

## Public Documents of Maine:

BEING THE

# ANNUAL REPORTS

OF THE VARIOUS

# Departments @ Institutions

FOR THE YEAR

## 1900.

VOLUME II.

AUGUSTA kennebec journal print 1900 ANNUAL REPORT

OF THE

# UNIVERSITY OF MAINE

FOR THE YEAR 1899.

PART I.

PART I-Reports of Trustees, President, and Treasurer.

PART II—Report of the Director of the Agricultural Experiment Station.

> AUGUSTA kennebec journal print 1900

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## REPORT OF THE BOARD OF TRUSTEES.

To the Honorable Governor and Executive Council of Maine:

The Trustees of the University of Maine respectfully submit their thirty-first annual report, with the reports of the President and Treasurer.

The unbroken prosperity which has attended this institution for years still continues. All of its affairs are in good condition. Full information regarding every department will be found in the report of President Harris.

Important changes have taken place in the Board of Trustees during the past year. Gen. Russell B. Shepherd of Skowhegan retired from the Board in April, after fourteen years of continuous service. During a part of this time, he was President of the Board. Hon. B. F. Briggs of Auburn died May 10th, sincerely mourned by all who knew him. He served with rare fidelity as Trustee eight years. Both men were prominent in the business and political affairs of the State, and were able and public spirited. By their interest in its welfare and their influence and efforts in its behalf, they rendered most valuable and efficient service to the University for many years. To such men the present prosperity and high standing of the University are largely due. Their successors, Hon. V. L. Coffin of Harrington and Hon. John H. Roberts of Norway, are men of ability and experience, and will doubtless prove strong and useful members of the Board of Trustees.

The changes in the faculty during the year have been many. Members who were competent and faithful have gone and new men believed to be equally competent and faithful have taken their places. The high standard of ability in the faculty of the past has doubtless been fully maintained. The University has been fortunate in the men obtained for the new departments. As will be seen by the report of President Harris, they are graduates of institutions of high standing, and come to the University of Maine with established reputations for ability and scholarship.

The usual improvements have been made in the campus during the year. Nearly all the shrubs and trees planted in past years are thrifty and vigorous. The grounds, or those which have been improved, are generally attractive and beautiful. The buildings of the University are now twenty-four in number, and they are in good condition. It is intended that all of these buildings shall be kept in proper order and good repair, and that such changes and improvements shall be promptly made as appear to be necessary to meet the varying requirements of the institution. In the summer months an addition to the Experiment Station was built of brick at a cost of about \$3,500. During the year necessary repairs, more or less extensive, have been made on the President's House, the Commons, Oak Hall, and other buildings. Important alterations and improvements have also been made in the heating plant, the electric lighting plant, and the water works.

From the report of President Harris it will be seen that during the fall term some few cases of hazing occurred, which were dealt with promptly and wisely by both faculty and students. Apparently the outcome was very satisfactory. The students held a meeting and determined, themselves, to put an end to the practice of hazing, and signed a paper declaring their intention to take no part hereafter in such a practice, and to discourage it in others.

The School of Law has been successful from its beginning. Last year there were thirty students. This year there are forty-two. Members of the legal profession familiar with the work of this department are cordial in their expression of approval and commendation.

Of the needs of the University, this report will make a brief reference to only one, that of additional accommodations for the increasing number of students.

In 1891 the students numbered one hundred and two; they number now about three hundred and fifty.

The accommodations have not kept pace with the increase in the number of students; and provision should be made for at least one new building in the immediate future.

The University of Maine is prosperous and successful, and its friends have constant cause for congratulation. Its growth is steady and healthful, and each succeeding year it offers some additional advantage to young men and young women seeking a broad and liberal education. May a large number be able to avail themselves of its advantages.

## HENRY LORD,

President of the Board of Trustees.

## REPORT OF THE PRESIDENT.

## To the Trustees of the University of Maine:

I have the honor to present my seventh annual report as President of the University of Maine, covering the calendar year 1899.

CHANGES IN THE BOARD OF TRUSTEES AND THE FACULTY.

The term of office of Hon. Russell Benjamin Shepherd of Skowhegan expired April 17, 1899. Mr. Shepherd was first appointed a trustee by Gov. Robie in 1885, and served continuously for fourteen years, acting as president of the Board in 1891 and 1892. He has been succeeded by Hon. Voranus Lathrop Coffin of Harrington.

On May 10, 1899, Hon. Benjamin Franklin Briggs, for eight years a member of the Board of Trustees, died at his home in Auburn. No trustee was more interested in the welfare of the University than Mr. Briggs. One of the best known farmers of the State, and a leader in farmers' societies, he was regarded as the special representative of agriculture in the Board. He had faith in the agricultural department, and believed in its usefulness, but was not narrow in his sympathies, nor less interested in other departments. He was rarely absent from a meeting of the Board, and always careful to keep himself informed on the work of the University and its needs, often visiting the campus between the sessions of the Board. As a member of the Advisory Council of the Experiment Station, he had a large influence in establishing and fixing the policy of that department.

As a member of the legislature during two terms, he participated actively in measures of vital interest to the University. In 1895, during his first session in the House, he was earnest and persistent in advocating a fixed appropriation for current expenses, and he deserves no small credit for the final passage of the appropriation obtained at that time. When, two years later, the commission on the State College recommended that no appropriation be given to the college, lest it might grow into a state university, Mr. Briggs, when consulted, among the first, on the advisability of accepting the issue and asking the legislature to change the name of the college to the University of Maine, gave the proposition his immediate support. Throughout the session, he was unceasing in his efforts to insure the passage of the bill to change the name, and of the resolve granting an appropriation for ten years. No one was happier than he, when both matters attained success. The growth and prosperity of the University was ever a source of keenest satisfaction to him. He was a kindly man, possessed of courage and an even temper, a delightful friend, and a trustworthy colleague.

Hon. John Alfred Roberts of Norway has been appointed to serve for the unexpired term of Mr. Briggs.

Professor Alfred Bellamy Aubert, after a continuous service of twentyfive years, has been granted leave of absence for the college year 1899-1900, to be used partly in professional study.

Garnett Ryland, Ph. D., who was instructor in chemistry last year, has been appointed Assistant Professor of Chemistry, and put in charge of the department of chemistry during the absence of Professor Aubert.

Howard Scott Webb was appointed Professor of Electrical Engineering, beginning with the fall term, relieving both Professor Stevens, of the department of physics, under whose supervision the work in electrical engineering was established and has been carried on, and Mr. Dickinson, who was Instructor in Electrical Engineering. Professor Webb is a native of this State, who received the degree of B. M. E. from the University of Maine in 1887. From his graduation to 1897 he was first assistant and afterward instructor in the department of mechanical engineering. In the winter of 1891 he became for a time a graduate student in the shops of Cornell University. In 1895 he received from the University of Maine the degree of M. E. The summer of 1897 he spent in the physical laboratory of the University of Chicago. During the year 1897-98 he was in the graduate school of the University of Wisconsin, from which he gained the degree of E. E. The results of his thesis "On the Form of Pressure and Current Curves in an Alternating Generator" were published in an article by Professor D. C. Jackson for the American Society of Electrical Engineers. The year 1898-99 he spent in the testing department of the General Electric Company at Schenectadv.

Karl Pomeroy Harrington, M. A., has been appointed Professor of Latin, beginning with the fall term of 1899. Professor Harrington was born in New Hampshire, in a town adjoining Maine. He was graduated from Wesleyan University in 1882, with the first honors. For three years he was classical master of the high school at Westfield, Mass., and for two years teacher of Latin in the Academy at Wilbraham, Mass.; he spent the years 1887 to 1889 as a student in Germany, Italy and Greece; was for two years tutor of Latin in his *alma mater*, and one year a graduate student in Yale University. Since 1891 he has been Professor of Latin in the University of North Carolina.

He has the reputation of a scholarly teacher, of force and inspiration; is a member of several learned societies, a contributor to classical and other magazines, and the author of two books: "Helps to the Intelligent Study of College Preparatory Latin" and "Greek and Roman Mythology."

John Homer Huddilston, Ph. D., has been appointed Professor of Greek, beginning with the fall term of 1899. Professor Huddilston was born in Ohio. When 16 years old he began his career as a teacher in a

district school. He entered Baldwin University in 1887, and was graduated in 1890. After two years spent in teaching Latin and Greek in Baldwin, he entered Harvard University and received the degree of B. A. in 1893. He then became Instructor in Greek in Northwestern University, where he remained until 1895, when he went to Europe, where he spent three years, chiefly at the Universities of Berlin and Munich. From the latter university he obtained the degree of Ph. D., *magna cum laude*, in 1897. On his return to this country in 1898 he went to Bryn Mawr College as lecturer on Classical Archæology.

Professor Huddilston is a member of various societies, has published numerous articles in periodicals, and is the author of the following books: "Essentials of New Testament Greek;" "Key to Essentials of New Testament Greek;" "Greek Tragedy in the Light of Vase Paintings;" "The Attitude of the Greek Tragedians Toward Art."

Assistant Professor Wallace Stedman Elden, M. A., who was for two and a half years in charge of the department of Latin, has withdrawn. He was an excellent teacher, and left us with the regret of his colleagues and pupils.

Mr. Leonard Perley Dickinson, B. S., completed in June, 1899, his service of two years in the department of electrical engineering. He was appointed in 1897 to serve until Professor Webb's term began. Mr. Dickinson enjoyed a high degree of success, and was well liked for his personal qualities and professional abilities.

Mr. Allen Rogers, B. S., formerly assistant in chemistry, has been made instructor in chemistry.

William Emanuel Walz, M. A., LL. B., has been appointed instructor in law, to succeed Robert Harper Murray, LL. B., who resigned in June to enter upon the practice of his profession. Mr. Walz was born in Ohio, but when a small child was taken to Germany, where he was educated in the Royal Gymnasium at Stuttgart. He returned to the United States in 1877 and entered Northwestern College, from which he received the degree of B. A. in 1880, and M. A. in 1882. He was principal of the Schuylkill Seminary at Myerstown, Penn., for two years, and in 1883 entered the service of the Japanese government as Professor of History in the Government College. In 1896 he resigned his professorship and entered the Harvard Law School to fit himself for teaching law. In 1899 he received the degree of LL. B. Mr. Walz served for one year as instructor in German in Harvard University.

Mr. Harold Sherburne Boardman, C. E., appointed Tutor in Drawing for three years, completed his term in June, 1899.

Harold Hayward Clark, B. M. E., a graduate of the University of Maine in the class of 1899, has been appointed Tutor in Drawing.

Mr. Arthur Wellington Price, B. A., Assistant in English, has been reappointed for a second year.

The following members of the class of 1899 have been appointed assistants as indicated:

Cyrenius Walter Crockett, B. S., Assistant in Chemistry.

Archer Lewis Grover, B. M. E., Assistant in Electrical Engineering.

Edward Raymond Mansfield, B. S., Assistant Chemist in the Experiment Station.

Stanley Sidensparker, B. M. E., Assistant in Physics.

Clinton Leander Small, B. S., Assistant in Chemistry.

William Augustine Murray, B. C. E., Assistant in Civil Engineering.

Oliver Otis Stover, B. S., Assistant in Natural History.

Edwin Carleton Upton, B. S., Assistant in Modern Languages.

Miss Georgia Thomas Burrows has been appointed Assistant Librarian. The following is the list of Lecturers in the School of Law reappointed

for the year 1899-1900:

Charles Hamlin, M. A., Lecturer on Insolvency.

Lucilius Alonzo Emery, M. A., LL. D., Lecturer on Roman Law.

Andrew Peters Wiswell, B. A., Lecturer on Evidence.

Louis Carver Southard, M. S., Lecturer on Medical Jurisprudence.

Forrest John Martin, LL. B., Lecturer on Pleading and Maine Practice. Hugo Clark, C. E., Lecturer on Equity Pleading.

#### THE STUDENTS.

The number of students for the year ending June, 1899, was 329, an increase of 12 over the preceding year. The number for the college year 1899-1900 will exceed 360, the largest number in the history of the University. The freshman class numbers 114. The students come in about equal numbers from farming communities and from cities and villages. Of the total number about 89 per cent are from the State of Maine. Every county of the State is represented, and the representation of the counties is nearly in proportion to the population of the counties.

Leon Forrest Livermore of South Sebec, a member of the freshman class, lost his life, Tuesday, June 6, 1899, by a sad drowning accident, in the Stillwater river. He was a fine manly fellow, a member of the base ball nine, an editor of "The Cadet," a diligent and successful student, and had won for himself a large place in the esteem of his teachers and fellow students.

During the fall term some cases of hazing occurred. They were not serious cases; but the faculty, believing that hazing of any sort should receive vigorous treatment, took measures to punish the guilty students severely. As a result the students, of their own accord, held a college meeting and determined to put an end to the practice of hazing, and evidenced their sincerity by signing a paper in which they declared their intention to take no part in hazing, and to discourage others from doing so. As this result was brought about without any pressure, and seems to have the unanimous and cordial support of the students themselves, the President regards it as a hopeful indication that we shall succeed in banishing, almost, if not entirely, a practice which is a source of great anxiety to teachers and danger to the students.

Otherwise the discipline of the year has involved no difficulties. College life is making a distinct gain in quiet and dignity. In class rooms, in chapel, and in public places, order is maintained, not by rules nor the watchfulness of college officers, but by the constraint of those considerations which maintain gentlemanly behavior among our best citizens everywhere.

The various student interests and enterprises are in a prosperous condition. The athletic and other associations have shown unusual care and success in the management of their finances. The college journal, "The Cadet," published monthly, has been succeeded by "The Campus," a paper published every second week. It is hoped and expected that the success of this new venture will soon justify a weekly edition.

The glee club has attained the highest point of proficiency in its history and will compare favorably with similar clubs in other New England colleges. Together with the instrumental clubs, it has proved an important influence in æsthetic and artistic matters.

The fraternity houses with their provision for boarding clubs continue to prove successful.

The steward of the Commons, Mr. H. H. McLain, resigned at the end of the spring term, 1899, and has been succeeded by Mr. A. B. Comins.

Mrs. E. H. Chase, the matron of the Mount Vernon House, resigned at the end of the spring term, and has been succeeded by Mrs. J. A. Knights. The number of boarders at the Commons is about 75; the number at the Mount Vernon House is about 20.

The rate of board at the Mount Vernon House is \$3.00 a week; the rate at the Commons has not been determined, but will not exceed this figure.

The various athletic interests of the University are prosperous. During the spring the base ball nine was successful in several important games with colleges outside the State, and won the Maine championship. In track athletics, chiefly contests in personal prowess, our students have made no attempts until quite recent years. The first delegation to the intercollegiate contest at Worcester was sent last spring, and made a very creditable record. In the State meet at Brunswick our team gained the second place.

In foot ball we are seriously handicapped by our location, which makes all athletics difficult, but affects foot ball most seriously. Situated further east than any other college, both time and cost nearly prohibit exhibition games with other colleges, which are the best form of practice, and greatly limit the number of match games.

Foot ball is a game which cannot be quickly mastered, but requires years of playing before a college may expect great success. The University of Maine was the last college in the State to take up the game and has only occasionally been a fair antagonist for the other Maine colleges. We are making a steady gain in our command of the game and there are indications that before long our record will be more nearly in proportion to the number of students.

#### DEGREES CONFERRED.

The following is a list of the persons who received certificates or degrees at the Commencement in 1899.

A certificate was presented, upon completing the two year course in Pharmacy, to

William Bryant Webster.

The first degree was conferred upon the following persons: Eben Pierce Bassett, B. M. E., (in Electricity), Bangor. Frank Lothrop Batchelder, B. C. E., Machias. Wallace Edward Belcher, B. C. E., Plymouth, Mass. Charles Elbert Blackwell, B. M. E., (in Electricity), Madison. Alson Edwin Boynton, B. C. E., Alna. John Wilson Brown, B. M. E., (in Electricity), Brimfield, Mass. Rufus Houdlette Carlton, B. M. E., (in Electricity), Cedar Grove. Winfield Benson Caswell, B. M. E., Waterville. Harold Hayward Clark, B. M. E., (in Electricity), Ellsworth. Daniel Lunt Cleaves, B. S., (in Chemistry), Portland. George Collins, B. C. E., Athol, Mass. Cyrenius Walter Crockett, B. S., (in Chemistry), Rockland. Marshall Buckland Downing, B. M. E., (in Electricity), Dover. Irving Harry Drew, B. M. E., (in Electricity), Bar Harbor. Reginald Lovejoy Fernald, B. S., Orono. Bert Whitaker Flint, B. C. E., Bangor. Leonard Harris Ford, B. S., Bangor. Archer Lewis Grover, B. M. E., (in Electricity), Bethel. William Wallace Haney, B. M. E., (in Electricity), Eastport. George Woodman Hersey, B. M. E., Portland. Harry Sanford Heyer, B. M. E., (in Electricity), Friendship. George Libby Hilton, B. S., (in Pharmacy), Bradley. Hall Farrington Hoxie, B. M. E., (in Electricity), Waterville. Edward Raymond Mansfield, B. S., (in Agriculture), Orono. Herbert Palmer Mayo, B. M. E., South Boston, Mass. William Bradley Morell, B. M. E., (in Electricity), Amherst, Mass. Walter Jean Morrill, B. S., (in Preparatory Medicine), Madison. Edwin St. Elmo Mosher, B. M. E., (in Electricity), Presque Isle. William Augustine Murray, B. C. E., Pittsfield. William Nelson, B. M. E., Cumberland Centre. Herman Henry Uswald, B. M. E., (in Electricity), Philadelphia, Pa. Edward Everett Palmer, B. M. E., (in Electricity), South Bridgton. Maurice Henry Powell, B. S., (in Agriculture), Orono. Mildred Louise Powell, B. S., Orono. Joseph Henry Pretto, B. M. E., Orono. Stanley Sidensparker, B. M. E., Warren. Clinton Leander Small, B. S., (in Chemistry), Orono. Edwin Melcher Smith, B. M. E., Gardiner. Allen Whitmore Stephens, B. C. E., Oldtown.

Frank Minott Stinson, B. M. E., Bath. Oliver Otis Stover, B. S., Freeport. John Henry Swain, B. S., Skowhegan. Pearl Clayton Swain, B. A., Solon. Marcellus Maurice Veazie, B. S., Islesboro. Charles Comfort Whittier, B. C. E., Skowhegan.

The degree of Bachelor of Laws was conferred upon: Frank Devereux Fenderson, East Parsonsfield. Herbert Lewis Graham, Bar Harbor. Laurence Vincent McGill, East Rochester, N. H.

The degree of Civil Engineer was conferred upon the following persons, upon presentation of satisfactory theses, and proof of professional and scientific work extending over a period of not less than three years:

Charles Partridge Weston, Orono.

Frank Elwin Weymouth, Graytown, Nicaragua.

The degree of Graduate in Pharmacy was conferred upon: Albert James Nute, Arlington, Mass,

The honorary degree of Master of Science was conferred upon: Samuel Lane Boardman, Augusta.

## THE LIBRARY.

The library contains 15,638 bound volumes and more than 7,500 pamphlets. The increase during the year ending June, 1899, was 2,641 volumes, besides 500 pamphlets. While the library is still small in comparison with many college libraries it is within the first fourth of all college libraries arranged according to size. In usefulness and value it stands relatively much higher, as a very large proportion of the volumes have been gained by purchase.

The library of the School of Law contains nearly 2,500 volumes. It is the policy to purchase for the school all books for which there is immediate demand, and, in addition, to provide for constant increase.

No department of the University can more profitably make use of liberal appropriations than the library, and it is my hope that it may be found possible in the future to provide for a much more rapid growth than at present.

### THE SCHOOL OF LAW.

The School of Law completed its first year successfully. At the Commencement in June three young men received the degree of Bachelor of Laws. Several students have passed successfully the examination for admittance to the Maine bar.

In accordance with the action of the last legislature extending the required time of study for admission to the bar from two years to three, the course of study has been extended to three years.

The faculty of the school remains as last year, except that Mr. Walz, already mentioned in this report, succeeds Mr. Murray as Instructor in Law.

The number of students catalogued for the year 1899-1900 will be forty-two as against thirty for last year. The gain is very gratifying, especially in view of the increase in the length of the course of study.

## THE CLASSICAL COURSE.

The first term of the newly organized classical department finds 31 students availing themselves of the courses of instruction given by Professors Harrington and Huddilston. The forthcoming catalogue will show a full list of courses both required and elective, including not only those purely literary and linguistic, but also such courses dealing with the allied subjects of antiquities, art, topography, epigraphy, etc., as are being offered at our leading American universities. The department is conveniently housed in the remodeled rooms on the second floor of Wingate Hall, which are equipped with the latest classical wallmaps, and hung with photographs illustrating ancient life, art and mythology. The special library appropriation has been expended carefully, giving the department a good working start in the line of valuable reference books, sets of classical texts, special treatises, editions, etc. Nearly 175 lantern slides have been purchased for the illustration of lectures on Rome, Roman life, etc., and others are about to be procured representing Greek life, archæology, and kindred subjects. Public illustrated lectures on such topics are being arranged to be given. Through the promise of a loan of negatives from a sister institution, it is expected that the number of slides will be materially increased at comparatively small expense. A philological club has been organized which proposes to hold monthly meetings for the presentation and discussion of papers on philological topics in the broader sense of the term, thus bringing together on a common basis of interest all the professors and instructors in language and literature, and affording an opportunity for advanced students in these lines to present the results of original research. There is every reason to expect a rapid growth in the number of students in this department, as it becomes generally known that those seeking a classical college education can obtain here advantages equal to those offered at our best American institutions.

## ADDITIONS TO EQUIPMENT.

Our buildings are creditable and much more impressive than most visitors expect to find, but they are still very much inferior to those of many other institutions of similar grade and size, and certainly insufficient for the easy and comfortable performance of our work.

The equipment of apparatus and other facilities for instruction and investigation are most excellent and greatly superior to those possessed by most similar institutions. The most noteworthy additions during the year are 2,641 new volumes for the library; for the department of physics a Kelvin balance, a dividing engine and a quadrant electrometer, a testing set for resistance, 2 D'aSonal sets of condensers; for the department of electrical engineering 6 ammeters, 4 volt meters, a Watt meter, portable tachometer, 3 self-registering speed indicators, a 4-kilowatt CrockerWheeler dynamo, a 1¼-kilowatt Commercial Electric Company dynamo, a 2½-kilowatt General Electric Company dynamo, a 5.6-kilowatt Westinghouse Electric Company dynamo, a 5-kilowatt Westinghouse Electric Company dynamo, 2 circuit breakers, 5 recording Wattmeters, and a 15 horse power Otto Gasoline Engine.

#### THE BUILDINGS.

The most important change in the buildings during the year has been an addition to the Experiment Station, containing upon the first floor a laboratory for food investigations, and upon the second floor an office for the Director of the Station.

During the summer extensive changes have been made in the University heating plant. Last winter the steam boilers in Fernald Hall and Oak Hall showed signs of weakness that made it unwise to depend upon them for the heating of these buildings, and pipes have been laid to carry steam from the boiler in the Light Station to Fernald Hall, thence to Wingate Hall, Oak Hall, and the Commons.

As the supply of steam is not entirely sufficient for all these buildings, the boiler in Wingate Hall, which is in good condition, is used to supplement the Light Station boiler as needed. It is desirable that the boiler capacity of the Light Station be increased so that the supply of steam will be sufficient for all the large buildings.

The steam pump, which supplies the stand pipe, has been in use for many years with no breakdown until in the early part of the fall term of '99, when for two days we were without water. During the summer an electric pump, to be operated from the light station, had been ordered; but it had not been installed at the time of its first need. The steam pump will be maintained as a duplicate plant.

When the electric lighting plant was put in, a few years ago, it was planned to run the dynamos only during the part of the day when the engine was run for shop purposes, and during a part of the evening. A storage battery was provided which was to carry the lights from the early evening until the engine started up the next day. This plan worked satisfactorily until last spring, when it was found that the battery was badly exhausted, and that with the great increase in the number of lights used it would not be profitable to depend longer upon a storage battery. To carry the lights after the steam engine is shut down, we have installed a 15-horse-power gas engine. This engine, with the electric pump, gives us increased security against fire, for we can now have the pumps going in three minutes, whereas it formerly took more than thirty minutes.

Repairs have also been made in the foundation walls in the President's house, and at the Commons. The Harrington house vacated by Professor Aubert has been thoroughly renovated. Some changes have been made in the plumbing of Oak Hall, and the walls of the chapel have been colored.

Respectfully submitted,

## REPORT OF THE TREASURER.

## To the Trustees of the University of Maine:

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The Treasurer has the honor to submit the following report concerning the financial condition of the University, June 30, 1899.

RECEIPTS OF THE UNIVERSITY FROM JULY 1, 1898, TO JUNE 30, 1899.

Cash balance July 1, 1898	-	\$6,884 72
Land Grant Fund	\$5,915 00	
Coburn Fund	4,00000	
Morrill Fund.	24,000 00	
The State	15,000000	
Rents.	1,175 00	
Bills receivable	458 47	
Interest	440 92	
Light Station	745 32	
Prizes	85 00	
Commons, old bills,	980 59	
Mt. Vernon House, heat and light.	224 22	
Diplomas	145 00	
Miscellaneous	731 64	
Tuition.	8,167 50	
Student Receipts	9.877 17	
Personal Receipts	1,770 05	73,717 88
		000 000 00
	í í	\$80,602 60
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NET EXPENSES OF THE UNIVERSITY FROM JULY 1, 1898 TO JUNE 30, 1899.

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CURRENT EXPENSES: Salaries	-	\$36,997 00
Departments: A griculture Physics	\$160 39 513 29	
Chemistry Natural History		
Civil Engineering Electrical Engineering Mechanical Engineering	$     \begin{array}{r}       98 & 19 \\       35 & 25 \\       2 & 54     \end{array} $	
Shop Modern Languages	1,077 45 9 25	
Military Science School of Law.	$   \begin{array}{r}     101 & 30 \\     104 & 20 \\     725 & 49   \end{array} $	
Library Philosophy	$\begin{array}{r} 2,918 \hspace{0.1cm} 22 \\ \hspace{0.1cm} 31 \hspace{0.1cm} 00 \end{array}$	6 451 03
GENERAL EXPENSES: Advertising	392 46	0,101 (19
Improvement of grounds Experiment Station	$549 43 \\ 636 40 \\ 735 58$	
Office	268 59	

## REPORT OF THE TREASURER.

## NET EXPENSES OF THE UNIVERSITY-CONCLUDED.

and the second		
GENERAL EXPENSES—Concluded :         Commencement	\$226 66 839 19 479 02 271 81 91 25 64 60 647 80 527 24 442 07 869 67 780 11 382 95 95 96 139 88 717 55 39 78 - - - - -	\$10,164 75 1,815 59 145 00 258 46 \$55,831 83 6,500 00 5,510 73 \$67,842 56 12,760 04
Cash balance June 30, 1899	-	\$67,842 56 12,760 04 \$80,602 60

## ACCOUNT WITH THE UNITED STATES GOVERNMENT APPROPRIATION UNDER THE MORRILL ACT, FOR THE YEAR ENDING JUNE 30, 1899.

RECEIPTS. Received from the United States, July 12, 1897	-	\$24,000 00
EXPENDITURES. Department of Agriculture Mechanic Arts English Language Mathematical Science Natural or Physical Science Economic Science	\$6,250 00 6,050 00 2,050 00 3,200 00 4,650 00 1,800 00	24,000 00

Respectfully submitted,

ISAIAH K. STETSON, Treasurer.

I hereby certify that I have examined the accounts of the Treasurer, and find them correctly kept and properly vouched.

ELLIOTT WOOD, Auditor.

## CATALOGUE OF THE GRADUATES.

An asterisk (\*) indicates deceased, and a dagger (†) indicates not heard from.

## 1872.

Gould, Benjamin Flint, C. E., Hollister, Calif., Irrigation Engineer.

Hammond, George Everett, C. E., Eliot, Chief Clerk, Department of Yards and Docks, U. S. Navy Yard, Portsmouth, N. H.

Haskell, Edwin James, B. S., Westbrook, Silk Manufacturer.

Hilliard, Heddle, C. E., Oldtown, Civil Engineer.

<sup>†</sup>Thomas, Eber Davis, B. S., Grand Rapids, Mich., Soldiers' Home, P. O., Farmer.

Weston, George Osmer, B. S., Madison, Farmer.

## 1873.

Eaton, Russell William, C. E., Brunswick,

Agent, Cabot Manufacturing Company.

Hamlin, George Herbert, C. E., Orono,

Civil Engineer.

Holt, Fred William, C. E., Office, 94 Prince William St., St. John, N. B., Civil Engineer.

Oak, John Marshall, B. S., Bangor,

Postmaster, Bangor Post Office.

\* Reed, Charles Emery, C. E.

Scribner, Frank Lamson, B. S., U. S. Department of Agriculture, Washington, D. C.,

Agrostologist, and Chief of Division of Agrostology.

Thayer, Harvey Bates, B. S., Presque Isle, Druggist.

## 1874.

- \* Allen, William Albert, C. E.
- \* Balentine, Walter, M. S.
- † Gerrish, William Herbert, B. S., M. D., Deering Centre, Physician.
- † Gurney, John Irvine, B. S., Highland St., Dorchester, Mass., Florist.
- <sup>†</sup> Hunter, Rodney David, B. S., 535 25th St., Oakland, Calif., Insurance Agent.
- Ramsdell, Louise Hammond, B. S., Maple, (Mrs. Milton D. Noyes.)

## 1875.

- Bates, Solomon Wheaton, C. E., First National Bank Building, Portland, Patent Attorney.
- Bumps, Wilbur Allerd, C. E., M. D., M. S., Dexter, Physician.
- \* Clapp, Samuel Hervey, C. E.
- Coburn, Lewis Farrin, C. E., Yreka, Calif., Attorney at Law.
- Colesworthy, Charles Franklin, B. S., Pendleton, Ore., Grain Dealer.
- \* Durham, Charles Frederic, C. E.
- Goodale, Alfred Montgomery, B. S., Waltham, Mass., Treasurer, Boston Manufacturing Company.
- Hitchings, Edson Forbes, C. E., M. S., Waterville, Farmer.
- Jordan, Whitman Howard, M. S., Sc. D., Geneva, N. Y., Director, New York Agricultural Experiment Station.
  - Director, New Tork Agricultural Experiment Station.
- Mayo, Edward Doliver, M. E., 2015 Elliott Ave., Minneapolis, Minn., Mechanical Engineer and Chief Draftsman, Barnett & Record Company.
- Mitchell, Albert Eliphalet, M. E., Office, 26 Cortlandt St., New York, N. Y.,

Superintendent Motive Power, Erie Railroad Company and roads operated.

- Mitchell, Allen Gilmore, C. E., Pittsburg, Pa.,
- Assistant Engineer, Pennsylvania R. R.
- \* Moore, Fred Lamson, B. S.
- Rogers, Luther Woodman, B. S., 59 South Forsyth St., Atlanta, Ga., Wholesale Grocer.
- Sewall, Minott Wheelwright, M. E., Roselle, N. J., Superintendent Engineering Department, Babcock and Wilcox Company, 29 Cortlandt St., New York, N. Y.
- Shaw, George' Moore, C. E., 969 Broadway, Oakland, Calif.,

Attorney at Law, firm of Johnson & Shaw.

Southard, Louis Carver, M. S., 73 Tremont St., Boston, Mass., Lawyer. Lecturer University of Maine, School of Law.

- Webb, Wesley, M. S., Dover, Del.
  - Inspector of Orchards and Nurseries of Delaware.
- \* Work, Edgar Alexander, C. E.

## 1876.

- Abbott, Edmund, B. S., M. D., 148 Broadway, Providence, R. I., Physician.
- Allen, Charles Plummer, B. S., Presque Isle, Attorney at Law.
- Beckler, Elbridge Harlow, C. E., 1339 Wilton Ave., Chicago, Ill., Superintendent and Engineer, Winston Bros., R. R. Contractors.
- Bisbee, Fred Milton, C. E., Springfield, Mo., Superintendent Tracks, Bridges and Buildings, St. Louis and San Francisco R. R.
- Blanding, Edward Mitchell, B. S., Bangor,

Editor and Publisher, Maine Industrial Journal.

- \* Brainard, Charles M., B. S.
- \* Buker, George Haskell, B. S.
- Cowan, Florence Helen, B. S., 46 Summer St., Lynn, Mass.
- Crosby, Oliver, M. E., St. Paul, Minn.,

President and Engineer, American Hoist and Derrick Co.

- \* Cyr, Vetal, B. S.
- \* Dike, James Edward, C. E.
- \* Dike, Willis Oliver, B. S.
- Estabrooke, Horace Melvin, M. S., M. A., Orono,

Professor of English, University of Maine.

Farrington, Arthur Manly, B. S., B. V. S., 1436 Chapin St., Washington, D. C.,

> Veterinarian, Chief of Inspection Division, Bureau of Animal Industry, U. S. Department of Agriculture.

- Foss, George Obed, C. E., Port Arthur, Ontario,
  - Contractor, firm of Foss & McDowell.
- Haines, William Thomas, B. S., LL. B., Waterville,
  - Attorney at Law. Attorney General of Maine.
- Hamilton, Harry Fairfield, B. S., D. M. D., 125 Marlborough St., Boston, Mass.,

Dentist.

- Haskell, Newall Prince, B. S., Custom House, Portland,
  - Deputy Collector of internal Revenue, District of N. H., 5th Division.

How, Edward Stevens, M. E., Baltimore, Md.,

Chief Clerk, Light House Inspector's Office.

- Hubbard, Philip Wadsworth, B. S., 438 West 33 St., Los Angeles, Calif., Mail Carrier.
- Jones, Samuel Messer, M. E., 35 Wilcox St., Springfield, Mass.
- Lewis, Albert Augustus, B. S., Gardiner,

Pastor M. E. Church, Gardiner.

Long, Herbert Augustine, M. E., Roque Bluff, Farmer and Mechanic.

- <sup>†</sup> Lothrop, Luther Ramsdell, C. E., Lothrop, Minn., Chief Engineer, Brainerd and Northern R. R.
- Martin, Nelson Hussey, B. S., Fort Fairfield, Merchant.
- Oak, Charles Edson, M. E., Caribou, Lumber Manufacturer. State Land Agent, and Fish and Game Commissioner.
- Parks, George Daniel, C. E., LaFayette, Ind., Lawyer.
- Peirce, Hayward, B. S., Frankfort, Granite Manufacturer.
- Reed, Frank Radford, C. E., Rumford Falls, Assistant Engineer, Rumford Falls Power Co.
- Reynolds, Henry Jones, B. S., Eastport, Pharmacist.
- Rogers, Charles Wilson, M. E., 16 South Canal St., Chicago, Ill., Engineer with Sturtevant Co., Chicago.
- Stevens, William Lewis, M. E., 827 Guaranty Loan Building, Minneapolis, Minn.,

Exporter of Flour.

Williams, John Howard, B. S., Elk River, Minn., County Superintendent of Schools, and County Surveyor.

1877.

- Blackington, Alvah DeOrville, C. E., Dunmore, Pa., Chief Engineer, Erie and Wyoming Valley R. R.
- Burns, Robert Bruce, C. E., Williams, Ariz.,
  - Chief Engineer, Santa Fe Pacific Railroad Co.
- Dakin, Eugene Herbert, B. S., Bangor,

Dealer in Bicycles and Phonographs, 42 Harlow St. Bangor.

- Danforth, Edward Franklin, B. S., LL. B., Skowhegan, Lawyer.
- Elkins, Augustus Jerome, B. M. E., 58 Chamber of Commerce, Minneapolis, Minn.,

Bookkeeper, Victoria Elevator Co.

- Emery, Alicia Towne, B. S., Orono.
- Gould, Samuel Wadsworth, B. S., Skowhegan, Lawyer.
- \* Lunt, Joseph Cony, B. C. E.
- Phillips, Fred Foster, B. S., Room 12, Warder Building, Washington, D. C.,

Broker.

- \* Shaw, Samuel, B. M. E.
- Stevens, Thomas Jefferson, B. M. E., Auburn,

Druggist.

Stone, Frank Pierce, B. S., 143 Main St., Norway, Druggist.

- † Sturgis, George Eugene, B. C. E., Portland, Ore., Travelling Salesman.
- Towne, Charles Elmer, B. C. E., Rocky Bar, Idaho,
  - Mining Engineer and Superintendent of Mines.
- Weeks, Nellie Estelle, B. S., Orono,
  - (Mrs. Llewellyn Spencer.)
- <sup>†</sup> Weeks, James Walter, B. M. E., North Des Moines, Iowa, Architect.
- † Webster, Ivan Eldorus, B. S.

## 1878.

- Brown, Emma, B. S., Enfield, (Mrs. Charles Gilman.)
- Caldwell, Andrew James, B. M. E., 120 Liberty St., New York, N. Y., General Superintendent and Mechanical Engineer, with Henry R. Worthington.
- Chamberlain, Cecil Calvert, B. S., Enderlin, N. D.,
- Lumber Dealer.
- Fernald, George Everett, B. C. E., Wilmette, Ill., Commercial Salesman.
- † Heald, James, B. S., 1408 3rd Ave., Seattle, Wash., Civil Engineer and Surveyor.
- Locke, John, B. S., 238 St. John St., Portland,
  - Chief Clerk, General Freight Department, Maine Central R. R.
- <sup>†</sup>Oakes, Frank Judson, B. C. E., care of H. R. Worthington, Brooklyn, N. Y., Box 14,
  - Mechanical Engineer.
- Patterson, John Cameron, B. C. E., Great Falls, Mont., Resident Engineer, Great Northern Railway.
- Tripp, Winfield Eastman, B. C. E., LL. B., Iron River, Wis.,
  - Attorney at Law, firm of Miles & Tripp.
- Walker, Edward Colby, B. S., Bridgton,
  - Lawyer.
- Webster, Otis Colby, B. S., Bowditch, Webster & Co., Augusta, Druggist.

## 1879.

† Bean, Harry Percy, C. E., Care of G. S. Bean, 4 Eden Ave., Campbell, Calif.,

Ranchman.

Blake, Edward Josiah, C. E., 205 Adams St., Chicago, Ill.,

- Consulting Engineer, Chicago, Burlington and Quincy Railroad Co.
- Crosby, Simon Percy, B. S., 803 Goodrich Ave., St. Paul, Minn.,
- Attorney and Counsellor at Law, Offices 610-611 Globe Building. Cutter, John Dana, B. S., M. D., Tomahawk, Wis.,

Physician and Surgeon.

Decker, Wilbur Fisk, M. E., Phœnix Building, Minneapolis, Minn., Vice President, St. Anthony Falls Bank.

- Decrow, David Augustus, B. C. E., Lockport, N. Y., Chief Engineer, Holly Manufacturing Co.
- † Ferguson, Willis Edwin, B. S., Los Angeles, Calif., Nurseryman and Orchardist.
- Gibbs, Charles Wingate, C. E., Telluride, Colo., Civil and Mining Engineer.
- Gould, Annie May, B. S., 1404 Sylvanie St., St. Joseph, Mo., (Mrs. Loomis F. Goodale.)
- \* Holt, Nellie Maud, B. S.
- Kidder, Frank Eugene, C. E., Ph. D., 628 14th St., Denver, Colo., Consulting Architect and Structural Engineer.
- Libby, Mark Dunnell, B. C. E., El Reno, Okl. Ter., Attorney at Law.
- \* Loring, Charles Sewall, B. M. E.
- Merrill, George Perkins, M. S., Ph. D., U. S., National Museum, Washington, D. C.,

Head Curator, Department of Geology.

Meserve, John William, B. M. E., The Westinghouse Electric & Mfg. Co., East Pittsburg, Pa.,

Mechanical Engineer, Westinghouse Electric & Manufacturing Co.

Moore, Arthur Lee, B. S., Camden,

Agent, Boston and Bangor Steamship Co.

- Morse, Charles Adelbert, C. E., 519 2nd St., Fort Madison, Ia., Resident Engineer, Chicago Division, Atchison, Topeka and Santa Fe Railway.
- Potter, Frederick David, B. M. E., 39 Cortlandt St., New York, N. Y., Manager of the F. D. Potter Co., Engineers and Contractors; Agents, Straight Line Engine.
- \* Shaw, Alton Jhacellous, B. M. E.
- Vinal, Percia Ann, M. S., Orono,

(Mrs. Albert White.)

- <sup>†</sup> Warren, George Otis, B. S., Fryeburg, Farmer.
- <sup>†</sup> Webster, Herbert, B. S.

## 1880.

- Atwood, Horace Ward, B. S., 228 Pleasant St., Brockton, Mass., Real Estate Dealer.
- Bartlett, James Monroe, M. S., Orono, Chemist of the Agricultural Experiment Station of the University of Maine.
- Brown, Albert Hinckley, B. S., Oldtown, Manager, Oldtown Branch Eastern Trust and Banking Company; Treasurer and Clerk, Ounegan Woolen Company.
- † Davis, Marcia, B. S., 337 South Fifteenth St., Denver, Colo., (Mrs. Joseph D. Stevens.)
- Elliott, Fred Burton, B. S., Waterville, Principal, Waterville Business College.

- \* Farrington, Sarah Perkins, B. S.,
  - (Mrs. George P. Merrill.)
- Fernald, Charles Wilbur, B. S., South Levant, Merchant and Postmaster.
- Fickett, Fred Wilden, M. S., Galveston, Tex., Attorney, firm Denson and Fickett; General Attorney for G. and I. S. R. R. and G. B. and S. W. R. R.

Lufkin, George William, B. C. E., Coatesville, Pa.,

Assistant Engineer, Wilmington and Northern R. R.

- Mansfield, Frank Albert, M. S., B. D., 182 State St., Hackensack, N. J., Clergyman.
- Matthews, Annie Amelia, B. S., Stillwater, Teacher.
- Murray, Henry Wilson, B. C. E., Napa, Calif., Farmer and Teacher.
- † Patten, Franklin Robert, C. E.
- Pease, Charles Trueman, B. S., LL. B., 1716 Marion St., Denver, Colo., U. S. Surveyor General's Office.
- Purrington, James Frank, B. A., 1043 Washington St., Bath, Clerk, Railway Mail Service.

#### 1881.

- Andrews, Henry Harris, M. E., Callaway, Neb., Cashier, Bank of Callaway.
- Brown, Henry William, M. S., Literary Institution, New Hampton, N. H., Vice Principal and Professor Metaphysics and Geology.
- Buck, Clara Louise, B. S., Eurika, Calif.,

(Mrs. Thomas W. Hine.)

† Colburn, Fanny Eliza, B. S., 2404 Capital Ave., Omaha, Neb., (Mrs. Arthur L. Fernald.)

Farrington, Edward Holyoke, M. S., 315 Mills St., Madison, Wis., Associate Professor of Dairy Husbandry; in charge of Dairy

School, University of Wisconsin.

Farrington, Oliver Cummings, M. S., Ph. D., Field Columbian Museum, Chicago, Ill.,

Curator of Geology, Field Columbian Museum, Chicago.

- Fogg, Charles Henry, B. C. E., Greensburg, Pa., Civil and Mining Engineer.
- † Ingalls, Aldana Theodore, B. C. E., Winston, Mont., Mining.
- \* Johnson, Robert John, B. C. E.
- † Libby, Clara Alice, B. S., 241 Water St., Augusta, Milliner.
- McIntyre, Horace Flanders, M. E., Waldoboro,

Mechanic. Chairman, Board of Selectmen.

- Moor, Charles Lincoln, B. C. E., Hartland,
  - Bookkeeper, Linn Woolen Co.
- \* Murray, Benjamin Franklin, B. C. E.

<sup>†</sup>Osborn, Edwin Winthrop, B. C. E., Hotel Metropolitan, St. Paul, Minn.,

Chief Clerk for General Superintendent, Northern Pacific R. R. Pease, Oscar Leroy, B. S., Tucson, Ariz.,

Train Dispatcher, S. P. R. R.

