CORNELL UNIVERSITY
OFFICIAL PUBLICATION

Volume XV Number 18

Thirty-second Annual

President's Report

by

Livingston Farrand

1923-24

With appendices containing a summary of
financial operations, and reports of
the Deans and other officers

Ithaca, New York
Published by the University
October 1, 1924

TABLE OF CONTENTS

PRESIDENT'S REPORT
FOR 1923-24

To the Board of Trustees of Cornell University:

I have the honor to present the following Report on the progress of the University during the academic year 1923-24.

THE TRUSTEES

On January 1st Emeritus Professor George L. Burr took his seat as Faculty Representative on the Board of Trustees in succession to Emeritus Professor E. L. Nichols, whose term had expired.

In January 1924 Harold E. Babcock, as President of the New York State Agricultural Society, succeeded A. L. Brockway as a member of the Board.

At the regular meeting of the Board held on June 16th Trustees Henry W. Sackett and C. Sidney Shepard were reelected for terms of five years and Walter C. Teagle was elected for a similar term to succeed Charles H. Blood, whose term had expired.

W. F. Pratt was reelected a member of the Board by the New York State Grange and George A. Blauvelt was reappointed by the Governor of the State for a term of five years.

At a meeting of the Board held on April 26th, S. Wiley Wakeman was elected a member of the Committee on Buildings and Grounds.

Following the union of the New York State Experiment Station at Geneva with Cornell University, Director R. W. Thatcher became a member of the Agricultural College Council.

Professor Howard W. Riley was elected by the Faculty of the College of Agriculture as a member of the Agricultural College Council to succeed Professor G. A. Works, whose term had expired.

THE FACULTY

The title of Wallace Notestein, Professor of English History, was changed to Goldwin Smith Professor of English History.

The following members of the Faculty have presented their resignations: C. C. Taylor, Professor of Rural Education; M. V. Atwood, Professor in Extension Service and Assistant Chief of Publications;

W. L. G. Williams, Assistant Professor of Mathematics; D. L. Gamble, Assistant Professor of Zoology; Ellen A. Reynolds, Assistant Professor of Home Economics; J. L. Baldridge, Assistant Professor of Architecture; G. H. Collingwood, Assistant Extension Professor of Forestry.

The following appointments and promotions in the Faculty have been made during the past year: W. C. Ballard, Professor of Electrical Engineering; I. C. Hall, Professor of Bacteriology in the Department of Dairy Industry; Mary F. Henry, Professor of Home Economics; Halldor Hermannsson, Professor of Scandinavian Languages; W. A. Hurwitz, Professor of Mathematics; Otto Kinkeldey, Professor of Music; Kurt Koffka, Acting Professor of Education; M. A. Lee, Professor of Machine Construction; H. B. Meek, Professor of Institution Management; B.L. Melvin, Acting Professor of Rural Social Organization; J. F. Mountford, Professor of Classics; R. A. Mordoff, Professor of Meteorology; A. H. Nehrling, Professor of Floriculture; J. G. Pertsch, Professor of Electrical Engineering; E. F. Phillips, Professor of Apiculture; F. S. Rogers, Professor of Machine Design; J. M. Sherman, Professor of Dairy Industry; Adelaide Spohn, Professor of Home Economics; F. G. Switzer, Professor of Mechanics of Engineering; C. E. Townsend, Professor of Engineering Drawing; C. L. Allen, Assistant Professor of Animal Husbandry; G. E. G. Catlin, Assistant Professor of Political Science; M. A. Copeland, Assistant Professor of Economics; F. C. Evans, Assistant Professor of Heat-Power Engineering; Jennette Evans, Assistant Professor of Hygiene and Medical Adviser of Women; Lois Farmer, Assistant Professor of Home Economics; George Fraser, Assistant Professor of Architecture; M. L. Holmes, Acting Assistant Professor of Marketing; M. S. Kendrick, Assistant Professor of Economics; W. E. Mordoff, Assistant Professor of Machine Construction; M. P. Rasmussen, Assistant Professor of Marketing; H. A. Ross, Assistant Professor of Marketing; H. R. Smart, Assistant Professor of Philosophy; C. Wilson Smith, Assistant Professor of Education and Secretary of the College of Arts and Sciences; H. D. Smith, Assistant Professor of Music and Organist; Leland Spencer, Assistant Professor of Marketing; H. F. Vieweg, Assistant Professor of Geology; H. E. Whiteside, Assistant Professor of Law and Secretary of the College of Law; H. A. Wichelns, Assistant Professor of Public Speaking.

The following appointments to the staff of the Medical College in New York City have been made: A. F. Coca, Professor of Immunology; Oscar M. Schloss, Professor of Pediatrics; Henry B. Richardson, Assistant Professor of Medicine; L. C. Schroeder, Assistant Professor of Pediatrics; Douglas Symmers, Assistant Professor of Pathological Anatomy.

Calvin H. Goddard was appointed Director of the Medical College Clinic, New York City, to succeed George H. Bigelow, resigned.

The following appointments in the Extension Staff of the College of Agriculture have been made: C. E. Ladd, Director of Extension, to succeed M. C. Burritt, resigned; F. P. Bussell, Professor of Plant Breeding; R. A. Felton, Extension Professor of Rural Social Organization; Alice Blinn, Assistant Extension Professor of Home Economics; Caroline Morton, Assistant Extension Professor of Home Economics.

THE STUDENTS

The official enrollment of students for the year ending June 30, 1924, was 5,588, as compared with 5,502 for the previous year.

In the last Report attention was called to the difficult problem created by the increasing pressure for admission to certain of the colleges of the University and the probable necessity of taking definite steps in the near future looking toward limitation of the number of students admitted to those colleges. During the past year the problem has been met with partial success by rigid enforcement of existing requirements and certain arbitrary rules with regard to date of application. It is now evident that the increased pressure for admission is not a temporary phenomenon but is almost certain to continue, and definite methods of selection of applicants are being worked out by the faculties concerned. The Medical College has for some years past been forced to exercise rigid selection and the problem of numbers is now particularly pressing in the College of Arts and Sciences and in the College of Architecture. The difficulties of solution are naturally very great in the case of the College of Arts and Sciences on account of the numbers involved. A discussion of the situation will be found in the report of the Dean of that College, appended hereto.

The experience of Cornell in this respect is in no way unique. A large number of universities in the country are facing the same difficulty and in certain instances elaborate methods of selection are

being employed. A careful study has been made of the experience in sister institutions and full use will be made of that experience in working out a method applicable to our own situation. It is interesting to note the apparent unanimity with which the institutions, which have actively grappled with the problem, have reached the conclusion that certain criteria other than scholarship must be considered if a desirable quality of product is to be assured. Character, personality and potential capacity for leadership will be given appropriate weight, even though the scholarship record of the applicant will remain the most important basis of selection.

I am glad to report that the character and conduct of the student body during the year has been of a high order. The policy of the University in placing responsibility for the regulation of student life largely upon the shoulders of the students themselves has again been amply justified.

MATERIAL DEVELOPMENT

The Baker Laboratory of Chemistry, the completion of which was announced in the last annual Report, has been in full operation throughout the year and has proven in every way successful. This is the most notable of the recent additions to the University's physical equipment.

The Dairy Industry building has similarly been in full operation and has greatly relieved the pressure on the College of Agriculture.

Boldt Hall, the most recently completed unit in the men's dormitory group, has been placed in operation and adds much both to the beauty and to the utility of that group.

Construction is now under way on the Willard Straight Memorial and rapid progress is being made. It is hoped that this welcome gift of Mrs. Straight will be available for use during the academic year 1925-26.

The new stand on Schoellkopf Field will be completed during the summer and promises to be an imposing addition to the architectural development of the southern section of the University grounds.

The plans for the new buildings of the College of Agriculture, provided by legislative appropriation, are progressing under the direction of the State Architect. It is hoped that the next building to be erected in that group, that for Plant Industry, will be begun during the coming year.

After full consideration of the most important lacks in the University's building equipment, the Trustees have authorized the preparation of definite architectural plans for an enlargement of the Library, for new engineering buildings and for a gymnasium. While the funds for these improvements are not now in sight, there can be no doubt that the possession of carefully considered plans for the needed additions will greatly facilitate the obtaining of the necessary money for their erection.

In this connection should be noted an important step taken by the Board in the appointment of an Architectural Advisory Commission, consisting of M. B. Medary and Dean F. H. Bosworth, to which Commission shall be referred all questions relating to new construction or alterations of existing buildings, in order to insure harmonious architectural development in the future. There is also involved, and now under active consideration, the important question of landscape development and definite recommendations on this point are awaited in the near future from the Architectural Commission.

A full list of the gifts to the University during the past year is presented in the report of the Comptroller.

Special attention may be called to the establishment of the McHarg Memorial Research Fund in the amount of $200,000, the income of which shall be used for research in Pediatrics under the direction of the Faculty of Medicine. This enlightened donation will greatly assist the development of that important department of medical science.

The generous gift of George C. Boldt, Jr., of $50,000 for the establishment of scholarships in memory of his father, the late George C. Boldt, is most welcome and perpetuates a name highly honored in the annals of the University.

Under the will of the late Frank S. Washburn the University has received $40,000 for the establishment of the Sophie French Washburn Instructorship.

Plans have been completed for the administration of the Messenger Foundation for Lectures on the Evolution of Civilization, established under the bequest of the late Hiram J. Messenger. This Lectureship will be inaugurated during the coming year and Professor J. H. Breasted of the University of Chicago has accepted appointment as the first lecturer on the Messenger Foundation.

It may be appropriate at this time to emphasize again the continued success of the Heckscher Research Fund, which has now been in

operation for some years. Under the terms of that gift appropriations are made to members of the Faculty of the University at Ithaca to facilitate the prosecution of research in all fields of knowledge represented. I doubt if any provision in the University's resources has done more to strengthen this fundamental phase of the university function.

I commend to the attention of the Board the reports of the Deans of the several Colleges of the University, which are appended hereto. The important problems are discussed in each instance and their aggregate affords a clear picture of the situation now existing at Cornell.

Of particular importance on account of the diversified contacts represented by that College is the report of the Dean of the College of Arts and Sciences. His discussion of the difficulties presented by lack of space in Goldwin Smith Hall is convincing. Temporary relief at the expense of convenience has been afforded by housing the Department of Music in Morse Hall, an arrangement which must come to an end with the approaching demolition of that building. No less serious is the present inadequacy of provision for the important Departments of Public Speaking and Education.

Dean Ogden's analysis of the distribution of registration in the courses of study provided by the College of Arts and Sciences is also illuminating.

One of the most baffling problems in college education in America has long been that of the admittedly unsatisfactory provision for exceptional students. One of the most frequent indictments of our present system is that the student of exceptional ability is necessarily penalized in his progress in the interests of the average student of less ability. Recognizing this situation, the Faculty of the College of Arts and Sciences has this year adopted a plan of "informal study' which is intended to supersede the existing plan of a degree with honors. The step is an interesting one and its operation will be watched with close attention.

Another important step during the past year has been the union of the Departments of Latin, Greek and Archaeology into a new Department of Classics. The staff has been strengthened by the appointment of Dr. J. F. Mountford as Professor of Classics and the courses of instruction coordinated. There is an unmistakable increase in interest in the study of the classics evinced by the under-

graduates and it is hoped that this encouraging development may continue.

I would also call particular attention to the discussion by the Dean of the College of Engineering on the inquiry into the content of the engineering curriculum now being carried on in the leading engineering schools of the country and in which Cornell is actively participating. Whatever may be discovered in this technical field will be of significance for other lines of professional and specialized education.

In the College of Law what is regarded as a significant forward step has been the decision by the Trustees, upon recommendation of the Faculty of that College, to place the College on a graduate basis. This action is the result of long consideration and will be made effective in the academic year 1925-26. I would also note the encouraging increase in the student registration in the College of Law, as well as the development of the Summer Session in that subject.

The Dean of the Medical College reports the continued success of the interesting experiment generally known as the Cornell Clinic. The professional success of that enterprise has been clear for some time and it is a satisfaction to know that the Clinic is now financially practically self-supporting. It is felt that a contribution of exceptional value has been made to this fundamental medico-social problem.

The extensive operations of the State Colleges of Agriculture and of Veterinary Medicine will be found fully discussed by their respective Deans. I would emphasize particularly the satisfactory way in which the union of the New York State Agricultural Experiment Station at Geneva with the University has developed and the consequent correlation of research in agriculture by the College and the State Experiment Station.

The Board has had before it and is actively dealing as rapidly as resources permit with the question of building accommodations for the various Colleges of the University. Of even more importance is the necessity of unceasing effort to improve the scale of remuneration for the University faculties. The increased cost of living applies obviously to the operation of the physical plant of the University as well as to the personal budgets of the members of the teaching staff. This fact has made it impossible to increase the standard of remuneration as rapidly as had been hoped and as is urgently demanded if Cornell is to be able to withstand the inducements to its proven teachers to accept positions at higher remuneration in sister institutions. That we have not suffered more seriously than we

have is largely due to the devotion of the Faculty. The Faculty as well as the Board of Trustees are deeply appreciative of the active effort which is being made by the Cornellian Council to meet this problem and I wish to emphasize at this time the indebtedness of the University to the Council for its disinterested energy in marshalling alumni support.

No institution of the complexity of Cornell is, or ever will be, free from problems of difficulty. It is perhaps a sign of vigor that such is the fact. I know that the Faculty of the University is keenly alive to the educational responsibilities placed in its charge and I believe that the problems peculiar to Cornell are for the most part recognized and in process of solution.

Respectfully submitted,

LIVINGSTON FARRAND,

President.

SUMMARY OF FINANCIAL OPERATIONS

To the Board of Trustees:

I have the honor to submit herewith a summary of the financial operations of Cornell University for the fiscal year 1923-24:

In the administration of the endowed colleges at Ithaca for the year there resulted a net deficit of $274,363.88, which, added to the deficit at the beginning of the year of $160,438.27, leaves a debit balance of the income account on June 30, 1924, of $434,802.15. Of the deficit for the current year, $38,505.74 was incurred in the purchase of land bordering on the campus and desired by the University to protect or supplement the existing campus; $70,684.01 was expended for equipment for the new Baker Laboratory of Chemistry, and $165,210.12 resulted from the ordinary running expenses of the University. The first two items for the purchase of additional land and for the equipment of the Baker Laboratory of Chemistry are in the nature of capital charges, but as the University can meet such charges only from gifts or from current income, this deficit results. Reluctantly, the Trustees have been again compelled to increase tuition rates in the colleges of Arts and Sciences, Architecture, and Engineering from $250 to $300 a year. The additional income from this source should prevent any deficit in current income for the coming year and it is hoped there may result a credit balance to apply upon the accumulated deficit.

In the Medical College in New York City the net deficit in current income was $46,160.36, which, added to the accumulated deficit July 1, 1923, $21,502.98, resulted in an accumulated deficit at the close of the year of $67,663.34. This deficit results from the failure of income on the International Traction Company securities received as part of the endowment of the college.

The expenses of the State colleges at the University, in excess of certain income available from University and Federal funds, are met from appropriations by the State of New York. The expenses of the Veterinary College were $206,304.90; of the College of Agriculture $2,362,952.33; and of the New York State Experiment Station at Geneva, N. Y., $253,774.00.

During the year $236,303.59 was collected on account of the Semi-Centennial Endowment subscriptions and $67,710.47 on account of interest, leaving $3,111,432.00 of subscriptions outstanding. The net collections from the Cornellian Council increased from $98,856.14 to $164,642.36. Of this latter amount $48,743.63 was unrestricted as to use. The total gifts to the University during the year aggregated $1,102,474.85 and are listed in detail in my complete report.

CHARLES D. BOSTWICK,
Comptroller.

NOTE: The complete report of the Comptroller and the Treasurer, bearing the certificate of audit of Messrs. Haskins & Sells, certified public accountants, 37 West Thirty-ninth Street, New York City, together with the reports of the Superintendent of Buildings and Grounds, the Manager of Purchases, and the Manager of Residential Halls, will be forwarded to members of the Faculty and Alumni upon receipt of specific request addressed to the Secretary of Cornell University, Ithaca, N. Y.

APPENDIX I

REPORT OF THE DEAN OF THE UNIVERSITY FACULTY

To the President of the University:

SIR: I have the honor to submit the following report of the University Faculty for the year 1923-24:

Since writing my last report the Faculty has lost by death one of its members, long and intimately associated with the Faculty's affairs and with the general activities of the University, Professor Willard Winfield Rowlee. Professor Rowlee served as chairman of the Committee on Student Affairs and on many special committees. He was a constant attendant at the Faculty's sessions and participant in its deliberations, particularly on questions relating to athletics and the regulation of student conduct. He was a careful observer, not given to many words, and was happily endowed with unusually sound and kindly judgment.

FACULTY REPRESENTATIVES ON THE BOARD OF TRUSTEES

Under the regulations adopted by the Faculty on October 12, 1921 (to which my report of last year made reference), the Faculty's representatives on the Board no longer report directly to the Faculty, as was the custom until the end of the year 1920-21. The present rules provide that the President of the University shall be the medium of communication between the Board of Trustees and the Faculty and that at each regular meeting of the Faculty an order of business shall be the President's report on matters of educational policy, if there be any, pending in the Board. During the large part of the past academic year the Faculty has suffered the loss of the active service of Professor J. E. Creighton in the sessions of both Board and Faculty, but it is hoped that during the year 1924-25 his health will permit him to resume the whole or the major part of these duties.

On June 11, 1924 the Faculty adopted the following committee report:

> The privilege of representation on the Board of Trustees was conferred by the Board of Trustees upon the 'University Faculty' (Cornell University Statutes 1917, Article VIII, paragraph 6, as amended May 31, 1919).
>
> The 'University Faculty' is defined in the University Statutes as including all members of any of the Special Faculties, among which the Faculty of Medicine at New York is expressly enumerated (Cornell University Statutes 1917, Article VIII, paragraphs 2 and 3). The University Faculty as defined in the University Statutes, therefore, includes members of Faculties not residing in Ithaca. Other non-resident members of the University Faculty are those Extension Professors of the College of Agriculture who received their appointment as such prior to April, 1917 (Genl. Legisl. Univ. Fac. 1918, p. 4 6), and those members of the staff at the State Agricultural Station at Geneva, who, by virtue of having graduate students, are members of the Faculty of the Graduate School.
>
> In practice, however, the 'University Faculty' has been interpreted as including only those members of the various Special Faculties who reside in Ithaca. Your Committee is informed that notices of the University Faculty meetings are sent to those members only who reside in Ithaca. Under the existing procedure of election of Faculty Representatives on the Board of Trustees, as adopted by the University Faculty in

May, 1920, the votes must be cast in person at the December meeting of the Faculty and 'a majority vote of the Faculty members present at the session shall be required for election' (Genl. Legisl. of Univ. Faculty, 1920, p. 520). It thus appears that non-resident members of the University Faculty are virtually denied the privilege of voting in this election, for they are not given notice of the meeting, and they are required to attend the meeting in order to vote.

Your Committee has conferred with Dean Mann of the Agricultural College and with Dean Niles of the College of Medicine in New York. Dean Niles presented the matter to the Medical Faculty's Committee on Educational Policy. After a conference between the President of the University and your Committee, the President presented the problem at a meeting of the Faculty of Medicine in New York in May. At that meeting that Faculty expressed their appreciation of the attitude of the University Faculty in bringing this situation to their attention, and adopted a resolution to the effect that the Medical Faculty's Committee on Educational Policy be regarded as representing the Medical Faculty in all matters pertaining to the University Faculty.

As a result of this Resolution the Medical Faculty has consented that its Committee on Educational Policy may represent it in all University Faculty matters, including that of the election of Faculty Representatives on the Board of Trustees.

Your Committee makes the following recommendations:

First, That all notices that are to be sent to members of the University Faculty shall be sent to all members residing here or elsewhere, except that in the case of the members of the Medical Faculty in New York such notices be sent only to the members of the Faculty's Committee on Educational Policy.

Second, That the following procedure be adopted in the election of Faculty Representatives on the Board of Trustees:

1. That the Faculty at its regular November meeting elect a Committee of five members to nominate candidates for Faculty Representatives on the Board of Trustees. The Committee shall canvass the Faculty by mail (or messenger service), asking for suggestions in writing in regard to candidates.

2. At the regular December meeting, the Committee shall nominate at least two persons for each office to be filled, and additional nominations from the floor of the Faculty shall thereupon be called for. In case the Committee submit nominations outside the active membership of the Faculty, a brief statement of the qualifications of the person or persons shall accompany the Committee's nominations.

3. The Committee shall report its nominations to a Committee on Election of which the Dean of the Faculty, the Secretary of the University Faculty and the Secretary of the University shall be ex officio members. The Committee on Election shall then proceed to mail ballots to each member of the University Faculty, whether resident in Ithaca or not, except that in the case of the Faculty of Medicine in New York, ballots shall be mailed to those members of that Faculty only who are members of its Committee on Educational Policy. There shall appear on the ballot, after the name of the candidates, the address and position of each candidate. The ballot shall convey the request that the ballot be returned to the Committee on Election, who shall count the ballots and report the result to the President of the University.

4. A plurality of votes cast shall be necessary for election, and, in case of a tie vote, the election shall be decided by the Faculty at its next meeting, at which only those candidates who shall have tied for election in the mail ballot shall be considered.

5. Representatives shall be elected for a term of three years, and shall not be eligible for renomination or reelection until after one year from the expiration of their term of office.

WAR ALUMNI

At the Commencement of 1922, on the recommendation of the University Faculty, the Board of Trustees conferred the distinction of War Alumnus on twelve students, in 1923 on nine students, and in 1924 on four students. This illustrates the principle of "diminishing numbers" to which the Faculty's report of 1921-22 (p. 11) made reference. The students on whom the honor was conferred at the last Commencement are: Rodney Moore Bliss, ex '18, John Howard Duncan, ex '19, Guy Baker Stephenson, ex '16, and Leslie Roy Terrill, ex '17.

BLOCK WEEK

The period of final examinations in each semester, known as Block Week, has long been the subject of consideration and re-consideration by the Faculty. The present regulation provides that all final examinations shall be held within the period provided for this purpose and that, on account of interference with the final week of lectures and class instruction, no preliminary examinations shall be held in the week preceding Block Week. Owing to wide variations in the interpretation and observance of this rule, the Faculty on May 14, 1924 codified its legislation as follows:

1. (a) So far as is practicable, a final examination is to be regarded as a part of the regular work of each course for the undergraduates in that course.
   (b) Final examinations shall be held only in Block Week and according to a schedule of examinations prepared by the Registrar. There shall be no deviations from this schedule excepting such as may be necessary to avoid conflicts.
   (c) Students whose term work in any course is of sufficiently high grade may be exempted from the final examination in that course, and the conditions under which such exemptions are made, if at all, shall be determined by the several college faculties.
   (d) Whenever, in the judgment of the professor concerned, a final examination would serve no useful purpose there shall be substituted therefor an equivalent exercise such as a term report, essay, or personal conference. This shall not be construed as excusing the student from work in the course during block week.
2. (a) Except as herein provided, no examination shall be held by any department in the week preceding the beginning of block week. This shall not be interpreted to exclude the giving of written lessons, quizzes, or papers when such exercises form a regular part, week by week, of the work of the course.
   (b) Make-up preliminary examinations may be held during the week preceding the beginning of block week, but only in case it is impossible to arrange to hold them earlier.

THE HONOR CODE IN EXAMINATIONS

In the so-called Student Honor System, ratified by the Faculty on March 9, 1921, no provision, except by implication, is made for the control of examinations held during the University's Summer Session. The Dean having been interrogated regarding the jurisdiction of the Student Honor Committee over Summer Session examinations, has expressed the opinion that the Committee has jurisdiction over the conduct of examinations throughout the year, with the exception of examinations for undergraduate scholarships, for entrance to the University, and for advanced degrees. It would appear desirable that the provisions of the Honor Code should be amended or supplemented by removing the above (and perhaps other) ambiguities. On May 14, 1924 the University Faculty voted to recommend to each College Faculty that it authorize the Student Honor Committee to impose academic penalties increasing the requirements for graduation under that Faculty by not more than six hours.

THE KANT CELEBRATION

The two hundredth anniversary of the birth of Immanuel Kant was celebrated at Koenigsberg on April 19-23. On this occasion the Faculty sent as its representative Professor E. L. Schaub (Ph. D. '10, Cornell). A detailed report of Dr. Schaub's mission will be published in the September issue of the *Philosophical Review*.

THE SCHIFF AND MESSENGER FOUNDATIONS

On February 13, 1924 the Faculty made provision for a standing committee to be known as the "Committee on the Schiff Endowment", its purpose being the administration of the Jacob H. Schiff Foundation for the Promotion of Studies in Human Civilization. On November 14, 1923 the Faculty had established a similar standing committee to be known as the "Committee on the Messenger Foundation", its function being the administration, subject to such restrictions as may be fixed by the Board of Trustees, of the income of a fund of $74,000 known as The Messenger Foundation for Lectures on the Evolution of Civilization. The Faculty's action of February 13 provides that the personnel of the two committees shall be identical and the committees are therefore consolidated as The Committee on the Administration of the Messenger and Schiff Foundations.

ASSESSMENTS AND FINES

In the Faculty's report of 1921-22 reference was made to the above subject and attention was called particularly to objections then current regarding the money fine imposed upon students for absence immediately before and after holiday recesses. It was there pointed out that this method of lessening or removing the disorder of absence was in an experimental stage. However, the Faculty during the past year decided to discontinue the experiment and voted on December 12 that "subject to the cuncurrent action of the Board of Trustees, all regulations involving fines against students for absence before and after holiday recesses be abolished". The Board of Trustees having voted its approval, the action went into effect at once. The statistics of absences before and after the Christmas and Easter recesses, following upon the abolition of fines, show a recurrence of the disorder which the fines were intended to remove and which to a considerable extent, they had removed.

DATE OF COMMENCEMENT

For a quarter of a century the University calendar has been almost constantly the subject of minor revisions and changes. Recently the Faculty enlarged its standing committee on the calendar to include representatives from all of the colleges of the University and it is now one of the largest and most representative of the Faculty's organizations. Practically every year some question of reform or modification of the calendar is presented to the Faculty, principally questions regarding the dates of beginning and concluding the academic year, the division of the year into two, three, or four terms, and the dates and duration of the various holiday recesses. Objections to the traditional time of holding commencement, namely, on Wednesday or Thursday in the week following Block Week, have come chiefly from members of the graduating class, who for economic reasons desired the Faculty to fix the earliest possible date. In response to this desire the Faculty, with the concurrence of the Board of Trustees, in adopting (April 16, 1924) a calendar extending over the period 1924-30, has made provision that Commencement shall be held on the Monday following the close of final examinations.

WILLIAM A. HAMMOND,
Dean of the University Faculty.

APPENDIX II

REPORT OF THE DEAN OF THE GRADUATE SCHOOL

To the President of the University:

SIR: I have the honor to present the Report of the Graduate School for the year 1923-24.

For 1923-24 the enrollment has been 529 during the academic year and 304 in the summer, a total of 833. During the year 193 advanced degrees were conferred, 81 candidates receiving the degree of Doctor of Philosophy. The following table shows the registration of graduate students for the past five years:

STATISTICS OF ATTENDANCE

	1923–24	1922–23	1921–22	1920–21	1919–20
Number of students registered during the academic year	529	540	534	438	408
Number of students registered during the Summer of 1922					
1. Summer Session	211	135	88	79	95
2. Third Term	0	84	76	65	67
3. Personal Direction	93	46	55	20	9
Total in Summer	(304)	(265)	(219)	(164)	(171)
Total	833	805	753	602	579

The most significant feature of the registration is the considerable increase in the enrollment during the summer, an increase evident both in the Summer Sessions and in the work carried on under the personal direction of members of the Faculty.

The character of these two groups is widely different. Those who are enrolled in the Summer Sessions are candidates for the master's degree, largely secondary school teachers who come to the University in search of training which will broaden their horizon and fit them better to present their subjects to their pupils. Those who are working under personal direction are candidates for the doctor's degree, many of them instructors or assistants in this or some other university, who are preparing themselves for the tasks of scholarly work.

It is probable that the numbers will continue to increase in both these groups and it is incumbent upon the University to make adequate provision for their instruction. Courses designed primarily for candidates for the master's degree, such as are already offered by some departments, must be more widely included in the curriculum of the Summer Sessions, and wherever possible, the several departments of study must provide that certain members of the department will be in residence during the summer and free to devote an adequate part of their time to the direction of students, in order that this summer work may be maintained on the same high level as the regular work of the Graduate School.

The problem of the proper requirements for a master's degree has not yet received a satisfactory solution at Cornell. Those which are now set are practically identical with the requirements for the Doctor's degree, differing in quantity but not in kind. It is undoubtedly true that in interpreting these requirements, members of the Faculty show a wide variety of opinion. To some the training for a master's degree is only a first step on the way to the doctor's degree; it is aimed primarily to equip a student with the technique of scholarly research. To

others, however, the training for a master's degree is an end in itself. The candidate has no desire, or is perhaps not equipped to carry on independent investigation. He is interested merely in broadening his knowledge of some field, in securing the proper orientation in order to practice or teach the subject.

It is questionable whether our present requirement of a thesis or essay is an essential element for this latter group. It is possible that the time devoted to the preparation of such a thesis might be more wisely devoted to filling in the gaps in the candidate's general knowledge of his field. There is, on the other hand, no question as to the usefulness of the final, comprehensive examination, for candidates for the master's degree as well as for candidates for the doctor's degree. This examination is an assurance at once of breadth and of unity in the student's preparation. It is possible that the present regulations are sufficiently flexible to provide for the group which is not looking toward research as an end. But at least we must recognize the existence of the group and seek to meet their needs.

Another obligation incumbent upon the University is more adequate provision for the housing and the social life of its graduate students. Not the least of the stimuli to successful graduate work is the contact with minds engaged in the same or kindred fields of work. Under the present conditions our students are scattered or isolated in various parts of the city; they have no common meeting places, no center for their social life, no dignified surroundings for their hours of leisure. A slight step has been taken in the reservation of one of the University cottages for women graduate students. But this is by no means adequate.We need more houses for the women. And quite as much we need a hall for the men. It is most earnestly to be desired that in the development of the plans for the residential halls, early provision should be made for setting apart a unit or group of units exclusively for graduate students. They are Cornell men in no less degree than our undergraduates. And precisely because they are to be the teachers and the leaders in the mental life of the coming generation, Cornell owes to them every opportunity she can give for going out quickened with a love for the things of the spirit.

Certain minor changes in the regulations have been adopted by the Faculty during the year. The rule requiring that all doctoral theses must be printed in full has been modified to permit the acceptance of abstracts; the practice of requiring that all students must have studied some foreign language before being admitted to candidacy for an advanced degree has been incorporated as a part of the definite legislation of the Faculty. The Faculty has also recommended certain changes in its organization: the inclusion in its membership of the Deans of the several colleges of the University and of the Directors of the Experiment Stations; and the inclusion of all members of the Faculty who have served for five years as members of Special Committees.

The chief need of the Graduate School is not, however, a matter of organization or administration; it is a question of personnel. We cannot strengthen our work by new rules and regulations; we can grow only as our Faculty grows. In that matter the Graduate School has no voice; it receives its personnel from the component colleges of the University. Every appointment, then, which strengthens the staff of a college by the addition of an active scholar contributes to the growth of the Graduate School. And each time that a vacancy in a college staff is left unfilled or is filled by the appointment of an inferior man, the work of the Graduate School is weakened. The position of the Graduate School in this respect is not peculiar to Cornell. In a considerable number of American Universities the graduate faculty exists only as an appendage of undergraduate work, without a separate budget and with no voice in the recruiting of its staff. If the requirements of a successful graduate teacher were identical with those of a successful undergraduate teacher, the matter would be of no concern. But the undergraduate college often finds it necessary to appoint a man who has none of the qualifications for graduate instruction and this man at once becomes a potential member of the graduate faculty. As long as our present system continues, there is, in my opinion,

only one solution which will preserve the integrity of graduate instruction, that is that the President of the University must in the future decide whether a man appointed to the professorial staff of an undergraduate college shall also be a member of the faculty of the Graduate School.

R. H. KENISTON,
Dean of the Graduate School.

CLASSIFICATION OF GRADUATE STUDENTS

Graduate Students receiving advanced degrees, classified according to the degree received:

	1923–24	1922–23	1921–22	1920–21	1919–20
Doctors of Philosophy	81	50	47	44	45
Masters of Arts	44	42	36	34	19
Masters of Science	38	36	32	21	13
Masters of Science in Agriculture	13	12	14	9	11
Masters in Landscape Architecture	3	1	3	2	2
Masters in Forestry	2	1	6	6	3
Masters in Architecture	1	0	3	1	0
Masters of Civil Engineering	5	16	14	7	12
Masters of Mechanical Engineering	5	2	1	4	3
Masters of Electrical Engineering	1	4	5	..	..
Total	193	164	161	128	108

Classified according to the degree for which they are candidates:

	Academic Year	*Summer*
Honorary Fellows	2	
Doctors of Philosophy	248	68
Masters of Arts	93	94
Masters of Chemistry	1	
Masters of Science	78	56
Masters of Science in Agriculture	34	25
Masters in Forestry	3	
Masters in Landscape Architecture	5	1
Masters of Architecture	3	
Masters of Civil Engineering	15	
Masters of Electrical Engineering	9	
Masters of Mechanical Engineering	7	1
Non-candidates	31	59
Total	529	304

Classified according to the group in which the major subject falls:

	1923–24	1922–23	1921–22	1920–21	1919–20
Group A, Languages and Literatures	64	68	60	48	37
Group B, History, Philosophy, Education and Political Science	131	95	102	40	49
Group C, Physical Sciences	132	129	113	77	67
Group D, Biological Sciences	145	178	171	191	216
Group E, Engineering, Arcihtecture	49	61	85	42	31
Group F, Science Departments, New York City	6	7	0	0	0
Unclassified	0	0	0	40	7
Honorary Fellows	2	2	3	1	2

Among the students registered in the Graduate School during the year 1923–24 there were graduates of 181 institutions, distributed as follows:

Acadia University	2	Government Agricultural College	1
Alabama Polytechnic Institute	4	Government Conservancy Engineering College	1
Alfred University	3	Government Institute of Technology, Shanghai	3
Allegheny College	1	Grove City College	1
Alma College	1	Gymnasium of Reykjavik	1
Amherst College	2	Harvard University	2
Anderson College	1	Haverford College	1
Arkansas, University of	3	Hiram College	1
Barnard College	1	Hobart College	3
Bates College	1	Hokkaido College	2
Berea College	1	Hollins College	1
Bombay University	1	Hunter College	1
Bonn, University of	1	Huron College	2
Bowdoin College	2	Idaho, University of	1
Brazil University	1	Illinois, University of	6
Brigham Young University	2	Indiana University	2
British Columbia, University of	1	Iowa State Teachers College	1
Brown University	2	Iowa, State University of	4
Brussels University	1	Kagoshima Imperial College	1
Bucknell University	1	Kansas State Agricultural College	1
Budapest, University of	1	Kansas, University of	2
Buenos Aires, University Nacional de	1	Kentucky, State University of	2
Butler College	1	Kings College, University of	1
California, University of	1	Lafayette College	1
Capetown, University of	1	Lake Forest College	1
Central Missouri Teachers College	1	Lawrence College	1
Chicago University	2	Louisiana State University	1
Cincinnati, University of	1	McGill University	1
Clark University	5	McMaster University	1
Colgate University	6	Madras University	1
College of the City of New York	1	Maine, University of	2
College of Industrial Arts	1	Marquette University	2
Colorado Agricultural College	1	Massachusetts Agricultural College	3
Colorado College	2	Meredith College	1
Colorado, University of	2	Michigan, University of	4
Columbia University	3	Millsaps College	1
Cornell College	1	Minnesota, University of	2
Cornell University	215	Mississippi A. & M. College	1
Dartmouth College	3	Missouri, University of	3
Davidson College	2	Montana, University of	1
Delaware, University of	1	Mt. Holyoke College	3
Denver, University of	2	Nanking, University of	4
De Pauw University	1	Nanyang College	3
Doshiska University	1	Nebraska, University of	1
Earlham College	1	Nebraska Wesleyan University	1
Elmira College	1	New Hampshire State College	1
Elon College	1	New York State Teachers College	1
Florida, University of	1	New York University	1
Furman University	2	North Carolina State College	2
Geneva College	1	North Carolina, University of	4
George Peabody College	2	Northwestern College	1
George Washington University	1	Northwestern University	1
Georgia School of Technology	3	Oberlin College	8
Georgia, University of	2	Occidental College	1
Gettysburg College	1	Ohio State University	4
Goucher College	6		

Oklahoma University of	2	Tarkio College	1
Ontario, University of	1	Tennessee, University of	3
Oregon Agricultural College	3	Texas A. & M. College	2
Oregon, University of	1	Tokyo College	1
Oxford University	2	Tokyo, Higher Technological School of	1
Paris, University of	1	Tokyo, Normal College	1
Pei-Yang, University of	2	Toronto, University of	2
Peking, National University of	1	Transylvania University	1
Pennsylvania Military College	1	Trinity College	2
Pennsylvania State College	8	Tufts College	1
Pennsylvania, University of	2	Utah Agricultural College	3
Philippines, University of	2	Utah, University of	3
Pomona College	3	Valparaiso University	1
Prague University	1	Vanderbilt University	1
Purdue University	1	Vassar College	3
Radcliffe College	1	Vermont, University of	1
Randolph-Macon College	1	Virginia Polytechnic Institute	1
Rensselaer Polytechnic Institute	2	Virginia, University of	2
Rhode Island State College	1	Wabash College	3
Rice Institute	3	Washburn College	1
Rochester, University of	2	Waynesburg College	1
Royal High Agricultural College	1	Wellesley College	6
Rutgers College	3	Wells College	2
St. John's University (China)	1	Wesleyan University	1
St. Lawrence University	1	West Virginia University	8
Saskatchewan, University of	1	Western Maryland College	1
Shanghai College	1	Western Reserve College for Women	1
Smith College	2	Western Reserve University	1
South Africa, University of	3	Western University	1
South Dakota State College	1	Wheaton College	1
South Dakota, University of	1	William and Mary, College of	1
Southwestern University	1	Wisconsin, University of	4
Susquehanna University	1	Wofford College	1
Syracuse University	4	Wooster, University of	1
Tangshan Engineering College	1		
Tangshan University	2		

APPENDIX III

REPORT OF THE DEAN OF THE COLLEGE OF ARTS AND SCIENCES

To the President of the University:

SIR: I have the honor to submit to you the following report of the College of Arts and Sciences for the academic year 1923-24.

