

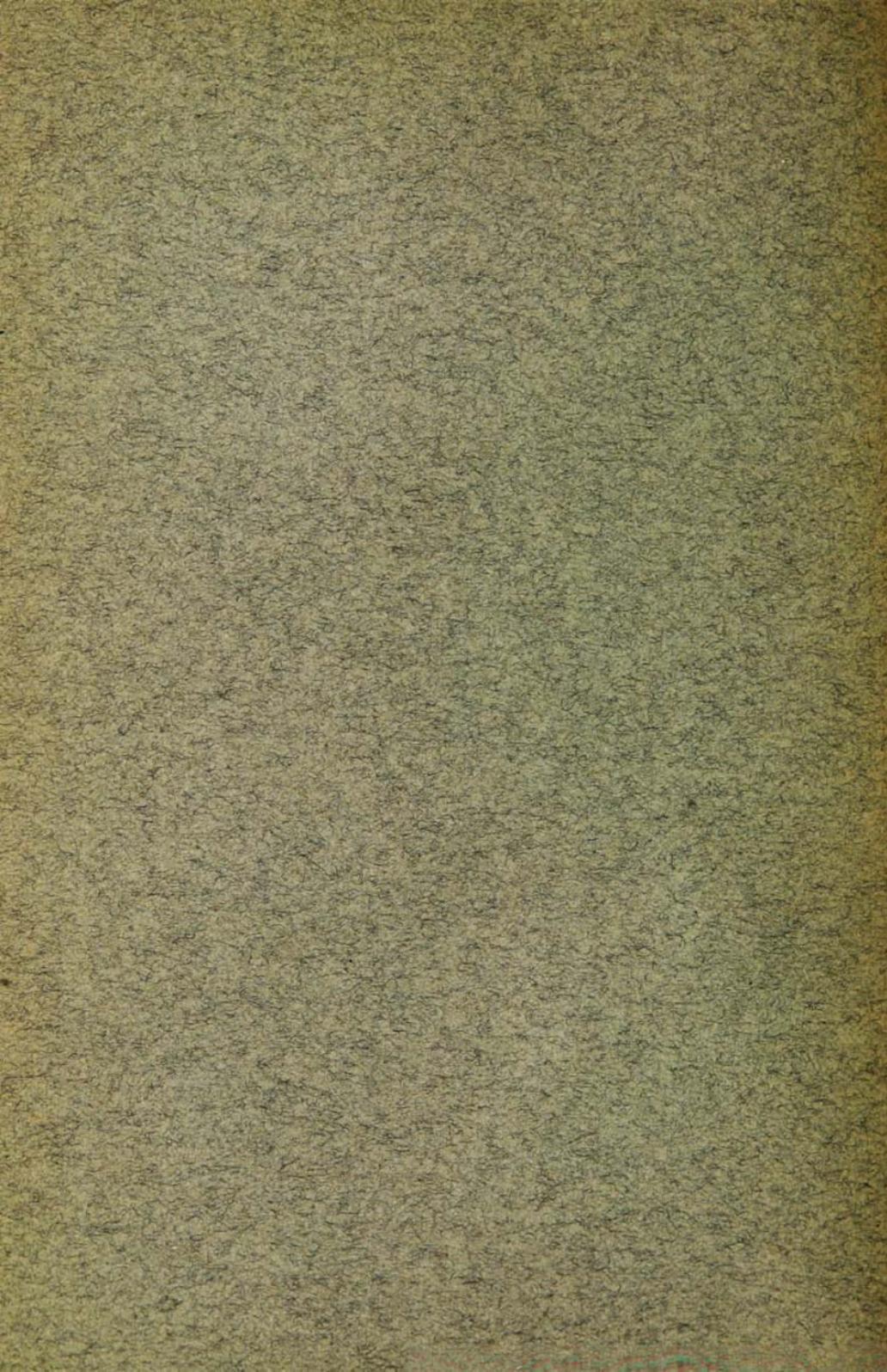
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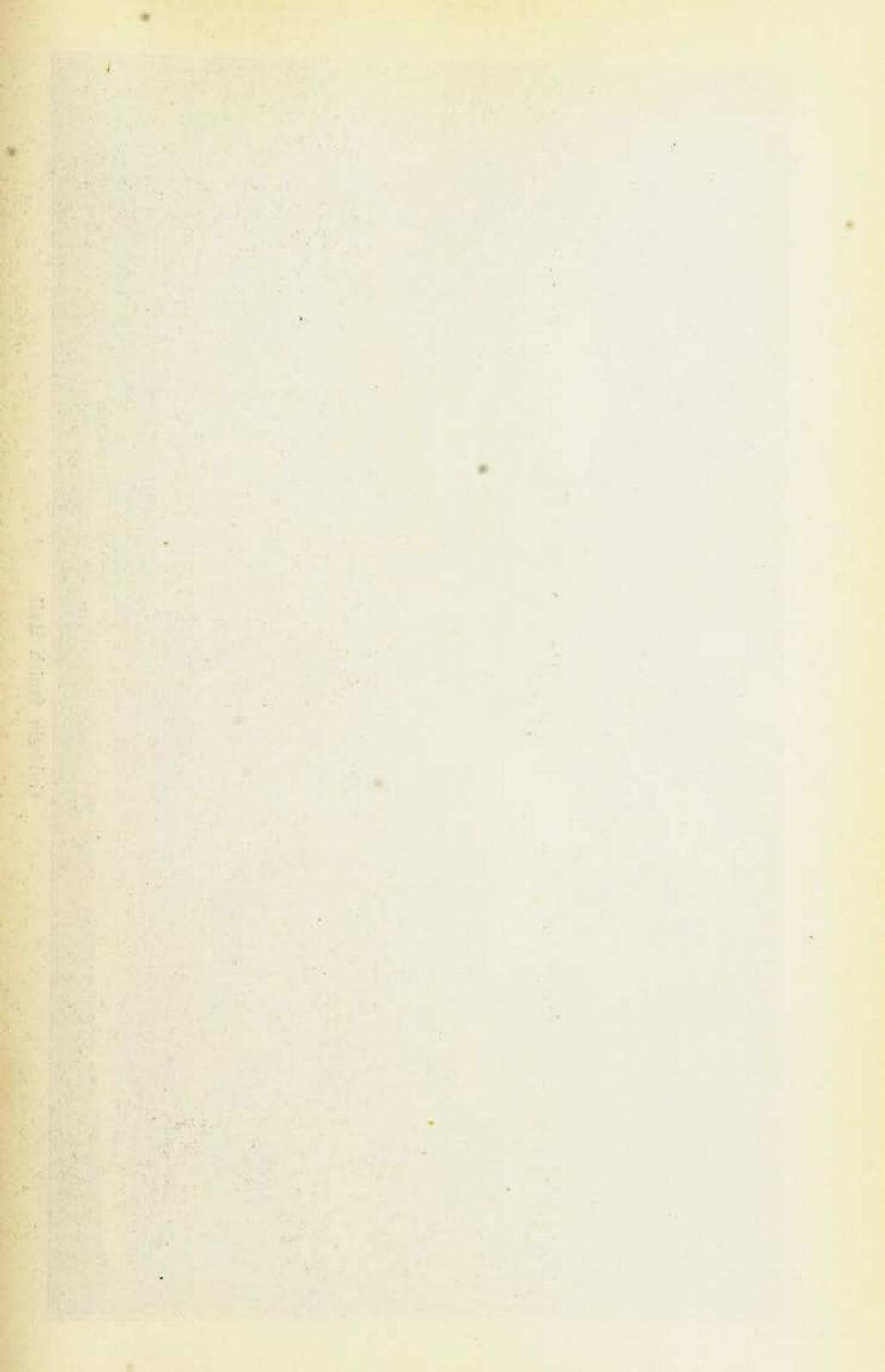
VOLUME II