Plaisted, Harold Mason, M. E., 2206 N. 2nd St., St. Louis, Mo., Mechanical Expert and Designer, with E. E. Souther Iron Co., St. Louis.

Ring, Alice Isabel, B. S., Orono,

(Mrs. Charles J. Dunn.)

Ring, Mary Lillian, B. S., Callaway, Neb., (Mrs. H. H. Andrews.)

\* Smith, Roscoe Loring, B. S.

Sturtevant, George Washington, Jr., B. C. E., 1208 Fisher Building, Chicago, Ill.,

> Consulting Engineers, firm of Sturtevant & Todd; also President Phœnix Construction Co.

† Wade, Frank Swan, B. S., New Richmond, Wis.,

Physician and Surgeon; Attending Physician to the St. Croix County Asylum for Insane.

\* White, Walter Adelbert, B. C. E.

\* Wilson, John Barrows, B. S.

Wyman, Levi Augustus, B. C. E., North Pasadena, Calif.,

Real Estate Lawyer and Civil Engineer.

## 1882.

Bickford, Charles Swan, B. S., Belfast,

Secretary, The Swan and Sibley Co., Jobbers of Grain and Groceries.

† Boynton, Jacob Leighton, B. S., Lynn, Mass.

Browne, Charles Weston Hopkins, B. M. E., Takoma Park, D. C., U. S. Patent Office, Washington, D. C.

Buzzell, Stephen Jennings, B. C. E., Oldtown,

General Engineering Work.

† Dunton, Oscar Howard, M. E., Cincinnati, O.

Flint, Walter, M. E., Orono,

Professor of Mechanical Engineering, University of Maine.

Fuller, George Ripley, B. S., South West Harbor,

Attorney at Law.

- Garland, Charles Clinton, B. S., Oldtown.
- Gould, Joseph French, B. S., Oldtown, Lawyer.
- Hine, Thomas Walton, B. S., Eureka, Calif., Manufacturer of red wood lumber.

Howard, Will Russell, B. S., Belfast,

Manufacturer, firm of F. A. Howard and Son; Teacher.

Hurd, Alonzo L., B. S., M. D., Somers, Conn., Physician and Surgeon.

- †Keith, Alfred Justin, B. C. E., Oldtown.
- †Kimball, Frank Issacher, C. E., Scalp Level, Pa.,
  - District Superintendent, White Coal Mining Company, in charge of Westmoreland, Somerset and Cambria Counties.
- Patten, James Herbert, B. S., M. D., Amherst, Physician and Surgeon.
- Reed, Frederick Martin, B. M. E., New Bedford, Mass., Draftsman, Johnson Typesetter Co.
- **†Snow**, Gleason Cyprian, B. S., North Orrington,
  - Farmer.
- Starrett, Avery Palmer, B. S., Warren, Market Gardner; Statistical Correspondent U. S. Department of Agriculture for Knox County.
- Todd, Frank Herbert, B. C. E., 1208 Fisher Building, Chicago, Ill., Consulting Engineer and Superintendent, firm of Sturtevant & Todd.
- Webster, Eben Crowell, B. S., Orono,

Treasurer Union Land Co., Oldtown.

- <sup>†</sup>Wight, Willard Alberto, B. C. E., Trinidad, Colo. and Atlanta, Colo., Stock Raising and Fruit Business.
- Woodward, Daniel Carr, M. E., 510 South Ave., Wilkinsburg, Pa., Designer, Westinghouse Elec. & Mfg. Co., Pittsburg, Pa.

## 1883.

Cain, James Henry, B. S., Twinlakes,

Merchant.

Cilley, Jonathan Vernet, B. C. E., Cruz del Eji, Prov. of Cordoba, Argentina,

General Manager, Ferro-Carril Argentino del Norte.

Emery, Frank Edwin, M. S., 44 Boylan Ave., Raleigh, N. C.

Fernald, Arthur Liddell, B. S., 2404 Capitol Ave., Omaha, Neb.,

Agent, The American Thread Co. of New York & Chicago.

Kelleher, Bartholomew Patrick, B.S., M. D., Orono,

- Physician.
- Merrill, Lucius Herbert, B. S., Orono, Professor of Biological Chemistry, and Chemist in the Agri
  - cultural Experiment Station of the University of Maine.
- Michaels, Janie Chase, M. S., Merrymount Road, Quincy, Mass.,
- Teacher of German, Quincy High School. Mullen, Charles Ward, B. C. E., Bangor,

Manufacturer.

- †Patten, Truman Miller, B. C. E., Sioux Falls, Physician.
- Powers, Harry Wilson, B. S., 45 Armandine St., New Dorchester, Boston, Mass.,

Real Estate Agent, No. 1, Hancock St., Boston, Mass.

Putnam, Charles Edgar, B. C. E., Jamaica Plain, Mass., Engineer, Park Department, Boston, Mass.

- Robinson, Lewis, Jr., B. M. E., M. D., Carmel, Physician: Superintendent of Schools.
- Sutton, George Arthur, B. C. E., Orono, Farmer.
- Taylor, Levi William, M. S., Waverly, Iowa, Marble Worker.

## 1884.

- Allan, George Herman, B. S., 121 Exchange St., Portland, Lawyer.
- \* Burleigh, Will Hall, B. C. E.

\* Conroy, Mary Frances, B. S.,

(Mrs. A. R. Saunders.)

- Cutter, Leslie Willard, B. C. E., Bangor, Contractor and Builder.
- Fernald, Harriet Converse, B. S., Spokane, Wash., (Mrs. John A. Pierce.)
- \*Hatch. Elmer Ellsworth, B. S.
- Hill, John Edward, B. C. E., Anoka, Minn., Civil Engineer.
- Kelley, Joseph Grant, C. E., P. O. Drawer 50, Portland, Oregon. Assistant Engineer, U. S. Engineer Department.
- Ladd, Edwin Fremont, B. S., Agricultural College, Fargo, N. D., Professor of Chemistry, North Dakota Agricultural College; Chemist in Experiment Station; and Editor of the Sanitary Home.
- Lunt, Clarence Sumner, B. C. E., Rochester, N. Y., General Manager and Treasurer, Metallic Basket Co.
- Stevens, Fred Leroy, B. S., V. S., Weehawken, N. J.,
  - U. S. Government Meat Inspector. (Bureau of Animal Industry.)
- Webber, William, M. E., 930 Turner Ave., Chicago, Ill., Draftsman, McCormick Harvesting Machine Co.

## 1885.

Chamberlain, George Walter, M. S., Weymouth, Mass., (10 mo.) West Lebannon, Me., (July and August,)

Prin. Hunt School, Weymouth.

- Dole, Asher, B. C. E., Superior, Wis.,
  - Timekeeper, The N. W. Coal R'y Co.

† Dutton, Orion Jesse, B. S., Boston, Mass.

- Fernald, Henry Torsey, M. S., Ph. D., Amherst, Mass.,
  - Professor of Entomology, Mass. Agricultural College, and Associate Entomologist, Hatch Experiment Station.
- Goodridge, Elmer Orlando, M. E., 82 Canton St., Lowell, Mass.,
  - Chief Engineer, Lowell, Lawrence and Haverhill Power Stations, Mass. Electrical Co.
- Hanscom, George Loring, B. S., 88 Sherman Ave., Newark, N. J., Clergyman, First Congregational Church.

- Hart, James Norris, C. E., M. S., Orono,
- Professor of Mathematics and Astronomy, University of Maine. Hull, Frank Eugene, C. E., Waterville,
  - Engineer in charge of construction of Sulphite Mill, Hollingsworth & Whitney Co.
- Keyes, Austin Herbert, B. C. E., B. Ph., M. A., Westerly, R. I., Student, Brown University.
- Morey, William, Jr., B. C. E., Kensington, Md., Topographer, Adjutant General's Office, War Department, Washington, D. C.
- Moulton, Joseph Perkins, B. S., Springvale, Farmer.
- Paine, Leonard Gregory, M. E., 291 Commercial St., Portland, Treasurer, Monson-Burmah Slate Co.
- † Pennell, Elmer Ellsworth, B. M. E., Saccarappa.
- Riggs, Louis Warner, B. M. E., Ph. D., 414 East 26th St., New York City,
  - Chemist and Instructor in Chemistry, Cornell University Medical College.
- Russell, Fremont Lincoln, B. S., V. S., Orono,

Professor of Biology, University of Maine, and Veterinarian of the Agricultural Experiment Station.

## 1886.

- Allan, Bert John, B. C. E., North Middleboro, Mass., Lawyer, and principal of Pratt Free School.
- Ayer, Josiah Murch, C. E., Hotel Hamlet, Somerville, Mass., Assistant Engineer, Boston Elevated Railway.
- Barker, George Greenleaf, B. M. E., Care of Deering Harvester Co., Chicago, Ill.,

Head Draftsman, Special Machine Department.

Black, George Fuller, C. E., Portland,

Superintendent, Mt. Div., Maine Central Railroad.

- Blagden, John Decker, B. C. E., Weather Bureau, Memphis, Tenn., Observer, U. S. Weather Bureau.
- French, Heywood Sanford, C. E., Newtonville, Mass., Boston representative, The J. W. Bishop Co., 53 State St., Boston.
- Graves, Edwin Dwight, C. E., 650 Main St., Hartford, Ct.,

Civil Engineer. Chief Engineer for Commissioners Connecticut River Bridge and Highway District.

- Jones, Ralph Kneeland, B. S., Orono,
  - Librarian, University of Maine.
- Lenfest, Elmer, B. C. E., Snohomish, Wash.,
- Civil Engineer and Surveyor. U. S. Deputy Mineral Surveyor. Lockwood, James Frederick, M. E., 71 Broadway, New York, N. Y. Chief Draftsman, Otis Elevator Company.

- Lull, George Frederick, M. S., Great Works,
  - Assistant Superintendent and Chemist, Orono Pulp and Paper Co., Orono.
- Merriam, Willis Henry, B. C. E., S. 358 Coeur d'Alene Ave., Spokane, Wash.,
  - Attorney at Law, 327 "The Rookery."
- Merritt, Elmer Ellsworth, M. E., Des Moines, Iowa, Insurance and Lightning Rod Dealer.
- Page, Arthur Dean, C. E., St. Paul, Minn.,
  - Chief Draftsman, Bridge Department, Great Northern Railway Line.
- Ray, Irving Burton, B. C. E., 167 Cambridge St., Boston, Mass., Grocer.
- Twombly, Sidney Smith, B. S., D. V. S., Fullerton, Calif., Instructor in Science, Fullerton Union High School.

1887.

- Burleigh, John Henry, B. C. E., 93 Main St., Waterville, Civil Engineer.
- <sup>†</sup> Cilley, Luis Vernet Prince, B. C. E., 59 Calle Rivadona, San Isidro, Prov. Buenos Ayres, Argentine Republic, S. A.
- Clark ,Bertrand Elmer, M. S., Bar Harbor, Lawyer.
- Coffin, Edwin Voranus, B. C. E., Harrington, Clerk.
- Colby, David Wilder, B. S., Skowhegan, Superintendent of Schools.
- Hicks, Alice Albur, M. S., Portland, (Mrs. George F. Black.)
- Lazell, James Draper, B. M. E., Room 1001, Real Estate Trust Co. Building, Philadelphia, Pa.,

Representing The Plunger Elevator Co., Worcester, Mass.

- McNally, Henry Allen, B. C. E., Denver, Colo., Observer, U. S. Weather Bureau.
- Mason, Charles Ayers, B. C. E., Little Rock, Ark.,
  - Engineer, Choctaw & Memphis R. R.; in charge St. Francis and White River Bridges.
- † Merrill, Fenton, B. C. E., Lawrence, Wash., Lumberman.
- Saunders, Addison Roberts, M. E., Brookings, S. Dak.,
  - Professor of Architectural and Agricultural Engineering, South Dakota Agricultural College.
- Sears, Cassius Almon, B. C. E., Lyman, Wash.
- Stevens, Charles Hildreth, B. M. E., Fort Fairfield, Lumber Manufacturer.
- Sturtevant, Charles Fremont, C. E., 321 North Main St., St. Louis, Mo., Civil and Hydraulic Engineer.

- Trask, Frank Eilsworth, C. E., Ontario, Calif., Civil and Hydraulic Engineer.
- Vose, Charles Thatcher, B. C. E., 122 Sherman St., Portland, Assistant Civil Engineer, Maine Central R. R.
- Webb, Howard Scott, M. E., E. E., Orono,

Professor of Electrical Engineering, University of Maine. Williams, John Sumner, B. S., LL. B., Guilford,

Attorney at Law.

## 1888.

Andrews, Hiram Bertrand, B. C. E., 101 Milk St., Boston, Mass., Civil Engineer, Boston Elevated Railway Co.

\*Batchelder, George Stetson, B. M. E.

Blanchard, Charles DeWitt, B. C. E., Oldtown,

Assistant Engineer, International Paper Co.

- Boardman, John Russell, B. S., Hallowell,
- Pastor, Congregational Church.
- Brick, Francis Stephen, M. S., Belfast, Superintendent of Schools.
- Butler, Harry, B. S., M. D., Bangor, Fhysician.
- Campbell, Dudley Elmer, C. E., Newport, R. I., Principal, Coddington School.
- Eastman, Fred Langdon, M. E., Cliftondale, Mass.,

Draftsman, General Electric Co., Lynn, Mass.

- \*Elwell, Edward Henry, B. S.
- Hancock, William Jerome, M. S., Erasmus Hall High School, Brooklyn, N. Y.,

Teacher of Chemistry, Erasmus Hall High School.

Hatch, John Wood, M. S., Sprague's Mills,

Pastor, M. E. Church.

- Howes, Claude Lorraine, M. E., Room 49 City Hall, Boston, Mass., Assistant Engineer, Water Department, City of Boston.
- Lincoln, Harry Foster, B. S., M. E., 311 Main St., Worcester, Mass., Chief Engineer and Superintendent of Construction, New England Electric Railway Construction Company.
- Lord, Thomas George, M. S., Skowhegan,

Farmer.

- Marsh, Ralph Hemenway, B. S., M. D., Guilford, Physician.
- \* Miller, Seymore Farrington, B. C. E.
- † Philbrook, William, B. C. E., Worcester, Mass., With Plunger Elevator Co.
- Rogers, Seymore Everett, B. M. E., Hanover, New Mexico,

Chief Engineer, The Hanover Mining Co.

- † Seabury, George Edwin, B. M. E., 289 French St., Bangor.
- Small, Frank Llewellyn, B. M. E., King St., South Hampton, Va., Merchant.
- † Smith, Frank Adelbert, C. E., Care of H. C. Shepard, Danvers, Mass.

Wilson, Nathaniel Estes, M. S., 807 Centre St., Reno, Nevada, Chemist to Nevada Expt. Sta., and Professor Agr. Chemistry and Dairying, Nevada State University.

## 1889.

\* Briggs, Fred Percy, B. S.

Cushman, Charles Granville, B. M. E., 30 Broad St., New York City, Engineer, International Paper Company.

Edgerly, Joseph Willard, B. C. E., Princeton,

Field Assistant, U. S. Geological Survey.

Ferguson, Jeremiah Sweetser, M. S., M. D., 330 West 28th St., New York, N. Y.,

Physician; Instructor in Histology, Cornell University Medical College.

- Freeman, George Gifford, B. S., Cherryfield, Lawyer and Insurance Agent.
- <sup>†</sup> Gay, George Melville, B. S., Damariscotta, Clerk.
- Haggett, Eben Raymond, B. S., 32 Marine Bank Building, Baltimore, Md.,

Manager, J. S. Horkins Lumber Co.

Leavitt, Nellie Louise, B. S., Skowhegan.

Reed, John, B. C. E., 3 Depot St., Concord, N. H.,

Assistant Engineer, B. & M. R. R.

Reed, Nellie Waterhouse, B. S., 405 Eastern Ave., Malden, Mass., (Mrs. Edwin R. Jordan.)

- \* Stevens, Fred, B. M. E.
- † Vickery, Gilbert Scovil, B. C. E., Bangor, City Engineer of Bangor.

\* White, Mark Elmer, B. C. E.

Wilson, Mortimer Frank, B. S., Bangor, Market Gardener.

## 1890.

Andrews, Franklin Orris, B. M. E., 6 Victoria St., London, S. W., England.

Mechanical Engineer, Mossberg Roller Bearings Co., Std.

- Babb, George Herbert, B. M. E., 35 Concord St., Portland, Manual Training Instructor. In charge of Manual Training Dept. City Schools.
- Bird, John, B. M. E., Rockland,

Manufacturer.

- <sup>†</sup> Blackington, Ralph Harvey, B. S., Box 124, Rockland, Retail Shoe Dealer, R. H. Blackington and Co.
- Bowden, George Irving, B. C. E., Hingham, Mass., Principal of West School.
- Clark, Hugo, C. E., 3 Granite Block, Park St., Bangor, Attorney and Counsellor at Law.

- Coffin, Alphonso John, B. S., 910 Tremont Building, Boston, Mass., New Eng. Representative, Joseph Dixon Crucible Co.
- Croxford, Walter Everett, B. M. E., 354 Van Vranken Ave., Schenectady, N. Y.,

Draftsman for General Electric Co.

- Dow, Fred Todd, B. M. E., 831 Victory Ave., Schenectady, N. Y., Assistant Foreman, Drafting Room, General Electric Co.
- Drew, Albert Wilson, B. M. E., 116 28th St., Newport News, Va., Leading Draftsman with Newport News Shipbuilding & Dry Dock Co.
- Dunton, Harris Drummond, B. M. E., 2 Central Square, Cambridgeport, Mass.,
  - Draftsman with E. D. Leavitt, Jr.
- Farrington, Horace Parker, B. M. E., 1436 Chapin St., N. W., Washington, D. C.,

Engineer.

- Gould, George Pendleton, B. S., 106 Forest Ave., Bangor, Railway Postal Clerk, Bangor and Boston R. P. O.
- Grover, Nathan Clifford, B. S., C. E., Orono,
- Professor of Civil Engineering, University of Maine.
- <sup>†</sup>Hardison, Allen Crosby, B. C. E.,
  - Civil and Hydraulic Engineer.
- Harvey, Chandler Cushman, C. E., Fort Fairfield, Postmaster.
- Hayes, Samuel Henry Tewksbury, M. S., 421 N. Charles St., Baltimore, Md.,

Manager, The Walker-Gordon Laboratory. (Modified Milk.)

- Heath, Everett Fenno, B. M. E., 222 48th St., Newport News, Va., Hull Draftsman, Newport News Shipbuilding and Dry Dock Co.
- Kelley, Edward Havener, B. S., Bangor House, Bangor,

Managing Editor, Bangor Daily Commercial.

- \* Keyes, George Edwin, B. M. E.
- Leavitt, Hannah Ellis, B. S., Orono. (Mrs. Walter Flint.)
- Morey, Elmer Lake, B. C. E., Columbo, Ceylon.
- Vice and Deputy Consul at Ceylon for the United States.
- Morrill, Edmund Needham, B. S., Warren, N. H.,
  - Chemist, Warren Separator Co.
- Owen, John Wesley, B. C. E., 101 Milk St., Boston, Mass., Civil Engineer, Boston Elevated Railway.
- Peirce, Varna John, B. M. E., 5513 Monroe Ave., Chicago, Ill., Mechanical Engineer and Draftsman.
- Peirce, William Bridgham, B. M. E., 51 Hammond St., Bangor, Lawyer.
- Pierce, William Barron, B. M. E., 60 Pine St., Milford, Mass., Draftsman, Rawson & Morrison Mfg. Co., Cambridgeport, Mass.

- Pillsbury, George Melville, B. S., Lowell, Wash., Assistant Superintendent and Chemist, Everett Pulp & Paper Co.
- Quincy, Frederick Grant, B. M. E., State St., Bangor, Surveyor of Land and Lumber.
- Rackliffe, Joseph Riley, B. C. E., 1211 Frederick Ave., St. Joseph, Mo., City Engineer, St. Joseph, Mo.
- Reed, Fullerton Paul, B. C. E., Ash Forks, Arizona, Wool Grower.
- Sawyer, Frank Wade, B. S., M. D., Everett, Mass., Physician and Surgeon.
- Swan, Clarence Buzzell, B. M. E., Oldtown, Member of firm, Star Printing Co.
- Wallace, Chester Jay, B. C. E., 3 Mt. Vernon St., Boston, Mass., Assistant Engineer, Metropolitan Water Board.
- † Webb, Winfield Scott, C. E., Houlton, Principal, Grammar School.
- Wight, Ralph Holbrook, C. E., Estherville, Iowa, Civil Engineer, M. & St. L. R. R.
- Williams, Charles Sampson, M. S., 3 Court St., Woburn, Mass., Division Supt., Gypsy Moth Commission.

## 1891.

- Arey, Ralph Jesse, C. E., Williams, Arizona, Assistant Engineer, Santa Fe Pacific R. R.
- Bailey, William Melvin, B. C. E., 206 Summer St., Malden, Mass., Resident Engineer, Concord Sewerage System.
- Clark, Edmund, M. S., 105 Beech St., Flushing, L. I., N. Y., Assistant Chemist, Department of Health, New York City.
- <sup>†</sup>Clayton, Charles, B. S., Taopi, Minn., Manager of Farm.
- Farrington, Wallace Rider, B. S., Honolulu, Hawaiian Islands, Editor and part owner, Evening Bulletin.
- Farrington, William Rowe, B. C. E., 4 Mt. Vernon St., Boston, Mass., Division Engineer, Mass. Highway Commission.
- Flanagan, John Henry, B. M. E., Rockland, Mailing Clerk, Rockland P. O.
- Graves, Joseph Colburn, M. E., 71 Broadway, New York, N. Y., Assistant Engineer, Otis Elevator Company.
- Hall, Herbert Austin, C. E., Payson St., Revere, Mass., Superintendent of Streets, Revere, Mass.
- Hamlin, Cyrus, B. S., M. D., 150 Putnam Ave., Brooklyn, N. Y., Physician.
- Keyes, Prescott, Jr., C. E., M. A., Bar Harbor, Principal, Bar Harbor High School.
- Kilbourne, Charles Herbert, B. S., 2254 7th Ave., New York, N. Y., Milk Inspector, Dept. of Health, 55th St. and 6th Ave., N. Y. City.

Lord, Robert William, B. M. E., 116 28th St., Newport News, Va.,

Hull Draftsman, Newport News Shipbuilding & Dry Dock Co.

† Menges, Hugo Gustave, B. M. E., 22 Monument Square, Charleston, Mass.

Assistant Engineer, Metropolitan Water Board.

† Merrill, True Lander, B. M. E., Lawrence, Wash.,

Lumberman.

Moulton, Fred Charles, M. S., 17 Russell St., Malden, Mass.,

Chemist, Gypsy Moth Department, Mass. Board of Agriculture. † Patten, William Nickels, B. C. E., 33 Gold St., New York, N. Y.,

Chief Draftsman, New York Heat, Light & Power Co. Starrett, Henry Vaill, B. S., Warren,

Market Gardener.

Steward, John White, B. M. E., Skowhegan, Miller.

Taylor, Charles Norton, C. E., 130 Prescott St., Clinton, Mass., Civil Engineer and Contractor of Public Works.

Thompson, George Edward, B. C. E., Orono,

Lawyer.

Valentine, William Alton, M. E., 1933 Parrish St., Philadelphia, Pa., Draftsman, E. H. Godshalk Co., 23rd & Hamilton Sts., Philadelphia.

1892.

Atherton, George Frederick, B. M. E., Susquehanna, Pa., Engineer, Erie Railroad Company.

Atkinson, William Hacker, B. C. E., Phillipsdale, R. I.,

Superintendent of construction for building contractor.

Bristol, Mortimer Lucius, B. M. E., West Hartford, Ct.,

Draftsman, Colt's Patent Fire Arms Manufacturing Co.

Butterfield, William Rowe, B. C. E., 17 Wyoming Ave., Melrose, Mass., Assistant Engineer, Boston Elevated Ry. Co., 101 Milk St., Boston.

Clark, Roscoe Conkling, B. M. E., Susquehanna, Pa.,

Engineer, Erie Railroad Company.

Danforth, Ernest Wilbur, B. C. E., 468 Medford St., Somerville, Mass., Assistant City Engineer, in Charge of Sewers.

Doolittle, Herbert Edward, B. C. E., East Northfield, Mass., Dealer in Lumber.

Farrington, Mellen Edward, B. M. E. Brewer,

Draftsman, Union Iron Works, Bangor.

Fernald, Robert Heywood, M. E., Case School of Applied Science, Cleveland, O.,

> Assistant Professor of Mathematics and Mechanical Engineering.

Gibbs, John Clinton, B. M. E., 144 Munroe St., Lynn, Mass., Florist.

Grover, Arthur Curtis, B. C. E., 43 Lincoln Boulevard, Rutland, Vt., City Engineer, and Superintendent of Streets and Water Works.
- Healey, Warren Evans, B. M. E., 5833 Bartmer Ave., St. Louis, Mo., Salesman, Trinidad Asphalt Roofing Co.
- Holden, William Cross, B. M. E., High School, Lynn, Mass., Director of Manual Training and Instructor in Mathematics.
- † Maguire, George, C. E., 46 Chestnut St., Waltham, Mass., Assistant Engineer, Hobbs Brook Basin, Cambridge Water Works.
- Randlette, Charles Maurice, B. S., M. D., Monmouth, Physician.
- <sup>†</sup> Timberlake, Stanley Milton, C. E., 31 Milk St., Boston, Mass., Surveyor and Draftsman, Mutual Association Fire Insurance.
- Tolman, Frank Stevens, B. C. E., 779 Steinway Ave., Long Island City, N. Y.,

Chemist, Oakes Manufacturing Company.

Tyler, Joseph Albert, B. C. E., 59 Congress St., Portland, Civil Engineer and Superintendent for Thos. Shanahan, General contractor and builder of sewers and stone masonry.

#### 1893.

- Buck, Hosea Ballou, C. E., Room 2, Columbia Building, Bangor, Draftsman.
- Crosby, Walter Wilson, C. E., 4 Mt. Vernon St., Boston, Mass., Resident Engineer, Mass. Highway Commission.
- <sup>†</sup> French, Charles Frederick, B. M. E., 7 Fayette St., Beverly, Mass., With Consolidated and McKay Machine Co.
- Gannett, Charles Henry, B. C. E., 7 Academy St., Arlington, Mass., Civil Engineer, Office 1102 Exchange Building, Boston, Mass.
- Gould, Harris Perley, M. S., College Park, Md.,

Assistant State Entomologist, and Assistant Entomologist in Maryland Agr. College & Expt. Station.

Hutchinson, George Weymouth, B. C. E., Greensburg, Pa., Civil Engineer.

Jack, Walter Dows, B. S., Box 42, Cateret, N. J., Supt., International Chem. Co., Cateret, N. J.

Jordan, Alva Thomas, B. S., New Brunswick, N. J.,

Assistant in Horticulture, New Jersey State Experiment Station.

- Kittredge, Charles Prentiss, B. S., Southwest Harbor,
  - Pastor, Manset Baptist Church.
- Lewis, Hugh McLellan, B. C. E., South Berwick.
- Murphy, Charles Clark, B. C. E., Clinton, Mass.,
  - Engineering Inspector, Metropolitan Water Board.

Rowe, George Freeman, B. M. E., Bangor,

- Draftsman, International Paper Co., N. Y.
- Shaw, Orrin John, B. C. E., 723 Spruce St., Philadelphia, Pa., Dentist.
- Smith, Harry Maubec, B. M. E., 23 Second St., Bangor, Partner in Coombs and Smith Wood Co.

- Webster, John Milton, B. S., Care of Pacific American Fisheries Co., Fairhaven, Wash., Bookkeeper.
- Whitney, George Ansel, B. M. E., 235 Main St., Lewiston, Hardware Merchant.
- Williams, Hiram B. S., M. D., 150 Monroe St., Passaic, N. J., Physician.

1894.

- Bowler, Frank Colburn, B. M. E., 148 Ohio St., Bangor,
  - Draftsman with H. S. Ferguson, Chief Engineer Great Northern Paper Co., Millinocket.
- Cowan, Edward Henry, B. C. E., Care of A. D. Schermerhorn, Div. Eng., Union Pacific R. R., Omaha, Neb.,

Assistant Engineer, Union Pacific R. R.

- Cowan, George Parker, B. C. E., Boston, Mass.,
- Contractor's Engineer, O'Brien, Sheehan, Perkins & McHale. \* Durham, Leroy Tolford, B. C. E.
- Gilbert, Charles Edward, B. M. E., Orono.
- Gould, Frank Gilman, B. C. E., Michipicoton Harbor, Ontario, Canada, Civil Engineer, Algoma Central Railway.
- Gray, Jesse Alexander, B. S., Oldtown, Travelling Salesman, United States and England, Bickmore Gall Cure Co.
- Hall, George Henry, M. E., 130 Somerset St., Providence, R. I., Assistant Superintendent, Builders Iron Foundry.
- Harvey, James Elmore, B. M. E., Readfield, Member of firm of Wm. Harvey & Sons, Manufacturers of Edge Tools and Woolen Goods.
- <sup>†</sup> Hayes, Augustus Daniel, B. C. E., 185 High St., Belfast, City Engineer, Belfast.
- Jose, Wallace Hight, B. S., 6 Broad St., Bangor, Lawyer.
- \* Kimball, James Mayberry, B. C. E.
- † Murray, Herbert, B. S., Golden Crown Mine, Bolinas, Calif., Mining Foreman.
- Norwood, Leon Charles, B. C. E., Room 30, Court House, Rockland, City Engineer.
- Rumball, George Washington, Jr., B. M. E., Consolidated & McKay Lasting Machine Co., Beverly, Mass.,

Machinist.

Wood, Edward Butler, B. M. E., Huntsville, Ala., Draftsman with Lockwood, Greene & Co., 131 Devonshire St., Boston, Mass.

1895.

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Boardman, Harold Sherburne, C. E., Box 685, Athens, Pa.,

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- Calderwood, Isaac Glidden, B. C. E., 12 Alcott St., Allston, Mass., Civil Engineer on dock construction, Mass. Harbor and Land Commission.
- Chase, Wendell Wyse, B. C. E., 63 Rosseter St., Dorchester, Mass., Draftsman, Mass. Highway Commission, 4 Mt. Vernon St., Boston, Mass.
- Damon, Frank Hardy, B. S., 102 Ohio St., Bangor, In charge of Department Physics and Chemistry, Bangor High School.
- Ellis, Merton Eugene, B. M. E., 20 Fayette St., Beverly, Mass., Foreman, Consolidated & McKay Lasting Machine Co.

Folsom, Leroy Rowell, B. S., South Norridgewock, Lawyer and Principal Norridgewock High & Grammar Schools.

- Frost, Charles Albert, B. C. E., 52 Winthrop St., Everett, Mass., Civil Engineer, Metropolitan Water Board.
- Grover, Oscar, Llewellyn, B. M. E., B. C. E., 43 High St., Medford, Mass., Resident Engineer, Mass. Highway Commission.
- de Haseth, Gerardus Andries, B. C. E., 372 South Station, Boston, Mass., With Boston & Albany R. R. Co., Engineering Department.
- Knight, Ora Willis, B. S., Bangor, Chemist to the Agricultural Experiment Station of the University of Maine.
- Martin, James William, B. C. E., 38 Oliver St., Boston, Mass., Civil Engineer, B. F. Smith & Bro.
- Merrill, Earl Clinton, B. C. E., East Eddington.
- Moulton, Albion, B. M. E., 3435 N. 3rd St., Philadelphia, Pa., Superintendent, North Penn. Iron Co.
- † Murphy, Walter Marshall, B. C. E., South Norridgewock, Manufacturer of Clothing.
- Pattee, Clifford James, B. C. E., Belfast,
  - Insurance Agent, firm James Pattee & Son.
- Robinson, Halbert Gardner, B. C. E., Ætna Life Building, Hartford, Conn.,

Civil Engineer, with Edwin D. Graves.

- Rollins, Melville Frederick, B. C. E., 71 Third St., Bangor, Assistant Engineer, Bangor & Aroostook R. R.
- Thomas, Charles Dura, B. C. E., West Boylston, Mass., Civil Engineer, Metropolitan Water Board.

#### 1896.

- Farrell, Harry Clifford, B. M. E., Manchester, N. H., Mass. Elect. Power Co.
- Fernald, Roy Lynde, B. C. E., Co. E., 26th Infantry, U. S. V., Manila, Philippine Islands,
  - 2nd Lieutenant, 26th Infantry, U. S. V.

- Gibbs, Edward Everett, B. C. E., 11 East Franklin St., Baltimore, Md., With Gibbs Preserving Co., Baltimore, Md.
- Glidden, Everett Gray, B. M. E., 19 East River St., Hyde Park, Mass., Machinist, The Brainard Milling Machine Co.
- Hobbs, Frederick Andrews, B. S., Alfred,

Law Student.

Jeffery, George Wesley, B. C. E., 36 Norwood St., Everett, Mass., Draftsman, Sheaff & Juastad, 85 Water St., Boston, Mass.

† Kidder, Elmer Elwood, B. C. E., 164 West Canton St., Boston, Mass.

Libby, Frank Joshua, B. M. E., 7 Fayette St., Beverly, Mass., Machinist, Consolidated & McKay Lasting Machine Co.

- Manter, Ralph Barton, B. C. E., Isthmian Canal Commission, San Juan Del Norte, Nicaragua, C. A.,
  - Assistant Engineer, Isthmian Canal Commission.
- Marston, Frank Leonard, B. C. E., 16 Broad St., Room 5, Bangor, Civil Engineer and Patent Attorney. City Engineer.
- Martin, Herman Stephen, B. C. E., Box 1072, Boulder, Calif., Civil Engineer.
- † Niles, Herbert Lester, B. C. E., 191 Broadway, East Somerville, Mass., Civil Engineer, Metropolitan Water Board.
- † Page, Warren Robbins, B. C. E., Newburgh Village, Principal, High School, Hermon.
- Palmer, Percy Burnham, B. C. E., 30 Broad St., New York, Civil Engineer, International Paper Co.
- Pride, Frank Perley, B. S., 12 Dwight St., Boston, Mass., Student, Boston Univ. Law School.
- Randlette, Joseph William, B. M. E., 10 Putnam St., Somerville, Mass., Test Clerk, New England Telegraph & Telephone Co., Boston, Mass.
- Rogers, Lore Alford, B. S., 25 Elmwood Ave., Geneva, N. Y.,
  - Student Assistant in Bacteriology, N. Y. Agr. Experiment Station.
- Sargent, Paul Dudley, B. C. E., Calais,

Assistant Engineer, Washington County R. R.

- Simpson, Erastus Roland, B. M. E., 85 Water St., Boston, Mass., Mechanical Engineer, Contractors Plant Co.
- Starr, John Alvah, B. C. E., 11 Riverside St., Watertown, Mass., Assistant Engineer, Metropolitan Park Commission.
- Steward, Stanley John, B. M. E., Orono,

Foreman of Shop, University of Maine.

Tolman, Gilbert, B. M. E., Raleigh, N. C.,

Teacher, Industrial Department, Shaw University.

- Walker, Perley, B. M. E., Orono,
- Instructor in Mechanical Engineering, University of Maine. Weston, Charles Partridge, C. E., Orono,

Instructor in Civil Engineering, University of Maine.

Weymouth, Frank Elwin, C. E., Isthmian Canal Commission, San Juan Del Norte, Nicaragua, C. A.,

Assistant Engineer, Isthmian Canal Commission.

Whitcomb, Beecher Davis, B. M. E., 3 Rollins St., Boston, Mass., Lineman, Boston Elevated R. R. Co.

Wilkins, Gardiner Benson, B. M. E., 626 Columbus Ave., Boston, Mass., With Boston Elevated Railway Co., Department of Wires and Conduits.

#### 1897.

- Atwood, Edward Moseley, B. S., 462 Cleveland Ave., Chicago, Ill., Chemist, Western Electric Co.
- Brastow, William Thomas, B. C. E., Rockport.
- Brown, William Bourne, B. S., Livermore Falls., Farmer.
- Bryer, Charles Sidney, B. C. E., Port Hawkesbury, Nova Scotia, Assistant Engineer, Canco & Louisburg Railway Co.

Bunker, Stephen Sans, B. C. E., Petersburg, Va., Track Engineer, with The J. P. McDonald Construction Co., New York.

- Chase, John Parks, B. M. E., North Edgecomb, Draftsman.
- Clary, Justin Robert, B. C. E., 1123 Broadway, New York, N. Y., Draftsman, Granite Department, Norcross Bros.
- Cosmey, Stanwood Hill, B. C. E., Box 370, Houlton, Draftsman, Bangor & Aroostook Railroad.
- Duncan, Lindsay, B. S., Union College, Schenectady, N. Y., Instructor in Mathematics and in Engineering.
- Farnham, Charles Henry, B. C. E., Ishmian Canal Commission, San Juan Del Norte, Nicaragua, C. A.,

Assistant Engineer, Isthmian Canal Commission.

- Goodridge, Perley Francis, B. M. E., 177 Chestnut St., Holyoke, Mass., Draftsman, Deane Steam Pump Co., Holyoke, Mass.
- Gould, Vernon Kimball, B. M. E., 65 Second St., Bangor, Assistant Superintendent, Bangor Gas Light Co.
- Grover, Oscar Llewellyn, B. M. E., B. C. E., 43 High St., Medford, Mass.,

Resident Engineer, Mass. nighway Commission.

- <sup>†</sup>Gorham, Frank Edward, B. M. E., Round Pond.
- Heath, Stanley Jacob, B. S., 65 Fourth St., Bangor,
  - Collector for M. C. R. R. Co.
- Holyoke, William Lawrence, B. M. E., Bath,

Foreman, Gas Works, Bath Gas & Electric Light Co.,

Macloon, Ernest Henry, B. M. E., Berlin, N. H.,

Chief Electrician, International Paper Co., Glen Mills.

- Patten, Andrew Jarvis, B. S., Orono,
  - Assistant Chemist of the Agricultural Experiment Station of the University of Maine.

- Porter, Byron Frank, B. S., 3414 Sansom St., Philadelphia, Pa., Student, Medical Department, Univ. of Penn.
- Porter, Joseph White Humphrey, B. S., 3414 Sansom St., Philadelphia, Pa.,

Student, Medical Department, Univ. of Penn.

Rogers, Allen, B. S., Orono,

Instructor in Chemistry, University of Maine.

- Russell, Myron Roswell, B. S., Vernon, Vt., Teacher.
- Stevens, Howard Eveleth, B. C. E., 475 Washington Boulevard, Chicago, Ill.,

Bridge Draftsman with Ralph Modjeski, C. E.

- Upton, Edwin Carlton, B. S., Assistant in Modern Languages, University of Maine.
- Urann, Marcus Libby, B. S., North Easton, Mass., Lawyer, Boston, Mass.

1898.

- † Bailey, Fred Wesley, B. S., Belfast.
- † Barron, Wilson Darling, B. M. E., Dexter.
- Brann, Lewis Jefferson, B. S., Lewiston,
- Law student, McGillicuddy & Morey.
- Crowell, Charles Parker, B. M. E., Berlin, N. H., Draftsman, Burgess Sulphite Fibre Co.
- Davis, Edward Harmon, B. M. E., 24 Washington St., Auburn, Steam fitting.
- Dearborn, John Washington, B. M. E., 46 Hungerford St., Hartford, Conn.

Dillingham, Samuel Clark, B. C. E., Rumford Falls,

Draftsman, Construction Department, International Paper Co.

Dolley, Walter, B. S., 212 Summer St., Boston, Mass.,

Employed in the Estes Publishing Co.

- Dow, Leroy Eugene, B. M. E., Room 10, 11 Exchange St., Portland, Assistant with C. W. Fenn, Civil and Hydraulic Engineer, and Mill Architect.
- Dunn, Rena Ethel, B. S., East Eddington,

Principal, High School.

- † Dunn, Rossell Olin, B. C. E.
- Edwards, Llewellyn Nathaniel, B. C. E., 327 Potts Pl., Johnstown, Pa., Draftsman, Cambria Steel Co.
- Ellis, Walter Lincoln, B. M. E., Bath,
- Draftsman, Bath Iron Works.
- Farrar, Lottie Gertrude, B. S., Bangor.
- Fernandez, Gracia Lillian, B. S., San Juan, Puerto Rico,

Instructor in English in the Benefencia.

Frost, George Sherman, B. C. E., 318 E. 124th St., New York, N. Y., Civil Engineer, Third Ave. Street R'y Co.

- Gibbs, Bernard, B. Ph., 16 Central St., Bangor, Student, U. of M. School of Law.
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Student, Mass. Institute of Technology.

- Higgins, Harry Alston, B. M. E., 17 St. Charles St., Boston, Mass., Draftsman.
- Johnson, Bertrand Randall, B. S., 1475 Congress St., Portland, Representative, International Correspondence Schools, Scranton, Pa.
- Lawrence, George Warren, B. M. E., 54 Beacon St., Chelsea, Mass., Electrician, Charlestown Navy Yard.
- Libby, Albion Dana Topliff, B. M. E., 475 Washington Boulevard, Chicago, Ill.,

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- † Libby, Herbert Ivory, B. M. E., Biddeford.
- Lincoln, Harry Matthew, B. C. E., Bangor,
  - With M. Lincoln, 100 Exchange St., Bangor.
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- Merrill, Dana True, B. S., Co. K., 12th U. S. I., Manila, Philippine Islands,
  - 1st Lieutenant, Co. K., 12th U. S. Infantry.
- Merrill, Elmer Drew, B. S., 1443 Q St., N. W., Washington, D. C., Assistant, Division of Agrostology, U. S. Dept. of Agriculture.
- Merrill, Harrison Pratt, B. M. E., 54 Beacon St., Chelsea, Mass., Electrician, U. S. Navy Yard, Charleston, Mass.
- Pearce, Charles Abram, B. S., 17 St. Charles St., Boston, Mass., With Haskell, Adams & Co., Wholesale Grocers.
- Ryther, Leon Edwin, B. S., Franconia, N. H.,
- Instructor in Science and Mathematics, Dow Academy.
- Sawtelle, Fred William, B. C. E., Waterville, Roadmaster's Assistant, M. C. R. R.
- Small, Albert Clifford, B. M. E., 41 Mall St., West Lynn, Mass., In the employ of General Electric Co.
- Smith, George Albert, B. M. E., 34 Pleasant St., Auburn. Inspector, Screw Machine and Plane Depts. U. S. Machine Co.
- Sprague, Alden Percy, B. M. E., 520 7th St., South Minneapolis, Minn., Draftsman, Twin City Iron Works, Machinists and Founders.
- Starbird, Alfred Andrews, B. S., Battery O, 6th U. S. Artillery, Manila, Philippine Islands,

2nd Lieutenant, 6th U. S. Artillery.

- Stevens, Ray Parker, B. M. E., 475 Washington Boulevard, Chicago, Ill., Superintendent Elect. Div., Calumet Elevator Co., S. Chicago, Ill.
- Sturgis, Edwin Albert, B. M. E., 39 High St., Lynn, Mass.,
  - Electrician, Lynn & Boston Street R. R.
- † Tarr, Roderick Desmond, B. M. E., Biddeford.
- Tolman, Wilfred Reuben, B. C. E., 24 Hampshire St., Everett ,Mass., Structural Draftsman.

- Webster, Charles Staples, B. S., 53 Exchange St., Portland,
  - Insurance. Firm of J. H. & C. S. Webster.
- Welch, Warner Edwin, B. M. E., Windber, Pa.,

Assistant Mechanical Engineer, Berwind-White Coal Mining Co.

- White, Horace Loring, B. S., Medical Dept., Univ. of Vermont, Burlington, Vt.,
  - Adjunct Professor of Chemistry.
- Whittemore, George Arthur, B. M. E., 65 Green St., Worcester, Mass., Draftsman, Worcester Boiler Works.
- Wiswell, Carl Gardner, B. M. E., East Machias, Dealer in Hardware and Plumber.