The registration in the College as reported by the Registrar was 1274 men and 645 women, a total of 1919 students. The total is significant inasmuch as it exceeds by more than one hundred the registration of the previous year. During the preceding four years beginning with 1919 the registration in the College was virtually stationary, the annual numbers being 1812, 1845, 1836, and 1809 respectively. The marked increase which we have noted during the present year has brought an unusual pressure upon the instructing staff, and also upon our classroom and laboratory facilities. Steps will have to be taken in the near future either to expand our staff and physical equipment, or to limit the number of students admitted to the College. I may add that the Committee on Educational Policy of this College favors the latter step as being educationally the more desirable of the two. The limitation of students, however, will involve

careful planning and close supervision in harmony with the plans and aims of our other undergraduate colleges. The fact that the College of Arts and Sciences provides instruction, not only for its own students, but also for large numbers of students who come to us from sister colleges in the University, complicates the problem, and makes it essentially one in which the entire University is concerned.

As regards the admission of students to the College of Arts and Sciences, we are already administering the entrance requirements now in force with as rigorous an adherence to the rules as seems feasible. We propose in future to observe more closely the provision of the Trustees of August 1, 1922, that "all prospective undergraduate students intending to register in the University at Ithaca for the first term of the academic year shall be required to apply for registration not later than August 1 of that year"; but how far the enforcement of this provision will assist in limiting our numbers, and at the same time permit us to select the best qualified candidates for admission, experience alone can show.

I believe it safe to affirm that with our present program of study, staff, and equipment, 1800 students resident in the College is the maximum number we should attempt to instruct. The total number at the beginning of the fall term was 1804, and we then found ourselves overtaxed to provide instructors and classrooms for sections in the larger courses in order that the numbers in these sections might be held to manageable proportions.

It is of interest to note that out of the total number of 1919 students registered at one time or another throughout the year, 108 have secured leaves of absence, while 47 were dropped for scholastic deficiency at the end of the first term. The number of students dropped shows a rather striking reduction from the numbers dropped at a corresponding time during the previous four years, the previous numbers being respectively, 113, 73, 91, and 69. This indication of an apparent rise in the quality of our students likewise indicates the difficulty of drawing the lines more closely at entrance without some accurate means of testing the less obvious qualifications of applicants for admission. It is my personal belief that such an undertaking should be at once referred to a representative committee of the University authorized to study the situation, and to proceed experimentally with various devices which may seem to commend themselves; all this with a view to such modification of our entrance requirements as will select the best qualified students with the largest degree of fairness to all applicants.

With respect to the present overcrowding, there is scarcely a department of the College which has not complained of a lack of space for its work. We need more offices for the faculty, more and better equipped class and lecture rooms, more space and better equipment for laboratories, and more seminary rooms, where advanced students can meet, not only at stated times, but also informally for purposes of conference with members of the teaching staff. These seminary rooms might also provide advanced students with a ready access to books, pamphlets, and periodicals in their special fields of work.

In these various respects the needs of certain departments are crying. I would mention first of all the departments of Education, Music, and Public Speaking. The department of Education has at present but two rooms at its disposal in which to house a fairly elaborate museum of educational materials, a good equipment for a laboratory of educational investigations, and a seminary which possesses a large and valuable collection of books and pamphlets. In order that the advanced undergraduate and the graduate work of this department may be placed upon a proper level for carrying on its important function, other quarters than are likely to be made available in Goldwin Smith Hall must speedily be found.

A similar situation confronts the department of Public Speaking, which at present is confined to several ill-lighted and ill-heated rooms in the basement of Goldwin Smith Hall. Since a large part of the work of this department is conducted by individual meetings of student and instructor, the need for sanitary and appropriate quarters is pressing.

The department of Music manages to get on in its temporary situation in Morse Hall, but since the destruction of that edifice is impending, we can not properly ask for any expenditure of funds other than the bare minimum requisite to make the work of the department possible. Since new quarters must be found

in the near future, and since the character of the work in a department of Music requires the use of voices and musical instruments, it is to be hoped that one of the University cottages, or some other suitable detached building, may be acquired for the independent use of this department.

In all three of the above-cited cases provision should be made at the earliest possible moment to move these departments; and this, in all probability, will require the erection or acquisition of buildings not at present available.

The need of additional space is pressing also in Economics, for its laboratories of Accounting and Banking, Commercial and Industrial Organizations, and Statistics. Both the space and the equipment now available for these laboratories are quite inadequate to the legitimate demands of the numerous students who are following these varied lines of economic study and research. In addition, the department has outgrown its provision for office space, and the important feature of personal conference between students and instructors which the department tries to maintain is now suffering for want of suitable quarters in which students should be received.

The departments of Geology and Zoology are both inadequately placed in a building ill-suited to the needs of experimental sciences; it is poorly-lighted and poorly-ventilated, and is, in addition, a fire-trap which may one day bring about an irreparable loss of the valuable collections now housed there.

Since it is planned to move the department of Zoology into new quarters which the State is expected to provide for the College of Agriculture, it is to be hoped that a careful survey of McGraw Hall may soon be made with a view to determining to what use it may best be put in the future. If it is to serve as a semi-permanent home for Geology and Geography, I suggest that plans be drawn, and estimates taken, for the thorough overhauling and remodeling which are undoubtedly essential if the building is ever to be in any sense adequate to the needs of this department.

When the departments of Education and Public Speaking have been removed from Goldwin Smith Hall, it will then be possible by certain alterations to provide more adequate accommodation for the department of Economics, to which reference has been made, and possibly also for the department of Government, which requires additional office and seminary space, and for the department of English, which is also in need of a seminary room in this building.

The pressure we now feel in our vain attempts to find classrooms enough to accommodate the courses offered in the College may also be somewhat eased if the departments come to realize how desirable would be a reorganization of their curricula leading to a reduction in the number of courses now offered.

An analysis of the work done in twenty-one departments which appear in the budget of the College indicates that 285 different courses were conducted by these departments in the first term, and 322 in the second term, of the current year. Of these courses approximately 37% in the first term and 36% in the second term registered twenty-five or more students. On the other hand 33% of these courses registered fewer than ten students in each term. It may be doubted, both on educational and on economic grounds, whether it is desirable that so large a proportion of courses should be conducted for so small a number of students. More than 15% of these courses registered five or fewer students in each term. It is at any rate obvious that the future cancellation of some of the courses conducted with fewer than five students (47 in the first term, and 59 in the second) might diminish the present demand for classrooms.

In the same connection the question is raised whether the total number of courses now offered by the College is not greater than we can well afford, either educationally or economically. A comparison of the offerings of the same departments at Harvard indicates that, when reduced to term-courses, the offerings for undergraduates at Harvard during the two terms of the present academic year were 357 as compared with 647 at Cornell. A similar comparison with the University of Chicago indicates that in sixteen of these departments where it was possible to make a fair comparison, Chicago offered 514 quarter-courses for undergraduates in the year 1922 as compared with 595 term-courses offered this year at Cornell.

These facts have been brought to the attention of the faculty in the hope of suggesting to the various departments of the College the possibility of curtailing their programs of study in the interest of greater educational efficiency in the courses which are offered and conducted, thus reducing the demand for classrooms, and also, if possible, the requirement of an ever increasing staff of instruction.

The organization of the work of the biological sciences raises a problem in the solution of which the College of Arts and Sciences has an immediate concern. Save for a shared interest in the department of Zoology, all the biological sciences are now located in other colleges of the University. Although courses in Anatomy, Biology, Botany, Entomology and Limnology, Histology and Embryology, Physiology and Biochemistry, are still offered as an integral part of the work of the College of Arts and Sciences, these departments for the most part plan their courses in the interest of professional students of the colleges in which they have their respective homes. Accordingly we have, in effect, a list of general introductory courses in each of these several fields, followed by more specialized subjects than the average student of Arts and Sciences is interested to pursue. Consequently, despite unusual facilities for biological study and investigation, the Arts student after satisfying his underclass requirement of six hours in the group which includes these sciences, rarely proceeds to advanced work in any of these fields. With the exception of fifty-eight juniors and seniors looking forward to the study of Medicine, who are therefore advised by the Secretary of the College of Medicine, Professor Kerr, and who fulfill the ten hours required of them in the upperclass group of Animal Biology, there were this year but nine students electing biological subjects for their upperclass group. Botany, for instance, which offers fifteen courses in the College of Arts and Sciences, was elected by only four Arts students in courses beyond the freshman course of General Botany. The fact that we rarely train an undergraduate for a career as a teacher of Biology in the secondary schools also indicates our failure to provide, through cooperation of the various departments concerned, the type of undergraduate instruction which is best suited to the needs of students who, without wishing to specialize, desire a broad foundation and an adequate training in the general principles of the biological sciences.

In recommending, therefore, that some effort be made to reorganize our biological work in the interests of undergraduate students, I find support, not only in the facts which have been recited, but also in the following statements which I take the liberty of quoting from the reports submitted to me by two of the departments concerned.

Professor B. F. Kingsbury, after discussing the status of Histology and Embryology and their relations to the Colleges of Medicine, Arts and Sciences, and Agriculture, goes on to remark that the "separation of certain phases of biological work is, I think, unavoidable in such a University as Cornell. It has always seemed to me, however, that a certain unity might be maintained by means of a committee representing biological work in all three colleges. Coordination and correlation of courses, interchange of assistants, interchange of points of view, etc., might be mentioned as possible results of such a central committee's efforts. . . . A number of years ago, in an exchange of letters, I suggested to President Schurman the usefulness of a committee to maintain the unity of biological work at Cornell. It is in and through the College of Arts and Sciences that a unification of the biological work in the University should be accomplished."

In his report for the department of Zoology, the acting head, Professor B. P. Young has this to say: "I have spent the past three summers at the Marine Biological Laboratory at Woods Hole, Massachusetts, and the most frequent question which I have been asked by coworkers from other institutions is: 'Why are your departments of Zoology, Entomology, and Histology and Embryology separate at Cornell?' The answer that the history of the institution has been responsible for this condition of affairs seems hardly sufficient to me, when I am convinced that the work in these departments would be much more efficient if the three were supervised by a single man big enough to see the needs of each phase of the work; and there is little doubt about the impression which the activi-

ties of such a large department would make upon the outside world as compared with that made by three separate departments."

Whether Professor Kingsbury's suggestion of a joint committee of the biological sciences, or the more radical suggestion of a single department of Animal Biology which is made by Professor Young, or, indeed, some other plan, would best meet our needs, I make no attempt to decide; but that some reorganization is desirable in the interest of the College program of study seems to be clearly indicated by the facts and opinions which have been cited.

So much for the work and needs of the College.

The most conspicuous legislation of the faculty during the past year was the adoption of a scheme for informal study which is intended to supersede the existing plan of a degree with honors. It is hoped that the new plan may encourage larger numbers of students to do independent work in the field of concentration which constitutes the so-called upperclass group requirement.

According to the terms of the new plan, a student who enters his junior year with a distinguished record of work done in his first two years, may apply for credit not to exceed three hours a term, which he will earn by informal study under the direction of his adviser who represents his field of concentration. It is hoped by this means to afford these selected students an opportunity to express their initiative by reading and reports, or by experimentation in laboratories, without the formalities of classroom attendance and examinations. The same plan may be followed by seniors. A second provision is also made for additional credit of not more than three hours a term, in cases where the student and the department cooperate in a program of study which, with tutorial assistance to be rendered by the adviser and his associates, will prepare the student to stand a comprehensive examination in his field of concentration. This examination will occur at the close of the senior year, and the credit for the informal work of this year will be contingent upon a satisfactory test.

In addition, those students who pass the comprehensive examination with distinction will be recommended for the degree with honors in the field of study in which they are concentrating.

The plan is purposely left in a flexible form in order that the departments which accept its general provisions may experiment with its possibilities. It is hoped, however, that the list of juniors and seniors who are eligible to seek these privileges may find them, and that the satisfaction of independent study and a certain release from the formalities of classroom work and laboratory periods may serve to stimulate free inquiry, and to round out the more formal work in a manner advantageous both to the individual student and to the departments of study.

Another matter of some importance in which the faculty has recently legislated concerns the interpretation of the grade E in the College. This grade (commonly known as a condition) is not a passing grade, but hitherto it could be removed by a make-up examination. According to the new legislation the removal of conditions becomes a matter for the department to determine with reference to the requirements of advanced courses; but the hours of credit toward graduation are no longer recoverable save by repeating the course and earning a passing grade in it.

The conditions under which students are dropped from the rolls of the College for scholastic deficiencies, or are placed on probation pending an improvement in the quality of their work, have been clarified by the faculty's enactment of the following regulation. In order to remain in good standing a student must gain credit each term in at least twelve hours of work, with at least six hours at a grade of C or better. Failure to gain credit in twelve hours "drops" a student, and failure to gain at least six hours of C grade within a minimum of twelve hours places the student automatically on probation.

A student's petition for a review of his case by the faculty will in future be based upon these general regulations.

A matter of considerable moment to the College is the revival of interest in the Classics which has been manifest during the current year. Beginning with a series of stimulating lectures on *Ancient Answers to "Modern" Problems* which

was offered in the first term by Dr. L. L. Forman, an interest in classical subjects was aroused which led to the introduction of a course in Homeric Greek for beginners in the second term. This course was elected by 104 students, requiring four sections. Arrangements were then made to bring a special lecturer on the Classics to us for the month of May in the person of Dr. J. F. Mountford, Lecturer in the University of Edinburgh. Dr. Mountford's course in the *Roman Drama*, as well as his two general lectures on *Greek and Roman Music*, have been well attended and cordially appreciated.

In order that the College may benefit by this revival of interest, the departments of Greek, Latin, and Classical Archaeology have been united in one department of the Classics, the members of which will hereafter cooperate in a more intimate fashion with one another, and with other agencies of instruction in the ancient field, such as Greek Philosophy, Ancient History, and the course in English Translations of Greek and Latin Classics, to the end that study and research in the classical field may be encouraged and promoted.

The College year has been marked by an unusually large number of excellent lectures by distinguished speakers from abroad on the Goldwin Smith Lectureship Foundation. The arrangements for these lectures have been in the hands of a committee of the Faculty consisting of Professor Guerlac, Chairman, and Professors Cooper and Notestein. The selection of an admirable list of lecturers has been attested by the large audiences which they have attracted. An important function of the College has thus been served, thanks to the able manner in which the Committee has fulfilled its obligations.

The standing committees of the College on Educational Policy, on Records, and the Underclass Advisory Board have each served effectively in promoting the interests of the College. It is, indeed, largely because of the active participation of these three committees in the welfare of the College that I am able to report a successful year.

Mention should also be made, in particular, of the important service rendered by the Underclass Board, with its corps of advisers, which, under the able supervision of its Chairman, Professor Pumpelly, has performed the difficult function of adjusting underclassmen to their work with a large degree of success.

In addition, the Secretary of the College, Professor C. Wilson Smith, has managed the College office with admirable discretion. Both by his tactful and sympathetic interest in students, and by his sound judgment in matters of policy and administration, he has made this office the useful instrument which it should be in our academic life.

R. M. Ogden,
Dean of the College of Arts and Sciences.

APPENDIX IV

REPORT OF THE ACTING DEAN OF THE COLLEGE OF LAW

To the President of the University:

Sir:

I have the honor to submit the following report regarding the College of Law for the year 1923-24:

The registration for 1923–24 was as follows:

Third year	24
Second year	27
First year (single registration)	52
Arts Seniors registered in first year Law	22
Specials	5
Total registered in Law School	130
Other students electing law courses	35
Total receiving instruction in Law School	165

This shows an increase in our entering class of thirty-three per cent.

During the academic year 1923–24 Dean George G. Bogert has been absent on sabbatical leave and the undersigned has been acting in his place. Provision for carrying on Dean Bogert's teaching work was made largely through the appointment of Horace E. Whiteside as full time lecturer in law. The preceding year Mr. Whiteside had given only half of his time to the law school.

The most important development in the law school during the year has been the action taken to put the law school on a graduate basis. The possibility of this move has been under consideration for some time. The Faculty of the College of Law at a meeting held November 15, 1923, adopted the following resolution:

> 1. That it is the sense of the Faculty of the College of Law that it is desirable from an educational point of view that the entrance requirements of the College of Law be increased to admit only those applicants having a Bachelor's Degree, except that students in the College of Arts and Sciences of Cornell University shall be permitted to take the combined six-year Arts-Law course leading to the degrees A. B. and LL. B. as at present.
>
> 2. That Acting Dean Burdick be requested to confer with the President with a view to a conference with a committee of the Board of Trustees to discuss the feasibility of putting into effect the proposed advance in entrance requirements.

On January 5 a conference was held between the Committee on General Administration of the Board of Trustees, and Professors Wilson and Burdick representing the law faculty, during which the proposed change was thoroughly canvassed. The matter came before the Board of Trustees at its January meeting and the acting dean was called in to make a statement and to answer questions. At that meeting the Board of Trustees took the following action:

> Upon the recommendation of the Faculty of the College of Law it was *Resolved* that beginning with the academic year 1925–26, the Cornell Law School be placed upon a graduate basis, retaining, however, the six-year combined Arts-Law course.

It is understood that in interpreting this action students registered in the University before January, 1924, will be admitted to the law school in 1925 with two years of college work.

The Board of Trustees at its May meeting approved the increase of the personnel of the law faculty to seven, and the appointment of Horace E. Whiteside as assistant professor of Law and secretary of the law faculty. Mr. Whiteside received his A. B. degree from the University of Chicago in 1912, and his LL. B. from Cornell University in 1922. Since his graduation from the law school he has been serving as lecturer in the law school on temporary appointment.

During the spring of 1923 preparations were made for the first law Summer Session. This Summer Session ran for eleven weeks, being divided into two terms. Of our own faculty, Dean Bogert and Professors Burdick, McCaskill, Wilson, Stevens, and Mr. Whiteside taught during the summer, and were joined by Professor Walter W. Cook of Yale Law School, Dean M. L. Ferson of George Washington University Law School and Dean W. A. Seavy of the University of Nebraska Law School. One course running throughout the summer session and eight term courses were given. Forty-four students were registered in the 1923 Summer Session.

A second Summer Session in law is being planned for 1924. Those of our own faculty who will teach in it are Professors McCaskill, Stevens, and Whiteside. Those from outside who are to join our law faculty for the summer are Professor W. R. Vance of the Yale Law School, Professor A. W. Scott of the Harvard Law School, Professor H. W. Ballantine of the University of Minnesota Law School, and Professor A. M. Dobie of the University of Virginia Law School. One course will run throughout the summer session and there will also be ten term courses.

During this past year a new course in International Law has been added to the law school curriculum, taught by Professor Burdick. During this next year there will be a further addition to the law school curriculum when Professor Stevens will give a course in Jurisprudence.

During the past academic year Professor John Dewey delivered a series of three lectures in the law school on "Law and Logic." Judge Harrington Putnam made his biennial visit of a week to the law school to lecture on "Admiralty and Maritime Law." Judge Irving Lehman of the New York Court of Appeals delivered the Phi Delta Phi lecture this year on "The Influence of the Universities on Judicial Decisions." Col. H. W. Sackett delivered two lectures in the fall on "The Struggle for Freedom of Utterance," and in the spring Hon. Frank Irvine delivered two lectures on "Some Problems of the Law of Public Service", and Judge Leonard C. Crouch of the Appellate Division of the Supreme Court, Fourth Department, delivered two lectures on "Facts and Judicial Proof."

During the winter seven double bookcases were erected in the lower library in Boardman Hall in order to provide for the natural growth of the library. Just as they were finished 7204 volumes of law books were received from the Benno Loewy gift which had to be put on these new shelves. These volumes are being incorporated into the library and are being treated as part of it. Many of them are, however, in very bad condition. Up to the present time only 271 have been catalogued. Besides the Benno Loewy books 1081 books have been added to the law library during the past year. The Board of Trustees at its May meeting made provision for a Cataloguing Assistant for Mr. Willever in the Law Library. Provision was also made for a contingent library fund of $300, designed to meet special needs, or to make it possible to take advantage of special opportunities which may arise from time to time.

CHARLES K. BURDICK,
Acting Dean of the College of Law.

APPENDIX V

REPORT OF THE DEAN OF THE MEDICAL COLLEGE

To the President of the University:

SIR:

I have the honor to submit the following report of the Medical College for the academic year 1923–24.

I am gratified to report that there have been few changes in the Faculty. Professor Frederick W. Gwyer, formerly Professor of Clinical and Operative Surgery, who because of disability sustained in the course of early researches in Roentgenology, resigned from the Faculty in 1912, died on January 11, 1924. Professor Gwyer served the College with diligence and great ability for fourteen years and his death was keenly felt by all of his former associates now on the Faculty.

Professor Oscar M. Schloss, after two years of service as Professor of Pediatrics at Harvard Medical School, resigned in 1923 and resumed the position of head of the Department of Pediatrics at Cornell University Medical College. He has again been made Director of the Pediatric Service at the New York Nursery and Child's Hospital, where his rare ability in research and teaching has long been recognized, and the Hospital has generously cooperated with the Medical College in providing extensive laboratories and equipment for the pursuit of investigations. It may safely be assumed that the Department of Pediatrics will soon be one of the foremost in the medical world. Other Faculty changes during the year have been as follows: appointment of Dr. Arthur F. Coca as Professor of Immunology, Dr. Louis E. Schroeder, Assistant Professor of Pediatrics, and Dr. Henry B. Richardson as Assistant Professor of Medicine.

The Committee on Educational Policy continues to function admirably and during the past year has engaged in numerous studies of the educational problems of the College. It also serves as an advisory body to the Dean, and is of great

service in arriving at recommendations for the Medical College, Council, and the Trustees. The organization of this Committee has undoubtedly strengthened the administration of the College.

The number of applicants for admission continues to be large and the task of selecting those best qualified to benefit by the opportunities which we have to offer, is burdensome. The improvement in the quality of the student body has, however, been very marked, and no one doubts the advisability of restricting numbers and selecting from the applicants. Our students now comprise a group of admirable young people with high ideals and devotion to the science of medicine. This is reflected in the small number of failures, and in their success in securing hospital appointments, as well as frequent participation in research activities.

The revised curriculum adopted by the Faculty last year has been in operation for the first and second year classes. The schedule for the third and fourth years will begin to operate next Fall. While it is as yet too soon to arrive at any definite conclusions concerning the somewhat radical changes which have been effected, it is the general impression among the Faculty that the present curriculum will be a decided improvement over the old. A considerable reduction in the number of required hours allows greater academic freedom for the students, and many are wisely taking advantage of it. There is a tendency for the teachers to attempt to cover all the work which was formerly given in a greater number of hours, with the result that some of the courses have been hurried, and in other instances students have been kept overtime. This is contrary to the basic idea developed in the new schedule and will soon cease.

The system of Faculty Advisers for students has now been in operation for two years, and the Faculty must soon review it and decide if it is working successfully. It is my observation that in a few instances it has operated with great benefit to the students but for the majority it has been not effective.

The College is the fortunate recipient of a gift of $200,000 for the purpose of establishing an endowment fund the income of which shall be devoted to researches in pediatrics. The generous donor, who has made other gifts to the College, has thereby created a foundation which is unique in schools of medicine. The department is strengthened and wise use of the funds is therefore more completely assured.

The Cornell University Travelling Fellowship in Medicine amounting to $2,000 annually, which first became available last year, was awarded to Dr. Harold E. Himwich (Cornell 1919) who has been studying at the University of Kiel in Germany. It has again become available for the coming year and has been awarded to Dr. Arthur M. Master, a graduate of the class of 1921. It is hoped that the fellowship will be made permanent, for it will serve as a stimulus to our recent graduates, and is also an effective aid in developing teachers and research students.

The members of the Council who are elected by the Faculty, have continued to give a great deal of time and thought to the work of this important body. Professor Elser's term expires on July 1, but he has been reelected for a term of two years.

I am pleased to report that the Alumni continue to display an increasing interest and participation in the affairs of the College. The Alumni Association, which was formed last year, has been actively functioning and for the first time was in complete charge of the arrangements for the alumni day and dinner, which was held on May 17, 1924. A larger number than heretofore participated in the events of the day, and the enthusiasm and interest displayed by all insures active alumni support for the College.

The senior class was again privileged to participate in a symposium on tuberculosis organized by the College of Physicians and Surgeons of Columbia University. It was, as heretofore, admirably arranged and conducted, and the Faculty deeply appreciates the opportunity which has been courteously extended to our students. In accordance with plans which have been formulated during the past two years, the College, under the direction of Professor Ewing, organized a symposium on cancer. It was given largely by the Staff of the Memorial Hospital, with members from several departments cooperating. An invitation to participate

was extended to the senior class of the College of Physicians and Surgeons, which accepted and attended in large numbers. The symposium was admirable in every detail and will doubtless be repeated next year. Such interchanges of courtesy between the medical schools indicate an advance in teaching. It conserves effort and material and provides for an interchange of thought between the Faculties and students which otherwise would not be secured. I trust that the idea may gradually be extended still further.

The Clinic continues to be one of the most interesting features of the College, especially from the standpoint of administration. A report of the activities for 1923 has recently been published in which the situation is discussed in detail. Dr. George H. Bigelow, who served as Director from August 1, 1923, resigned March 1, 1924, to accept a position in the Massachusetts State Department of Health. He had won the confidence and respect of all his associates and his departure was sincerely regretted by all of them. We have been fortunate in securing the services of Dr. Calvin H. Goddard, formerly Assistant Superintendent of the Johns Hopkins Hospital, who assumed the directorship on April 1, 1924. Dr. Goddard has had a very thorough training in hospital and dispensary administration, and there is no doubt that his direction of the Clinic will be efficient.

During the first year of the Clinic the chief problem was to insure the best possible professional service for the patients. That, I believe was accomplished and thus far there have been no indications of a decline in the quality of the medical service rendered. During the second year of operation the problem became chiefly financial. The cost of operation was then approximately $3,000 a month in excess of the income. This obviously could not continue, for one of the fundamental ideas in its establishment was to make it essentially self-supporting. After very careful study of the numerous factors involved, it was decided to make a material advance in the fees charged, and at the same time to make every possible reduction in the cost of operation which would not impair the efficiency of the Clinic for the patients. These measures have during the past year been gradually carried into effect, with the result that the Clinic is now operating with a very small deficit. It appears, therefore, that the two chief problems have been solved, and I am sure that the operation of the Clinic on a pay basis, is generally regarded by those best qualified to express an opinion, as an entirely successful experiment. It should not be forgotten that the chief reason for the reorganization of the Clinic on a pay basis was to secure a more varied and better flow of clinical material, in order that the teaching might be made more effective. There can be no doubt that this result has followed, and besides providing material for the teaching of undergraduates, the Clinic serves as an educational centre for a large group of more or less recent graduates who are enabled to work and study under the best conditions. After nearly three years of operation, the College feels justified in concluding that this experiment in dispensary administration is a distinct success.

Owing to the perfect cooperation of the hospitals with which the College is affiliated, our clinical facilities continue to be as nearly adequate as possible under the present organization. The New York Hospital, Bellevue Hospital, Memorial Hospital, Nursery and Child's Hospital, Woman's Hospital, and the John E. Berwind Maternity Clinic, have all offered every possible facility for instruction and research, and the College is most fortunate in its association with such an admirable group of institutions. The pathological laboratory in Bellevue Hospital under the direction of Professor Symmers, has developed into one of the foremost institutes of pathology, and Professor Symmers' unceasing and cordial cooperation gives our students an unusual opportunity for training in this fundamental branch of medicine.

The second Medical Division, in affiliation with the Russell Sage Foundation, under the direction of Professor DuBois, continues to carry on important researches and to train men for positions of responsibility. The College takes satisfaction in the recent appointment of Dr. William S. McCann, Cornell 1915, who was formerly associated with the Clinic to the Chair of Medicine at Rochester

University. Also to the more recent appointment of Dr. David P. Barr, Cornell 1914, who has been with the Clinic during the past five years, to the Chair of Medicine at Washington University. Several others have also been trained for important, more or less conspicuous academic positions.

Upon reviewing the reports of the heads of the various departments of the College, I conclude that the teaching has generally been quite satisfactory. Efforts to secure closer coordination between the various departments have been continued with some success. Several are in need of more personnel, particularly to supervise the work of special students and those undergraduates who take advantage of the opportunities which are now provided in the curriculum for work which is not definitely scheduled. In previous reports I have mentioned particularly the need for assistant professors, but it has thus far been impossible to provide for them. This continues to be one of the chief defects in the College and must be remedied as soon as funds can be procured for the purpose. Professor Gibson has repeatedly mentioned the necessity for developing a subdepartment of experimental surgery, and this must also be provided for as soon as possible. In other respects, the teaching staff may generally be considered adequate.

The scientific investigations carried on in the various departments have been more numerous and more productive perhaps than ever before.

The Department of Anatomy has been chiefly concerned with investigations on the glands of internal secretion and developmental modifications. This work has attracted wide interest and has secured considerable financial support and cooperation from outside sources. Professor Lusk reports that the physiological laboratory has never been more active than during the past year. In addition to the regular staff it has been filled with research workers, and several undergraduate students have accomplished significant pieces of research work.

In the Department of Chemistry methods for determining minute amounts of the acetone bodies in blood and in urine have been developed by Dr. Behre, and have been applied to studies on normal dogs and those treated with insulin. Extensive studies of the effects of insulin upon the normal metabolism of dogs have been made. Work upon a new method for determination of sugar in blood has been completed and will soon be published. Studies in the determination of phosphorus and of phenols in blood will shortly appear from the chemical laboratory of the Memorial Hospital. Nutrition studies relating to cancer development have been continued in the latter laboratory in conjunction with Mr. K. Sugiura. One of the second year students working with Dr. Behre completed a short study upon the action of insulin on the rate of fermentation of glucose by yeast.

The Department of Pathology continues to be chiefly interested in the cancer problem and, in association with the Memorial Hospital, has issued three important reports during the past year. Original research by members of the staff is now divided between the College proper and the various hospitals. Professor Hussey's work on the biophysics of radiation, begun at the Memorial Hospital, will probably be continued at Yale University. Dr. Denton is preparing reports of his studies of measles and pellagra which he made in Panama.

The Department of Pharmacology has completed an investigation of the elimination of digitalis in animals and is making similar studies in man. Studies on vomiting have contributed to the knowledge of this phenomenon and the significance of nausea as a protective mechanism. The sensitizing action of thyroid substance on the effect of epinephrin in man, and the action of calcium in experimental cocain poisoning have also been studied by this department.

The Department of Bacteriology and Immunology has been chiefly concerned with problems of hypersensitiveness, but has also completed studies on certain bacteria, as well as the phenomena of certain blood groups.

The Department of Hygiene has, as for several years heretofore, concerned itself principally with studies of the intestine as the source of certain human ailments. This relates chiefly to the intestinal flora and the absorption of toxic bacterial products from the intestine. Dr. Churchman, who has worked in the Department during the past two years, has been especially concerned with the

effect of dyes upon certain types of bacteria, with a view to their possible therapeutic application.

Researches in the Department of Medicine have been chiefly along the lines of metabolism, although numerous clinical studies have been published by various members of the Department. All of the other clinical departments have also been active in investigations and report, and the output of scientific contributions from the College, has been very large and generally satisfactory.

The Department of Military Science and Tactics has enjoyed the most satisfactory year by far since it was organized. The Unit shows a steady growth of from 16 members in 1921 to 103 in 1923. Five were awarded commissions. There were 35 prospective members for the advanced course next year.

The material needs and present inadequacies of the College, which I have discussed in previous reports, remain as heretofore. It must soon have a large general hospital, closely adjacent and in complete affiliation. The endowment funds must be materially increased in the near future. These are essential, not only for the normal expansion of the College, but for maintenance of its present level of efficiency. The future is, however, brighter than ever before, and the noteworthy accomplishments which have been achieved by the College in its first quarter of a century in medical education justify confidence in its future support.

WALTER L. NILES,
Dean of the Cornell University Medical College.

APPENDIX VI

REPORT OF THE SECRETARY OF THE ITHACA DIVISION OF THE MEDICAL COLLEGE

To the President of the University:

SIR:

As Secretary of the Ithaca Division of the Medical College, I have the honor to present my twenty-second annual report covering the college year 1923–24.

The curriculum has been changed so that the subjects covered in the first year at Ithaca are identical with the work of the first year in New York. The amount of work in Physiology has been curtailed and the amount in Anatomy increased. With the exception of a short course in topographical anatomy, all of the required work in anatomy is now completed in the first year; while in physiology less than half of the work is now finished in the first year. In addition to rearranging the curriculum, the number of required classroom and laboratory hours has been reduced. This was to conform to similar action taken by the Faculty in New York. The methods of instruction desired by the staff at Ithaca made it seem inadvisable however, to make quite such a great reduction in scheduled hours as was done in New York. It is imperative that the personality of individual teachers should be maintained by permitting as great leeway as possible in the methods of instruction that they employ. It is well known that one teacher will obtain best results by stressing laboratory work while another will obtain equally good results by emphasizing more lectures and recitations. The scheduled time of the student is, of course, greater in the former than in the latter but the total time, when we consider home work, may be the same in both cases. Although the scheduled hours at Ithaca are more than in New York, I believe that the total amount of time required of the student in classroom, laboratory, and at home is about equal in the two divisions. It is still too early to judge of the effect of the above changes.