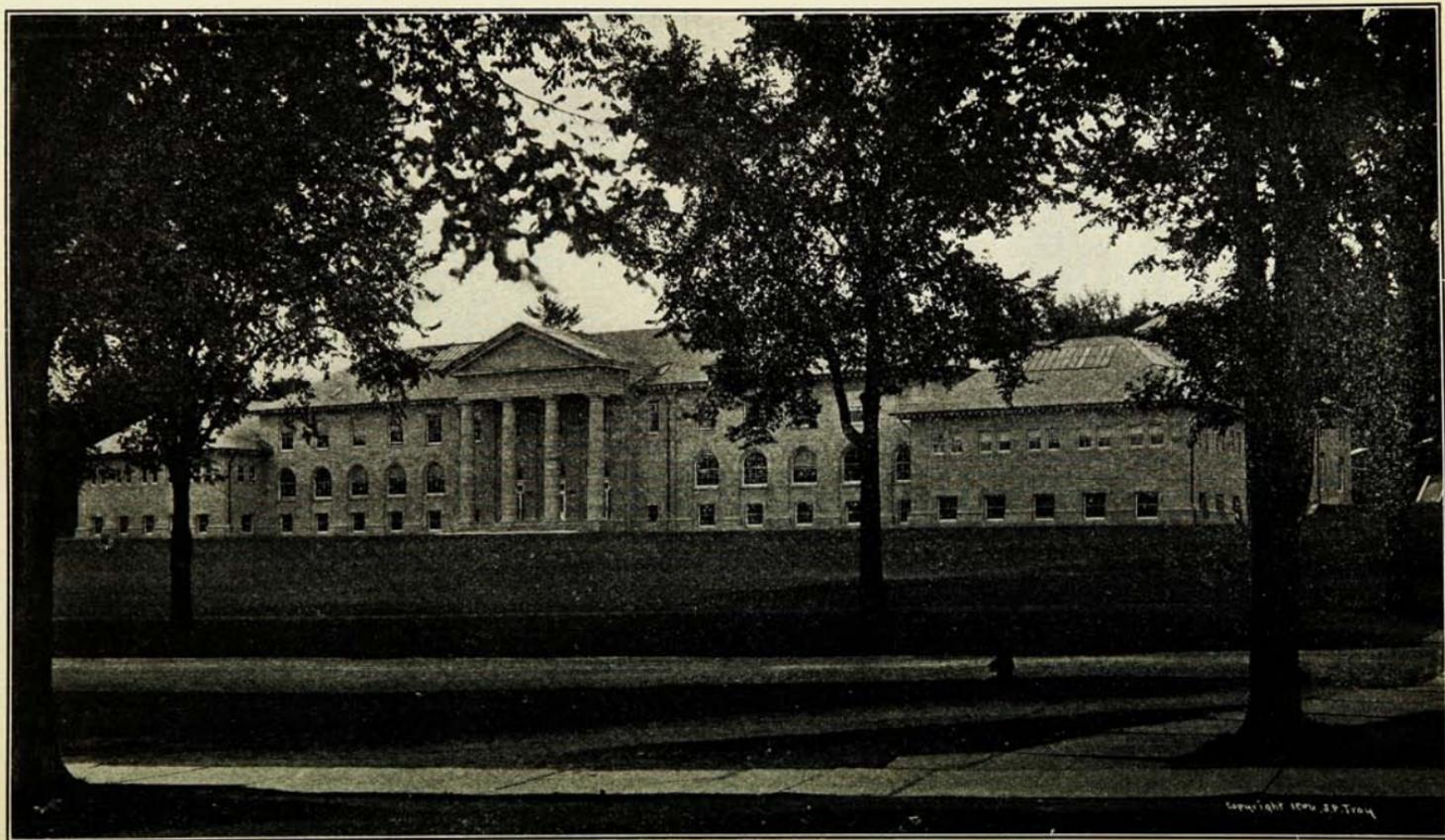
NUMBER 2

COLLEGE OF ARTS AND SCIENCES ANNOUNCEMENT 1911

JANUARY 15, 1911
PUBLISHED BY CORNELL UNIVERSITY
ITHACA, NEW YORK







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For further information, address

THE DEAN OF THE COLLEGE OF ARTS AND SCIENCES

GOLDWIN SMITH HALL

ITHACA, N. Y.

THE COLLEGE OF ARTS AND SCIENCES CORNELL UNIVERSITY

The distinguishing features of the College of Arts and Sciences of Cornell University can be indicated in a few words. It is a large college and it forms part of a larger University with whose other colleges it maintains close relations. It has a numerous faculty and a generous equipment in buildings, books, apparatus, museums, and laboratories. Its instruction is given under the elective system. It is situated in a town of 15,000 inhabitants, in a region of exceptional natural beauty. These are among the principal factors which combine to form its individuality, and a consideration of them will help the prospective student to decide whether or not this College is fitted to his needs.

The question of the relative advantages of the large and the small college as a place for study has been much debated, and always will be. Undoubtedly there are students for whom the small college is best, and others for whom the large college is best.

Large vs. Cornell University has shown by its practice that it believes in the large college as the best, at
Small College least for the average American student. It has never arbitrarily restricted the number of students in its colleges, but on the contrary has welcomed the constant increase in their numbers, not merely as an evidence of its own healthy growth, but in many cases as making possible, and indeed necessary, additions to its teaching staff and greater diversification of opportunities for study. One of the objections frequently urged against the large colleges has been that in them the instruction for underclassmen has sometimes been placed almost exclusively in the hands of instructors and assistants, while the professors have devoted their time solely to seniors and graduate students. The policy of Cornell has been to meet the growth of the College of Arts and Sciences not only by the appointment of additional instructors, but by the creation of new professorships. Thus, there are now in the College seventy-four professors and assistant professors, fifty-four instructors, and about seventy assistants, making a total of over one hundred and ninety persons engaged in giving instruction in this college, out of a total of four hundred and thirty-four giving instruction in the University at Ithaca. The total

number of alumni of the college is 3817, more than one-third of the total for the University since its foundation. The number of students enrolled for the last few years has been as follows: 1905-06, 705; 1906-07, 748; 1907-08, 820; 1908-09, 902; 1909-10, 970; 1910-11, over 1000.

But the College of Arts and Sciences is not merely a large college in itself; it forms a part of a still larger whole, and stands in intimate relationship with the professional and technical colleges of the University. The benefits of such an arrangement are very evident at Cornell. The College of Arts and Sciences borrows from the technical and professional colleges something of their practical spirit and business-like methods. The professional and technical colleges in turn, deeply influenced by the ideals of the College of Arts and Sciences, are prevented from becoming merely practical. Further, the demands of the technical and professional colleges have assisted materially to create strong departments in the subjects taught to technical and professional students by the College. Equally beneficial have been the effects upon the methods of teaching in these departments.

The relationship of the College of Arts and Sciences to the other colleges of the University is not merely nominal, but is a close association. Students from all the other colleges attend the classes in the College of Arts and Sciences, because its staff furnishes much of the instruction required in some of the technical colleges. All engineering students, for instance, must receive instruction in the modern languages, in mathematics, in chemistry, in physics, and in certain courses in political economy. These subjects are taught them in the College of Arts and Sciences.

Not only do students of other colleges take much of their work in the College of Arts and Sciences, but the student of arts may, with proper authorization, elect courses in the professional and technical colleges. Such authorization is granted freely in respect of certain semi-technical courses of wide application such as free-hand drawing and domestic science, and to senior students who desire both an academic and also a technical or professional education, but believe that they cannot afford time for both courses. To spend seven or eight years in preparation for their profession or their business seems too great a sacrifice. This difficulty never can be wholly overcome, but at Cornell an effort is made to lessen it by allowing a student who wishes to take two degrees to shorten the

time. If he has spent three years in the College of Arts and Sciences, he may devote his entire time in his senior year to work in a technical or a professional school. In this way he may secure both degrees in six or seven years instead of in seven or eight.

Still another advantage to the undergraduate student at Cornell arises from the existence here of a Graduate School. The members of the faculty of Arts and Sciences give most of the instruction in that school. As a consequence, the undergraduate has for his teachers men who are actively engaged not merely in the transmission, but in the extension of scholarship and science, men for whom knowledge is not a dead body of ascertained fact, but a vital and growing thing. It is believed by the University that such men can impart to the student, even in elementary courses, something of their own attitude toward the studies with which they are engaged.

The work of the student in the College of Arts and Sciences is under the elective system. This means that instead of being restricted to a single program of studies, prescribed by the faculty for all students, or to a choice among a limited number

The Elective System

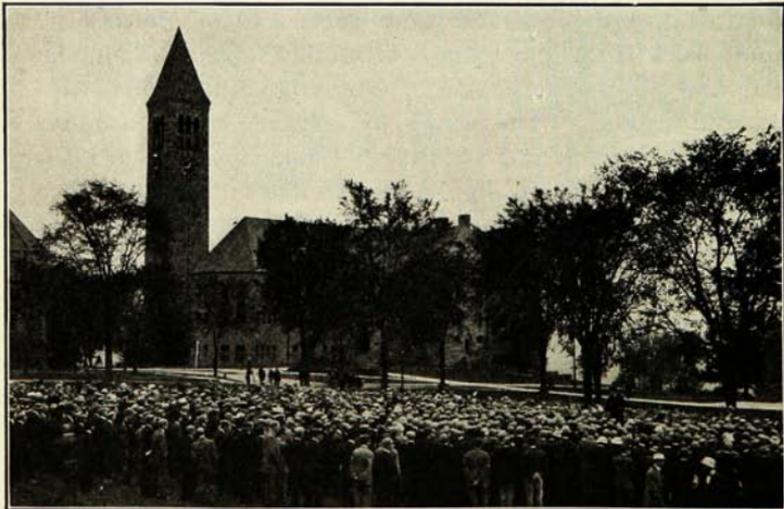
of programs, the student is free to make out his own program from the courses offered by the College, subject only to such slight restrictions as experience has shown to be necessary to prevent injudicious choice. Thus, the list of courses open to election by freshmen is a somewhat restricted one. Further, each underclassman must select a little over one-third of his total work from four groups of studies: English and history, ancient and foreign languages, philosophy and mathematics, and the natural sciences. The taking, for instance, in his freshman year of a course in French and a course in Chemistry, and in his sophomore year of a course in logic and a course in English, meets this requirement. The fundamental purpose of this plan is to discourage specialization in the first two years of college life. After the student has become an upperclassman, he must elect some subject to which he will give at least one-third of his time, or if he chooses, all of it. The idea here is to encourage specialization in the last two years of the student's undergraduate life. By this plan the student must first obtain some insight into the methods and results of several branches of knowledge, and must then obtain a degree of proficiency in some one subject which he has chosen for his specialty.

Under the elective system it is desirable that the newly-entered student should have the opportunity of receiving guidance and advice in the choice of his work. To meet this need the members of the administrative board, including representatives of every subject offered to freshmen, hold continuous session on the days for the registration of new students at the beginning of the college year, for the purpose of giving the new student information and aid.