#### 1899.

- Bassett, Eben Pierce, B. M. E., 516 Nostrand Ave., Brooklyn, N. Y., With The General Incandescent Arc Light Co., New York City.
- Batchelder, Frank Lothrop, B. C. E., Pittsburg, Pa.,
  - Draftsman, Keystone Bridge Works.
- Belcher, Wallace Edward, B. C. E., Pittsburg, Pa., Civil Engineer, Keystone Bridge Works.
- Blackwell, Charles Elbert, B. M. E., 9 Stevens St., Winchester, Mass., With the McKay Metallic Fastening Co.
- Boynton, Alson Edwin, B. C. E., 311 Washington St., Somerville, Mass., Civil Engineer, Metropolitan Park Commission, 14 Beacon St., Boston, Mass.
- Brown, John Wilson, B. M. E., Windsor, Conn.
- Carlton, Rufus Houdlette, B. M. E., 101 Oliver St., Linden, Mass., Experts Course in General Electric Co.'s Factory, Lynn, Mass.
- Caswell, Winfield Benson, B. M. E., Bath Iron Works, Bath,
  - Draftsman, Bath Iron Works.
- Clark, Harold Hayward, B. M. E., Orono,
  - Tutor in Drawing, University of Maine.
- †Cleaves, Daniel Lunt, B. S., Portland,
  - Student, Mass. Institute of Technology.
- † Collins, George, B. C. E., Athol, Mass.
- Crockett, Cyrenius Walter, B. S., Orono,

Assistant in Chemistry, University of Maine.

- Downing, Marshall Buckland, N. M. E., 9 Boerum Ave., Flushing, N. Y., Inspector, New York Telephone Co.
- <sup>†</sup> Drew, Irving Harry, B. M. E., Bar Harbor.
- Fernald, Reginald Lovejoy, B. S., 70 Fifth Ave., New York, N. Y., With Ginn & Co., Publishers.
- Flint, Bert Whitaker, B. C. E., Rumford Falls, Civil Engineer.
- † Ford, Leonard Harris, Bangor.
- Grover, Archer Lewis, B. M. E., Orono,

Assistant in Electrical Engineering, University of Maine.

Haney, William Wallace, B. M. E., 412 W. 23rd St., New York, N. Y., Installing Dept., American Telephone & Telegraph Co.

- <sup>†</sup> Hayes, Clarence Morrill, B. M. E., Milton, N. H.
- Hersey, George Woodman, B. M. E., 6800 Simen St., Pittsburg, Pa., Apprenticeship Course, Westinghouse Electric & Mfg. Co.
- Heyer, Harry Sanford, B. M. E., 9 State St., Schenectady, N. Y., Draftsman, General Electric Co., Schenectady, N. Y.
- † Hilton, George Libby, B. S., Bradley.
- Hoxie, Hall Farrington, B. M. E., 134 Nott Terrace, Schenectady, N. Y.
- Mansfield, Edward Raymond, B. S., Orono, Assistant Chemist, Agricultural Experiment Station of the University of Maine.
- Mayo, Herbert Palmer, B. M. E., 3 Batavia St., Boston, Mass., Draftsman, Walworth Mfg. Co., 134 Federal St., Boston, Mass.
- Morell, William Bradley, B. M. E., 9 Boerum Ave., Flushing, N. Y., Telephone Work.
- Morrill, Walter Jean, B. S., Meredith, N. H., Principal, High School.
- Mosher, Edwin St. Elmo, B. M. E., 50 Cedar St., Portland, With the Belknap Motor Company.
- Murray, William Augustine, B. C. E., Orono, Assistant in Civil Engineering, University of Maine.
- Nelson, William, B. M. E., 12 Liberty St., Bath, Draftsman, Bath Iron Works.
- Oswald, Herman Hersey, B. M. E., 1728 Wallace St., Philadelphia, Pa., Colo. Fuel and Iron Co., Pa.
- Palmer, Edward Everett, B. M. E., 306 Lafayette St., Schenectady, N. Y., In testing department, General Electric Co.
- Powell, Maurice Henry, B. S., Orono. Agriculturist.
- Powell, Mildred Louise, B. S., Orono, Teacher.
- Pretto, Joseph Henry, B. M. E., 19 Garden Ave., Hyde Park, Mass., Draftsman.
- Sidensparker, Stanley, B. M. E., Orono,

Assistant in Physics, University of Maine.

- Small, Clinton Leander, B. S., 781 Steinway Ave., Long Island City, N. Y.,
  - Chemist, Oakes Manufacturing Co.
- Smith, Edwin Melcher, B. M. E., 228 North Broad St., Elizabeth, N. J., Draftsman, Babcock & Wilcox Co.
- Stephens, Allen Whitmore, B. C. E., 80 Chelsea St., Everett, Mass., Draftsman, The New England Structural Co., East Everett, Mass.
- Stover, Oliver Otis, B. S., Orono,
  - Assistant in Natural History, University of Maine.
- Swain, John Henry, B. S., Solon,
  - Scaler, Steam Lumber Co., Solon.
- Swain, Pearl Clayton, B. A., Solon, Teacher.

† Veazie, Marcellus Maurice, B. S., Islesboro.

Wescott, Arthur Clement, B. M. E., 42 Munjoy St., Portland, Advertising Agent, Portland City Directory.

Whittier, Charles Comfort, B. C. E., I Spring St., Malden, Mass.,

Civil Engineer, Chief Engineer's Office, Boston & Maine R. R., Union Station, Boston, Mass.

#### SCHOOL OF LAW.

1899.

Fenderson, Frank Devereux, LL. B., Limerick. Lawyer.

Graham, Herbert Lewis, LL. B., Bar Harbor. Lawyer.

McGill, Laurence Vincent, LL. B., Lebanon. Lawyer.

#### GRADUATES OF SHORT COURSES.

These students were awarded certificates. Those marked (L. E.) completed the course in library economy; others the short pharmacy course.

1895.

Hamilton, Geneva Ring, (L. E.), Orono, Assistant Clerk, Clerk of Court's Office, Bangor.
Ring, Virginia Mary (L. E.), Orono.
Sheridan, Lena Matilda (L. E.), Lawrence, Mass., Nurse in Lawrence General Hospital.

1896.

Greene, Carrie Smythe (L. E.), Rose Place, Bangor, Librarian and Cataloguer. Vinall, Rena Pearl (L. E.), Orono.

#### 1897.

Bartlett,, Charles Simming, Auburn. Drug Clerk with Ralph F. Burnham.
Bird, James Alfred, Bangor, Druggist.
Gardner, Hope (L. E.), Caribou, Teacher.

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Keirstead, Alvin Willard, Sabattus,

Drug Clerk with E. Woodside.

- McCrillis, Ernest Julian, Henniker, N. H.,
  - Drug Clerk with W. N. Whitney.
- McCrillis, William George, Bristol, N. H., Drug Clerk with Fowler & Co.
- Nute, Albert James, Ph. G., B. S., 4 Washington Ave., Winthrop, Mass., Medical Student, Harvard Medical College, Boston, Mass.

Parker, Dora Lucinda (L. E.), Danversport, Mass.

White, Charles Harry, Orono,

Drug Clerk with Samuel Libbey.

#### 1898.

- Cleaves, Daniel Lunt, B. S., Institute of Technology, Boston, Mass., Student.
- Hall, Fred Elmer, 931 Congress St., Portland, Drug Clerk with E. W. Stevens.
- MacDougal, Wilbur Edwin, Main St., Lewiston, Shipping Clerk.
- Mitchell, Curtis Boyd, Bangor.
  - Drug Clerk with C. M. Brown & Co.
- Walton, Russell Davenport, College of Physicians and Surgeons, Baltimore, Md.,

Student.

#### 1899.

† Webster, William Bryant, Coventry, Vt.

#### CATALOGUE OF NON-GRADUATES.

An asterisk (\*) indicates deceased, and a dagger (†) indicates not heard from.

1872.

Bowler, John True, Bangor, Register of Deeds, Penobscot County. Fisher, Edward Fletcher. † George, William Henry. † Macomber, George Leonard, Windom, Minn., Farmer. † Norton, Charles Carroll, Buffalo Meadows, Nev. Oleson, William Brewster, B. D., Pastor First Congregational Church, Warren, Mass. † Watson, Benjamin Franklin, South Levant, Farmer. 1873. Dry Goods Merchant. † Ransom, Frederick Alexander. \* Shorey, Marcus Peltiah. 1874.

Clark, Joseph Elliot Payson, 208 N. Sawyer Ave., Chicago, Ill. \* Jackson, John. Lane, Samuel, Houlton,

1875.

Osgood, Charles Frederick, Garland, Postmaster. \* Reed, William Henry.

\* Ham, Benson.

Jones, Freeland, Granite Block, Bangor, Attorney at Law.

Soule, Sidney Smith, South Freeport, Farmer.

\* Spratt, George Wilbur.

† Spring, Charles Herbert.

- † Bacon, Francis Henry, 96 Washington St., Boston, Mass., Architect.
- † Gurney, Frank Parish, Brookhaven, Miss.
- \* Hazeltine, Frank Adlam.
- † Hopkins, Eugene L., 1508 Randolph St., Seattle, Wash., Travelling Salesman.
- † Linnell, James Warren, Exeter.
- <sup>†</sup> Moody, George Jameson.
- <sup>†</sup> Mudgett, Webster.
- Pillsbury, Edward Butler, 220 Devonshire St., Boston, Mass., Supt., Postal Telegraph-Cable Co.
- Robinson, Walter Franklin, C. E., Portsmouth, N. H., Principal Assistant Engineer, U. S. Engineer Department.

#### 1877.

- † Andrews, Charles Frederick, Biddeford.
- \* Bunker, Frederick Story, B. A., M. D.
- \* Chase, Edson Clifford.
- <sup>†</sup> Dow, William Wheeler, Rehoboth, Mass.
- Harvey, Austin Irving, M. D., Lewiston,
  - Physician and Surgeon. Member of State Board of Registration of Medicine.
- † Herring, Menzies Fessenden, 375 Broadway, Cambridge, Mass.,
  - Boston Representative, Plunger Elevator Co., Worcester, Mass.

† Lovejoy, Ardean.

Mallett, Fred Bartlett, 407 Erie St., C. E., Minneapolis, Minn.,

Chief Engineer, Nelson Tenney Lumber Co.

- \* Pullen, Fred Hubbard.
- \* Reed, Frank Elmon.
- Townsend, Henry Clay, Fort Fairfield,

Farmer.

- \* Webb, Clara Ella.
- Wiggin, Fred Sumner, Maysville Center,

Farmer.

**†** Whitney, William Butler.

#### 1878.

- Benjamin, Charles Henry, M. E., 89 Adelbert St., Cleveland, Ohio, Professor of Mechanical Engineering, Case School of Applied Science.
- \* Crocker, Nathaniel Appleton.
- Elwell, Charles Clement, C. E., Norwich, Conn.,

Superintendent, New York, New Haven & Hartford R. R. Co.

Hartwell, Howard Hampson, Montpelier, Vt., Granite Finisher.

- † Howe, Richard Scrope, Fryeburg.
- † Leathers, Alvar Willis.
- Perkins, Frank Judson, Oldtown. Merchant.
- Plumly, Charles Fremont, Lincoln, Merchant and Postmaster.
- † Richardson, John Oakes, Oldtown.
- † Warriner, Edson, Fryeburg.
- \* Weeks, Erastus.

#### 1879.

- † Cochrane, Byron Harris, Woonsocket, R. I.
- † Colburn, Fred Alden, Minneapolis, Minn.,
  - Commercial Salesman.
- Cousins, James William, Stillwater,

Postmaster.

- Curtis, John Andrew, Delta, Colo.,
- Civil Engineer and Surveyor. County Surveyor, Delta Co., Colo. Goodale, Loomis Farrington, C. E., St. Joseph, Mo.,
  - Chief Engineer on Hannibal & St. Joseph R. R.; St. Louis, Keokuk & N. W. R. R.; Kansas City, St. Joseph & Council Bluffs R. R.; Chicago, Burlington & Kansas City R. R.
- † Hawes, Edwin Augustus, Pasadena, Calif.,
  - Building Contractor.
- \* Johnson, Edwin Cunton.
- Jones, Oliver Leslie, Corinna,
- Farmer.
- Merrill, Albert Young, 445 Temple Court, Minneapolis, Minn., Lawyer.
- <sup>†</sup> Morton, Asa Crocford.
- Peaks, Henry Wilson, Charleston,
  - Town Clerk and Assistant Postmaster.
- \* Smith, Eugene Gardiner.
- Titus, William Nelson, Alna,
  - Lawyer. Disclosure Commissioner for Lincoln County.
- † Webster, Howard Elmer.
- Wellington, Arthur Lee, Covina, Calif.,

Postmaster.

#### 1880.

- Allen, Charles Morse, M. A., Pratt Institute, Brooklyn, N. Y., Instructor in Chemistry, Pratt Institute.
- Cheney, Charles Eastman, 457 1-2 Congress St., Portland, Dealer in Pianos and Tuner.
- <sup>†</sup> Cleveland, Woodbury Fremont, M. D., Eastport.
  - Physician.
- <sup>†</sup>Fuller, Osgood Everett, Rockland.
- † Goodwin, Harry Herrick.
- Jones, Daniel Sherman, Pruden, Colo., County Superintendent of Schools, Saguache Co.

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† Oak, Willis Lawrens, Caribou.

Webster, Daniel, Jr., 51 Hammond St., Bangor, Superintendent Maine and New Brunswick Division, American Express Co.

#### 1881.

† Adams, Henry Walton, Electrical Engineer, Boston, Mass.

\* Boynton, Lorin Thompson.

† Carver, Benjamin Vanness.

Gee, Archy Stuart, 3049 Stevens Ave., Minneapolis, Minn.,

Salesman for Janney, Semple, Hill & Co., Hardware.

Macomber, Charles Sumner, Ida Grove, Ia.,

Attorney at Law.

- † Nichols, Charles Stuart Davis, Hollis.
- Nowland, James Martin, M. S., Whitney Road, Quincy, Mass., Principal, Adams Grammar School.

Wales, William Gorton, Klondike.

- <sup>†</sup> Weeks, Frank Benjamin, San Francisco, Calif., Government Quartermaster's Office.
- Welch, Flora Etta, 250 Dudley St., Boston, Mass., Nurse.
- Wilson, George Henry, Willcox, Ariz., Agent for Chief Quartermaster, Dept. of the Colorado, Denver, Colo.

#### 1882.

Bartlett, Joshua Burr, Ashland, Surveyor of Lumber.

<sup>†</sup> Chapin, Charles Edward,

\* Dunn, Charles Lincoln.

Kenniston, Frederick Andrew, Brockton, Mass., Salesman.

- † Nason, Walter Herbert, M. D., Hampden, Physician and Surgeon.
- Page, Parker James, Rockland,

Manager, Union Mutual Life Insurance Company.

Tilley, Louis Kossuth, Ashland,

Farmer; Justice of Peace.

#### 1883.

\* Currier, George Russell.

Kelsea, Norman Fay, 29 Warren Ave., Brockton, Mass., Travelling Salesman.

- \* Longfellow, Henry Whitney.
- † Rich, George Avery, Boston, Mass.,

On Editorial Staff, "Journal."

Starbird, Ralph, 10 California St., San Francisco, Calif., Lumberman and Salesman. Webster, Frank Carr, Ninth St. and Santa Fe R. R. Track, Los Angeles, Calif.,

Secretary, Harris & Frith Co., Oils, Gasoline & Distillate.

Webster, Frank Gilman, Ashland,

Bookkeeper, Ashland Manufacturing Co.

#### 1884.

Abbott, Edward Sewall, M. S., M. D., Bridgton, Physician.

† Bailey, Edward Mansfield, Bangor.

† Berry, William Alanson, Hampden.

Butler, Frederick Heywood, C. E., Houlton,

Assistant Engineer, Bangor and Aroostook R. R.

† Dunning, James Alexander.

Clerk, R. B. Dunning Co., 54 Broad St., Bangor.

\* Longfellow, Gilbert, Jr.

Pattangall, William Robinson, M. S., Machias,

Attorney at Law.

Patterson, Robert Crosby, 313 E. 10th St., St. Paul, Minn.,

Assistant Cashier, G. N. R. R. Co.

\*Trueworthy, Horace Griffin.

#### 1885.

Dickerson, Fred William, 34 Temple St., Nashua, N. H., Agent, B. M. R. R., Hollis, N. H.

† Libby, Willard A., Denver, Colo.,

Clerk.

\* Manter, Frank Ellsworth.

Merrill, Dennis D., Orono.

#### 1886.

Bartlett, Clarence Eugene, Orono,

Market Garden.

Libby, Charles Leon, Care of Ludw. Loeroe & Co., Berlin, Germany, Mechanical Engineer.

Merriam, Charles Herbert, Room 327 Rookery, Spokane, Wash., Attorney.

#### 1887.

† Clarke, Irving Mason, C. E., 2086 Washington Ave., New York, N. Y., Computer, Department Street Improvements, 23rd and 24th Wards.

\* Harris, William John.

Houghton, Austin Dinsmore, M. E., Atlanta, Ga.,

Contractor.

\* Kirkpatrick, Fred Hudson.

Ruth, Alfred Smith, Olympia, Wash.,

Assistant Engineer, Port Angeles & Eastern R. R.

1888.

Buker, Albion Henry, Franklin, N. H., Dealer in Groceries and Provisions.

Page, Frank Jackson, Orono,

Clerk.

Sargent, Abram Woodard, Pier 36, North River, New York, Commissary, N. Y., N. H., and H. R. R.

True, Joseph Sumner, Intervale, Merchant.

#### 1889.

† Gould, Charles Benjamin, Orono,

Travelling Salesman.

† Greenwood, Elmer E., C. E., Paolis, Ind., Locating Engineer, Springfield, Ohio River & South Atlantic R'y.

\* Matthews, Maude Arnold.

Sargent, William Henry, South Brewer, Bookkeeper, Sargent's Sons.

† Tripp, Norman, Helena, Mont., Salesman.

#### 1890.

Cargill, Carroll David, Livermore Falls, Assistant Station Agent, M. C. R. R. Dillingham, Charles Albert, 154 Exchange St., Bangor,

Proprietor of the Record Printing Company.

† Hastings, Albert Mills, Rockland.

Travelling Salesman.

\* Jones, Leon Houston.

† Kenniston, Irving Chase, Klondike, Mining.

† Lewis, John Winchcomb E., Newburyport, Mass., Clerk.

† Norton, Jay Pearl.

†Rowell, Herbert Burns.

† Webber, Gilman Hodgdon.

White, Ambrose Harding, 30 Broad St., New York, N. Y.,

Engineer and Chief Draftsman, International Paper Company.

#### 1891.

Boadway, Leslie Albert, Madison,

General Insurance Business, Fire, Life & Accident.

Cobb, Charles Edward, Patten,

Engineer.

Davis, James Walker, 1543 Summit St., Toledo, O., Civil Engineer, L. S., & M. S. R'y.

- † Fernald, Henry Elmer.
- Hersey, Jacob Frye, Patten,
  - Postmaster.
- <sup>†</sup> Hodgdon, Edwin Wyman, Whitinsville, Mass., Druggist.
- Keith, William Everett, Wichita, Kansas,
- Lawyer.
- Merrill, Edwin Reuel, M. E., 357 W. 7th Ave., Columbus, O., Engineer Mining Department, The Jeffrey Mfg. Co.

Miller, Albert Morton, 700 Congress St., Portland, Bookkeeper, Preble House.

- \* Morris, William Allen.
- Scott, Clarence, Oldtown,
  - Lawyer.
- Tirrill, Leonard Alexander, 812 Summer St., Lynn, Mass., Draftsman, General Electric Company.
- Webster, Alden Palmer, Orono,
  - Superintendent, Webster Mills, International Paper Co.

#### 1892.

- † Alexander, John Francis.
- Bourne, Frank Agustus, M. S., 849 Tremont Building, Boston. Architect.
- McKechnie, Willard Erastus, Princeton,

Part owner and manager, General Retail Store and Mill. Nealley, Calvin Henry, 30 Broad St., New York, N. Y.,

- Clerk, International Paper Co.
- Prentiss, Harry Mellen, Belfast,

Railway Postal Clerk, Belfast and Burnham R. P. O.

† Prince, Job, South Turner,

Farmer.

Rich, George Frank, Berlin, N. H.,

Attorney at Law; Judge of Municipal Court.

#### 1893.

\* Alexander, James Almore.

Alford, Abbott Edwin, Beverly, Mass.,

Draftsman, United Shoe Machinery Co., Beverly.

- Atkinson, Timothy Ralph, Fargo, North Dakota,
- Manager, The French-Hickman Flax Fibre Co.,
- Cooper, Walter, Belfast,
- Junior Member of firm, Cooper & Co., Retail Lumber Yard. † Freeman, George Washington, Box 35, Falmouth,
- Farmer.
- Hamlin, Edwin Thompson, 150 Putnam Ave., Brooklyn, N. Y.
- Hammett, William Cushing, Tepezala Estado de Aguascalieutes, Mexico. Division Engineer, Mexico Central R'y.

† Jerrard, John F., Bangor.

Manager, The Jerrard.

- <sup>†</sup> Johnston, Chesley Metcalf, 17 Bowdoin St., Boston, Mass.
- <sup>†</sup> Morris, John Richard, Cor. Springfield and Washington Sts., Boston, Mass.
- Robinson, Harry Orman, 78 Essex St., Bangor, Civil Engineer.
- † Smith, Lizzie Louise, Veazie.
- Smith, Ralph Kendrick, "Advertiser," Boston, Mass., Assistant Night Editor.
- Steward, George Henry Colburn, 9 Front St., Marlboro, Mass., Engineer, Middlesex Shoe Factory.
- † Wilson, Pearley Rupert, Klondike, Mining.
- Young, Thomas Jefferson, Solon, Lawyer.

#### 1894.

- \* Blagden, Judson Billings.
- \* Bradford, Charles Frank.
- Fernald, Merrill Lyndon, B. S., 21 Dunster Hall, Cambridge, Mass., Botanist, Assistant in Gray Herbarium.
- † Smith, Albert Currier.
- Ricker, John Hale, 40 Lincoln St., Boston, Mass., Manufacturer, Firm of Eyelet Tool Co.

#### 1895.

- Achorn, Davis Tillson, East Blackstone, Mass., Engineer, Blackstone Electric Light Co.
- \* Atwood, Ernest Johnston.
- French, Frank Luther, 64 Bridge St., Beverly, Mass., Machinist, Foreman.
- Sawtelle, William Jus, B. S., 50 Penobscot St., Bangor, Teacher, Bangor High School.

#### 1896.

- Black, Fred Frasier, West Point, N. Y., Cadet, U. S. Military Academy.
- Buffum, Charles Nathaniel, Apalachicola, Fla.,
  - Lumberman.
- Goodridge, Nathan Eaton, Orono,
  - Machinist. United States Navy.
- Heywood, Heywood Hall, D. D. S., 239 West 122nd St., New York, N. Y.,
  - Surgeon Dentist, (Visiting Surgeon Dentist to Harlem Dispensary of New York.)
- † Holmes, Frank Lewis.

- † Lee, John Lewis, Waltham, Mass.,
- Assistant Engineer, on Construction Cambridge Water Basin.
- McLeod, Daniel James, Brewer,
  - Bicycle Repairer.
- Morse, Percy Franklin, 129 Park St., Portland,
- Draftsman and Designer for Maine Electric Co.
- † Black, Fred Frasier, Searsport.

#### 1897.

- † Albee, George Plummer, Richmond.
- † Bass, George Willis, Washington County R. R., Calais.
- Bird, Tyler Hanson, Rockland.
- <sup>†</sup>Coburn, William Bridgham.
- Cowan, Arthur Sidney, Plattsburg Barrack, Plattsburg, N. Y., 2nd Lieut., U. S. Army, 15th Inf.
- Crowell, Walter Newton, 6 Lothrop St., Beverley, Mass., Firm of Daniel Crowell & Son, Wholesale Hay & Produce.
- Dalot, Arthur John, Addison Point,
  - Secretary, Pleasant River Granite Company.
- † Dow, Harry Eugene.
- Gooch, Fred Burton, Yarmouthville, Mechanic.
- <sup>†</sup> Haley, George, East Brownfield,
  - Teacher; Dealer in Natural History Supplies.
- Hamilton, Robert Whitman, Saco.
- † Leavette, George Greenwood.
- Merrill, Edward Arthur, Winn,
- Student, Tufts College Dental Sschool.
- Robinson, William Chandler, Rockland, Machinist.
  - Machinist.
- Smith, Arthur Nealley, 71 Walnut St., Portland, Machinist, Portland Company.
- White, Harvey Aaron, Ashland, Assistant Bookkeeper, Ashland M'f'g Co.

1898.

- † Arche, John Francis.
- Adams, Henry Gilbert, Cumberland Center,
- Station Agent, M. C. R. R., Cumberland Center.
- Anderson, Ralph Sidney, Yarmouth,
  - Foreman, Portland Packing Co.
- Arche, John Francis, Oneco, Conn.,
  - With Norcross Bros.
- Bartlette, Lester Franklin, Nealey's Cor., Teacher and Farmer.
- Brown, Charles Winchester, New York City, Electrical Engineer.
- Bryant, Edwin Scammon, Berlin, N. H.

Burns, Fred Eugene, Rutland, Vt.,

Cashier, N. Y. Life Insurance Co.

- † Clark, Frederick Robinson.
- Coney, Edward, 21 Fern St., Bangor.

† Decelle, William Edwin.

Dyer, William Elmer, 117 Chandler St., Boston, Mass.,

Civil Engineer with New England Structural Works, Everett, Mass.

Eldridge, Charles Thayer, 265 Main St., Bangor,

Locomotive Engineer, Bangor and Bar Harbor Pass. Train.

- Files, William Rolfe, with Raritan Copper Works, Perth Amboy, N. J., Mechanical Engineer.
- Hopkins, Fred Weston, 63 Sixth St., Bangor,

Proprietor of Hampden Creamery, Bangor.

Johnston, Cecil Chestnut, Fort Fairfield,

Clerk.

- Marks, Homer Elbridge, Fessenden Park, Portland, Dealer in Real Estate.
- Merrill, Adelbert Samuel, 20 Pleasant St., Beverly, Mass., Machinist, United Shoe Mach. Co.
- \* Nowlan, Edwin Ernest.
- Sawyer, Charles Jewett, with Friji Paper Co., Tokio, Japan, Superintendent, Sulphite Pulp Mill.
- Seavey, Haller David, 5 Ohio St., Bangor.
- Swett, Irving Cooper, 71 Third St., Bangor,

Swett & Co. Cooperage, etc.

- \* Taylor, Arthur Horace.
- Thomas, John Franklin, Millinocket,

Architect and Engineer.

† Tolman, Fred Moses.

Warner, Albert Frank, 57 Mott St., Ansonia, Conn.,

Assistant General Manager, Ansonia Telephone Co.

Watts, Clarence Everett, Windber, Pa.,

Chief Engineer, Electrical & Compressed Air Plants.

Webber, Mortimer Asa, Dawson City, Yuxon District, Northwest Territory, Canada,

Care of N. W. Mounted Police.

Whipple, Albert Lawrence, 20 Pleasant St., Beverly, Mass., With Consolidated & McKay Lasting Machine Co.

1899.

Armes, Fred Walter, 12 Liberty St., Bath,

Draftsman, Hyde Windlass Co.

- † Bradford, Fred Prince.
- Brett, Howard, 57 Charles St., Bangor.

Driver and Engineer on Penobscot Central Railway.

† Blaisdell, John West.

- Crosby, Charles Elmer, Albion,
- Railway Postal Clerk, Albion & Wiscasset R. P. O.
- † Cummings, George Harold.
- † Farnham, Maud Lulu.
- Fortier, Arthur Henry, Oldtown,
- Shipping Clerk, Oldtown Woolen Mill.
- Garrigues, Frederick Lewis, Waterbury, Conn.,
  - With S. N. E. Telephone Co.
- Getchell, Roy Chester, Brewer,
  - Taxidermist, Exchange St., Bangor.
- Guptill, Roscoe Volney, Box 1455, Phoenix, Ariz.
- † Herald, Walter, Calais.
- \* Holmes, Harry L.
- <sup>†</sup> McPeters, Ralph Herbert, Orono.
- Morrisette, Rena Ermyra, (Mrs. W. Watson), 36 Larkin St., Bangor.
- Moulton, Frank Augustus, Limington.
- Noyes, Herman Frank, 826 Main St., Lewiston,
  - Joiner.
- \* Pierce, John Leverett.
- Rockwood, Ralph Hubbard, 93 Main St., Waterville,
  - Civil Engineer, with J. H. Burleigh.
- \* Scott, Charles Curtis.
- <sup>†</sup> Trim, Amariah Colby.

# ALPHABETICAL LIST OF GRADUATES.

Abbott, E	1876	Be
Allan, B. J	1886	*B
Allan, G. H	1884	Bı
Allen, C. P	1876	Bı
*Allen, W. A	1874	Br
Andrews, F. O	1890	*B
Andrews, H. H	1881	Br
Andrews, H. B	1888	Br
Arey, R. J	1891	$\mathbf{R}_{1}$
Atherton, G. F	1892	Br
Atkinson, W. H	1892	Bı
Atwood, E. M	1897	$\mathbf{Br}$
Atwood, G. G	1895	Bı
Atwood, H. W	1880	Br
Ayer, J. M.	1886	Bu
Babb, G. H	1890	Br
Bailey, F. W	1898	Bι
Bailey, W. M	1891	*E
*Balentine, W	1874	Bı
Barker, G. G	1886	Bι
Barron, W. D	1898	Bı
Bartlett, J. M	1880	*E
Bassett, E. P	1899	Βı
Batchelder, F. L	1899	Bι
*Batchelder, G. S.	1888	Bı
Bates, S. W	1875	Bı
Bean, H. P	1879	C٤
Beckler, E. H	1876	Ca
Belcher, W. E.	1899	Ca
Bickford, C. S	1882	Ca
Bird, J.	1890	Ca
Bisbee, F. W	1876	C٤
Black, G. F	1886	Cl
Blackington, A. De O	1877	Ch
Blackington, R. H	1890	Ch
Blackwell, C. E	1899	Cl
Blagden, J. D	1886	Ci
Blake, E. J	.1877	Ci
Blanchard, C. D	1888	*C
Blanding, E. M	1876	Cl
Boardman, H. S	1895	Cl
Boardman, J. R	1888	Cl
Bowden, G. I	1890	Cl
Bowler, F. C	1894	C
Boynton, A. E	1899	Cl

Boynton, J. L.	1882
*Brainard, C. M	1876
Brann, L. J.	1899
Brastow, W. T	1897
Brick, F. S.	1888
*Briggs, F. P	1889
Bristol, M. L	1892
Brown, A. H	1880
Brown, E. (Mrs. C. Gilman)	1878
Brown, H. W	1881
Brown, J. W	1899
Brown, W. B	1897
Browne, C. W. H	1882
Brver, C. S.	1897
Buck, A. H	1895
Buck, C. L. (Mrs. T. W. Hine)	1881
Buck, H. B.	1893
*Buker, G. H	1876
Bunker, S. S	1897
Bumps, W. A	1875
Burleigh, J. H.	1887
*Burleigh, W. H	1884
Burns, R. B.	1887
Butler, H	1888
Butterfield, W. R.	1892
Buzzell, S. J	1882
Cain, J. H	1883
Calderwood, I. G	1895
Caldwell, A. J	1878
Campbell, D. E	1888
Carlton, R. H	1899
Caswell, W. B	1899
Chamberlain, C. C	1878
Chamberlain, G. W	1885
Chase, J. P	1897
Chase, W. W	1895
Cilley, J. V	1883
Cilley, L. V. P	1887
*Clapp, S. H	1875
Clark, E	1891
Clark, H	1890
Clark, H. H	1899
Clark, R. C.	1892
Clary, J. R	1897
Clayton, C	1891

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Cleaves, D. L	1899	Ellis, W. E	1895
Coffin, A. J	1890	Ellis, W. L	1898
Coffin, E. V	1887	*Elwell, E. H	1888
Colburn, F. E. (Mrs. A. L. Fernald)	1881	Emery, A. (Miss)	1877
Coburn, L. F	1875	Emery, F. E	1883
Colby, D. W	1887	Estabrooke, H. M	1876
Colesworthy, C. F	1875	Farnham, C. H	1897
Collins, G	1899	Farrar, L. G	1898
Cosmey, S. H	1897	Farrell, H. C	1896
*Conroy, M. F. (Mrs. A. R. Saun-		Farrington, A. M	1876
ders)	1884	Farrington, E. H	1881
Cowan, E. H	1894	Farrington, H. P	1890
Cowan, F. H. (Miss)	1876	Farrington, M. E	1892
Cowan, G. P	1894	Farrington, O. C	1881
Crockett, C. W	1899	*Farrington, S. B. (Mrs. G. P.	
Crosby, 0	1876	Merrill)	1880
Crosby, S. P	1879	Farrington, H. R	1891
Crosby, W. W	1893	Farrington, Wallace R	1891
Crowell, C. P	1898	Farrington, William R	1891
Croxford, W. E	1890	Ferguson, J. S	1889
Cushman, C. G	1889	Ferguson, W. E.	1879
Cutter, J. D	1879	Fernald, A. L	1883
Cutter, L. W.	1884	Fernald, C. W	1880
*Cyr, V	1876	Fernald, G. E	1878
Dakin, E. H.	1877	Fernald, H. C. (Mrs. J. A. Pierce)	1884
Damon, F. H	1895	Fernald, H. T	1885
Danforth, E. F	1877	Fernald, R. H	1892
Danforth, E. W.	1892	Fernald, Roy L	1896
Davis, E. H	1898	Fernald, Reginald L	1899
Davis, M. (Mrs. J. D. Stevens)	1880	Fernandez, G. L	1898
Dearborn, J. W	1898	Fickett, F. W	1880
Decker, W. F	1879	Flanagan, J. H	1891
Decrow, D. A	1879	Flint, B. W	1899
*Dike, J. E.	1876	Flint, W	1882
*Dike, W. O	1876	Fogg, C. H.	1881
Dillingham, S. C	1898	Folsom, L. R.	1895
Dole, A	1885	Ford, L. H	1899
Dolley, W.	1898	Poss, G. O	1876
Dom E	1892	Freeman, G. G	1889
Dow I F	1890	French, U. F.	1893
Downing M P	1000	French, H. S.	1886
Drow A W	1099	Frost, C. A.	1895
Drow f H	1000	Frost, G. S.	1898
Dupgen I	1699	Connott O H	1882
Dunn P F	1897	Carland () ()	1893
Dupp $\mathbf{R}$ $\mathbf{O}$	1000	Gariand, C. C.	1882
Dunton H D	1000	Convict W II	1889
Dupton () H	1000	Gibba B	1874
*Durbarn C F	1004	Gibbs, D	1898
*Durham, C. F	10/0	Gibbs, C. W	1879
Dutton O J	1094	Cibba I C	1896
Eastman F I.	1666	Gilbort C F	1892
Eaton R W	1000	Cliddon F C	1894
Edgerly J. W.	1999	Coodele A M	1055
Edwards I. N	1000	Coodvide: F O	19/9
Filting A I	1000	Coodridge, P. F.	1982
Flliot F R	1000	Conham E E	1897
EIIIUU F. D	1990	Gornam, F. E	1897

Gould, A. M., (Mrs. L. F. Goodale)	1879	How, E	1876
Gould, B. F	1872	Howard, W. R	1882
Gould, F. G	1894	Howes, C. L	1888
Gould, G. P	1890	Hoxie, H. F	1899
Gould, H. P	1893	Hubbard, P. W	1876
Gould, J. F	1882	Hull, F. E	1885
Gould, S. W	1877	Hunter, R. D	1874
Gould, V. K	1897	Hurd, A. L	1882
Graves, E. D	1886	Hutchinson, G. W	1893
Graves, J. C	1891	Ingalls, A. T	1881
Grav, J. A	1894	Jack. W. D	1893
Grover. A. C.	1892	Jeffery, G. W	1896
Grover, A. L.	1899	Johnson, B. B.	1898
Grover, N. C.	1890	*Johnson R.J	1881
Grover, O. L	1895	Jones B. K.	1886
Gurney, J. L.	1874	Jones, S. M.	1876
Haggett F R	1889	Jorden A T	1894
Hainas W T	1976	Jordan W H	1075
	1070	Jone W H	1879
	1894		1894
Hamilton H E	1091	Kellohow D. D.	1882
Hamlin C	1901	Kellew F H	1883
Hamim, C	1891	Kelley, E. H.	1890
Hamim, G. H	1873	Kelley, J. G.	1884
Hamiin, R	1898	Keyes, A. H.	1885
Hammond, G. E	1872	*Keyes, C. E	1890
Hancock, W. J	1888	Keyes, P., Jr	1891
Haney, W. W	1899	Kidder, E. E	1896
Hanscom, G. L	1885	Kidder, F. E	1879
Hardison, A. C	1890	Kilburn, C. H	1891
Hart, J. N	1885	Kimball, F. I	1882
Harvey, C. C	1890	*Kimball, J. M	1894
Harvey, J. E	1894	Kittredge, C. P	1893
Haskell, E. J	1872	Knight, O. W	1895
Haskell, N. P	1876	Ladd, E. F	1884
de Haseth, G. A	1895	Lawrence, G. W	1898
Hatch, E. E	1884	Lazell, J. D	1887
Hatch, J. W	1888	Leavitt, H. E., (Mrs. W. Flint)	1890
Haves, A. D.	1894	Leavitt. N. L., (Miss)	1889
Haves, C. M.	1899	Lenfest, E	1886
Haves. S. H. T	1890	Lewis, A. A.	1876
Heald, J	1878	Lewis, H. M.	1893
Healey, W. E	1892	Libby, A. D. T	1898
Heath. E. F	1890	Libby, C. A., (Miss)	1881
Heath, S. J.	1897	Libby, F. J.	1896
Hersey, G. W	1899	Libby, H. I.	1898
Hever, H. S.	1899	Libby, M. D.	1879
Hicks, A. A., (Mrs. G. F. Black)	1887	Lincoln H.F.	1888
Higgins, H. A.	1898	Lincoln H. M	1898
Hill J E	1884	Locke ) Jr	1979
Hillard H	1872	Lockwood J F	1886
Hilton C I	1012	Long H A	1000
Dintoll, G. Litter and a second second	1000	Lond D W	1001
nine, T. W	1882		1891
Huchings, E. F	1875	Lora, T. G.	1888
Holden W. C	1896	*Loring, U.S.	1879
Holden, W. C	1892	Lounrop, L. K.	1876
Heit, F. W	1873	Lufkin, G. W	1880
*Holt, N. M., (Miss)	1879	Lu11, G. F	1886
Holyoke, W. L	1897	Lunt, C. S	1884

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*Lunt, J. C	1877	Oak, J. M	1873
Macloon, E. H	1897	Oakes, F. J	1878
Maguire, G	1892	Osborn, E. W	1881
Mansfield, E. R	1899	Oswald, H. H	1899
Mansfield, F. A	1880	Owen, J. W	1890
Manson, R. H	1898	Page, A. D	1886
Manter, R. B	1896	Page, W. R	1896
Marsh, R. H	1888	Paine, L. G.	1885
Marston, F. L.	1896	Palmer, E. E	1899
Martin, H. S.	1896	Palmer, P. B.	1896
Martin J. W	1895	Parks G. D	1876
Martin N H	1876	Pattee C. J.	1895
Mason C A	1887	Patten A J	1897
Matthews A A	1880	Patten F R	1889
Mayo F D	1875	Petten T M	1880
Mayo, H. D.	1010	Patton W N	1000
Mayo, n. r	1000	Patterson T.C.	1070
McIntyre, H. F	1881	Patterson, J. C	1818
MeNally, H. A	1887	Pearce, C. A	1898
Menges, H. G.	1891	Pease, C. T	1880
Merriam, W. H	1886	Pease, O. L	1881
Merrill, D. T	1898	Peirce, H	1876
Merrill, E. D	1898	Peirce, V. J	1890
Merrill, F	1887	Peirce, W. B	1890
Merrill, E. C	1895	Pierce, W. B	1890
Merrill, G. P	1879	Pennell, E. E	1885
Merrill, H. P	1898	Philbrook, W	1888
Merrill, T. L	1891	Phillips, F. F	1877
Merrill, L. H	1883	Pillsbury, G. M	1890
Merritt, E. E	1886	Plaisted, H. M	1881
Meserve, J. W	1879	Porter, B. F	1897
Michaels, J. C., (Miss)	1883	Porter, J. W. H	1897
*Miller, S. F	1888	Potter, F. D	1879
Mitchell, A. E	1875	Powell, M. H	1899
Mitchell, A. G	1875	Powell, M. L	1899
Moor, C. L	1881	Powers, H. W	1883
Moore, A. L	1879	Pretto, J. H	1899
*Moore, F. L	1875	Pride, F. P	1896
Morell, W. B	18 <b>9</b> 9	Purrington, J. F	1880
Morey, E. L	1890	Putnam, C E	1883
Morey, W., Jr.	1885	Quincy, F. G.	1890
Morrill, E. N	1890	Rackliffe, J. R.	1890
Morrill, W.J	1899	Ramsdell, L. H., (Mrs.M.D.Noves)	1874
Morse, C. A	1879	Randlette, C. M.	1892
Mosher, E. S. E	1899	Randlette, J. W	1896
Moulton, A	1895	Rav. I. B	1886
Moulton, F. C	1891	*Reed. C. E	1873
Moulton, J	1885	Reed. F. R.	1876
Mullen, C. W.	1883	Reed F M	1889
Murphy C C	1893	Road F P	1002
Murnhy W M	1995	Pood I	1000
*Murrey R F	1993	Rood N W (Mise)	1000
Murray H	1904	Roynolds H I	1009
Murray, H. W	1994	Rigger I. W	1005
Mumpor W A	1000	Diggs, L. W	1991
Mullay, W. A	1899	Ring, A. I., (Mrs. C. J. Dunn)	1881
Nilos H T.	1899	Rabinson H C	1881
Nowwood I O	1990	Robinson I In	1989
All	1894	Robinson, L., Jr	1883
Uak, U. E	1876	kogers, A	1897