Of the thirty students admitted to the first-year class at Ithaca, twenty-three were seniors and seven were college graduates. The seniors were, with one exception, trained in our own College of Arts and Sciences. The graduates were only two of them from Cornell. We have found that the seniors trained in our

own College of Arts and Sciences compare most favorably with the graduates who come to us from other institutions. This is undoubtedly due in part to the fact that we are able to obtain better information about the Cornell students and are thus able to discriminate better in our selection. It is also due in part, we believe, to the character of the training that they have received. There were four women in the class at Ithaca this year, three Cornell seniors and one a graduate from elsewhere.

In addition to the medical students, there were 112 course registrations in Anatomy, 227 in Histology and Embryology, and over 700 in Physiology and Biochemistry. Considering also the medical courses the amount of required teaching time of each of the above departments is in inverse ratio to the number of students.

The Department of Anatomy has been hard pressed with teaching work this year. Without increase of staff, the added hours of work for medical students and an increased number of students in the Arts courses have been taken care of. Until the size of the staff can be increased, it seems inevitable that the teaching requirements in this department should be larger than in most other departments of the University. Steady growth has continued in the neurological collection, both in the microscopical series and in the gross specimens. A few years ago the human specimens in the Wilder Brain Collection were transferred from the Department of Zoology and added to the collection in the Department of Anatomy. As research in neurology involves animal experimentations as well as morphological study, it is hoped that the remainder of the collection including the comparative anatomy specimens, may soon follow. As one of the pioneer institutions in this country in this line of work, we should hope with adequate support to again build up, under the enthusiastic guidance of Dr. Papez, one of the leading neurological departments in this country.

The large and constantly increasing collection of viscera and other parts of the body has already proved of great value for investigators as well as for teaching and its usefulness should increase steadily.

I am pleased to report that the shortage in dissecting material has apparently passed and that the reserve supply is slowly growing and should soon reach a safe margin. The needs of the department are many, the most important is, perhaps, an additional preparator.

Although every member of the staff has been busily engaged in research, the all too heavy teaching schedule has not permitted so many completed investigations and published results as should be.

Dr. Kingsbury reports that instruction has been faithfully carried out in all courses in the Department of Histology and Embryology and that the results have been good. Last June Instructor R. R. Humphrey, the senior instructor in the department, resigned to accept a position in the Medical Department of the University of Buffalo. His loss to the research and teaching staff is a severe one and it was only through marked readjustment that the loss was not more seriously felt. It was necessary to secure four new assistants and these Dr. Kingsbury commends for their faithful and conscientious work. To, in a measure, guard against the too often repetition of such disorganizing changes as noted above, I would again urge the appointment of an Assistant Professor of Histology and Embryology. Instructor Adelmann, now the senior instructor has continued to show himself a teacher and investigator much above the average, extremely thorough in his teaching and with a marked mastery of the literature in the field.

The course registrations in the department have increased over last year mainly through increase in Arts courses but also slightly in one Veterinary course. Research will always have a prominent place in a department conducted by Dr. Kingsbury and this year has been no exception. Graduate students as well as staff have been active under his guidance. Four important papers from the department have been published this year.

In addition to the needs mentioned in other reports the most pressing present need is an additional laboratory attendant to relieve the staff of time consuming work that now interrupts and interferes with their more imperative duties.

During the first term Dr. Sutherland Simpson was absent on sabbatical leave which was spent attending the Eleventh International Physiological Congress at Edinburgh and in visiting physiological departments in Great Britain and on the continent.

While formerly the whole field of Physiology for medical students, with the exception of a special course of lectures on nutrition and metabolism, was covered at Ithaca in the first year; the important chapters on circulation, respiration, and nutrition are, in the revised curriculum, now left over until the second year. The work in physiology for medical students does not begin therefore until the second term. During Dr. Simpson's absence on sabbatical leave from June to the beginning of the second term, the work of the department was carried on very satisfactorily by Dr. Liddell and Mr. Dye. This work consisted of the elementary courses for Arts and Agricultural students and the supervision of the general routine of the department. I last year noted the resignation of the senior instructor, Dr. Burlage. To fill the position thus left vacant, Mr. Joseph A. Dye, who because of ill health, resigned from the department in 1919 and is now fully recovered, returned again as instructor. Dr. Howard S. Liddell has now resigned to accept a research fellowship of the National Research Council. While, on the recommendation of the National Research Council, Dr. Liddell will remain connected with the department and continue his investigations on the thyroid gland, which he has been engaged in for the past three years, it must be remembered that with his acceptance of this fellowship he retires from the teaching staff of the department and it will be very difficult to replace him. This almost yearly resignation of one of the senior instructors emphasizes again the importance of securing as soon as possible an Assistant Professor of Physiology whose tenure of office would be somewhat more prolonged. The number of academic students receiving instruction in the department, over 700 this year, would alone warrant such an appointment.

Dr. Simpson reports that on the whole from the point of view of instruction the year has been a successful one. Research has been prosecuted vigorously and enthusiastically by every member of the staff and already the Physiological Field Station on Cayuga Heights has been found to be a great asset to the department. Investigations along several lines are in progress and many reports thereon have been made to scientific societies and the results have been published.

The buildings erected at the Physiological Field Station during the past couple of years furnish adequate housing for the sheep, goats, dogs, cats, rabbits, and other animals that are kept there for observation and breeding. They also provide a small laboratory for some of the experimental work while the truck belonging to the department makes it possible when necessary to transport the animals to Stimson Hall for more extended experiments. The most pressing need of the department is an attendant's residence at the Field Station so that he might be constantly on the spot to look after the animals. Dr. Simpson lives in constant dread of dogs getting into our pastures and destroying some of our invaluable thyroidectomized sheep and goats. I would again urge the importance of this matter.

Dr. Sumner reports that this year's teaching with medical students has been the most successful of any of the ten years that he has been Assistant Professor in charge of the work in Biochemistry. The work, however, with the Agricultural students in Home Economics and the Arts students has not been so satisfactory owing to their poorer preparation. Research has been active with every member of the staff and two important papers have been published by Dr. Sumner. In the second term, through an appropriation from the Heckscher Foundation an assistant was secured to relieve Dr. Bodansky of much of his teaching duties so that he could devote most of his time to investigations at the Physiological Field Station. These observations on thyroidectomized sheep and goats require more or less continuous observations which conflicted with his teaching duties.

The grants from the Sarah Manning Sage Research Fund of the Medical College continue to be a great boon to the various departments. Almost every investigator in the college has received some aid from this fund. The unrestricted

character of the fund has made this aid available in cases where the more specific grants of the Heckscher Foundation were not applicable.

Professor Emeritus S. H. Gage volunteered to act as supervising librarian of the Charles Edward Van Cleef Memorial Library. The Library is located in a room adjoining his special research laboratory and under his wise guidance the attendant has been cataloguing and rearranging the collection to make it more available for research workers. Mr. Mynderse Van Cleef has generously added to his original endowment so that when the whole amount becomes available there will be at least $750 yearly for the use of the departments housed in Stimson Hall. This has made it possible for each department to relinquish part of its yearly grant from the Library Council of the General Library and to still have a sufficient fund for the purchase of the most important books and periodicals in their special fields each year.

While some of the most pressing needs of the departments of the Medical College at Ithaca have been mentioned in the body of this report and in the annual recommendations for appointments and for budget, the most important need still remains increases of salary for the staff of instruction. The Ithaca Division of the Medical College fills a special and an important function in the University. It forms the connecting link between the University and the Medical College located in New York City and its departments give instruction not only to medical students but also to considerable numbers of graduate and undergraduate students in other departments of the University. It is important that the teachers in the college should be leaders in their fields and because of this relation of the Medical College to the University it is important also that at least the major chairs should be filled by men with a medical training and a medical point of view. To secure teachers fulfilling these requirements is very difficult and to retain them demands adequate salaries commensurate with the salaries paid to the teachers of similar grade in the first class medical colleges elsewhere. That the past year has been so successful is due not only to the enthusiastic and faithful service and cooperation of the staff but as well to the wise council and advice that you have so freely given us.

ABRAM T. KERR,
Secretary of the Ithaca Division of the Medical College.

APPENDIX VII

REPORT OF THE DEAN OF THE NEW YORK STATE VETERINARY COLLEGE

To the President of the University:

SIR: I have the honor to submit herewith a report of the New York State Veterinary College for the academic year 1923-24.

The conditions affecting veterinary medicine, explained in my last report, still exist, although there are indications that the situation is improving. There was an appreciable reduction in the number of veterinary students in the United States from that of 1922. It is a period in which veterinary education is being readjusted to the modern needs of the animal husbandry of the country, with regard both to the number of men required in the profession and to their distribution for efficient service.

There was a total registration of 87 undergraduates and 6 graduate students. They were distributed by classes as follows: 32 freshmen, 25 sophomores, 10 juniors, 19 seniors, and 1 special. This is a small decrease from last year, but the entering class was practically the same. The registration is sufficient to supply the veterinary needs of New York State, but inadequate to do this and furnish our quota of veterinarians for the federal and state governments and for the states in which there are no veterinary colleges. There were 165 university students who received a total of 458 credit hours of instruction in this college.

Among them were 42 agricultural students, who registered in the course on "Health and Disease" given for them, and 79 who took the lectures in physiology.

There have been few changes in the teaching staff. In the Department of Surgery, Dr. M. H. Mabey succeeded Dr. A. M. Mills, resigned, and Miss E. C. Williams was appointed librarian to succeed Mr. C. E. DeCamp, resigned. The loyalty of the Faculty is shown from the fact that several of its members have declined attractive offers elsewhere. Their ambition is to make the respective departments as efficient in teaching and research as possible. It is this devotion to the ideals of the institution crystallized by James Law, and the desire to aid in the development of an efficient veterinary profession, that enables the University to retain these teachers.

There have been numerous minor changes in the teaching. Directions for laboratory courses have been revised or rewritten. Considerable new apparatus has been acquired, which tends to improve the instruction. The necessary material for teaching practical medicine and surgery, as applied to both large and small animals, has been increasing steadily.

The results of the research work have been encouraging. The more detailed report of the college to the Legislature will contain several valuable contributions to the knowledge of animal diseases. Among these may be mentioned the research on the reaction of the skin to tuberculins. This study has shown that a reaction of a non-specific character often occurs, and this may explain the considerable number of no-lesion cases that are being reported in cattle giving a supposedly positive reaction. The investigations on the diseases of breeding cattle are progressing satisfactorily in acquiring data to explain the cause of certain losses, and, we believe, point to practical preventive measures. In addition to the work reported, a number of other researches are in progress, some of which promise findings of much economic value.

It is impossible for us to do a large amount of original work when the men engaged have heavy teaching schedules. It is believed, however, that the combination of research with teaching exerts a most beneficial influence on the students who, later as practitioners, are to carry the newly discovered truths to the owners of live stock who need the information. The contact of students with teachers who, through research, are trying to find answers to the many obscure questions in the treatment and control of animal diseases, cannot fail to make them better advisers to animal owners than they could be otherwise.

The south wing to James Law Hall is completed and the equipment is being installed. It provides necessary office space, an auditorium adequate for our large veterinary gatherings, a suitable diagnosis laboratory, and large library rooms. All of these have been needed for many years. We are very grateful to the trustees and to the Legislature for these additional facilities which will tend to more efficient work.

The college has continued as heretofore to assist veterinary practitioners and live-stock owners of the State by aiding them in diagnoses and in the preparation of certain biological products used in the identification and prevention of infectious maladies. The preparat on of tuberculins, anti hog cholera serum, and autogenous bacterins for immunizing purposes have increased during the year. The marked reduction in this State in the amount of such diseases as anthrax and rabies has been due largely to the aid given by this service. The members of the Faculty have rendered further assistance by answering many inquiries relative to animal diseases, in giving practical talks to groups of veterinary practitioners, breeders, and health officers, and by personal interviews. In these ways the college has become the professional home for the veterinarians of the State.

The Sixteenth Annual Conference for the veterinarians of the State was held January 10 and 11. It was well attended. The program was instructive for practitioners. That large numbers of veterinarians attend is evidence that they profit by these gatherings. We were fortunate this year in obtaining instructive addresses from Assistant Commissioner C. P. Norgord of the Department of Farms and Markets, Mr. C. P. Bigler, President of the State Holstein-Friesian Association, and Professor E. S. Savage of the Department of Animal Husbandry.

The papers presented were published in the April issue of the Cornell Veterinarian and a copy was sent to each practitioner in the State.

We gratefully acknowledge gifts to the Flower Library from Dr. William Sheppard of Long Island of over 100 bound volumes and 800 pamphlets and unbound journals on veterinary and allied subjects, and a collection of veterinary books from Mrs. C. H. DuBois, of New York, widow of the late Dr. C. H. DuBois. We wish to acknowledge a further gift from Mrs. James Law and daughters of about 100 volumes, which will be added to the Law collection.

The Legislature of 1924 made an appropriation of $128,860 for the maintenance of the teaching and research work of the college for the fiscal year 1924-25. This is an increase of $11,450 over that of the preceding year. The appropriation provides $6,850 for the study of poultry diseases and $10,000 for continuing the researches on the diseases of breeding animals. In addition to the maintenance, an appropriation of $37,000 was made for adding a second story to the surgical hospital.

The members of the Faculty have cooperated fully in an effort to have the college meet its obligations to the veterinary profession and live-stock owners of the State, to the University, and to the students who came here for instruction.

V. A. MOORE,
Dean of the New York State Veterinary College.

APPENDIX VIII

REPORT OF THE DEAN OF THE COLLEGE OF AGRICULTURE

To the President of the University:

SIR: I have the honor to submit herewith a report of the New York State College of Agriculture and of the Agricultural Experiment Stations under the administration of Cornell University, for the fiscal year 1923-24.

THE LEGISLATIVE ENACTMENTS

Certain gains of distinct importance to the College were made at the 1924 session of the Legislature. The total appropriation for general maintenance and operation for the year 1924-25 was $1,524,560, as contrasted with $1,404,105 for the current year, a net gain of $120,455. From the standpoint of the salary scale this appropriation was unsatisfactory, as it included very little which could be applied to the adjustment of salaries. Inasmuch as the salary scale has never been brought to a standard commensurate with either the requirements of the institution or the importance of its service to the people, and in view of the continued denial of requests for salary increases, now rigidly adhered to with but slight adjustment for a period of four years, the failure of the Legislature of 1924 to give relief was a serious hardship. It has compelled the yielding-up of several positions, which could be spared only by distinct sacrifice, in order to make a number of imperative salary increases. The wholly inadequate salaries paid continue to constitute the most difficult problem with which the College has to deal in attempting to provide the State with educational service of a high order. This situation must be met by a more generous attitude with respect to salaries on the part of the Legislature if the State is to be saved from serious consequences in its State College of Agriculture. It is the intention to stress this need when the Legislature of 1925 convenes.

In a number of other respects the legislative grants provided distinct relief, notably in certain of the classified funds for general maintenance other than salaries. The items for fuel, equipment and supplies, repairs, and summer school, were chiefly benefited. The items for equipment and supplies and summer school are still inadequate, but the gains this year have been distinctly helpful.

For a number of years the beekeepers of the State have urged larger consideration of their needs. The matter has been presented to the Legislature repeatedly, the beekeepers themselves taking the major responsibility although fully supported by the college authorities because of the recognized importance of the industry. These efforts were successfully rewarded this year in provision for salaries for a professor of apiculture, who is to engage in research and resident instruction, and for an extension assistant professor. This makes adequate staff provision for the immediate requirements. There will need to be additional funds for facilities.

The largest single new item in the appropriations received is one in the amount of $45,000, to expand the research and teaching in marketing and to round out the facilities of the College so that a four-years course in agricultural business administration can be established. There has been urgent need for this work. The farmers' cooperative organizations, which are looking to the College to provide trained personnel for them, requested this appropriation and were particularly active and effective in promoting its course through the Legislature. This educational enterprise is more fully discussed in the next section of this report.

In addition to the foregoing appropriations for the general operations of the College, a grant of $5,000 was made to provide an emergency heating system in the greenhouses.

A special bill of great importance to the extension service was passed and was made a law by the signature of the Governor. It specifically commits the State to the development of junior extension, or boys' and girls' club work, on substantially the same basis as is now provided for the county agricultural and the home demonstration agent services. For many years the State has appropriated annually $600 for each county which meets the requirements fixed by the College for the employment of a resident county agricultural agent, and similarly $500 for each county for the employment of a home demonstration agent. The law in question raises the State allotment for the home demonstration agents to $600 a county, authorizes the employment of junior extension agents in each county that shall qualify, and authorizes State aid at $600 a county for such agents. Inasmuch as the junior extension service has already laid strong hold on the people, many county boards of supervisors are making specific appropriations for the work, and there are already approximately 15,000 boys and girls enrolled for specific farm and home projects, this backing by the State will give impetus to the work and do much to insure its permanency. It provides for the completion of the county extension force as now contemplated. Experience has shown that the work with farm girls and boys is one of the most promising and forward-looking of the extension enterprises.

The above-mentioned law also makes certain other provisions of advantage to the three lines of work covered by it. Chief among these is a requirement that no county may receive the allotment of $600 for any one of the three kinds of work until the county has raised, either by appropriations made by the board of supervisors or otherwise, $2,500 of local funds for that work. Thus a county receiving State aid in all three phases must provide at least $7,500 of local funds.

The bill to designate the School of Home Economics as the State College of Home Economics, which has been before the Legislature for four years, passed the Assembly without a dissenting vote, and was on order of final passage in the Senate in the closing session of the year. At the last moment, when its passage seemed assured, objection by the Senator from Onondaga County caused its reference to the Finance Committee, from which there was no opportunity to report it since that committee had no further meeting. The bill is sound in principle, is in accord both with a wise State policy and with the highest interests of the work which the State is supporting at this institution, and is generally acceptable. It should become a law. There is encouragement to believe that the best judgment and the larger interests of the State will yet prevail and secure its passage.

THE WORK IN MARKETING AND AGRICULTURAL BUSINESS ADMINISTRATION

Reference has already been made to the action of the Legislature in making an appropriation for developing research and courses of instruction in marketing and in agricultural business administration. Students have heretofore entered these lines of work, in considerable numbers, with such training as the College has been able to furnish, which was wholly inadequate. The enlargement of this field of education and research has constituted one of the most pressing needs of the College. It is now provided for, in so far as immediate requirements are concerned.

The primary aim of the new work will be to bring to bear on the problems of marketing the same painstaking investigation that has, through a long period, been given more largely to the problems of production. Farm crops and animals have long been studied with the purpose of securing improvement in kind and improvement in the methods of culture and care. Farm management studies have analyzed the farm practices and business methods that have made it possible for some farmers to produce crops with less labor and cost than others. There are equally great differences in the cost of getting the products from the farm to the consumer, and a similar analysis should indicate the best procedures. Studies will be made also of the kinds of agencies best adapted to the various steps in the marketing process, and of the organization and management of these agencies.

While it will take time to develop this new activity in the College, new courses in accounting, cooperation, marketing, and business management are already being organized and the necessary additions to the staff recruited, so that, in conjunction with the courses previously in operation, the new courses will constitute a curriculum practically sufficient for the needs of students specializing in marketing and agricultural business.

SPECIAL TEMPORARY FELLOWSHIPS, AND OTHER GIFTS OR GRANTS

During the year covered by this report, the following special temporary fellowships have been established or renewed:

(1) By the Union Sulphur Company, renewal of the two Herman Frasch fellowships, each providing $2,000 a year, for the investigation and development of dusting as a means of applying fungicides and insecticides in dry form.

(2) By the Union Sulphur Company, a temporary annual grant of $1,000 a year for the purpose of investigating and demonstrating the possibility of controlling cereal rust by the application of fungicides in dry form.

(3) By the Western New York Farms Corporation and the Orleans-Genesee Vegetable Growers' Association, a temporary annual grant of $1,000 for the establishment of the Western New York Farms Corporation Fellowship, for the purpose of investigating and demonstrating the nature and control of injurious diseases and pests attacking muck-land crops in western New York.

(4) By the Bayer Company, Inc., a temporary annual grant of $1,000 for the establishment of the Bayer Fellowship, for the purpose of investigating and demonstrating the value of chlorophenolate of mercury in comparison with other new and standard disinfectants for plant-disease control and plant stimulation.

A gift of $2,500 was received from the Honorable George D. Pratt, of New York City, to finance investigations in the raising of insect food for young pheasants. Mr. Pratt is a recognized constructive leader in wild-life conservation. His gift, to carry forward a promising investigation on which Dr. J. G. Needham was engaged, is received with appreciation.

The New York State Bankers' Association continued its generous aid to the junior extension service by again providing the achievement medals at an approximate cost of $1,000, and again appropriating $1,000 for five scholarships of a value of $200 each, to enable winners in the junior extension projects to attend the state agricultural college or the state schools of agriculture.

The New York State Grange has continued its provision for twelve scholarships, of a value of $50 each, available on competitive examination, to members of the order who may desire to enroll for the winter courses.

During the past year the University has sold, somewhat above par, the shares of railway stock donated by Mr. Charles H. Roberts in 1906 for the establishment of five scholarships. As reinvested the sum will now permit raising the amount of each of these scholarships from $240 to $320 a year. Since their establishment these scholarships have afforded greatly needed and appreciated help to worthy students, and it is well that their usefulness is thus to be augmented.

For some years the Department of Forestry has awarded to the member of the senior class who has maintained the best all-round record during his course, a prize donated by Mr. Charles Lathrop Pack. During the past year Mr. Pack has increased the fund for this prize to $1,000, and has further donated $1,000 for establishing another annual prize, the purpose being "to aid in training foresters to write articles which will arouse in the public an interest in forestry and an appreciation of what forestry means to the country." Mr. Pack's generous gifts have been highly useful, and the College welcomes the additions that have been made.

BUILDINGS AND LANDS

The past year has seen the substantial completion of the architect's plans for the plant industry building and the library, and it is anticipated that bids for their erection will be invited during the summer or early fall. Relief from an overcrowding which is seriously hampering the work of the College awaits the erection of these buildings. It is highly important that every effort be made to avoid further delay.

While the plant industry building is the one whose construction has been urged for the longest period of years, beginning with 1913, and the one that will afford the greatest space relief to the College as a whole, the immediate erection of the library building is no less important. The college library is growing steadily in use, size, and value. In recent years a special effort has been made to add the more significant foreign works in agricultural science and related fields, and important acquisitions have been made. The continued housing of the main deposits in a non-fireproof building is a risk greater than should be borne by an institution of this character, in which the library plays so vital a part. Also, the administration of the library is made difficult, and in many respects unsatisfactory and cumbersome, because of the scattered location of sections of the collections, necessitated by the wholly inadequate space in Stone Hall. During the past year a small amount of relief was gained by readjustments following the occupancy of the new building for the dairy industries.

The erection of these two buildings will necessitate the destruction of a considerable section of the greenhouse range. The architect's plans are practically completed for the reestablishment of the houses thus disturbed, in what will constitute a new range for vegetable gardening, floriculture and ornamental horticulture, on the plateau north of the university barns. Plans are advanced also for the reorganization of such parts of the exisiting range as it is practicable to leave in the present location.

The new building for the dairy industries was completed in the summer of 1923, in time for occupancy prior to the opening of the fall term. In space, arrangement, and in equipment it is satisfactory in the highest degree, and amply meets the requirements of this important phase of the college work. The building was formerly dedicated on October 12 and 13, 1923. The occasion was honored by the attendance of nearly ninety distinguished dairy scientists from all parts of the world, who came to Ithaca from the sessions of the World's Dairy Congress which had just completed its meetings in Washington, Philadelphia, and Syracuse. Dr. Robert Wallace, Professor Emeritus of the University of Edinburgh, spoke for the members of the Congress. The dedicatory address was delivered by Dr. H. E. Russell, Dean of the College of Agriculture of the University of Wisconsin.

Of small farm structures, for many of which the College still has great need, there were erected during the year a drying-shed on Caldwell Field for the experimental work in agronomy, and a barn, a greenhouse, and an extensive water system on the new floricultural grounds.

The University purchased the J. W. Preswick farm on the Ellis Hollow Road, consisting of a dwelling, barns, and fifty acres of land, in order to provide a desired addition to the college domain. It joins land already owned by the University.

While the erection of the plant industry and library buildings will add substantially to the housing facilities, many large and important departments will remain in quarters wholly unsuited to their work and grossly inadequate. It is of the highest importance that the State should go steadily forward with the entire building program which has been placed before it and officially recognized by the Legislature.

CHANGES IN THE COLLEGE STAFF

I have to report the following resignations from the professorial staff during the year: L. J. Norton, Assistant Professor of Agricultural Economics, July 1, 1923; Miss Ellen A. Reynolds, Assistant Professor of Home Economics, January 30, 1024; G. Harris Collingwood, Extension Assistant Professor of Forestry, June 30, 1924; C. A. Boutelle, Extension Assistant Professor of Animal Husbandry, June 30, 1924.

The staff has been strengthened during the year by the following additions, all of them persons of excellent professional training and a record of successful experience: Dr. Bruce L. Melvin, Acting Professor of Rural Social Organization, October 1, 1923; Ralph A. Felton, Extension Professor of Rural Social Organization, October 1, 1923; Dr. James Morgan Sherman, Professor, and head of the Department of Dairy Industry, December 1, 1924, replacing in the latter post Professor W. A. Stocking, who retired from the headship to a teaching professorship after many years of arduous, devoted, and successful administration of the affairs of the department; E. J. Anderson, Acting Assistant Professor of Rural Education for one term, January 25, 1924.

Effective with the beginning of the academic year 1924-25, the following appointments have been approved by the Trustees: Dr. Ivan Clifford Hall, of the University of California, Professor of Bacteriology in the Department of Dairy Industry; Dr. Everett Franklin Phillips, of the United States Department of Agriculture, Professor of Apiculture in the Department of Entomology; Dr. H. A. Ross, of the University of Illinois, Assistant Professor of Marketing in the Department of Agricultural Economics for the first semester of 1924-25.

THE DIRECTORSHIP OF EXTENSION

On June 30, 1924, Maurice Chase Burritt resigned his position as Director of Extension in order to fulfill a desire which he had cherished from the time of his graduation from the College in 1908, to return to the management of the farm of his boyhood at Hilton, New York, the ownership and direction of which he had retained. After three years of notably successful work as State County Agent Leader, during which period occurred the rapid rise and development of the farm bureau movement in this State, with its exacting problems of organization and direction, Professor Burritt was promoted in 1917 to the newly created position of Vice Director of Extension, and in 1923 he became Director of Extension. Throughout his period of service he demonstrated exceptional ability as an organizer and director. His frank, straightforward, clear, and convincing presentation of the essential factors in every situation, and his excellent sense of the practical situations to be served, made his leadership of the extension service invaluable. His ability was not only freely acknowledged by his associates in New York, but widely recognized throughout the country. His contribution was of a high order and its benefits will be lasting.

Effective on July 1, 1924, the Trustees, on the recommendation of the Dean, appointed Dr. Carl E. Ladd to succeed Director Burritt. Dr. Ladd brings to the post an excellent experience in administrative work and an intimate acquaintance with the field of agricultural extension. He received the degree of bachelor of science in agriculture from Cornell University in 1912, and the degree of doctor of philosophy in 1915. Thereafter he served successively as Director of the State School of Agriculture at Delhi, Specialist in Agricultural Education in the State

Department of Education, Director of the State School of Agriculture at Alfred University, and Extension Professor of Farm Management at Cornell University. In all of these positions he had direct contact with the extension service in the State. He is eminently qualified for the duties in the responsible position to which he has been appointed.

PROFESSOR WILLARD WINFIELD ROWLEE, B. L., D.SC.

It is with deep regret that I must record the death of Professor W. W. Rowlee, which occurred on August 8, 1923. Following a long period of service at Cornell University, beginning with his appointment in 1889 as an instructor in botany in the College of Arts and Sciences, Professor Rowlee was transferred to the State College of Agriculture on July 1, 1922, as Professor of Dendrology. He was a welcome addition to the staff, both because of his ability as a teacher, and for his gracious personality, which endeared him to all with whom he came in contact. It was the expectation that Professor Rowlee would devote his energies primarily to investigative work in the field of dendrology, with a limited amount of teaching. Steadily failing health largely prevented him from carrying out his plans, although during his first term with this College he gave instruction to advanced students. Also, during that period and later, he supervised the reclassification of the tropical and other wood specimens in the collections in the Department of Forestry, which he had enriched by the addition of a large collection that he had made prior to his transfer to the College. Professor Rowlee will be remembered as a man whose first thought was always for the welfare of the University, to which he devoted himself unsparingly throughout his long connection with it.

THE ENROLLMENT OF STUDENTS

The enrollment of students in the College of Agriculture during the year 1923-24 is given below, in comparison with the figures for the previous year. There is an increase in the lower classes and in the number of graduate students, which suggest the beginnings of recovery from the agricultural depression, and a small decrease in the winter-course registration. The decrease in the registration for the summer school, which accounts for the decrease in the total enrollment, is due to the transfer of the summer work in physical training to the State Normal School at Cortland, discussed in last year's report.

	1922-23		1923-24	
Freshmen	368		421	
Sophomores	283		300	
Juniors	230		233	
Seniors	264	1,145	220	1,174
Special students		39		36
Winter course students				
Agriculture (general)	121		101	
Dairy Industry	48		48	
Poultry Husbandry	40		52	
Fruit Growing	22		18	
Flower Growing	16		19	
Vegetable Gardening	7		2	
Home Economics (not offered in 1922-23)	...	254	...	240
Graduate Students		189		202
Summer school students		992		584
		2,619		2,236
Less number counted twice		145		100
		2,474		2,136

CLASS ABSENCES AND GRADES

Two items of faculty action may be recorded as of general interest. The very real abuse of absence on the part of students on days immediately preceding and following vacations was dealt with by the University Faculty some years ago by the imposition of fines for unexcused absences on these days. This measure has not found great favor with either the Faculty or the student body, and the University Faculty has recently removed the fines. Whatever the merits or demerits of the plan, a record should be made of its working in this College. The following tabulation indicates the amounts of excused and unexcused absences with and without fines. While there are certain considerations discounting the results, there can be little question of the general conclusion that the fines substantially reduced the number of absences:

	1915-16 No fine	1919-20 Fine	1920-21 Fine	1921-22 Fine	1923-24 No fine
Christmas recess:					
Percentage of days of excused absence	1.8	2.3	2.4	3.5	2.3
Percentage of days of unexcused absence	9.4	1.1	1.0	0.99	7.3
Spring recess:					
Percentage of days of excused absence		3.0	3.0	3.2	2.7
Percentage of days of unexcused absence		0.7	0.8	0.7	9.1

In 1916 the Faculty adopted the so-called "Missouri plan" of giving credit toward graduation varying with the grade of work done. With five passing grades, the medium grade of C carries normal credit, A carries twenty per cent and B ten per cent increased credit, and D and P carry ten and twenty per cent decreased credit, respectively. As a stimulus to good work, those who make excess credit averaging fifteen per cent, that is, an average midway between A and B, are allowed graduation on seven terms of residence if all specific requirements are met. The experience of several years shows that with the scale of grading maintained as it is by the faculty, the standard set for exemption for a term of residence is too high, since not a single student has qualified under this provision. The Faculty is agreed that exceptional work merits such exemption, and has therefore voted to allow it if the record averages B. It has determined also to limit a student's registration to fifteen hours a term if in the preceding term his grades average less than C, in order to prevent students from making up by rather heavy registration what has been lost by reason of the system of varying credit.

THE DIRECTORY OF FORMER STUDENTS

In the annual report for 1921-22 a summary was given of the information gathered by Mr. Anson Wright Gibson, of the college staff, on the occupations of the graduates who had entered the College during the year 1906 to 1910, inclusive. Information of this character has now been compiled for all the students of the College up to June, 1923, and is brought together in an alumni directory, published during the current year.

DEPARTMENTAL NOTES

Botany. The Department of Botany reports that during the second term of 1923-24 it conducted an experiment in class sectioning in Course 1, in which there were nearly two hundred students registered. The class was divided into twelve sections. To some of these sections students were assigned who ranked high in mental-ability tests; to others, students of medium and low mental-test scores. Some of the sections were filled with students of various grades in mental-ability tests, and these sections served as the checks in the experiment. The achievement of the students as compared with that in the first term, when the sections

were formed at random, was measured, and the result showed, in general, a greater gain by the sections in which students of apparently equal ability were segregated than in the mixed sections. The department recognizes the need of further experimentation in this field, but the study of the past year was made with care and constitutes a worth-while contribution toward the solution of the problem.

Dairy Industry. The courses in the Department of Dairy Industry have been reorganized to a considerable degree, largely with the purpose of concentrating the work in fewer courses. It is thought that a gain has been made in the dairy courses themselves, and also in releasing more of the student's time for work in the basic sciences essential to the best work in dairy industry. The courses in bacteriology have been greatly strengthened. There will be a general introductory course for those planning to do advanced work in the department, and separate elementary courses for the special needs of students in general agriculture, home economics, and hotel administration.

Floriculture. Prior to the current year, students specializing in floriculture were held to meet the established farm-practice requirement. With the beginning of the present year a change was made, so that the requirement for these students is now met by equivalent practice in greenhouse or nursery work. This modification promises to be advantageous to the students concerned, in preparing them more directly for their chosen work.

Forestry. The year 1924 marked the close of the first decade of the forest working plan for the woodlands on the college farm. Ten years ago, when these areas were taken over by the Department of Forestry, most of them were in poor condition. Since that time they have been under systematic forest management. The effect is noticeable both in the way of growth and in the composition of the species making up the stands. Although cuttings have been made each year, there is now a greater volume of wood standing than there was ten years ago. The working plan has now been revised. Its revision, on which both staff and graduate students worked, has been a valuable educational enterprise. The revised plan will guide the operations for the ensuing ten-year period.

In the autumn of 1923, a definite agreement was entered into between the College and the New York State Conservation Commission governing the conduct of the educational activities that have grown out of the white-pine, blister-rust eradication undertaken by the State.

Representatives of the department have cooperated during the year in forwarding Federal and State legislation having to do with the expansion of the Federal forest policy and the establishment of a logical and comprehensive Statewide forest policy for New York. The most important result was the enactment by Congress of the McNary-Clarke bill, which provides very important and substantial enlargement of the national forest service in cooperation with the several States. Members of the forestry staff have given valuable aid in the preparation of a forestry policy for New York State, at the request of the Chairman of the State Senate Committee on Conservation, made to the New York Section of the Society of American Foresters. There is great need that this State shall revise and extend its policy in relation to the forest areas within its borders.

The greatest need of the Department of Forestry at Cornell University is for a college forest of approximately 2000 acres. Reference to this need has been made in previous reports. For the study of many forest problems, a forest under his sole control is as essential to the forester as is a laboratory to the chemist. Without a tract of forest land, sufficient in area to be representative of forest conditions and in the ownership of the University so as to exercise complete freedom of operation, the department is operating under a heavy handicap. Practically every other important forestry school in the country now has an extensive area of this character. The woodlots on the college farm serve many useful purposes, but they do not now, nor can they ever, take the place of a proper college forest. Arrangements with private owners of forest lands are of value and are taken advantage of, but uninterrupted continuity in the conduct of certain types of experiments is impossible without ownership and a large area available. In forest research the time element is a factor of controlling importance.

Home Economics. The School of Home Economics has had a total registration of 526 students in the past year. Of these, 325 were in the regular four-year course, 11 were special students, 9 were students from other colleges in the University, 93 were in the summer session, and 88 were taking the course in hotel administration.

The special course in hotel administration has progressed not only in numbers but also in the organization of the work. The American Hotel Association is continuing its support of the course, and the University has decided to charge tuition to this group of students whether or not they are residents of New York State.

Pomology. The Department of Pomology is making practically no change in its teaching program for the year, beyond adding an hour's credit to three of its major courses. The department has confined its teaching very strongly to subject matter based on experimental evidence, and the addition of credit hours in the courses is forced by the newer results of research in the field of pomology.