**The
Administrative
Board**

The departments of the College of Arts and Sciences occupy a number of different buildings. The Department of Chemistry occupies Morse Hall; the Department of Physics, Rockefeller Hall. The Department of Mathematics is in White Hall. Psychology has its laboratories in Morrill Hall, and the Departments of Geology, Anatomy, Physiology, and kindred subjects are located in McGraw and Stimson Halls. The Department of Botany is in Sage College. All the other departments have recitation rooms and offices in Goldwin Smith Hall, a handsome new building named in honor of the distinguished English scholar who, as active or as Emeritus Professor of History, was connected with Cornell from its opening, and who bequeathed to the University practically his whole estate "for the promotion especially of liberal studies".

Buildings



University Library

President's Address to Freshmen

A recent writer on American universities after visiting Cornell says of this building that it is "one of the very few educational edifices of real beauty in America". It is built in the form of a capital letter **E**, and is 384 feet long. The Museum of Casts and the rooms of the Department of Classical Archæology occupy the ground floor. The first and second floors contain class rooms and departmental offices. In addition there are three large lecture rooms, seating 200, 250, and 300 persons. On the third floor is a large reading room.

The library facilities at Cornell are unusually good. In size and value the library ranks among the first three or four university libraries in America. It contains 390,000 volumes and 57,000 pamphlets. Some of the collections are extremely valuable. The

The Library Dante and Petrarch libraries are probably unrivalled. The collection of Icelandic literature is the most complete in America. The library on the French Revolution is surpassed only by that of the Bibliothèque Nationale in Paris and that of the British Museum in London. There are also unusually complete collections in the Romance and Germanic literatures, in Latin and Greek, in American history, and in mathematics. The library building is open daily from eight in the morning until half-past ten at night. All students may draw out books for home use. In addition to the general library, many of the departments have in their own buildings special collections for the use of students. There is also for students in the College of Arts and Sciences a working library in Goldwin Smith Hall, already referred to, of over 7,000 volumes, and for all students an open-shelf library designed to supply books for general reading.

For some subjects, such as literature and the languages, philosophy and history, books are the principal material equipment needed by teacher and student. For the sciences, not only books, but museums and laboratories are needed. It is not possible here to describe in detail, or even to enumerate, what the College provides to meet these needs, but a brief account of the museums and laboratories, is given in the later pages of this pamphlet, in connection with the subjects to which they relate.

Museums and Laboratories The museum of casts in Goldwin Smith Hall, the museum of zoology, geology, and mineralogy in McGraw Hall, the psychological laboratory in Morrill Hall, and the physical and chemical labora-

tories in Rockefeller and Morse Halls, are the most notable of these. The study of the biological sciences and of geology and physiography is also greatly facilitated by the situation of the University in a region exceptionally rich in material for all these studies.

PERSONAL AND SOCIAL LIFE

The conditions and influences of college life which have to be taken into account are not solely those of the class-room and the lecture-room. A college is not merely a place where instruction is given; it is a place where the student, as a rule, spends the greater part of four of the most important years of his life. The question naturally arises, how far his religious life, his general intellectual development apart from that obtained by direct instruction, his physical development, and his general social life, will be carried on under favorable conditions in the college community.

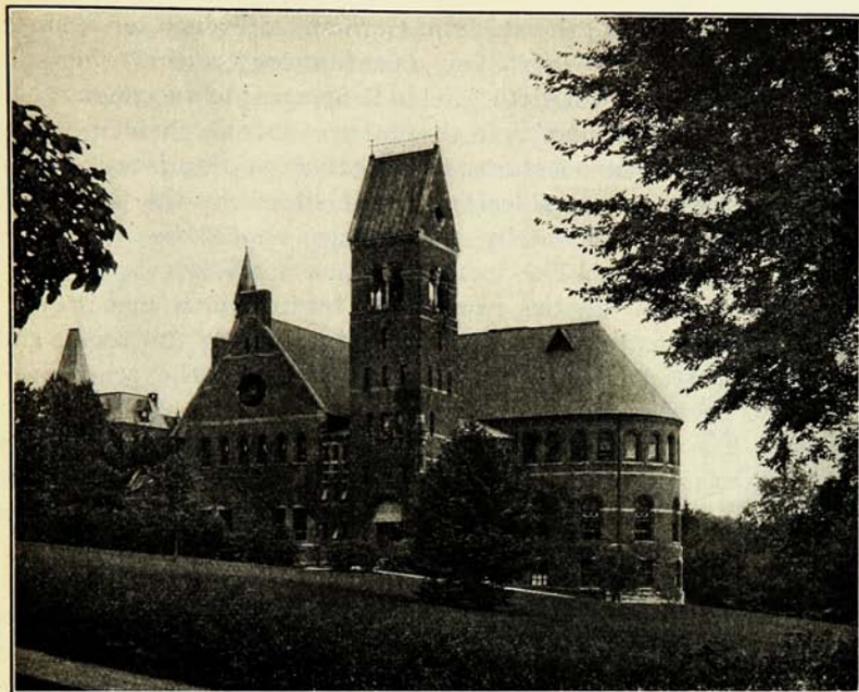
Cornell University is not, and from its incorporation has not been, a denominational college. It exacts no religious tests or compulsory attendance at chapel from faculty or from students. Its charter effectively provides against the possibility of control in

the interests of any single denomination. On

Religious Life

the other hand the University has always endeavored to foster a healthy religious life among its students and has provided generously for their

religious needs. Religious services are held in Sage Chapel every Sunday morning and afternoon throughout the college year. These services are conducted by clergymen of different religious denominations, who are invited by the University. In this way the student has the opportunity of hearing many of the noted leaders of religious thought. In addition, the Cornell University Christian Association provides religious meetings on one evening each week and on Sunday nights. The Association occupies an attractive building called Barnes Hall, containing, besides the large rooms for meetings, a number of smaller committee and office rooms, a library, and a reading room. The Association arranges classes for Bible study and engages actively in numerous other forms of religious work. The churches of the city of Ithaca, representing all the larger religious bodies, make special efforts to welcome the student as soon as possible after his arrival in Ithaca, and invite him cordially to share in their religious life.



Barnes Hall

The size of the College and the University, and the wide range of studies pursued in the same community, tend in themselves to broaden the student's intellectual horizon. The presence of the

Intellectual Life different professional and technical colleges is a good thing for the student in Arts and Sciences, no less than for his professor. If the student is alert and curious, he will have his attention outside of the class room constantly directed through conversation with his fellows to lines of study and modes of thought different from his own. It is a useful experience for the student of literature or history, for instance, to come into contact with the student of law or medicine or engineering.

Literary and Scientific Clubs Another intellectual benefit, apart from his regular course, is offered to the student by the numerous clubs and societies, in which faculty and students cooperate, devoted to particular studies, and supplementing the regular work. These comprise the English Club,

the Philosophical Club, the Oliver Mathematical Society, and several debating societies, whose objects are apparent in their names.

and others devoted to the study of German, of French, of Spanish, of chemistry, of physics, of zoology, of entomology, and of other subjects. The clubs devoted to foreign languages include among their purposes the giving of plays; the others devote their meetings to readings, papers, lectures, and other appropriate objects. Further, numerous special lectures, some offered by the University and some by the College, should be mentioned here. The lecturers come from the other great universities, from among business men, men in political life, and others interested in the social and economic questions of the day, and from among the scholars of Germany, France, Italy, and England.

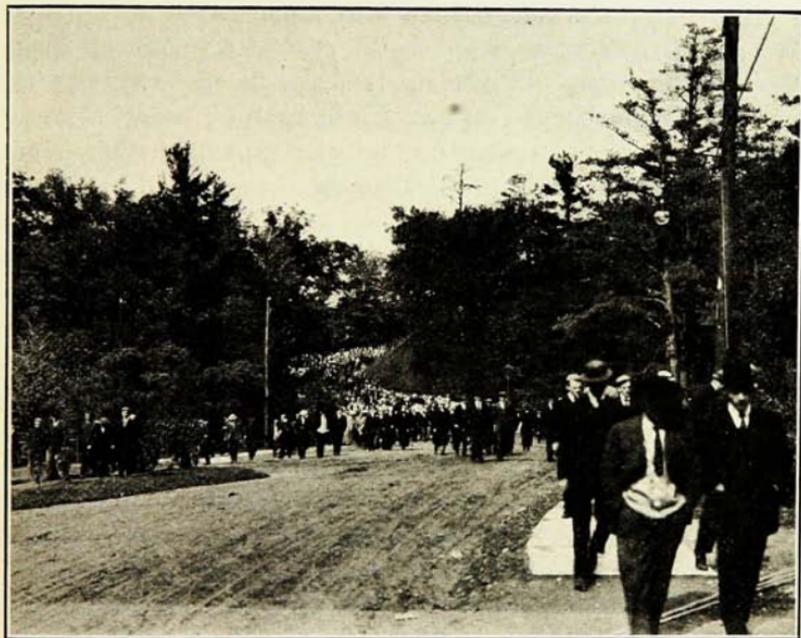
**Special
Lecturers**

Cornell has always pursued the policy of allowing the students to manage their own affairs with a minimum of interference on the part of the faculty. Student self-government is the rule, and it has been effective in educating students in self-reliance, in mutual concession, and in self-control. It has done even more than this, for it has brought about relations between faculty and students which are well nigh ideal. There are no exasperating differences between the men who teach and the men who are taught. On the contrary, there has grown up a feeling of comradeship between faculty and students.