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	Rogers, C. W	1876	Swan, C. B	1890
	Rogers, L. A	1896	Tarr, R. D	1898
	Rogers, L. W	1875	Taylor, C. N	1891
	Rogers, S. E.	1888	Taylor, L. W	. 1883
	Rollins, M. F	1895	Thayer, H. B	1873
	Rowe, G. F	1893	Thomas, C. D	1895
	Rumball, G. W	1894	Thomas, E. D.	1872
	Russell, F. L	1885	Thompson, G. E.	1891
	Russell, M. R.	1897	Timberlake S M	1892
	Ryther L E.	1898	Todd F H	1000
	Sargent P D	1896	Tolman F S	1002
	Sandors A P	1000	Tolman, F. S	1092
	Sautollo F W	1001	Tolman, G	1000
	Sawtene, F. W.	1000	Tolman, w. K.	1898
	Sawyer, F. w.	1890	Towne, C. E	1877
	Scribner, F. L.	1873	Trask, F. E	1887
	Seabury, G. E	1888	Tripp, W. E	1878
	Sears, C. A	1887	Twombly, S. S	1886
	Sewall, M. W	1875	Tyler, J. A	1892
	*Shaw, A. J	1879	Upton. E. C.	1897
	Shaw, G. M	1875	Urann, M. L.	1897
	Shaw, O. J	1893	Valentine, W. A	1891
	*Shaw, S	1877	Veazie, M. M	1899
	Sidensparker, S	1899	Vickery, G. S	1889
	Simpson, E. R.	1896	Vinal, P. A., (Mrs. A. White)	1879
	Small, A. C	1898	Vose, C. T	1887
	Small, C. L	1899	Wade, F. S	1881
	Small, F. L	1888	Walker, E. C	1878
	Smith, E. M	1899	Walker, P	1896
	Smith, F. A	1888	Wallace, C. J.	1890
	Smith, G. A	1898	Warren, G. O	1879
	Smith, H. M.	1893	Webb, H. S	1887
	*Smith, R. L	1881	Webb, W	1875
	Snow, G. C	1882	Webb, W. S	1890
	Southard, L. C	1875	Webber, W	1884
	Sprague, A. P.	1898	Webster, C. S	1898
	Starbird, A. A	1898	Webster, E. C	1882
	Starr, J. A	1896	Webster, H	1879
	Starrett, A. P	1882	Webster, I. E	1877
	Starrett, H. V	1891	Webster, J. M	1893
	Stephens, A. W	1899	Webster, O. C	1878
	Stevens, C. H	1887	Weeks, J. W.	1877
	*Stevens, F	1889	Weeks, N. E., (Mrs. L. Spencer)	1877
	Stevens, F. L	1884	Welch, W. E.	1898
	Stevens, H. E	1897	Wescott, A. C	1899
	Stevens, R. P	1898	Weston, C. P	1896
	Stevens, T. J	1877	Weston, G. O	1872
	Stevens, W. L.	1876	Weymouth, F. E	1896
	Steward, J. W	1891	Whitcomb, B. D	1896
	Steward, S. J	1896	White, H. L	1898
	Stone, F. P	1877	*White, M. E	1889
	Stover, O. O	1899	*White, W. A	1881
	Sturgis, E. A	1898	Whitney, G. A	1893
	Sturgis, G. E	1877	Whittemore, G. A	1898
	Sturtevant, C. F	1887	Whittier, C. C	1899
	Sturtevant, G. W	1881	Wight, R. H	1890
1	Sutton, G. A	1883	Wight, W. A	1882
į	Swain, J. H.	1899	Wilkins, G. B	1896
	Swain, P. C	1899	Williams, C. S	1890
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Williams, H	1893	Wiswell, C. G	1898
Williams, J. H	1876	Wood, E. B	1894
Williams, J. S	1887	Woodward, D. C	1882
*Wilson, J. B	1881	*Work, E. A	1875
Wilson, M. F	1889	Wyman, L. A	1881
Wilson, N. E	1888		

# ALPHABETICAL LIST OF NON-GRADUATES.

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Abbott, E.S	1884
Achorn, D. T	1895
Adams, H. G	1898
Adams, H. W	1881
*Albee, G. P	1897
Alexander, J. A	1893
Alexander, J. F.	1893
Alford, A. E.	1893
Allen, C. M	1880
Anderson, R. S	1898
Andrews, C. F	1887
Arche, J. F	1898
Armes, F. W	1899
Atkinson, T. R	1893
Atwood, E. J	1895
Atwood, E. N	1880
Bacon, F. H	1876
Bailey, E. M.	1884
Bartlett, C. E	1886
Bartlette, J. B	1882
Bartlett, L. F	1898
Bass, G. W.	1897
Benjamin, C. H	1878
Berry, W. A	1884
Bird, T. H	1897
Black, F. F.	1396
Blaisdell, J. W	1899
Blagden, J. B	1894
Boadway, L. A	1891
Bourne, F. A	1892
Bowler, J. T.	1872
*Boynton, L. T	1881
*Bradford, C. F	1894
Bradford, F. P	1899
Brett, H	1899
Brown, C. W	<b>189</b> 8
Bryant, E.S.	1898

Buffum, C. N	1895
Buker, A. H.	1888
*Bunker, F. S.	1887
Burns, F. E	1898
Butler, F. H	1885
Cargill, C. D	1890
Carver, B. V	1880
Chapin, C E	1882
*Chase, E. C	1877
Cheney, C. E	1880
Clark, F. R	1898
Clark, I. M	1887
Clark, J. E. P.	1873
Cleveland, W. F	1880
Cobb, C. E	1892
Coburn, W. B	1897
Cochrane, B. H	1879
Colburn, F. A	1879
Coney, E	1898
Cooper, W	1893
Cousins, J. W	1879
*Crocker, N. A	1878
Crosby, C. E	1899
Crowell, W. N.	1897
Cummings, G. H	1899
Currier, G. R	1883
Curtis, J. A	1879
Davis, J. W	1891
Dalot, A. J.	1897
Decelle, W. E	1898
Dickinson, F. W	1885
Dillingham. C. A	1890
Dow. H. E	1897
Dunn, C. L	1882
Dow, W. W	1877
Dunning, J. A.	1884
Dyer, W. E	1898

Eldredge, C. T	1898	Keniston, F. A	1882
Elwell, C. C	1878	Kenniston, I. C	1890
Farnham, M. L	1839	*Kirkpatrick, F. H	1887
Fernald, H. E	1891	Lane, S	1873
Fernald, M. L.	1894	Leathers, A. W	1878
Files, W. R	1898	Leavette, G.G	1897
Fisher, E. F	1872	Lee, J. L	1896
Fortier, A. H	1899	Lewis, J. W	1890
Freeman, G. W.	1893	Leavitt, C. A., (Mrs. F. L. Parker)	1889
French, F. L.	1895	Libby, C. L	1887
Fuller, O. E	1880	Libby, W. A	1885
Garrigues, F. L	1899	Linnell, J. W	1876
Gee, A. S	1881	*Longfellow, G., Jr	1884
George, W. H.	1872	Lovejoy, A	1877
Getchell, R. C	1899	Lunt, J	1879
Gooch, F. B	1897	Macomber, C. S	1881
Goodale, L. F.	1879	Macomber, G. L	1872
Goodridge, N. E	1896	Mallett, F. B	1877
Goodwin, H. H	1880	*Manter, F. E	1885
Gould, C. B.	1889	Marks, H. E	1898
Greenwood, E. E	1889	*Mathews, M.A	1889
Guptill, R. V	1899	McKechnie, W. E.	1892
Gurney, F. P	1876	McLeod, D. J	1896
Haley, G.	1897	McPheters, R. H	1899
*Ham, B	1875	Merrill, A. S	1898
Hamilton, R. W	1897	Merrill, A. Y	1879
Hamlin, E. T	1893	Merrill, D. D.	1885
Hammatt, W. C	1893	Merrill, E. A	1897
*Harris, W. J.	1887	Merrill, E. R	1891
Harvey, A. I	1877	Merriam, C. H	1886
Hartwell, H. H.	1878	Miller, A. M.	1891
Hastings, A. M	1890	Moody, G. J	1876
Hawes, E. A	1879	Morris. J. R	1893
Hazeltine, F. A.	1876	*Morris. W. A	1891
Herald. W	1899	Morisette, R. E., (Mrs. W. Watson)	1899
Herring, M. F.	1877	Morse, P. F	1896
Hersey, J. F	1892	Morton, A. C	1879
Heywood, H. H	1896	Moulton, F. A	1899
Hodgdon, E. W	1891	Mudgett, W	1876
Hodgkins, B. C	1891	Nason, W. H	1882
*Holmes	1899	Nealley, C. H	1892
Holmes, F. L	1896	Nichols, C. S. D	1881
Holmes, G. W	1881	Norton, C. C	1872
Hopkins, E. L	1876	Norton, J. P.	1890
Hopkins, F. W	1898	Nowlan, E. E	1898
Houghton, A. D	1887	Nowland, J. M	1881
Howe, R. S	1878	Noyes, H. F	1899
Jackson, J	1873	Oak, W. L	1880
Jerrard, J. F	1893	Oleson, W. B	1872
Johnston, C. M	1893	Osgood, C. F	1874
*Johnson, E. C	1879	Page, F. J	1888
Johnston, C. C	1898	Page, P. J	1882
Jones, D. S.	1880	Pattangall, W. R	1884
Jones. F	1875	Peaks, H. W	1879
Jones, L. H.	1890	Perkins, F. J	1878
Jones, O. L	1879	Pillsbury, E. B.	1876
Keith, W. E.	1891	Plumly, C. F	1878
Kelsea, N. F	1883	*Poole, H. K	1882
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Prentiss, H. M	1892
Prince, C. H.	1885
Prince, J	1892
Pullen, F. H	1877
Ransom, F. A	1873
*Reed, F. E	1877
*Reed, W. H	1874
Rich, G. A	1883
Rich, G. F	1892
Richardson, J. O	1878
Ricker, J. H.	1894
Robinson, H. O	1893
Robinson, W. F	1876
Robinson, W. C	1897
Rockwood, R. H	1899
Rowell, H	1890
Ruth, A. S	1887
Sargent, A. W	1888
Sargent, O. S	1872
Sargent, W. H.	1889
Sawtelle, W. O	1895
Sawyer, C. J	1898
Scott, C	1891
*Scott, C. C	1899
Seavey, H. D	1898
*Shorey, M. P	1872
Smith, A.C	1894
Smith, A. N	1897
Smith, C. F	1884
Smith, L. L., (Miss)	1893
Smith, R. K	1893
Soule, S. S	1875
*Spratt, G. W	1875
Spring, C. H.	1875
Starbird, R	1883
Steward, G. H. C	1893
Swett, I. C	1898

*Taylor, A. H	1898
Thomas, J. F	1898
Tilley, L. K	1882
Tirrill, L. A	1891
Titus, W. N	1879
Tolman, F. M	1898
Townsend, H. C	1877
Trim, A. C	1899
Tripp, N	1889
True, J. S	1888
*Trueworthy, H. G	1884
Wales, W. G.	1881
Warner, A. F	1898
Warriner, E	1878
Watson, B. F	1872
Watts, C. E	1898
Webb, C. E., (Miss)	1877
Webber, G. H	1890
Webber, M. A.	1898
Webster, A. P.	1891
Webster. D., Jr	1880
Webster, F.C	1883
Webster, F. G.	1883
Webster, H. E	1879
*Weeks, E	1878
Weeks, F. B	1881
Welch, F. E., (Miss)	1881
Wellington, A. L	1879
Whipple, A. L.	1898
White, A. H	1890
White, H. A	1897
Whitney, W. B	1877
Wiggin, F. S.	1877
Wilson, G. H	1881
Wilson, P. R	1893
Young, T. J	1893

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WINGATE HALL.

# CATALOGUE

OF THE

# University of Maine

1899-1900



### ORONO, MAINE

AUGUSTA, MAINE KENNEBEC JOURNAL PRINT 1900

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# CALENDAR.

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# FALL TERM, 1899.

September 18, Monday,	Arrearage examinations begin.	
September 19, Tuesday,	Entrance examinations begin.	
September 20, Wednesday,	Fall term begins.	
November 27, Tuesday,	Meeting of the Board of Trustees.	
November 29, Wednesday,		
December 4, Monday,	Thanksgiving recess.	
December 8, Friday,	Sophomore prize declamations.	
December 21, Thursday,	Christmas recess begins.	
1900.		

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January	2, Tuesday,	Arrearage examinations begin.
		(Spring term studies).
January	3, Wednesday,	Christmas recess ends.
January	26, Friday,	Fall term ends.

# SPRING TERM, 1900.

January	26, Friday,	Entrance examinations begin.
January	29, Monday,	Spring term begins.
February	22, Thursday,	Washington's birthday.
April	11, Wednesday,	Easter recess begins.
April	16, Monday,	Arrearage examinations begin.
		(Fall term studies).
April	17, Tuesday,	Easter recess ends.
May	18, Friday,	Ivy day.

30, Wednesday,	Memorial day.
31, Thursday,	Farmers' field day.
26, Saturday,	Senior vacation begins.
9, Saturday,	Junior exhibition.
10, Sunday,	Baccalaureate sermon.
11, Monday,	Convocation.
11, Monday,	Class day.
12, Tuesday,	Meeting of the Board of Trustees.
12, Tuesday,	Exhibition drill.
12, Tuesday,	Receptions by the fraternities.
12, Tuesday,	Reception by the President.
13, Wednesday,	Commencement.
13, Wednesday,	Commencement dinner.
13, Wednesday,	Meeting of the Alumni Asociation.
13, Wednesday,	Commencement concert.
14, Thursday,	Entrance examinations begin.
	<ul> <li>30, Wednesday,</li> <li>31, Thursday,</li> <li>26, Saturday,</li> <li>9, Saturday,</li> <li>10, Sunday,</li> <li>11, Monday,</li> <li>11, Monday,</li> <li>12, Tuesday,</li> <li>12, Tuesday,</li> <li>12, Tuesday,</li> <li>13, Wednesday,</li> <li>13, Wednesday,</li> <li>13, Wednesday,</li> <li>13, Wednesday,</li> <li>14, Thursday,</li> </ul>

# FALL TERM, 1900.

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September 17, Monday,	Arrearage examinations begin.
September 18, Tuesday,	Entrance examinations begin.
September 19, Wednesday,	Fall term begins.
November 26, Tuesday,	Meeting of the Board of Trustees.
November 28, Wednesday,	Therefore access
December 3, Monday,	f nanksgiving fecess.
December 7, Friday,	Sophomore prize declamations.
December 20, Thursday,	Christmas recess begins.

## 1900.

January	2, Wednesday,	Arrearage examinations begin.
		(Spring term studies).
January	3, Thursday,	Christmas recess ends.
January	25, Friday,	Term ends.

# SPRING TERM, 1901.

January	25, Friday,	Entrance examinations begin.
January	28, Monday,	Spring term begins.
June	12, Wednesday,	Commencement.

# CALENDAR OF THE SCHOOL OF LAW.

# 1899.

October	4,	Wednesday,	Fall	term	begins.
December	20,	Wednesday,	Fall	term	ends.

# 1900.

January	10, Wednesday,	Winter term begins.
March	21, Wednesday,	Winter term ends.
March June	28, Wednesday, 13, Wednesday,	Spring term begins. Сомменсемент.

## 1900.

October	3, Wednesday,	Fall term begins.
December	19, Wednesday,	Fall term ends.

# 1901.

January	9,	Wednesday,	Winter	term	begins.
March	20,	Wednesday,	Winter	term	ends.

March	27,	Wednesday,	Spring	term	begins.
June	12,	Wednesday,	Сомме	NCEMI	ENT.

## ESTABLISHMENT.

By an act of Congress, approved July 2, 1862, it was provided that there should be granted to the states, from the public lands. "thirty thousand acres for each Senator and Representative in Congress," from the sale of which there should be established a perpetual fund "the interest of which shall be inviolably appropriated, by each state which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." The Act forbade the use of any portion of the principal or interest of this fund, for the purchase, erection, or maintenance of buildings, and required each state, taking the benefit of the provisions of the Act, "to provide within five years not less than one college" to carry out the purposes of the Act.

Maine accepted this grant in 1863, and in 1865 constituted "a body politic and corporate, by the name of the Trustees of the State College of Agriculture and the Mechanic Arts." The Trustees were authorized to receive and hold donations, to select the professors and other officers of the college, to establish the conditions for admission, to lay out courses of study, to grant degrees, and to exercise other usual powers and privileges.

The Governor and Council were given the right, "to examine into the affairs of the college, and the doings of the trustees, and to inspect all their records and accounts, and the buildings and premises occupied by the college."

It was provided that in addition to the branches specifically required by the Act of Congress, the college should teach such other studies as the facilities would permit.

The Legislature of 1897 changed the name of the institution to "The University of Maine."

#### ENDOWMENT AND INCOME.

The State of Maine received, under the Act of Congress above referred to, two hundred and ten thousand acres of public lands, from which the University has realized an endowment fund of \$118,300. This has been increased by a bequest of \$100,000 from Abner Coburn of Skowhegan, who was for many years president of the Board of Trustees. The town of Orono contributed \$8,000, and the town of Oldtown \$3,000, for the purchase of the site on which the buildings stand. The State has appropriated about \$300,000 for the material equipment.

Under an Act of Congress approved March 2, 1887, the University receives \$15,000 annually for the maintenance of the department known as the Agricultural Experiment Station.

Under an Act of Congress approved August 30, 1890, the University receives for its more complete endowment and main-tenance, \$25,000 annually.

Under an Act of the Legislature, approved March 20, 1897, the University receives \$20,000 annually from the State for current expenses. Student fees and miscellaneous receipts complete the income.

# THE BOARD OF TRUSTEES.

HON. HENRY LORD, President, Bangor. HON. WILLIAM THOMAS HAINES, B. S., LL. B., Secretary, Waterville. ARTHUR LEE MOORE, B. S., Camden. HON. ELLIOTT WOOD, Winthrop. HON. CHARLES PLUMMER ALLEN, B. S., Presque Isle. HON. JOHN ALFRED ROBERTS, M. A., Norway. HON. EDWARD BRACKETT WINSLOW, Portland. HON. VORANUS LATHROP COFFIN. Harrington.

#### EXECUTIVE COMMITTEE.

TRUSTEES LORD, HAINES, AND ALLEN.

#### TREASURER.

HON. ISAIAH KIDDER STETSON, B. PH., Bangor.

ADVISORY BOARD FOR THE SCHOOL OF LAW.

Hon. CHARLES HAMLIN, M. A., President,	Bangor.
Hon. Henry Bradstreet Cleaves,	Portland.
Hon. William Henry Fogler,	Rockland.
HON. WILLIAM THOMAS HAINES, B. S., LL. B.,	Waterville.
Hon. Herbert Milton Heath, M. A.,	Augusta.
Hon. Andrew Peters Wiswell, B. A.,	Ellsworth.
DEAN GEORGE ENOS GARDNER, M. A., Secretary,	Bangor.

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# THE EXPERIMENT STATION COUNCIL.

Arthur Lee Moore, B. S.,	Camden.
Edward Brackett Winslow,	Portland.
Voranus Lathrop Coffin,	Harrington.
Abram Winegardner Harris, Sc. D., President,	Orono.
CHARLES DAYTON WOODS, B. S., Secretary,	Orono.
Benjamin Walker McKeen,	Fryeburg.
Otis Meader,	Albion.
Charles S Pope,	Manchester.
JAMES MONROE BARTLETT, M. S.,	Orono.
LUCIUS HERBERT MERRILL, B. S.,	Orono.
Francis LeRoy Harvey, Ph. D.,	Orono.
FREMONT LINCOLN RUSSELL, V. S.,	Orono.
Welton Marks Munson, M. S.,	Orono.
GILBERT MOTTIER GOWELL, M. S.,	Orono.

# THE FACULTY AND OTHER OFFICERS.

Abram Winegardner Harris, Sc. D.,Campus. President.
MERRITT CALDWELL FERNALD, PH. D.,Bennoch Street. Professor of Philosophy.
*Alfred Bellamy Aubert, M. S.,Campus. Professor of Chemistry.
ALLEN ELLINGTON ROGERS, M. A.,College Street. Professor of Political Economy and History, and Professor of Constitutional Law.
WALTER FLINT, M. E.,College Street. Professor of Mechanical Engineering.
JAMES MONROE BARTLETT, M. S.,College Street. Chemist in the Experiment Station.
LUCIUS HERBERT MERRILL, B. S.,Bennoch Street. Professor of Biological Chemistry, and Chemist in the Experiment Station.
FRANCIS LEROY HARVEY, Ph. D.,Forest Avenue. Professor of Natural History, and Entomol- ogist of the Experiment Station.
JAMES NORRIS HART, C. E., M. S.,Campus. Professor of Mathematics and Astronomy.
FREMONT LINCOLN RUSSELL, B. S., V. S.,
WELTON MARKS MUNSON, M. S.,Main Street. Professor of Horticulture, and Horticulturist of the Experiment Station.

\* On leave.

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HORACE MELVYN ESTABROOKE, M. S., M. A.,
JAMES STACY STEVENS, Ph. D.,Main Street. Professor of Physics.
GILBERT MOTTIER GOWELL, M. S.,Campus. Professor of Animal Industry, and Agriculturist of the Experiment Station.
CHARLES DAYTON WOODS, B. S.,
NATHAN CLIFFORD GROVER, B. S., C. E.,Campus. Professor of Civil Engineering.
George Enos Gardner, M. A.,Bangor. Professor of Law, and Dean of the School of Law.
HOWARD SCOTT WEBB, M. E., E. E.,North Main Street. Professor of Electrical Engineering.
KARL POMEROY HARRINGTON, M. A.,Campus. Professor of Latin.
John Homer Huddilston, Ph. D.,Main Street. Professor of Greek.
Professor of Military Science.
WILBUR FISK JACKMAN, B. S., Ph. C.,Mill Street. Assistant Professor of Pharmacy.
EDWIN BRYANT NICHOLS, B. A.,Campus. Assistant Professor of Modern Languages.
GARNETT RYLAND, Ph. D.,Campus. Assistant Professor of Chemistry.
RALPH KNEELAND JONES, B. S.,Main Street. Librarian.
PERLEY WALKER, B. M. E.,Campus. Instructor in Mechanical Engineering.
REGINALD RUSDEN GOODELL, M. A.,
CHARLES PARTRIDGE WESTON, C. E.,Campus. Instructor in Civil Engineering.

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Allen Rogers, B. S.,
WILLIAM EMANUEL WALZ, M. A., LL. B.,Bangor. Instructor in Law.
CHARLES HAMLIN, M. A.,Bangor. Lecturer on Insolvency.
LUCILIUS ALONZO EMERY, M. A., LL. D.,Ellsworth. Lecturer on Roman Law.
ANDREW PETERS WISWELL, B. A.,Ellsworth. Lecturer on Evidence.
LOUIS CARVER SOUTHARD, M. S.,Boston. Lecturer on Medical Jurisprudence.
FOREST JOHN MARTIN, LL. B.,
HUGO CLARK, C. E.,
STANLEY JOHN STEWARD, B. M. E.,
LUCIUS JERRY SHEPARD, B. S.,
Ora Willis Knight, M. S.,Bangor. Assistant Chemist in the Experiment Station.
Arthur Robert Crathorne, B. S.,Campus. Tutor in Mathematics.
Herbert Grove Dorsey, M. S.,Campus. Tutor in Physics.
ANDREW JARVIS PATTEN, B. S.,Forest Avenue. Assistant Chemist in the Experiment Station.
HAROLD HAYWARD CLARK, B. M. E.,Main Street. Tutor in Drawing.
ARTHUR WELLINGTON PRICE, B. A.,Bangor. Assistant in English.
CYRENIUS WALTER CROCKETT, B. S.,Campus. Assistant in Chemistry.
Archer Lewis Grover, B. M. E.,Campus. Assistant in Electrical Engineering.

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Edward Raymond Mansfield, B. S.,Bennoch Street.
Assistant Chemist in the Experiment Station.
STANLEY SIDENSPARKER, B. M. E.,Campus. Assistant in Physics.
CLINTON LEANDER SMALL, B. S.,Campus. Assistant in Chemistry.
WILLIAM AUGUSTINE MURRAY, B. C. E.,Campus Assistant in Civil Engineering.
OLIVER OTIS STOVER, B. S.,Campus Assistant in Natural History.
Edwin Carleton Upton, B. S.,Campus Assistant in Modern Languages.
* GEORGIA THOMAS BURROWS,Campus Assistant in the Library.
† THIRSA BURR SANDSCampus Assistant in the Library.
ELIZABETH ABBOTT BALENTINE,Campus Secretary to the President, and Secretary of the Faculty.

\* Until December 31, 1899. † After January 1, 1900.

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## ADMISSION.

Applicants for admission must pass the required examinations, or present satisfactory certificates of fitness, and file with the Treasurer a bond for \$150 signed by two bondsmen, as security for the payment of  $\mathfrak{t}$  rm bills. A cash deposit covering the bills of one term will be accepted in place of a bond. In the School of Law the fees must be paid in advance, and no bond or deposit is required. The University admits men and women, both residents of Maine, and non-residents.

Candidates for advanced standing are examined in the preparatory studies, and in those previously pursued by the classes they purpose to enter, or in equivalent studies. Certificates will be accepted for the preparatory work, but not for any part of the college work, unless done in a college. A student who has accomplished half of the preparatory course may be examined on that part, and receive credit.

The attention of students preparing for the entrance examinations is called to the need of careful work in mathematics. A good preparation in algebra and geometry is most important for those who expect to enter engineering courses. Schools should give a part of the work in algebra and geometry, or a review of these subjects, during the last year.

Persons, not candidates for a degree, who wish to take special studies, will be permitted to do so upon giving evidence of satisfactory preparation. If they subsequently desire to become candidates for a degree, or to take a regular course, they will be required to pass the entrance examinations.

No examinations are required for admission to the short winter courses.

College graduates, who wish to enter a technical course, will be admitted to the junior class without examination. Students in general college courses, who expect to pursue technical courses after graduation, should avail themselves of opportunities for the study of mathematics, physics, chemistry, and drawing, as a preparation for engineering courses; and of physics, chemistry, and drawing, for chemical and biological courses.

ADMISSION TO THE SCHOOL OF LAW.—Graduates of a college, or of a preparatory school of good standing, will be admitted without examination. Other applicants must give satisfactory evidence of the necessary qualifications. These are fixed in each case on a consideration of its merits.

Students from other law schools of good standing will be admitted to the appropriate classes in this school upon certificate. Students from law offices will be admitted to advanced standing after passing a satisfactory examination upon the earlier subjects of the course. Members of the bar of any state will be admitted to the senior class without examination.

Special students, not candidates for a degree, will be admitted without examination.

#### ENTRANCE EXAMINATIONS.

Examinations are held at Orono, beginning on the day before the opening of each term, and on the day after commencement. Examinations will be held, if desired, in each county of the State. These examinations are held on the day after commencement, and persons desiring examinations at such places must notify the President not later than June I.

To save expense to candidates, examination papers will be sent to any satisfactory person who will consent to conduct an examination. The questions are to be submitted under the usual restrictions of a written examination, and the answers returned to the University accompanied by the indorsement of the examiner. Applications for such examinations must be made out on blanks to be obtained from the secretary of the faculty.

Candidates for the CLASSICAL COURSE are examined on—Language, English, Latin, Greek, and either French or German; History, Roman, Greek; Mathematics, Plane Geometry, Algebra.

Candidates for the LATIN-SCIENTIFIC COURSE are examined on—Language, English, Latin, and either French or German; History, Roman; Mathematics, Plane Geometry, Algebra.

Candidates for the SCIENTIFIC COURSE are examined on— Language, English, and one year of a foreign language, either ancient or modern; *History*, One of the following,—General, Roman, Greek, English; *Mathematics*, Plane Geometry, Algebra; *Science*, Two of the following,—Botany, Chemistry, Physical Geography, Physics.

Candidates for the CHEMICAL, AGRICULTURAL (four years). PREPARATORY MEDICAL, AND PHARMACY (four years) COURSES are examined on—*Language*, English, and one year of a foreign language, either ancient or modern; *Mathematics*, Plane Geometry, Algebra; *Science*, Two of the following,—Botany, Chemistry Physical Geography, Physics.

Candidates for the CIVIL ENGINEERING, MECHANICAL ENGI-NEERING, and ELECTRICAL ENGINEERING COURSES are examined on—Language, English, and one year of a foreign language, either ancient or modern; *Mathematics*, Plane and Solid Geometry, Algebra; *Science*, Two of the following,—Botany, Chemistry, Physical Geography, Physics.

Candidates for SHORT COURSES IN AGRICULTURE (one year or more) are examined on—*Elementary Subjects*, Arithmetic, English Grammar, Physiology; *Language*, English; *History*, United States; *Mathematics*, Algebra through simple equations of the first degree; *Science*, One of the following,—Botany, Chemistry, Physical Geography, Physics.

Candidates for the SHORT COURSE IN PHARMACY (two years) are examined on—*Elementary Subjects*, Descriptive Geography, Arithmetic, English Grammar, Physiology; *History*, United States; *Mathematics*, Algebra through simple equations of the first degree.

SUBSTITUTES.—One year of Latin will be accepted as a substitute for one of the following groups: (a) Geography, Arithmetic, English Grammar, Physiology; (b) French or German; (c) One science.

One year of French or German will be accepted as a substitute for one of the following groups: (a) Geography, Arithmetic, English Grammar, Physiology; (b) One science.

Other equivalents will be accepted for any of the requirements except Mathematics, Latin, or Greek.

In consideration of the recent addition of one year of a foreign language, and of solid geometry, to the requirements, students who are not able to offer these subjects, but are otherwise prepared, will be admitted without them, and allowed to make them up after admission. This privilege will be withdrawn after 1902.

## ENTRANCE REQUIREMENTS.

College of	ARTS AND SCIENCES				AGRICUL- TURE		ENGINEER- ING		PHAR- MACY			
Course	Classical	Latin Scientific	Scientific	Chemical	Preparatory Medical	Four years	Special	Civil	Mechanical	Electrical	Four years	Two years
Lunguage: English French	* *c *	* *c *	$\left. \right\}^{*d}$	* *d	* *d	* *d	*b	* *d	* *d	* *d	* *d	*b 
History: United States General Roman Greek English	····· * *	••••• * •••••	}*e	••••	· ····		*					*
Mathematics: Plane Geometry Solid Geometry Algebra	*	* ••••• *	* ••••• *	*	*	*	*g	* *f *	* *f *	* *f *	* •••••	 *g
Science: a Botany Chemistry Physical Geog Physics			*h *	*h *	*h *	*h *	*i	*h *	*h *	*h *	*h *	••••
Elementary: a Geography Arithmetic Physiology	 	 	•••••	 	·····	 	*	 	••••		 	* *

#### The stars indicate the studies required. For requirements of the School of Law see page 94.

a-One year of a foreign language, ancient or modern, will be accepted as a substitute for all the elementary studies, or for one science. b-English grammar only. c-One year of French or German. d-One year of a foreign language, either ancient or modern. In consideration of the recent addition of this requirement, candidates who cannot satisfy it, but are otherwise well prepared, will be allowed to make it up as an extra study after admission. This privilege will be discontinued after 1902. e-One from general, Roman, Greek, or English history. f-See page 19. g-Through simple equations of the first degree only. h-Two sciences, from the list of four, are required.

#### ENTRANCE REQUIREMENTS.

The following statements will show in detail the requirements in each subject.

#### LANGUAGE.

ENGLISH.—Grammar. The usual school course. Attention should be given to punctuation and the use of capital letters.

Reading and Practice. Each candidate will be required to present evidence of a general knowledge of the substance of the books mentioned below and to answer simple questions on the lives of their authors. The examination will usually be the writing of one or two paragraphs on each of several topics. The treatment of these topics is designed to test the power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. In place of this test, the candidate may present an exercise book, certified by his instructor, containing compositions or other written work done in connection with the reading of the books.

In 1900, this part of the examination will be based upon: Dryden's Palamon and Arcite; Pope's Iliad, books I, VI, XXII, and XXIV; the Sir Roger de Coverley Papers in the Spectator; Goldsmith's The Vicar of Wakefield; Scott's Ivanhoe; De Quincey's The Flight of a Tartar Tribe; Cooper's The Last of the Mohicans; Tennyson's The Princess; Lowell's The Vision of Sir Launfal.

In 1901 and 1902, it will be based upon: Shakespeare's Merchant of Venice; Pope's Iliad, books I, VI, XXII, and XXIV; the Sir Roger de Coverley Papers in the Spectator; Goldsmith's The Vicar of Wakefield; Coleridge's The Ancient Mariner; Scott's Ivanhoe; Cooper's The Last of the Mohicans; Tennyson's The Princess; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

In 1903, 1904, and 1905, it will be based upon: Shakespeare's Merchant of Venice and Julius Caesar; the Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Carlyle's Essay on Burns; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner. Study and Practice. This part of the examination presupposes a careful study of the works named below. The examination will be upon subject-matter, form, and structure; and will also test the candidate's ability to express his knowledge with clearness and accuracy.

In 1900, this part of the examination will be based upon: Shakespeare's Macbeth; Milton's Paradise Lost, books I and II; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

In 1901 and 1902, it will be based upon: Shakespeare's Macbeth; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

In 1903, 1904, and 1905, it will be based upon: Shakespeare's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and on Addison.

FRENCH.—The candidate offering French must have an accurate knowledge of the grammar, especially of the regular and irregular verbs; an elementary knowledge of French composition; the ability to read at sight moderately difficult French prose.

GERMAN.—The candidate offering German must have an accurate knowledge of the grammar; an elementary knowledge of German composition; the ability to read at sight moderately difficult German prose.

LATIN.—The grammar, including prosody; Cæsar's Gallic War, books I-IV; Cicero's four orations against Catiline, and those for Archias and for the Manilian Law; Vergil's Eclogues and the Æneid, books I-VI; the sight translation of Latin passages of moderate difficulty; translation into Latin of simple English sentences, and easy narrative passages based on the prose authors read. For the last, a vocabulary of unusual words will be furnished. Equivalent readings will be accepted for those prescribed.

GREEK.—The grammar, including prosody; Xenophon's Anabasis, books I-IV; Homer's Iliad, books I-II; the sight translation of easy passages from Xenophon; the translation into Greek of easy passages based on the required books of the Anabasis. For the last, a vocabulary of unusual words will be furnished. Equivalent readings will be acc pted.

#### HISTORY.

GENERAL HISTORY.—A knowledge such as may be obtained from Myers's General History.

ROMAN HISTORY.—A knowledge such as may be obtained from Allen's Short History of the Roman People, to the death of Marcus Aurelius.

GREEK HISTORY.—Pennell's, or Myers's History of Greece, to the capture of Corinth, 146 B. C.

ENGLISH HISTORY.—A knowledge such as may be obtained from Montgomery's History of England.

UNITED STATES HISTORY.—A knowledge such as may be obtained from Higginson's History of the United States.

## MATHEMATICS.

PLANE GEOMETRY.—The first five books of Wells's, or Wentworth's Geometry, or an equivalent. Numerical exercises, original propositions, and the neat and careful construction of figures should not be neglected. The examination will include some original propositions for demonstration or construction.

SOLID GEOMETRY.—Books VI-IX of Wells's, or books VI-VIII of Wentworth's Geometry, or an equivalent. The examination will be planned to test the candidate's ability to apply the theorems to the computation of surfaces and volumes, as well as readiness in demonstration. Required only of candidates for the engineering courses.

As this is a new requirement, and is not taught in all preparatory schools, students who cannot offer it, but are otherwise well prepared, will be allowed to take it as an extra study after admission. This privilege will be withdrawn after 1902.

ALGEBRA.—The elements, equations of the first degree, radicals, quadratic equations, arithmetical and geometrical progression. Candidates for special courses in agriculture or for the short course in pharmacy will be examined on no topics beyond simple equations of the first degree. A satisfactory preparation may be obtained from Greenleaf's Elementary, Newcomb's, Wells's Academic, or Wentworth's School Algebra.

#### Science.

BOTANY.—An elementary course which will bring the student into contact with plants. Gray's Lessons in Botany, Spaulding's Introduction to Botany, or Bergen's Elements of Botany, will serve as a satisfactory guide.

CHEMISTRY.—The necessary ground is covered by the following text-books: Fisher, Remsen, Roscoe (inorganic part), Shepard, Storer and Lindsay, Williams.

PHYSICAL GEOGRAPHY.—A satisfactory preparation may be obtained from Appleton's Physical Geography.

PHYSICS.—A satisfactory treatment of this subject may be found in Avery's, Gage's or Cooley's Physics.

## ELEMENTARY SUBJECTS.

DESCRIPTIVE GEOGRAPHY.—The usual school course. Required for short course in pharmacy only.

ARITHMETIC.—The usual school course, including the metric system of weights and measures. Required for the short courses only.

PHYSIOLOGY.—Cells and tissues, skeleton, muscles, blood and circulation, respiration, nutrition and digestion, lymphatic system, excretory organs, nervous system, special senses, hygiene. Required for the short courses only.

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## CERTIFICATES OF FITNESS.

Any preparatory school whose course of instruction covers in a satisfactory manner the requirements for admission may be placed upon the list of approved schools. Application for such approval should be made to the President of the University, and must be accompanied by a detailed statement of the course of study.

Certificates for admission to the freshman class are accepted from graduates of approved schools, but will not be accepted from non-graduates except in extraordinary cases, and then only provided the candidate is expressly recommended for admission by the principal of the school from which he comes. Certificates must be made out on blanks furnished by the University.

## APPROVED SCHOOLS.

Principal. F. C. Avery.

Athol (Mass.) High School, Bangor High School, Bar Harbor High School, P Bath High School, Belfast High School, Berwick Academy, South Berwick, Biddeford High School, Bowdoinham High School, Boynton High School, Eastport, Brewer High School, Bridge Academy, Dresden Mills, Bridgton Academy, North Bridgton, Bridgton High School,

Henry K. White, M. A. Prescott Keyes, Jr., B. C. E. H. E. Cole, M. A. W. R. Howard, B. S. F. Stanley Stebbins, B. A. Harry H. Burnham, M. A. R. F. Springer. Everett L. Getchell, B. A. Harlan M. Bisbee, B. A. Alonzo A. Morelen, B. A. on, C. C. Spratt, B. A. J. E. Connor, B. A.

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Bristol Academy, Taunton, Mass., Alfred Bowman Maggs, M. A. Charles Fish, M. A. Brunswick High School, Verne M. Whitman, M. A. Calais High School, Bernard W. Owen, B. A. Caribou High School, Cherryfield Academy, Benjamin Coffin, B. A. Coburn Classical Institute, Waterville, F. W. Johnson, M. A. Cony High School, Augusta, C. F. Cook, B. A. Cornish High School, Stephen Rounds. Corinna Union Academy, William F. Miner, B. A. Danforth High School, Varney A. Putnam. Deering High School, William M. Marvin, B. A. Dexter High School, W. S. Brown, B. A. Dover English High School, W. J. Rideout. A. L. Dennison, B. A. East Corinth Academy, East Maine Conference Seminary, Bucksport, J. F. Haley, M. A. Edward Little High School, Auburn, J. F. Moody, M. A. Ellsworth High School, Ernest H. Pratt, M. A. English High School, Boston, Mass., John F. Casey, M. A. Farmington High School, Charles M. Pennell, B. A. William L. Bonney, M. A. Fort Fairfield High School, Foxcroft Academy, Lyman K. Lee, B. A. Framingham (Mass.) Academy and High School, John H. Parsons, M. A. Freeport High School, Will O. Hersey, B. A. Gardiner High School, William L. Powers, M. A. George Stevens-Bluehill Academy, Bluehill, Charles W. Cutts, B. A. Gould's Academy, Bethel, F. E. Hanscom, M. A. Greeley Institute, Cumberland Center, Everett Peacock, B. A. Guilford High School, George W. Snow, M. A. Hallowell High School, Herbert W. Dutch, B. A. Hampden Academy, J. F. Philbrook, B. A. Hebron Academy, W. E. Sargent, M. A. Higgins Classical Institute, Charleston, H. Warren Foss, B. A. Island Falls High School, Sans Lorenzo Merriman, B. A. Leavitt Institute and Training School, Turner Center, Leland A. Ross, B. A. Lewiston High School, G. H. Libby, B. A. Limington Academy, Charles L. Orton, B. A. Lincoln Academy, Newcastle, George H. Larrabee, M. A. Abner T. Hincklev, B. A. Lisbon High School, Lubec High School, Frank P. Wagg. Machias High School, D. Lyman Wormwood, B. A. Madison High School, Edward M. Tucker, B. A. Maine Central Institute, Pittsfield, O. H. Drake, M. A. Maine Wesleyan Seminary and Female College, Henry E. Trefethen, M. A. Milo High School, Ernest E. Morse, B. A. W. S. Masterman. Monmouth Academy, W. S. Knowlton, M. A. Monson Academy, North Brookfield (Mass.) High School, C. L. Judkins, B. A. North Yarmouth Academy, Yarmouth, Rev. B. P. Snow, M. A. Albert M. Rollins, B. A. Norway High School, F. L. Tapley. Oakland High School, Harry T. Watkins, B. A. Oldtown High School, S. H. Powell, M. A. Orono High School, Charles L. Simmons. Orange (Mass.) High School, Alfred C. Thompson, B. A. Palmer (Mass.) High School, Parsonsfield Seminary and Piper High School, Elden D. Pratt, M. A. North Parsonsfield, H. N. Gardner, B. A. Patten Academy, C. W. Pierce, M. A. Pennell Institute, Gray, Hugh Pendexter. Phillips High School, Phillips Limerick Academy, Limerick, William Harthorne.

Albro E. Chase, B. A. Portland High School, Plymouth (Mass.) High School, Agnes W. Lindsey. Richmond High School, E. C. Megguire, M. A. Ricker Classical Institute, Houlton, Arthur M. Thomas, M. A. Rockland High School, L. E. Moulton, B. A. Rumford Falls High School, Charles W. Carv. Skowhegan High School and Bloomfield Academy, Skowhegan, F. G. Farrington, B. A. South Paris High School, L. P. Gerrish, B. A. South Portland High School, Ralph A. Parker, B. A. Thomaston High School, Albert S. Cole, B. A. Thornton Academy, Saco, Edwin P. Sampson, M. A. Topsham High School, John A. Cone, B. A. Warren High School, F. E. Russell, M. A. Washington Academy, E. Machias, A. Sherman Harriman, B. A. Waterville High School, J. E. Nelson. Westbrook High School, Fred W. Freeman, M. A. Westbrook Seminary, Deering. O. H. Perry, B. A. Wilton Academy, Drew T. Harthorn, M. A. Yarmouth High School, Herbert M. Moore, B. A.

# DEPARTMENTS OF INSTRUCTION.

## ENGLISH.

#### PROFESSOR ESTABROOKE; MR. PRICE.

Eh I. DECLAMATIONS.—In the freshman year six declamations are required—three in the fall, and three in the spring. In the sophomore and junior years, five are required each year three in the fall, and two in the spring. PROFESSOR ESTA-BROOKE; MR. PRICE.

Eh 2. THEMES.—In the sophomore year five themes, historical in subject, and each containing from 1,000 to 1,200 words, are required. In the junior year five themes are required, and in the senior year, two themes or debates. PROFESSOR ESTABROOKE; MR. PRICE.

Eh 3. RHETORIC.—The classification of sentences; analysis of the sentence with reference to punctuation, clearness, strength, and unity; exercises in punctuation; diction, with special reference to purity, propriety, and precision of language; the paragraph; themes, including the narrowing of the subject, construction of outline, etc.; frequent exercises in extemporaneous writing; formal essays.

The text-book is Genung's Outlines of Rhetoric. Five hours a fortnight. Fall term. PROFESSOR ESTABROOKE.

Eh 4. RHETORIC.—Extended study of narration and description, argumentative composition, and persuasion; construction of analytical outlines of selections from Burke, Webster, Macaulay, and others; practice in different kinds of composition; exercises in extemporaneous writing.

The text-book is A. S. Hill's Principles of Rhetoric. Five hours a fortnight. Spring term. PROFESSOR ESTABROOKE.

Eh 5. ANGLO-SAXON.—Elements of Anglo-Saxon grammar; reading of easy prose and poetry. Constant reference is made to the relation of Anglo-Saxon to modern English.

The text-book is Smith's Old English Grammar. Five hours a fortnight. Spring term. PROFESSOR ESTABROOKE.

Eh 8. ENGLISH LITERATURE.—The text-book, Pancoast's Introduction to English Literature, is supplemented by frequent lectures, and by study in the library. A few masterpieces are studied in detail. Attention is given to historical and social conditions, and the students are required to prepare essays upon the characters and times studied. *Five hours a fortnight*. Fall term. PROFESSOR ESTABROOKE.

Eh 9. ENGLISH LITERATURE.—A continuation of course 8. Five hours a fortnight. Spring term. PROFESSOR ESTABROOKE.

Eh 10. ENGLISH LITERATURE.—In this course particular attention is paid to the development of the English novel and to the Lake poets. *Five hours a fortnight*. Fall term. PRO-FESSOR ESTABROOKE.

Eh II. ENGLISH LITERATURE.—A continuation of course IO, including a study of the most important American authors of the present century. *Five hours a fortnight*. Spring term. PROFESSOR ESTABROOKE.

## MODERN LANGUAGES.

Assistant Professor Nichols; Mr. Goodell; Mr. Upton.