The department has limited its teaching in another way by dealing only with those phases of fruit growing with which the instructor has intimate contact through research activity or field experience. Thus the subjects of insect and fungus control in relation to fruit growing, except for elementary consideration in the introductory course, are left to the Departments of Entomology and Plant Pathology. The department reports that this practice is on the whole satisfactory. It constitutes, nevertheless, a basic problem in the organization of courses and departments. Shall we in the main make the crop or the animal or the farm the unit of instruction, or shall we attack from the point of view of basic biological and economic processes involved, leaving the student to a large extent responsible for making synthesis of what he learns? This is a problem to which we need to give attention.

Rural Education. The teaching program in rural education has been much as in the preceding year. The course for members of the college staff was successfully started, Professor Kruse giving work in educational psychology for college teachers. The absence of Professor Works during the second term made it impossible to give the second-term work in the problems of agricultural teaching. Both courses will be in operation for members of the faculty during the coming year.

The department urges that the phases of elementary rural education which have to do with teacher preparation and curricula be developed as early as possible. It suggests also that some provision be made by which the Rural School Leaflet may be sold to interested persons outside the State. The demand for this publication cannot be met from our present editions, and many persons express a willingness to purchase it. It is clearly unfortunate that this wider usefulness for the Leaflet has not been established.

Rural Engineering. The main changes in the teaching program and the importance of rural engineering are the addition of a course in gas engines and another in farm concrete, and the opening of the farm-shop course to all students of the College. It has long been desired to have the shop work available to all students, but until this year the course has derived support from the Smith-Hughes funds and this has precluded the admission of students other than prospective teachers.

The department reports gratifying success in certain changes in teaching method, and in the plan of arranging students in class sections according to proved ability.

Rural Social Organization. The number of registrations in the relatively new Department of Rural Social Organization shows an increase, during the past four years, of undergraduates from 35 to 56, 77, and 78, and of graduate students from 6 to 19, 19, and 31, in the successive years.

ACTIVITIES OF THE EXPERIMENT STATIONS

Excellent progress has been made during the year in the research work of the several agencies which are now grouped together under the administration of Cornell University. The unified administration has already made possible certain cooperation which did not exist before, and has made it easier to avoid any undesirable duplication of effort.

The work at the Long Island Vegetable Research Farm has been put on a permanent basis, and much needed equipment has been installed. Significant progress has been made in the solution of problems of disease and insect control peculiar to that part of the State, and a general plan for the study of the production of vegetable crops has been inaugurated.

The Hudson River Valley horticultural investigations, made possible by a special appropriation by the Legislature of 1923, were started at the beginning of the year. Five tracts for cooperative study of orchard tillage and fertilization and of varietal adaptation, located at different places in the valley, were leased and work on them was begun this season. A laboratory for disease and insect-control investigations was established at Poughkeepsie.

From the State station at Geneva there were sent out for the first time this year three new strawberries, three new red raspberries, one gooseberry, one cherry, one nectarine, and three new apple varieties, all resulting from the fruit-breeding work at the station and each superior in some way to existing varieties. Studies of garden peas, beans, cucumbers, muskmelons, and radishes were carried to the point where the material concerning these vegetables is ready for submission as parts of the proposed monograph on vegetable crops of New York. About half of the necessary material was accumulated for the paper on small fruits of New York, the publication of which was authorized by the Legislature of 1923. A problem in the discoloration of chocolate ice cream was solved, and progress was made in the physical-chemical studies of the texture of ice cream. The cause of deterioration of bottled tomato catsup was found and was reported to canners interested. A new method for the preparation of pure casein, for studies of its composition and of the changes which it undergoes during the manufacture of cheese, was perfected.

At the Ithaca station, significant progress was made in the installation of the laboratories for studies in the nutrition of man, poultry, and farm animals, respectively, and certain preliminary methods of technique were worked out. A long-continued experiment in horse feeding was brought to a conclusion. Progress was made in the State soil survey and in the study of plant-food requirements of the different soil types. The plant-breeding studies reached the point where many new varieties were ready for extension propagation, and the technique of this work was published as a guide to agronomy workers elsewhere. The research of every department of the College, covering a wide range of projects, was carried forward, and a large number of investigations were completed and the results prepared for publication.

Cooperative study by workers at both Geneva and Ithaca of the relative efficiency and feasibility of dusting and spraying for orchard pests, made significant progress during the year, and it is expected that definite conclusions and specific recommendations concerning this problem will soon be available.

The equipment of the new dairy industry building was completed during the year, and plans for the inauguration of research in dairy chemistry and dairy bacteriology are being developed.

Several studies in farm management and rural social organization were completed and the results published. A special study of the disposal of waste products from dairy plants was also completed, and conclusions from it were published.

Frequent conferences concerning the possibilities of united attack on research work which involves several sciences, and of the joint use of equipment and other facilities for research by several departments, have resulted in an increased feeling of solidarity and cooperation which promises well for future developments.

Extended reports of the research at the two experiment stations will be found in the more complete annual reports printed separately by the State.

THE EXTENSION SERVICE

The extension service of the State, including the extension staff of the College of Agriculture and the cooperating county extension organizations, have conducted their work as usual during the past year, except that increasing emphasis has been placed on economical production through eliminating the unfit among animals, fowls, seeds, and methods of doing farm business, and substituting in their stead better-producing animals, fowls, and seeds, higher-grade fertilizers and feeds, better methods of culture and grading and marketing, and more advantageous use of relatively unproductive areas through reforestation. The service has also sought to raise the morale of farm people by teaching them to play and to take part in other forms of recreation and social contact, and by encouraging practices that will lessen drudgery and increase efficiency. In addition, emphasis has been placed on promoting better practices in nutrition, dress, and the ornamental planting of grounds and roadsides, all of which contribute much to a feeling of well-being.

There has been increasing public recognition of the educational value of extension work. This is indicated in a clearer public discrimination between what is educational on the one hand, to be supported principally by public funds, and what is service on the other hand, to be paid for by those directly benefited. Both phases of the work are growing in public favor.

There is a growing conviction that the development of the educational program and participation in its benefits should not be contingent upon membership in some association. All should have the privilege of participating in it, and all should help pay for it. Reflecting this sentiment, the State Legislature and the county boards of supervisors, with little urging and in spite of insistent demands for retrenchment, each year have made the necessary appropriations for the extension service and have given it the needed legal status and direction. Leading men and women are more and more taking part in the definite formulation of community and county educational programs. More of them are becoming teachers through the local leadership plan. On the part of the extension staff and the county workers, efforts are being made to increase the educational value of the work by means of better organized supervisory programs, questionnaires to learn the needs of rural people, surveys and county analyses to learn what agencies and methods are most productive of good, and attendance at conferences and summer schools for their own professional improvement.

As for the service features of extension work, there has been wholesome development both of the work and of public recognition of its place in the extension program. It is the term *service* implies—mainly a solving of the farmer's problem for him, for which he should pay the cost; but usually it also has sufficient educative value to warrant the College giving it supervision. Such are the spray information service, the inspection of potatoes, cereals, and poultry for certification, and the culling of poultry after the passing of the demonstration stage. It is noteworthy that in recent years there have grown up State associations of seed potato growers, poultry producers, and a seed improvement association, which pay the cost of inspection and assume all the responsibilities of certification but employ inspectors approved by the College. Other cases in point are the employment of supervisors by dairy improvement associations, and the employment of poultry cullers by groups of farmers.

One event of great importance to the future development of the extension service was the action of the Legislature in 1924 in amending the county law so as to place home bureau and junior extension work in the same financial relationship to the State and the counties as the farm bureau work has been for a number of years. This has been described in preceding pages. There was no provision in the appropriation act for increase of state funds for home economics work or junior extension work this year, as the enabling act was passed in the closing hours of the legislative session; but the other provisions of the act take effect on July 1, 1924.

A detailed statement of the extension service is included in the report of the College separately printed by the State for general distribution.

A. R. MANN,
Dean of the New York State College of Agriculture
and of the Agricultural Experiment Stations.

APPENDIX IX

REPORT OF THE DEAN OF THE COLLEGE OF ARCHITECTURE

To the President of the University:

SIR: I beg to submit herewith the report of the Faculty of Architecture for the academic year 1923-24.

Last fall more qualified students applied for entrance to the college than it was physically possible or academically advisable to accept. This was the second year that the college has been faced with this situation and present indications would lead to the belief that next fall will in this respect be similar to the last two.

The study of the question of the proper administration of entrance and the establishment of fair entrance standards, which would select students best fitted to pursue the technical work of this college has been one that has been forced upon this Faculty. Up to the present time this selection of students has been based, for lack of other available means, upon priority of application, a means which is indefensible except for the fact that it works.

The school records of all students who have entered the college during the past five years have been studied and comparisons made between these school records and their scholastic records within the University. Unfortunately no real correlation between school and college work has been established. The best that can be said is that those students who have had a distinctly poor record in school have had a distinctly poor record in the University. There is nothing, however, to lead to the belief that either an average school record or high school record would warrant the assumption that a good or even an average record would be made within the University.

An absolutely rigid adherence to our entrance requirements has aided to some degree, perhaps, in eliminating the lesser fit applicants but even raising our entrance requirements would be of little real value as a test. Last year but one student presented the minimum 15 units. The average was about 17. Up to the present time no workable scheme of selection has been suggested and we are continuing to accept applicants on the basis of priority.

Not only has the past academic year been the second one on the five-year basis but it has likewise been the second one in which the course leading to the degree of Bachelor of Landscape Architecture has been combined to a certain extent with that leading to the degree of Bachelor of Architecture. The last two years' experience has not, I believe, led the Faculty to think that any mistake was made in their original action of putting both of these degrees on their present basis in regard to time.

Minor matters have been adjusted, slight changes in the curriculum have been necessary where experience has shown slight discrepancies. But on the general proposition, no developments have as yet arisen which would lead to misgivings. Generally speaking, such changes in the curriculum as have been made had been those largely with the object of better fitting it to the Faculty. It might be said that there is no such thing as an ideal curriculum in itself. An ideal curriculum in a professional school is simply one which will allow every member of the Faculty to do his best with the greatest freedom, while at the same time making his work fall into its proper place as part of a complete scheme.

In professional education the value and necessity of what is called, for lack of better name, cultural study has been strongly felt. In the curriculum as at present established by this Faculty, no attempt has been made to define what studies outside those of a technical nature are or are not cultural. What would be cultural for one student would not of necessity be cultural for another, and in this belief the Faculty introduced as part of the curricula a certain number of free

electives, taken by the student normally in the latter part of his course. So far, I believe they feel that this has been on the whole as satisfactory a solution as any heretofore tried.

While material equipment is of lesser importance than character of staff, yet this Faculty cannot but hope for a time when even this handicap may be removed.

F. H. BOSWORTH, JR.
Dean of the College of Architecture.

APPENDIX X

REPORT OF THE DEAN OF THE COLLEGE OF ENGINEERING

To the President of the University:

SIR: I have the honor to submit the following report upon the work of the College of Engineering for the year 1923-24.

The past year has been one of quiet progress and there have been no outstanding changes that merit special consideration. As reported last year the important changes in the courses of study made necessary by the consolidation of the schools have all been put into effect and during the past year the Faculties of the several schools have been giving much thought to such minor changes and rearrangement as will strengthen the work.

The most important development of the year educationally was the organization of an Engineering Experiment Station, as such organizations are now known in this country, for the encouragement and promotion of research. Research of course is largely a personal matter as compared to teaching, but a somewhat formal organization of those interested in research is most helpful in stimulating interest and securing helpful cooperation. Many of the larger universities particularly in the middle west have strong organizations of this character and some of them receive liberal appropriations from the State for the prosecution of research. It is highly essential that everything possible be done to build up the research work of the college for there are few things that tend to enhance the prestige of any institution of learning in the same measure as the publication of the results of scholarly work. This experiment station, of course, changes in no way the relation of the teacher or the college to the graduate school, in fact it should strengthen the latter. In addition, it provides a source of contact with other institutions, particularly the Land-Grant colleges since the Land Grant College Association has a special section devoted to the interests of engineering experiment stations.

The total number of students registered in the college for the past year was 1402 which is about thirty less than last year. As you know, there has been a tendency for several years past toward a reduction in numbers in all engineering colleges throughout the country. Cornell has not so far felt this quite so much as some others, but it is to be expected.

Part of this decrease is due, in all probability, to the more rigid enforcement of entrance requirements and to the advance notice of increased tuition. A more probable reason, however, is the great growth in schools of business administration, a movement which as yet remains to be evaluated. For many years students have been studying engineering as a general training for a business career. It may be that this new movement will absorb this class of student to a certain extent.

Considerable thought has been given by the Faculty to the future of engineering education and this has been stimulated by the work of the Society for the Promotion of Engineering Education which has secured $100,000 from the Rockefeller Foundation for the purpose of making a study of this problem. This study is to be undertaken in cooperation with the several faculties of engineering in this country and is not to be an investigation such as the Mann Report which was directed from without the field and probably, therefore, was less

effective than it might have been. The Faculty of the College of Engineering has been invited to cooperate in this work and has already perfected an organization for that purpose.

This problem is by far the most important and most difficult one that engineering faculties have before them. The criticisms of engineering education lie between two extremes. On the one hand are the advocates of efficiency who think the curriculum should be intensified and made more closely applicable to the practical field. On the other extreme are those who believe that the curriculum should be greatly liberalized and broadened, the technical work being confined closely to fundamentals. There are valid arguments too lengthy to be given here in favor of both views. The obstacles to an easy solution lie in such matters as the limitations of secondary education, the rising cost of university education, the serious objection to lengthening the college course, and certain psychological considerations which are of great importance.

The solution usually presented is to follow the example of medicine and law and impose a certain degree of liberal training at the beginning of the course. There are good reasons for doubting whether this method applies to engineering to the same degree as to medicine and law, and in fact there are reasons for doubting the efficiency of this method as applied now to these professions, considering some phases of modern industrial life by which we are all affected. Furthermore, there is no reason to believe that there is not some other solution which will apply more aptly to the colleges of engineering. Thus efficiency of technical instruction and breadth of content in the curriculum while apparently somewhat antipodal may be made mutually helpful. The introduction of liberal studies into a curriculum fixed in length of time naturally tends to refinement of the technical content. On the other hand liberalizing studies so introduced must have proven their worth and efficiency as educational tools before they will be adopted. It may be, therefore, that the solution lies not so much in the imposition of pre-technical liberal studies as in a careful selection of both technical and liberal studies that are to be carried throughout the student's college life, both lines of study to be very carefully considered from the standpoint of the student's future professional life. The writer believes that such a course could be organized that would not be more than five years in length and which would answer most of the criticisms. This might at least serve as a transitional step toward what some believe is the ultimate solution, namely, a graduate school of engineering. Such experience as has been had in this country with graduate schools of engineering has been very discouraging, to say the least. The Faculty of the Sibley School of Mechanical Engineering is now working along the lines outlined above and it will be interesting to see whether the new investigation under the Society for the Promotion of Engineering Education will evolve anything along similar lines.

I shall not enumerate the needs of the college since I know you are already conversant with them. I sincerely hope something can be done in the near future to bring our equipment, both personal and physical, up to its former preeminent quality.

DEXTER S. KIMBALL,
Dean of the College of Engineering.

APPENDIX XI

REPORT OF THE ADMINISTRATIVE BOARD OF THE SUMMER SESSION

To the President of the University:

SIR: On behalf of the Administrative Board of the Summer Session, I beg leave to submit the following report of the 1923 Session, together with certain recommendations concerning the maintenance and administration of the 1924 session.

The following memorandum of attendance compares the enrollment figures during the recent session with those of the previous summer.

TOTAL ENROLLMENT

	1922		1923	
In the Summer Session	1395		1576	
In the Summer School of Agriculture	986	2381	541	2117
Double registrations		233		223
Net Totals		2148		1894

GRADUATE STUDENTS

	1922	1923
Graduate Students in Summer Session	70	128
Graduate Students in Summer School of Agriculture	47	50
Graduate Students (Double registration)	18	46
Totals	135	244

MEN AND WOMEN

	1922		1923	
Men	994	46.2%	867	45.7%
Women	1154	53.8%	1027	54.3%
Men in Summer Session	783	56.1%	762	48.3%
Women in Summer Session	612	43.9%	814	51.7%
Men in Summer School of Agriculture	211	28.0%	184	34.0%
Women in Summer School of Agriculture	542	72.0%	357	66.0%

TEACHERS

	1922	1923
College	42	50
High School	175	240
Grades	227	246
Administrators	20	15
Others	21	27
Totals	485	578

REGULAR CORNELL STUDENTS IN THE SUMMER SESSION

	1922	1923
From the College of Arts and Sciences	....	184
From the College of Engineering	....	256
Totals	420	440

From the above figures it appears that the decline of 254 in total registration as compared with the attendance in 1922 was felt by the Summer School of Agriculture. The Summer Session proper had an increase of 181, while the loss in Agriculture is more apparent than real, since two departments of that school, the department of physical education and the department of industrial education, which together enrolled about 500 students in 1922, were both discontinued. It is of interest to note that the registrants of the recent session were all students of regular university grade taking courses for which we have counterparts in our regular sessions.

It is also gratifying to be able to point to the marked increase of graduate students, and to the satisfactory growth in the number of teachers who enrolled in the Summer Session. While the majority of our Summer Session students were undergraduates of this and other colleges and universities, we feel there is a special demand upon the Summer Session to provide courses of study in the interest of teachers, and it is to be hoped that this feature of the summer work will be given most careful consideration with a view to strengthening and expanding courses of this nature. With the addition of two courses in the field of Education last summer, the registration of this department increased from 166 in 1922 to 315.

THE ADMINISTRATIVE BOARD OF THE SUMMER SESSION,
R. M. OGDEN, *Chairman.*

APPENDIX XII
REPORT OF THE DEAN OF WOMEN

To the President of the University:

SIR: I have the honor to submit the following report for the year 1923-24.

REGISTRATION

The registration of women for the year 1923-24 as shown by colleges was as follows:

REGISTRATION BY COLLEGES

Arts	651
Agriculture	470
Graduate School	91
Law	6
Engineering	3
Architecture	25
Veterinary	2
Medicine—Ithaca	2
Medicine—New York	39
Total for year	1289
Total registration in Ithaca	1250

The total attendance of women for the year was 1289, an increase of 78 over the preceding year. The total registration in Ithaca was 1250. The subjoined tables show the attendance of women students during the past five years and also the distribution among colleges.

DISTRIBUTION BY COLLEGES OF WOMEN STUDENTS DURING LAST FIVE YEARS

Year	Arts	Agr.	Grad.	Law	Eng.	Arch.	Med.	Vet.	Total	Dup.	Net
1919-20	621	373	67	11	12	14	57	..	1155	19	1136
1920-21	650	392	65	10	12	11	41	..	1181	13	1168
1921-22	667	386	64	7	8	19	50	2	1201	6	1197
1922-23	627	427	76	4	5	26	44	2	1211	..	1211
1923-24	651	470	91	6	3	25	41	2	1289	..	1289

REGISTRATION BY COLLEGES AND CLASSES

	Arts	Agr.	Med.	Eng.	Arch.	Law	Vet.	Grad.	Total
1924	158	91		1	6				256
1925	128	105			9	2	1		245
1926	135	100			3	3	1		242
1927	203	139	2	2	5				351
1928	17	15							32
Spec	10	20			2	1			33
Grad								91	91
Med. N. Y.			39						39
	651	470	41	3	25	6	2	91	1289

HOUSING

REGISTRATION BY RESIDENCE

	First Term	Per Cent	Second Term	Per Cent
Prudence Risley	186	15.95	194	16.99
Sage College	189	16.21	184	16.11
University Houses	134	11.49	134	11.73
Approved Houses	152	13.04	149	13.05
Sororities	234	20.07	231	20.23
At Home	130	11.14	133	11.65
Working for Room and Board	40	3.43	40	3.50
Special Arrangement	62	5.32	38	3.33
New York Medical	39	3.34	39	3.41
Total in Halls and University Houses.	509	43.65	512	44.83
Total not in Halls and University Houses...	657	56.35	630	55.17
Total for semester	1166	100.00	1142	100.00
Withdrew second semester			108	
Entered second semester	84			
	1250		1250	

No marked changes have taken place in the housing situation for women during the past year and the need for more dormitories for women is still immediate and urgent.

Miss Gertrude Nye, Warden of Prudence Risley Hall, has been in England on leave of absence for the spring term of this year and Dr. Jennette Evans, our Medical Adviser, has been Acting Warden during this period.

The experiment of using Risley Cottage as a Cooperative House has been sufficiently successful to warrant its continuance for another year.

Another University House has been set aside for the use of undergraduate women at 308 Wait Avenue, which is to be known as Risley Terrace. This house will accommodate twenty-one.

Risley Lodge, which was used last year for undergraduates, will be occupied for the coming year by nine graduate women and the rooms on the first floor will be used as club rooms by the Graduate Women's Club.

In the latter part of January one of the Approved Houses, owned by Mrs. I. T. Deane and occupied by undergraduate women, was burned and it was necessary to provide for those who had been living there, in Sage College and other University Houses, for the second semester. The fire fortunately occurred during the day-time and there was no loss of life or personal injury; though many of the students lost part or all of their books and personal belongings. The Women's Self-Government Association assisted in replacing books and the material for continuing college work and the Cornell alumnae,—individually and through their clubs,—gave help to those who had lost the most by the fire. The house was badly damaged but has been put in good condition for use during the coming year.

SELF-SUPPORTING STUDENTS

The subjoined table indicates the number of women who are meeting part or all of their own expenses while in college and the types of work in which they are engaged.

CLASSIFICATION OF WOMEN STUDENTS WHO HAVE DONE REMUNERATIVE WORK DURING THE YEAR 1923-24

Working for Room and Board in private families	40
Working for Room and Board in Sorority Houses	22
Chaperons	10
Charge of night door	2

Waiting on Table in Dormitories	82
Substitutes	28
Sororities	15
Outside dining rooms	6
Work by the hour	
Care of children	28
Housework	25
Stenographic and clerical	32
Telephone	17
Elevator	10
Laundry	5
Total	320

During the past year the work of assisting the women students who wish to be partly or entirely self-supporting while in college, to find work has been done in the Office of the Dean of Women and after the year of experiment, it has been decided to have this employment work continued there, for the present at least.

WOMEN'S ORGANIZATIONS

There have been no radical changes or developments in the women's organizations during the year.

The Cornell Women's Self-Government Association has developed its organization and has continued its effort to raise the standards of honor in academic work and in conduct.

The Cornell Women's Dramatic Club acted as hostess this year for the Third Annual Conference of the Intercollegiate Dramatic Association, December 7-9. Over fifty delegates were here, representing twenty-four institutions.

The Y. W. C. A. has had no permanent Secretary this year to succeed Miss Lois Osborn, who resigned to take up work in Vellore, India; but the work has been carried on by Miss Margaret Cushman, Cornell 1923, for the first term and by Miss Ruth Davis, Cornell 1917, for the remainder of the year. Miss Doris Hopkins, Cornell 1924, has been appointed to the position of Secretary for 1924-1925. Miss Hopkins has been actively engaged in the Y. W. C. A. work while in college and has served on important committees in connection with the National Association and the Silver Bay Conferences and we look forward with great confidence to her work for the Association and for the women of the University during the coming year.

As a whole, the year may be characterized as one of slow development and steady progress in those things pertaining to the women of the University.

GEORGIA L. WHITE,
Dean of Women.

APPENDIX XIII

REPORT OF THE REGISTRAR

To the President of the University:

SIR: I have the honor to submit herewith my twenty-eighth annual report as Registrar of the University. The report covers the academic year 1923-24 including the Summer Session of 1923.

THE YEAR

	Days in Session	Sundays	Holidays	Vacation	Total
Summer vacation, June 19—July 6	..	..	..	18	18
Summer Session, July 7—Aug. 17	36	6	..	..	42
Summer vacation, Aug. 18—Sept. 25	..	..	..	39	39
First term, Sept. 26—Feb. 6	102	17	1	..	120
Christmas vacation, Dec. 22—Jan. 5	..	..	..	14	14
First term, vacation, Feb. 7	..	..	..	1	1
Spring vacation, Apr. 2—Apr. 9	..	..	..	7	7
Second term, Feb. 8—June 16	104	18	1	..	123

STUDENTS

The accompanying table shows the attendance for 1923-24, gives the number of students who have received instruction this year, including those in the 1923 Summer Session, in the 1923 Summer School in Agriculture, in the 1923-24 Winter Courses in Agriculture, and the Summer School in Law, but excluding duplicates, as 7190.

The accompanying table shows the attendance in each course since the opening of the University in 1868.

MATRICULATES

The following table shows that 2736 students have registered during the present year for the first time. The table also shows the method of admission. Students entering for the first time in the Summer Session and in the Summer School in Agriculture are not considered as matriculates, but for convenience are listed in this table.

Graduates	172	Coll. Ent. Board Exams	34
Advanced standing	252	Medical (N.Y.C.)	56
Regents' credentials	605	Summer Session (1923)	752
School certificates	595	Summer School in Agr. (1923)	186
By examination	2	Sum. Grad. (Per. Dir.)	9
As special students	44	Summer School Law	29
Total			2736

The small number entering by some of the methods mentioned above is due to the fact that two or more methods have been combined in a single case, the student, however, being listed in the group to which the major portion of his entrance belongs.

ADMISSION FROM OTHER COLLEGES AND UNIVERSITIES

The Registrar has charge of all credentials presented by applicants coming from other institutions. This system has given uniformity of action on similar certificates when the applicants enter different colleges at this University.

	'69	'70	'71	'72	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84	'85	'86
Bachelors of Arts	8	8	7	4	17	4	8	8	5	9	7	12	18	13	10	8	6	7
Bachelors of Chemistry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bachelors of Literature	...	...	...	...	3	4	...	1	2	3	7	5	5	8	8	...	5	1
Bachelors of Philosophy*	...	7	9	9	6	3	5	3	8	2	...	4	4	5	7	9	7	13
Bachelors of Letters	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bachelors of Science†	...	8	17	38	45	30	19	25	25	24	33	40	35	29	21	31	26	36
Bachelors of Sci. in Chemistry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bachelors of Sci. in Nat. Hist	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bachelors of Sci. in Agriculture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Bachelors of Sci. in Architecture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
Bachelors of Architecture	...	...	...	...	1	6	4	6	7	2	4	3	...	1	2	1	2	...
Bachelors of Agriculture	...	...	...	...	2	2	1	1	2	1	...	3	8	4	2	2	2	...
Bachelors of the Sci. of Agr	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bachelors of Veterinary Science	...	...	1	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...
Doctors of Veterinary Medicine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Graduate in Pharmacy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pharmaceutical Chemists	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bachelors of Civil Engineering	...	...	7	16	18	15	8	12	15	14	10	7	9	4	10	7	9	...
Civil Engineers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
Bachelors of Mech. Engineering	...	...	...	...	3	1	5	6	7	12	5	4	3	...	5	3	3	...
Mechanical Engineers‡	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
Bachelors of Laws	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Doctors of Medicine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Forest Engineers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bachelors of Fine Arts	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Electrical Engineers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bachelors of Landscape Architecture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
War Alumni**	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total First Degrees	8	23	41	68	95	65	50	62	71	67	67	78	82	64	65	61	61	8
*Ph.B. in Hist. and Political Sci	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	6	3	4
†B.S. in Chemistry	...	...	...	...	4	1	1	...	...	...	...	...	...	...	...	...	...	...
in Chemistry and Physics	...	...	...	...	...	...	...	4	...	3	...	3	...	...	1	1	1	...
in Natural History	...	...	...	...	1	2	2	1	3	2	1	4	2	4	1	1	3	4
in Science and Letters	...	...	...	...	...	...	...	...	1	18	31	31	29	22	18	27	18	28
in (Physical) Science	...	...	...	...	...	...	...	...	...	1	...	...	3	1	1	2	...	1
in Mathematics	...	...	...	...	...	...	...	...	...	...	1	1	1	1	...	...	...	1
in Civil Engineering	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...
in Electrical Engineering	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	2
‡M.E. in Electrical Engineering	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
in Marine Construction	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
in Ry. Mech. Engineering	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

	'69	'70	'71	'72	'73	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84	'85	'86
Architects	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Civil Engineers	...	1	...	...	1	4	...	2	2	2	2	1	2	...	2	1	...	...
Mechanical Engineers	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Masters of Arts	...	...	...	...	1	...	...	4	2	1	...	...	...	1	2	2	2	3
Masters of Philosophy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters of Letters	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters of Science	...	...	...	1	...	3	3	2	3	...	1	2	1	1	2	1	5	3
Masters of Sci. in Agriculture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters of Sci. in Architecture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters of Civil Engineering	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters of Mechanical Eng	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters of Electrical Eng	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters of Laws	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters in Landscape Design	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters in Forestry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters of Architecture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Masters of Landscape Architecture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Doctors of Veterinary Medicine	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Doctors of Science	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Doctors of Philosophy	...	...	...	1	1	1	...	...	1	...	1	1	...	...	...	...	3	...
Doctors of Laws (Honorary)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Total Advanced Degrees	...	1	...	2	3	8	3	10	8	3	4	4	3	3	6	4	10	11
Grand Total	8	24	41	70	98	73	53	72	79	70	71	82	85	67	71	65	71	9

** The Certificate of War Alumnus is conferred by the Trustees, on the recommendation of the Faculty in reco
The degrees conferred in September and February are counted with those conferred in the following June.

04–05	05–06	06–07	07–08	08–09	09–10	10–11	11–12	12–13	13–14	14–15	15–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24
211	232	239	249	310	309	372	383	382	383	394	482	468	278	286	407	440	614	540	544
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
684	705	748	820	902	970	1017	1031	1112	1194	1294	1424	1483	1262	1470	1812	1845	1836	1809	1919
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
189	230	278	348	415	539	761	967	1263	1462	1670	1704	1565	1068	901	1283	1204	1161	1179	1221
1060	1096	1081	1127	1162	1186	1073	1020	956	902	927	942	955	690	1077	1210	1309	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
385	425	466	511	569	559	558	539	503	487	480	450	409	260	357	403	377	....	....	....
68	81	82	100	133	140	133	138	144	149	163	166	168	91	93	130	117	118	188	181
228	222	211	206	225	264	279	328	297	269	245	243	255	193	228	178	119	97	90	113
110	88	86	82	94	100	105	106	120	131	123	159	157	108	85	103	81	80	91	87
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
406	394	348	320	221	201	179	118	150	141	205	216	205	210	227	349	279	239	278	274
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1634	1445	1355
3318	3461	3523	3734	3985	4227	4412	4596	4803	5015	5345	5656	5549	4082	4597	5765	5668	5681	5502	5588
619	642	755	841	889	987	1030	1053	1098	1126	1142	1142	1329	919	913	1773	1591	1407	1396	1547
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	37	105
199	248	244	270	364	371	477	451	597	555	549	425	282	190	83	396	326	326	252	240
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	128	223	338	388	445	445	382	406	333	490	532	853	991	590
....	....	....	....	....	....	....	31	107	75	42	1	....	....	35	9	47	48	73	110
....	....	....	....	....	....	....	....	....	41	108	141	44	54	....	39	72	36	....	....
....	....	....	....	....	....	....	....	....	....	86	117	74	39	....	63	162	86	4	....
....	....	....	....	....	....	....	....	....	....	....	....	....	86	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	11	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	97	98	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	57	168	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	41	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	138	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	364	....	....	....	....

s for the sudden fluctuations in that course which appear in the Catalogue.
ool in Agriculture. Thereafter the year is from July 1 to June 30.

Dept. & Coll.	Graduate			Arts & Sciences			Law		
Degrees	A.M., Ph.D., M.M.E., Etc.			A.B., B. Chem.			LL.B.		
Classification	Men	Women	Total	Men	Women	Total	Men	Women	T
Graduates	446	98	544	.....	.....	.....	.....	.....	.
Class of 1928	.....	.....	.....	35	18	53	.....	.....	.
Class of 1927	.....	.....	.....	403	206	609	4	.....	
Class of 1926	.....	.....	.....	321	138	459	40	3	
Class of 1925	.....	.....	.....	271	129	400	35	2	
Class of 1924	.....	.....	.....	238	146	384	25	.....	
Specials	.....	.....	.....	6	8	14	3	1	
Totals	446	98	544	1274	645	1919	107	6	
Duplicates	.....	.....	.....	.....	.....	.....	.....	.....	.
Net Totals	446	98	544	1274	645	1919	107	6	
Summer School Law to July 1,1924									
Summer 1924 to July 1, 1924 Grad. (Per. Dir.)	76	2	78	.....	.....	.....	.....	.....	.
Summer 1923 after July 1, 1923 Grad. (Per. Dir.)	26	6	32	.....	.....	.....	.....	.....	.
Winter Agr.	.....	.....	.....	.....	.....	.....	.....	.....	.
Summer (1923)	117	102	219	.....	.....	.....	.....	.....	.
Totals	665	208	873	1274	645	1919	107	6	1
Duplicates	80	5	85	.....	.....	.....	.....	.....	.
Net Totals	585	203	788	1274	645	1919	107	6	1

* Includes 230 (82 Men, 148 Women) registered in both Summer Session and Summer Scho
† Excludes 106 duplicates of Regular Session.
‡ Excludes 106 duplicates of Regular Session and 230 registered in Summer Session and

Summer Session 1923			Summer School in Agr. 1923			Summer School in Law 2nd 1923, 1st 1924			Total		
n	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
..	.....	.....	.....	.....	.....	.....	.....	.....	446	98	544
..	.....	.....	.....	.....	.....	.....	.....	.....	79	32	111
..	.....	.....	.....	.....	.....	.....	.....	.....	1113	365	1478
..	.....	.....	.....	.....	.....	.....	.....	.....	1005	258	1263
..	.....	.....	.....	.....	.....	.....	.....	.....	868	257	1125
..	.....	.....	.....	.....	.....	.....	.....	.....	834	256	1090
..	.....	.....	.....	.....	.....	.....	.....	.....	46	37	83
..	.....	.....	.....	.....	.....	.....	.....	.....	4391	1303	5694
..	.....	.....	.....	.....	.....	.....	.....	.....	86	20	106
..	.....	.....	.....	.....	.....	.....	.....	.....	4305	1283	5588
..	.....	.....	.....	.....	.....	68	5	73	68	5	73
..	.....	.....	.....	.....	.....	.....	.....	.....	76	2	78
..	.....	.....	.....	.....	.....	.....	.....	.....	26	6	32
..	.....	.....	.....	.....	.....	.....	.....	.....	224	16	240
	793	1547*	207	383	590*	31	1	32	1109	1279	2388
	793	1547*	207	383	590*	99	6	105	5808	2591	8399†
	203	695	86	51	137	55	3	58	717	262	979
	590	852	121	332	453	44	3	47	5009	2181	7190‡

ATTENDANCE FOR THE YEAR 1923-24

	Medicine M. D.			Agriculture B.S.			Veterinary D. V. M.			Architecture B.Arch., B.F.A., B.L.A.			Engineering C.E., M.E., E.E.		
en	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
...	.....	.....	28	14	42	2	.....	2	4	.....	4	10	.....	10
6	9	75	219	143	362	27	.....	27	48	5	53	346	2	348
7	11	68	178	102	280	27	1	28	45	3	48	337	.....	337
6	12	58	154	103	257	9	1	10	26	10	36	327	.....	327
5	12	57	153	91	244	20	.....	20	26	6	32	327	1	328
5	1	16	11	25	36	.....	.....	.....	6	2	8	5	.....	5
9	45	274	743	478	1221	85	2	87	155	26	181	1352	3	1355
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	45	274	743	478	1221	85	2	87	155	26	181	1352	3	1355
....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
....	.....	.....	224	16	240	.....	.....	.....	.....	.....	.....	.....	.....	.....
....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	45	274	967	494	1461	85	2	87	155	26	181	1352	3	1355
....	.....	.....	4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	45	274	963	494	1457	85	2	87	155	26	181	1352	3	1355

riculture.