College life, in America as in other countries, has always been understood to have many incidental attractions, growing out of the student's natural instinct for comradeship, the presence in a single community of a large body of young men of about the same age and of similar tastes and aims, and in the English-speaking countries, of the common interest in athletics. Under student initiative there have developed at Cornell, in addition to the informal social relations natural in so large a community of students, a great number of student organizations, pursuing various aims, with greater or less seriousness and permanence. One group is that of the fraternities, clubs, and societies, in which the membership is determined by election, or, in some of the literary and scientific societies, by voluntary enrollment. The other group is that of the athletic, dramatic, and musical organizations, and the staffs of the college publications, of which the distinguishing feature is that the members gain their positions by competition and that the

**Student
Organizations**

organization is popularly regarded as representing the University. This classification, although incomplete and not wholly exact, indicates some features of the difference. To one or more of these student organizations, as his tastes and abilities may permit, the student may, if he choose, devote part of his leisure time, and obtain, as the case may be, relaxation and comradeship, intellectual profit, proficiency and experience of various kinds, and prestige among his fellows.



The Noon Hour

The athletic, musical, and dramatic organizations coming under the second head are incorporated and are managed by one central office. They are controlled by boards of directors on which the faculty is represented, and with the specific authorization of the faculty in each case, take part in contests and give performances out of town.

The representative athletic organizations comprise what are known as the major sports, the minor sports, and the freshman teams. These three groups, each controlled by a separate govern-

ing body, are all under the financial management of the Cornell Athletic Association, the governing body for the major sports (rowing, football, baseball, and track athletics). Cornell is represented annually in the Intercollegiate Regatta at Poughkeepsie by an eight-oared crew, a four-oared crew, and a freshman eight-oared crew. Besides this, there is customarily an annual race for junior eight-oared crews, on or near Decoration Day. In football and baseball there are varsity and freshman teams, playing at home and out of town with teams from other colleges. Cornell is annually represented in the games of the Intercollegiate Athletic Association, and also holds "dual meets" with the track teams of other colleges. Contests are further provided for the freshman track team. The minor sports include cross-country running, in which especial interest has been manifested, basketball, lacrosse, fencing, wrestling, association football, hockey, swimming, and cricket.

**Musical and
Dramatic
Clubs**

Likewise under the financial management of the Athletic Association are the Cornell Glee Club, the Cornell Mandolin Club, and the Cornell Masque. These give musical and dramatic performances in Ithaca at various times during the year and also give a series of performances out of town.

Cornell holds a high place in intercollegiate athletic sports. But better than victories is the spirit of the University in regard to athletics. There is no athletic evil at Cornell. Cleanness and fairness in sport are sought and are attained.

**Inter-college
Athletics**

No undue emphasis is placed on intercollegiate contests. Moreover, at Cornell, a new system of contests has been introduced which is of the utmost value to the students and to the University. There has been established a series of inter-college games, that is, games between the different colleges of the University. Each college has its own baseball team, its own association football team, its own crew, its own cross-country team. Contests are held in all these sports. The winners of each event receive a trophy, and the college which wins in the majority of sports in a year is the holder of the university championship for that year. Under this system the love of fair play has been thoroughly developed, the interest in athletics has been increased, and best of all, large numbers of

students who have been hitherto only spectators of athletic games have taken an enthusiastic part in the contests.

Cornell is situated in one of the most picturesque regions in America. The surrounding country abounds in lofty hills, deep gorges, and beautiful water-falls. The campus lies between the

Outdoor Life two largest of the Ithaca gorges, and overlooks Cayuga Lake, one of the largest and most beautiful of the New York lakes. The location, moreover, has advantages quite apart from its beauty. The surroundings give unusual opportunities for wholesome outdoor life and for open-air sports. In summer, excursions to the numerous pleasant places in the neighborhood appeal to those who are fond of walking; the country is particularly fitted for cross-country running and for hare and hound chases; Cayuga Lake affords ideal recreation for those who enjoy rowing and sailing. In winter, there is excellent skating and tobogganing on Beebe Lake, a small body of water adjoining the campus, while there is plenty of opportunity for coasting, hockey, and skeeving.

The University receives both men and women students. Its courses of instruction, its scholarships, and its degrees are open to women on the same terms as to men. About two hundred and sixty women are at present enrolled in the College

Women Students of Arts and Sciences. For its women students the University maintains two dormitories, Sage College and Sage Cottage. A room in either of these buildings costs from \$1.25 to \$6 a week. Board is furnished in Sage College at \$4.25 a week. For the women students the University provides special women officers, an Adviser of Women, a Medical Adviser, and a Physical Instructor. The women share with the men in the activity of the various student associations whose purpose is to supplement the work of instruction, and have in addition many clubs and societies, social, musical, dramatic, and athletic, of their own. Basketball, tennis, and rowing have flourishing organizations.

TRAINING OFFERED BY THE COLLEGE

The training offered by the College of Arts and Sciences may be said to fulfil two purposes, that of giving the student the mental discipline and the breadth of intellectual sympathy

Preparation for Profes- sional Study

which will make his life more profitable to himself and to his community, and that of giving him the special preparation which will fit him for a particular field of work. In accordance with the belief of

Ezra Cornell, its founder, the University has always held that a broad and thorough training in the humanities is a valuable part in the education of a man, no matter to what profession or to what business he may thereafter devote his energies. One of the most valuable services performed by the College is that of affording a liberal training as a preliminary to professional studies. Educators generally are convinced that students in technical and professional schools need a broader culture than most of them at present receive. Cornell University has given practical expression to this conviction. The College of Medicine accepts as students in preparation for the degree of M.D. only graduates of accredited colleges and universities, and senior students of Cornell University who have studied for three years in the College of Arts and Sciences and are thereupon registered in both colleges. The College of Law has modified the four-year law course so that students electing that course take almost all the work of the first year in the College of Arts and Sciences. Moreover, the faculty of the College of Law strongly advises students who have not already had at least two years of college work leading to an Arts degree, to pursue this four-year course. Beginning in September, 1911, the three-year course in law will be open only to students who have completed at least one year of college work. Meanwhile, the Colleges of Mechanical Engineering and of Civil Engineering have adopted five-year courses in engineering, as alternative to the present four-year courses. In these five-year courses the work of the first two years is in the College of Arts and Sciences.

This conviction of the value and need of liberal training is not confined to educators. Many business men share it, believing that a student will be better equipped for his future not only as a man but also as a man of business, by receiving a broader education than is now given in most technical and professional colleges.

Under the elective system, he may so shape his course as to combine studies pursued for their value as liberal training with such studies as will be of direct practical utility in his future business.

The College of Arts and Sciences is itself in many ways a technical and a professional school. For instance, it has always prepared students for the profession of teaching. Over one thousand of Cornell's graduates are engaged in this profession, and it is believed that there are no teachers better equipped for their work than the men and women who have secured their training at Cornell.

Preparation for Teaching

Certain it is that, though the supply is large, the demand is still larger. The college also trains students to continue as specialists in the Graduate School, there to fit themselves for independent research and for positions in colleges and universities.

There is also a course of technical training in chemistry extending through four years and intended to prepare men to be practical chemists. The demand for such men is very large, especially for well trained men in commercial chemistry, and the college has been

Special Course in Chemistry



Fall Creek Gorge

very successful in supplying men to meet this demand. A full account of this course may be found in the Announcement of the Department of Chemistry, which will be sent on application to the Registrar of Cornell University, Ithaca, N. Y.

There is a steady demand for Cornell graduates as teachers, and the Director of the School of Education keeps in his office a list of all persons, graduates as well as undergraduates, who are candidates for appointment as teacher. He seeks to learn of places which may be filled by Cornell men and women, and invites correspondence from graduates and other persons engaged in the work of education.

**Board of
Recommendations**

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invites correspondence from graduates and other persons engaged in the work of education.

ADMISSION AND EXPENSES

Full information regarding the requirements for admission to the College of Arts and Sciences, and the expense of living in Ithaca will be found in the General Circular of Information, which may be obtained on application to the Dean of the College of Arts and Sciences, Cornell University, Ithaca, N. Y. This information will not be repeated here. To prevent possible misunderstanding and disappointment, however, it may be mentioned that the entrance requirement of the College of Arts and Sciences is strictly enforced, and that students who are unable by examination or certificate, or by a combination of these, to present the fifteen units of entrance credit demanded, should not expect to be admitted to the College.

For information regarding prizes, consult the Pamphlet on Prizes, obtainable on application to the Registrar of Cornell University, Ithaca, N. Y.

INSTRUCTION AND EQUIPMENT IN THE VARIOUS DEPARTMENTS

The subject-matter of the separate courses of instruction, with the times and places at which they are given, hours of credit, and similar information, is outlined in the pamphlet entitled *Courses of Instruction*, issued every May, and to be obtained on application to the Dean of the College of Arts and Sciences. In the following brief survey, individual courses are, as a rule, not described, but the nature of the work offered in the various studies represented in the College of Arts and Sciences, and where called for, the methods pursued in this work and the equipment available, are indicated in a general manner.

The leading part played by ancient Greece as the founder of arts and sciences is recognized by the College of Arts and Sciences

which has provided ample instruction in the Greek language, literature, and art, and ample material for illustrating this instruction.

Greek For students who enter without having previously studied the language, a beginners' course is offered.

For students who have already begun the subject, courses in literature are provided, beginning with the easier authors and covering virtually the complete range of the literature in



Museum of Casts: South Wing

history, philosophy, epic and lyric poetry, and drama. Special courses deal with Greek life, art, and archæology. More advanced courses afford training in textual criticism and philology.

The Museum of Casts contains a large collection of reproductions in full size of the great works of Greek sculptural art through its entire history, a collection of ancient Greek coins, supplemented by a complete set of the British Museum electrotypes, a collection of Greek vases, and various models and electrotype reproductions. Lecture courses on Greek sculpture, given in the museum, furnish the student with such knowledge as will enable him to recognize

the spirit and meaning of ancient art and view intelligently the treasures of the great museums of this country and of Europe.