M1 19. FRENCH.—An elementary course enabling the student to acquire the essentials of the grammar, and the ability to read moderately easy prose.

The text-books are: Grandgent, Short French Grammar; Super, French Reader; Labiche et Martin, La Poudre aux yeux; Dumas père, La Tulipe noire; About, Le Roi des montagnes; Mérimée, Colomba. *Two hours a week*. Fall term. MR. GOODELL. Ml 20. FRENCH.—A continuation of course 19. Two hours a week. Spring term. MR. GOODELL.

Ml 21. FRENCH.—Augier, Le Gendre de M. Poirier; Daudet, Choix d'extraits; Balzac, Le Curé de Tours; Coppée, Le Pater; Thiers, L'Expédition de Bonaparte en Égypte; Hugo, Quatrevingt-treize; Francois, French Composition. Two hours a week. Fall term. MR. GOODELL.

Ml 22. FRENCH.—A continuation of course 21. Two hours a week. Spring term. MR. GOODELL.

Ml 1. FRENCH.—This course is equivalent to courses 19 and 20. Four hours a week. Fall term. MR. GOODELL.

Ml 2. FRENCH.—This course is equivalent to courses 21 and 22. Four hours a week. Spring term. Mr. GOODELL.

Ml 3. FRENCH.—Crane, Le Romantisme français; Dumas fils, La Question d'argent; Zola, La Débâcle; Daudet, Morceaux choisis; Fasnacht, French Composition. *Five hours a fortnight*. Fall term. MR. GOODELL.

M1 4. FRENCH.—A continuation of course 3. Five hours a fortnight. Spring term. MR. GOODELL.

Ml 15. FRENCH LITERATURE.—French literature of the sixteenth and seventeenth centuries. The more important authors will be read. Lectures. Collateral readings and composition. Elective for those who have completed course 4. *Five hours a fortnight*. Given in the fall term of even years. PROFESSOR NICHOLS.

M1 16. FRENCH LITERATURE.—A continuation of course 15. Five hours a fortnight. Given in the spring term of odd years. PROFESSOR NICHOLS.

M1 17. FRENCH LITERATURE.—French Literature of the eighteenth and nineteenth centuries. The more important authors will be read. Lectures. Collateral readings and com-

position. Elective for those who have completed course 4. Five hours a fortnight. Given in the fall term of odd years. PROFESSOR NICHOLS.

Ml 18. FRENCH LITERATURE.—A continuation of course 17. *Five hours a fortnight.* Given in the spring term of even years. PROFESSOR NICHOLS.

Ml 13. OLD FRENCH.—Paris, Extraits de la Chanson de Roland; Constans, Chrestomathie de l'ancien français. Lectures. Assigned readings and essays required. *Five hours a fortnight*. Fall term. PROFESSOR NICHOLS.

MI 14. OLD FRENCH.—A continuation of course 13. Five hours a fortnight. Spring term. PROFESSOR NICHOLS.

Ml 9. SPANISH.—This course is designed to give a reading knowledge of Spanish. Elective for those who have completed course 2.

The text-books are: Edgren, Spanish Grammar; Ramsey, Spanish Reader; José de Larras, Partir á Tiempo; Breton de los Herreros, La Independencia; Galdós, Doña Perfecta. *Five hours a fortnight*. Given in the fall term of even years. PROFESSOR NICHOLS.

M1 10. SPANISH.—A continuation of course 9. *Five hours a fortnight*. Given in the spring term of odd years. PROFESSOR NICHOLS.

Ml 11. ITALIAN.—This course is designed to give a reading knowledge of Italian. Elective for those who have completed course 2.

The text-books are: Grandgent, Italian Grammar; De Amicis, Cuore; Goldoni, Un curioso Accidente; Manzoni, I promessi Sposi. *Five hours a fortnight*. Given in the fall term of odd years. PROFESSOR NICHOLS.

Ml 12. ITALIAN.—A continuation of course 11.

Five hours a fortnight. Given in the spring term of even years. PROFESSOR NICHOLS.

Ml 23. GERMAN.—An introductory course covering the elements of the grammar, and moderately easy prose reading.

The text-books are: Harris, German Lessons; Guerber, Märchen und Erzählungen; Heyse, L'Arrabbiata; Storm, Immensee; Hauff, Das kalte Herz; Baumbach, Die Nonne; Hatfield, Materials for German Composition. *Two hours a week*. Fall term. PROFESSOR NICHOLS; PROFESSOR HUDDILSTON.

Ml 24. GERMAN.—A continuation of course 23. Two hours a week. Spring term. Professor Nichols; Professor Huddilston.

Ml 25. GERMAN.—Schiller, Wilhelm Tell; Lessing, Minna von Barnhelm; Keller, Bilder aus der deutschen Litteratur; Brandt and Day, German Scientific Readings; Freytag, Aus dem Jahrhundert des grossen Krieges. *Two hours a week*. Fall term. PROFESSOR NICHOLS.

Ml 26. GERMAN.—A continuation of course 25. Two hours a week. Spring term. PROFESSOR NICHOLS.

Ml 5. GERMAN.—This course is equivalent to courses 23 and 24. Four hours a week. Fall term. PROFESSOR NICHOLS.

M1 6. GERMAN.—This course is equivalent to courses 25 and 26. Four hours a week. Spring term. PROFESSOR NICHOLS.

Ml 7. GERMAN.—Lessing, Emilia Galotti; Schiller, Maria Stuart; Goethe, Faust; Helmholz, Goethe's naturwissenschaftliche Arbeiten. *Five hours a fortnight*. Fall term. Mr. GOODELL.

MI 8. GERMAN.—A continuation of course 7. Five hours a fortnight. Spring term. MR. GOODELL.

M1 27. GERMAN.—This course is equivalent to course 6. Four hours a week. Fall term. PROFESSOR NICHOLS.

Ml 28. GERMAN.—This course is equivalent to courses 7 and 8. Four hours a week. Fall term. MR. GOODELL.

## LATIN.

#### PROFESSOR HARRINGTON.

Lt I. LIVY AND CICERO.—Livy, History of Rome, Books XXI and XXII; Cicero, De Senectute; Latin composition based upon the authors read. *Four hours a week*. Fall term.

Lt 2. HORACE.—Selections from the Satires, Epistles, Epodes and Odes; classical mythology. *Four hours a week*. Spring term.

Lt 3. PLAUTUS AND TERENCE.—The Captivi, Trinummus, or Menæchmi of Plautus; the Andria, Adelphæ, or Phormio of Terence; lectures on the development of Roman comedy. *Five hours a fortnight*. Fall term.

Lt 4. CICERO AND TACITUS.—Selected letters of Cicero; the Agricola and Germania of Tacitus. *Five hours a fortnight*. Spring term.

Lt 5. PLINY AND TACITUS.—Selected letters of Pliny, the younger; readings in the Annals of Tacitus; studies in Silver Latinity. *Five hours a fortnight*. Given in the fall term of odd years.

Lt 6. ROMAN LYRIC POETRY.—Selections from Catullus, Horace, and the Latin hymns of the Christian church; original research. *Five hours a fortnight*. Given in the spring term of even years.

Lt 7. THE ROMAN ELEGIAC POETS.—Selections from Catullus, Tibullus, Propertius, and Ovid; original research. *Five hours a fortnight*. Given in the fall term of even years.

Lt 8. THE ROMAN ELEGIAC POETS.—A continuation of course 7. Five hours a fortnight. Given in the spring term of odd years.

Lt 9. ROMAN SATIRE.—Selections from Ennius, Lucilius, Varro, Horace, Persius, Juvenal, Petronius; original research. *Five hours a fortnight.* Given in the fall term of odd years.

Lt 10. ROMAN SATIRE.—A continuation of course 9. Five hours a fortnight. Given in the spring term of even years.

Lt II. ROMAN PHILOSOPHY.—Lucretius (selections); Cicero (selections from the Academica, De Officiis, Tusculan Disputations, De Finibus, De Natura Deorum); Seneca (De Providentia, De Vita Beata); lectures on the history and development of ancient philosophy; original research. *Five hours a fortnight*. Given in the fall term of even years.

Lt 12. ROMAN PHILOSOPHY.—A continuation of course 11. Five hours a fortnight. Given in the spring term of odd years.

Lt 13. ROMAN LITERATURE.—General introduction to the subject; illustrative class-room readings; a choice of one of five courses of collateral reading of Roman authors. *Five hours a fortnight*. Given in the fall term of even years.

Lt 14. ROMAN LITERATURE.—A continuation of course 13. *Five hours a week.* Given in the spring term of odd years.

Lt 15. ROMAN RHETORIC AND ORATORY.—Quintilian (selections from the Institutes of Oratory); Tacitus (Dialogus de Oratoribus); Cicero (selections from the Brutus, De Oratore, Orator); a study of sample orations of Cicero, and of some of the fragments of Roman oratory. *Five hours a fortnight*. Given in the fall term of odd years.

Lt 16. ROMAN RHETORIC AND ORATORY.—A continuation of course 15. *Five hours a fortnight*. Given in the spring term of even years.

Lt 17. ROMAN TOPOGRAPHY.—Lectures on the development of the city of Rome and the present condition of its ancient ruins, preceded by a glance at the geography of the Italian peninsula. Illustrated by maps, photographs, and stereopticon views. One hour a week. Given in the fall term of even years. Lt 18. ROMAN PRIVATE LIFE.—Text-book work, supplemented by collateral reading and lectures upon some of the more important and interesting customs and institutions of Roman every-day life. One hour a week. Given in the spring term of odd years.

Lt 19. LATIN WRITING.—Advanced exercises in the translation of English into Latin with special reference to style. One hour a week. Given in the fall term of odd years.

Lt 20. ROMAN EPIGRAPHY.—The principles of the science, and the interpretation of selected inscriptions. One hour a week. Given in the spring term of even years.

## GREEK.

#### PROFESSOR HUDDILSTON.

GK I. XENOPHON.—Hellenica, Books I-IV. Study of syntax, and daily exercises in writing, based upon the text. *Four hours a week*. Fall term.

Gk 2. HOMER.—Odyssey, Books VI-X, and XII. The reading of the remaining books, in English translation, is required; assigned readings on the history of Greek poetry, "the Homeric question," and Homeric antiquities. *Four hours a week*. Spring term.

Gk 3. ATTIC ORATORS.—Some of the shorter orations of Demosthenes; selections from the minor Attic orators; parallel reading on the history of Greek prose literature, and the public economy and social life of Athens. *Five hours a fortnight*. Fall term.

Gk 4. GREEK TRAGEDY.—Euripides's Medea and Sophocles's Œdipus Rex; required reading on the history of the Greek tragic drama. *Five hours a fortnight*. Spring term.

Gk 5. THUCYDIDES.—Book I. Assigned reading in Herodotus, and a comparative study of the three great historians of Greece. *Five hours a fortnight*. Fall term. Open to those who have taken courses I and 3. Gk 6. ARISTOPHANES.—The Clouds and the Knights; lectures and collateral reading on the development of Greek comedy. *Five hours a fortnight*. Spring term. Open to students who have taken courses 2 and 4.

Gk 7. PLATO.—Selected dialogues. Lectures on the history of Greek philosophy with special reference to Plato and Aristotle. *Five hours a fortnight*. Fall term. Open to those who have taken courses 3 and 5.

Gk 8. PINDAR.—The Olympian and Pythian Odes; parallel reading on the history of Greek lyric poetry. *Five hours a fort-night*. Spring term.

Gk 9. GREEK SCULPTURE.—Lectures, illustrated by photographs and lantern slides. This course does not presuppose a knowledge of Greek, and is intended to serve as a general introduction to Greek fine arts. The interdependence of the arts and their relation to the life of the Greeks, as well as their relation to the world's subsequent art, receives considerable attention. *Five hours a fortnight*. Given in the fall term of odd years. Open to all students in the University.

Gk 10. GREEK SCULPTURE.—A continuation of course 9 with a more particular study of Greek architecture. Five hours a fortnight. Given in the spring term of even years.

Gk II. NEW TESTAMENT GREEK.—This course is intended for those who have no acquaintance with ancient languages, and, with course 12, is expected to give considerable facility in reading the narrative portions of the Greek Testament. It neither takes the place of preparatory Greek, nor counts toward a degree in the Classical course. It is open to all students except freshmen. *Five hours a fortnight.* Fall term.

Gk 12. NEW TESTAMENT GREEK.—A continuation of course 11. Reading of the Gospels of John and Matthew; syntax. *Five hours a fortnight*. Spring term. GK 13. GREEK PRIVATE LIFE.—Lectures, illustrated with lantern slides and photographs. *Five hours a fortnight*. Fall term. Open to all students in the University.

#### PHILOSOPHY.

## PROFESSOR FERNALD.

Pl I. PSYCHOLOGY.—Among the topics considered are sensation, structure and functions of the brain, conditions of neural activity, consciousness, attention, conception, discrimination, association, memory, imagination, perception, reasoning, instinct, emotions and sentiments, will as volition, will as choice, and will in relation to character.

The text-book is James's Psychology (Briefer Course.) Five hours a fortnight. Fall term.

Pl 2. LogIC.—The object of this course is to give the student a just appreciation of the functions of language as a means of expressing thought, and a familiarity with the principles of deductive and inductive reasoning. The student is given frequent drills in the application of logical principles.

The text-book is Ryland's Logic. *Five hours a fortnight*. Spring term.

Pl 3. HISTORY OF PHILOSOPHY.—The text-book is Weber's History of Philosophy. *Five hours a fortnight*. Fall term. PROFESSOR ROGERS.

Pl 4. PEDAGOGY.—The principles of psychology applied to the art of teaching. The order in which the several powers of the mind become active, their relative activity and development at successive school periods. The principles and methods of teaching; oral instruction and the study of books; the recitation, its objects and methods; methods of testing, by questions, by topics; examinations; psychical facts applied to moral training. *Five* hours a fortnight. Fall term.

Pl 5. COMPARATIVE PSYCHOLOGY. The psychology of man and the higher animals compared. A study of other minds than ours with reference to sense-experience, instinct and intelli-
gence, association of ideas, memory, perception of relations, the power to reason, and the emotions. *Five hours a fortnight*. Offered in the spring term of even years. Open to juniors and seniors.

Pl 6. PSYCHOLOGY, ADVANCED COURSE.—Besides special topics in general psychology, this course is designed to include a discussion of such phenomena as sleep and dreams, the hypnotic state, thought transference, illusions and hallucinations. *Five hours a fortnight*. Offered in the spring term of odd years. Open to juniors and seniors.

# CIVICS AND HISTORY.

## PROFESSOR ROGERS.

CV I. GENERAL HISTORY.—The text-book is Schwill's History of Modern Europe. *Five hours a fortnight*. Spring term.

Cv 2. ENGLISH HISTORY.—The text-book is Green's Shorter History of the English People. *Five hours a fortnight*. Spring term.

Cv 3. AMERICAN HISTORY.—Lectures, supplemented by topical investigation and study.

The text-book is Burgess's Middle Period. Two hours a week. Spring term.

Cv 4. THE PHILOSOPHY OF HISTORY.—The literature, learning, political and economic conditions of the great historic nations, and the growth of their institutions.

The text-book, Duruy's History of the Middle Ages, is supplemented by lectures and topical studies. *Five hours a fortnight*. Given in the fall term of even years.

CV 13. POLITICAL ECONOMY.—Instruction is given by lectures. Topical readings and investigations are required. *Five hours a fortnight*. Fall term.

CV 14. POLITICAL ECONOMY.—A continuation of course 13. Five hours a fortnight. Spring term.

CV 15. CONSTITUTIONAL LAW AND HISTORY.—An outline of Anglo-Saxon institutions, the development of the English Constitution, the growth and political conditions of the American colonies, the Articles of Confederation, the adoption of the Constitution, and the comparative study of the Federal and the State Constitutions from the historical and legal standpoints.

The text-book is Rogers's Our System of Government. Five hours a fortnight. Fall term.

CV 16. CONSTITUTIONAL LAW AND HISTORY.—A continuation of course 15. Five hours a fortnight. Spring term.

CV 10. MUNICIPAL LAW.—Lectures on the general principles of contracts, sales, notes, bills, conveyancing, agency, bailments, and insurance. One hour a week. Spring term.

CV II. INTERNATIONAL LAW.—The text-book is Lawrence's International Law. *Five hours a fortnight*. Given in the fall term of odd years.

Cv 12. LIBRARY WORK.—The aim of this work is to familiarize the student with the literature of history and economics and to teach him to make critical and independent investigation of questions connected with these subjects.  $\dagger$  *Five hours a fortnight*. Spring term.

## LAW.

LW I. CONTRACTS.—The text-book is Huffcut and Woodruff's Cases on Contract. *Four hours a week*. Fall term. PROFESSOR GARDNER.

Lw 2. CONTRACTS.—A continuation of course I. Four hours a week. Winter term. PROFESSOR GARDNER.

Lw 3. TORTS.—The text-book is Ames and Smith's Cases on Torts.

Four hours a week. Fall term. MR. WALZ.

Lw 4. TORTS.—A continuation of course 3. Three hours a week. Winter term. MR. WALZ.

Lw 5. TORTS.—A continuation of course 4. Two hours a week. Spring term. MR. WALZ.

Lw 6. HISTORY AND ELEMENTS OF LAW.—Lectures. One hour a week. Fall term. PROFESSOR ROGERS.

Lw 7. REAL PROPERTY.—The text-book is Tiedeman on Real Property.

Four hours a week. Fall term. PROFESSOR GARDNER.

Lw 8. REAL PROPERTY.—A continuation of course 7. Three hours a week. Winter term. PROFESSOR GARDNER.

Lw 9. AGENCY.—The text-book is Huffcut's Cases on Agency. Two hours a week. Winter term. Mr. WALZ.

Lw 10. BANKRUPTCY.—Lectures. One hour a week. Winter term. Mr. HAMLIN.

LW II. BANKRUPTCY.—A continuation of course 10. One hour a week. Spring term. MR. HAMLIN.

LW 12. CRIMINAL LAW.--The text-book is Beale's Cases on Criminal Law.

Four hours a week. Spring term. MR. WALZ.

Lw 13. QUASI CONTRACTS.—The text-book not selected. Two hours a week. Spring term. PROFESSOR GARDNER.

Lw 14. COMMON LAW PLEADING.—Lectures. Three hours a week. Spring term. Mr. MARTIN.

Lw 15. EQUITY.—The text-books are Bispham on Equity Jurisprudence, and Shepard's Illustrative Cases in Equity. *Four hours a week.* Fall term. MR. WALZ.

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Lw 16. EQUITY JURISPRUDENCE.—A continuation of course 15. Four hours a week. Winter term. Mr. WALZ.

Lw 17. EVIDENCE.—The text-book is Thayer's Cases on Evidence.

Four hours a week. Fall term. PROFESSOR GARDNER.

Lw 18. EVIDENCE.—A continuation of course 17. Three hours a week. Winter term. PROFESSOR GARDNER.

Lw 19. PRIVATE CORPORATIONS.—The text-book is Cummings's Cases on Private Corporations.

Four hours a week. Fall term. PROFESSOR GARDNER.

Lw 20. PRIVATE CORPORATIONS.—A continuation of course 19. *Two hours a week*. Winter term. Professor Gardner.

Lw 21. REAL PROPERTY.—The text-book is Finch's Cases on the Law of Property in Law.

Three hours a week. Fall term. MR. WALZ.

Lw 22. REAL PROPERTY.—A continuation of course 21. *Three hours a week*. Winter term. Mr. WALZ.

Lw 23. CONSTITUTIONAL LAW.—The text-book is Boyd's Cases.

Two hours a week. Winter term. PROFESSOR ROGERS.

Lw 24. DOMESTIC RELATIONS.—The text-book is Elwell's Leading Cases.

Two hours a week. Winter term. PROFESSOR GARDNER.

Lw 25. WILLS AND ADMINISTRATION.—The text-book is Chaplin's Cases on Wills.

Four hours a week. Spring term. PROFESSOR GARDNER.

Lw 26. PARTNERSHIP.—The text-book is Ames's Cases on Partnership. Four hours a week. Spring term. MR. WALZ.

Lw 27. EQUITY PLEADING.—Lectures. Two hours a week. Spring term. Mr. CLARK. Lw 28. ROMAN LAW.—Lectures. One hour a week. Spring term. JUDGE EMERY.

Lw 29. EVIDENCE.—Lectures. The time is not fixed. JUDGE WISWELL.

Lw 30. MEDICAL JURISPRUDENCE.—Lectures. Two hours a fortnight. Winter term. Mr. Southard.

Lw 31. MEDICAL JURISPRUDENCE.—A continuation of course 30. Two hours a fortnight. Spring term. Mr. SOUTHARD.

# MATHEMATICS AND ASTRONOMY.

PROFESSOR HART; PRESIDENT HARRIS; MR. CRATHORNE.

Ms I. SOLID GEOMETRY.—Solid and spherical geometry, including the mensuration of solids, and original demonstrations.

The text-book is Gore's Solid Geometry. Five hours a week for eight weeks. Spring term. MR. CRATHORNE.

Ms 18. ALGEBRA.—Review of quadratic equations and of the binomial theorem with integral, fractional, and negative exponents; variation; progression; convergence and divergence of series; undetermined coefficients; partial fractions; permutations and combinations; probability; logarithms; exponential and logarithmic series; computation of logarithms; the theory of equations.

The text-book is Wells's College Algebra, Part 2. Five hours a week. Fall term. Professor Hart; President Harris; Mr. Crathorne.

Ms 4. PLANE TRIGONOMETRY.—The text-book is Phillips and Strong's Trigonometry. *Five hours a week for ten weeks*. Spring term. PROFESSOR HART; MR. CRATHORNE.

Ms 19. SPHERICAL TRIGONOMETRY.—A continuation of course 4, with additional problems and applications to spherical trigonometry. *Five hours a week for eight weeks*. Spring term. PROFESSOR HART.

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Ms 5. ANALYTICAL GEOMETRY.—A brief study of the point, right line, and conic sections.

The text-book is Wentworth's Analytic Geometry. Five hours a fortnight. Spring term. MR. CRATHORNE.

Ms 6. ANALYTICAL GEOMETRY.—A more extended course. The straight line and conic sections, including polar and oblique coördinates; the equation of the second degree; introduction to solid analytical geometry.

The text-book is Nichols's Analytic Geometry. Five hours a week. Fall term. PROFESSOR FERNALD; MR. CRATHORNE.

Ms 7. CALCULUS.—Differentiation; integration by fundamental formulas; integration regarded as a summation; definite integrals.

The text-book is Lambert's Differential and Integral Calculus. *Five hours a week.* Spring term. PROFESSOR HART; PROFESSOR FERNALD.

Ms 8. CALCULUS.—Applications of differential calculus; applications of integral calculus.

The text-book is Lambert's Differential and Integral Calculus. Five hours a fortnight. Fall term. PROFESSOR HART.

Ms 9. DESCRIPTIVE ASTRONOMY.—The text-book is supplemented by informal lectures, and illustrated by lantern slides, the Trouvelot drawings of celestial objects, and work in the observatory.

The text-book is Young's Elements of Astronomy. *Five hours* a *fortnight*. Spring term. PROFESSOR HART.

Ms 10. PRACTICAL ASTRONOMY.—Problems in the conversion of time, the determination of terrestrial latitudes and longitudes, and the establishment of meridian lines. The instruments used are the sextant, artificial horizon, portable chronometer, theodolite, and vertical circle. *Five hours a fortnight*. Spring term. PROFESSOR HART.

MS II. ADVANCED ALGEBRA.—Determinants and the solution of higher equations. *Five hours a fortnight*. Spring term. MR. CRATHORNE. Ms 12. ADVANCED INTEGRAL CALCULUS.—A course based upon Byerly's Integral Calculus. *Five hours a fortnight*. Given in the fall term of odd years. PROFESSOR HART.

MS 13. ADVANCED INTEGRAL CALCULUS.—A continuation of course 12. *Five hours a fortnight*. Given in the spring term of even years. PROFESSOR HART.

Ms 20. SOLID ANALYTICAL GEOMETRY.—Lectures based on C. Smith's Solid Geometry. *Five hours a fortnight*. Given in the fall term of even years. PROFESSOR HART.

Ms 15. DIFFERENTIAL EQUATIONS.—The text-book is Murray's Differential Equations. *Five hours a fortnight*. Given in the spring term of odd years. PROFESSOR HART.

Ms 16. PRACTICAL ASTRONOMY.—The theory and use of the sextant, universal instrument, transit, and zenith telescope. *Five hours a fortnight*. Given in the fall term of odd years. PROFESSOR HART.

Ms 17. PRACTICAL ASTRONOMY.—A continuation of course 16. *Five hours a week.* Given in the spring term of even years. PROFESSOR HART.

## PHYSICS.

PROFESSOR STEVENS; MR. DORSEY; MR. SIDENSPARKER.

Ps I. GENERAL PHYSICS.—Lectures on the dynamics of solids, liquids and gases; sound and light; experiments before the class; problems. *Five hours a week*. Fall term. PROFESSOR STEVENS.

Ps 2. GENERAL PHYSICS.—A continuation of course I; heat and electricity. *Five hours a fortnight*. Spring term. ProFessor STEVENS.

Ps 12. GENERAL PHYSICS.—A course covering the ground of course I, with more attention to the experimental and historical aspects and less to the mathematical.

The text-book is Gage's Principles of Physics. Five hours a fortnight. Fall term. MR. DORSEY.

Ps 13. GENERAL PHYSICS.—A continuation of course 12. Five hours a fortnight. Spring term. Mr. Dorsey.

Ps 3. ELEMENTARY PHYSICS.—A non-mathematical course, covering the ground of course 1. The recitations are supplemented by lectures and experimental demonstrations.

The text-book is Dolbear's Natural Philosophy. Five hours a fortnight. Fall term. MR. DORSEY.

Ps 4. ELEMENTARY PHYSICS.—A continuation of course 3. Two hours a week. Spring term. Mr. DORSEY.

Ps 5. LABORATORY PHYSICS.—The subjects usually included in an under-graduate course. Special attention is given to the reduction of observations, and the tabulation of results.

Nichols's Laboratory Manual is made the basis of most of the experiments. † *Five hours a week.* Spring term. PROFESSOR. STEVENS; MR. DORSEY; MR. SIDENSPARKER.

Ps 6. LABORATORY PHYSICS.—A brief course for students in the short course in pharmacy.  $\dagger Two$  hours a fortnight. Spring term. Mr. SIDENSPARKER.

Ps 7. ADVANCED OPTICS.—Lectures in continuation of course I, based chiefly upon Preston's Light. *Five hours a fortnight*. Spring term. PROFESSOR STEVENS.

Ps 8. ADVANCED PHYSICS.—One course in mathematical physics is offered each year. For this year the text-book is Merriman's Least Squares. *Five hours a fortnight*. Fall term. PROFESSOR STEVENS.

PS 9. LABORATORY PHYSICS.—General laboratory work in continuation of course 5. † *Five hours a week*. Fall term. PROFESSOR STEVENS.

Ps 10. LABORATORY PHYSICS.—Advanced laboratory work in optics, in continuation of course 9.  $\dagger$  *Five hours a week*. Spring term. Professor Stevens.

PS II. ELECTRICAL MEASUREMENT AND TESTING.—The measurement of resistance, potential, current and capacity; the testing of galvanometers, etc. The charge for this course is \$2.50. † Four hours a week. Fall term. Mr. DORSEY.

Ps 14. ELECTRICAL MEASUREMENT AND TESTING.—Additional work in the subjects offered in course 11, with lectures on the mathematical theory of electrical instruments. The charge for this course is 1.00. One hour a week. Fall term. PROFESSOR STEVENS.  $\dagger$  Three hours a week. Fall term. MR. DORSEY.

Ps 15. LABORATORY PHYSICS.—A special course, open to students who have completed courses 9, 10, and 11. Some subject is assigned for original investigation, or the work of a published research is repeated.  $\dagger$  *Five hours a week.* Fall term. PROFESSOR STEVENS.

Ps 16. LABORATORY PHYSICS.—A continuation of course 15. † Five hours a week. Spring term. PROFESSOR STEVENS.

# DRAWING.

## PROFESSOR GROVER; MR. WESTON; MR. CLARK.

Dr. 1. DRAWING.—Free-hand work in perspective and model drawing; lettering.

† Five hours a week. Fall term. MR. CLARK.

Dr 2. MATHEMATICAL DRAWING.—The plotting of functions, and the solution of equations by the graphic method.

The text-book is Harris and Hart's Lessons in Mathematical Drawing. † *Three hours a week for thirteen weeks*. Fall and spring terms. Mr. CLARK.

Dr 3. MECHANICAL DRAWING.—Instruction and practice in the care and use of drawing instruments, in the drawing of geometrical problems, and in the use of water colors. The textbook is Faunce's Mechanical Drawing.

† Five hours a week. Spring term. MR. CLARK.

Dr 4. MECHANICAL DRAWING.—Problems in shades and shadows, and dimension drawing.

The text-book is Faunce's Mechanical Drawing. † *Five hours* a week. Fall term. Mr. CLARK.

Dr 5. GENERAL DRAWING.—Isometric and cabinet projections, perspective, and the preparation of working drawings. Lectures and exercises in the drawing room.

† Twelve hours a week for five weeks. Spring term. MR. WESTON.

Dr 6. DESCRIPTIVE GEOMETRY.—Elementary problems; tangents, intersection of planes, cylinders, cones, spheres, etc. The time is divided equally between the recitation room and drawing room.

The text-book is Church's Descriptive Geometry. Five hours a fortnight. Fall term. MR. WESTON; MR. CLARK.

Dr 7. DESCRIPTIVE GEOMETRY.—A continuation of course 6. Three hours a fortnight. Spring term. Mr. WESTON; Mr. CLARK.

Dr 8. STEREOTOMY.—The application of the methods of descriptive geometry to the preparation of drawings for retaining walls, bridge abutments, piers, arches, etc.

† Twelve hours a week for five weeks. Spring term. MR. WESTON.

## CHEMISTRY.

PROFESSOR AUBERT; ASSISTANT PROFESSOR RYLAND; MR. ROGERS; MR. CROCKETT; MR. SMALL.

Ch I. GENERAL CHEMISTRY.—Recitations and lectures on the general principles of chemistry, illustrated by charts, experiments, etc.

The text-book is Remsen's Inorganic Chemistry. Five hours a fortnight. Fall term. MR. ROGERS.

Ch 2. GENERAL CHEMISTRY.—A continuation of course 1. Five hours a fortnight. Spring term. Mr. ROGERS. Ch 3. LABORATORY CHEMISTRY.—The preparation of the more common elements and inorganic compounds, and the study of their properties.

The text-book is Remsen and Randall's Chemical Experiments. † Two hours a week. Fall term. MR. CROCKETT.

Ch 4. LABORATORY CHEMISTRY.—Elementary qualitative analysis.

† Two hours a week. Spring term. Mr. CROCKETT.

Ch 5. INORGANIC CHEMISTRY.—Lectures and recitations, illustrated by specimens.

The text-book is Joannis's Cours elementaire de chimie, Vols. 1 and 2. Five hours a fortnight. Fall term. PROFESSOR RYLAND.

Ch 6. INORGANIC CHEMISTRY.—A continuation of course 5. Five hours a fortnight. Spring term. PROFESSOR RYLAND.

Ch 7. ORGANIC CHEMISTRY.—The marsh gas series. Lectures and recitations, illustrated by specimens.

The text-book is Remsen's Organic Chemistry. Five hours a fortnight. Fall term. PROFESSOR RYLAND.

Ch 8. ORGANIC CHEMISTRY.—The unsaturated compounds and the benzene series.

The text-book is Remsen's Organic Chemistry. Five hours a fortnight. Spring term. PROFESSOR RYLAND.

Ch 10. CHEMICAL READING.—Study and translation of foreign works. One hour a week. Fall term. PROFESSOR RYLAND.

Ch II. LABORATORY PROCESSES.—Laboratory methods and processes used in the arts. *Five hours a fortnight*. Spring term. PROFESSOR RYLAND.

Ch 12. ORGANIC CHEMICALS.—The preparation and purification of typical organic substances.

Remsen's Organic Chemistry is used for reference. † Five hours a week. Fall term. PROFESSOR RYLAND.

Ch 14. QUALITATIVE ANALYSIS.—The determination and the separation of the constituents of inorganic substances, and the study of the reactions involved in these processes.

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The text-book is Noyes's Qualitative Analysis. The time varies; it is stated in the tables. Mr. ROGERS.

Ch 15. QUALITATIVE ANALYSIS.—The examination of mixtures of salts and the determination of their components.

The text-book is Noyes's Qualitative Analysis. The time varies; it is stated in the tables. Mr. ROGERS.

Ch 16. QUANTITATIVE ANALYSIS.—Gravimetric determinations.

The text-book is Appleton's Quantitative Analysis. The time varies; it is stated in the tables. MR. SMALL.

Ch 18. QUANTITATIVE ANALYSIS.—Analysis of complex alloys, minerals, etc.

The text-book is Clowes and Coleman's Quantitative Analysis. The time varies; it is stated in the tables. Fall term. PROFESSOR RYLAND.

Ch 19. VOLUMETRIC ANALYSIS AND ASSAYING.—Acidimetry, alkalimetry, oxydimetry; gold and silver assaying.

The text-book is Clowes and Coleman's Quantitative Analysis. The time varies; it is stated in the tables. PROFESSOR RYLAND.

Ch 20. AGRICULTURAL ANALVSIS.—The analysis of fodders, fertilizers, milk, and other agricultural products. The methods are those recommended by the Association of Official Agricultural Chemists. The time varies; it is stated in the tables. PROFESSOR RYLAND.

Ch 21. TOXICOLOGY AND URINALYSIS.—The determination of the commoner poisons; the analysis of urine.

The text-book is Witthaus's Urinalysis and Toxicology. The time varies; it is stated in the tables. PROFESSOR RYLAND.

Ch 22. THESIS WORK.—The thesis must embody the results of original work in analysis, or research. † *Fifteen hours a* week for thirteen weeks. Spring term. PROFESSOR RYLAND.

Ch 23. ORGANIC CHEMISTRY.—A continuation of course 8. Five hours a fortnight. Fall term. PROFESSOR RYLAND.

Ch 24. INDUSTRIAL CHEMISTRY.—General processes of technical chemistry, and selected subjects including the principal manufactured products of special interest. *Five hours a fortnight*. Spring term. PROFESSOR AUBERT.

Ch 25. TECHNICAL ANALYSIS.—The analysis of ores and industrial products. † *Five hours a week*. Fall term. PROFESSOR RYLAND.

Ch 26. PHYSICAL CHEMICAL METHODS.—The determination of molecular weight by the vapor density, boiling point, and freezing point methods. The use of the refractometer and the polariscope. † *Five hours a week*. Spring term. PROFESSOR RYLAND.

Ch 27. LABORATORY PHYSIOLOGICAL CHEMISTRY.—Qualitative tests of fats, carbohydrates, protein, blood, milk, etc.

The text-book is May's Physiological Chemistry. † Ten hours a week for nine weeks. Fall term. PROFESSOR JACKMAN.

Ch 13. DESCRIPTIVE MINERALOGY.—The text-book is Moses and Parsons's Elements of Mineralogy. † *Two hours a week*. Spring term. PROFESSOR JACKMAN.

## NATURAL HISTORY.

## PROFESSOR HARVEY; MR. STOVER.

Nh I. CRYPTOGAMIC BOTANY.—A detailed study of about thirty type forms. Special attention is given to algæ and to useful and injurious fungi. Students collect specimens and prepare an herbarium.

The text-book is Bessey's Botany. Five hours a fortnight. Fall term. PROFESSOR HARVEY.

Nh 2. LABORATORY BOTANY.—The use of the microscope, micrometers, camera lucida, and microtome; the preparation of slides; the analysis, description, and classification of cryptogams, and their preparation for the herbarium.  $\dagger Two$  hours a week. Fall term. PROFESSOR HARVEY; MR. STOVER.

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Nh 3. ADVANCED PHYSIOLOGY.—A consideration of the nervous system and special senses of the human body.

The text-book is Kirke's Handbook of Physiology. Five hours a fortnight. Spring term. PROFESSOR HARVEY.

Nh 4. LABORATORY PHYSIOLOGY.—Examination of skeleton, manikin, charts, models, microscopic slides, and the dissection of lower animals.  $\dagger Two hours a week$ . Spring term. PROFESSOR HARVEY.

Nh 5. INVERTEBRATE ZOOLOGY.—A detailed study of type forms of all the branches. *Five hours a fortnight*. Fall term. PROFESSOR HARVEY.

Nh 6. LABORATORY ZOOLOGY.—Supplementary to course 5. The student uses the compound microscope, makes dissections and careful drawings, and classifies the forms studied.  $\dagger$  *Five hours a week.* Fall term. Mr. STOVER.

Nh 7. HELMINTHOLOGY.—A course in zoology with special attention to animal parasites. † *Four hours a week*. Spring term. PROFESSOR HARVEY.

Nh 8. COMPARATIVE VERTEBRATE ZOOLOGY.—A comparative study of type forms of vertebrate animals. Special attention is given to the zoology of the domestic animals.

The text-book is Packard's Zoology. Seven hours a fortnight. Fall term. PROFESSOR HARVEY.

Nh 9. LABORATORY ZOOLOGY.—Museum work; study of charts, and models; dissections of the fish, frog, turtle, bird, and rat; methods of preparing specimens for collections. † *Four hours a week*. Spring term. PROFESSOR HARVEY.

Nh 10. ENTOMOLOGY.—The anatomy, physiology, classification, and economic importance of insects.

The text-books are Smith's Economic Entomology, and Comstock's Entomology. *Five hours a fortnight*. Spring term. PROFESSOR HARVEY. Nh II. GEOLOGY.—Special attention is given to the origin and formation of soils, to the method of conducting a geological survey, and to the geology of Maine.

The text-book is Scott's Introduction to Geology. Five hours a fortnight. Fall term. PROFESSOR HARVEY.

Nh 12. HUMAN ANATOMY.—A detailed study of the human skeleton. Examination of a manikin showing details of the respiratory, digestive, circulatory, reproductive, depurgatory, nervous, and muscular systems, and of the organs of the special senses.

The text-book is Gray's Anatomy. *Five hours a fortnight*. Spring term. PROFESSOR HARVEY.

Nh 13. BOTANY.—An exhaustive study of some phenogamic order, together with a prepared collection of the Maine species. † *Five hours a week*. Fall term. PROFESSOR HARVEY.

Nh 14. BOTANY.—An exhaustive study of some lesser group of cryptogams, or the life history of some species.  $\dagger$  *Five hours a week.* Spring term. PROFESSOR HARVEY.

Nh 15. ZOOLOGY.—History and principles of zoology. † Five hours a week. Fall term. PROFESSOR HARVEY.

Nh 16. ZOOLOGY.—A detailed study of some small group of animals, or the history of some species. † *Five hours a week*. Spring term. PROFESSOR HARVEY.

# AGRICULTURE.

## PROFESSOR WOODS; PROFESSOR GOWELL; PROFESSOR MERRILL; PROFESSOR RUSSELL.

Ag I. BIOLOGICAL CHEMISTRY.—Lectures and recitations on the chemical changes in nature important to agriculture; the composition of air, soils, natural waters, and plants; the sources and assimilation of plant food, and the chemical processes and methods of investigation by which these subjects are studied.

The text-book is Johnson's How Crops Grow. Five hours a fortnight. Fall term. PROFESSOR MERRILL.

Ag 2. BIOLOGICAL CHEMISTRY.—A continuation of course I. Lectures and recitations in physiological chemistry, including the composition of the animal body, and of food materials; the chemical changes involved in the digestion and assimilation of food; the chemistry of milk and dairy products, and the chemical processes and methods of investigation by which these subjects are studied.

The text-book is Arthus's Chimie physiologique. Five hours a week. Spring term. PROFESSOR MERRILL.

Ag 3. AGRICULTURAL CHEMISTRY.—Lectures on the origin, composition, preparation and use of commercial fertilizers; the supply, composition, care and use of farm manures, and the general considerations which pertain to the maintenance of soil fertility. Five hours a fortnight for nine weeks. Given in the spring term of even years. PROFESSOR WOODS.

Ag 4. AGRICULTURAL PHYSICS.—Lectures on the relation of soils to heat and moisture; the mechanical condition of soils best suited to plant growth, and the objects to be gained by cultivation. *Five hours a fortnight for nine weeks*. Given in the spring term of odd years. PROFESSOR WOODS.

Ag 5. AGRICULTURAL ENGINEERING.—Lectures on farm drainage, irrigation, water supply for stock and household, farm implements and machinery, handling crops, construction of farm buildings, sites, etc. *Five hours a fortnight for nine weeks*. Given in the spring term of even years. PROFESSOR GOWELL.

Ag 6. STOCK FEEDING.—Lectures upon the production of cattle foods and their composition; formulating rations for milk and meat production; the application of the lectures to the animals in the herd.

The text-book is Henry's Feeds and Feeding. *Five hours a* week for seven weeks. Given in the spring term of odd years. PROFESSOR GOWELL.

Ag 7. DAIRYING.—Lectures upon the formation and composition of milk; sources of infection; bacteria and their relation to dairying; ferments and their effects. The text-books are Grotenfelt and Woll's Principles of Modern Dairy Practice, and Wing's Milk and Its Products. *Five hours a fortnight for nine weeks*. Given in the spring term of even years. PROFESSOR GOWELL.

Ag 8. STOCK BREEDING.—Lectures upon animal reproduction, the principles of breeding, and the means of improvement and development. Practice is given in judging animals by a scale of points.

The text-books are Miles's Cattle Breeding, and Saunder's Horse Breeding. *Five hours a week for seven weeks*. Given in the spring term of odd years. PROFESSOR GOWELL.

Ag 9. POULTRY INDUSTRY.—Lectures, with practice in handling poultry; judging by a scale of points; breeding; hatching by natural and artificial processes; the use of machinery; caponizing; the construction and arrangement of buildings. *Five hours a week for four weeks*. Given in the spring term of odd years. PROFESSOR GOWELL.

Ag IO. DAIRY PRACTICE.—The treatment and handling of milk and cream; milk testing for fat and other solids; aëration, pasteurization and sterilization; the application of acid tests and ferments to butter and cheese making; operating and caring for dairy machinery; making, curing and judging butter and cheese; the business management of factories and creameries. Each student is required to provide two suits of clothes made of white drilling. † Seven hours a week for twelve weeks. Given in the spring term of even years. PROFESSOR GOWELL.

Ag II. VETERINARY SCIENCE.—Lectures, demonstrations and clinics, illustrated by models, natural preparations, and living animals. *Five hours a fortnight*. Given in the spring term of odd years. PROFESSOR RUSSELL.

Ag 12. DISSECTING.—A brief course intended to make the student familiar with the location and appearance of the more important organs of the animal body. † Seven hours a week for six weeks. Spring term. PROFESSOR RUSSELL.

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Ag 13. BACTERIOLOGY.—A study of the morphology and biology of bacteria and fungi, particularly those of pathologic or economic importance; culture methods; biological examinations of air and water. During the time given to laboratory work, exercises in this course will be held every day, and the number of exercises will be correspondingly decreased. The instructor will arrange for an exchange of time with other laboratory courses. † *Five hours a week for nine weeks*. Spring term. PROFESSOR RUSSELL.

Ag 14. ANIMAL HISTOLOGY.—Dissecting and the preparation of the most important tissues and organs. †*Ten hours a week* for nine weeks. Spring term. PROFESSOR RUSSELL.

Ag 15. LABORATORY BACTERIOLOGY.—An advanced course. † Ten hours a week for nine weeks. Spring term. PROFESSOR RUSSELL.

## HORTICULTURE.

## PROFESSOR MUNSON; MR. STOVER.

Ht I. GENERAL BOTANY.—The structure and functions of the organs of plants; the development and relationship of the leading groups. Lectures, supplemented by work in the laboratory, greenhouses, and field.