School in Agriculture.

In the following list should be included properly a number of cases of special students who, coming from other colleges, would have been eligible for admission to advanced standing. Such students, however, preferred to be admitted as specials. Some later changed to a regular course but are not included in the tables.

The number of students admitted to advanced standing as candidates for the first degree during the past thirty-eight years, is, as nearly as may be ascertained, as follows. The former courses in Chemistry, Pharmacy, Medical Preparatory, and Optional have been omitted from the table but the numbers have been retained in the totals.

Year	Arts	Phil.	Let.	Sci.	Agri.	Arch.	Civil Eng.	Mech. Eng.	For-estry	Law*	Vet.	Med.	No. of Cases
1886-87	2	8	1	4	1	4	6	18	..	..	..	..	50
1887-88	6	4	1	1	..	..	11	10	..	..	..	..	37
1888-89	5	..	6	5	2	2	12	21	..	..	..	..	64
1889-90	4	5	6	3	2	1	2	25	..	..	..	..	50
1890-91	8	8	2	4	1	..	14	28	..	..	..	..	69
1891-92	7	9	2	5	2	2	10	52	..	..	..	..	90
1892-93	6	6	1	8	..	6	11	44	..	..	..	..	87
1893-94	5	6	5	8	..	6	6	56	..	..	..	..	98
1894-95	4	2	3	3	2	3	6	44	..	..	..	..	71
1895-96	5	11	4	7	3	3	9	33	..	..	..	..	85
1896-97	10	4	2	4	3	3	11	42	..	12	5	..	100
1897-98	11	6	..	7	9	2	15	41	..	15	1	..	108
1898-99	27	6	1	7	4	3	16	56	1	6	2		134
1899-00	28	..	..	1	5	3	25	64	1	7	4	..	138
1900-01	37	..	..	..	4	6	6	64	3	10	2	2	134
1901-02	38	..	..	..	6	2	29	92	5	7	..	2	184
1902-03	33	..	..	..	8	2	24	105	9	12	1	..	194
1903-04	31	..	..	..	9	5	39	112	..	9	1	1	207
1904-05	29	..	..	..	9	5	44	101	..	3	..	..	191
1905-06	39	..	..	..	14	8	36	89	..	1	..	..	187
1906-07	40	..	..	..	19	5	55	86	..	15	..	..	220
1907-08	43	..	..	..	22	10	60	79	..	11	..	..	225
1908-09	37	..	..	..	21	10	53	71	..	5	1	5	203
1909-10	47	..	..	..	41	7	30	88	..	9	..	..	222
1910-11	41	..	..	..	44	8	44	47	..	11	..	..	195
1911-12	36	..	..	..	52	6	38	57	..	7	4	..	200

Year	Arts	Agri.	Arch.	Engineering	Law	Vet.	Med.	No. of Cases
1912-13	57	76	8	83	7	1	..	232
1913-14	58	76	5	78	7	..	..	224
1914-15	70	87	5	93	7	1	6	269
1915-16	85	94	7	75	9	4	8	282
1916-17	76	84	9	73	9	2	10	263
1917-18	64	45	3	50	12	2	4	180
1918-19	87	52	3	79	11	6	6	244
1919-20	126	102	8	146	9	2	8	401
1920-21	75	68	13	134	5	5	3	303
1921-22	95	62	6	100	13	2	1	279
1922-23	61	74	14	75	7	6	5	242
1923-24	59	82	12	72	21	1	5	252

Of the 252 admitted in 1923-24, 103 registered as freshmen, 85 as sophomores, 47 as juniors, 17 as seniors.

During the past thirty-eight years there have been admitted from 560 other institutions of collegiate rank 6714 students. The distribution in general of these students can be seen by reference to the table on page xciii of the Report for the year 1907-08.

*No data prior to 1896-97.

ADMISSION ON SCHOOL CERTIFICATE, REGENTS' CREDENTIALS, AND EXAMINATIONS

The Registrar has charge of the credentials of those entering by school certificate, by Regents' credentials, and by examinations, including the examinations conducted by the College Entrance Examination Board.

During the past sixteen years the number of applicants admitted by school certificate, by Regents' credentials, and by examinations, has been as follows:

	'08–09	'09–10	'10–11	'11–12	'12–13	'13–14	'14–15	'15–16	'16–17	'17–18	'18–19	'19–20	'20–21	'21–22	'22–23	'23–24
Certificate.	578	574	524	517	601	587	647	683	605	524	648	636	646	600	527	595
Regents....	287	329	311	420	404	476	494	520	544	476	649	575	543	527	596	605
Examin....	12	14	8	12	11	6	9	28	9	7	4	12	7	8	4	2
Col.Ent.Exam. Bd...	23	27	14	18	13	14	27	7	13	20	22	31	23	22	33	34
N.Y.C. Ex..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.....	905	944	857	967	1029	1083	1177	1238	1171	1027	1323	1254	1219	1157	1160	1236

The inserted table gives the number admitted to graduation. Care has been taken to discriminate between closely allied degrees, but such have been grouped so as to show at a glance the number in each department.

DAVID F. HOY,
Registrar.

APPENDIX XIV

REPORT OF THE LIBRARIAN

To the President of the University:

SIR: I herewith respectfully submit my annual report of the condition, needs, and work of the University Library for the year 1923-24.

In some ways, the year has been an unusual one. Never before has the library received by gift so many books and periodicals as during this year. The long deferred action of the courts in the matter of the gift of Benno Loewy resulted in the offer to the University of this library, without the original conditions which were practically impossible, and without the endowment. This offer was accepted and the executors turned over to the University the books, which the appraisers estimated to be some 40,000 or 50,000 volumes, the autographs, the coins and medals, and some pieces of furniture, deemed a part of the library. It required some 725 packing cases, filling three freight cars, to transmit the collection to Ithaca.

The rarest items of the collection were brought to Ithaca by hand. Some fourteen additional cases were specially packed and immediately opened and placed in the library vault. In addition to these about 100 boxes have been unpacked and placed on shelves in the tower and elsewhere, wherever shelf space could be found. The rest must remain boxed up, and inaccessible to users, until more shelf space for the books and what is equally important, more space for library workers to prepare them for use, can be had.

The Loewy collection that has come to the library consists of an unusual group of books dealing with Shakespeare and other dramatic and musical literature down to the present day; a large collection dealing with Freemasonry in all parts of the world, and a rich collection about the Dance of Death, and allied subjects. The law books, proved to be least valuable of the library and the conditions under which these books were stored, pending the court decision, were so bad that many volumes were permanently destroyed. A considerable collection of historic legal trials, however, were not stored with these books and reached the library in good condition.

Besides the books and other literary materials there came with the library a large collection of coins and medals which the appraisers valued at about $4,000. Many of these are historic in character and many more are illustrative of the various orders of Freemasonry.

Finally there came an autograph collection comprising prominent names in law, music, drama, opera, statesmen, etc. of Europe and America.

In the receipt of this collection the University Library has been enriched by a large number of fine editions of standard works, that some day when there is a special room for it, will form a nucleus for a model library that should do much to cultivate a taste for literature in fine editions. Also many rare and expensive books that the general library funds could not be drawn upon to purchase were received.

With the collection also came three handsome book cases specially built for the collection and a beautifully carved etching easel, all of which will make appropriate furnishings for special collections rooms, when such are available.

Late in the year came from Miss Anne McCormick through her niece, Mrs. Julia McCormick Beers '09, a set of the Century library of music in 20 volumes, and over 50 miscellaneous volumes in history and literature.

Since 1915 there has been compiled at Princeton an annual statement regarding the size, amount expended for books, the number on the staff and the amount appropriated for salaries, of some thirty of the leading university libraries in the United States. Most of these libraries include their several college and department libraries in this statement, because all these libraries are under the supervision of the general library, and constitute branches. Cornell has not included the expenditure for books and salaries for the outlying libraries. This has placed our library at a disadvantage in the showing, as well as revealed the weakness of our system. In order to make a more correct comparison possible, an approximate estimate has been made of the budget for books and salaries of the department libraries, and this added to the general library expenditure gives Cornell the 12th place in amount spent for library service and 9th place in the amount spent for books, although in size Cornell is fourth among the university libraries of the United States.

With the large gifts that have come to the library during the past few years, there are, of course, a good many duplicates. These are examined first with reference to needs for additional copies now or in the future in the general library or in some of the branch collections. After these probable needs are cared for it has been found necessary and desirable to offer duplicates, not needed, for sale. This has resulted in enabling many of the younger teachers and students to get desired books at a small cost, and the library received more than could have been realized had we prepared lists and offered them to other libraries and dealers. Not a little satisfaction was derived from the discovery of a large number of students interested in owning standard works of literature, history, and science.

The usual lectures on applied bibliography and the history of writing and book making, have been given throughout the year.

ACCESSIONS DIVISION

The accompanying table shows the additions made to the several groups of library books, manuscripts, etc. In this statement we have not included the books added by the Loewy and Wynne gifts, and a few other small groups, that are still not accessioned. If these were added they would increase the number by at least 60,000 volumes. Until, however, they are available for use they cannot properly be counted among the library resources. A list of donors during the year is given at the end of this report.

BOOKS, BOUND PAMPHLETS, MAPS, MSS., ETC.

General Library, exclusive of the following		481,475
Anthon Collection, purchased 1868	6,770	
Bopp Collection, purchased 1868	2,014	
Sparks Collection, purchased 1872	5,717	
White Historical Library, gift 1891	23,177	
Zarncke Collection, gift 1893	13,000	
British Patents, gift 1868	3,108	
		53,879

Fiske Dante Collection, gift 1893	9,003	
Fiske Petrarch Collection, gift 1905	4,123	
Fiske Icelandic Collection, gift 1905	16,665	
Wason Collection, gift 1918	9,9 3	
Kuichling Collection, gift 1919	2,217	
Volumes C. U. Theses (Deposited)	7,222	
Philological Seminary Collection	1,084	
Philosophical Seminary Collection	882	
German Seminary Collection	769	
French Seminary Collection	24	
Latin Seminary Collection	324	
American History Seminary Collection	612	
		52,738
Maps in Cornell University Library	1,058	
C. U. Plans (Deposited)	197	
U. S. Coast Survey charts	960	
U. S. Geological Survey Topog. sheets	2,370	
U. S. Geological Survey Atlases	210	
British Geological Survey Maps	600	
		5,390
Manuscripts	750	
		750
General Law Library, gifts and purchases	45,032	
Moak Law Library, gift 1893	12,500	
Flower Veterinary Library, gift	6,271	
Barnes Biblical Library, gift	2,690	
Goldwin Smith Hall Library	2,674	
Van Cleef Memorial Library	1,708	
Evans Mathematical Library	420	
Comstock Memorial Library	8 3	
Architectural College Library	1,319	
Economics Laboratory Collection	340	
Entomological Laboratory Collection	2,4 3	
Prudence Risley Hall Collection	841	
Gray Memorial Library	432	
		78,033
N. Y. State College of Agriculture Library	32,705	
N. Y. State Forest College Library	1,181	
N. Y. State Plant Pathology Collection	424	
		38,310
		710,575

IMPORTANT ADDITIONS TO THE LIBRARY 1923-24

Periodicals

Gasellschaft für Erdkunde. Zeitschrift. 1865-1922.
Derbyshire Archaeological and Natural History Society. Journal. 1879-1923.
Dorset Natural History and Antiquarian Field Club. Proceedings. 1877-1923.
Academie Royale des Sciences, Paris. Histoire avec les Mémoires. 1666-1782.
Bristol and Gloucestershire Archaeological Society. Transactions. 1876-1913.
Royal Society of London. Philosophical transactions. Vols. 1-29, 1665-1716.
Institut National Genevois. Memoires. 1854-1910.
Dublin quarterly journal of science. 1861-66.
Edinburgh philosophical journal. 1819-1864.
Bookman's journal and print collector. 1919-23.
R. Accademia di Archeologia, Lettere, Belle Arti, (Napoli). Atti. 1865-1920.
Illustrirte Garten-Zeitung. 1856-1887.
Mémoires de la Service de la Carte Géologique de la France. 23 vols.
National intelligencer. 1819-50.

Books

Galilei, Galileo. La Opere. Ed. Naz. 20 vols. 1890-1909.
Davis, Jefferson. Letters, papers and speeches. 10 vols. 1923.
Brehms, Tierleben. 13 vols. 1922.
Zoology of the "Erebus and Terror." 2 vols.
Enciclopedia Universal Ilustrada. 50 vols. 1907-23.
600 English political pamphlets.

PERIODICAL DIVISION

The list of periodicals has undergone many changes during the past few years. Many periodicals, especially foreign ones, have died or suspended for a time and until definite information is received it requires constant watching to keep the publication down to date. The files of German periodicals that failed to come during the war are not all received yet, but by getting into correspondence with Leipzig dealers the missing numbers are gradually being supplied.

Periodicals currently received:

By subscription	1225
By gift and exchange	1012
	2237
Bound volumes kept on open shelves	2939
Current periodicals on open shelves	741
Volumes bound during the year	2966

CATALOGUE DIVISION

The work of this division has been pushed as rapidly as possible with the limitations of working space and force of cataloguers. More printed cards from the Library of Congress are being used because much preliminary work is done on them before they reach us. With the new standard set by the use of these printed cards much revision must be done in the catalogue on the old written cards as additions are made. This together with the fuller information given and the more careful revision of all cards before they are filed, has brought the standard of catalogue work to the best known.

The following table shows the record of work done.

Number of volumes and pamphlets catalogued:	11,666
Number of maps catalogued	42
Number of manuscripts catalogued	25
Number of titles added to the catalogue	5,820
Number of typewritten cards	8,505
Number of printed cards	10,379
Number of cards added to the Library of Congress catalogue	20,671
Number of cards added to the Harvard catalogue	3,840

READERS DIVISION

The division of use, which comprises all use made of books within the library and the sending out of books to department and laboratory collections is the barometer so far as records of use can be kept, of the use made of the library. Every effort is made to make the use of books as easy as possible, and when this can be done without making a record, it is done. The plan of putting on open shelves a large selection of books for general reading and reference is a part of this effort, but the presence of a few dishonorable persons about the University who carry away such books without making a record, makes the practice a bit discouraging. A slight improvement in this respect is noticeable this year, but there are still enough cases to make it seem desirable to apply the honor system to the use of the library as well as to examinations.

The library has been open to readers 308 days during the year, being closed only on Sundays and five holidays. The number of registered borrowers for home use has been 1755. The recorded use is as follows:

Reading room use	125,478
Seminary room use	3,714
Laboratory and department libraries	5,367
Home use	42,810
Foreign loans	296
Borrowed from other libraries	178
Books reserved in the general library	22,099

The record for reading room use shows an increase over last year and that for home use a slight falling off. This record takes no account of the use made of books deposited in college and department libraries, as in most cases no record for this use is available and unless a uniform record can be made it has little value.

The record of books missing from the open shelf reading room and the reference rooms gives a discouraging aspect to the desire to give readers an opportunity to come into touch with the standard literature of the world. The number of persons that deliberately carry away even reference books, cannot be large, but they do carry away enough books during the year to raise the question as to whether it is worth while to have open shelves.

SPECIAL COLLECTIONS

The additions to the special collections are shown in the general table, when compared with the similar table for previous years. The Barnes Hall library is still under the supervision of Mr. A. C. White, who consented to continue his care of this collection after his retirement from the library staff. The White Historical library still has the counsel of Professor Burr, the emeritus librarian of this collection. He expects eventually to finish the publication of the White library catalogue, which is still lacking part 3, the Witchcraft catalogue.

STACKS DIVISION

Owing to the crowded condition of the library stacks the work of keeping the books in order requires frequent shifting, and the lack of adjustability of the book shelves in the stacks, makes the problem very difficult. If the old stacks with wooden shelves could be fitted with new metal shelving, the shifting of shelves to fit the books placed thereon would be facilitated, the capacity of the stacks for storage would be increased, the library be more fireproof, and the work of changing the location of books greatly lessened.

The annual inventory of all books belonging to the general library both within and without the library building has gone on systematically during the year and the usual number of books found misplaced and missing, which is always expected in libraries that are used.

During the year there was completed a systematic inventory of the framed Arundel, Medici, Seeman, and other prints, given by President White, for decorating the walls of various University buildings. There were some 200 of these, all of which were numbered and labeled as the property of the University in the custody of the library, and a list sent to the Comptroller with the annual inventory of library material.

WILLARD AUSTEN,
Librarian.

APPENDIX XV

PUBLICATIONS 1923-24

The University Library keeps alphabetically arranged the publications of University Officers, so far as received at the Library, and for this purpose copies are solicited. Omissions in the following list are due to incomplete information.

Cornell University. Official publications. v. 15. 1923-24.
Cornell University. Agricultural Experiment Station. Bulletin. 411-426. 1923-24. Ithaca, N. Y.
— Memoir. No. 67, 69-74. 1923-24. Ithaca, N. Y.
— Report of the Dean and Director. 1923. Albany, N. Y. 1924.
Cornell University. College of Architecture. Report of the Dean. 1922-23. *Cornell University Official publications. v. 14, No. 18. Appendix IX. 1923.*
Cornell University. College of Arts and Sciences. Report of the Secretary. 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix III. 1923.*
Cornell University. College of Engineering. Report of the Dean, 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix X. 1923.*
Cornell University. College of Law. Report of the Dean, 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix IV. 1923.*
Cornell University. Dean of Women. Report, 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix XII. 1923.*
Cornell University. Engineering experiment station. Bulletin 1-2. Ithaca, N. Y. 1924.
Cornell University. Graduate School. Report of the Dean, 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix II. 1923.*
Cornell University. Library. Report of the Librarian, 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix XIV. 1923.*
— Publications, 1922-23 (by Cornell University and its officers.) *Same. Appendix XV. 1923.*
Cornell University. Medical College. Report of the Dean, 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix V. 1923.*
Cornell University. Medical College, Ithaca Division. Report of the Secretary, 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix VI. 1923.*
Cornell University. President. Annual report, 1922-23. *Cornell University. Official publications. v. 14, No. 18. 1923.*
Cornell University. Registrar. Report, 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix XIII. 1923.*
Cornell University. Summer Session. Report of the Administrative Board, 1923. *Cornell University. Official publications. v. 14, No. 18. Appendix XI 1923.*
Cornell University. University Faculty. Report of the Dean, 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix I. 1923.*
New York State College of Agriculture. Report of the Dean for the year 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix VIII. 1923.*
New York State Veterinary College. Report of the Dean for the year 1922-23. *Cornell University. Official publications. v. 14, No. 18. Appendix VII. 1923.*
Cornell alumni news. v. 26. Ithaca, N. Y. 1923-24.
Cornell chemist. v. 13. Ithaca, N. Y. 1923-24.
Cornell civil engineer; monthly publication of the Association of Civil Engineers at Cornell University. v. 32. October, 1923-June, 1924. Ithaca, N. Y.
Cornell countryman. v. 21. October, 1923-June, 1923. Ithaca, N. Y.
Cornell daily sun. Ithaca, N. Y. 1923-24.
Cornell era. v. 56. Ithaca, N. Y. 1923-24.
Cornell extension bulletin. No. 66-81. Ithaca, N. Y. 1923-24.
Cornell graphic. v. 1. Ithaca, N. Y. 1923-24.
Cornell law quarterly; published by the faculty and students of the Cornell University College of Law. v. 9. November, 1923-May, 1924. Ithaca, N. Y.

Cornell reading course for the farm. No. 163. Ithaca, N. Y. 1923.
Cornell rural school leaflet. v. 17. September, 1923-March, 1924. Ithaca, N. Y.
Cornell University medical bulletin. v. 13. New York. 1923-24.
Cornell veterinarian. v. 14. Ithaca, N. Y. January-April, 1924.
Cornellian. v. 56. Ithaca, N. Y. 1924.
Cornellian Council quarterly. v. 9. Ithaca, N. Y. 1923-24.

Adams, Bristow. The farm press speaks for itself. *Cornell countryman, v. 21: 135, 1924.*
— Making the printed word work for you, by Bristow Adams and M. V. Atwood. *Cornell extension bulletin, 77, 1923.*
— What is the farm press doing? *Cornell countryman, v. 20:143, 1923.*
Adams, J. Q. Chief pre-Shakespearean dramas. Boston, Houghton Mifflin Co., 1924. xi, 780 p.
Adams, R. M. The family garden. *Cornell extension bulletin, 74, 1923.*
— Rude rural rhymes, v. 2. Ithaca, N. Y., Bob Adams Syndicate, 1923. 52 p.
Albee, Ernest. The philosophy of Cudworth. *Philosophical review, v. 33:245, 1924.*
Albert, C. D. Machine design drawing room problems. New York, John Wiley and Sons, Inc., 1923. 320 p.
Alexander, H. L. The failure of peptone to protect against anaphylactic shock and allergic conditions, by N. P. Larsen, A. V. R. Haigh, H. L. Alexander, and Royce Paddock. *Journal of immunology, v. 8:409, 1923.*
Allen, R. P. Metallic luster I, by W. D. Bancroft and R. P. Allen. *Journal of physical chemistry, v. 28:588, 1924.*
Anderson, A. F. Allergy to cow's milk in infants with nutritional disorders, by A. F. Anderson and O. M. Schloss. *American journal of diseases of children, v. 26:451, 1923.*
Anderson, E. J. Pericarp studies in maize. I: The inheritance of pericarp colors, by E. J. Anderson and R. A. Emerson. *Genetics, v. 8:466, 1923.*
Anderson, R. J. Concerning the anthocyans in Norton and Concord grapes; a contribution to the chemistry of grape pigments. *Journal of biological chemistry, v. 57:795, 1923.*
— A study of the phytosterols of corn oil, cottonseed oil and linseed oil, by R. J. Anderson and M. G. Moore. *American Chemical Society. Journal, v. 45: 1944, 1923.*
Andrews, A. L. Hymenostomum in North America III-IV. *Bryologist, v. 27:1, 1924.*
— A new bryum from Alberta. *Same, v. 26:43, 1923.*
— Studies in the Fornaldarsögur Nordlanda. II. The Hervarar saga. 3. Composition of the saga in the light of version "U". *Modern philology, v. 21:187, 1923.*
— *Review:* North America flora. Vol. 14, pt. I. *Bryologist, v. 26:40, 1923.*
Atwood, M. V. Making the country weekly more attractive. *Cornell extension bulletin 69, 1923.*
— Making the printed word work for you, by Bristow Adams and M. V. Atwood. *Same 77, 1923.*
Austen, Willard. Books in Loewy library. *Cornell daily sun, v. 44, no. 90:6, 1924.*
— Cornell's priceless library. *Cornellian Council bulletin, v. 9, no. 5:1. 1924.*
— Library must expand. *Cornell alumni news, v. 26:174, 1924.*
— Work of Benno Loewy as a collector of books, manuscripts, coins, and medals. *Cornell daily sun, v. 44, no. 136:5, 1924.*
— Report of the librarian, 1922-1923. *Cornell University. Official publications. v. 14, No. 18. Appendix XIV. 1923*
Bailey, Harold. Control of midwives. *American journal of obstetrics and gynecology, v. 6:293, 1923.*
— Follow-up results of 908 cases of uterine cancer treated by radium. *American journal of obstetrics and gynecology, v. 6:402, 1923.*
— Serum treatment of puerperal sepsis. *American journal of obstetrics, v. 7: 658, 1924.*

Bakwin, Harry. The effect of fluid on the temperature and blood concentration of newborns with dehydration fever, by H. Bakwin, R. M. Morris, and J. D. Southworth. *American journal of diseases of children, v. 27:500, 1924.*

— Estimation of the volume of blood in normal infants and in infants with severe malnutrition, by H. Bakwin and H. Rivkin. *Same, v. 27:340, 1924.*

— The leucocyte count in new-borns with dehydration fever, by H. Bakwin and R. M. Morris. *Same, v. 26:23, 1923.*

Bancroft, W. D. Action of metals on nitric acid. *Journal of physical chemistry, v. 28:475, 1924.*

— Andrew Dickson White. *American Academy of Arts and Sciences. Proceedings, v. 57:520, 1922.*

— The art of expression. *Hexagon of Alpha Chi Sigma, v. 14:347, 1924.*

— Baudrimont as colloid chemist. *Journal of physical chemistry, v. 28:256, 1924.*

— Blue feathers, by W. D. Bancroft, E. M. Chamot, Ernest Merritt, and C. W. Mason. *Auk, v. 40:275, 1923.*

— Colloid chemistry. *American Institute of Electrical Engineers. Journal, v. 42:367, 1923.*

— Colloid chemistry and metallurgy. *American Institute of Mining and Mechanical Engineers. Transactions, v. 68:604, 1923.*

— Contact catalysis and photochemistry. *Industrial and engineering chemistry, v. 16:270, 1924.*

— The fastness of dyes to light. *American dyestuff reporter, v. 12, Dec. 31, 1923.*

— Iridescent colors in feathers. *Journal of industrial engineering chemistry, v. 14:898, 1922.*

— Metallic luster I, by W. D. Bancroft and R. P. Allen. *Journal of physical chemistry, v. 28:588, 1924.*

— Mordants III. *Journal of physical chemistry, v. 26:736, 1922.*

— Newton and the peacock. *Journal of physical chemistry, v. 28:351, 1924.*

— A plea for research. *Photographical journal, v. 63:425, 1923.*

— Precipitation of sols by alcohol. *Recueil des travaux chimiques des Pays-Bas, s. 4, v. 4:735, 1923.*

— Preliminary notes on corrosion. *American Society for Testing Materials. Proceedings, v. 22, II:232, 1922.*

— The recognition of blue. *Journal of physical chemistry, v. 28:131, 1924.*

— Second report of the Committee on contact catalysis. *Journal of physical chemistry, v. 27:801, 1923.*

— Structural colours in feathers. *Nature, v. 112:243, 1923.*

— The theory of photography. *Faraday Society. Transactions, v. 19:243, 1923.*

— Tyndall blue in solids. *Journal of physical chemistry, v. 28:12, 1924.*

— Papers from the laboratory of W. D. Bancroft: Basic aluminum sulphate, by F. S. Williamson. *Journal of physical chemistry, v. 27:284, 1923;* Basic chromic sulphate, by F. S. Williamson. *Journal of physical chemistry, v. 27: 384, 1923;* Basic copper sulphate, by F. S. Williamson. *Journal of physical chemistry, v. 27:789, 1923.* Blue eyes, by C. W. Mason. *Journal of physical chemistry, v. 28:498, 1924;* Dyeing of chlorinated wool, by J. R. Adams. *Journal of physical chemistry, v. 27:81, 1923.* The mordanting of wool with potash alum, by W. W. Paddon. *Journal of physical chemistry, v. 26:790, 1922.* The quantitative determination of reduction products of free nitric acid solutions, by L. H Milligan. *Journal of physical chemistry, v. 28:544, 1924;* Structural colors in feathers I, II, by C. W. Mason. *Journal of physical chemistry, v. 27: 201, 401, 1923.*

Bartlett, R. W. Cooperative insurance for farmers, pts. 1-2. *Cornell countryman, v. 21:210, 232, 1924.*

Bateman, J. F. *Abstract:* A statistical study of closed foramina of Luschka in the brains of insane. *Anatomical record, v. 27:195, 1924.*

Becker, Carl. *Reviews:* Cresson, W. P. The holy alliance. *New republic, v. 35: 336, 1923;* A good summary narrative (Macdonald, William. Three centuries of American democracy) *Advance, v. 7:8, 1923;* Mumford, Lewis. The story of

Utopias. *Political science quarterly, v. 33:310, 1923;* The exploitation of Turkey. (Turkey, the great powers, and the Bagdad Railway) *Nation, v. 117:556, 1923.*

Beekman, Fenwick. Acute appendicitis in childhood. *Annals of surgery, v. 79: 538, 1924.*

Behr, Leo. #1,474,884. Automatic control apparatus. *U. S. Patent Office. Official gazette, v. 316:645, 1923.*

—— Multiple range potentiometers. *Optical Society of America. Journal, v. 7, 1923.*

Behre, Mrs. J. A. Observations on the determination of blood urea. *Journal of biological chemistry, v. 56:395, 1923.*

—— Studies in creatine and creatinine metabolism, IV, by J. A. Behre and S. R. Benedict. *Same, v. 52:11, 1923.*

Behrends, F. G. Farm engineering, by B. B. Robb and F. G. Behrends. New York, John Wiley & Sons, Inc., 1924. 454 p. (Wiley farm series. 1)

—— The gas engine on the farm, by F. G. Behrends and F. L. Fairbanks. *Cornell extension bulletin 85, 1924.*

Benedict, S. R. The combined uric acid in beef blood, by A. R. Davis, E. B. Newton, and S. R. Benedict. *Journal of biological chemistry, v. 54:595, 1922.*

—— The determination of uric acid. *Same,* v. *54:233, 1922.*

—— The influence of inorganic salts upon tumor growth in albino rats, by Kanematsu Sugiura and S. R. Benedict. *Journal of cancer research, v. 7:329, 1922.*

—— The metabolism of creatin, by S. R. Benedict and Emil Osterberg. *Journal of biological chemistry, v. 56:229, 1923.*

—— A method for the purification of picric acid. *Same, v. 54:239, 1922.*

—— On the mechanism of phlorhizin diabetes, by T. P. Nash, jr. and S. R. Benedict. *Same, v. 55:757, 1923.*

—— Studies in creatine and creatinine metabolism, IV, by J. A. Behre and S. R. Benedict. *Same, v. 52:11, 1922.*

—— Sugar elimination after subcutaneous injection of glucose in the dog, by S. R. Benedict and Emil Osterberg. *Same, v. 55:769, 1923.*

Benner, J. W. Immunizing young pigs against hog cholera. *American Veterinary Medical Association. Journal, n. s., v. 17:457, 1924.*

Bidwell, C. C. Resistance and thermoelectric power of the alkali metals. *Physical review, v. 23:357, 1924.*

—— Electrical resistance, thermo-electric power and crystal structure of the alkali metals. *Same, v. 23:555, 1924.*

Birch, R. R. A study of bang abortion disease in cattle, by R. R. Birch and H. L. Gilman. *New York State Veterinary College at Cornell University. Annual report, 1922-23. p. 62, 1924.*

Bishop, M. G. Poems. *In* Morley Christopher, ed. The Bowling green, an anthology. New York, Doubleday Page, 1924.

—— Poetic renaissance in Catalonia. *New York evening post. Literary review, Sept. 15, 1923, p. 48.*

—— *Reviews:* Montfort, Eugene. L'oubli des morts. *New York evening post. Literary review, July 14, 1923, p. 833;* Dorgelès, Eugène. Le reveil des morts. *Same, Sept. 29, 1923, p. 90;* Tharand, Jean and Jerome. The shadow of the cross. *Same, May 3, 1924, p. 724.*

Bizzell, J. A. Depressive influence of certain higher plants on the accumulation of nitrates in soil, by T. L. Lyon, J. A. Bizzell, and B. D. Wilson. *American Society of Agronomy. Journal, v. 15:457, 1923.*

Blau, N. F. The amino-acid nitrogen of the blood. I. The total free amino acid nitrogen in blood. *Journal of biological chemistry, v. 56:861, 1923.* II. The diamino nitrogen in the protein-free blood filtrate. *Same, v. 56:867, 1923.* III. A study of the occurrence of peptide nitrogen in the blood. *Same, v. 56:874, 1923.*

—— The ovarian cystic fluid with special reference to its effect upon the reactions of the genital tract, by G. N. Papanicolaou and N. F. Blau. *Society for Experimental Biology and Medicine. Proceedings, v. 21:164, 1923.*

Blodgett, F. M. Time-temperature curves for killing potato tubers by heat treatment. *Phytopathology, v. 13:465, 1923.*

Bodansky, Aaron. Antagonistic effects of thyroxin and insulin. *Society for Experimental Biology and Medicine. Proceedings, v. 20:538, 1923.*
— The blood chemistry of thyroidectomized sheep. *Same, v. 19:430, 1922.*
— Effect of thyroidectomy upon the reaction of sheep to insulin. *Same, v. 21:546, 1923.*
— Effects of dosage and previous diet on blood sugar curves in sheep after intravenous injection of insulin. *Same, v. 21:416, 1924.*
— Insulin hypoglycemia in normal sheep and antagonistic effects of thyroxin and insulin. *International Physiological Congress. Proceedings, 1923:23.*
— A study of the reaction of normal human subjects to intravenous injections of insulin, by Aaron Bodansky and Sutherland Simpson. *Society for Experimental Biology and Medicine. Proceedings, v. 21:280, 1924.*
Bogert, G. G. Express warranties in sales of goods. *Yale law journal, v. 33:14, 1923.*
— Funded insurance trusts and the rule against accumulations. *Cornell law quarterly, v. 9:113, 1924.*
— Report of the Dean of the College of Law, 1922-23. *Cornell University. Official publications, v. 14, No. 18, Appendix IV, 1923.*
Boothroyd, S. L. The dedication of the Irving Porter Church memorial telescope. *Popular astronomy, v. 32:1, 1924.*
Bosworth, F. H., jr. Report of the Dean of the College of Architecture, 1922-23. *Cornell University. Official publications, v. 14, No. 18, Appendix IX, 1923.*
Boyle, J. E. Farmers organizations in the United States. *Weltwirtschaftliches Archiv, v. 20:102, 1924.*
— The Federal Reserve Board as farm adviser. *Commerce and finance, v. 13: 12, 1924.*
— The grain trade of the United States: its present organization and future outlook. *Weltwirtschaftliches Archiv, v. 20:158, 1924.*
— The truth about grain gambling. *Nation's business, v. 12:13, 68, 1924.*
— Wheat prices and wheat receipts in Chicago, 1904-1914. Privately printed, 1923. 14 p.
— *Review:* Skalweit, August. Agrarpolitik. *Weltwirtschaftliches Archiv, v. 20:101, 1924.*
Brenner, E. C. Repair of urethra by means of a fascial laba transplant. *Journal of urology, v. 11:197, 1924.*
— Sacral anaesthesia. *Annals of surgery, v. 79:118, 1924.*
Briggs, T. R. The detection of constant-boiling mixtures. *Journal of physical chemistry, v. 28:644, 1924.*
— The physical chemistry of dyeing: Substantive dyes. *Same, v. 28:368, 1924.*
Brown, Sanger, 2d. The year's progress in New York State in the care of mental defectives. *Mental hygiene, v. 7:796, 1923.*
Browne, A. W. Azidocarbondisulphide, I, by A. W. Browne, A. B. Hall, G. B. L. Smith, F. H. Swezey, and C. W. Mason. *American Chemical Society. Journal, v. 45:2541, 1923.*
— Azidodithio carbonic acid, I, by G. B. L. Smith, F. Wilcoxon, A. W. Browne, and C. W. Mason. *Same, v. 45:2604, 1923.*
Buckman, H. O. Availability of phosphorus of floats as influenced by the incorporation of farm manure in the soil, by T. L. Lyon and H. O. Buckman. *American Society of Agronomy. Journal, v. 16:96, 1924.*
— Edaphology, by T. L. Lyon and H. O. Buckman. *Same, v. 16:24, 1924.*
— The organization of a general introductory course in soils with special reference to laboratory exercises, by H. O. Buckman and others. *Same, v. 16:86, 1924.*
— Season, reason, and lime. *Cornell countryman, v. 21:204, 1924.*
Burdick, C. K. Coal control and the Constitution. *North American review, v. 218: 297, 1923.*
— Federal aid legislation. *Cornell law quarterly, v. 8:324, 1923.*
— The law of the American constitution. New York, G. P. Putnam's Sons, 1922. xviii, 687 p.