The courses in Latin are designed to impart to the student an intimate knowledge of the language, the life, and the literary heritage of the ancient Romans. These courses fall into two groups, those of general educational value and those especially intended for prospective teachers of Latin. The first of these

Latin

groups meets the needs of students who wish to pursue classical study for its cultural value or for its value as an auxiliary to the study of English, modern languages and literatures, history and political science, or law. Courses are given in the translation of Roman literature, in the translation of English into Latin, in Roman antiquities, and in Latin epigraphy. The teachers' course gives an exhaustive presentation of the facts and usages of classical Latin, with discussions of the aims, ideals, and problems of the high school Latin teacher. A companion part of this course deals with Caesar's Gallic War, paying special attention to all the points which should be emphasized in secondary school instruction. The more advanced courses in Latin are intended primarily for classical specialists.

The value of a scientific study of the languages, literatures, and history of the Semitic nations is now recognized by all the great universities in the world. They no longer confine

Semitic Languages

themselves to offering to candidates for the ministry instruction in Hebrew, Syriac, and Arabic, but vie with one another in providing opportunities for original research, comprehensive philological studies, and critical investigation of records.

Courses are regularly offered in all the Semitic languages and dialects. In addition, lecture courses on Semitic literature and oriental history are given, in which no knowledge of the Semitic languages is required. There are exceptional library facilities for students of Egyptian, and a large collection of squeezes of inscriptions, phonograph records, and Ethiopic, Coptic, Samaritan, and Arabic manuscripts is of value to advanced students.

The courses in the German language and literature, and also in the language and literature of kindred groups, such as Old Norse, Modern Scandinavian, and the languages of the Netherlands, are given by the Department of German.

German Though in the elementary and intermediate courses, stress is laid upon disciplinary drill in the essentials of grammar, nevertheless German is taught as a living language and is spoken as much as possible in the class-room. There are special classes in conversation and composition, divided into numerous small sections, and in these the German language is used exclusively. The classes in conversation prepare for lecture courses, given entirely in German, on some epoch in the history of the literature or on some phase of German life.

The advanced courses are of two kinds, literary and philological. The history of German literature is given in lecture courses. Special periods are selected for more minute study. The philological courses trace the development of the German language from the earliest monuments and explain the development of Modern German. A teachers' course is given on class-room methods and theories of instruction in the modern languages.

Courses are also provided on the history of Germanic culture and art, and Germanic antiquities and mythology. In this work the department is aided by a valuable collection of lantern slides. These and a large collection of photographs constitute a fund of illustrative material.

The Deutscher Verein, a student organization, is a valuable accessory in fostering interest in German studies at Cornell. At its meetings, literary and musical programs are rendered, the use of the German language is enforced, and opportunity is afforded for a closer acquaintance between faculty and students. The Verein also presents numerous short comedies, scenes from classic dramas, and in alternate years a four or five act play.

The Department of Romance Languages offers instruction in the languages and literatures of France, Spain, Portugal, and Italy.

The instruction in French comprises both elementary and advanced courses in language and literature. In the three elementary courses careful drill is given in grammar and in conversation, the aim of the department being to teach the students to use French as a living language.

The study of French literature begins with a course in which a general outline of the history of French literature is presented. Practically the whole field of modern French literature is covered by further courses offered by the department.

The philological side of the language is represented by special courses in Old French for advanced students.

The instruction in Spanish comprises four years' work, and aims to give the student a comprehensive knowledge of the grammar, an ability to read and understand Spanish without translating, a conversational knowledge of the language, and a familiarity with the literature of the modern and classical periods. As there are among the students many young men whose mother tongue is Spanish, there is perhaps no other university in the country where so many opportunities outside of the class-room are offered for conversation in the Spanish language.

In Portuguese a course extending through one year is offered.

The instruction in Italian comprises two elementary courses in which the principles of grammar are taught and in which facility in reading and understanding the language is acquired. There are advanced courses in which the works of Dante, Petrarch, and Boccaccio are studied and explained.

The University Library is very rich in books in the Romance languages. Among its famous possessions is the Willard Fiske collection of Dante and Petrarch literature, probably the most complete collection on this subject in the world.

The purpose of the introductory course in English is to train the student's taste in literature and to give a sound preparation in expression for the ordinary demands of life. Characteristic poems, essays, novels, and Shakespearean plays afford the material for the course, and frequent papers are required. Following this are courses in composition, in language, and in literature.

The composition courses aim to give the wider proficiency in expression that a liberal education implies, and to meet the needs of students who have shown marked aptitude for literary pursuits, or whose future profession (the ministry, law, newspaper work) calls for specific training in composition. Personal conferences form a regular part of the instruction in all the composition courses.

In language the instruction is planned for two sets of students. For undergraduates who wish to obtain an acquaintance with the older forms of the language such as will enable them to read the earlier literature down to the fifteenth century and to understand the main principles underlying English grammar, courses are provided, covering Old, Middle, and Early Modern English. These

courses furnish a linguistic preparation suitable to the student intending to become a teacher of English. For students desiring to specialize in English philology, more advanced courses are provided.

In literature the second year's work provides a restricted choice of two or three courses dealing with nineteenth century poetry and prose, and is intended to make the student familiar with the literature of his own time and to establish critical methods of study.

The work of the following years comprises a wide range of definitely advanced courses, dealing with all the principal periods of English literature, with the entire work of single authors, with American literature, with foreign and classical authors in translation, with foreign influences, with textual criticism, with dramatic structure, and with other special subjects.

A course of lectures and discussions on problems of English in the secondary schools is offered to students intending to teach English.

Allied to the work of the department is that of the English Club, membership in which is open to all. Meetings are held fortnightly during the year. The programmes include papers, readings, lectures, and illustrative music.

The Department of Oratory furnishes training in spoken English. The work has not only the practical object of developing proficiency in speaking before an audience, but also the educational purpose of providing training in self-expression. The student is called upon to express his own ideas and to impress them upon his fellows. He is taught to regard delivery not as an end in itself but as a means of informing, convincing, and persuading. The endeavor is to develop and improve each student's own style, rather than to make all conform to a fixed standard. While the development of a speaker can be completed by experience, it has been found possible to give to students a training that does not need radical modification to enable them to meet successfully the demands of business, professional, and political life.

Several courses are given, including the training of voice and action, the interpretation of speeches, the briefing of arguments, debating, extemporaneous speaking, the writing of speeches, and the history of oratory. Oral reading is taught, both in its simpler forms and as a method of literary interpretation.

Under the direction of the instructor in reading, plays are presented at the local theatre by the Cornell University Dramatic Club. Several debate clubs and numerous interclass and intercollegiate debates afford opportunity for oral argumentation. Three prizes, of the aggregate value of two hundred and eighty dollars, are given for excellence in original oratory, in declamation, and in debating.

In philosophy there are undergraduate courses in logic, introduction to philosophy, history of philosophy, ethics, aesthetics, metaphysics, and the philosophy of religion. There are also special courses open to undergraduates and devoted to the history of ancient and medieval philosophy and to Plato and Aristotle as well as to the principal philosophers of modern times.

Philosophy The objects which are aimed at in all of the work in philosophy are two-fold: first, to trace the historical development of philosophical ideas and thus to throw light upon the problems and methods of the present day; second, to show the relations between philosophy and the various natural and social sciences, in order that the student may be able to gain an intelligent appreciation of the problems presented by our complex civilization.

In addition to the undergraduate work, advanced courses are offered adapted to the needs of graduates who are preparing themselves to become teachers.

In all courses of instruction in psychology, emphasis is laid upon the experimental method, and the work in the class-room is paralleled throughout by work in the laboratory. A general introductory course in psychology is followed by courses in general, abnormal, comparative, and systematic psychology. Brief courses upon special topics are given in the senior year, and advanced work, suitable for graduates who intend to become teachers, is also offered.

Psychology The psychological laboratory contains twenty-six rooms, eight of which are used as lecture room, seminary room, writing room, and private laboratories of the officers of instruction, while the remainder are devoted to experimental work, prescribed or investigatory. The laboratory is amply supplied with the qualitative and quantitative apparatus and materials needed for undergraduate instruction. It possesses the standard instruments of precision for all kinds of psychological research, and is especially well equipped for work in acoustics.

The School of Education is organized for the training of teachers for all grades of instruction. Students in the College of Arts and Sciences may, during the third and fourth years of their course, be enrolled also in the School of Education. The

Education Department of Education gives instruction in the history and principles of education and in educational psychology. These courses meet the requirements of the New York State Education Department for a professional teacher's certificate, and furnish prospective teachers with the necessary instruction in educational theories and in methods of teaching. The department offers also special and advanced courses for those who wish to make education their special study. The various courses offered by the professors of education are supplemented in other departments by special courses planned for those who are preparing to become teachers.

The department has a laboratory well equipped for experimental work in educational psychology, and a museum with a good collection of books, apparatus, and the various materials used in the schools of this country and Europe.