Gray's School and Field Book of Botany is used for reference. † *Five hours a week*. Spring term. PROFESSOR MUNSON; MR. STOVER.

Ht 2. POMOLOGY.—The economic importance, methods of propagation and culture, and the marketing of fruits; the principles and practice of spraying plants. Lectures. *Five hours a fortnight for nine weeks*. Given in the fall term of even years. PROFESSOR MUNSON.

Ht 3. VEGETABLE GARDENING.—The history and uses of leading garden vegetables, with directions for their culture in the field and under glass. Lectures. *Five hours a fortnight for nine weeks*. Given in the fall term of even years. PROFESSOR. MUNSON.





FERNALD HALL.

Ht 4. PLANT VARIATION.—A discussion of the underlying principles of horticulture. The origin and distribution of cultivated plants; their variation as affected by soil, climate, and cultivation; the methods and effects of crossing; the principles of selection, and the influence of heredity. Students in this course must have taken course I. Five hours a fortnight for nine weeks. Given in the fall term of odd years. PROFESSOR MUNSON.

Ht 5. LANDSCAPE GARDENING.—The principles of landscape art and their application. *Five hours a fortnight for nine weeks*. Given in the fall term of odd years. PROFESSOR MUNSON.

Ht 6. LABORATORY HORTICULTURE.—Practical work in orchard, garden, and greenhouse, supplementing courses 2 and 3.  $\dagger Five$  hours a week. Given in the fall term of even years Professor Munson.

Ht 7. LABORATORY HORTICULTURE.—Practical work in the laboratory, the nursery, and on the campus, supplementing courses 4 and 5.  $\dagger$  *Two hours a week*. Given in the fall term of odd years. PROFESSOR MUNSON.

Ht 8. HISTOLOGY OF PLANTS.—A description and comparison of tissues, with investigation of the minute anatomy of vegetable organs, and studies in the phenomena of cell development and fertilization.

Goodale's Physiological Botany is used for reference.  $\dagger Five$  hours a week for nine weeks. Spring term. PROFESSOR MUNSON.

Ht 9. PLANT BREEDING.—A systematic study of the amelioration of plants by cultivation. Lectures and investigations concerning: the fact and philosophy of variation, the causes of individual differences, the choice and fixation of varieties; the philosophy of the crossing of plants, the limits of crossing, the function of a cross; how domestic varieties originate, the influence of heredity, the principles of selection.

Bailey's Plant Breeding, Darwin's Animals and Plants under Domestication, and Darwin's Cross and Self Fertilization in the Vegetable Kingdom, are used for reference. Five hours a fortnight. Given in the fall term of odd years. PROFESSOR MUNSON. MUNSON.

Ht IO. FORESTRY. Importance and scope of the subject; meteorological influences; financial considerations; the propagation of trees and the planting of forests; forest management; forest products; forest fires, their prevention and control; enemies and disease. Lectures. *Five hours a fortnight*. Given in the fall term of even years. PROFESSOR MUNSON.

Ht II. PLANT PATHOLOGY.—A systematic study of the more important diseases of plants. Students in this course must have taken course 8. Lectures and investigations.  $\dagger Two$  hours a week. Given in the fall term of odd years. PROFESSOR MUNSON.

# PHARMACY.

# Assistant Professor Jackman.

Pm I. PHYSICAL AND OFFICIAL PHARMACY.—The history of pharmacopœias, dispensatories, etc.; weights and measures, specific gravity, the pharmaceutical uses of heat, distillation, solution, filtration, etc.; official preparations; pharmaceutical problems, involving percentage solutions, parts by weight and measure, chemical principles and equations, actual pharmacy operations.

The text-book is Caspari's Pharmacy. Five hours a week. Fall term.

Pm 2. INORGANIC, ORGANIC, AND EXTEMPORANEOUS PHAR-MACY.—The elements, official salts, and inorganic acids, their preparation and classification; organic compounds, their classification, official preparations; official drugs of the materia medica, classified according to their proximate principles, the preparation of these drugs, and animal preparations; extemporaneous pharmacy, the principles of dispensing, store management, etc.

The text-book is Caspari's Pharmacy. Five hours a week. Fall term.

Pm 3. LABORATORY PHARMACY.—Official preparations and tests. The operations of manufacturing pharmacy, including the preparation of granular and scale salts, infusions, syrups and tinctures; official tests of chemicals, drugs, and preparations, for identity, strength and adulteration; drug assaying.

The text-book is Caspari's Pharmacy, or the U. S. Pharmacopœia. † *Twelve hours a week*. Fall term.

Pm 4. PHARMACOPŒIA AND PRESCRIPTIONS.—A complete review of the pharmacopœia, with special reference to the chemical and pharmaceutical principles involved in processes and preparations; critical examination of prescriptions from actual files, with reference to inelegance, physiological, pharmaceutical, and chemical incompatibility; doses; methods and order of compounding, etc.

The text-books are Caspari's Pharmacy and the U. S. Pharmacopœia. *Five hours a week*. Spring term.

Pm 5. INORGANIC PHARMACOGNOSY.—Official and common names; practical exercises in the identification of specimens.

The text-book is the U. S. Pharmacopœia. Five hours a fortnight. Fall term.

Pm 6. ORGANIC PHARMACOGNOSY.—Official and common names, practical exercises.

The text-book is the U. S. Pharmacopœia. Four hours a week. Spring term.

Pm 7. MATERIA MEDICA.—Chemicals and drugs, their nature, uses, classification, therapeutic action, and doses; poisons, and antidotes.

The text-book is Potter's Materia Medica. Five hours a fortnight. Fall term.

Pm 8. THESIS WORK.—The thesis must embody the results of original work in analysis, or research.  $\dagger Ten$  hours a week. Spring term.

# CIVIL ENGINEERING.

PROFESSOR GROVER; MR. WESTON; MR. MURRAY.

Ce I. PLANE SURVEYING.—Recitations on the general principles of land surveying, the laying out of land, the dividing of land, surveying of public lands, direct leveling, and the variation of the magnetic needle.

The text-book is Raymond's Surveying. Five hours a fortnight. Spring term. MR. WESTON.

Ce 2. FIELD WORK IN SURVEYING.—The uses of the chain, compass, transit, and level. Instruments are adjusted, original surveys made, and old lines retraced. Plats are prepared of the surveys made in the field. *†Four hours a week*. Spring term. MR. WESTON; MR. MURRAY.

Ce 3. RAILROAD ENGINEERING.—Lectures and recitations on the theory of railroad curves, switches, turnouts and slope stakes; the calculation of earthworks, and the resistance to trains offered by grades and curves; the theory of economic location.

The text-book is Carhart's Field Book for Civil Engineers. Five hours a fortnight. Fall term. MR. WESTON.

Ce 4. RAILROAD WORK.—The location and detailed survey of a railroad several miles long. The curves are laid out, levels taken, and all the necessary measurements made to enable the student to compute the excavations and embankments and estimate the cost of construction.  $\dagger Five$  hours a week. Fall term. MR. WESTON; MR. MURRAY.

Ce 5. HIGHWAY ENGINEERING.—The location, construction, and improvement of country roads under different conditions of soil, climate, and traffic. *One hour a week*. Fall term. Mr. WESTON.

Ce 6. MECHANICS.—The principles of statics; the algebraic and graphic solution of statical problems, including simple trusses; exercises in finding the moment of inertia, center of gravity, shearing force and bending moment. The text-book is Church's Mechanics of Engineering. *Five* hours a week. Fall term. MR. WESTON.

Ce 7. MECHANICS.—A continuation of course 6, including the principles of dynamics. *Five hours a week*. Spring term. Mr. WESTON.

Ce 8. SANITARY ENGINEERING.—Drainage of land; plumbing of houses; drainage and sewerage of towns; sewage disposal; water supply and purification; ventilation of houses.

The text-book is Merriman's Sanitary Engineering. Five hours a fortnight. Fall term. PROFESSOR GROVER.

Ce 9. HIGHER SURVEYING.—The plane table, stadia measurements, topographical surveying, the elements of geodesy, the measurement of base lines, calculation of a system of triangulation. † *Ten hours a week for eight weeks*. Spring term. Mr. WESTON; Mr. MURRAY.

Ce 10. HYDRAULICS.—The weight, pressure, and motion of water; the flow of water through orifices and pipes; weir gauging; the flow of water in open channels, mains, and distribution pipes; distribution systems; the construction of water works for towns and cities.

The text-book is Church's Mechanics of Engineering. Five hours a fortnight. Fall term. PROFESSOR GROVER.

Ce II. HYDRAULICS FIELD WORK.—The measurement of the flow of rivers is illustrated by the application of the current meter and the various forms of floats to the Penobscot River or some of its large branches. †Seven hours a week for six weeks. Fall term. PROFESSOR GROVER; MR. MURRAY.

Ce 12. STRUCTURES.—A detailed study of the properties of materials used in engineering structures; their resistance to bending, breaking, extension and compression, under the various conditions of practice; the theory of stresses in framed structures; the usual systems of loading; the principles of designing.

Merriman's Mechanics of Materials, Johnson's Framed Structures, and Merriman's Roofs and Bridges, Part III, are used for reference. *Five hours a week*. Fall term. PROFESSOR GROVER. Ce 13. STRUCTURES.—A continuation of course 12; including the study of problems in connection with masonry structures; natural and artificial foundations; the stability of dams and retaining walls; the designing of bridge piers and abutments; the theory of the masonry arch.

The text-book is Baker's Masonry Construction. Five hours a week. Spring term. PROFESSOR GROVER.

Ce 14. DESIGNING.—Designs for several of the common types of wooden and steel structures, and preparation of drawings for the shop. †*Seven hours a week for twelve weeks*. Fall term. PROFESSOR GROVER; MR. MURRAY.

Ce 15. DESIGNING AND THESIS WORK.—A continuation of course 14 and the preparation of a thesis.  $\dagger Twelve$  hours a week. Spring term. PROFESSOR GROVER; MR. MURRAY.

Ce 16. HYDRAULIC ENGINEERING.—Rainfall, evaporation, and stream-flow; the collection, purification, and distribution of water for city supplies; water meters, water wheels and motors; the development and utilization of water power. *Five hours a fortnight*. Fall term. PROFESSOR GROVER.

Ce 17. HYDRAULIC ENGINEERING.—A continuation of course 16. Five hours a fortnight. Spring term. PROFESSOR GROVER.

Ce 18. SANITARY SCIENCE.—Lectures on the causes and prevention of disease, sanitation and the p blic health, and the relations of the engineer to this work. *One hour a week*. Fall term. PROFESSOR GROVER.

## MECHANICAL ENGINEERING.

## PROFESSOR FLINT; MR. WALKER; MR. STEWARD.

Me I. CARPENTRY.—The care and sharpening of tools, the squaring of stock, and taking work out of wind; practice in making different joints in soft and hard wood; wood turning. The charge for material is \$4.00 a term. † Seven hours a week for twelve weeks. Fall term. Mr. WALKER.

Me 19. MACHINE DRAWING.—Practice in tracing completed drawings, and in making drawings of standard bolts, threads, and simple machine parts, from actual dimensions. Special attention is given to the care and handling of instruments, lettering, and methods of projection.

<sup>†</sup> Seven hours a week for six weeks. Fall term. MR. WALKER.

Me 2. FORGE WORK.—Drawing and upsetting; welding; making rings, chain links, eye bolts, bolt heads, etc.; the making of a steel punch, cold chisels, and a set of lathe tools, for use in the machine shop; foundry work. The student must furnish a forging hammer, calipers, and scale, at a cost of \$2.50. The charge for materials is \$5.00 a term.  $\dagger$  *Five hours a week*. Spring term. MR. WALKER.

Me 3. KINEMATICS.—Methods of transmitting and transforming motion, illustrated by the solution of practical problems; study of forms of gearing, cone pulleys, etc.; construction of cams, lobed wheels, and gear teeth.

The text-book is Jones's Kinematics. *† Five hours a week.* Spring term. MR. WALKER.

Me 4. MACHINE WORK.—Exercises in filing and chipping; lathe work, drilling, boring and threading in the lathe; making cut gears, machinist taps, and finished bolts; exercises on the planer and shaper. Each student provides himself with center gauge, steel scale, and files, at a cost of \$2.50. The charge for materials is \$5.00 a term. Students will be given credit for work in commercial shops on presentation of satisfactory proof. The time devoted to machine work varies. MR. STEWARD.

Me 5. ANALYTICAL MECHANICS.—Motion of bodies under the action of forces; work, energy, composition and resolution of forces, center of gravity, friction, virtual velocities, moment of inertia.

The text-book is Wood's Analytical Mechanics. Five hours a week. Fall term. MR. WALKER.

Me 6. ANALYTICAL MECHANICS.—A continuation of course 5. Five hours a week for six weeks. Spring term. Mr. WALKER.

Me 7. MECHANICS OF MATERIALS.—Strength and elasticity of materials; strength of cylinders; riveted joints; shear and bending moment in beams; strength and deflection of beams, columns, and shafts.

The text-book is Merriman's Mechanics of Materials. Five hours a week for twelve weeks. Spring term. MR. WALKER.

Me 8. STRUCTURES.—A continuation of course 7, with applications to framed structures; graphical methods of analyzing roof and bridge trusses, and the stability of walls. Merriman's Mechanics of Materials, and Merriman's Roofs and Bridges are used for reference. *Five hours a fortnight*. Fall term. MR. WALKER.

Me 9. MACHINE DESIGN.—The principles of machine construction, treated by means of text-book, lectures, and a study of methods in modern practice; the preparation of working drawings, and the sketching of original designs of simple machine parts.

The text-book is Jones's Machine Design, Part II. † Seven hours a fortnight. Spring term. Mr. WALKER.

Me 10. HYDRO-MECHANICS.—The behavior of liquids in motion and under pressure, flowing through pipes and in open channels, with problems.

The text-book is Bowser's Hydro-Mechanics. Five hours a fortnight. Fall term. PROFESSOR FLINT.

Me II. HEAT AND STEAM.—The characteristics of steam and its behavior in pipes, boilers, and particularly in the cylinders of engines; problems involving the properties of saturated steam; the calculation of steam pipes and safety valves; the design of a boiler suited to run an engine under given conditions, and the detail drawings.

The text-book is Benjamin's Heat and Steam. Five hours a fortnight. Fall term. PROFESSOR FLINT.

Me 12. STEAM BOILER DESIGN.—Drawings of the more important parts of the design worked out in course 11. † *Twelve hours a week*. Fall term. PROFESSOR FLINT.

Me 13. TESTING.—Tests of steam gauges, boilers, etc.; tests of different metals under tension and compression. *Five hours a fortnight*. Spring term. PROFESSOR FLINT.

Me 14. STEAM ENGINE.—The steam engine as a source of power; the design, proportions and working of engine cylinders, steam pipes, and ports; engine valves, eccentrics, adjustable eccentrics; the locomotive link motion with its connections; problems on the slide valve and link motion; the calculation of details of an engine.

The text-book is Auchincloss's Link and Valve Motion. Seven hours a fortnight. Spring term. PROFESSOR FLINT.

Me 15. STEAM ENGINE DESIGN.—Drawings of the parts worked out in course 14; the setting of valves by means of the indicator; the calculation of horse power; the consumption of water and coal, etc. † *Fifteen hours a week for nine weeks*. Spring term. PROFESSOR FLINT.

Me 16. THESIS WORK.—The design of a piece of machinery. † Fifteen hours a week for nine weeks. Spring term. PROFES-SOR FLINT.

Me 17. DESIGN.—A course supplementary to Me 9, consisting of an original design of some piece of scientific apparatus, or, an original investigation of some engineering problem to be fully written up and presented to the department.

† Five hours a week. Fall term. PROFESSOR FLINT.

Me 18. DESIGN.—A continuation of course 17. † Five hours a week. Spring term. PROFESSOR FLINT.

# ELECTRICAL ENGINEERING.

## PROFESSOR WEBB; MR. DORSEY; MR. GROVER.

Ee I. ELECTRICITY AND MAGNETISM.—This course continues the subjects of electricity and magnetism begun in physics. Lectures are given, and laboratory methods and results are discussed with the class. The text-book is Silvanus Thompson's Electricity and Magnetism. *Two hours a week*. Fall term. PROFESSOR WEBB; MR. DORSEY.

Ee 2. ELECTRICITY AND MAGNETISM.—A continuation of course I; the dynamo and apparatus connected with its operation.

The text-book is Hawkins and Wallis's The Dynamo. Three hours a week. Spring term. PROFESSOR WEBB.

Ee 3. ELECTRICAL MACHINERY.—Lectures on the theory and construction of dynamos, motors, etc. *Five hours a fortnight*. Fall term. PROFESSOR WEBB.

Ee 4. ALTERNATING CURRENT MACHINERY.—The designing, construction, and operating of alternating current machinery, and the use of direct and alternating current machinery in lighting and the transmission of power.

The text-book is Jackson's Alternating Currents and Alternating Current Machinery. *Five hours a week for nine weeks*. Spring term. PROFESSOR WEBB.

Ee 5. ELECTRICAL DESIGN.—This course is similar to the course in machine design given to students in mechanical engineering. Each student is required to make the computations and complete drawings for a dynamo. † Seven hours a week. Fall term. PROFESSOR WEBB.

Ee 6. ELECTRICAL DESIGN.—The problems involved in designing alternating current machinery, in the electrical transmission of power, and in the distribution of electric light.  $\dagger$  *Ten hours a week for nine weeks*. Spring term. PROFESSOR WEBB.

Ee 7. LABORATORY ELECTRICITY.—Tests of electrical instruments; experimental work with dynamos, motors, etc.; tests of efficiency; photometric tests of electric lamps; the practical management of the electric light plant. The charge for this course is \$2.50. † *Five hours a week*. Fall term. MR. GROVER. Ee 13. ALTERNATING CURRENTS.—Theory and application of alternating currents; design and construction of alternating current generator, motor and transformer; methods of testing alternating current machines.

The text-book is Jackson's Alternating Currents and Alternating Current Machinery. *Five hours a fortnight*. Fall term. **PROFESSOR WEBB**.

Ee 14. ELECTRICAL TESTING.—Theory and construction of telegraph and telephone instruments; methods of operating and testing. Lectures. *Five hours a fortnight for nine weeks*. Spring term. PROFESSOR WEBE.

Ee 16. THESIS WORK.—The designing of electrical apparatus, laboratory investigation, or commercial testing, presented in proper form. † *Fifteen hours a week for nine weeks*. Spring term. PROFESSOR WEBB.

## MILITARY SCIENCE AND TACTICS.

## MR. WALKER.

Each man student is required to take military drill, unless physically unfit, and to attend recitations in military science.

The drill, course I, occupies the first ten weeks of the fall term, and the last thirteen weeks of the spring term, one hour a day, three days in the week, counting as one hour and a half in reckoning the student's total time. The remaining eight weeks in the fall term, and five weeks in the spring term, are given:—by the senior class, to recitations in military science, course 4, three recitations a fortnight; by the junior class, to recitations in military science, course 3, three recitations a fortnight; by the sophomore class, to recitations in military science, course 2, three hours a fortnight; by the freshman class, to mathematical drawing.

Mt I. MILITARY DRILL.—(a.) School of the soldier, school of the company, school of the battalion, and extended order

movements. (b.) Target practice at known distances up to six hundred yards. Marksman's buttons are awarded to cadets who qualify. (c.) Military signaling with flag, lantern, heliograph, and field telegraph. (d.) Band practice. † Three hours a week for the first ten and last thirteen weeks of each year.

Mt 2. GUARD DUTY.—Recitations on the Manual of Guard Duty. Required of sophomores. Three hours a fortnight for thirteen weeks.

Mt 3. DRILL REGULATIONS.—Recitations on U. S. Infantry Drill Regulations. Required of juniors. Three hours a fortnight for thirteen weeks.

Mt 4. ART OF WAR.-Required of seniors.

The text-book is Mercur's Elements of the Art of War. Three hours a fortnight for thirteen weeks.

## UNIVERSITY OF MAINE.

# ORGANIZATION OF THE UNIVERSITY.

The University is divided into colleges, each offering several courses upon related subjects. The colleges are interdependent and together form a unit. The organization is as follows.

College of Arts and Sciences.

The Classical Course, The Latin-Scientific Course, The Scientific Course, The Chemical Course, The Preparatory Medical Course.

College of Agriculture.

The Agricultural Course,

The Special Courses in General Agriculture,

The Special Course in Horticulture.

The Special Course in Dairying,

The Agricultural Experiment Station.

College of Engineering.

The Civil Engineering Course. The Mechanical Engineering Course, The Electrical Engineering Course.

College of Pharmacy.

The Pharmacy Course, The Short Course in Pharmacy.

SCHOOL OF LAW.

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# EXPLANATION OF TABLES.

The college year is divided equally into a fall term and a spring term. The year of the School of Law is divided into three terms, the fall, winter, and spring terms, of eleven, ten, and eleven weeks respectively. For details see the calendar.

The quota of studies prescribed for each student is, for a minimum, fifteen hours, and for a maximum, twenty hours of class-room work each week, exclusive of declamations and themes. The tables are made so as to require, with the military work of three hours a fortnight, approximately eighteen hours' work each week. The numbers in the tables show the average number of hours a week given to each study. The number 2.5 means three hours one week and two the next. In making up the quota of studies, laboratory work, and other exercises not requiring preparation, count as half time—that is, two hours in the laboratory are counted as equivalent to one hour. The hours devoted to such studies are marked with a dagger (†) in the tables.

The abbreviations and numerals preceding a study refer to the explanatory statements to be found on the pages given.

# COLLEGE OF ARTS AND SCIENCES.

The aim of this college is to furnish a liberal education and to afford opportunity for specialization along literary, philosophical, and general and special scientific lines. The college comprises:

The Classical Course.

The Latin-Scientific Course.

The Scientific Course.

The Chemical Course.

The Preparatory Medical Course.

# THE CLASSICAL COURSE.

This course is planned for those who desire general culture. About two-thirds of the work is elective. The required work includes Greek, Latin, mathematics, English, French, German, chemistry, psychology, and political economy. After the freshman year Greek and Latin are elective. The student may give special attention to language, mathematics, natural science, chemistry, or physics.

Upon graduation the student receives the degree of Bachelor of Arts. Three years later, on proof of satisfactory advancement, and on presentation of a thesis embodying original work or investigation, he receives the degree of Master of Arts.

## STUDIES OF THE CLASSICAL COURSE.

For Declamations and Themes see page 29; for Military Science see page 67.

# FRESHMAN YEAR.

r RESHMA	AN I DAR.
FALL TERM-18 WEEKS.	SPRING TERM-18 WEEKS.
Hours.         4.0           Gkl, Greek, p. 36         4.0           Ml25, German, p. 33 or         4.0           Ml21, French, p. 31         2.0           Msl8, Algebra, p. 43         5.0           Dr2, Math. Drawing, p. 47, 8 w.         f3.0	Hours.         4.0           (k2, Greek, p. 36
Sophome	DRE YEAR.
n	

Required.	Required.
Eh3, Rhetoric, p. 29 2.5	Eh4, Rhetoric, p. 29 2.5
M11, French, p. 31, or ( 4.0 M15, German, p. 33	M12, French, p. 31, or M16, German, p. 33 { 4.0
Chl, General Chemistry, p. 48 2.5	Ch2, General Chemistry, p. 48 2.5
Ch3, Laboratory Chemistry, p.49, +2.0	Ch4, Laboratory Chemistry, p.49, †2.0
Elective.	Elective.

2.5	Gk4, Greek, p. 36	2.5
2.5	Gk10, Greek Sculpture, p. 37	2.5
2.5	Gk12, Greek, p. 37	2.5
2.5	Lt4, Latin, p. 34	2.5
2.5	Ps2, General Physics, p. 45	2.5
5.0	Ps13, General Physics, p. 46	2.5
2.5	Ps5, Laboratory Physics, p. 46	<b>†5.0</b>
5.0	Ms5, Analytical Geometry, p. 44,	2.5
rse.	Others as in Latin Scientific Cou	rse.
	2.5 2.5 2.5 2.5 5.0 2.5 5.0 rse.	<ol> <li>2.5 Gk4, Greek, p. 35</li></ol>

# JUNIOR YEAR.

<i>Required.</i> Pl1, Psychology, p. 38	2.5	Required. Pl2, Logic, p. 38	2.5
Elective. Gk5, Greek, p. 36 Lt5, Latin, p. 34 Lt7, Roman Elegiae Poets, p. 34, Lt13, Roman Literature, p. 35 Lt17, Roman Topography, p. 35 Lt19, Latin Writing, p. 36 M18, French, p. 31 Others as in Latin Scientific Cou	2.5 2.5 2.5 1.0 2.5 2.5 1.0 2.5 2.5 rse.	Elective. Gk6, Greek, p. 37 Lt6, Latin, p. 34 Lt8, Roman Elegiac Poets, p. 34, Lt14, Roman Literature, p. 35 Lt18, Roman Private Life, p. 36, Lt20, Roman Epigraphy, p. 36 M14, French, p. 31 M18, German, p. 33 Cv2, English History, p. 39 Cv3, American History, p. 39 Others as in Latin Scientific Com	$\begin{array}{c} 2.5\\ 2.5\\ 2.5\\ 2.5\\ 1.0\\ 1.0\\ 2.5\\ 2.5\\ 2.5\\ 2.5\\ 2.5\\ 2.5\\ 2.5\\ 2.5$
		i sheet as in sherin southing out	100+

### SENIOR YEAR.

Required.		Required.	
History, p. 40	2.5	History, p. 40	2.5
Elective.		Elective.	
Gk7, Greek, p. 37	2.5	Gk8, Greek, p. 37	2.5
Lt5, Latin, p. 34	2.5	Lt6, Latin, p. 34	2.5
Lt9, Roman Satire, p. 35	2.5	Lt10, Roman Satire, p. 35	2.5
Lt11, Roman Philosophy, p. 35	2.5	Lt12, Roman Philosophy, p. 35	2.5
Lt15, Roman Rhetoric and Ora-	-	Lt16, Roman Rhetoric and Ora-	
tory, p. 35	2.5	tory, p. 35	2.5
Others as in Latin Scientific Cour	rse.	Others as in Latin Scientific Cou	rse.
# THE LATIN-SCIENTIFIC COURSE.

This course differs from the classical course by omitting Greek. It requires an extensive study of modern languages, and permits a wide choice of elective work.

The required studies include Latin, English, and modern languages; mathematical and physical science; natural science; and political economy. Latin is not required, but may be elected, after the freshman year. By a proper selection of elective studies, the student may give special attention to language, mathematics, natural science, chemistry, or physics.

Upon graduation the student receives the degree of Bachelor of Philosophy; three years later, on proof of satisfactory advancement, and on presentation of a thesis embodying original work or investigation, he receives the degree of Master of Philosophy.

#### STUDIES OF THE LATIN SCIENTIFIC COURSE.

For Declamations and Themes see page 29; for Military Science see page 67.

#### FRESHMAN YEAR.

FALL TERM-18 WEEKS.

nu	urs.	
M15, German, p. 33	4.0	
Lt1, Latin, p. 34	4.0	
Ms18, Algebra, p. 43	5.0	
Ch1, General Chemistry, p. 48	2.5	
Ch3, Laboratory Chemistry, p.49,	12.0	
Dr2, Math. Drawing, p. 47, 8 w	13.0	

SPRING TERM18 WEEKS.	
Но	urs.
M16, German, p. 33	4.0
Lt2, Latin, p. 34	4.0
Ms4, Trigonometry, p. 43, 10 w	5.0
Ms1, Solid Geometry, p. 43 or )	
Ms19, Spherical Trigonometry, {	5.0
8 w., p. 43	
Ch2, General Chemistry, p. 48	2.5
Ch4, Laboratory Chemistry, p.49,	$^{+2.0}$
Dr2, Math. Drawing, p. 47, 5 w	†3.0

#### SOPHOMORE YEAR.

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Ms5, Analytical Geometry, p. 44.	2.5
Ps5, Laboratory Physics, p. 46	15.0
Dr3, Mechanical Drawing, p. 47	†5.0
Htl, Botany, p. 56	$^{+5.0}$
Others as in Scientific Course	•

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### JUNIOR YEAR.

<i>Required.</i> Eh8, English Literature, p. 30 P11, Psychology, p. 38	$2.5 \\ 2.5$	<i>Required.</i> Eh9, English Literature, p. 30 Pl2, Logic, p. 38	$2.5 \\ 2.5$
Elective. M13, French, p. 31 M17, German, p. 33 Lt5, Latin, p. 34 Lt7, Roman Elegiac Poets, p. 34. Lt13, Roman Literature, p. 35 Lt17, Roman Topography, p. 35 Lt19, Latin Writing, p. 36 Others as in Scientific Course.	2.5 2.5 2.5 2.5 1.0 1.0	Elective. M14, French, p. 31 M18, German, p. 33 Lt6, Latin, p. 34 Lt8, Roman Elegiac Poets, p. 34. Lt14, Roman Literature, p. 35 Lt18, Roman Private Life, p. 36. Lt20, Roman Epigraphy, p. 36 Cv2, English History, p. 39 Cv3, American History, p. 39 Others as in Scientific Course	2.5 2.5 2.5 2.5 1.0 2.5 2.5 2.5 2.5 2.5 2.5 2.5

SENIOR YEAR.

<i>Required.</i> Cv13, Political Economy, p. 39 Cv15, Constitutional Law and History, p. 40	2.5 2.5	Required. Cv14, Political Economy, p. 39 Cv16, Constitutional Law and History, p. 40	$2.5 \\ 2.5$
Elective. Lt5, Latin, p. 34 Lt9, Roman Satire, p. 35 Lt11, Roman Philosophy, p. 35 Lt15, Roman Rhetoric and Ora- tory, p. 35 Others as in Scientific Course.	$2.5 \\ 2.5 \\ 2.5 \\ 2.5 \\ 2.5 \\ 2.5 \\ 2.5 \\ $	<i>Etective.</i> Lt6, Latin, p. 34 Lt10, Roman Satire, p. 35 Lt12, Roman Philosophy, p. 35 Lt16, Roman Rhetoric and Ora- tory, p. 35 Others as in Scientific Course.	$2.5 \\ 2.5 \\ 2.5 \\ 2.5 \\ 2.5 \\ 2.5$

# THE SCIENTIFIC COURSE.

This course is arranged for those who seek a broad general training, based chiefly upon the study of science, modern languages, and history. It prepares students for executive positions in banking, commercial, or manufacturing establishments, or for teaching.

The work of the freshman year consists of English, modern languages, history, mathematics, drawing, chemistry, and botany. After the freshman year, a large part of the work—varying from one-third at the beginning to three-fourths at the end—is elective. The required courses include analytical geometry, general physics, geology, French, German, English literature, English history, United States history, constitutional history, psychology, logic, and political economy. The elective studies may be selected to give a comprehensive course in the mathematical or natural sciences, or a specialized course in modern languages, mathematics, physics, or natural science.

Upon graduation the student receives the degree of Bachelor of Science; three years later, on proof of satisfactory advancement and on presentation of a thesis embodying original work or investigation, he receives the degree of Master of Science.

# STUDIES OF THE SCIENTIFIC COURSE.

For Declamations and Themes see page 29; for Military Science see page 67.

#### FRESHMAN YEAR.

FALL TERM-18 WEEKS.	SPRING TERM-18 WEEKS.
Hours.	Hours.
Eh3, Rhetoric, p. 29 2.5	Eh4, Rhetoric, p. 29 2.5
Ms18, Algebra, p. 43 5.0	Ms4, Trigonometry, p.43, 10 w 5.0
M15, German, p. 33, or /	Ms1, Solid Geometry, p. 43, or )
M127, German, p. 33	Ms19, Spherical Trigonometry, 5.0
Dr2, Mathematical Drawing, p.	p. 43, 8 w.
47, 8 w †3.0	M16, German, p. 33, or (
Ch1, General Chemistry, p. 48 2.5	M128, German, p. 33
Ch3, Laboratory Chemistry, p.49, †2.0	Dr2, Mathematical Drawing, p.
	47, 5 w †3.0
	Htl, General Botany, p. 56 †5.0
	Ch2, General Chemistry, p. 48 2.5
	Ch4, Laboratory Chemistry, p.49, †2.0

SOPHOMORE YEAR.

# Dogwinod

Required.           M11, French, p. 31, or {	Required.           M12, French, p. 31, or         4.0           M122, French, p. 31,         2.0           Ps2, General Physics, p. 45, or         2.5           Ps13, General Physics, p. 46,         2.5           Ps5, Laboratory Physics, p. 46,         4.0           Ms5, Analytical Geometry, p. 44,         2.5
<i>Elective.</i>	Elective.
Ch5, Inorganic Chemistry, p. 49. 2.5	Eh5, Anglo-Saxon, p. 30 2.5
Ch14, Qualitative Analysis, p. 49, †5.0	Cvl, General History, p. 39 2.5
Ms6, Analytical Geometry, p. 44, 5.0	Ms7, Calculus, p. 44 5.0
Nh1, Cryptogamie Botany, p. 51, 2.5	Ms11, Advanced Algebra, p. 44 2.5
Nh2, Laboratory Botany, p. 51 †2.0	Ch15, Qualitative Analysis, p. 50. †5.0
Lt17, Roman Topocraphy, p. 35 12.0	Ht8, Histol, of Plants, p. 57.9 W. 4 4

$\nabla (111, \nabla (\alpha (1)(\alpha (1)(\alpha (1)))))$	10.0		
Ms6, Analytical Geometry, p. 44,	5.0	Ms7, Calculus, p. 44	5.0
Nh1, Cryptogamic Botany, p. 51,	2.5	Ms11, Advanced Algebra, p. 44.	2.5
Nh2, Laboratory Botany, p. 51	$^{+2.0} $	Ch15, Qualitative Analysis, p. 50.	$^{+5.0}$
Lt17, Roman Topography, p. 35.	1.0	Ht8, Histol. of Plants, p. 57,9 w. (	+5 A
Gk9, Greek Sculpture, p. 37	2.5	Ag13, Bacteriology, p. 56, 9 w.	10.0
Gk11, Greek, p. 37	2.5	Lt18, Roman Private Life, p. 36.	1.0
Gk13, Greek, p. 38	2.5	Gk10, Greek Sculpture, p. 37	2.5
· , ·	1	Gk12, Greek, p. 37	2.5

#### JUNIOR YEAR.

Required.		Required.	
Eh8, English Literature, p. 30	2.5	Eh9, English Literature, p. 30	2.5
M13, French, p. 31, or /	0 5	M14, French, p. 31, or {	2.5
M17, German, p. 33	2.0	M18, German, p. 33, {	
P11, Psychology, p. 38	2.5	P12, Logic, p. 38	2.5
		Cv3, American History, p. 39	2.5
		Cv2, English History, p. 39	2.5

#### JUNIOR YEAR-Concluded.

Elective.	1	Elective.	
M19, Spanish, p. 32	2.5	M110, Spanish, p. 32	2.
M111, Italian, p. 32	2.5	M112, Italian, p. 32	2.5
M113, Old French, p. 32	2.5	M114, Old French. p. 32	2.5
M115, French Literature, p. 31	2.5	M116, French Literature, p. 31	2.5
M117, French Literature, p. 31	2.5	M118, French Literature, p. 32	2.5
Cv4. Philosophy of History, p.39.	2.5	Ms9, Descrip, Astronomy, p. 44.	2.5
Cv11, International Law, p. 40	2.5	Ms10, Practical Astronomy, p. 44.	2.5
Ms8. Calculus, p. 44	2.5	Ms13, Adv. Integ. Calculus, p. 45.	2.5
Ms12, Advanced Integral Calcu-		Ms15, Differential Equations,	
lus, p. 45	2.5	p. 45	2.5
Ms20, Solid Analytical Geome-		Ps7. Advanced Optics. p. 46	2.5
try, p. 45	2.5	Ps10. Laboratory Physics, p. 47.	t5.0
Ps8, Advanced Physics, p. 46	2.5	Ch15, Qualitative Analy., p. 50	15.0
Ps9, Laboratory Physics, p. 46	t5.0	Ch16, Quantitative Analy., p. 50.	14.0
Ps11. Electrical Measurements		Nh7, Helminthology, p. 52	t4.0
and Testing, p. 47	14.0	Nh9, Laboratory Zoology, p. 52.	14.0
Ch14, Qualitative Analysis, p. 49,	15.0	Nh10, Entomology, p. 52	2.5
Nh5, Invertebrate Zoology, p. 52,	2.5	Me6, Analytical Mechanics, p.)	
Nh6, Laboratory Zoology, p. 52,	15.0	63, Ğ w.	F 0
Nh8, Comp. Vert. Zoology, p. 52,	3.5	Me7, Mech. of Materials, p. 64, (	5.0
Me5, Analytical Mechanics, p. 63,	5.0	12 w.	
Eel, Electricity and Magnetism,		Ee2, Electricity and Magnetism,	
p. 65	2.0	p. 66	3.0
-		-	
SENIOR VEAR			
Decentral		Demained	
Requirea.	0 5	Gult Delitical Franceway p. 20	0 5
UV15, POILICAL LCONOMY, D. 59	2.0	UV14, FOILICAL ECONOMY, D. 39	2.0

#### Cv15, Constitutional Law and Cv16, Constitutional Law and History, p. 40..... 2.5 2.5 History, p. 40 ..... Elective. Elective. Elective. Eh10, English Literature, p. 30... Pl3, Hist. of Philosophy, p. 38... Ms12, Advanced Integral Calcu-lus, p. 45..... Ms20,Solid Analytical Geometry, Elective. Ehll, English Literature, p. 30.. 2.5 Cvl0, Municipal Law, p. 40..... 1.0 Cvl2, Library Work, p. 40...... †5.0 Msl3, Advanced Integral Calcu-lus, p. 45....... 2.5 Msl5, Differential Equations, 2.52.5 2.5p. 45..... Ms16, Practical Astronomy, p.45, 2.5 Ms17, Practical Astronomy, p.45, 2.5 Ms17, Practical Astronomy, p.45, 2.5 Nh3, Advan, Physiology, p. 52..... 2.5 Nh4, Lab. Physiology, p. 52..... ?2.0 2.5 Pl4, Pedagogy, p. 53 ..... Ht\$, Plant Breeding, p. 57..... 2.5 $\frac{2.5}{2.5}$ 2.5 Ht10, Forestry, p. 58..... 2.5 Ht11, Plant Pathology, p. 58..... †2.0

## THE CHEMICAL COURSE.

This course is designed for those who plan to become professional chemists and analysts, managers or chemists of industries which require an extensive knowledge of chemistry, or teachers of chemistry. Attention is given to preparation for the work of the agricultural experiment stations. In addition to a theoretical knowledge of chemistry, the student acquires, in his biological studies, knowledge of comparative anatomy, and of the lower forms of life, and, in his work in the chemical laboratory, facility in the manipulation of chemical apparatus and the microscope. Lectures and recitations are closely associated with practical work in the laboratories. The student is drilled in the use of chemical apparatus, in accurate observation, and in careful interpretation of directions.

Upon graduation the student receives the degree of Bachelor of Science; three years later, on proof of satisfactory advancement and on presentation of a thesis embodying original work or investigation, he receives the degree of Master of Science.

#### STUDIES OF THE CHEMICAL COURSE.

For Declamations and Themes see page 29; for Military Science see page 67.

### FRESHMAN YEAR.

FALL TERM18 WEEKS.	SPRING TERM18 WEEKS.
Hours.	Hours.
Eh3, Rhetoric, p. 29 2.5	Eh4, Rhetoric, p. 29 2.5
Ms18, Algebra, p. 43 5.0	Ms4, Trigonometry, p. 43, 10 w 5.0
M15, German, p. 33 or /	Msl,Solid Geometry, p.43 or )
M127, German, p. 33	Ms19, Spherical Trigonom 8 w. 5.0
Dr1, Drawing, p. 47 †5.0	etry, p. 43)
Dr2, Math. Drawing, p. 47, 8 w †3.0	M16, German, p. 33 or /
Ch1, General Chemistry, p. 48 2.5	M128, German, p. 33
Ch3, Laboratory Chemistry, p. 49, †2.0	Dr2, Math. Drawing, p. 47, 5 w †3.0
	Ht1, General Botany, p. 56 †5.0
	Ch2, General Chemistry, p. 48 2.5
	Ch4. Laboratory Chemistry, p.49, †2.0

### SOPHOMORE YEAR.

Mll, French, p. 31 or )	Ml2, French p. 31 or )	
M121, French, p. 31 (2 hrs.) and4.0	M122, French, p. 31 (2 hrs.) and {	4.0
M17, German, p. 33 (2.5 hrs.)	M18, German, p. 33 (2.5 hrs.)	
Ps12, General Physics, p. 45 2.5	Ps13, General Physics, p. 46	2.5
Ch5, Inorganic Chemistry, p. 49. 2.5	Ps5, Laboratory Physics, p. 46	<b>†5.0</b>
Ch14, Qualitative Analysis, p. 49, 10.0	Ms5, Analytical Geometry, p. 44.	2.5
Nh1, Cryptogamic Botany, p. 51, 2.5	Ch6, Inorganic Chemistry, p. 49,	2.5
Nh2, Laboratory Botany, p. 51 †2.0	Ch15, Qualitative Analysis, p. 50,	†7.0

JUNIOR YEAR.

Pl1, Psychology, p. 38 2 5	Pl2, Logic, p. 38 2.5
M17, German, p. 33. or 7 2.5	M18, German, p. 33, or } 2.5
M13, French, p. 31	M14, French, p. 31, (
Ch7, Organic Chemistry, p. 49 2.5	Ch8, Organic Chemistry, p. 49 2.5
Ch10, Chemical Reading, p. 49 1.0	Ch19, Volumetric Analysis and
Ch16, Quan. Analysis, p. 50 †5.0	Assaying, p. 50
Ch18, Quan. Analysis, p. 50 †10.0	Nh10, Entomology, p. 52, or
Nh5, Invertebrate Zoology, p.)	Eh9, Eng. Literature, p. 30, or \$2.5
52, or	Ms9, Descrip. Astronomy, p.44)
Eel, Electricity and Magne- \2.5	
tism, p. 65 (2 hrs.) or	
Eh8, English Literature, p. 30,	

#### SENIOR YEAR.

Cv13, Political Economy, p. 39 2.5	Cv14, Political Economy, p. 39 2.5
Cv15, Constitutional Law and	Cv16, Constitutional Law and
History, p. 40 2.5	History, p. 40 2.5
Ch12, Organic Chemicals, p. 49 †5.0	Ch11, Laboratory Processes, p.49, 2.5
Ch20, Agricultural Analysis, p.50, †9.0	Ag13, Bacteriology, p.66, 5 w.110
Ch21, Toxicology and Urinalysis,	Ch22, Thesis Work, p.50, 13 w.115
p. 50	Ch24, Industrial Chemistry, p. 51, 2.5
Ch23, Organic Chemistry, p. 50 2.5 Nh11, Geology, p. 53 2.5	,

# THE PREPARATORY MEDICAL COURSE.

This course is arranged to meet the needs of those students who purpose becoming physicians, but offers to those who are interested in the biological sciences a useful training for teaching or investigation.

The technical work of the course, consists mainly of two lines of study, chemical and biological. The chemical studies are continued for three and a half years, and include advanced inorganic and organic chemistry, biological chemistry, qualitative and quantitative analysis, toxicology, and the testing of drugs. The biological studies extend throughout the course and include botany, both phænogamic and cryptogamic, invertebrate zoology, comparative vertebrate zoology, human anatomy, advanced physiology, bacteriology, plant histology and animal histology.

Important features of the course are: a study of animal parasites, particularly those affecting the human subject; a free use of the microscope in studying vegetable and animal tissues; experience in identifying and cultivating pathogenic organisms; a thorough consideration of the chemistry of foods, of the animal body, and of digestion and metabolism. Graduates of this course are received into medical schools without examination, and by many of the best schools are given credit for the work of the first year.