Burkholder, W. H. The effect of varying soil moistures on healthy bean plants and on those infected by a root parasite. *Ecology, v. 5:179, 1924.*

—— The gamma strain of Colletotrichum lindemuthianum (Sacc. et Mgn.) B. et C. *Phytopathology, v. 13:316, 1923.*

—— Varietal susceptibility among beans to the bacterial blight. *Same, v. 41:1, 1924.*

Burr, G. L. *Review*: Thorndike, L. History of magic and experimental science. *American historical review, v. 29:118, 1923.*

Bussell, F. P. Oats for New York farmers. *Cornell extension bulletin, 80, 1924.*

Butterworth, J. E. Reorganization of state support in New York. *Schoolmen's week proceedings, v. 10:84, 1023.*

—— Should the county be the local unit of school administration? *Same, v. 10: 132, 1923.*

Caplan, Harry. The Latin panegyrics of the Empire. *Quarterly journal of speech education, v. 10:41, 1924.*

Carpenter, C. M. Bacterium abortum invasion of the tissues of calves from the ingestion of infected milk. *Cornell veterinarian, v. 14:16, 1924.*

—— Controlled vaccination experiments in cattle with bacterium abortum, by G. H. Hart and C. M. Carpenter. *American Veterinary Medical Association. Journal, v. 17:37, 1923.*

—— The distribution of the colon-aerogenes group of bacteria in the alimentary tract of calves, by C. M. Carpenter and Gladys Woods. *Cornell veterinarian, v. 14:218, 1924.*

—— Report of a fatal case of anthrax in man contracted from an infected shaving brush. *Same, v. 13:325, 1924.*

Carpenter, D. C. Anomalous osmose of solutions of electrolytes with collodion membrances. I. Electrical properties of the membrane system. II. Effect of pore diameter. III. Effect of stirring solutions, by F. E. Bartell and D. C. Carpenter. *Journal of physical chemistry, v. 27:101, 252, 346, 1923.*

—— Gelatin liquefaction by bacteria, by Max Levine and D. C. Carpenter. *Journal of bacteriology, v. 8:297, 1923.*

Carver, W. B. The mathematical puzzle as a stimulus to investigation. *American mathematical monthly, v. 30:132, 1923.*

Cavanaugh, G. W. The effect of the spray process of drying on the vitamin C content of milk, by G. W. Cavanaugh and R. A. Dutcher. *American journal of diseases of children, v. 25:498, 1923.*

Chambers, L. P. Some causes of Turkey's present condition. *Queen's quarterly, v. 30:151, 1922.*

—— *Review:* Watson, John. Philosophical essays. *Philosophical review, v. 33: 199, 1924.*

Chamot, E. M. Blue feathers by W. D. Bancroft, E. M. Chamot, Ernest Merritt, and C. W. Mason. *Auk, v. 40:275, 1923.*

Churchman, J. W. L'action bacteriostatique et selective du violet. . . . *Chimie et industrie, v. 10, August, 1923.*

—— Bacteriostasis by mixture of dyes. *Journal of experimental medicine, v. 38: 1, 1923.*

—— Mechanism of bacteriostasis. *Same, v. 37:543, 1923.*

—— Mechanism of selective bacteriostasis. *National Academy of Sciences. Proceedings, v. 9:78, 1923.*

—— Reverse selective action of acid fuchsin. *Journal of experimental medicine, v. 37:1, 1923.*

—— The selective bacteriostatic action of gentian violet and other dyes. *Journal of urology, v. 11:1, 1924.*

Claassen, P. W. Laboratory directions in general biology. Ithaca, N. Y., Comstock Publishing Co., 1922. 116 p.

—— The larva of a chironomid. *Kansas University science bulletin 14:395, 1922.*

—— New species of North American plecoptera. *Canadian entomologist, v. 55: 257, 1923.*

—— New species of North American plecoptera. *Same, v. 55:281, 1923.*

— New species of North American capniidae (Plecoptera) *Same, v. 56:43, 54, 1924.*
— The North American species of the genus acroneuria (Plecoptera), by J. G. Needham and P. W. Claassen. *Same,* v. *54:249, 1922.*
Clayton, E. E. Investigations of cauliflower diseases on Long Island. *New York State Agricultural Experiment Station, Geneva, N. Y. Bulletin 506, 1924.*
Coca, A. F. Hitherto undescribed pair of isoagglutination elements in human beings, by A. F. Coca and H. Klein. *Journal of immunology, v. 8:477, 1923.*
— The nature of the atopen of pollens, by E. F. Grove and A. F. Coca. *Society for Experimental Biology and Medicine. Proceedings, v. 21:48, 1923.*
— A study of the atopic reagins, by A. F. Coca and E. F. Grove. *Same, v. 21:49, 1923.*
— A study of the occurrence of the blood groups among the American Indians, by A. F. Coca and O. Deibert. *Journal of immunology, v. 8:487, 1923.*
Coley, W. B. Diagnosis and treatment of sarcoma of the long bones. *International journal of medicine and surgery, v. 37:81, 1924.*
— End results in malignant disease of the testis. *Annals of surgery, v. 78:370, 1923.*
— Prognosis in giant-cell sarcoma of the long bones. *Same, v. 79:321, 561, 1924.*
— Traumatic and industrial hernia. Report of the Special Committee of the Medical Section of the American Railway Association, by W. B. Coley, Southgate Leigh, J. B. Walker, C. W. Hopkins, and J. A. Hutchinson. *Same, v. 75: 467, 1922.*
Conn, H. J. Bacteriology, by H. W. Conn and H. J. Conn. 2d ed. Baltimore, Williams and Wilkins, 1924. 449 p.
— Dye solubility in relation to staining solutions. *Science, v. 57:1483, 1923.*
— Progress in the certification of biological stains. *Same, v. 59:1514, 1924.*
— Standardized nomenclatures of biological stains. *Same, v. 57:1487, 1923.*
— Methods of gram staining, by G. J. Hucker and H. J. Conn. *New York State Agricultural Experiment Station, Geneva, N. Y. Technical bulletin 93, 1923.*
Conner, L. A. Relation of laboratory aids to the practice of medicine and surgery. *American Medical Association. Journal, v. 81:871, 1923.*
Cooper, Lane. The climax. *Sewanee review, v. 32:32, 1924.*
— Establishment of a modern university press. *Cornell daily sun, Oct. 31, 1923.*
— Good usage. *Parchment, v. 15:5, 1924.*
— The new course for beginners in Greek. *Cornell daily sun, Jan. 19, 1924.*
— The poetics of Aristotle, its meaning and influence. Boston, Marshall Jones, 1923. x, 157 p.
— *Reviews:* Gudeman, Alfred. Aristotles über die Dichtkunst. *Classical weekly, Nov. 19, 1923;* More, P. E. Hellenistic philosophies. *New York herald-tribune. Book news and reviews, May 4, 1924.*
Copeland, M. A. Communities of economic interest and the price system. *In* Tugwell, R. G. Trend of economics, p. 103, 1924.
— Seasonal problems in financial administration. *Journal of political economy, v. 28:793, 1920.*
Corey, R. B. Germanium VII. The hydrides of germanium, by L. M. Dennis, R. B. Corey, and R. W. Moore. *American Chemical Society. Journal, v. 46: 657, 1924.*
Coryllos, P. Intracardiac irradiation of the valves from radium emanation, employing a two-stage operative technique, by P. Coryllos, D. J. Edwards, and H. J. Bagg. *Society for Experimental Biology and Medicine. Proceedings, v. 21: 151, 1923.*
Craig, W. T. Methods now in use in cereal breeding and testing at the Cornell Agricultural Experiment Station, by H. H. Love and W. T. Craig. *American Society of Agronomy. Journal, v. 16:109, 1924.*
Crane, T. F. Painting the town red. *Scientific monthly, v. 18:605, 1924.*
— *Review*: Folklore Fellows. F F communications. Nos. 42-50. *Romanic review, v. 14:319, 1923.*
Crosby, C. R. The genus cyptobunus banks (Phalangida), by C. R. Crosby and S. C. Bishop. *Entomological news, v. 25:104, 1924.*

Curtis, O. F. The effect of ringing a stem on the upward transfer of nitrogen and ash constituents. *American journal of botany, v. 10:361, 1923.*

Cushman, R. E. Judicial decisions on public law. *American political science review, v. 17:434, 1923.*

Dahlberg, A. C. The causes of leaky butter, by A. C. Dahlberg and J. C. Marquardt. *New York produce review, v. 57:474, 1924.*

—— A greenish-black discoloration of chocolate ice cream. *Journal of dairy science, v. 6:455, 1923.*

—— How ice cream looks under the microscope. *Ice cream trade journal, v. 20: 68, 1924.*

Dallenbach, K. M. Dr. Johnson on reaction-time experiments. *American journal of psychology, v. 35:305, 1924.*

—— Recurrent images. *Same, v. 35:155, 1924.*

—— Position *vs.* intensity as a determinant of attention of left-handed observers, by R. S. Burke and K. M. Dallenbach. *Same, v. 35:267, 1924.*

—— Size *vs.* intensity as a determinant of attention, by D. Dewey and K. M. Dallenbach. *Same, v. 35:121, 1924.*

—— *Associate and business editor.* American journal of psychology. 1923-24.

Dana, C. L. The ecology of epilepsy. *Archives of neurology and psychiatry, v. 9:551, 1923.*

—— Neurology in Greater New York, by C. L. Dana and T. K. Davis. *New York State journal of medicine, v. 23:449, 1923.*

Davis, T. K. Bilateral pontine thrombosis. *Medical clinics of North America, v. 8:385, 1924.*

—— Neurology in Greater New York, by C. L. Dana and T. K. Davis. *New York State journal of medicine, v. 23:449, 1923.*

Dennis, L. M. The Baker Laboratory of Chemistry at Cornell University. A description. Ithaca, N. Y., Cornell University, 1923.

—— Germanium VI. Metallic germanium. Reduction of germanium dioxide. Preparation of fused germanium. Physical and chemical properties, by L. M. Dennis, K. M. Tressler, and F. E. Hance. *American Chemical Society. Journal, v. 45:2033, 1923.*

—— Germanium VII. The hydrides of germanium, by L. M. Dennis, R. B. Corey, and R. W. Moore. *Same, v. 46:657, 1924.*

Deuel, H. J., jr. The role of the liver in pancreatic secretion, by H. N. Plummer, H. J. Deuel, jr., and C. R. Cowgill. *Society for Experimental Biology and Medicine. Proceedings, v. 21:380, 1924.*

Diederichs, Herman. The purification of salt made from Central New York brines by R. O. McDuffy and Herman Diederichs. *Cornell University. Engineering Experiment Station. Bulletin 1, 1923.*

Drummond, A. M. Graduate work in public speaking. *Quarterly journal of speech education, v. 9:136, 1923.*

—— Persistent questions in public discussion, by A. M. Drummond and E. L. Hunt. New York, Century Co., 1924. 500 p.

—— Play production for the country theatre. *Cornell extension bulletin, 83, 1924.*

—— Some tendencies in dramatic art. *English journal, v. 13:49, 1924.*

—— Training teachers for oral English work. *English bulletin, v. 3:1, 1923.*

Du Bois, E. F. Clinical calorimetry XXXV. A graphic representation of the respiratory quotient and the percentage of calories from protein, fat and carbohydrate. *Journal of biological chemistry, v. 59:1, 1924.*

—— On certain courses not listed in the medical curriculum. *Science, v. 59:53, 1924.*

Eames, A. J. The fall of leaves. *Cornell rural school leaflet, v. 16:78, 1922.*

—— Variations in trillium cernuum, by K. M. Wiegand and A. J. Eames. *Rhodora, v. 25:189, 1923.*

Eaton, T. H. Agricultural teacher training. *United States Federal Board for Vocational Education. Bulletin 90, 1923.*

—— Casting vocational education out of the high school. *Vocational education magazine, v. 2:266, 1923.*

— Vocational education in farming occupations. Philadelphia, J. B. Lippincott, 1923. 374 p.

Edwards, D. J. Blood concentration in insulin hypoglycemia, by D. L. Drabkin, I. H. Page and D. J. Edwards. *Society for Experimental Biology and Medicine. Proceedings, v. 21:309, 1924.*

— Intracardiac irradiation of the valves from radium emanation, employing a two-stage operative technique, by P. Coryllos, D. J. Edwards, and H. J. Bagg. *Same, v. 21:151, 1923.*

— Observations on the circulation during hypoglycemia from large doses of insulin, by D. J. Edwards and I. H. Page. *American journal of physiology, v. 69:177, 1924.*

— Some cardiovascular changes accompanying insulin hypoglycemia, by D. J. Edwards, I. H. Page and R. K. Brown. *Society for Experimental Biology and Medicine. Proceedings, v. 21:170, 1924.*

Einhorn, Max. Further experiences with peptic ulcers accompanied by deformities of the viscus visible by X-rays. *New York medical journal and medical record, November 21, 1923.*

— Indigocarmine as a functional permeability test of the liver, by Max Einhorn and G. L. Laporte. *Same, Sept. 19, 1923.*

— The more practical functional tests of the liver. *American Medical Association. Journal, v. 81:1494, 1923.*

Ellenwood, F. O. High pressure, reheating, and regenerating for steam power plants, by C. F. Hirshfeld and F. O. Ellenwood. New York, The American Society of Mechanical Engineering, 1923. 49 p.
Abstracted in *Power, v. 58:893, 1923; Sibley journal of engineering, v. 38: 28, 1924; Mechanical engineering, v. 46:179, 1924; Power plant engineering, v. 27:1244, 1923.*

Emerson, R. A. Control of flowering in teosinte. *Journal of heredity, v. 15:41, 1924.*

— A genetic view of sex expression in the flowering plants. *Science, v. 59:176, 1924.*

— The inheritance of blotch leaf in maize. *Cornell University Agricultural Experiment Station. Memoir 70:3, 1923.*

— Pericarp studies in maize. I. The inheritance of pericarp colors, by E. J. Anderson and R. A. Emerson. *Genetics, v. 8:466, 1923.*

Evans, F. C. Computations involving steam in boiler flue gas. *Combustion. Feb. 1924, p. 118.*

— Figuring centrifugal pump characteristics from those at known speed. *Power. v. 59:487, 1924.*

Ewing, James. The influence of radiation therapy on the study of cancer. *Canadian practitioner, v. 49:95, 1924.*

— An unusual alteration in the natural history of a giant cell tumor of bone, by W. S. Stone and James Ewing. *Archives of surgery, v. 7:280, 1923.*

Fairbanks, F. L. The factor of intensity of light. *American agriculturist, v. 112: 191, 1923.*

— The gas engine on the farm, by F. G. Behrends and F. L. Fairbanks. *Cornell extension bulletin 85, 1924.*

Farrand, Livingston. President's report, 1922-23. *Cornell University. Official publications, v. 14, No. 18, 1923.*

Farrar, L. K. D. Acidosis in operative surgery. A study of its occurrence during operation and its treatment by glucose and gum acacia given intravenously. *Surgery, gynecology, and obstetrics, v. 32:328, 1921.*

— The incidence of pulmonary embolism and thrombosis following hysterectomy for myoma uteri. *New York State journal of medicine, v. 21:324, 1921.*

— The relation of gynecology to the glands of internal secretion. *Medical woman's journal, v. 228:241, 1921.*

— A technique for the management of the large cystocele when associated with non-malignant disease of the cervix and myomata uteri. *American journal of obstetrics and gynecology, v. 2:395, 1921.*

Faust, A. B. Those dandelions. *Cornell era, v. 56:54, 1924.*

— *Reviews:* Francke, Kuno. Die Kulturwerte der deutschen Literatur in ihrer geschichtlichen Entwicklung, v. 2. *Modern language notes, v. 39:103, 1924*; Fries, A. L., editor. Records of Moravians in North Carolina. *American historical review, v. 28:756, 1923*; Uhlendorf, B. A. Charles Sealsfield; ethnic elements and national problems in his works. *Modern language notes, v. 38, no. 7:426, 1923.*

Fish, P. A. Nutrition trails. *American Veterinary Medical Association. Journal v. 65:327, 1924.*

— An undescribed constituent of semen. *Society for Experimental Biology and Medicine. Proceedings, v. 21:566, 1924.*

Fitch, H. W. Some results of dusting experiments for apple scab and peach leaf curl in 1921-22, by L. M. Massey and H. W. Fitch. *New York State Horticultural Society. Proceedings, v. 68:42, 1923.*

Fitzpatrick, H. M. Generic concepts in the pythiaceae and blastocladiaceae. *Mycologia, v. 15:166, 1923.*

— Monograph of the nitschkieae. *Same, v. 15:23, 1923.*

— A survey of the evidence indicating that phytophthora should be merged with pythium. *Phytopathology, v. 13: 34, 1923.*

Foster, N. B. Basal metabolism in the diagnosis and treatment of thyroid disease. *New York State journal of medicine, v. 23:484, 1923.*

— The diagnosis of vascular-renal disease. *Iowa State Medical Society. Journal, v. 13:2, 1923.*

— The examination of patients. Philadelphia, W. B. Saunders Co., 1923. 253 p.

— Metabolic states contributing to uraemia. *Archives of neurology and psychiatry, v. 9:627, 1923.*

— Treatment of diabetic coma with insulin. *American journal of the medical sciences, v. 166:699, 1923.*

— The treatment of severe diabetes with insulin. *New York medical journal, v. 117:591, 1923.*

Gager, L. T. Conduction changes accompanying periodical effusion with a note on a local circulatory factor in heart block. *Archives of internal medicine, v. 33: 449, 1924.*

— Lymphatic obstruction: Non-parasitic elephantiasis. *American journal of the medical sciences, v. 166:200, 1923.*

Gibson, A. W. *Compiler.* Alumni directory of the New York State College of Agriculture. *Cornell University. Official publications, v. 15, no. 2, 1923.*

Gibson, C. L. Acute perforations of the stomach and duodenum (with a report of 76 cases). *Boston medical and surgical journal, v. 189:425, 1923.*

— Rapport sur 76 perforations aigues de l'estomac et le duodenum. *Société de Chirurgie. Bulletin et mémoires, July 11, 1923.*

— Treatment of hour-glass stomach by double gastro-enterostomy. *Annals of surgery, v. 78:587, 1923.*

Gillespie, D. C. *Associate editor.* American mathematical monthly, 1923-24.

Gilman, H. L. A study of bang abortion disease in cattle, by R. R. Birch and H. L. Gilman. *New York State Veterinary College at Cornell University. Report, 1922-23:62.*

Goldberg, S. A. A case of hyperglycemia in a thyroidectomized sheep, by S. A. Goldberg and others. *Society for Experimental Biology and Medicine. Proceedings, v. 20:195, 1922.*

— Further studies on posterior paralysis in swine, by L. A. Maynard, S. A. Goldberg, and others. *Same, v. 20:528, 1923.*

— The lesions in necrobacillosis. *New York State Veterinary College at Cornell University. Report, 1922-23:132.*

— The pathological tissue changes resulting from continuous feeding of cotton seed meal, by S. A. Goldberg and L. A. Maynard. *American Veterinary Medical Association. Journal, v. 62:450, 1923.*

— The pathology of arthritis. *Clifton medical bulletin, v. 9:97, 1923.*

— The pathology of a certain deficiency disease in pigs by S. A. Goldberg and L. A. Maynard. *Cornell veterinarian, v. 14:141, 1924.*

— The pathology of posterior paralysis, by S. A. Goldberg and others. *American Veterinary Medical Association. Journal, v. 65:214, 1924.*

Goldsmith, H. E. The variation of the refractive index of China wood oil with the temperature, by F. H. Rhodes and H. E. Goldsmith. *Industrial and engineering chemistry, v. 15:786, 1923.*

Gould, A. G. Physical factors pertaining to hayfever. I. Amount of seasonal precipitation. *American Medical Association. Journal, v. 81:693, 1924.*

Graham, V. A. A method for the purification of jack bean urease, by J. B. Sumner, V. A. Graham, and C. V. Noback. *Society for Experimental Biology and Medicine. Proceedings, 1924.*

Greene, G. S. A new date for George Wilkin's *Three miseries of Barbary. Modern language notes, v. 39:285, 1924.*

Grove, E. F. The nature of the atopen of pollens, by E. F. Grove and A. F. Coca. *Society for Experimental Biology and Medicine. Proceedings, v. 21:48, 1923.*

— A study of the anaphylactogenic properties of aqueous extracts of pollens and of LePage's glue, by Matthew Walzer and E. F. Grove. *Same, v. 21:47, 1923.*

— A study of the atopic reagins, by A. F. Coca and E. F. Grove. *Same, v. 21:49, 1923.*

Guba, E. F. Apple rust and the red cedar in Illinois, by H. W. Anderson and E. F. Guba. *Illinois agriculturist, v. 27:103, 118, 1923.*

— Check list of important references dealing with the taxonomy of the fungi, by E. F. Guba and P. A. Young. *American Microscopical Society. Journal, v. 43, 1924.*

— Effect of dormant lime sulfur upon the control of apple blotch. *Science, N. S., v. 53:484, 1921.*

— The nature and control of apple blotch. *Illinois agriculturalist, v. 26:197, 218, 222, 1922.*

— The phyllosticta canker, leaf spot, and fruit blotch of the apple; its etiology and control. *Phytopathology, v. 14, 1924.*

— Phyllosticta leaf spot and damping-off of snapdragons by E. F. Guba and P. J. Anderson. *Same, v. 9:315, 1919.*

Guthrie, E. S. Creamery management problems. *New York produce review and American creamery, v. 58:248, 1924.*

Hagan, W. A. Studies on intradermal tuberculin, by W. A. Hagan and J. Traum. *Cornell veterinarian, v. 14:182, 1924.*

Hammond, W. A. Report of the Dean of the University faculty, 1922-23. *Cornell University. Official publications, v. 14, No. 18, Appendix I, 1923.*

Hance, F. E. Germanium VI. Metallic germanium. Reduction of germanium dioxide. Preparation of fused germanium. Physical and chemical properties, by L. M. Dennis, K. M. Tressler, and F. E. Hance. *American Chemical Society. Journal, v. 45:2033, 1923.*

Hardenburg, E. V. Ecological factors affecting tuber-set in potatoes. *Potato Association of America. Proceedings, 1923:165.*

— Potato notes—New York. *Potato news bulletin, v. 1:50, 1924.*

— Report of Committee on varietal nomenclature and testing. *Potato Association of America. Proceedings, 1923:75.*

Harman, S. W. The aphiscidal properties of tobacco dust, by G. F. MacLeod and S. W. Harman. *New York State Agricultural Experiment Station, Geneva, N. Y. Bulletin 502: 18, 1923.*

Hebel, J. W. Milton's lighter moments. *Freeman, v. 7:4, 1923.*

— The surreptitious edition of Michael Drayton's Peirs Gaueston. *Library, N. S., v. 4:5, 1923.*

Heinicke, A. J. Catalase activity in dormant apple twigs, its relation to the condition of the tissue, respiration, and other factors. *Cornell University Agricultural Experiment Station. Memoir 74:3, 1924.*

— The set of apples as affected by some treatments given shortly before and after the flowers open. *American Society for Horticultural Science. Proceedings, 1923, p. 19.*

Henry, M. F. Food-value chart, by F. M. Thurston, M. F. Henry, and Evelyn Byrd. *Cornell extension bulletin 71, 1923.*

Hermannsson, Halldor. Jon Gudmundsson and his natural history of Iceland. Ithaca, N. Y., 1924. xxviii, 40 p. (Islandica, XV)

— *Collaborator.* Nordisk bibliografisk litteratur under år 1922. *Nordisk tidskrift for bok- och biblioteksvsäen, v. 10:237, 1923.*

— *Review:* Gathorne-Hardy, G. M. The Norse discoverers of America. *American-Scandinavian review, v. 11:371, 1923.*

Herrick, G. W. Notes on the biology of Desmocerus palliatus (Forst). *Journal of economic entomology, v. 16:546, 1923.*

— The preservation of wood from the attacks of termites. *Sibley journal of engineering, v. 37:130, 1923.*

Hitzrot, J. M. Splenectomy in hemorrhagic purpura. *Annals of surgery, v. 78: 185, 1923.*

Hoisington, L. B. The RL of increased chroma with film colors, by D. Ginsberg and L. B. Hoisington. *American journal of psychology, v. 35:269, 1924.*

— The spatial limen for the four principal film colors, by Martha Elliott, Jean West, and L. B. Hoisington. *Same, v. 35:125, 1924.*

Holmes, R. M. The thermoelectric properties of sputtered films of gold, platinum, and palladium; and of solid palladium containing occluded hydrogen. *Physical review, v. 22:137, 1923.*

Hopkins, E. F. The quality of packet vegetable seed on sale in New York. *New York State Agricultural Experiment Station. Bulletin 507:23, 1924.*

— Work of the seed testing laboratory from 1918 to 1923, with notes on seed quality, seed testing, seed law compliance, and trade practices, by M. T. Munn and E. F. Hopkins. *Same, 504:35, 1923.*

Hosmer, R. S. The attitude of the forestry profession toward a national forest policy. *Journal of forestry, v. 31:517, 1923.* Also in Report on hearings before select committee on reforestation of the United States Senate. *U. S. 67th Congress, 4th session. Hearings, pt. 6, 1923.*

— The forest policy of New York. *American forests and forest life, v. 30:349, 1924.*

— A glance back and a look forward. *Journal of forestry, v. 22:1, 1924.*

— Recent developments toward a forest policy for state and nation. *Lumber world review, v. 45:37, 1923.*

— The background of the forest [and] The Christmas tree problem. *In* Bailey, L. H. Cultivated evergreens. New York, Macmillan & Co., 1923.

— Why a forestry school annual? *Cornell forester, v. 4:31, 1924.*

— *Reviews:* Berry, J. B. Farm woodlands. *Journal of forestry, v. 21:822, 1923;* Hawaii. Forestry Dept. Annual report. *Same, v. 31:517, 1923.*

Howlett, F. S. Nitrogen and carbohydrate composition of the developing flowers and young fruits of the apple. *American Society of Horticultural Science. Proceedings, v. 20:31, 1923.*

Hoy, D. F. Report of the registrar, 1922-23. *Cornell University. Official publications. v. 14, No. 18, Appendix XIII, 1923.*

Hucker, G. J. The flora of American cheddar cheese and its relation to quality. *International Dairy Congress. Proceedings, 1923.*

— Methods of gram staining, by G. J. Hucker and H. J. Conn. *New York State Agricultural Experiment Station, Geneva, N. Y. Technical bulletin 93, 1923.*

— Studies on the coccaceae, 1. Previous taxonomic studies concerning the coccaceae. *Same, 99, 1924.*

— Studies on the coccaceae, 2. A study of the general characters of the micrococcus group. *Same, 100, 1924.*

— Studies on the coccaceae, 3. The nitrogen metabolism of the micrococcus group. *Same, 101, 1924.*

— Studies on the coccaceae, 4. The classification of the genus micrococcus Cohn. *Same, 102, 1924.*
— Studies on the coccaceae, 5. Serological studies of the micrococci. *Same, 103, 1924.*
Hunt, E. L. The future of debating at Cornell. *Cornell daily sun, April 2, 1924.*
— Rhetoric and oratory in classical historiography. *Quarterly journal of speech education, v. 9:383, 1923.*
— Persistent questions in public discussion, edited by A. M. Drummond and E. L. Hunt. New York, Century Co., 1924. 558 p.
— A seminary for idlers. *Cornell era, v. 66:35, 1924.*
— *Abstract:* Report of Committee on Teaching of Public Speaking in Technical and Professional Schools. *Quarterly journal of speech education, v. 10:283, 1924.*
— *Reviews:* Lowell, A. L. Public opinion in war and peace. *Quarterly journal of speech education, v. 10:85, 1924;* Lippman, Walter. Public opinion. *Same, v. 10:85, 1924.*
— *Editor.* Huron College alumni quarterly, 1923-24.
Hurwitz, W. A. *Editor.* American Mathematical Society. Bulletin, 1923. *Associate Editor.* American Mathematical Society. Transactions. 1923-24.
Hutchinson, J. I. On a remarkable class of entire functions. *American Mathematical Society. Transactions, v. 25:325, 1923.*
Johannsen, O. A. Eye structure in the spineless-glass mutant of drosophila. *Anatomical record, v. 26:396, 1923.*
— A method for the extermination of the round-headed apple-tree borer (Saperda candida). *Journal of economic entomology, v. 17:420, 1924.*
— A new chloropid sub-genus and species from New York. *Canadian entomologist, v. 56:89, 1924.*
— A new species of dixa from California. *Psyche, v. 31:45, 1924.*
— *Review:* MacGillivray, A. D. External insect anatomy. *Science, v. 59: 214, 1924.*
Jones, H. L. *Editor and translator.* The geography of Strabo, with an English translation by H. L. Jones. Vol 2. London, W. Heinemann & Son; New York, G. P. Putnam's Sons, 1923. 480 p.
Jordan, R. H. Cornell alumni in education. *Cornellian Council bulletin, v. 9:1, 1923.*
— The professor of education. *Yale University. Class of 1893. Thirtieth anniversary record, 1923.*
— Summer session opportunities. *Cornell daily sun, v. 44, Nov. 22, 1923.*
— Teaching as a profession. *Same, v. 44, Mar. 5, 1924.*
— *Review:* Platt, Charles. The psychology of social life. *American journal of psychology, v. 35:142, 1924.*
Kahn, M. C. The inhibition of putrefactive spore-bearing anaerobes by bacterium acidophilus, by J. C. Torrey and M. C. Kahn. *Journal of infectious diseases, v. 33:482, 1923.*
Karapetoff, Vladimir. All macadam (a poem). *Ithaca journal-news, Dec. 31, 1923.*
— Ampere-turns for saturated teeth. *Electrical world, v. 83:1231, 1924.*
— Award of the Montefiore prize. *Sibley journal of engineering, v. 37:229, 1923.*
— Belgian prize awarded. *Ithaca journal-news, Oct. 24, 1923.*
— Courses for training of circus managers and artists. *Same, April 21, 1924.*
— Einstein's restricted theory of relativity explained on a model. *Science and invention, v. 11:442, 1923.*
— A five-string cello. *New York world, Aug. 26, 1923.*
— How to study a musical composition. *Key note, March, 1924.*
— The immigrant (A poem). *Ithaca journal-news, Feb. 18, 1924.*
— The indumor, a kinematic device which indicates the performance of a polyphase induction machine. *American Institute of Electrical Engineers. Transactions, v. 41:177, 1922.*
— Kinematic models of electrical machinery. *In* Popular research narratives. New York, Engineering Foundation, 1924.

— Lead-acid storage batteries. *Lefax, Sept., 1923.*
— Lenin's ideas on the electrification of Russia. *Electrical world, v. 83:831, 1924.*
— Magnetization curve, names for its parts. *Science, v. 61:440, 1924.*
— Mathematicians need help. *Electrical world, v. 83:780, 1924.*
— Model to illustrate theory of relativity. *American Institute of Electrical Engineers. Journal, v. 42:712,1923.*
— On continuous threads of activity. *Bridge of Eta Kappa Nu, v. 20:3, 1923:* reprinted in *Sibley journal of engineering, v. 38:9, 1924.*
— On continuous threads of activity. *Zontian, v. 4:6, 1924.*
— A problem in eccentric slider-crank mechanism. *Sibley journal of engineering, v. 37:226, 1923.*
— Some desirable human characteristics in members of an organization. *Same, v. 37:226, 1923.*
— Steinmetz as a mathematician. *Electrical world, v. 82:932, 1923.*
— Tests on modes of diaphram vibration. *In* Kennelly, A. E. Electrical vibration instruments. Appendix XIV. New York, Macmillan & Co., 1923.
— Transformation of electric and magnetic forces in a plane wave, in a plane normal to the direction of relative motion of two observers. *Physical review, v. 23:239, 1924.*
— A tribute to Steinmetz. *Cornell daily sun, Oct. 29, 1923.*
— Triplen and non-triplen harmonics. *Electrical world, v. 83:237, 1924.*
— The use of superimposed imaginary EMF's, currents, and fluxes in the solution of alternating-current problems. *American Institute of Electrical Engineers. Transactions, v. 41:122, 1922.*
— The use of the scalar product of vestors in locus diagrams of electrical machinery. *American Institute of Electrical Engineers. Journal, v. 42:1181, 1923.*
— We need inventions to supply necessities. *New York times, May 20, 1923.*
— Working for unborn generations. *Electrical world, v. 82:25, 1923.*
— *Discussion:* Condenser discharges. *American Institute of Electrical Engineers. Transactions, v. 41:76, 1922;* Current locus of induction motors. *Same, v. 41:221, 1922;* Determination of duty cycles. *Same, v. 41:469, 1922;* Electromagnetic forces. *American Institute of Electrical Engineers. Journal, v. 42: 1189, 1923;* Floating-neutral n-phase systems. *Same, v. 42:1350, 1923;* Heat losses in armature conductors. *Same, 42:214, 1923;* Measurement of power in polyphase circuits. *Same, v. 42:975, 1923;* Qualitative analysis of transmission lines. *Same, v. 42:1069, 1923;* Radiation from transmission lines. *Same, v. 42:981, 1923.*
— *Editor:* Electrical world, research section. 1920-24.

Kellogg, R. M. Getting ready for summer. *Delineator, v. 104:58, 1924.*
— Slice, pare, and grind. *Same, v. 104:64, 1924.*
— Vacuum cleaners. *Cornell countryman, v. 21:82, 1923.*

Kennard, E. H. Die Art der Röntgenimpulse. *Physikalische Zeitschrift, v. 24: 372, 1923.*
— On the thermo-dynamics of thermal transpiration and of the Thomson effect. *Physical review, v. 22:617, 1923.*

Kennedy, Foster. Testicular teratoma with secondary deposits in spinal column and meninges, by Foster Kennedy and Lewis Stevenson. *Archives of neurology and psychiatry, v. 11:151, 1924.*

Kerr, A. T. Report of the Secretary of the Ithaca Division of the Medical College, 1922-23. *Cornell University. Official publications. v. 14, No. 18, Appendix VI, 1923.*

Kimball, D. S. Balancing of machine parts. *Sibley journal of engineering, v. 37:56, 1923.*
— The content of a liberal education. *Same, v. 36:132, 1922.*
— The development of machine tools. *Mechanical engineering, v. 45:154, 1923.*
— Industrial leadership. *Sibley journal of engineering, v. 36:171, 1922.*
— National leadership. *Mechanical engineering, v. 45, 1923.*

— Report of the Dean of the College of Engineering, 1922-23. *Cornell University. Official publications, v. 14, No. 18, Appendix X, 1923.*
— Technical education (editorial) *Engineering education, v. 13:86, 1922.*
— Textile manufacturing and economics. *Engineers and engineering, v. 39: 140, 1922.*
— The organization of modern industry. *Management and administration, v. 6:17, 136, 165, 333, 437, 539, 743; v. 7:45. 1923-24.*

Kinkeldey, Otto. The harmonic sense, its evolution and its destiny. *Music Teachers' National Association. Papers and proceedings, 1923, p. 9, 1924.*

Kirby, G. H. Focal infection and mental disease, by Nicholas Kopeloff and G. H. Kirby. *American journal of psychiatry, v. 3:149, 1923.*

Knox, L. C. Hypernephroma of the ovary, by W. A. Downes and L. C. Knox. *American Medical Association. Journal, v. 82:1315, 1924.*

Ladd, C. E. *Joint editor.* Wiley farm series. New York, John Wiley & Sons, Inc.