There is no school or conservatory of music at Cornell, nor does the University attempt to develop professional musicians or expert performers. Opportunity is however afforded to each student throughout his course, to develop his

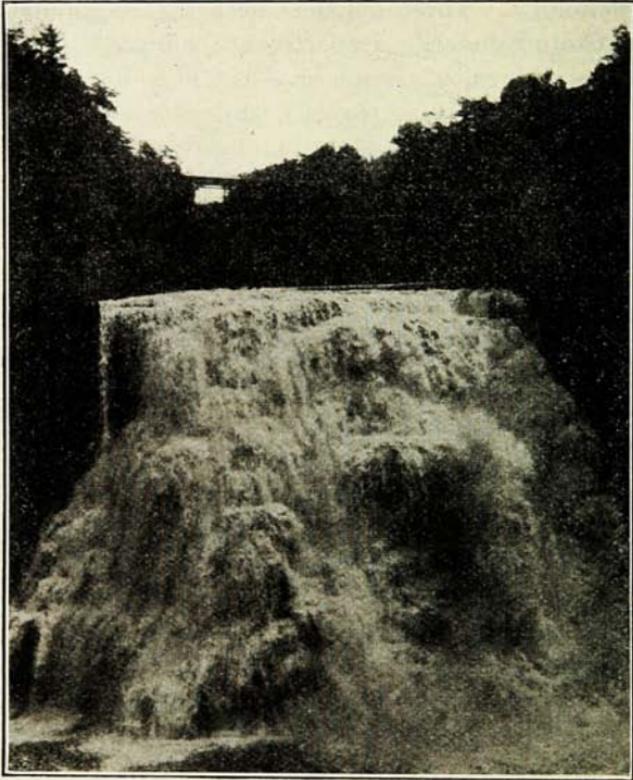
Music musical talent and liberalize his education by the study of musical compositions of the best class.

For students entering college without previous musical training, elementary instruction is offered in training of the ear, in sight reading, in musical notation and terminology, and in elementary harmony. For those sufficiently qualified there are more advanced classes in choral singing and in orchestral playing. Students in these classes constitute the greater part of the Sage Chapel choir, and form the nucleus of the larger chorus for the annual music festival held about the first of May.

Taken together, the classes in history afford a somewhat detailed survey of the entire course of western civilization, from its origin to the most recent times. The study of ancient

History history and of English history may be begun by freshmen, of medieval history and of American history by sophomores, of modern European history and of oriental history by juniors. There are in addition, advanced courses,

chiefly for upperclassmen, in special periods of history, ancient American, and European, such as the age of Alexander, the Renaissance, the Reformation, and the French Revolution, likewise in English and American constitutional history, and in the economic history of the United States. Historical geography, the decipher-



Ithaca Falls

ing of manuscripts, the literature of history, and historical method, are also made the subject of advanced courses, and qualified seniors may be admitted to any of the four historical seminars which are conducted primarily for graduate students.

Students of history have especially good opportunities at Cornell because the University Library is exceptionally rich in historical literature. It contains many valuable manuscripts and original impressions of notable books, all the great series of historical sources, and many special collections of material for the study of particular

periods and topics. In the more advanced courses the abundant library facilities enable the student not only to do the large amount of outside reading required in all the courses in history, but also to deal with historical materials at first hand, thus encouraging him in the practice of research.

The courses in the political sciences (politics, economics, statistics and finance) are designed to contribute to an education that makes for broader life and better citizenship, and also to aid the student directly in his preparation for a career in business, law, journalism, the ministry, philanthropic and administrative work, and various kinds of governmental service.

Political Science

Every effort is made to bring the classes into close contact with life and experience, in government, in society, and in business. The professors in the political sciences have all had experience as business men or as investigators and administrators in statistics, philanthropy, finance, diplomacy, or other lines of political and social service, which qualifies them to understand, in the investigation and discussion of public questions, the attitude of the business man or of the government official. This experience proves of direct value in preparing students for positions in business or in the public service.

In all classes in the political sciences a prominent feature in connection with the lectures is the laboratory and library work. Every student spends each week a specified number of hours, under the immediate direction of an instructor, in making investigations and in working out such problems as would be likely to arise in business or in public administrative work. For these lines of special study there are three laboratories primarily for the use of undergraduates. There are also large collections of charts, maps, and lantern slides, to illustrate in detail the work in social institutions, statistics, finance, municipal government, comparative politics, ethnology, and indeed all fields of political and social science.

In bibliography three courses are offered. Two train the student in the scientific use of bibliographies, indexes, dictionaries, and cyclopedias, and in cataloguing, in indexing, and

Bibliography

in preparing manuscript for the printer. In the third course attention is given to the materials and forms of books in ancient times and in the middle ages, and to block books and early printed books. Manuscripts and in-

cunabula are used for illustration. This course meets certain needs of students looking forward to the profession of librarian; the first two courses are designed to aid students in any province of letters or science.

The elementary and intermediate courses in mathematics include higher algebra, solid geometry, trigonometry, analytic geometry, differential and integral calculus, theory of equations, differential equations, and projective geometry. Some of these courses are designed specially to meet the needs of those students who are preparing to teach mathematics, and, taken together, they constitute an excellent preparation for positions in the best high schools and academies. Another object of this group of courses is to give adequate preparation for some of the more advanced courses in physics, in chemistry, and in the engineering subjects.

The advanced courses are for juniors, seniors, and graduates. They give a general survey of mathematical science, and serve as an introduction to any of the special fields of investigation in the subject.

The department library consists of more than ten thousand volumes on pure and applied mathematics, and about one hundred periodicals, including the proceedings of nearly all of the mathematical societies of the world. There is also a large collection of plaster and thread models to illustrate the most important surfaces, twisted curves, and functions.

A general course in descriptive astronomy is given for students that desire a knowledge of the fundamental principles of the science. During the second term a course in astronomical observations is conducted in the Fuertes Observatory.

Instruction is provided in dynamic, structural, and economic geology; in mineralogy, crystallography, and petrography; in paleontology, and historical geology; and in physical geography. In each of these branches, elementary as well as advanced instruction is given; and the theoretical, practical, and professional aspects of the sciences all receive consideration.

The local geological conditions offer special advantages for study and research in stratigraphic and historical geology and in paleontology. From the university, situated in the center of

New York State, a typical series of the paleozoic rocks is easily reached for examination; exposures along the Cayuga Lake shores and in the many deep ravines in the neighborhood exhibit admirable sections for minute exploration and facilitate the collection of fossils for laboratory study. For field studies in economic and mining geology the important mining regions of Pennsylvania are easily reached.

The presence in the university of adequately equipped colleges of civil engineering, mechanical engineering, architecture, and agriculture has led to special emphasis being placed on the practical and economic sides of geology. Structural materials, ore deposits, and the entire range of useful minerals and rocks are treated in the various courses given by the Department.

The collections comprise several thousand specimens, including building stones, coals, clays, cements, and petroleum, also specimens illustrating the industrial uses of these materials, glass models of ore deposits, numerous charts and geological maps, and about two thousand lantern slides.



Reading Room, University Library

The experimental laboratory is equipped for both chemical and physical investigations of various economic minerals, and is especially well fitted for the investigation of clays.

A general course in mineralogy is supplemented by two shorter courses on the measurement and drawing of crystals, and on the blowpipe method of determining minerals. In physical crystallography, especial attention is paid to the optics of crystals. Advanced work in all of these subjects may be pursued by those who have had sufficient preliminary training.

The work in paleontology is greatly facilitated by the type collections of Brazilian fossils and the Jewett collection contained in the museum. Large collections of tertiary fossils from all the Atlantic and Gulf States and from southern England and north-central France also add to the equipment of the department. The Newcomb collection of ten thousand species of recent shells is of great assistance in studying and classifying the tertiary fossils.

Much work has been done of late in the younger formations of the Southern States and in central and eastern New York. This field work is greatly facilitated by the two power-boats constructed and maintained for navigation of the water-ways throughout the state.

Courses primarily for undergraduates are offered in general physical geography, physiography of the lands, geography of North America, and geography of Europe. The first two of these courses include laboratory work and field work for which the vicinity of Ithaca furnishes excellent material in its wide variety of typical physiographic forms. In the field work there are weekly afternoon excursions and occasional all-day trips. Longer voluntary excursions are made to more distant points, such as Watkins Glen, Niagara, and Wilkes-Barre.

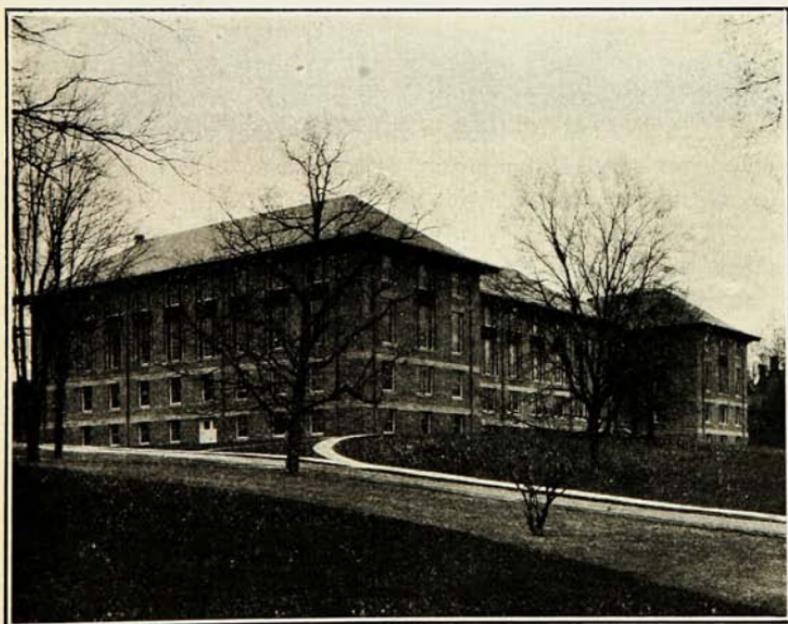
Several advanced courses in physiography are also offered, and properly qualified students are given opportunity for original investigation in field work on the glacial and other physiographic phenomena for which the Finger Lake region of central New York is noted. There are few sections in the United States where problems for investigation in these fields are presented in such number and variety. Expeditions have been organized from time to time for studies in more distant regions. These surveys offer opportunity for instruction in the methods of field research and form a valuable part of the advanced instruction.