Upon graduation the student receives the degree of Bachelor of Science; three years later, on proof of satisfactory advancement and on presentation of a thesis embodying original work or investigation, he receives the degree of Master of Science.

# STUDIES OF THE PREPARATORY MEDICAL COURSE.

# For Declamations and Themes see page 29; for Military Science see page 67.

### FRESHMAN YEAR.

The studies for this year are the same as in the Chemical Course, page 77.

### SOPHOMORE YEAR.

# FALL TERM-18 WEEKS.

# SPRING TERM-18 WEEKS.

Hours.	Hours.
M11, French, p. 31, or )	M12, French, p. 31, or )
M121, French, p. 31 (2 h.) and 1 \ 4.0	M122, French, p. 31 (2 h.) and }
M17, German, p. 33 (2.5 hrs.) ()	M18, German, p. 33 (2.5 hrs.)
Ps1, General Physics, p. 45, or 7 5.0	Ps2, General Physics, p. 45, or 1 3, 5
Ps12, General Physics, p. 45 (2.5)	Ps13, General Physics, p. 46 ( 2.5
Ch5, Inorganic Chemistry, p. 49. 2.5	Ps5, Laboratory Physics, p. 46 †5.0
Ch14, Qualitative Analysis, p.49. †6.0	Ch6, Inorganic Chemistry, p. 49, 2.5
Nh1, Cryptogamic Botany, p. 51. 2.5	Chi5, Qualitative Analysis, p.50, 5.0
Nh2, Laboratory Botany, p. 51 †2.0	Ht8, Histology of Plants, p. 57, )
	9 w. { †5.0
	Ag13, Bacteriology, p. 56, 9 w.

#### JUNIOR YEAR.

M17, German, p. 33, or 1	95	Pl2, Logic, p. 38 2	.5
M13, French, p. 31 (	2.0	Cv2, English History, p. 39, or (	5
Pl1, Psychology, p. 38	2.5	Ag11, Veterinary Science, p. 55 ( "	••
Ch7, Organic Chemistry, p. 49	2.5	Chi9, Volumetric Analysis, p. 50. †11	.0
Ch16, Quantitative Analysis, p.50,	16.0	Ch21, Toxicology and Urinalysis,	
Nh5, Invertebrate Zoology, p.52,	2.5	p. 50 †1	.0
Nh6, Laboratory Zoology, p. 52	15.0	Nh7, Helminthology, p. 52 †4	.0
Agl, Biological Chemistry, p. 53	2.5	Ag2, Biological Chemistry, p. 54 5	.0

# SENIOR YEAR.

Cv13, Political Economy, p. 39	2.5	Cv14, Political Economy, p. 39	2.5
Cv15, Constitutional Law and		Cv16, Constitutional Law and	
History, p. 40	2.5	History, p. 40	2.5
Nh8, Comparative Vertebrate		Nh3, Advanced Physiology, p. 52	2.5
Zoology, p. 52	3.5	Nh4, Laboratory Physiology, p.52	$^{+2.0}$
Nh11, Geology, p. 53	2.5	Nh12, Human Anatomy, p. 53	2.5
Pm3, Laboratory Pharmacy,	j	Cv2, English History, p. 39, or 1	95
p. 59, 9 w.	0.0	Ag11, Veterinary Science, p. 55,	2.0
Ch27, Laboratory Physiologi (	10.0	Ag14, Animal Histology, p. 56, )	
cal Chemistry, p.51,9 w.		9 w.	†10.0
Pm7, Materia Medica, p. 59	2.5	Ag15, Lab. Bacteriology, p.56,9w)	

# COLLEGE OF AGRICULTURE.

The aim of the College of Agriculture is to prepare young men to become farmers, or teachers or investigators of agricultural subjects. The instruction is arranged: first, to secure for the student that intellectual development which is a condition fundamental to the highest success in any calling, and, second, to give the necessary technical knowledge. The college comprises:

The Agricultural Course.

The Special Courses in General Agriculture.

The Special Course in Horticulture.

The Special Course in Dairying.

The Agricultural Experiment Station.

# THE AGRICULTURAL COURSE.

This course is designed for those who wish to follow agriculture as a business, or purpose to become teachers or investigators in the sciences related to agriculture. It is broadly educational, particularly in the natural sciences and their relations to human needs and activities, and gives a preliminary training for either business or professional life. The distinctive studies of this course are along technical lines, but the branches pertaining to general culture, to social and civil relations, occupy an important place.

The theoretical instruction, especially that of the last two years, is associated with practical work and observation. Practice is combined with theory whenever necessary for the demonstration of a principle, or when skilled labor is involved, but the student's time is not consumed in merely manual operations.

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Upon graduation the student receives the degree of Bachelor of Science; three years later, on proof of satisfactory advancement and on presentation of a thesis embodying original work or investigation, he receives the degree of Master of Science.

### STUDIES OF THE AGRICULTURAL COURSE.

For Declamations and Themes see page 29; for Military Science see page 67.

### FRESHMAN YEAR.

The studies of this year are the same as in the Chemical Course, page 77.

# SOPHOMORE YEAR.

FALL TERM18 WEEKS.	SPRING TERM-18 WEEKS.
Hours.	Hours.
M11, French, p. 31 or )	M12, French, p. 31 or )
M121, French, p. 31 (2 h.) and / 4.0	M122, French, p. 31 (2 h.) and 2 4.0
M17, German, p. 33 (2.5 hrs.)	M18, German, p. 33 (2.5 hrs.)
Psl, General Physics, p. 45 or. 1 5.0	Ps2, General Physics, p. 45 or. 1
Ps12, General Physics, p. 45 2.5	Ps13, General Physics, p. 46 ( <sup>2.9</sup>
Ch5, Inorganic Chemistry, p. 49. 2.5	Ps5, Laboratory Physics, p. 46 †5.0
Chl4, Qualitative Analysis, p. 49. †6.0	Ch6, Inorganic Chemistry, p. 49. 2.5
Nh1, Cryptogamic Botany, p. 51. 2.5	Ch16, Quan. Analysis, p. 50 †8.0
Nh2, Laboratory Botany, p. 51 †2.0	Hts, Hist. of Plants, p. 57, 9 w. /
	Ag13, Bacteriology, p. 56, 9 w. ) * <sup>13.0</sup>

#### JUNIOR YEAR.

M17, German, p. 33, or /	Cv2, English History, p. 39 2.5
M13, French, p. 31	Ag2, Biological Chemistry, p. 54, 5.0
Nh5, Invertebrate Zoology, p. 52, 2.5	*Ag7, Dairying, p. 54, 9 w.
Nh6, Laboratory Zoology, p. 52., †5.0	*Ag5, Agricultural Engineering > 2.5
Ag1, Biological Chemistry, p. 53, 2.5	p. 54, 9 w.
Ch7 Organic Chemistry, p. 49 2.5	*Ch20, Agricul. Analysis, p. 50 †6.0
*Ht4, Plant Variation, p. 57, 9 w.)	*Ag10, Dairy Practice, p.55,12 w. ) +7 o
*Ht5, Landscape Gardening, p. 2.5	*Ag12, Dissecting, p. 55, 6 w.
57, 9 w.	*Nh10, Entomology, p. 52 2.5
*Ht7, Laboratory Horticulture,	
p. 57 $†2.0$	
*Ht11, Plant Pathology, p. 58 †2.0	

### SENIOR YEAR.

Cv13, Political Economy, p. 39 2 Cv15, Constitutional Law and	2.5	Cv14, Political Economy, p. 39 Cv16, Constitutional Law and	2.5
History, p. 40 2	2.5	History, p. 50	2.5
Pll, Psychology, p. 38 2	2.5	P12, Logic, p. 38	2.5
Nh8, Comparative Vertebrate		<sup>‡</sup> Ag3, Agricultural Chemistry, )	
Zoology, p. 52 3	3.5	p. 54, 9 w.	0 F
Nh11, Geology, p. 53 2	2.5	‡Ag4, Agricultural Physics, p. (	2.9
tHt2, Pomology, p. 56, 9 w. )		54, 9 w.	
Ht3, Vegetable Gardening, p. 2	2.5	‡Nh3, Advanced Physiology, p.52	2.5
56. 9 w.		tAg6, Stock Feeding, p. 54,7 w.)	
tHt6, Laboratory Horticulture,		Ag8, Stock Breeding, p. 55,7 w.	5.0
p. 57 †5	5.0	tAg9, Poultry Industry, p.55,4w.)	
<b>F</b>		‡Ag11, Veterinary Science, p. 55,	2.5

<sup>\*</sup> Given to juniors and seniors in fall term of odd years and spring term of even years.

‡ Given to juniors and seniors in fall term of even years and spring term of odd years.

# THE SPECIAL COURSES IN AGRICULTURE.

For those who can meet the expense, the investment of time and money necessary to complete the four years' course, is most wise. To others the Special Courses in Agriculture are offered. Students are admitted to courses of such length as their time will allow, and of such breadth as their previous training will permit.

For admission to these courses, applicants should possess a good common school education. No formal entrance examination is required for admission to courses of one term or less, but the professor in charge will satisfy himself of the fitness of candidates to pursue the course with success. The requirements for admission to courses of one year or more are given on page 16.

These courses are intended to give the greatest amount of directly useful knowledge that can be acquired in the time allotted. The studies pursued must usually be selected from those announced in the catalogue, but they will be arranged, so far as practicable, to meet the needs of each student.

The annual expenses for courses of one year or more, are the same as those of students in the four years' courses. No charge is made for rooms. Students in the special courses, who are in attendance for one term or less, are not charged tuition.

These courses, including the work in agriculture, horticulture, animal industry, and veterinary science, are in the general charge of the Professor of Agriculture, to whom inquiries should be addressed.

The outline of the subjects which may be profitably pursued, and which a student may expect to complete within the time allotted, is listed below:

# SUBJECTS WHICH MAY BE TAKEN IN ONE TERM OR LESS.

General Agriculture. Plant and Animal Nutrition; Fertilizers and Manures; Breeds, Breeding and Feeding; Farm Machinery; Farm Drainage; Veterinary Science; Bacteriology; Injurious Insects and Fungi; Crops and Crop Production; Farm Gardening; Carpentry; Blacksmithing; Farm Accounts; Business Law.

Horticulture. Injurious Insects; Injurious Fungi; Bacteriology; Propagation of Plants; Vegetable Gardening; Spraying and Spraying Machines; Fruit Culture; Economic Botany; Ornamental Gardening; Greenhouse Construction and Management.

# SHORT WINTER COURSE IN DAIRYING.

The Course in Dairying is intended to meet the needs of those who wish to fit themselves for managers of creameries and cheese factories. If the course is pursued during two terms, and two seasons' satisfactory work is performed in a butter or cheese factory, the student will be granted a certificate of proficiency.

This course begins on the first Tuesday of January and continues six weeks.

An outline of the subjects taken up in this course follows:

First Winter. Plant and Animal Nutrition; Diseases of Dairy Animals; Milk, Butter and Cheese; Cows,—Breeding, Handling and Judging; Building and Furnishings; Barns, Creameries, etc.; Accounts.

Second Winter. Milk, Butter and Cheese; Bacteriology of the Dairy; Veterinary Science; Boiler and Engine; Business Law; Carpentry; Feeding of Cows.

# SUBJECTS WHICH MAY BE TAKEN IN A ONE YEAR COURSE IN AGRICULTURE.

General Chemistry; Agricultural Chemistry; Cryptogamic Botany; Laboratory Botany; Plant Variation; Landscape Gardening; Laboratory Horticulture; Pomology; Vegetable Gardening; Invertebrate Zoology; Laboratory Zoology; Entomology; Stock Feeding; Poultry Industry; Dairy Practice; Veterinary Science; Agricultural Physics; Agricultural Engineering; Business Law; Carpentry; Forge Work.

SUBJECTS WHICH MAY BE TAKEN IN A TWO YEARS' COURSE IN AGRICULTURE.

First Year. Rhetoric; Elementary Physics; General Chemistry; Agricultural Mechanics; Cryptogamic Botany; Laboratory Botany; Invertebrate Zoology; Laboratory Zoology; Drawing; Business Law; Entomology; Laboratory Horticulture; Pomology; Vegetable Gardening; General Botany; Carpentry; Forge Work. Second Year. Laboratory Chemistry; Biological Chemistry; Agricultural Chemistry; Vertebrate Zoology; Physiology; Dissection; Veterinary Science; Stock Feeding; Plant Variation; Landscape Gardening; Laboratory Horticulture; Geology; Agricultural Physics; Agricultural Engineering; Dairying; Stock Feeding; Poultry Industry; Dairy Practice; Bacteriology.

# THE AGRICULTURAL EXPERIMENT STATION.

The Maine Agricultural Experiment Station owes its existence to an act of Congress, approved March 2, 1887, popularly known as the Hatch Act. The act of the Legislature accepting the Congressional grant made the Station a department of the University of Maine.

The affairs of the Station are considered by an advisory council consisting of a committee of the trustees of the University, the president of the University, members of the Station staff, and representatives from the State Board of Agriculture, the State Pomological Society, and the State Grange. The recommendations of the council are referred to the trustees for ratification. The Station receives \$15,000 annually from the general government.

The inspection of fertilizers, the inspection of concentrated commercial feeding stuffs, and the testing of the graduated glassware used in creameries, are entrusted to the Station through its director, who is responsible for the execution of the public laws relating to these matters.

The publications of the Station consist of annual reports and frequent short bulletins. The latter are intended to convey to the farmer the results that relate to farm practice. The annual reports contain a fuller statement of the proceedings of the Station, involving the technical language of science. These reports include nothing of value to practical agriculture not set forth in the bulletins. All station bulletins are sent to farmers on request, free of expense. The edition of the annual report is limited and this document is sent only when expressly requested. It is reprinted in the report of the State Board of Agriculture.

# UNIVERSITY OF MAINE.

# COLLEGE OF ENGINEERING.

The College of Engineering provides instruction along the lines indicated by the divisions made below. Two years of general studies, including the natural sciences, mathematics, modern languages, philosophy and economics, are followed by two of technical training. Opportunity is offered for special work in addition to that of the required courses. The college comprises:

The Civil Engineering Course.

The Mechanical Engineering Course.

The Electrical Engineering Course.

# THE CIVIL ENGINEERING COURSE.

The object of this course is to give the student a knowledge of mathematics, mechanics, and drawing, experience in the care and use of engineering instruments, and a drill in the application of mathematical principles and rules, with a view to fitting him at graduation to apply himself at once to engineering work. The course is planned to furnish not only technical instruction, but also the basis of a liberal education.

The methods of instruction are recitations, lectures, original problems, work in the testing laboratories, field practice, and designing, including the making of original designs and the preparation of the necessary drawings. Effort is made to acquaint the student with the best engineering structures, and with standard engineering literature.

The engineering building contains recitation rooms, designing rooms, testing laboratories, drawing rooms, and instrument rooms, and is well equipped.

Upon graduation the student receives the degree of Bachelor of Civil Engineering; three years later, on proof of satisfactory advancement and on presentation of a thesis embodying original work or investigation, he receives the degree of Civil Engineer.

# STUDIES OF THE CIVIL ENGINEERING COURSE.

For Declamations and Themes see page 29; for Military Science see page 67.

# FRESHMAN YEAR.

FALL TERM-18 WEEKS.	Spring Term-18 weeks.
Hours.	Hours.
Eh3, Rhetoric, p. 29 2.5	[ Eh4, Rhetoric, p. 29 2.5
Ms18, Algebra, p. 43 5.0	Ms4, Trigonometry, p. 43, 10 w 5.0
M15, German, p. 33 or M127, German, p. 33	Msl, Solid Geometry, p. 43, or
Dr1, Drawing, p. 47 †5.0	Ms19, Sph. Trigonom., p. 43)
Dr2, Math. Drawing, p. 47, 8 w †3.0 Ch1, General Chemistry, p. 48 2.5	M16, German, p. 33, or 4.0
Ch3, Laboratory Chemistry, p. 49, †2.0	Dr2, Math. Drawing, p. 47, 5 w †3.0
	Dr3, Mechanical Drawing, p. 47, †5.0
	Ch2, General Chemistry, p. 48 2.5 Ch4, Laboratory Chemistry, p.49, †2.0

# SOPHOMORE YEAR.

M119, French, p. 30, or { 2.0	M120, French, p. 31, or   M122, French, p. 31,
Ms6, Analytical Geometry, p. 44, 5.0	Ms7, Calculus, p. 44 5.0
Psl, General Physics, p. 45 5.0	Ps2, General Physics, p. 45 2.5
Dr4, Mechanical Drawing, p. 48, †5.0	Ps5, Laboratory Physics, p. 46 †5.0
Dr6, Descriptive Geometry, p. 48, 2.5	Dr7, Descriptive Geometry, p.48, 1.5
Cels, Sanitary Science, p. 62 1.0	Cel, Plane Surveying, p. 60 2.5
	Ce2, Field Work, Surveying, p.60, †4.0

# JUNIOR YEAR.

Pl1, Psychology, p. 38 Ms8, Calculus, p. 44	$2.5 \\ 2.5$	Cv2, English History, p. 39 Pl2, Logic, p. 38	2.5 2.5
Msl2, Adv. Int. Calculus, p.45, or ) Ms20, Solid Analytical Geome-		Ms13, Adv. Int. Calculus, p.45, or ) Ms15, Diff. Equations, p. 45, or	
try, p. 45, or Nh11, Geology, p. 53, or	2.5	Ms9, Descriptive Astronomy, p. 44, or	2.5
Ps8, Math. Physics, p. 46, or Ps9, Adv. Physics, p. 46, (†5hrs.)		Ps7, Advanced Optics, p. 46, or Ps10, Adv.Lab. Physics, p. 47,	
Ces, Railroad Engineering, p. 60 Ce4, Railroad Work, p. 60 Ce5, Highway Engineering, p.60,	$\begin{array}{c} 2.5 \\ \dagger 5.0 \\ 1.0 \end{array}$	Dr5, General Drawing, p.48,5 w.	†12.0
Ce6, Mechanics, p. 60	5.0	Ce9, Higher Surveying, p.61,8 w. ) Ce7, Mechanics, p. 61	5.0

# SENIOR YEAR.

Cv13, Political Economy, p. 39	2.5	Cv14, Political Economy, p. 39	2.5
Cv15, Constitutional Law and		Cv16, Constitutional Law and	
History, p. 40	2.5	History, p. 40	2.5
Ce8, San. Engineering, p. 61, or		Ms10, Practical Astronomy, p. 44	2.5
Mathematics, or Physics		Ce13, Structures, p. 62	5.0
as in Junior Year	2.5	Cel5, Designing and Thesis)	
Ce10, Hydraulics, p. 61	2.5	Work, p. 62, or	
Ce12, Structures, p. 61	5.0	Math., or Physics, as in >†	12.0
Cell, Hydraulics Field Work, )	ļ	Junior Year, elective	
p. 61, 6 w.	†7.0	with †5 hours of Ce15	
Ce14, Designing, p. 62, 12 w.	· ]		

# THE MECHANICAL ENGINEERING COURSE.

This course is designed to give such a training in mathematics, mechanics, the principles of mechanism, drawing, and manual arts as shall make the student competent to deal successfully with the problems of mechanical engineering. The technical courses include the geometry of machinery; gearing, with problems and practice; the transmission of motion and power by belts, cams, couplings and links; the study and designing of the valve and link motions used in the steam engine; analytical mechanics; hydro-mechanics; the strength of materials; the expansion of steam; the construction of steam engines, and the designing of steam boilers.

The methods of instruction include lectures, recitations, practice in the various branches of shop-work, the solution of problems, the testing of theoretical results by comparison with modern machinery, the inspection of important plants, and the use of journals and catalogues.

The department shares Wingate Hall with the departments of civil engineering, electrical engineering and physics. The machine shop is equipped with iron working and wood working machinery of the most approved forms.

Upon graduation the student receives the degree of Bachelor of Mechanical Engineering; three years later, on proof of satisfactory advancement and on presentation of a thesis embodying original work or investigation, he receives the degree of Mechanical Engineer.

#### STUDIES OF THE MECHANICAL ENGINEERING COURSE.

For Declamations and Themes see page 39; for Military Science see page 67.

#### FRESHMAN YEAR-

The studies of this year are the same as in the Civil Engineering Course, page 86.

### SOPHOMORE YEAR.

FALL TERM-18 WEEKS.	SPRING TERM-18 WEEKS.	
Hours.	Hours.	
M119, French, p. 30, or { 2.0 M121, French, p. 31, M56, Analytical Geometry, p. 44, 5.0 Ps1, General Physics, p. 45 5.0 Dr6, Descriptive Geometry, p. 48, 2.5 Me1, Carpentry, p. 62, 12 w. Me19, Machine Drawing, p. 63, { 17.0	M120, French, p. 31, or {	

#### JUNIOR YEAR.

P11, Psychology, p. 38 2.5   Cv2, English History, p. 39	2.5
Ms8, Calculus, p. 44 2.5   Pl2, Logic, p. 38	2.5
Nh11, Geology, p. 53, or   Me6, Analytical Mechanics, p. ]	
Ms12. Advanced Integral Cal-	= 0
culus, p. 45, or Me7. Mech, of Materials, p. 64., (	9.0
Ms20, Solid Analytical Geom.	
etry n 45 or $2.5$ Me9 Machine Design, n, 64	3.5
Pss Advanced Physics n 46 ( Med Machine Work n 63 or )	0.0
Met, algentic for the second s	
Pol Laboratory Physics n 4645	
Mas Apolitical Masters, p. 40 (5) Curus, p. 40, 40 (115), 01	
Mes, Analytical Mechanics, p. 65 5.0 Msis, Differential Equations,	
Delt Machine Work, p. 65, 67 p. 45, 2.5 frs., 67	10.0
PSI, Electrical Measurement [ 18.0] PSI, Advanced Optics, p. 46,	
and Testing, p. 47, elec-	
tive with [4 hrs. of Me4] PSI0, Laboratory Physics, p.47,	
Eel, Electricity and Magnetism, <sup>†5</sup> hrs., elective with <sup>†5</sup>	
p. 65 2.0 hrs. of Me4,	
SENIOR YEAR.	
Cv13, Political Economy, p. 39 2.5   Cv14, Political Economy, p. 39	2.5
Cyl5, Constitutional Law and Cyl5, Constitutional Law and	
History, p. 40, 2.5 History, p. 40,	2.5
Mes Structures, p. 64	9 5
Molt) Hydro Mochanica y 64 05 Molt Stoom Engine y 65	· · · · ·
- MERU EVELO, MERCHARLES, U. 14 2.3   MERA 318411 BUSINE, D. 53	3.5

12, Steam Boller Design, p. ]	65, 9 W., and
64, or	Mel6, Thesis Work, p. 65, 9 w. or
Mathematics or Physics, > †12.0	Mathematics or Physics
as in Junior year, elec-	as in Junior year, elec-
tive with †5 hrs.of Mel2	tive with †5 hrs. of
	Me15 and Me16,

### THE ELECTRICAL ENGINEERING COURSE.

Physics > +15.0

This course is designed to give the student the training necessary to prepare him to meet successfully the problems of the practical electrical engineer. It is identical with the course in Mechanical Engineering for the first two years. During the last two years the student devotes his time about equally to mechanical and electrical work. He gets a knowledge of steam engineering, boiler management, mechanics and kindred subjects, and at the same time becomes familiar with the various branches of electrical engineering. The work consists of lectures, recitations, designing and drafting, laboratory practice, and plant testing.

The lecture-room, drafting-room, junior and dynamo laboratories are in Wingate Hall. The electric lighting plant occupys a building adjoining the Shop. The equipment, already ample to give the student a thorough preparation for the work of designing, constructing, testing and operating the various machines and instruments found in an electric plant, is to be largely increased during the current year.

Me

Upon graduation the student receives the degree of Bachelor of Mechanical Engineering; three years later, on proof of satisfactory advancement and on presentation of a thesis embodying original work or investigation, he receives the degree of Mechanical Engineer or Electrical Engineer, as his professional work may make proper.

### STUDIES OF THE ELECTRICAL ENGINEERING COURSE.

For Declamations and Themes see page 29; for Military Science see page 67.

#### FRESHMAN YEAR.

The studies of this year are the same as in the Civil Engineering Course. page 86.

SOPHOMORE YEAR.

# FALL TERM-18 WEEKS.

#### SPRING TERM-18 WEEKS.

Hours.	Hours.	
M119, French, p. 30, or { 2.0	$\left\{\begin{array}{c} Ml20, French, p. 31, or \\ Ml22, French, p. 31 \end{array}\right\} \dots 2.0$	
Ms6, Analytical Geometry, p. 44, 5.0	Ms7, Calculus, p. 44 5.0	
Psl, General Physics, p. 45 50	Ps2, General Physics, p. 45 2.5	
Dr6, Descriptive Geometry, p.48, 2.5	Ps5, Laboratory Physics, p. 46 †7.0	
Mel, Carpentry, p. 62, 12 w / 17 6	Dr7, Descriptive Geometry, p. 48, 1.5	
Me19, Machine Draw., p. 63,6 w. ) 14.0	Me2, Forge Work, p. 63 †5.0	
	Me3, Kinematics, p. 63 †5.0	
JUNIOR YEAR.		
P11. Psychology, p. 38 2.5	Cv2. English History, p. 39 2.5	
Ms8. Calculus. p. 44 2.5	P12, Logic, p. 38 2.5	
Nh11, Geology, p. or	Me6, Analytical Mechanics, p.)	
Ms12, Advanced Integral Cal-	63, č w.	

2.5

2.5

2.5

- Ms12, Advanced Integral Cal-
- culus, p. 45, or Ms20, Solid Analytical Geome-
- †5.0, or Ps14, Electrical Measurement
- and Testing, p. 47, 15.0
   Ps11, Electrical Measurement and Testing, p. 47, 15.0
   Me5, Analytical Mechanics, p.63, Ee1, Electricity and Magnetism, p. 55 †**4.**0 5.0
- 2.0p. 65..... 2.0 Me4, Machine Work, p. 63..... †4.0
  - - SENIOR YEAR. Cv14, Political Economy, p. 39... 2.5Cv16, Constitutional Law and 2.5

Me4, Machine Work, p. 63 ..... †5.0

. . . . . . . . .

Me7, Applied Mechanics, p. 64 12 w.

Me9, Machine Design, p. 64, or

Mes, Machine Design, p. 94, 01 Will, Advanced Integral Cal-culus, p. 45, 2.5, or Ms15, Differential Equations, p. 45, 2.5, or Ps7, Advanced Optics, p. 46,

2.5, or Ps10, Lab. Physics, p. 47, †5.0, J Ee2, Electricity and Magnetism,

p. 66

- Cv16, Constitutional La. History, p. 40..... Mel4, Steam Engine, p. 65, or Mathematics. or Phy-Mathematics, or Phy-sics, as in Junior Year, ) Ee4, Alternating Current Machinery, p. 66, 9 w., 1st. 5.0 Ee6, Electrical Design, p. 66,9 w., 10 a

- 1st ......†10.0 Ee14, Electrical Testing, p. 67, 9 w.,2nd..... 2.5
- Ee16, Thesis Work, p. 67,9 w. 2nd. †15.0
- Cv13, Political Economy, p. 39... Cv15, Constitutional Law and History, p. 40... Mell, Heat and Steam, p. 64.... Ee3, Electrical Machinery, p. 66... Ee7, Laboratory Electricity, p. 66, Ee13, Alternating Currents, p. 67,  $2.5 \\ 2.5 \\ 2.5$  $^{\dagger 7.0}_{\dagger 5.0}$

Cv13, Political Economy, p. 39...

2.5

5.0

3.5

3.0

. . . . . . . . .

# COLLEGE OF PHARMACY.

The College of Pharmacy comprises:

- I. The Pharmacy Course.
- 2. The Short Course in Pharmacy.

# THE PHARMACY COURSE.

This course is offered in response to a demand for a thorough training, both general and technical, for those who are to become pharmacists. It aims to combine broad general culture and thorough preparation along its special lines, with the design of affording both the intellectual development necessary for the well rounded professional or business man, and the necessary technical training. To this end, it includes the same instruction in modern languages, civics, and the sciences, offered in other college courses.

Instruction in pharmaceutical studies is given by means of lectures, recitations, and tests, supplemented by work in the laboratories of chemistry and pharmacy. It embraces qualitative, quantitative, and volumetric analysis, toxicology, bacteriology, prescriptions, and the preparation of pharmaceutical compounds, and original investigations.

Upon graduation the student receives the degree of Bachelor of Science; after one year, on proof of professional work or further study, he receives the degree of Graduate in Pharmacy; two years later, on proof of satisfactory advancement and on presentation of a thesis embodying original work, he receives the degree of Master of Science.

#### UNIVERSITY OF MAINE.

# STUDIES OF THE PHARMACY COURSE.

# For Declamations and Themes see page 29; for Military Science see page 67.

### FRESHMAN YEAR.

The studies for this year are the same as in the Chemical Course, page 77.

# SOPHOMORE YEAR.

FALL TERM-18 WEEKS.	SPRING TERM-18 WEEKS.
Hours.	Hours.
M11, French, p. 31, or )	M12, French, p. 31, or )
M121, French, p. 31 (2 hrs.) and { 4.0	M122, French, p. 31 (2 hrs.) and 4.0
M17, German, p. 33 (2.5 hrs.)	M18, German, p. 33 (2.5 hrs.)
Ps12, General Physics, p. 45 2.5	Ps13, General Physics, p. 46 2.5
Ch5, Inorganic Chemistry, p. 49. 2.5	Ps5, Laboratory Physics, p. 46 †5.0
Ch14, Qualitative Analysis, p. 49, 10.0	Ch6, Inorganic Chemistry, p. 49., 2.5
Nh1, Cryptogamic Botany, p. 51. 2.5	Ch15, Qualitative Analysis, p. 50. †10.0
Nh2, Laboratory Botany, p. 51 †2.0 (	

### JUNIOR YEAR.

Pl1, Psychology, p. 38	2.5	P12, Logic, p. 38	2.5
M17, German, p. 33, or 1	0 5	Ch8, Organic Chemistry, p. 49	2.5
M13, French, p. 31	2.0	Ag2, Biological Chemistry, p. 54.	5.0
Ch7, Organic Chemistry, p. 49	2.5	Nh3, Advanced Physiology, p.52,	2.5
Ch10, Chemical Reading, p. 49	1.0	Hts, Histology of Plants, p. 57, )	
Ch16, Quantitative Analysis, p.50†	10.0	9 w.	15.0
Ag1, Biological Chemistry, p. 53.	2.5	Ag13, Bacteriology, p. 56, 9 w.	
Pm5, Inorganic Pharmacognosy,	ļ	Pm6, Organic Pharmacognosy,	
p. 59	2.5	p. 59	4.0

### SENIOR YEAR.

Cv13, Political Economy, p. 39 2.5	Cv14, Political Economy, p. 39 2.5
History, p. 40 2.5	History, p. 40 2.5
Pm2, Pharmacy, p. 58 5.0 Pm3, Laboratory Pharmacy, p.59.†12.0	$p_1$ Ch21, Toxicology and Urinalysis $p_2$ . $p_2$ 50 $t^2.0$
Pm7, Materia Medica, p. 59 2.5	Pm4, Pharmacopœia and Pre- scriptions, p. 59 5.0
	Pm8, Thesis Work, p. 59
	p. 56 †5.0

# THE SHORT COURSE IN PHARMACY.

This course is designed for those who, for lack of time or for other reasons, are unable to take the four years' course in pharmacy. The more general educational studies of the full course are omitted, but as broad a range of subjects is offered as can be undertaken without sacrifice of thoroughness in the technical work. The course corresponds, in general, to the usual full course of the pharmaceutical college. The work required of the student will occupy his whole time during the college year of nine months, and will usually exclude work in drug stores, during term time.

Students who complete this course in a satisfactory manner receive a certificate. Three years later, on presentation of a satisfactory thesis and proof of professional work, or further study, they receive the degree of Graduate in Pharmacy.

### STUDIES OF THE SHORT COURSE IN PHARMACY.

#### For Military Science see page 67.

#### FIRST YEAR.

#### FALL TERM-18 WEEKS.

#### SPRING TERM-18 WEEKS.

Hours.	Hours.
Ps3, Elementary Physics, p. 46, 2.5	Ps4, Elementary Physics, p. 46 2.0
Ch1, General Chemistry, p. 48 2.5	Ps6, Laboratory Physics, p. 46 †1.0
Ch14, Qualitative Analysis, p. 49, †12.0	Ch2, General Chemistry, p. 48 2.5
Pm1, Pharmacy, p. 58 5.0	Ch16, Quantitative Analysis, )
Pm5, Inorganic Pharmacognosy,	p. 50, 9 w.
p. 59 2.5	Ch19, Volumetric Analysis, p. ( 14.0
-	50, 9 w.
	Htl, General Botany, p. 56 †5.0
	Pm6, Organic Pharmacog., p. 59, 4.0

#### SECOND YEAR.

Ch7, Organic Chemistry, p. 49... 2.5 | Ch21, Toxicology and Urinalysis, Ag1, Biological Chemistry, p. 53, 2.5 | Dt8, Hist. of Plants, p. 57, 9w. } †2.0 Pm3, Laboratory Pharmacy, p.58, 12.0 | Ag13, Bacteriology, p. 58, 9w. } †5.0 Pm7, Materia Medica, p. 59..... 2.5 | Ag2, Biological Chemistry, p. 54, 5.0 Its, Hist of Plants, p. 57, 9 w. 1
Agl3, Bacteriology, p. 56, 9 w. 1
Ag2, Biological Chemistry, p. 54, 5.0
Pm4, Pharmacopeia and Presscriptions, p. 59........
5.0
Pm8, Thesis Work, p. 59........

# SCHOOL OF LAW.

# FACULTY.

ABRAM WINEGARDNER HARRIS, Sc. D., President of the University.

George Enos Gardner, M. A., Dean and Professor of Law.

Allen Ellington Rogers, M. A., Professor of Constitutional Law.

WILL'IAM EMANUEL WALZ, M. A., LL. B., Instructor in Law.

> CHARLES HAMLIN, M. A., Lecturer on Bankruptcy.

LUCILIUS ALONZO EMERY, M. A., LL. D., Lecturer on Roman Law.

ANDREW PETERS WISWELL, B. A., Lecturer on Evidence.

LOUIS CARVER SOUTHARD, M. S., Lecturer on Medical Jurisprudence.

FOREST JOHN MARTIN, LL. B., Lecturer on Maine Pleading.

HUGO CLARK, C. E., Lecturer on Equity Pleading.

RALPH KNEELAND JONES, B. S., Librarian.

#### UNIVERSITY OF MAINE.

The School of Law was opened to students in 1898. It occupies rooms in the Exchange Building, at the corner of State and Exchange streets, Bangor. In this city are held annually one term of the U. S. District Court, five terms of the Maine Supreme Judicial Court, one term of the Law Court, and daily sessions of the Municipal Court. The library of the school contains about twenty-five hundred volumes, including full sets of the reports of the Supreme Courts of the United States, Maine, Massachusetts, New Hampshire, Vermont, Connecticut, Rhode Island, and Ohio; the reports of the Court of Appeals of New York; the American Decisions, American Reports, American State Reports; the Lawyers' Annotated Reports; the leading text-books, and the leading periodicals.

#### ADMISSION.

Graduates of any college or satisfactory preparatory school are admitted to the school as candidates for the degree of Bachelor of Laws without examination. Other applicants must give satisfactory evidence of the necessary educational qualifications for the pursuit of the required course of study. These will be fixed in each case, on a consideration of its merits.

Special students, not candidates for a degree, will be admitted without examination, and may pursue any studies for which they are prepared.

Students from other law schools of good standing are admitted to classes in this school corresponding to classes in the schools from which they come, upon the production of a certificate showing the satisfactory completion of the prior work in such schools.

Students from law offices are admitted to advanced standing upon passing a satisfactory examination upon the earlier subjects of the course.

Members of the bar of any state are admitted to the senior class, without examination, as candidates for the degree of Bachelor of Laws.

#### METHODS OF INSTRUCTION.

The school is not committed exclusively to any one method of instruction, and recognizes the value of lectures by able men, and the profit to be found in the use of standard textbooks, but the great stress is placed upon the study of selected cases, and most of the work is carried on in this way. It is believed that through the case the student can best come at and comprehend the controlling principles of the law, and that in no other way can he get so firm a grip and so vital a comprehension of them. "Through the case to the principle," may perhaps adequately indicate the standpoint of he school in the matter of method.

Particular stress is placed upon the Practice Court, which is held once a week as a part of the work of the school, and in which every student is required to appear regularly. The questions of law are in all instances made to arise from the pleadings prepared by the students, and briefs, summarizing the points involved and the authorities citied, are submitted to the presiding judge. During the present year members of the Penobscot Bar have served in the capacity of judge, and it is expected that their services may be secured hereafter. Jury trials are frequently held, the records of recent cases actually tried before the Supreme Court sitting at *nisi privs* being used for that purpose.

The aim and spirit of the school are eminently practical, the purpose being to equip men for the every day duties of the practicing attorney.

# COURSE OF STUDY.

The course of study covers three years, in accordance with the requirements for admission to the bar in the State of Maine. College graduates, however, may be able to complete the course in two years. The school year consists of thirty-two weeks, and is divided into the fall, winter, and spring terms of eleven, ten, and eleven weeks respectively.

# EXPENSES.

The tuition fee is \$60. The graduation fee is \$10. There are no other charges.

Board and furnished rooms, with light and heat, may be obtained in the most convenient locations, at a price ranging from \$3 to \$7 a week. In other parts of the city lower rates may be obtained. It is believed that expenses in this, as well as in other departments of the University, are lower than in any other college of New England.

#### DEGREES.

Upon the completion of the course, the degree of Bachelor of Laws is conferred. The degree of Master of Laws will be granted for one year of graduate study.

# MILITARY INSTRUCTION.

Military instruction is required by law. The department is under the charge of an officer of the regular army, detailed by the President of the United States for this purpose. Cadet rifles, ammunition, and accoutrements are furnished by the War Department. The course has special reference to the duties of officers of the line. The students are organized into an infantry batallion of four companies, an artillery company, band, and signal corps, officered by cadets selected for character, soldierly bearing, and military efficiency. The corps is instructed and disciplined in accordance with rules established by the President of the United States.

The trustees have prescribed a uniform consisting of dark blue blouse, with State of Maine buttons, and gold braid on the cuffs; light blue cloth trousers for cold weather, and white duck trousers for hot weather; blue cap with gold wreath ornament. Students are required to wear their uniforms during military exercises, and are allowed to do so at other times. Students must purchase uniforms subject to the approval of the military instructor, who is required to see that the quality and fit are satisfactory. The prices for the year ending November 30, 1898, were as follows: blouse \$7.00; cloth trousers \$5.00; three pairs of duck trousers \$3.00; cap \$1.50; three pairs of gloves 60c.; three belts 30c.; total, \$17.40.

The three seniors who attain the highest standing in the military department are reported to the Adjutant General of the U. S. Army, and their names are printed in the U. S. Army Register. Cadets who have satisfactorily completed the course in military science receive at graduation a certificate of military proficiency and are reported to the Adjutant General of Maine.

Service in the military department is optional for members of the senior class who have not received appointments as officers.

# SCHOLARSHIP HONORS.

Honors for scholarship are of two kinds, general and special. General honors are awarded, at graduation, to students who attain an average standing, after the freshman year, of ninety on a scale of one hundred. Special honors are granted for the satisfactory completion of an honor course in addition to the work required for a degree. An honor course must involve at least ninety recitations or an equivalent. The methods of work are determined by the instructor. The list of honor courses, with full description, is published by the secretary of the faculty four weeks before commencement. Honor courses are open to juniors and seniors who have attained an average standing of eighty per cent. in all previous work, and an average standing of ninety per cent. in the previous work of the department in which the honors are sought. A student cannot register for an honor course without the consent of the faculty, nor later than the fourth week of the fall term. Upon completion of a course, the student's work will be tested by an examination or thesis, under the direction of the faculty committee on honor courses. and the result, together with the instructor's report, will be laid before the faculty. The faculty may grant special honors to those students who receive the approval of the committee, but will not do so if the general work is unsatisfactory. Honors, and their nature, are stated upon the commencement program and published in the annual catalogue.

# PUBLIC WORSHIP.

Religious services of a simple character are held in the chapel every day except Saturday and Sunday. All undergraduate students are required to be present. Students receive a cordial welcome at all services in the churches of the village. Voluntary religious services, under the direction of the Young Men's Christian Association, are held weekly.

# GENERAL REGULATIONS.

The regulations in regard to the selection of studies, standings and grades, absences from recitations and examinations, rhetorical exercises, entrance conditions, leaves of absence, attendance upon church and chapel, penalties, examinations, and athletics, are printed in full and may be obtained upon application to the President of the University.

By these regulations, the quota of regular studies for each student is, for a minimum, fifteen hours, and, for a maximum, twenty hours of class room work each week. In the application of this rule, two hours of laboratory work or of other exercises not requiring preparation, count as one hour.

Excuses for absence from individual exercises are not required. Each student is expected to be present at all recitations and other exercises except when imperative reasons require absence. Of these reasons he is the judge, but a student who is absent from ten per cent. or more of the exercises in any study is not admitted to the final examination. A student who fails to pass at an examination, is absent from an examination, or is excluded from an examination, may make up his deficiency at the special examinations held at the times noted in the calendar. The arrearage examinations during the Christmas recess include only studies of the spring term; the examinations during the Easter recess include only studies of the fall term; the examinations at the beginning of the fall term include studies of the whole year. A student who fails to make up an arrearage before the study is again taken in class is required to attend recitations in that study.

Each student is given a report of his work shortly after the close of each term. Parents or guardians may obtain these reports from the Secretary upon application.

# STUDENT EXPENSES.

Many students go through college for an annual expenditure of a little more than \$200, exclusive of the expense of clothing, traveling and vacations, and very many earn a part of this sum by vacation work. An estimate of the necessary annual expenses of a student in any department, except the School of Law, may be made from the following table. For the expenses of students in the School of Law, reference is made to the article on that School. It should be noticed that clothing, traveling, vacation, society, and personal expenses are not included in the table. These vary according to individual tastes and habits. The table is made up for men students who room in Oak Hall and board at the Commons. The necessary expenses of other students are sometimes lower, but usually slightly higher. In all cases an allowance must be made for personal incidental expenses. The expenses of the first year are higher than those of later years.

# ANNUAL STUDENT EXPENSE.

Tuition, 2 terms at \$15.00,	\$30	00
Registration fee, 2 terms at \$5.00,	10	00
Incidentals, 2 terms at \$10.00,	20	00
Laboratory fees, average, about,	8	00
Text-books, about,	15	00
Board, 34 weeks at \$3.00,	102	00
Heat and light for half room, and general care		
of dormitory, about,	15	00
۔ 	\$200	

The tuition charge is \$15.00 a term, or \$30.00 a year, and all students are subject to this charge except those in the short winter courses in agriculture, for which no tuition charge is made. Residents of Maine who need assistance and maintain a good record may obtain from the University loans to cover the tuition charge. The regulations in regard to these loans are stated in the article on loans, page 101.

The registration fee of \$5.00 must be paid before the student enters any classes, at the beginning of each term.

The incidental fee is \$10.00 a term, or \$20.00 a year, and covers heat and light for public buildings, reading-room charges, care of public rooms, and miscellaneous expenses.

The cost of text-books will average almost exactly \$15.00 a year for the course. These may be bought from the librarian at cost, but must be paid for on delivery. The expense can be decreased by buying second-hand books and selling them when used.

Students in the laboratories and shops pay a charge, to cover cost of materials and maintenance. These charges are as follows:—botany, per term, \$1.00; chemistry, per term, about \$3.00; bacteriology, per course, \$3.00; physics, per course, \$3.50; pharmacy, per term, about \$3.50; mineralogy, \$2.00; natural history, per course, \$2.00; electrical engineering, per course, \$5.00, shop, per course, \$5.00. Laboratory charges in the civil engineering course are very few, but traveling expenses in visiting engineering works will be nearly equivalent to the laboratory expenses of other courses.