Lathrop, F. H. Fall spraying for the pear psylla. *New York State Horticultural Society. Proceedings, 1924:205.*
— Further studies on the control of S. opalescens in Oregon, by F. H. Lathrop and V. M. Trask. *Journal of economic entomology, v. 17, 1924.*
— The genus phlepsius in North America, by H. S. Osborn and F. H. Lathrop. *Entomological Society of America, v. 16:310, 1923.*
— Influence of temperature and evaporation upon the development of Aphis pomi DeGeer. *Journal of Agricultural research, v. 23:969, 1923.*

Lee, B. J. Radiation in the treatment of mammary carcinoma. *Canadian practitioner, v. 44:141, 1924.*
— Treatment of primary inoperable carcinoma of the breast by radiation: A report of 54 cases from the breast clinic, by B. J. Lee and R. E. Herendeen. *Radiology, v. 2:121, 1924.*

Liddell, H. S. The effect of thyroidectomy on the growth of the skull in sheep. *Anatomical record, v. 27:209, 1924.*
— The effect of thyroidectomy on the reaction time of sheep. *International Physiological Congress. Proceedings, 1923:166.*
— The possible influence of fatigue on the reaction time of thyroidectomized sheep. *Society for Experimental Biology and Medicine. Proceedings, v. 21:126, 1923.*
— The relation between spontaneous activity and the ability to learn a simple maze. *Same, v. 21:125, 1923.*
— Some effects of thyroidectomy on the muscular system in the sheep and goat, by Sutherland Simpson and H. S. Liddell. *Anatomical record, v. 27:218, 1924.*
— Some methods for investigating the effect of thyroidectomy on the neuromuscular mechanism of sheep. *Quarterly journal of experimental physiology, v. 13:191, 1923.*

Lilienthal, Howard. Carrel-Dakin treatment—an improvement in adjusting tubes in superficial wounds. *Military surgeon, v. 53:162, 1923.*
— Malignant tumor of the lung. *Archives of surgery, v. 8:308, 1924.*
— The selection of patients and of operation in the surgical treatment of pulmonary tuberculosis. *American journal of surgery, v. 38:1, 1924.*

Loomis, W. E. Some relations of hardening to transplanting. *American Society for Horticultural Science. Proceedings, 1923:206.*

Love, H. H. Methods now in use in cereal breeding and testing at the Cornell Agricultural Experiment Station, by H. H. Love and W. T. Craig. *American Society of Agronomy. Journal, v. 16:109, 1924.*
— A modification of Student's table for use in interpreting experimental results. *Same, v. 16:68, 1924.*
— Student's method for interpreting paired experiments, by H. H. Love and A. M. Brunson. *Same, v. 16:60, 1924.*

Lusk, Graham. Animal calorimetry. 24. Analysis of the oxidation of mixtures of carbohydrate and fat. *Journal of biological chemistry, v. 59:41, 1924.*
— Diet and disease. *American journal of public health, v. 14:297, 1924.*

— Fundamental basis of nutrition. 2d ed. New Haven, Yale University Press, 1923. 55 p.

— *Editor.* Ringer, Michael. Animal calorimetry. 23. The influence of the metabolism of the nucleic acids on heat production, by M. Ringer and D. Rapport. *Journal of biological chemistry, v. 58:485, 1923.*

Lyon, T. L. Availability of the phosphorus of floats as influenced by incorporation of farm manure in soil, by T. L. Lyon and H. O. Buckman. *American Society of Agronomy. Journal, v. 16:96, 1924.*

— Depressive influence of certain higher plants on the accumulation of nitrates in soil, by T. L. Lyon, J. A. Bizzell, and B. D. Wilson. *Same, v. 15:457, 1923.*

— Edaphology, by T. L. Lyon and H. O. Buckman. *Same, v. 16:24, 1924.*

McAuliffe, G. B. The deaf child. *New York State journal of medicine, v. 24:197, 1924.*

McCurdy, J. C. Sewage disposal for rural homes, by H. W. Riley and J. C. McCurdy. Revised April, 1923. *Cornell extension bulletin 48, 1923.*

MacLeod, G. F. The aphiscidal properties of tobacco dust, by G. F. MacLeod and S. W. Harman. *New York State Agricultural Experiment Station, Geneva, N. Y. Bulletin 502:18, 1923.*

Macmillan, W. B. Glimpses of summer work in the service. *Cornell forester, v. 4:33, 1924.*

Mann, A. R. American agricultural colleges. *Poljoprivredni glasnik, Bosnia, Jugo-Slavia, v. 4, No. 10:2, 1924.*

— Correlating the forces of the agricultural colleges in carrying out a program of agricultural improvement. *Association of Land Grant Colleges. Proceedings, 1923:308.*

— Encroachment by government on the freedom of administrative officers and boards of colleges and universities in the use of state appropriations for higher education. *Same, 1923:463.*

— How shall the College of Agriculture determine the aims and the organization of its courses of study? *Same, 1922:98.*

— The merger with the New York State Agricultural Experiment Station. *Cornell countryman, v. 21:7, 1923.*

— The New York State Bankers' Association and its cooperation with the State College of Agriculture in the promotion of junior extension work in agriculture and home economics. *New York State Bankers' Association. Proceedings,1923:74.*

— An opportunity for Grange leadership. *American agriculturist, v. 113:471, 1924.*

— Report of a survey of the state institutions of higher learning in Kansas, by Geo. F. Zook, Lotus D. Coffman, and A. R. Mann. *U. S. Bureau of Education. Bulletin 40, 1923.*

— Report of the Dean of the New York State College of Agriculture, 1922-23. *Cornell University. Official publications, v. 14, No. 18, Appendix VIII, 1923.*

Marquardt, J. C. The causes of leaky butter, by A. C. Dahlberg and J. C. Marquardt. *New York produce review, v. 57:474, 1924.*

Martens, J. H. C. Scorodite from Putnam County, New York. *American mineralogist, v. 9:27, 1924.*

Mason, C. W. Azidocarbondisulphide, I, by A. W. Browne, A. B. Hall, G. B. L. Smith, F. H. Swezey and C. W. Mason. *American Chemical Society. Journal, v. 45:2541, 1923.*

— Azidodithio carbonic acid, I, by G. B. L. Smith, F. Wilcoxon, A. W. Browne, C. W. Mason. *Same, v. 45:2604, 1923.*

— Blue eyes. *Journal of physical chemistry, v. 28:498, 1924.*

— Blue feathers, by W. D. Bancroft, E. M. Chamot, Ernest Merritt and C. W. Mason. *Auk, v. 40:275, 1923.*

— Structural colors in feathers, I II. *Journal of physical chemistry, v. 27:201, 401, 1923.*

Massey, L. M. Plant pathology investigations. *Cornell countryman, v. 21:109, 1924.*

— Some results of dusting experiments for apple scab and peach leaf curl in 1921-22, by L. M. Massey and H. W. Fitch. *New York State Horticultural Society. Proceedings, v. 68:42, 1923.*

Maynard, L. A. A system of rearing dairy calves with limited use of milk, by L. A. Maynard and L. C. Norris. *Journal of dairy science, v. 6:483, 1922.*

Merritt, Ernest. Blue feathers, by W. D. Bancroft, E. M. Chamot, Ernest Merritt, and C. W. Mason. *Auk, v. 40:275, 1923.*

— Selected topics in the field of luminescence, by Ernest Merritt, E. L. Nichols and C. D. Child. *National Research Council. Bulletin, v. 5:1, 1923.*

— *Abstract:* The effect of light upon the rectifying action of selenium contacts. *Physical review, v. 23:555, 1924.*

Milks, H. J. Intussusception in dogs. *Cornell veterinarian, v. 14:80, 1924.*

Mills, H. S. Canning crop cost studies in New York, by L. J. Norton and H. S. Mills. *Market growers' journal, v. 28:9, 39, 1921.*

— Clabret strains of golden self-blanching. *Same, v. 34:5, 1924.*

— Growing peas for canning in New York. *Same, v. 28:5, 1921.*

— Growing peas for the cannery. *Canning trade, v. 47:14, 16, 1924.*

— Growing sweet corn and beans for the cannery. *Same, v. 47:16, 18, 1924.*

— Heavy sowing pays for cannery peas. *Market growers' journal, v. 33:25, 1923.*

— How to grow peas. *New York Sunday world, June 1, 1924.*

— Labor and crop saving in harvesting peas. *Canning trade, v. 47:16, 18, 1924.*

— Light applications of fertilizer best for peas. *Market growers' journal, v. 32:19, 1923.*

— Merchandizing *vs.* dumping. *Same, v. 32:27, 1923.*

— A model cabbage storage house. *Pennsylvania farmer, v. 50:16, 1921.*

— The new strain of golden self-blanching. *Market growers' journal, v. 32:19, 1923.*

— Plant peas after a cultivated crop. *Same, v. 32:19, 1923.*

— Quality in celery. *Same, v. 32:3, 5, 7, 1923.*

— Some desirable canning varieties of vegetables in New York. *Seed world, v. 15:24, 1924.*

— Southern grown cabbage and tomato plants. *Rural New Yorker, v. 83: 367, 1924.*

— Success with cabbage on muck. *Same, v. 83:166, 1924.*

— Tests prove clabret good variety of celery. *Seed world, v. 14:44, 1923.*

— Varieties of market tomatoes. *Rural New Yorker, v. 83:367, 1924.*

Miscall, Jack. Copper in dairy products and its solution in milk under various conditions, by F. E. Rice and J. Miscall. *Journal of dairy science, v. 6:17, 1923.*

Moore, M. G. A study of the phytosterols of corn oil, cottonseed oil and linseed oil, by R. J. Anderson and M. G. Moore. *American Chemical Society. Journal, v. 45:1944, 1923.*

Moore, V. A. Bovine tuberculosis and its relation to the community. *Cortland standard, Dec. 21, 1923.*

— Bovine tuberculosis control. *Dairymen's league news, v. 8:1, 1924;* also printed in *Worlds Dairy Congress. Proceedings, 1923.*

— New York State Veterinary College at Cornell University. Report, 1922-23. Albany, J. B. Lyon Co., 1924. 234 p.

— Veterinary dairy inspection. *Dairymen's league news, v. 7:1, 1923.*

— The veterinary situation. *Holstein-Friesian world, v. 21:149, 1924;* also printed in *Veterinary medicine, v. 19:185, 1924.*

— Report of the Dean of the New York State Veterinary College, 1922-23. *Cornell University. Official publications, v. 14, No. 18, Appendix VII, 1923.*

Morrill, C. V. The peculiar reaction of the common newt to a liver diet. *Anatomical record, v. 26:83, 1923.*

Morse, Marston. A fundamental class of geodesics on any closed surface of genus greater than unity. *American Mathematical Society. Transactions, v. 26:35, 1924.*

— A one-to-one representation of geodesics on a surface of negative curvature. *American journal of mathematics, v. 43:33, 1921.*

— Proof of a general theorem on the linear dependence of panalytic functions of a single variable. *American Mathematical Society. Bulletin, v. 23:114, 1916.*
— Recurrent geodesics on a surface of negative curvature. *Same, Transactions, v. 22:84, 1921.*
— *Review:* Jung, H. W. E. Einführung in die Theorie der algebraischen Funktionen einer Veränderlichen. *American mathematical monthly, v. 30:391, 1923.*

Muenscher, W. C. Protein synthesis in chlorella. *Botanical gazette, v. 75:249, 1923.*

Munn, M. T. The quality of packet vegetable seed on sale in New York, by M. T. Munn and E. F. Hopkins. *New York State Agricultural Experiment Station, Geneva, N. Y. Bulletin 507, 1924.*
— Rules for seed testing. *Same, Circular 73, 1924.*
— Work of the seed testing laboratory from 1918 to 1923 by M. T. Munn and E. F. Hopkins. *Same, Bulletin 504, 1923.*

Myers, C. H. Some comments on selection with special reference to potatoes. *Potato news bulletin, v. 1:107, 1924.*

Needham, J. G. Entomological uses for yucca pith. *Entomological news, v. 35: 19, 1924.*
— Neotropical mayflies, by J. G. Needham and Helen E. Murphy. *Lloyd Library. Bulletin 24, 1924.*
— The North American species of the genus acroneuria (Plecoptera) by J. G. Needham and P. W. Claassen. *Canadian entomologist, v. 54:249, 1922.*
— Observations on the life of the ponds at the head of Laguna Cañon. *Pomona journal of zoology and entomology, v. 16:123, 1924.*

Nichols, E. L. Selected topics in the field of luminescence, by Ernest Merritt, E. L. Nichols and C. D. Child. *National Research Council. Bulletin, v. 5:1, 1923.*

Nichols, M. L. Laboratory manual of introductory quantitative analysis. Ithaca, Cornell Publications Printing Co., 1923. 63 p.
— Laboratory manual of introductory quantitative analysis (short course) Ithaca, Cornell Publications Printing Co., 1923. 49 p.

Niles, W. L. Report of the Dean of the Medical College. *Cornell University. Official publications, v. 14, No. 18, Appendix V, 1923.*

Nonidez, J. F. The behavior of the nucleus and chromosomes during spermatogensis in the robber fly, Lasiopogon bivittatus, by C. W. Metz and T. F. Nonidez. *Biological bulletin, v. 46:153, 1924.*
— Estudios sobre las gonadas de la gallina II. El tejido intersticial del ovario. *In* Libro en honor de S. Ramon y Cajal, v. 2:137, Madrid, 1922.
— Luteal cells and hen-feathering, by H. D. Goodale and J. F. Nonidez. *American naturalist, v. 58:91, 1924.*
— Spermatogenesis in Asilus notatus Wied (Diptera) *Archiv für Zellforschung, v. 17:438, 1923.*

Norris, L. C. A system of rearing dairy calves with limited use of milk, by L. A. Maynard and L. C. Norris. *Journal of dairy science, v. 6:483, 1922.*

Northup, C. S. What the colleges desire from the high schools in the teaching of literature. *English bulletin, v. 4:2, 8, 1924.*
— *Reviews:* Leonard, S. A. Essential principles of teaching reading and literature in the intermediate grades and the high school. *South Atlantic quarterly, v. 22:281, 1923*; Wendt, G. Grammatik des heutigen Englisch. *Journal of English and Germanic philology, v. 23:148, 1924*; Elton, O. A survey of English literature, 1780-1880. *Same, v. 23:152, 1924*; Sperlin, O. B. Studies in English world-literature. *Sewanee review, v. 31:380, 1923*; Greene, A. K. The step on the stair. *Same, v. 23:383, 1923.*
— *Reviews in Cornell alumni news, v. 25, 1922-23*; Nathan, G. J. The critic and the drama and the world in falseface, p. 487; Noyes, G. W. The religious experience of John Humphrey Noyes, p. 487; Singmaster, Elsie. The hidden road, p. 504; Bailey, L. H. The seven stars, p. 504; Whitbeck, R. H. High school geography, p. 504; Abbott, Jane. Minglestreams, p. 504.

— *Reviews in Cornell alumni news, v. 26, 1923-24:* Monroe, R. The ethical and economic theories of Adam Smith, p. 4: Rolfe, J. C. Cicero and his influence, p. 34; Turner, E. M. Stories and verse of W. Virginia, p. 45; Notestein, Wallace. Journal of Sir Simonds D'Ewes, p. 59: Mudge, I. G. New guide to reference books, p. 66: Lewiss, G. P. The Einstein theory, p. 83; Poate, E. M. The trouble at Pinelands, p. 96; Du Breuil, A. J. The novel of democracy in America, p. 104; Zon, R. and Sparhawk, W. N. The forest resources of the world, p. 119; Decker, F. N. Kriemhild herd, p. 131; Abbott, Jane. Fidelis, p. 140; Jones, H. L. Strabo ii, p. 140; Rural school survey of New York, p. 155; Olmstead, A. T. History of Assyria, p. 167; Grey Towers, p. 180; Cooper, Lane. The poetics of Aristotle, p. 191; Andrews, B. R. Economics of the household, p. 209; Vassar mediaeval studies, p. 234; Rosebush, J. C. The ethics of capitalism, p. 251; Divine, C. Gypsy gold, p. 267; Smith, P. Erasmus, p. 267; Cabeen, D. N. The African novels of Louis Bertrand, p. 280; Weiss, C. Practical railway maintenance, p. 292; James, B. B. The modern test, Crawford, L. S. The mental test, p. 292; Weeks, A. D. The control of the social mind, p. 303; Gil, J. C. America the peacemaker, p. 303; Hyde, W. W. Greek religion and its survivals, p. 315; Ogden, R. M. Hearing, p. 336; Cheyney, E. G. Scott Burton and the timber thieves, p. 363; Kellogg, V. L. Mind and heredity, p. 363; Goode, C. T. Byron as critic, p. 374; Whitchurch, I. G. The philosophical bases of asceticism in the Platonic writings and in the pre-Platonic tradition, p. 387; Nussbaum, F. L. Commercial policy in the French revolution: a study of the career of G. J. A. Ducher, p. 400; Bernays, E. L. Crystallizing public opinion, p. 408; Bedell, M. C. Modern gypsies, p. 424; Callan, F. H. Excellence in English, p. 434; Langdon, Ida. Milton's theory of poetry and fine art, p. 472; Fitch, A. P. None so blind, p. 472; Montross, L. S. The crimson cloak, p. 487; Reeves, J. B. The hymn as literature, p. 488.

— *Joint compiler:* Modern Humanities Research Association. Bibliography of English language and literature, 1922. Cambridge, 1923. viii, 231 p.

— *Editor:* Norton, W. Q. Entrance English questions set by the College Entrance Examination Board, 1901-1923. Boston, 1924. xx, 132 p.

— *Co-operating editor:* Journal of English and Germanic philology, 1923-24; Phi Beta Kappa key, 1923-24.

— *Joint editor:* Cornell alumni news, 1923-24; Cornell studies in English, 1923-24.

Notestein, Wallace. *Editor.* Journal of Sir Simonds D'Ewes from the beginning of the Long Parliament to the opening of the trial of the Earl of Strafford, edited by Wallace Notestein. New Haven, Yale University Press, 1923. 598 p.

Ogden, R. M. Hearing. New York, Harcourt, Brace & Co., 1924. xiii, 351 p.

— The need of some new conceptions in educational theory and practice. *School and society, v. 18:343, 1923.*

— Report of the Administrative Board of the Summer School, 1922. *Cornell University. Official publications, v. 14, No. 18, Appendix XI, 1923.*

— *Review*: Rivers, W. H. R. Instinct and the unconscious. *American journal of psychology, v. 34:127, 1923.*

— *Editor.* Elisaberg, W. Recent work on the psychology of forming concepts. *Psychological bulletin, v. 20:427, 1923.*

Orndorff, W. R. Laboratory manual of organic chemistry. Rev. ed. Boston, D. C. Heath & Co., 1923. 168 p.

— The structure of phenolphthalein oxine, by W. R. Orndorff and S. T. Yang. *American Chemical Society. Journal, v. 45:1926, 1923.*

O'Rourke, C. E. Design of concrete structures, by L. C. Urquhart and C. E. O'Rourke. New York, McGraw-Hill Book Co., 1923. 450 p.

Oskamp, Joseph. The planting and the early care of the commercial apple orchard. *Cornell extension bulletin, 75, 1923.*

Osterberg, Emil. The metabolism of creatin, by S. R. Benedict and Emil Osterberg. *Journal of biological chemistry, v. 56:229, 1923.*

— Sugar elimination after subcutaneous injection of glucose in the dog, by S. R. Benedict and Emil Osterberg. *Same, v. 55:769, 1923.*

Paddock, Royce. The failure of peptone to protect against anaphylactic shock and allergic conditions, by N. P. Larsen, A. V. R. Haigh, H. L. Alexander and R. Paddock. *Journal of immunology, v. 8:409, 1923.*

Palmer, A. M. After the high school—what? *Rotarian, v. 21:210, 1922.*

— Report of the Secretary of the College of Arts and Sciences, 1922-23. *Cornell University. Official publications, v. 14, No. 18, Appendix III, 1923.*

— Your friend in the faculty. *Cornell era, v. 55:7, 1922.*

Papanicolaou, G. N. Oestrus in mammals from a comparative point of view. *American journal of anatomy, v. 32:285, 1923.*

— The ovarian cystic fluid with special reference to its effect upon the reactions of the genital tract by G. N. Papanicolaou and N. F. Blau. *Society for Experimental Biology and Medicine. Proceedings, v. 21:164, 1923.*

Papez, J. W. *Abstract:* Secondary trigeminal tracts in the cat, as demonstrated by the Marchi method. *Anatomical record, v. 27:215, 1924.*

Parrott, P. J. Some side lights on dusting and spraying practices. *New York State Horticultural Society. Proceedings, 1924:118.*

— Some side lights on spray injuries to apple fruits and foliage. *Journal of economic entomology, v. 16:424, 1923.*

— The spray schedule in relation to pear psylla and pear thrips control. *New York State Horticultural Society. Proceedings, 1924:204.*

— Spraying and dusting experiments with apples in 1923. *Cornell University Agricultural Experiment Station. Circular 70, 1923.*

— The utility of dust and spray mixtures for orchard treatment. *Pennsylvania State Horticultural Association. Proceedings, 1924:8.*

Peck, G. W. Peach culture in New York. *Cornell extension bulletin 66, 1923.*

— Strawberry culture in New York State. *Same, 56, 1923.*

Phelps, A. C. Sir Christopher Wren and the Wren ideal. *Architecture, v. 49:139, 1924.*

Pope, J. D. Recruiting vocational students from boys' clubs. *Vocational educational magazine, v. 2:369, 1924.*

— Relationships between vocational agricultural teaching and junior project work. *Same, v. 2:188, 1923.*

— Vocational guidance through junior projects. *Same, v. 2:454, 1924.*

Race, H. H. A note on critical frequencies of a series electric circuit. *Sibley journal of engineering, v. 38:127, 1924.*

Rankin, W. H. Raspberry diseases. *New York State Horticultural Society. Proceedings, 1924:39.*

— Raspberry mosaic and blue stem. *New York State Agricultural Experiment Station. Circular 75, 1924.*

Recknagel, A. B. Growth of white spruce in the Adirondacks. *Journal of forestry, v. 21:794, 1923.*

— The story of Axton. *Cornell forester, v. 4:9, 1924.*

— *Review:* Ranger district, number five. *Journal of forestry, v. 22:439, 1923.*

— *Editor:* Journal of forestry; Empire State Forest Products Association. Bulletin, 1923-24.

Reed, H. D. The functional role of "locking" spines in the catfishes. *Anatomical record, v. 26:381, 1923.*

— The morphology and growth of the spines of siluroid fishes. *Journal of morphology, v. 38:431, 1924.*

Reed, H. L. Development of federal policy. Boston, Houghton Mifflin Co., 1922. 352 p.

— *Reviews:* Jevons, H. S. Money, banking, and exchange in India. *Journal of political economy, v. 31:455, 1923;* Tucker, D. S. The evolution of people's banks. *Same, v. 31:305, 1923;* Willis, H. P. The federal reserve system. *American economic review, v. 14:117, 1924.*

Reese, R. G. An operation for blepharoptosis with the formation of a fold in the lid. *American Medical Association. Journal, v. 82, 1924.*

— Technic of iridectomy done under a conjunctival flap for glaucoma using a broad keratome. *Archives of opthalmology, v. 53:26, 1924.*

Reid, A. C. The effect of varied instruction on the perception of lifted weights. *American journal of psychology, v. 35:53, 1924.*

Rhodes, F. H. The air slaking of lime, by F. H. Rhodes, W. H. Jones, and W. R. Dougen. *Chemical and metallurgical engineering, v. 28:1066, 1923.*
— The effect of various pigments upon the rate of oxidation of linseed oil, by F. H. Rhodes and A. E. Van Wirt. *Industrial and engineering chemistry, v. 15: 1135, 1923.*
— The motor oil fuel problem. *Sibley journal of engineering, v. 38:42, 1924.*
— Substances that prevent the jelling of tung oil, by F. H. Rhodes and T. J. Potts. *Chemical and metallurgical engineering, v. 29:533, 1923.*
— The vapor pressures of gasolines and light petroleum naphthas, by F. H. Rhodes and E. B. McConnell. *Industrial and engineering chemistry, v. 15:1273, 1923.*
— The variation of the refractive index of China wood oil with the temperature, by F. H. Rhodes and H. E. Goldsmith. *Same, v. 15:786, 1923.*
— The viscosities of mixtures of sulphuric acid and water, by F. H. Rhodes and C. B. Barbour. *Same, v. 15:850, 1923.*
Rice, F. E. Copper in dairy products and its solution in milk under various conditions, by F. E. Rice and J. Miscall. *Journal of dairy science, v. 6:261, 1923.*
— Infant stomachs and colloid chemistry. *Cornell chemist, v. 13:261, 1924.*
— Problems in the manufacture of food products. *Sibley journal of engineering, v. 38:147, 1924.*
— Simplified apparatus and technique for the electrometric determination of hydrogen ion concentration in milk and other biological liquids, by F. E. Rice and A. J. Rider. *Cornell University Agricultural Experiment Station. Memoir 66.*
— Sweetened condensed milk. I. Bacterial thickening, by F. E. Rice and P. A. Downs. *Journal of dairy science, v. 6:532, 1923.*
Richardson, H. B. Clinical calorimetry XXXIII: The effect of fasting in diabetes as compared with a diet designed to replace the foodstuffs oxidized during a fast, by H. B. Richardson and E. H. Mason. *Journal of biological chemistry, v. 57:587, 1923.*
— Clinical calorimetry XXXIV: Ketosis and the respiratory exchange in diabetes, by H. B. Richardson and W. S. Ladd. *Same, v. 58:931, 1924.*
— The inadequacy of the measured diet as an index of the food metabolized. *Boston medical and surgical journal, v. 189:1, 1923.*
Richmond, D. E. Electric wave filters. *Sibley journal of engineering, v. 38:61, 1924.*
Richtmyer, F. K. The absorption of X-rays by iron, cobalt, nickel, and copper, by F. K. Richtmyer and F. W. Warburton. *Physical review, v. 22:539, 1923.*
Ries, Heinrich. Testing of molding sands. *Sibley journal of engineering. v. 38:136, 1924*
Riley, H. W. Sewage disposal for rural homes, by H. W. Riley and J. C. McCurdy. Revised April, 1923. *Cornell extension bulletin 48, 1923.*
Robb, B. B. Farm engineering, by B. B. Robb and F. G. Behrends. New York, John Wiley & Sons, Inc., 1924. 454 p. (Wiley farm series. 1)
Roehl, L. M. Farmers' shop book. Milwaukee, Bruce Publishing Co., 1923. 429 p.
Rogers, John. Ovarian feeding. *Medical journal and record, v. 119:32, 1924.*
— Surgical neuroses of the thyroid gland. *American journal of the medical sciences, v. 165:66. 1923.*
Rose, Flora. *Reviser.* Judson, Helena. New Butterick cook book. New York, Butterick Publishing Co., 1924. 734 p.
Russell, L. C. Specific prevention and specific treatment of lobar pneumonia. *Military surgeon, v. 53:462, 1923.*
Sanderson, Dwight. Changes in the farm family. *Religious education, v. 19:22, 1924.*
— The social areas of Otsego County by Dwight Sanderson and W. S. Thompson. *Cornell University Agricultural Experiment Station. Bulletin 422, 1923.*
Schloss, O. M. Allergy to cow's milk in infants with nutritional disorders, by A. F. Anderson and O. M. Schloss. *American journal of diseases of children, v. 26: 451, 1923.*

Schmidt, Nathaniel. The Bok peace plan. *Cornell daily sun, v, 44, Jan. 21, 1924.*
— The disloyalty of Stambulisky. *Unity, v. 112, Nov. 1, 1923.*
— Early oriental studies in Europe and the work of the American Oriental Society, 1842-1922. *American Oriental Society. Journal, v. 43:1, 1923.*
— The fall of the Caliphate. *Cornell daily sun, v. 44, March 8, 1924.*
— A Jewish estimate of the ethics of Jesus. *Standard, v. 10:83, 1923.*
— The origin of Jewish eschatology. *In* A symposium on eschatology. New Haven, Yale University Press, 1923.
— The peace of Lausanne. *American review, v. 2:55, 1924.*
— The Swastika in Bavaria. *Cornell daily sun, v. 44, Oct. 30, 1923.*
— What I saw in Palestine. *New Palestine, v. 1:375, 1924.*

Schneck, H. W. Pollination studies with greenhouse tomatoes. *American Society for Horticultural Science. Proceedings, 1923:198.*
— Vegetable gardening teaching in agricultural colleges. *Same, 1923:81.*

Scott, Merit. Striking potential in low-voltage mercury arc. *Physical review, v. 22:447, 1923.*

Shaffer, N. M. Selected essays on orthopaedic surgery. New York, G. P. Putnam's Sons, 1923. xxii, 636 p.

Sharpe, F. R. *Associate editor.* American Mathematical Society. Transactions, 1923-24.

Sherman, J. M. The function of lag in bacterial cultures, by J. M. Sherman and W. R. Albus. *Journal of bacteriology, v. 9:303, 1924.*
— Propionic acid and ketones from whey, by E. O. Whittier and J. M. Sherman. *Industrial and engineering chemistry, v. 15:729, 1923.*
— The propionic acid fermentation of lactose, by J. M. Sherman and R. H. Shaw. *Journal of biological chemistry, v. 56:695, 1923.*
— The rates of fermentation of sugars by the propionic organism, by E. O. Whittier, J. M. Sherman, and W. R. Albus. *Industrial and engineering chemistry, v. 16:122, 1924.*
— Salt effects in bacterial growth: IV. The physical nature of bacterial growth in various concentrations of neutral salts, by G. E. Hohn and J. M. Sherman. *Society for Experimental Biology and Medicine. Proceedings, v. 21:311, 1924.*

Sherrington, C. E. R. A comparison of the probable economic consequences of the United States Transportation Act, 1920, and the British Railways Act, 1921. Privately printed, 1923. 16 p.
— Some economic results of the British Railways Act of 1921. *American economic review, v. 14:227, 1924.*

Simpson, Sutherland. The effect of thyroidectomy on growth in the sheep and goat as indicated by body-weight. *Quarterly journal of experimental physiology, v. 14:161, 1924.*
— Effects of thyroidectomy on the cutaneous system of the sheep and goat. *Same, v. 14:185, 1924.*
— Effects of thyro-parathyroidectomy on adult sheep. *International Physiological Congress, Edinburgh. Proceedings, 1923:219.*
— The effect of thyro-parathyroidectomy on the adult sheep. *Quarterly journal of experimental physiology, v. 14:199, 1924.*
— Effects of Steinach's operation in the goat. *Anatomical record, v. 27:218, 1924.*
— Physiology, physiological chemistry, and experimental pathology of the parathyroid glands. *In* Barker, L. F., editor. Endocrinology and metabolism. Vol. 1:509.
— Some effects of thyroidectomy in the sheep. *International Physiological Congress, Edinburgh. Proceedings, 1923:1.*
— Some effects of thyroidectomy in the sheep. *New York State journal of medicine, Dec. 1923:1.*
— Some effects of thyroidectomy on the muscular system in the sheep and goat. *Anatomical record, v. 27:218, 1924.*
— A study of the reaction of normal human subjects to intravenous injections of insulin, by Aaron Bodansky and Sutherland Simpson. *Society for Experimental Biology and Medicine. Proceedings, v. 21:280, 1924.*

— The teaching of physiology in medical schools. *American Medical Association. Journal, v. 81:410, 1923.*

Slichter, S. H. Labor turnover in industry. *American Statistical Association. Quarterly publications, v. 18:809, 1923.*

— The organization and control of economic activity. *In* Tugwell, R. G. Trend of economics. 1924.

— *Reviews:* Labor problems. (Walker, C. R. Steel; Robbins, Hayes. The labor movement and the farmer; Huggins, W. L. Labor and democracy.) *Yale review, v. 3:193, 1923.*

Smiley, D. F. A study of the acute infections of the throat and respiratory system. *American Medical Association. Journal, v. 82:540, 1924.*

Smith, G. B. L. Azidocarbondisulphide, I, by A. W. Browne, A. B. Hall, G. B. L. Smith, F. H. Swezey and C. W. Mason. *American Chemical Society. Journal, v. 45:2541, 1923.*

— Azidodithio carbonic acid, I, by G. B. L. Smith, F. Wilcoxon, A. W. Browne, and C. W. Mason. *Same, v. 45:2604, 1923.*

Smith, M. K. The prognosis in epiphyseal line fractures. *Annals of surgery, v. 79:273, 1924.*

Smith, Preserved. Have we a world state already? *New York evening post, Dec. 13, 1923.*

— The reformation historically explained. *American Society of Church History. Papers, second series, v. 7, 1923.*

— *Review:* Fouqueray, Henri. Histoire de la Compagnie de Jésus en France. *American historical review, v. 3:28, 1923.*

Snyder, Virgil. Further types of involutorial transformations which leave each cubic surface of web invariant. *American journal of mathematics, v. 46:131, 1924.*

— Problems in involutorial transformations in space. *American Mathematical Society. Bulletin, v. 30:101, 1924.*

— *Reviews:* Klein, F. Collected papers. Vol. 3. *Same v. 30:165, 1924*; Schmid, T. Darstellende Geometrie, vol. 2. *Same, v. 30:185, 1924*; Sanden, H. von. Praktische Analysis. *Same, v. 30:187, 1924.*

Spring, S. N. Commercial reforestation. *Paper trade journal, v. 78:251, 1924.*

— A living bank account. *Cornell countryman, v. 21:229, 1924.*

— Timber champions of the future—Boy scouts. *Order of Hoo-Hoo. Bulletin 33:18, 1924.*

Stephenson, J. W. Symposium on epidemic encephalitis. *Archives of neurology and psychiatry, v. 2:239, 1924.*

Stevenson, H. A. Noted pioneer agriculturist, Isaac P. Roberts. *Hoard's dairyman, v. 66:4, 1923.*

— *Managing editor.* Cornell alumni news, 1923-24.