The laboratory of physics, Rockefeller Hall, contains one hundred and sixty-seven rooms with a total available floor space of one hundred and twenty-six thousand square feet. In addition to the main building, there is a one-story wing containing the dynamo laboratory, and a small separate building for the heating and ventilating apparatus; storage batteries, gas generators, and accessory apparatus.

Physics

Instruction in physics is conducted by lectures, recitations, and laboratory work. The four lecture rooms, the largest of which has a seating capacity of five hundred, are fully equipped for illustrative experimentation. The lecture tables in three of these rooms are wired for direct and for alternating electric currents, and are provided with suction pipes and with piping for hot and cold water, gas, acetylene, oxygen, hydrogen, and compressed air. The equipment also comprises permanent and movable screens for lantern projections, and automatic apparatus for darkening the room. Recitations are conducted in classes of not more than twenty-five students each.

The practice laboratories for general physics are furnished with the apparatus employed in making accurate measurements per-



Rockefeller Hall of Physics

taining to mechanics, heat, electricity and magnetism, sound, and light.

The advanced electrical laboratories offer facilities for a wide range of technical measurements, and for the standardization of instruments. In the alternating current laboratory, the electric wiring and supply circuits are particularly complete, so that in addition to direct current, there is readily obtainable alternating current of any phase or voltage, or various wave forms, and of any frequency from fifteen to five thousand cycles per second. The alternating current lecture room is equally well equipped. Several rooms are reserved for advanced investigation.

The dynamo laboratory is equipped with more than sixty dynamos and motors ranging from large to small, and from the very earliest machines constructed in America and Europe to the latest types. The first Gramme dynamo in America, exhibited at the Centennial Exposition in 1876, was constructed by members of this department.

The photographic laboratory is provided with special rooms for developing, for printing, for testing lantern slides, for making enlargements, and for mounting prints, and is furnished with a number of cameras for general and special use. The instruction comprises both introductory and advanced courses.

Theoretical courses are offered in light, electricity and magnetism, dynamics, heat, and thermodynamics, as well as in more specialized branches. In several of these courses an experimental lecture is given each week by some member of the class. Illustrated lectures dealing with various recent advances in physics are also offered.

For the use of students investigating experimental problems, thirty or more especially equipped individual rooms are available. The laboratory possesses also a considerable amount of apparatus intended primarily for use in investigation. Worthy of particular mention is the plant for the liquefaction of air and hydrogen, and for the general study of the phenomena of low temperatures, and also the very complete optical equipment.

The department library contains a collection of periodical publications on physics that is probably not exceeded in completeness at any library in the country.

The chemical laboratory, named Morse Hall, has floor space of over ninety thousand square feet. It contains four lecture rooms

with a total seating capacity of five hundred and fifty-four, furnished with all necessary appliances for the illustration of lectures by experiment and by lantern projection; also four recitation rooms. For elementary work in inorganic chemistry and in qualitative and quantitative analysis, there are three large laboratories containing in the aggregate places for about twelve hundred and fifty students working in sections. In addition to these there are two rooms for organic

Chemistry



Morse Hall: the Chemical Laboratory

chemistry, a special laboratory for microchemical analysis, two for bacteriological work in connection with the analysis of water and foods, one room for distillation in water and food analysis, three rooms for assaying, two for gas analysis, a fire-proof room for work with highly inflammable substances, a laboratory for organic ultimate analysis by combustion, a hydrogen sulphide room connected with strong fan exhaust, an electric furnace laboratory, a large room for advanced chemistry, a room for spectroscopic chemical analysis, a large laboratory for elementary work in physical chemistry, one for electrochemistry, one for elementary and one for advanced work in agricultural chemistry, and a number of rooms devoted exclusively to research work in the different subdivisions of chemistry. The student laboratories contain in the aggregate

places for about seventeen hundred students working in sections, or about seven hundred and twenty-five students working at the same time. The chemical library contains complete sets of the important journals, and is fully supplied with works of reference and with the standard books on chemistry and allied subjects. Distilled water is conducted in block tin pipes to all the more important rooms on each floor from a tin-lined tank in the upper story of each building. Air blast is conducted wherever required from a high pressure blower in the basement. The buildings are supplied with an alternating current of one thousand volts and with two direct currents of five hundred and of one hundred and ten volts respectively. Lighter currents for electro-chemical analysis and synthesis are furnished by storage batteries. With the aid of a recently installed motor generator, low voltage direct currents up to two thousand amperes may be obtained.

The department offers fifty separate courses in chemistry, which may be classified under the divisions: inorganic chemistry; analytical chemistry, including qualitative analysis, quantitative analysis, gas analysis, spectroscopic chemical analysis, and calorimetry; microchemistry, and methods of organic analyses; organic chemistry; physical chemistry and electrochemistry; sanitary chemistry; agricultural chemistry.

A special course consisting of chemistry and allied branches, together with an appropriate amount of elective work, has been organized within the College of Arts and Sciences for those who plan to follow chemistry as a profession, either by teaching it or by entering commercial practice. Upon the completion of this course the student receives the degree of A.B. Graduates of this course are greatly in demand, and the department is constantly in receipt of requests for young chemists to fill positions in the chemical industries and in chemical engineering.

**The Special
Course in
Chemistry**

The university work of this special course in chemistry is outlined in the Announcement of the Department of Chemistry, which may be obtained from the Registrar. Students who intend to pursue the course are advised to defer the study of chemistry until after entering the college, and to complete before entrance solid geometry, advanced algebra, plane and spherical trigonometry, three years of preparatory German, three years of preparatory French, and four years of preparatory English.

The work in general biology covers a wide range of biological phenomena, and is designed to acquaint the student with the main principles of biology through selected practical studies of the phenomena on which they are based. Both lectures and laboratory work deal with such topics as the interdependence of organisms, organization and phylogeny, oogenesis and ontogeny, heredity and variation, natural selection and adaptation, segregation and mutation, the life cycle, metamorphosis and regeneration, and the psychic life of organisms. The laboratory equipment for this course is very complete.

General Biology

The introductory work in botany falls conveniently into three topics: the principles of plant life* (fundamental facts of structure and form of the plant members in connection with their function), the general comparative morphology of plants, and the special morphology of the seed plants. The advanced courses cover all the important subdivisions of the science, including comparative morphology and embryology, histology, mycology, dendrology, geographical botany, taxonomy, and plant physiology. In the laboratory work accompanying these courses the students are provided with suitable material for illustration and study, and are taught the technique of its collection and preparation. These courses also provide a thorough foundation in methods and practice of teaching the subject of botany.

Botany

Facilities are offered for original investigation in the different fields of botany. Many original contributions, the result of research by students and members of the staff, have been published during the last few years. These investigations cover a wide range of topics not only in scientific work, but also in practical botany.

The laboratory is equipped with all necessary apparatus, with models representing the different groups of plants, and with other illustrative material. The large greenhouses connected with Sage College offer at all seasons valuable material for studies in development and histology, and furnish living plants as illustrative material for many of the lectures. The department also has a large and growing herbarium, collections of fruits, cones, nuts, and fibres, a general collection of economic products, and a large number of specimens of woods from different countries.

Facilities are offered to students who are fitting themselves for economic work, in the courses in plant histology, plant physiology, and in the study of the fungi. The laboratory is well supplied with specimens of the marine algæ for morphological and developmental study of typical forms. The native flora of the region of Ithaca is very rich in species, and offers excellent opportunities for the study of botany.

In the elementary courses in zoology, invertebrate and vertebrate, the lectures are supplemented by the study of a wide series of typical forms illustrating the more important groups. The local species are studied in their ecologic and economic relations, systematic field study is carried on, and an effort is made to adapt the instruction to the needs of those who plan to teach zoology or nature-study in the secondary schools. The advanced courses are planned for students who are fitting themselves for college or experiment station positions, or who are preparing for a medical course.

Zoology

In entomology there are offered both elementary and advanced courses. On account of the difficulty of studying marine animals at any place remote from the sea-coast, and because of the exceptionally good facilities for the study of insects at this university, students wishing to take advanced work in invertebrate zoology are advised to select some entomological subject, and especial encouragement is given to those wishing to make original investigations in this field.

Closely correlated with the courses in general zoology and in entomology given in the College of Arts and Sciences are several courses on economic entomology given in the College of Agriculture.

The insectary of the Agricultural Experiment Station affords facilities to a limited number of advanced students for special investigations in the study of the life history of insects, and for experiments in applied entomology. A field station, located in the marsh at the head of Cayuga Lake, affords abundant opportunity for the study of the life of inland waters in all of its various biological phases.

In vertebrate zoology there are courses in comparative anatomy, in mammalian anatomy, and in the morphology of the brain, all extensively illustrated by means of models and charts, and by specimens from the museum.

Of the known species of North American vertebrates the museum contains a fair representation, as well as typical forms of the various vertebrate groups from all other parts of the world. The specimens are so prepared and arranged as to illustrate important biological principles. Besides the specimens on exhibition there are in store many entire vertebrates, particularly marsupials at various ages. For the study of vertebrate brains and of cerebral topography unusual facilities are offered, in both material and literature. There are about sixteen hundred brain preparations.