Stevenson, Lewis. Testicular teratoma with secondary deposits in spinal column and meninges, by Foster Kennedy and Lewis Stevenson. *Archives of neurology and psychiatry, v. 11:151, 1924.*

Stewart, F. C. Recommendations for the improvement of official inspection for crown-gall. *Phytopathology, v. 14:172, 1924.*

— The relation of moisture content and certain other factors to the popping of popcorn. *New York State Agricultural Experiment Station, Geneva, N. Y. Bulletin 505:1, 1923.*

Stewart, R. M. The challenge of unidentified farm youth. *Vocational educational magazine, v. 2:621, 1924.*

Stimson, P. M. Congenital diaphragmatic hernia of the right side; its diagnosis in life. *Archives of pediatrics, v. 40:647, 1923*; also in *New York State journal of medicine, v. 23:408, 1923.*

Stockard, C. R. Alcohol a factor in eliminating racial degeneracy. *American journal of the medical sciences, v. 167:469, 1924.*

— Experimental modification of the germ-plasm and its bearing on the inheritance of acquired characters. *American Philosophical Society. Proceedings, v. 62:311, 1923.*

—— Introductory: the general morphological and physiological importance of the oestrous problem. *American journal of anatomy, v. 32:277, 1923.*
—— The significance of modifications in body structure. *Harvey lectures, 1921-22:23, 1923.*
—— The structure of the vertebrate eye as an index of developmental deficiencies: with the bearing on recent inheritance studies. *American naturalist, v. 58:24, 1924.*

Streeter, L. R. Factors which affect the volatility of nicotine from insecticide dusts, by R. W. Thatcher and L. R. Streeter. *New York State Agricultural Experiment Station. Geneva, N. Y. Bulletin, 501, 1923.*
—— Combination sprays, by R. W. Thatcher and L. R. Streeter. *New York State Horticultural Society. Proceedings 69:50, 1924.*

Sumner, J. B. Detection of peutose, formaldehyde, and methyl alcohol. *American Chemical Society. Journal, v. 45:2378, 1923.*
—— Determination of the titratable alkali of the blood with dinitrosalicylic acid, by J. B. Sumner, R. S. Hubbard, and L. L. Finner. *Journal of biological chemistry, v. 56:701, 1923.*
—— A method for the purification of jack bean urease, by J. B. Sumner, V. A. Graham and C. V. Noback. *Society for Experimental Biology and Medicine. Proceedings, 1924.*

Swezey, F. H. Azidocarbondisulphide, I, by A. W. Browne, A. B. Hall, G. B. L. Smith, F. H. Swezey, and C. W. Mason. *American Chemical Society. Journal, v. 45:2541, 1923.*

Thatcher, R. W. Combination sprays, by R. W. Thatcher and L. R. Streeter. *New York State Horticultural Society. Proceedings 69:50, 1924.*
—— The effect of one crop on another. *American Society of Agronomy. Journal, v. 15:331, 1923.*
—— A lecture table demonstration of solubilities or of indicator action. *American Chemical Society. Journal, v. 45:1471, 1923.*
—— New York Agricultural Experiment Station, Geneva, N. Y. Forty-second annual report, 1923. 50 p.
—— Note concerning Graham and Carr's supposed calciumnicotine combination. *American Chemical Society. Journal, v. 46:1539, 1924.*
—— A program for agricultural development. *Science, N. S., v. 59:149, 1924.*
—— Factors which affect the volatility of nicotine from insecticide dusts, by R. W. Thatcher and L. R. Streeter. *New York State Agricultural Experiment Station, Geneva, N. Y. Bulletin, 501, 1923.*

Thilly, Frank. Doctrine of the freedom of thought. *Chronicon spinozanum, v. 3, June 1924.*
—— Morality and every day life. *Rice Institute. Pamphlet, v. 10, Nos. 1-12, 1923.*
—— Individualism of John Stuart Mill. *Philosophical review, v. 32:1, 1923.*
—— What really counts. (Phi Beta Kappa address, Hobart College) *Hobart College bulletin, v. 21:1, 1923.*
—— Sociological jurisprudence. *Philosophical review, v. 32:373, 1923.*
—— *Reviews:* Davy, G. Le droit, l'idéalisme et l'expérience. *Philosophical review, v. 32:410, 1923*; Neumann, Henry. Education for moral growth. *International journal of ethics, v. 34:298, 1924*; Pound, R. Interpretations of legal history. *Cornell law quarterly, v. 17:226, 1924*; Reininger, R. Kant. Seine Anhänger und seine Gegner. *Philosophical review, v. 33:221, 1924*; Schultz, J. Die Philosophie am Scheidewege. *Same, v. 33:189, 1924.*

Thomas, H. E. Tobacco wildfire. *Cornell extension bulletin, 79, 1924.*
—— Tobacco wildfire and tobacco seed treatment. *Phytopathology, v. 14:181, 1924.*

Thompson, H. C. Vegetable crops. New York, McGraw-Hill Book Co., 1923. 478 p.
—— Factors influencing early development of seed stalk of celery. *American Society of Horticultural Science. Proceedings, v. 20:219, 1923.*

Thompson, W. G. Focal infections in relation to systematic diseases. *Boston medical and surgical journal, v. 189:280, 1923.*

—— Dental diagnosis, its importance in general medicine. *New York medical journal and medical record, v. 118:138, 1923.*

Thurston, F. M. Food-selection score card. *Cornell extension bulletin 70, 1923.*

—— Food-value chart, by F. M. Thurston, M. F. Henry, and Evelyn Byrd. *Cornell extension bulletin 71, 1923.*

Titchener, E. B. The expression of simple feeling. *American journal of psychology, v. 34:616, 1923.*

—— Goerenz' *Vestigia. Same, v, 34:595, 1923.*

—— A model for the demonstration of facial expression, by E. B. Titchener and E. G. Boring. *Same, v. 34:471, 1923.*

—— The overlooking of familiar objects. *Same, v. 35:156, 1924.*

—— Relearning after forty-six years. *Same, v. 34:468, 1923.*

—— The term 'Attensity'. *Same, v. 35:156, 1924.*

—— *Editor:* American journal of psychology. 1923-24.

—— *Editor:* Studies from the psychological laboratory of Cornell University, edited by E. B. Titchener and H. P. Weld:

G. K. Adams. An experimental study of memory color and related phenomena. *American journal of psychology, v. 34:359, 1923. (No. 159)*

A. C. Reid. The effect of varied instruction on the perception of lifted weights. *Same, v. 35:53, 1924. (No. 160)*

D. Dewey and K. M. Dallenbach. Size *vs.* intensity as a determinant of attention. *Same, v. 35:121, 1924. (No. 161)*

M. Elliott, J. West, and L. B. Hoisington. The spatial limen for the four principal film colors. *Same, v. 35:125, 1924. (No. 162)*

C. C. Braddock. An experimental study of the negative after-image. *Same, v. 35:157, 1924. (No. 163)*

R. S. Burke and K. M. Dallenbach. Postion *vs.* intensity as a determinant of attention of left-handed observers. *Same, v. 35:267, 1924. (No. 164)*

D. Ginsberg and L. B. Hoisington. The RL of increased chroma with film colors. *Same, v. 35:269, 1924. (No. 165)*

B. R. Rubin and H. P. Weld. A preliminary study of the Bourdon illusion. *Same, v. 35:272, 1924. (No. 166)*

Torrey, J. C. The inhibition of putrefactive sporebearing anaerobes by bacterium acidophilus, by J. C. Torrey and M. C. Kahn. *Journal of infectious diseases, v. 33:482, 1923.*

Trever, A. A. The age of Hesiod; a study in economic history. *Classical philology, v. 19:157, 1924.*

Trevor, J. E. Determinants whose arrays are magic squares. *American mathematical monthly, v. 31:216, 1924.*

Troy, H. C. Directions for testing cream by the Koehler-Funke method. *New York produce review and American creamery, v. 57:456, 1924.*

Tucker, F. G. Effect of heat treatment on the photo-electric emission from platinum. *Physical review, v. 22:574, 1923.*

Udall, D. H. Prevention of diseases of newborn calves. *Cornell veterinarian, v. 14:226, 1924.*

Upton, G. B. The design and performance of complete cylindrical bearings from the mathematical theory of lubrication. *Sibley journal of engineering, v. 38:56, 76, 1924,* also in *Cornell University Engineering Experiment Station. Bulletin 2, 1924.*

—— Cross-relations of strengths of metals in tension, compression, torsion, and transverse hoodings. *Sibley journal of engineering, v. 38:2, 1924.*

—— Spark advance in internal combustion engines. *Society of Automotive Engineers. Journal, v. 13:111, 1923;* also abstracted in *Automotive industries, v. 44: 14, 46, 1923.*

—— Testing of materials and its effect on engineering. *Society of Automotive Engineers. Journal, v. 13:296, 312, 1923.*

Urquhart, L. C. Design of concrete structures, by L. C. Urquhart and C. E. O'Rourke. New York, McGraw-Hill Book Co., 1923. 450 p.

Valentine, J. J. Leukoplakia of the bladder, report of a case. *Journal of urology, v. 10:289, 1923.*

Vandegrift, G. W. The development of the accommodative apparatus in relation to myopia and presbyopia. *New York State journal of medicine, v. 24:385, 1924.*

Van Rensselaer, Martha. *Editor:* Delineator. Homemaking section. 1923-24.

von Engeln, O. D. American tendencies in geography. *Scientific monthly, v. 17: 326, 1923.*

—— The story key to geographic names, by O. D. von Engeln and J. M. Urquhart. New York, Appleton & Co., 1924. xviii, 279 p.

Walker, C. L. Studies on the treatment and the disposal of dairy wastes, by C. L. Walker and others. *Cornell University Agricultural Experiment Station. Bulletin 425, 1923.*

Warburton, F. W. The absorption of X-rays by iron, cobalt, nickel, and copper, by F. K. Richtmyer and F. W. Warburton. *Physical review, v. 22:539, 1923*

—— The use of a sector disk in X-ray measurements by J. A. Becker and F. W. Warburton. *Optical Society of America. Journal, v. 7:127, 1923.*

Ward, G. G. Reconstruction of the urethra after complete loss, complicating an extensive vesicovaginal fistula. *Surgery, gynecology, and obstetrics, v. 37:678, 1923.*

Warren, G. F. The agricultural depression. *Quarterly journal of economics, v. 38:183, 1924.*

—— An attempt to forecast the future trend of farm prices. *Journal of farm economics, v. 6:28, 1924.*

—— Cost accounts for six years on some successful New York farms, by G. F. Warren and others. *Cornell University Agricultural Experiment Station. Bulletin 414, 1923.*

—— Farm economics. Nos. 1-13, 1923-24.

Weeden, W. M. Mortality of surgical complications of diabetes. *American Medical Association. Journal, v. 82:1165, 1924.*

Weld, H. P. A preliminary study of the Bourdon illusion, by H. P. Weld and B. R. Rubin. *American journal of psychology, v. 35:272, 1924.*

—— *Reviews:* Fröbes, J. Lehrbuch der experimentellen Psychologie. *American journal of psychology, v. 35:138, 1924;* L'année psychologique, vingt-deuxiéme année. *Same, v. 35:290, 1924.*

—— *Associate editor.* Studies from psychological laboratory of Cornell University, edited by E. B. Titchener and H. P. Weld. Nos. 159-166. *American journal of psychology, v. 34-35, 1923-24.*

—— *Co-operating editor.* American journal of psychology. 1923-24.

Wellington, Richard. Self-sterility and self-fertility of fruit varieties grown in New York. *New York State Agricultural Experiment Station, Geneva, N. Y. Circular 71, 1923.*

West, L. S. Immunity to parasitism in Samia cecropia Linn. *Entomological news, v. 34:23, 1923.*

Whetzel, H. H. Dusting of apples in New York. *Peninsula Horticultural Society. Transactions, 1924;* also printed in *Delaware State Board of Agriculture. Bulletin, v. 13:3, 1924.*

—— The latest about dusting. *Rural New Yorker, v. 82:339, 1923.*

—— Report of the plant pathologist for the period January 1st to May 31st 1922. *Bermuda. Board and Dept. of Agriculture. Report, 1922:28, 1923.*

—— When and how to dust. *New York State Horticultural Society. Proceedings, v. 69:1924.*

White, Georgia L. Report of the Dean of women, 1922-23. *Cornell University. Official publications, v. 14, No. 18, Appendix XII, 1923.*

Whiteside, H. E. Restrictions on the duration of business trusts. *Cornell law quarterly, v. 9:422, 1924.*

—— *Reviews:* Davis, B. R. New York law of wills. *Cornell law quarterly, v. 9:92, 1924;* Schouler, James. The law of wills, executors, and administrators. *Same, v. 9:91, 1924;* Vinogradoff, Paul. Outlines of historical jurisprudence. *Same, v. 9:229, 1924;* Woerner, J. G. A treatise on the American law of administration. *Same, v. 9:231, 1924.*

Wiegand, K. M. Notes on some plants of the Ontario and St. Lawrence basins, New York, by M. L. Fernald and K. M. Wiegand. *Rhodora, v. 25:205, 1923.*

— Notes on triosteum perfoliatum and related species. *Same, v. 25:199, 1923.*
— Some changes in nomenclature. *Same, v. 26:1, 1924.*
— Variations in trillium cernuum, by K. M. Wiegand and A. J. Eames. *Same, v. 25:189, 1923.*

Wiggans, R. G. Relative adaptability of home-grown and foreign-grown red clover seed. *American Society of Agronomy. Journal, v. 15:500, 1923.*
— Studies of various factors influencing the yield and the duration of life of meadow and pasture plants. *Cornell University Agricultural Experiment Station. Bulletin 424, 1923.*

Wilcoxon,Frank. Azidodithio carbonic acid, I, by G. B. L. Smith, F. Wilcoxon, A.W. Browne, C. W. Mason. *American Chemical Society. Journal, v. 45:2604, 1923.*

Willcox, W. F. The apportionment problem. *Ithaca journal-news, Oct. 28, 1921.*
— Bok prize peace plan. *Cornell daily sun, Jan. 15, 1924.*
— Cotton statistics from the Dept. of Commerce. *American Statistical Association. Journal, v. 19:226, 1924.*
— Distribution and increase of negroes in the U. S. *International Congress of Eugenics, 2d. Scientific papers, v. 2:166, 1923.*
— Estimate of Woodrow Wilson. *Ithaca journal-news, Feb. 4, 1924.*
— H. M. Biggs at Cornell. *Health news. Memorial number, p. 176, 1923.*
— House apportionment. *New York times, Oct. 23, 1921, ♯7:8.*
— House reapportionment. *Same, Dec. 11, 1921, ♯7:16.*
— International Statistical Meeting. *Cornell daily sun, Nov. 12, 1923.*
— Letter about Shuler case. *Same, Sept. 28, 1920.*
— Letter about Shuler case. *Ithaca journal-news, Sept. 28, 1920.*
— Letters regarding James Mahoney. *In* James Mahoney, 1862-1915. Concord, N. H., Rumford press, 1920. p. 86.
— Limitation of armaments. *Cornell daily sun, Nov. 9, 1921.*
— Negro. *Encyclopedia Britannica, 12th ed., v. 31:1090, 1922.*
— On the future distribution of white settlement. *Geographical review, v. 12: 646, 1922.*
— Population and the world war: a preliminary survey. *American Statistical Association. Journal, v. 18:699, 1923.*
— Progress of vital statistics in the U. S. Privately printed, 1923.
— Proposal for Ithaca federation of social agencies. *Ithaca journal-news, June 13, 1923.*
— Public puzzled by murder case. *Cornell daily sun, Oct. 26, 1921.*
— *Reviews:* Newsholme, Arthur. Elements of vital statistics. New ed. *American Statistical Association. Journal, v. 19:246, 1924;* Rossiter, W. S. Increase of population in the United States, 1910–1920. *Same, v. 18:534, 1922;* Zizek, Franz. Grundriss der Statistik. *Same, v. 18:276, 1922.*

Williams, L. R. What a social worker should know about the early diagnosis of tuberculosis. *Hospital social service, v. 8:100, 1923.*

Williamson, H. C. The indications and limitations of irradiation in obstetrics and gynecology. *New York State journal of medicine, v. 23:341, 1923.*

Wilson, B. D. Depressive influence of certain higher plants on the accumulation of nitrates in soil, by T. L. Lyon, J. A. Bizzell, and B. D. Wilson. *American Society of Agriculture. Journal, v. 15:457, 1923.*
— The effect of plants on the concentration of drainage water from the Cornell lysimeters. *Soil science, v. 16:427, 1923.*
— The quantity of sulfur in rain water. *American Society of Agriculture. Journal, v. 15:453, 1923.*

Wilson, J. K. Bacterial symbiosis in plants other than the legumes. *American Society of Agronomy. Journal, v. 16:373, 1924.*

Wilson, L. P. Some limitations on the attractive nuisance doctrine. *North Carolina law review, v. 1:162, 1923.* Reprinted in *American law review, v. 67: 875, 1923.*

Woodruff, E. H. A selection of cases on the law of insurance. 2d ed., revised and enlarged. New York, Baker, Voorhis & Co., 1924. xix, 735 p.

Work, Paul. Nitrate of soda in the nutrition of the tomato. *Cornell University Agricultural Experiment Station. Memoir 75.*
— *Associate editor.* Market growers journal, Louisville, Ky. 1923-24.

CORNELL UNIVERSITY
OFFICIAL PUBLICATION

Volume XV Number 18-A

Librarian's Report
1923-24

Ithaca, New York
Published by the University
October 1, 1924

CORNELL UNIVERSITY LIBRARY

REPORT OF THE LIBRARIAN

1923–24

To the President of the University:

SIR: I herewith respectfully submit my annual report of the condition, needs, and work of the University Library for the year 1923-24.

In some ways, the year has been an unusual one. Never before has the library received by gift so many books and periodicals as during this year. The long deferred action of the courts in the matter of the gift of Benno Loewy resulted in the offer to the University of this library, without the original conditions which were practically impossible, and without the endowment. This offer was accepted and the executors turned over to the University the books, which the appraisers estimated to be some 40,000 or 50,000 volumes, the autographs, the coins and medals, and some pieces of furniture, deemed a part of the library. It required some 725 packing cases, filling three freight cars, to transmit the collection to Ithaca.

The rarest items of the collection were brought to Ithaca by hand. Some fourteen additional cases were specially packed and immediately opened and placed in the library vault. In addition to these about 100 boxes have been unpacked and placed on shelves in the tower and elsewhere, wherever shelf space could be found. The rest must remain boxed up, and inaccessible to users, until more shelf space for the books and what is equally important, more space for library workers to prepare them for use, can be had.

The Loewy collection that has come to the library consists of an unusual group of books dealing with Shakespeare and other dramatic and musical literature down to the present day; a large collection dealing with Freemasonry in all parts of the world, and a rich collection about the Dance of Death, and allied subjects. The law books, proved to be least valuable of the library and the conditions under which these books were stored, pending the court decision, were so bad that many volumes were permanently destroyed. A considerable collection of historic legal trials, however, were not stored with these books and reached the library in good condition.

Besides the books and other literary materials there came with the library a large collection of coins and medals which the appraisers valued at about $4,000. Many of these are historic in character and many more are illustrative of the various orders of Freemasonry.

Finally there came an autograph collection comprising prominent names in law, music, drama, opera, statesmen, etc. of Europe and America.

In the receipt of this collection the University Library has been enriched by a large number of fine editions of standard works, that some day when there is a special room for it, will form a nucleus for a model library that should do much to cultivate a taste for literature in fine editions. Also many rare and expensive books that the general library funds could not be drawn upon to purchase were received.

With the collection also came three handsome book cases specially built for the collection and a beautifully carved etching easel, all of which will make appropriate furnishings for special collections rooms, when such are available.

Late in the year came from Miss Anne McCormick through her niece, Mrs. Julia McCormick Beers '09, a set of the Century library of music in 20 volumes, and over 50 miscellaneous volumes in history and literature.

Since 1915 there has been compiled at Princeton an annual statement regarding the size, amount expended for books, the number on the staff and the amount appropriated for salaries, of some thirty of the leading university libraries in the United States. Most of these libraries include their several college and depart-

ment libraries in this statement, because all these libraries are under the supervision of the general library, and constitute branches. Cornell has not included the expenditure for books and salaries for the outlying libraries. This has placed our library at a disadvantage in the showing, as well as revealed the weakness of our system. In order to make a more correct comparison possible, an approximate estimate has been made of the budget for books and salaries of the department libraries, and this added to the general library expenditure gives Cornell the 12th place in amount spent for library service and 9th place in the amount spent for books, although in size Cornell is fourth among the university libraries of the United States.

With the large gifts that have come to the library during the past few years, there are, of course, a good many duplicates. These are examined first with reference to needs for additional copies now or in the future in the general library or in some of the branch collections. After these probable needs are cared for it has been found necessary and desirable to offer duplicates, not needed, for sale. This has resulted in enabling many of the younger teachers and students to get desired books at a small cost, and the library received more than could have been realized had we prepared lists and offered them to other libraries and dealers. Not a little satisfaction was derived from the discovery of a large number of students interested in owning standard works of literature, history, and science.

The usual lectures on applied bibliography and the history of writing and book making, have been given throughout the year.

ACCESSIONS DIVISION

The accompanying table shows the additions made to the several groups of library books, manuscripts, etc. In this statement we have not included the books added by the Loewy and Wynne gifts, and a few other small groups, that are still not accessioned. If these were added they would increase the number by at least 60,000 volumes. Until, however, they are available for use they cannot properly be counted among the library resources. A list of donors during the year is given at the end of this report.

BOOKS, BOUND PAMPHLETS, MAPS, MSS., ETC.

General Library, exclusive of the following		481,475
Anthon Collection, purchased 1868	6,770	
Bopp Collection, purchased 1868	2,014	
Sparks Collection, purchased 1872	5,717	
White Historical Library, gift 1891	23,177	
Zarncke Collection, gift 1893	13,000	
British Patents, gift 1868	3,108	
		53,879
Fiske Dante Collection, gift 1893	9,003	
Fiske Petrarch Collection, gift 1905	4,123	
Fiske Icelandic Collection, gift 1905	16,665	
Wason Collection, gift 1918	9,903	
Kuichling Collection, gift 1919	2,217	
Volumes C. U. Theses (Deposited)	7,222	
Philological Seminary Collection	1,084	
Philosophical Seminary Collection	882	
German Seminary Collection	769	
French Seminary Collection	24	
Latin Seminary Collection	324	
American History Seminary Collection	612	
		52,738
Maps in Cornell University Library	1,058	
C. U. Plans (Deposited)	197	
U. S. Coast Survey charts	960	
U. S. Geological Survey Topog. sheets	2,370	

U. S. Geological Survey Atlases	210	
British Geological Survey Maps	600	
		5,390
Manuscripts	750	
		750
General Law Library, gifts and purchases	45,032	
Moak Law Library, gift 1893	12,500	
Flower Veterinary Library, gift	6,271	
Barnes Biblical Library, gift	2,690	
Goldwin Smith Hall Library	2,674	
Van Cleef Memorial Library	1,708	
Evans Mathematical Library	420	
Comstock Memorial Library	803	
Architectural College Library	1,319	
Economics Laboratory Collection	340	
Entomological Laboratory Collection	2,403	
Prudence Risley Hall Collection	841	
Gray Memorial Library	432	
		78,033
N. Y. State College of Agriculture Library	32,705	
N. Y. State Forest College Library	1,181	
N. Y. State Plant Pathology Collection	424	
		38,310
		710,575

IMPORTANT ADDITIONS TO THE LIBRARY 1923-24

Periodicals

Gasellschaft für Erdkunde. Zeitschrift. 1865-1922.
Derbyshire Archaeological and Natural History Society. Journal. 1879-1923.
Dorset Natural History and Antiquarian Field Club. Proceedings. 1877-1923.
Academie Royale des Sciences, Paris. Histoire avec les Mémoires. 1666-1782.
Bristol and Gloucestershire Archaeological Society. Transactions. 1876-1913.
Royal Society of London. Philosophical transactions. Vols. 1-29. 1665-1716.
Institut National Genevois. Memoires. 1854-1910.
Dublin quarterly journal of science. 1861-66.
Edinburgh philosophical journal. 1819-1864.
Bookman's journal and print collector. 1919-23.
R. Accademia di Archeologia, Lettere, Belle Arti, (Napoli). Atti. 1865-1920.
Illustrirte Garten-Zeitung. 1856-1887.
Mémoires de la Service de la Carte Géologique de la France. 23 vols.
National intelligencer. 1819-50.

Books

Galilei, Galileo. La Opere. Ed. Naz. 20 vols. 1890-1909.
Davis, Jefferson. Letters, papers and speeches. 10 vols. 1923.
Brehms, Tierleben. 13 vols. 1922.
Zoology of the "Erebus and Terror." 2 vols.
Enciclopedia Universal Ilustrada. 50 vols. 1907-23.
600 English political pamphlets.

PERIODICAL DIVISION

The list of periodicals has undergone many changes during the past few years. Many periodicals, especially foreign ones, have died or suspended for a time and until definite information is received it requires constant watching to keep the publication down to date. The files of German periodicals that failed to

come during the war are not all received yet, but by getting into correspondence with Leipzig dealers the missing numbers are gradually being supplied.

Periodicals currently received:

By subscription	1225
By gift and exchange	1012
	2237

Bound volumes kept on open shelves	2939
Current periodicals on open shelves	741
Volumes bound during the year	2966

CATALOGUE DIVISION

The work of this division has been pushed as rapidly as possible with the limitations of working space and force of cataloguers. More printed cards from the Library of Congress are being used because much preliminary work is done on them before they reach us. With the new standard set by the use of these printed cards much revision must be done in the catalogue on the old written cards as additions are made. This together with the fuller information given and the more careful revision of all cards before they are filed, has brought the standard of catalogue work to the best known.

The following table shows the record of work done.

Number of volumes and pamphlets catalogued:	11,666
Number of maps catalogued	42
Number of manuscripts catalogued	25
Number of titles added to the catalogue	5,820
Number of typewritten cards	8,505
Number of printed cards	10,379
Number of cards added to the Library of Congress catalogue	20,671
Number of cards added to the Harvard catalogue	3,840

READERS DIVISION

The division of use, which comprises all use made of books within the library and the sending out of books to department and laboratory collections is the barometer so far as records of use can be kept, of the use made of the library. Every effort is made to make the use of books as easy as possible, and when this can be done without making a record, it is done. The plan of putting on open shelves a large selection of books for general reading and reference is a part of this effort, but the presence of a few dishonorable persons about the University who carry away such books without making a record, makes the practice a bit discouraging. A slight improvement in this respect is noticeable this year, but there are still enough cases to make it seem desirable to apply the honor system to the use of the library as well as to examinations.

The library has been open to readers 308 days during the year, being closed only on Sundays and five holidays. The number of registered borrowers for home use has been 1755. The recorded use is as follows:

Reading room use	125,478
Seminary room use	3,714
Laboratory and department libraries	5,367
Home use	42,810
Foreign loans	296
Borrowed from other libraries	178
Books reserved in the general library	22,099

The record for reading room use shows an increase over last year and that for home use a slight falling off. This record takes no account of the use made of books deposited in college and department libraries, as in most cases no record for this use is available and unless a uniform record can be made it has little value.

The record of books missing from the open shelf reading room and the reference rooms gives a discouraging aspect to the desire to give readers an opportunity to come into touch with the standard literature of the world. The number of persons that deliberately carry away even reference books, cannot be large, but they do carry away enough books during the year to raise the question as to whether it is worth while to have open shelves.

SPECIAL COLLECTIONS

The additions to the special collections are shown in the general table, when compared with the similar table for previous years. The Barnes Hall library is still under the supervision of Mr. A. C. White, who consented to continue his care of this collection after his retirement from the library staff. The White Historical library still has the counsel of Professor Burr, the emeritus librarian of this collection. He expects eventually to finish the publication of the White library catalogue, which is still lacking part 3, the Witchcraft catalogue.

STACKS DIVISION

Owing to the crowded condition of the library stacks the work of keeping the books in order requires frequent shifting, and the lack of adjustability of the book shelves in the stacks, makes the problem very difficult. If the old stacks with wooden shelves could be fitted with new metal shelving, the shifting of shelves to fit the books placed thereon would be facilitated, the capacity of the stacks for storage would be increased, the library be more fireproof, and the work of changing the location of books greatly lessened.

The annual inventory of all books belonging to the general library both within and without the library building has gone on systematically during the year and the usual number of books found misplaced and missing, which is always expected in libraries that are used.

During the year there was completed a systematic inventory of the framed Arundel, Medici, Seeman, and other prints, given by President White, for decorating the walls of various University buildings. There were some 200 of these, all of which were numbered and labeled as the property of the University in the custody of the library, and a list sent to the Comptroller with the annual inventory of library material.

WILLARD AUSTEN,
Librarian.

APPENDIX

TO THE

REPORT OF THE LIBRARIAN

1923-24

LIST OF DONORS TO THE UNIVERSITY LIBRARY

Academia Nacional de Artes y Letras
Academie des Sciences de Russie
Acorn Press
Adelmann, H. B., Ithaca
Alba Company
Alpha Phi Quarterly
Alpha Xi Delta Fraternity
American Artisan & Hardware Record
American Association for International Conciliation
American Contractor
American Economist
American Federationist
American Fruit Grower Magazine
American Hebrew
American Journal of Psychiatry
American Judicature Society
American Magnesium Corporation
American Medicine
American Red Cross
American Sabbath Tract Society
American-Scandinavian Foundation
American Society of Civil Engineers
American Society of Mechanical Engineers
American Water-Works Association
Amherst College Library
Armenian Educational Foundation
Arrow Points
Association of Iron and Steel Electrical Engineers
Atwood, M. V., Ithaca
Austen, Mrs. Willard, Ithaca
Australian Commissioner's Office
Australian Museum

Bailey, E. J., Pittsburgh, Pa.
Ballinger Company
Basile, Nicola, Alessandria, Italy
Bassler, R. E., Washington, D. C.
Bedell, Mrs. Frederick, Ithaca
Bensinger, Norman E., Chicago, Ill.
Better Eyesight
Better Fruit
Better Understanding Society
Bingham, L. J., Ithaca
Blanchard, John D., Madison, Wis.
Bogert, George G., Ithaca
Bollettino delle Publicazione Italiane
Boothroyd, S. L., Ithaca
Boston-Health Department
Boston Museum of Fine Arts
Brentano's
Bricklayer, Mason & Plasterer
Brooklyn Botanic Garden
Brooklyn Institute of Arts & Sciences
Brown, C. G., Ithaca
Brown University Library
Buchanan, E. S., Mt. Kisco, N. Y.
Buffalo Live Wire
Burnham, Stewart H., Ithaca
Burrage, Charles D., Boston, Mass.

C. J. Mfg. Co.
Caldwell, Mosser & Williaman, Inc.
California Oil Fields
California Safety News
California University Library
Canada Labour Dept.
Canada Patent Office
Cárdenas, C., New York City
Carnegie Institution of Washington
Carnegie Trust for the Universities of Scotland
Catholic Historical Review
Cebrian, John C., San Francisco, Cal.
Cheney Brothers
Chicago Health Dept.
China Inspector General of Customs
China Review
Chinese Educational Review
Church, I. P., Ithaca
Clarendon Press
Cleveland City Record
Cleveland Trust Company
Commission Permanente de l'Association Internationale de Congrès des Chemins de Fer
Comstock, Mrs. A. B., Ithaca
Constitutional Review
Cook, Albert S., New Haven, Conn.
Cornell Alumni News
Cornell Annuals, Inc.
Cornell Countryman
Cornell Era
Cornell Law Quarterly
Cornell University Medical College
Cornell Veterinarian
Crocker, Douglas, Fitchburg, Mass.
Crosby, C. R., Ithaca

Crosby, Oscar T., Warrentown, Va.
Cruikshank, Alfred B., New York City
Czechoslovak Review

Decker, Frank N., Syracuse, N. Y.
Delta Delta Delta Sorority
Delta Tau Delta Fraternity
Depew, Chauncey, M., New York City
Detroit News
Dog Fancier

Eastern Dealer in Implements and Vehicles
Eastern Miscellany
Edinburgh University Library
Educational Finance Inquiry Commission
Electric Light and Power
Elliott, W. C., Reynoldsville, Pa.
Ellwood, Charles A., Columbia, Missouri
Elston, James S., Hartford, Conn.
Engineering Journal
English Studies
Extension Service News

Farnsworth, E. C., Portland, Me.
Farrand, Livingston, Ithaca
Faust, A. B., Ithaca
Federal Bank of New York
Finska Forstsamfundet
Fisk, Harvey E., New York City
Flambeau
Florida State Plant Board

Gage, S. H., Ithaca
Gas Age-Record
Gas and Electric News
Gas Industry
Geographical Society of Philadelphia
George, Miss Beatrice, Ithaca
Gershoy, Leo, Ithaca
Ghent University Library
Glasgow Iron Company
Good Government
Griswold, H. D., Lahore, India
Groton Public Library
Guébhard, Adrien, St. Vallier de Thiey, France
Guernsey Breeders Journal

Han, S. T., Berlin, Germany
Harris, Franklin S., Provo, Utah
Hart, William S., Hollywood, Calif.
Harvard University Press
Haverhill Public Library
Health News
Heyl, Paul R., Washington, D. C.
Hill, James L., Salem, Mass.
Hispanic Society of America
Historical and Philosophical Society of Ohio
Hoepli, Ulrico, Milano, Italy
Horseshoers' Journal
Hosmer, R. S., Ithaca
Houghton Mifflin Company
Howard Memorial Library
Hoy, D. F., Ithaca
Huhn, George P., Minneapolis, Minn.
Hull, C. H., Ithaca

Illuminating Engineer
Indiana State Health Board
Indicator
Industrial News Survey
Institution Quarterly
International Correspondence Schools
Investment Bankers Association of America
Iowa-State Historical Society
Irvine, Frank, Ithaca
Italy. Royal Italian Embassy
Ithaca Rotary Club

Japan Society
Jersey Bulletin and Dairy World
Journal of Forestry
Journal of Physical Chemistry

Kansas State Agriculture Board
Kappa Kappa Gamma Sorority
Karapetoff, Vladimir, Ithaca
Kennard, Joseph S., New York City
Kingsley, R. R., Ithaca
Knapp, Charles, New York City

Ladd, Carl E., Ithaca
Ladies Journal
Lambert, Henri, à Charleroi, Belgium
Landmark
Langford, Mrs. Laura C., Canaan, N. Y.
Leonard, Clarence E., Yonkers, N. Y.
Lewisohn, Adolph, New York City
Lloyd Library
London Institution—School of Oriental Studies
Lyle, D. C., Baltimore, Md.

McCormick, Anne, Ithaca
Mack, Horace, 2d, Ithaca
McNairy, Amos B., Manchester, Vermont
McReavy, L. E., Ithaca
Marie, Georges, Paris, France
Mason, J. F., Ithaca
Maynard, L. A., Ithaca

Medical Times
Metropolitan Life Insurance Company
Metropolitan Museum of Art
Michigan Public Health
Michigan University, General Library
Mill Supplies
Mining Congress Journal
Minnesota Horticulturist
Missionary Herald
Morgenthau, M. L., New York City
Morse, Mrs. Virgil D., Ithaca
Municipal Reference Library Notes
Museo Social Argentino

National Analine & Chemical Co., Inc.
National Association of Wool Manufacturers
National Bank of Commerce
National Bureau of Economic Research, Inc.
National Humane Review
National Industrial Conference Board
National Nurseryman
National Research Council of Japan
Needham, J. G., Ithaca
New Armenia
New Church Messenger
New Jersey Historical Society Library
New Philosophy
New York City—Meteorological Observatory
New York Edison Company
New York Historical Society
New York State Charities Aid Association
New York State—Dept. of Farms and Markets
New York State—Dept. of Health
New York State Industrial Commissioner
New York State Shorthand Reporters' Association
New York State Teachers Association
New York University
New Zealand Patent Office
Niinomy, Junitaro, Ithaca
Northup, C. S., Ithaca
Northwestern University Library
Nova Scotian Institute of Science

Ogden, R. M., Ithaca
L'Opinion
Orth, Mrs. Samuel, Ithaca
Osborn, Albert S., New York City
Osborne, Sidney, London, England
Our Dumb Animals

Pace Student
Pacific Coast History Academy
Pennsylvania University—William Pepper Laboratory
Peruvian Arbitration Commission
Phi Epsilon Pi Quarterly
Philippine Agricultural Review
Philippine Islands—Health Service
Philippine Press Bureau
Place, Ira A., New York City
Poole, Murray, Ithaca
Positivist Review
Power Plant Engineering
Public Service Magazine

Revue de Hongrie
Rhode Island School of Design
Rockefeller, John D., jr., New York City
Rosenberger, Jesse L., Chicago, Ill.

St. Andrews University Library
Sanidad t Beneficencia
School Health News
Seventh Regiment Gazette
Shaffer, Newton M., New York City
Shoe-Workers' Journal
Short Story Magazine
Sibley Journal of Engineering
Silver, Burdett & Co.
Skeel, Mrs. Roswell, jr., White Sulphur Springs, W. Va.
Smith, Oberlin, Bridgeton, N. J.
Snap Shots
Social Hygiene Bureau, Inc.
Southland Farmer
Starry Cross
Stephens, Kate, Moravia, N. Y.
Stimson, Saxe Churchill, Milwaukee, Wis.
Stine, Wilbur M., Philadelphia, Pa.
Stocking, A. H., Chicago, Ill.
Storer, Mrs. Bellamy, Paris, France
Strassburger, Ralph B., Gwynedd Valley, Pa.
Sweden—Royal Consulate General
Sze, Sao-Ke Alfred, Washington, D. C.

Tang, Chen Long, Honkow, China
Tanner, J. H., Ithaca
Theosophical Path
Thwing, Charles F., Cleveland, Ohio
Tokyo Botanical Society
Trinity Church
Tson, Chang Yao, Peking, China

Union of South Africa—Agriculture Dept.
U. S. Golf Association
U. S. Weather Bureau

Unity
Universidad de la Habana
Uppsala Universitetsbiblioteket
Upsala Royal Library

Vandenberg, Arthur H., New York City
Van Ness, Mrs. G. B., Lexington, Mass.
Vassar College Library
Vedanta Monthly
Venezuela—Ministerio de Instruccion Publica

Wason, Mrs. C. W., Cleveland, Ohio
Weil, A. D., Paris, France
Westinghouse, H. H., Wilmerding, Pa.
White, A. C., Ithaca
White Pine Series of Architectural Monographs
Widow
Williams, Wayne C., New York City
Willis, Henry P., New York City
Wilson, T. E., Chicago, Ill.
Worden, Mrs. S. A., Ithaca
Wright, A. H., Ithaca
Wright, Mrs. A. H., Ithaca

Yale University Library

Zeta Beta Tau Fraternity