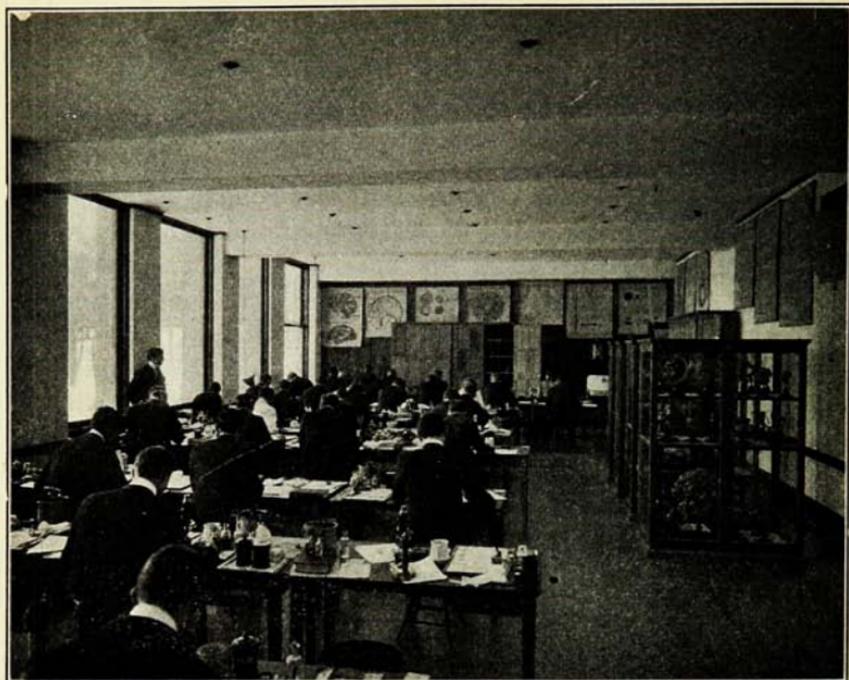
Superior advantages are offered for the systematic and ecologic study of vertebrates. In the Cayuga Lake basin are represented two, perhaps three, life-zones. It constitutes a transition area between the basins of Lake Ontario and the Susquehanna River. Not counting sub-species there are recorded already sixty-three fishes, eighteen amphibia, twenty-one reptiles, thirty-seven mammals, and two hundred and thirty-eight birds,—a total of three hundred and seventy-seven species. Expert ornithologists regard this as one of the best bird-stations in the United States.

Physiology as a science is related to hygiene, to biology, of which it is a primary division, and to medicine.

Aside from medical instruction, open only to students registered in the College of Medicine, the department, recognizing in its instruction the importance of physiology in its hygienic and biological relations, offers a course in elementary human physiology designed to give the students knowledge of

Physiology the human body, as a basis for an appreciation of the laws of health. To illustrate the functions of important organs, and to introduce the student to methods of laboratory work in physiology, there is an elementary laboratory course, so planned as to give a familiarity with simple physiological experiments and demonstrations. In connection with the introductory course of lectures and demonstrations, this may be taken with advantage by those students who intend to teach physiology in the secondary schools.

For students of biology, systematic laboratory work is offered in experimental physiology. In this course the ultimate problem kept in view is the explanation of life phenomena. In addition there is gained a detailed acquaintance with the experimental methods employed in physiology. Advanced work in physiology is encouraged, and all necessary facilities for its prosecution are



A Laboratory in Stimson Hall

furnished by the department laboratories, which consist of a large general or introductory laboratory, an advanced laboratory, and six small rooms equipped for special work. These include a chemical room, a blood-pressure room, and a dark room. The laboratories are spacious, and are unusually well lighted and ventilated.

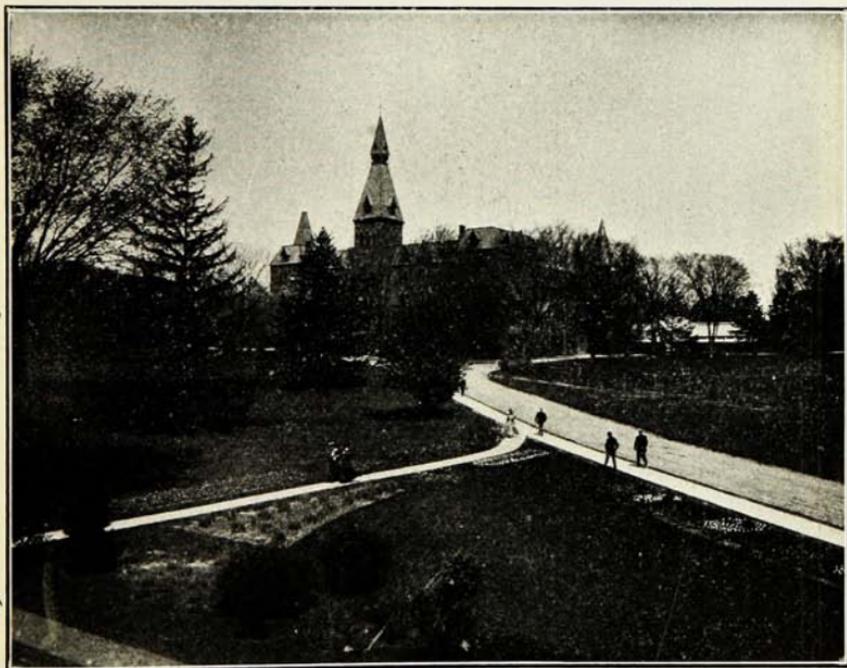
The general laboratory is provided with laboratory tables and with lockers containing full sets of glass-ware and apparatus for experimental physiology. Electric light, gas, and a time-marking circuit are at each desk.

The Department of Biochemistry is located on the second floor of Stimson Hall. Its equipment comprises a general laboratory with chemical desks for thirty-five students, a private laboratory equipped for research work, and five other rooms adapted to various purposes. Each student is provided with a set of reagents, and with all necessary apparatus. The department is also supplied with special apparatus for advanced work and research.

For the work in microscopy, histology, and embryology there are especially designed rooms in Stimson Hall. **Microscopy,** The one for elementary work is thirty by fifty feet. It faces the north and is lighted by six plate-glass windows six by nine feet in size, which extend from the top of the work tables to the ceiling. **Histology, and** **Embryology**

This room accommodates forty students at once. Each student has a separate table, microscope, and locker for his individual use during the period in which he works in the department. For the advanced work there is a room about forty feet square, with large plate-glass windows reaching to the ceiling. A well-equipped laboratory for microphotography and the reconstruction of microscopic objects in the form of enlarged models is located on the ground floor.

In addition there is a large chemical and preparation room and a fire-proof incubator room, together with private rooms for the teaching staff. These rooms are not only well lighted, but they are ventilated by fans forcing fresh air into them and by suction fans removing the air from them.

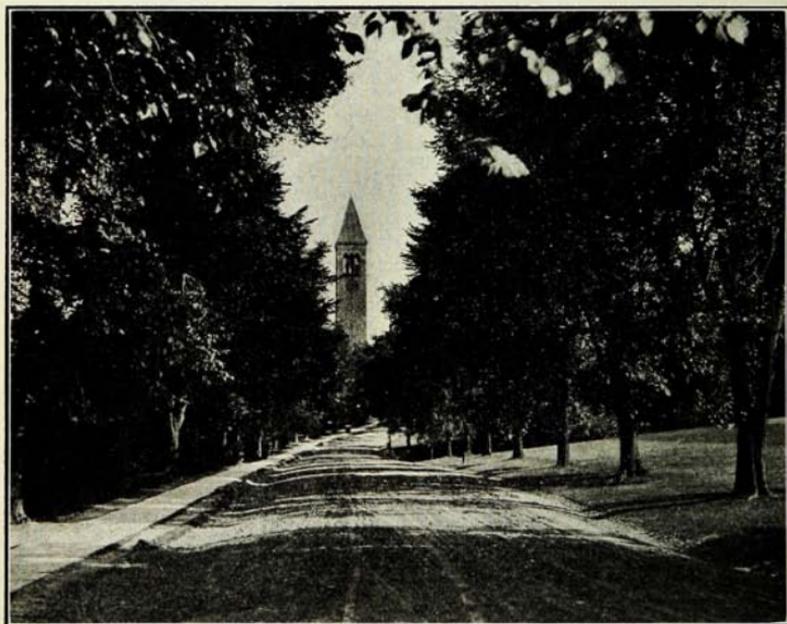


Sage College: Dormitory for Women

The equipment in microscopes and microscopical accessories, microtomes, models, standard preparations, and other material is ample for carrying on the elementary courses in the best modern way; and for the advanced work the facilities are equally adequate.

In the work of histology the student investigates the microscopic structure of the body, and learns how to make his own preparations. In embryology the student learns, by actually following the steps, how the complex adult body is developed from the ovum.

Facilities are offered by the department for advanced work covering a wide range of subjects.



Central Avenue



OFFICIAL PUBLICATIONS OF CORNELL UNIVERSITY

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These publications include the annual Register, for which a charge of twenty-five cents a copy is made, and the following publications, any of which will be sent gratis and post-free on request:

- General Circular of Information for prospective students,
- Announcement of the College of Arts and Sciences,
- Courses of Instruction in the College of Arts and Sciences,
- Announcement of Sibley College of Mechanical Engineering and the Mechanic Arts,
- Announcement of the College of Civil Engineering,
- Announcement of the College of Law,
- Announcement of the College of Architecture,
- Announcement of the Medical College,
- Announcement of the New York State College of Agriculture,
- Announcement of the Winter Courses in the College of Agriculture,
- Announcement of the New York State Veterinary College,
- Announcement of the Graduate School,
- Announcement of the Summer Session,
- Annual Reports of the President and the Treasurer,
- Pamphlets on scholarships, fellowships, and prizes, samples of entrance and scholarship examination papers, special departmental announcements, etc.

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