The largest item of expense is for board. At the Commons, the university boarding house, each student pays his share of the cost, varying from \$2.75 to \$3.00 a week. Board may be obtained in clubs or private families at prices ranging from \$3.00 to \$3.25 a week.

Rooms in Oak Hall, the men's dormitory, are free, but students supply their own furniture, and pay for heat and light, for the lighting and care of the halls and public rooms of the dormitory, and for damages. This charge may be expected to be about \$15.00 a year, for each student, when two occupy a room. Furnished rooms, with light and heat, may be obtained in the village for \$1.50 a week, if occupied by one person, or \$2.00 a week, if occupied by two persons.

The estimate for furniture is made on the assumption that two students will unite in furnishing a room, and that something will be realized from the sale of furniture upon graduation. Women students who do not live at their own homes are required to room and board at the Mt. Vernon House. The charge for board is \$3.00 a week. No charge is made for the rent of rooms, but students provide their own furniture, take care of their rooms, pay for the heat and light of their rooms, and for the heat, light and care of the halls and public rooms. The charge for all these items is at cost. Students are charged for all damages done to university property or to that of other students.

Each student is required to deposit with the Treasurer, a bond, with two good names as sureties, in the amount of \$150.00, to cover term bills. Blanks on which bonds should be made out will be furnished by the Secretary upon application. Those who keep a sufficient deposit with the Treasurer to cover the bills of one term, will not be required to furnish a bond. The deposit required is \$90.00 from those who board at the Commons or Mt. Vernon House, and \$30.00 from others. No student will be graduated who is in debt to the treasury.

A circular containing a fuller statement in regard to expenses, and treating of the opportunities for self help, may be obtained upon application.

# LOANS.

# TUITION LOANS.

Residents of Maine who need assistance and maintain a satisfactory record may borrow from the university treasury a sum sufficient to pay the tuition charge. This privilege is not extended to students in the School of Law.

Borrowers are required to give endorsed notes or other satisfactory security. The loans bear interest at six per cent per annum, and are due \$30.00 a year, beginning with the first year after graduation, but may be paid earlier. No member of the faculty is accepted as an endorser.

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Loans are granted by a committee consisting of the President and two other members of the faculty. The number of loans may not exceed one-third of the number of students in the undergraduate departments. Loans are granted to cover the tuition charges of one year at a time.

The first grant of loans for each university year is made in June preceding. Applications for loans are considered during May, and to insure attention at this time should be forwarded to the President not later than May 15. A second award is made in the fall term. Applications should be made not later than October 10. They must be made to the President upon blanks to be obtained from the Secretary of the faculty. Awards made in June may be withdrawn from students who do not register, or claim their loans, by October 10.

# THE KITTREDGE LOAN FUND.

This fund, amounting to nearly one thousand dollars, was established by Nehemiah Kittredge of Bangor. It is in the control of the President and Treasurer of the University, by whom it is loaned to needy students. In the deed of gift, it was prescribed that no security but personal notes bearing interest at the prevailing rate, should be required. Loans are made on the conditions that the interest shall be paid promptly, and that the principal shall be returned from the first earnings after graduation.

# SCHOLARSHIPS AND PRIZES.

THE KIDDER SCHOLARSHIP.—The Kidder Scholarship was endowed by Frank E. Kidder, Ph. D., Denver, Colorado, a graduate of the University in the class of 1870, to be awarded to a member of the junior class to be selected by the President and the Faculty.

THE PRENTISS PRIZE, the gift of Mrs. Henry E. Prentiss, Bangor, will be awarded to that member of the junior class who

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shall present the best oration at the junior exhibition. In the award of this prize, both the composition and the delivery of the oration will be considered.

THE PRENTISS DECLAMATION PRIZE, the gift of Mrs. Henry E. Prentiss, Bangor, for excellence in elocution, will be awarded to the best speaker in the sophomore class.

THE LIBBEY PRIZE, the gift of the Hon. Samuel Libbey, Orono, will be awarded to the student who shall present the best essay upon an agricultural topic. The essays must be handed to the Professor of Agriculture on or before the first Monday in June.

THE WALTER BALENTINE PRIZE, the gift of Whitman H. Jordan, Sc. D., Geneva, N. Y., a graduate of the University in the class of 1874, will be awarded to that member of the junior class who shall excel in biological chemistry.

THE KENNEBEC COUNTY PRIZE, the gift of the Hon. William T. Haines, Waterville, a graduate of the University in the class of 1876, will be awarded to that member of the senior class who shall write the best essay on applied electricity.

THE FRANKLIN DANFORTH PRIZE, the gift of the Hon. Edward F. Danforth, Skowhegan, a graduate of the University in the class of 1877, in memory of his father, Franklin Danforth, will be awarded to that member of the senior class in the agricultural course who shall attain the highest standing.

# LOCATION.

The University has a beautiful and healthful location in the town of Orono, Penobscot county, half way between the villages of Orono and Stillwater, three miles from the city of Oldtown, and nine miles from the city of Bangor. The Stillwater river, a branch of the Penobscot, flows in front of the buildings, forming the western boundary of the campus. Orono is upon the Maine Central Railroad and is easy of access from all parts of the State.

The Bangor, Orono and Oldtown Electric Railroad, runs through the university grounds. Visitors will find it convenient to take the electric cars at Bangor, Veazie, or Oldtown, as the electric road does not run to the railroad station at Orono. Baggage may be sent to Orono by railroad.

The School of Law is located in the Exchange Building, Bangor, at the corner of Exchange and State streets.

# THE BUILDINGS AND THEIR EQUIPMENT.

WINGATE HALL.-The most conspicuous building on the campus, Wingate Hall, named in honor of William P. Wingate of Bangor, long an honored member of the board of trustees, is a three-story brick structure, rectangular in form, with a handsome clock tower. It was erected for the departments of civil and mechanical engineering, but is at present occupied in part by other departments. On the ground floor are two large designing rooms, recitation rooms, armory, instrument rooms, and private offices for the professors of civil and mechanical engineering. On the second floor are the offices and recitation rooms of the professors of mathematics, physics, Greek, and Latin, the physical laboratory, and the apparatus room. On the third floor are large, well lighted drawing rooms. In the basement are the dynamo laboratory, and the testing room of the department of civil engineering. The testing room contains a Riehlé testing machine of 60,000 pounds capacity, cement testing machine, etc. The dynamo laboratory is provided with six direct-current dynamos, two alternating-current dynamos, a rotary converter, transformers, ammeters, voltmeters, wattmeters, rheostats, switches, etc., affording accommodations for fifteen students in a section.

OAK HALL.—North of Wingate Hall is Oak Hall, a substantial four-story brick building used as a dormitory for men, named in honor of Lyndon Oak of Garland, for many years a useful member of the board of trustees. It contains forty-nine study rooms for students, bath rooms, and a room occupied by the Young Men's Christian Association, is heated by steam, supplied with water, and lighted by electricity. It was remodeled in 1895. •



VIEW OF THE CAMPUS.

#### UNIVERSITY OF MAINE.

FERNALD HALL.—This building, named in honor of Merritt C. Fernald, Ph. D., president of the University from 1879 to 1893, is a two-story brick building, situated south of Wingate Hall. It contains fifteen rooms devoted to the departments of chemistry and pharmacy. On the first floor are the quantitative and pharmaceutical laboratories, office and private laboratories for the professors of chemistry and pharmacy; upon the second floor are the lecture rooms, the qualitative laboratory, the office and private laboratory of the instructor in qualitative analysis, a store room, and a recitation room. Under the roof are arranged the photographic studio, laboratory, and dark rooms. In the basement is an assay laboratory, the laboratory for beginners, and store rooms. The department is well supplied with apparatus.

COBURN HALL.—Directly south of Fernald Hall is Coburn Hall, named in honor of Abner Coburn of Skowhegan, the chief benefactor of the University. It is a brick building, three stories in height. On the first floor are located the reading room and the library, the laboratory and recitation room of the professor of agriculture, and the recitation room of the professor of English. On the second floor are the botanical and entomological laboratories, and recitation rooms for the departments of natural history, civics, and modern languages. Over the library is the museum, extending through two stories. The collections are large and constantly increasing. On the third floor is the chapel. In the basement is the President's office.

THE OBSERVATORY.—The astronomical observatory stands upon a slight elevation to the east of Coburn Hall. The equatorial room will, before the beginning of the next college year, be equipped with a seven and one-half inch refractor of the best modern construction with finding circles, driving-clock, filar micrometer and other accessories. In the transit-room is a Repsold vertical circle of two-inch aperture. These instruments, together with sextants, sidereal chronometer, etc., furnish excellent facilities for instruction in both descriptive and practical astronomy.

THE MACHINE SHOP.—In the rear of Fernald Hall is the machine shop, a wooden building 125 feet long and two stories

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high, containing the foundry, forge shop, carpenter shop, machine shop and tool room. The building is thoroughly equipped. An adjoining building, 30 by 57 feet, contains the dynamos, motors and storage battery, which operate the lighting plant, and serve the seniors for study in their technical work in electrical engineering.

THE EXPERIMENT STATION BUILDING.—South of the Machine Shop stands a two-story brick building with basement, which is occupied by the Agricultural Experiment Station. In the basement are rooms for the storage and preparation of samples for analysis, and the boiler room. On the ground floor are the chemists' office, reagent room, the laboratory used in the analysis of foods and feeding stuffs, the nitrogen room, and the laboratory used in the analysis of fertilizers. On the second floor are the general office, the director's office, the bacteriological laboratory, the journal room, and a storage room for books and pamphlets. The building is heated by steam, supplied with gas and electricity, and thoroughly equipped with apparatus.

THE HORTICULTURAL BUILDING.—East of the Experiment Station is the Horticultural Building, consisting of a head house and three greenhouses. In the head house are the office of the professor of horticulture, a work room, a seed storage room, a photographing room, the janitor's room, and a room used for storage. The main greenhouse, 20 feet by 100 feet, is devoted to the use of the Experiment Station, and to the instruction of students. A second structure, 20 feet by 80 feet, running parallel to the main greenhouse, is divided, one-half being used for growing plants, and the remainder as a potting and storage room. The third greenhouse is designed for investigations in plant nutrition. In the south end of this house is the conservatory.

THE DAIRY BUILDING.—The Dairy Building, 50 feet by 42 feet, contains a milk room, a butter room, a cheese room, a cold storage room, a cheese curing room, a lecture room, the office of the professor of animal industry, and a laboratory. It is supplied with all necessary appliances for teaching the most approved methods of handling milk, cream, butter, and cheese. The building is heated with steam and supplied with hot and cold water. Power is furnished by a 6-horse power engine.
THE MT. VERNON HOUSE .- This is a wooden building, completed in 1898, to furnish dormitory accommodations for women. It is at present occupied in part by members of the faculty. but will be entirely devoted to women, whenever the numbers demand it. The house is situated near the recitation and laboratory buildings, upon a site overlooking the campus, and commanding a magnificent view of the river, villages, and mountains. It is two stories in height, built in the old colonial style, and consists of a long central portion and two wings. It contains parlor, dining room, kitchen, bath room, and sixteen study rooms, each intended for two students. The rooms are large, well lighted. heated by a combined system of hot air and hot water, and provided with electric lights from the university plant. A special feature is the long hall on each floor, extending sixty-six feet upon the front of the building, wide enough to serve as assembly or study rooms. The building, and the students who live in it, are under the supervision of a competent matron.

THE FRATERNITY HOUSES.—Four of the student fraternities occupy club houses. Three of the houses are on the campus, and one in the village of Orono. They are large, well arranged houses, affording rooms for about twenty-five students each. Three of the fraternities maintain their own boarding establishments under the supervision of matrons.

OTHER BUILDINGS.—In addition to the buildings already described, there are six others devoted to various purposes. Among these are the President's house, the Commons or general boarding house, and three residences occupied by members of the faculty.

## LIBRARY AND READING ROOM.

The library contains over sixteen thousand bound volumes, and about seven thousand pamphlets. The growth of the library is about two thousand volumes a year.

A large and convenient reading room adjoins the book room. The principal daily and weekly newspapers and about two hun-

dred and twenty-five of the most important literary, scientific, and technical papers, magazines, and reviews, both American and foreign, are kept on file.

The library is open for eight hours daily, except Sunday. Students are allowed direct access to the shelves. Students may have two books each at a time, to be kept two weeks, when they may be renewed, unless some one else has filed an application for them. There is a fine of two cents a day for books kept over time. If additional books are needed for special work they may be obtained upon application to the librarian.

## MUSEUM AND HERBARIUM.

The museum is located in two stories of the wing of Coburn Hall. In the upper story are exhibited the mineral collection, geological specimens and plant models. The mineral cabinet embraces a general collection of three hundred species of the more common minerals, arranged for study according to Dana's system. A fine collection of economic minerals has been received from the National Museum; and an educational series of rocks, from the U. S. Geological Survey. The geological cabinet embraces a collection of plant and animal fossils, and a collection of the more important fragmental, crystalline, and volcanic rocks.

On the lower floor are collections of the vertebrate and invertebrate animals, and a set of animal models. The invertebrates include working collections and interesting native and exotic exhibition specimens of sponges, hydroids, corals, echinoderms, vermes, mollusks, crustaceans, and insects. The vertebrates include the nucleus of a collection of the fishes, reptiles, birds, and mammals of the State, and a set of type exotic mammals. The collection of animal models embraces a human manikin, the human eye, ear, and larynx, an insect, leach, snail, fish, snake, and bird. The herbarium comprises the original collection of Maine plants of about 500 species; the new collection of Maine plants of 800 species; the Blake herbarium of 7,000 species, including phænogams and cryptogams; Ellis and Everhard's North American Fungi, comprising thirty-five centuries; Halsted's Lichens of New England; Underwood's Hepaticæ; Cummings and Seymour's North American Lichens; Cook's Illustrative Fungi; Collins's Algæ of the Maine Coast; a collection of illustrative cryptogams in boxes; Harvey's Weeds and Forage Plants of Maine, of 300 species; Halsted's Weeds; a collection of grasses and forage plants of 400 species; a collection of United States woods prepared by the United States Department of Agriculture; a collection of seeds and fruits; numerous slides for the microscope.

### FIELD DAY.

One day in each year, usually the last Wednesday in May, is known as the Field Day of the agricultural departments. The usual exercises are omitted and all departments are thrown open Special effort is made to exhibit the facilities of to visitors. the agricultural departments in the most thorough manner. Special railroad rates are obtained for those who come from a distance. The attendance has ranged from twelve hundred to seventeen hundred persons. The program includes informal addresses by members of the faculty in regard to the collections, demonstrations with some of the more important apparatus, exhibitions of improved agricultural machinery, the operation of the dairy apparatus, an exhibit of agricultural products, tools and supplies contributed by manufacturers and dealers. The experimental work of the Experiment Station is explained by the investigators. The students give an exhibition drill.

Circulars in regard to Field Day may be obtained by addressing the Professor of Agriculture.

## ORGANIZATIONS.

FRATERNITIES.—The following fraternities are represented in the University:  $\Phi \Gamma \Delta$ ,  $B \Theta \Pi$ ,  $K \Sigma$ ,  $A T \Omega$ ,  $\Phi K \Sigma$ ,  $\Delta P$ ,  $I \Phi$ ,  $\Phi \Gamma$  (for women).

Associations.—The following is a list of other organizations existing in the University: Scientific Association, Philological Club, French Club, Debating Society, Electrical Society, Honorary Society (Phi Kappa Phi), Young Men's Christian Association, Athletic Association, Publishing Association, Press Club, Glee Club, Instrumental Club, Orchestra, Band, Photographic Society.

THE YOUNG MEN'S CHRISTIAN ASSOCIATION—The Young Men's Christian Association, composed of students, has for its object the promotion of Christian fellowship and aggressive Christian work.

THE HONORARY SOCIETY.—The Phi Kappa Phi is an honorary society. At the end of the junior year the five members of the class having the highest standing are elected members, and at the end of the fall term of the senior year the five next highest are added.

## UNIVERSITY PUBLICATIONS.

THE ANNUAL CATALOGUE OF THE UNIVERSITY OF MAINE.— This contains descriptions of the courses of study, lists of the trustees, faculty, and students, and other information relating to the University. THE SHORT CATALOGUE OF THE UNIVERSITY OF MAINE.— This is an abbreviated form of the catalogue.

THE ANNUAL REPORT OF THE TRUSTEES, PRESIDENT, AND TREASURER, TO THE GOVERNOR AND COUNCIL OF THE STATE.— The reports of the Trustees and President include an account of the general affairs and interests of the University for the year, and the report of the Experiment Station. The report for the odd years contains the biennial catalogue of graduates.

THE UNIVERSITY BULLETINS.—These are occasional publications containing reports of the investigations or researches made by the university officers, or other information of public interest relating to the University.

THE UNIVERSITY CIRCULARS.—These are occasional pamphlets, issued for special purposes. Those now ready for distribution relate to: The Courses in Agriculture; the Courses in Pharmacy; the School of Law; the Courses in Engineering; Student Expenses.

THE MAINE BULLETIN.—This is a small publication issued quarterly by the University, to give information to the alumni.

THE ANNUAL REPORT OF THE EXPERIMENT STATION.— This is Part II of the Annual Report of the University.

THE EXPERIMENT STATION BULLETINS.—These are popular accounts of the results of station work which relate directly to farm practice.

THE CAMPUS.—This is a journal published semi-monthly during the university year by an association of the students.

THE PRISM.—This is an illustrated annual, published by the junior class.

## THE ALUMNI.

### THE GENERAL ALUMNI ASSOCIATION.

George H. Hamlin, President, Orono. Charles P. Weston, Recording Secretary, Orono. Ralph K. Jones, Corresponding Secretary, Orono. Albert H. Brown, Treasurer, Oldtown. Prof. James N. Hart, Necrologist, Orono.

#### LOCAL ASSOCIATIONS.

- THE WEST MAINE ASSOCIATION.—S. W. Bates, Esq., First National Bank Building, Portland, President; C. S. Webster, Exchange St., Portland, Secretary.
- THE NORTH MAINE ASSOCIATION.—Harvey B. Thayer, Presque Isle, President; N. H. Martin, Fort Fairfield, Secretary.
- THE BOSTON ASSOCIATION.—Hon. L. C. Southard, 73 Tremont St., President; J. D. Lazell, 443 Tremont Building, Secretary.
- THE NEW YORK ASSOCIATION.—J. Fred Lockwood, 71 Broadway, President; C. H. Kilbourne, 2254 Seventh Ave., Secretary.
- THE WASHINGTON (D. C.) ASSOCIATION.—Prof. F. Lamson-Scribner, Department of Agriculture, President; Dr. George P. Merrill, National Museum, Secretary.
- THE PENOBSCOT VALLEY ASSOCIATION.—J. M. Oak, Bangor, President; E. H. Kelley, Bangor, Secretary.

## COMMENCEMENT.

Sunday, June 11: Baccalaureate Sermon, by Rev. S. C. Beach, Bangor.

Monday, June 12: College Convocation, including reports of departments and student enterprises, and the awarding of prizes; Class Day Exercises; Memorial Services.

Tuesday, June 13: Exhibition Drill; Receptions by the Fraternities; President's Reception.

Wednesday, June 14: Commencement Exercises; Commencement Dinner; Meeting of the Alumni Association; Commencement Concert.

### CERTIFICATES AND DEGREES.

A certificate was presented, upon completing the Short Course in Pharmacy, to:

William Bryant Webster, Coventry, Vt.

The Bachelor's degree was conferred upon the following persons:

Eben Pierce Bassett, B. M. E., (in Electricity), Bangor.

Frank Lothrop Batchelder, B. C. E., Machias.

Wallace Edward Belcher, B. C. E., Plymouth, Mass.

Charles Elbert Blackwell, B. M. E., (in Electricity), Madison.

Alson Edwin Boynton, B. C. E., Alna.

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John Wilson Brown, B. M. E., (in Electricity), Brimfield, Mass.

Rufus Houdlette Carlton, B. M. E., (in Electricity), Cedar Grove.

Winfield Benson Caswell, B. M. E., Waterville.

Harold Hayward Clark, B. M. E., (in Electricity), Ellsworth.

Daniel Lunt Cleaves, B. S., (in Chemistry), Portland.

George Collins, B. C. E., Athol, Mass.

Cyrenius Walter Crockett, B. S., (in Chemistry), Rockland.

Marshall Buckland Downing, B. M. E., (in Electricity), Dover.

Irving Harry Drew, B. M. E., (in Electricity), Bar Harbor. Reginald Lovejoy Fernald, B. S., Orono.

Bert Whitaker Flint, B. C. E., Bangor.

Leonard Harris Ford, B. S., Bangor.

Archer Lewis Grover, B. M. E., (in Electricity), Bethel.

William Wallace Haney, B. M. E., (in Electricity), Eastport.

George Woodman Hersey, B. M. E., Portland.

Harry Sanford Heyer, B. M. E., (in Electricity), Friendship.

George Libby Hilton, B. S., (in Pharmacy), Bradley.

Hall Farrington Hoxie, B. M. E., (in Electricity), Waterville.

Edward Raymond Mansfield, B. S., (in Agriculture), Orono. Herbert Palmer Mayo, B. M. E., South Boston, Mass.

William Bradley Morell, B. M. E., (in Electricity), Amherst, Mass.

- Walter Jean Morrill, B. S., (in Preparatory Medicine), Madison.
- Edwin St. Elmo Mosher, B. M. E., (in Electricity), Presque Isle.

William Augustine Murray, B. C. E., Pittsfield.

William Nelson, B. M. E., Cumberland Centre.

Herman Henry Oswald, B. M. E., (in Electricity), Philadelphia, Pa.

Edward Everett Palmer, B. M. E., (in Electricity), South Bridgton.

Maurice Henry Powell, B. S., (in Agriculture), Orono.

Mildred Louise Powell, B. S., Orono.

Joseph Henry Pretto, B. M. E., Orono.

Stanley Sidensparker, B. M. E., Warren.

Clinton Leander Small, B. S., (in Chemistry), Auburn.

Edwin Melcher Smith, B. M. E., Gardiner.

Allen Whitmore Stephens, B. C. E., Oldtown.

Frank Minott Stinson, B. M. E., Bath. Oliver Otis Stover, B. S., Freeport. John Henry Swain, B. S., Skowhegan. Pearl Clayton Swain, B. A., Solon. Marcellus Maurice Veazie, B. S., Islesboro.

Charles Comfort Whittier, B. C. E., Skowhegan.

The degree of Bachelor of Laws was conferred upon: Frank Devereux Fenderson, East Parsonsfield. Herbert Lewis Graham, Bar Harbor. Laurence Vincent McGill, East Rochester, N. H.

The degree of Graduate in Pharmacy, upon presentation of a satisfactory thesis, and proof of three years' professional work in addition to the Short Course in Pharmacy, was conferred upon:

Albert James Nute, Arlington, Mass.

The degree of Civil Engineering was conferred upon the following persons, upon presentation of satisfactory theses, and proof of professional work extending over a period of not less than three years:

Charles Partridge Weston, B. C. E., Orono, class of 1896.

Frank Elwin Weymouth, B. C. E., Greytown, Nicaragua, class of 1896.

The honorary degree of Master of Science was conferred upon:

Samuel Lane Boardman, Augusta.

The various prizes were awarded last year as follows:

The Kidder Scholarship to Mowry Ross, West Woodstock, Conn.

The Prentiss Prize to Frank McDonald, Portland.

The Prentiss Declamation Prize to Alson Haven Robinson, Orono.

The Libbey Prize to Wallace Edward Belcher, Plymouth, Mass.

The Walter Balentine Prize to William Bryant Webster, Coventry, Vt.

The Algebra Prize to Walter Hampton Eldridge, Bucksport.

The Kennebec County Prize to Hall Farrington Hoxie, Waterville.

The Franklin Danforth Prize to Edward Raymond Mansfield, Orono.

### APPOINTMENTS.

### SPEAKERS AT COMMENCEMENT, JUNE, 1899.

Marshall Buckland Downing, Dover; Reginald Lovejoy Fernald, Orono; Herman Henry Oswald, Philadelphia, Pa.; Stanley Sidensparker, Warren; Clinton Leander Small, Auburn; Pearl Clayton Swain, Solon.

SPEAKERS AT THE JUNIOR EXHIBITION, JUNE, 1899.

Roy Huntley Brown, Montague City, Mass.; Walter Neal Cargill, Liberty; Charles Hutchinson Lombard, Portland; Frank McDonald, Portland; Fred Carlton Mitchell, West Newfield; DeForest Henry Perkins, North Brooksville; Charles Omer Porter, Cumberland Mills; Joseph Onon Whitcomb, Morrill.

### Speakers at the Sophomore Prize Declamation Contest, December, 1898.

Wales Rogers Bartlett, Center Montville; Gertrude Lee Fraser, Oldtown; LeRoy Harris Harvey, Orono; Bertrand Clifford Martin, Fort Fairfield; Maurice Barnaby Merrill, Stillwater; Alson Haven Robinson, Orono; Frank Erwin Watts, West Falmouth.

Reported to the Adjutant General of the U. S. Army.

Clinton Leander Small, Portland; Charles Comfort Whittier, Skowhegan; Frank Lothrop Batchelder, Machias.

### Members of Phi Kappa Phi.

Frank Lothrop Batchelder, Machias; Wallace Edward Belcher, Plymouth, Mass.; John Wilson Brown, Brimfield, Mass.; Marshall Buckland Downing, Dover; Reginald Lovejoy Fernald, Orono; Herman Henry Oswald, Philadelphia, Pa.; Stanley Sidensparker, Warren; Clinton Leander Small, Auburn; Allen Whitmore Stephens, Oldtown; Pearl Clayton Swain, Solon.

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### STUDENTS RECEIVING GENERAL HONORS.

Wallace Edward Belcher, Plymouth, Mass.; Harold Hayward Clark, Ellsworth; Daniel Lunt Cleaves, Portland; Reginald Lovejoy Fernald, Orono; Herman Henry Oswald, Philadelphia, Pa.; Stanley Sidensparker, Warren; Clinton Leander Small, Auburn; Pearl Clayton Swain, Solon.

### STUDENTS RECEIVING SPECIAL HONORS.

SENIORS.

Frank Lothrop Batchelder, Machias, Hydraulic Engineering. Wallace Edward Belcher, Plymouth, Mass., Hydraulic Engineering and Physics.

Bert Whitaker Flint, Bangor, Hydraulic Engineering.

Stanley Sidensparker, Warren, Mathematics.

Allen Whitmore Stephens, Oldtown, Hydraulic Engineering. Pearl Clayton Swain, Solon, Latin.

Oliver Otis Stover, Freeport, Zoology.

JUNIORS.

Charles Hutchinson Lombard, Portland, Mathematics. Benjamin Thomas Weston, Madison, Mathematics.

## OFFICERS OF THE CADET CORPS.

Instructor Perley Walker, Commanding.

### GENERAL STAFF.

First Lieutenant and General Staff Officer—Frank McDonald. First Lieutenant and Chief Signal Officer—Julian Sturdevant

First Lieutenant and Quartermaster-Clinton Llewellyn Cole.

### FIELD AND STAFF.

Major-Charles Omer Porter.

First Lieutenant and Adjutant-Frank Harvey Bowerman.

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## NON-COMMISSIONED STAFF.

Sergeant Major—Bertrand Clifford Martin. Quartermaster Sergeant—Fred Merrill Davis. Color Sergeant—Lewis Goodrich Varney.

## Company A.

Captain	Charles Hutchinson Lombard.
First Lieutenant	.Leo Bernard Russell.
Second Lieutenant	Philip Ross Goodwin.
Second Lieutenant	Howard Clinton Strout.
First Sergeant	Walter Henry Rastall.
Sergeant	.LeRoy Harris Harvey.
Sergeant	.George Estyn Goodwin.
Sergeant	.Fred Hammond Hanson Bogart.
Sergeant	.Mowry Ross.
Corporal	Andrew George Hamilton.
Corporal	.Percival Hildreth Mosher.
Corporal	Arthur Elmer Silver.
Corporal	.Roy Elvert Russell.
Corporal	.James Warren Butman.

## Company B.

Captain	.John Gardner Lurvey.
First Lieutenant	Roy Huntley Brown.
Second Lieutenant	Wilfred Harold Caswell.
Second Lieutenant	Benjamin Thomas Weston.
First Sergeant	.Fred Lewis Martin.
Sergeant	.William Harris Boardman.
Sergeant	.Wales Rogers Bartlett.
Sergeant	.Lewis Robinson Cary.
Sergeant	.Frank Holt Lowell.
Corporal	.Charles William Margesson.
Corporal	.Edwin Stanley True.
Corporal	.Walter Hampton Eldridge.
Corporal	.William Asbury Hall.
Corporal	.John Clifford Warren.

# Company C.

Captain	.William Goldsbrough Jones.
First Lieutenant	James Arthur Hayes.
Second Lieutenant	Fred Carleton Mitchell.
Second Lieutenant	Wallace Augustus Weston.
First Sergeant	.Ernest Lauren Watson.
Sergeant	.Fred Albert Willard.
Sergeant	.Herbert Henry Leonard.
Sergeant	.Mark Jonathan Bartlett.
Sergeant	.Warren Callamore Hall.
Corporal	.Frank Ethelbert Pressey.
Corporal	. Alpheus Crosby Lyon.
Corporal	.Horace Percy Abbott.
Corporal	.Edwin Bishop Ross.
Corporal	.Herbert Willis Sewell.

## SIGNAL CORPS.

First Lieutenant	Freeman Ames Smith.
Second Lieutenant	Percy Leroy Ricker.
First Sergeant	Stephen Edward Woodbury.
Corporal	.Ralph Whittier.
Corporal	.Luther Peck.

# CATALOGUE OF STUDENTS.

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## GRADUATE STUDENTS.

Crathorne, Arthur Robert, B. S. (	Champaign,	fll.,	Mt. Vernon
			[House.
Crockett, Cyrenius Walter, B. S.,	Rockland,	Mt.	Vernon House.
Grover, Archer Lewis, B. M. E.,	Bethel,	Mt.	Vernon House.
Murray,William Augustine, B.C.	E., Pittsfiel	d, Mt	.Vernon House.
Sidensparker, Stanley, B. M. E.,	Warren,	Mt.	Vernon House.
Shepard, Lucius Jerry, B. S.,	Orono,		Mill Street.
Small, Clinton Leander, B. S.,	Auburn,	Mt.	Vernon House.
Stover, Oliver Otis, B. S.,	Freeport,	Mt.	Vernon House.

## SENIORS.

Beedle, Harry Woodward,	South Gardiner	, 207 Oak Hall.
Bird, Alan Laurence,	Rockland,	B. $\Theta.$ II. House.
Bowerman, Frank Harvey,	Victor, N. Y.,	B. O. II. House.
Burgess, William Joseph,	Calais, M	Irs. H. H. Finn.
Burnham, Agnes Rowena,	Oldtown,	Oldtown.
Cargill, Walter Neal,	Liberty, Mr. (	D. T. Goodridge.
Caswell, Wilfred Harold,	Bridgton,	A. T. Ω. House.
Clark, Wilkie Collins,	Skowhegan,	<b>Φ.</b> Γ. Δ. House.
Closson, James Edward,	Monson, Mass.,	201 Oak Hall.
Cole, Clinton Llewellyn,	Pleasantdale,	311 Oak Hall.
Cushman, Harvey Barnes,	Rockland,	A. T. Ω. House.
Davis, Harry Ashton,	Orono,	Orono.
Drummond, Henry Frank,	Bangor,	K. Σ. House.
Dunn, Julian Sturdevant,	Cumberland,	K. Σ. House.
Eaton, Herbert Davidson,	Bangor,	Bangor.
Goodwin, Philip Ross,	Randolph,	В. Ө. П.
Gray, Charles Perley,	Oldtown,	A. T. Ω. House.
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Hamlin, George Otis, Hart, Malcolm Cole, Hatch, Howard Andrew, Hayes. James Arthur, Hersey, Guy Alfred, Holley, Clifford Dyer, Horner, Leon Herbert, Johnson, Frank Ortelle, Jones, William Goldsbrough, Judge, Thomas Francis, Leathers, Harry Hewes, Lombard, Charles Hutchinson, Love, Alexander, Lurvey, John Gardner, McDonald, Frank, Maddocks, Howard Lewis, Mann, Edwin Jonathan, Merrill, Wilbur Louis, Mitchell, Fred Carleton, Mitchell, Frank Henry, Murphy, George Ferguson, Noyes, Frank Albert, Owen, Alden Bradford, Page, Arthur Southwick, Perkins, DeForest Henry, Philoon, Daniel Lara, Porter, Charles Omer, Ricker, Percy Leroy, Robbins, Charles Alphonso, Rollins, Clarence Herbert, Rollins, Frank Morris, Russell, Leo Bernard, Smith, Edward Henry, Smith, Freeman Ames, Snowdeal, Adah, Stickney, Grosvenor Wilson, Stowell, Clarence Warner, Strange, Edward Moore,

Orono, K. Σ. House. Φ. Γ. Δ. House.Willimantie, Lindenville, O., B. O. II. House. 211 Oak Hall. Randolph, Bangor, K. Σ. House. Farmington, Mrs. L. Haves. Springfield, Mass., K. Z. House. North Berwick,  $\Phi$ .  $\Gamma$ .  $\Delta$ . House. Mrs. H. H. Finn. Bucksport, A. T. Ω. House. Biddeford, 201 Oak Hall. Bangor, 205 Oak Hall. Portland, East Bluehill, K. Σ. House. Portland, 205 Oak Hall. Φ. Γ. Δ. House. Portland, Φ. Γ. Δ. House. Skowhegan, 301 Oak Hall. West Paris, East Parsonsfield, K. Σ. House. West Newfield, Ф. Г. Δ. House. Φ. Γ. Δ. House. Charleston, 203 Oak Hall. Alewive, Berlin, N. H., K. Σ. House. West Pembroke, 203 Oak Hall. Fairfield, 211 Oak Hall. North Brooksville, 111 Oak Hall. 312 Oak Hall. Auburn. Cumberland Mills, K. Z. House. 303 Oak Hall. Westbrook, Patten. Mr. J. P. Spearen. Veazie, Veazie. Waterville, A. T. Ω House. Φ. Γ. Δ. House. Farmington, 303 Oak Hall. East Sullivan. Thorndike, Mass., K. Σ. House. Augusta, Mt. Vernon House. Clinton, Mass., 301 Oak Hall. Brimfield, Mass., 202 Oak Hall. Calais, 112 Oak Hall.

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Strout, Howard Clinton,	Orono,	Mrs. Ada Strout.
Tate, Edwin Morrel,	South Corint	th, Bangor.
Tate, Fred Foy,	South Corint	h, Mr. Spaulding.
Vose, Fred Hale,	Milltown, N.	B., B. O. II. House.
Webster, Frank Elijah,	Patten,	Mr. E. Webster.
Weston, Benjamin Thomas,	Madison,	Φ. Γ. Δ. House.
Weston, Wallace Augustus,	Madison,	<b>Φ. Γ. Δ. House.</b>
Whitcomb, Joseph Onon,	Morrill,	111 Oak Hall.

### JUNIORS.

Bartlett, Charles William,	North New	Portland, K. S.
		[House.
Bartlett, Mark Jonathan,	Montville,	Mr. Chas. Crowell.
Bartlett, Wales Rogers,	Center Mont	tville, 209 Oak Hall.
Bennett, Waldo Horace,	Newport,	<b>Φ. Γ. Δ. House.</b>
Bixby, John Harold,	Anson,	309 Oak Hall.
Bixby, Oscar Merrill,	Anson,	309 Oak Hall.
Boardman, William Harris,	Calais,	Mr. H. H. Finn.
Bogart, Fred Hammond Hanson,	Chester, Con	nn., 109 Oak Hall.
Brown, Arthur Fred,	Belfast,	A. T. Ω. House.
Buck, Henry Alfred,	Bucksport,	102 Oak Hall.
Buck, Thomas,	Orland,	Mr. H. H. Finn.
Cary, Lewis Robinson,	Bowdoinhar	n, Prof. G. M.
		[Gowell.
Clark, Samuel,	Waterville,	A. T. Ω. House.
Cobb, Arthur Leroy,	South Vassa	alboro, Mrs. T.
		[Shatney.
Coombs, James Parker,	Pleasantdal	e, A. T. Ω. House.
Davis, Edmund Ireland,	Bangor,	B. O. II. House.
Davis, Fred Merrill,	Lewiston,	209 Oak Hall.
Davis, George Harold,	Auburn,	K. Σ. House.
Faunce, Benjamin Franklin,	Norway,	206 Oak Hall.
Fitzgerald, Elsie Eunice,	Oldtown,	Oldtown.
Fraser, Gertrude Lee,	Oldtown,	Oldtown.
Goodwin, George Estyn,	Gorham,	K. Σ. House.
Hamlin, Emily,	Orono,	Mrs. L. Hamlin.
Harvey, Clifford Dawes,	Lewiston,	Φ. Γ. Δ. House.
Harvey, Leroy Harris,	Orono,	Prof. F. L. Harvey.

Howe, Ernest Judson,

Hoyt, Henry Perez, Keller, Percy Raymond, Leonard, Herbert Henry, Libby, Wilbert Andrew, Linn, Robert Wilson, Lowell, Frank Holt,

Martin, Bertrand Clifford, Martin, Fred Lewis, Merrill, Maurice Barnaby, Mitchell, Charles Augustus, Nickerson, Percy Lee, Pritham, Harry Charles, Robinson, Alson Haven, Ross, Mowry,

Shaw, Scott Parker, Stilphen, Charles Augustus, Swasey, Lawrence Mabry, Thompson, Samuel Day, Varney, Lewis Goodrich, Ward, Thomas Hale, Watson, Ernest Lauren, Watts, Frank Erwin, Woodbury, Stephen Edward, Wormell, Ralph Geddes,

South Lancaster, Mass., [107 Oak Hall. Fort Fairfield, A. T. Q. House. West Rockport, A. T. Ω. House. Mr. G. Leonard. Orono. 304 Oak Hall. Standish. Hartland, Φ. Γ. Δ. House. North Penobscot, Mr. O. T. [Goodridge. Fort Fairfield, Φ. Γ. Δ. House. Bluehill. 106 Oak Hall. Stillwater. Stillwater. West Newfield,  $\Phi$ .  $\Gamma$ .  $\Delta$ . House. Mrs. Ada Strout. Swanville, 306 Oak Hall. Freeport, Rev. P. J. Robinson. Orono. West Woodstock, Conn., Ktaadn Building.

North Gorham, 306 Oak Hall. Dresden Mills, Mrs. T. Shatney. 304 Oak Hall. Limerick, Bangor, B. O. II. House. Windham Centre, K. Σ. House. Fryeburg, 302 Oak Hall. 302 Oak Hall. Brunswick, West Falmouth. Stillwater. Beverly, Mass., 210 Oak Hall. Waterville, A. T. Ω. House.

#### SOPHOMORES.

Adams, Nathan Herbert,	Notch, M	[r. J. P. Spearen.
Allen, Roy Parker,	North Sedgwid	ek, 308 Oak Hall.
Anderson, Thomas Alexander,	Hartland,	Φ. Γ. Δ. House.
Bacheldor, Arthur Willis,	North Sebago,	305 Oak Hall.
Bartlett, Enoch Joseph,	Monroe,	Stillwater.
Blaisdell, Melvin Merle,	Fort Fairfield,	307 Oak Hall.
Bodge, Byron Hodgkins,	Wells Beach,	Φ. Γ. Δ. House.

Boland, Marion Genevieve,	Worcester, Mass., Mt. Vernon
	[House.
Burns, Harry Buckman,	Westbrook, 104 Oak Hall.
Bussell, Edith Mae,	Oldtown, Mt. Vernon House.
Butman, James Warren,	Readfield, A. T. Ω. House.
Carr, Harold Malcolm,	Sangerville, K. Σ. House.
Chadbourne, Henry Wilmott,	Mattawamkeag, Ktaadn Build-
, <b>,</b> ,	[ing.
Chamberlain, Charles Edward,	Wilton, $\Phi$ . $\Gamma$ . $\Delta$ . House.
Chase, Nathan Ajalon,	South Paris, 212 Oak Hall.
Cimpher, Orman Taylor,	Guilford, $\Phi$ . Γ. Δ. House.
Cole, Henry Ernest,	Pleasantdale. 311 Oak Hall.
Crowell, William Henry,	Middletown, Conn., $\Phi$ . $\Gamma$ . $\Delta$ .
, , ,	ſHouse.
Davis, Alfred Ricker,	Auburn, K. Σ. House.
Davis, Samuel Prince,	Portland, B. O. II. House.
Delano, Edward Warren,	Abbot Village, B. O. II. House.
Duren, Harry Elwood,	Richmond. 204 Oak Hall.
Durgan, George Washington, Jr	Sherman Mills. 310 Oak Hall.
Dver, William Norman,	Harrington, A. T. $\Omega$ . House,
Eldridge, Walter Hampton,	Bucksport, Mr. J. P. Spearen.
Elliott, Wesley Clarendon.	Patten. 112 Oak Hall.
Farrington, Herbert Oscar,	Portland, $\Phi$ , $\Gamma$ , $\Delta$ , House,
Fessenden, Lothron Edwin,	Bridgton, Mrs. C. S. Marsh.
Foster, Arthur Brookhouse,	Beverly, Mass., Mrs. C.S. Marsh.
French, Henry Carter,	Rumford Centre, Mr.E. Webster.
Gilbert, Eugene Clarence,	Orono, Mr. T. Gilbert.
Graves, William,	Presque Isle, A. T. $\Omega$ . House.
Greene, James Marquis,	Putnam, Conn., Φ. Γ. Δ. House.
Hall, William Asbury,	Freeport, 210 Oak Hall.
Hamilton, Andrew George,	Orono, Mr. H. Hamilton.
Hamlin, Horace Parlin,	Orono, Mrs. L. Hamlin.
Hennessy, Harold Stewart,	Bangor, B. O. II. House.
Holmes, Fred Eugene,	East Machias, 202 Oak Hall.
Johnson, Elbridge Augustus,	Portland, Mrs. A. Cowan.
Kallom, Frank Winthrop,	South Berlin, Mass., A. T. Q.
· · · · · · · · · · · · · · · · · · ·	[House.
Kelley, Burchard Valentine,	Centerville, Mass., Mavo's
	[Block.

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Kneeland, Henry Wilton, Knight, Perley Charles,

Knowles, Lida May, Larrabee, George Pearson, Lowe, Sumner Sturdivant, Lyon, Alpheus Crosby, McCarthy, Patrick Edward, Mansfield, Harold Wilder, Margesson, Charles William, Mitchell, Ezra Getchell, Moore, Byron Newcomb. Mosher, Percival Hildreth, Packard, Harry Elton, Pease, Irving, Peck, Luther, Pressey, Frank Ethelbert, Rackliffe, Clinton Nathan, Rice, Marie Cecilia, Ross, Edwin Bishop, Russell, Roy Elvert, Sewell, Herbert Willis, Shaughnessy, James,

Silver, Arthur Elmer, Small, Silas Gilman, Smith, Royal Holland, Stephens, Charles Walter, Taft, DeForest Reed,

Towle, Jessie Craig,

True, Edwin Stapley, Warren, John Clifford, Watson, Alvin Morrison, Webb, Arnold Stedman, Wheeler, Allen Francis, Whittier, Ralph, Wilkins, Harry Fred,

Searsport. 204 Oak Hall. South Gorham, Mr. O. T. Good-[ridge. Bangor, Mt. Vernon House. Pride's Corner. 310 Oak Hall. Cumberland. Mrs. A. Cowan. Bangor, Φ. Γ. Δ. House. Lewiston, 207 Oak Hall. Union. Mavo's Block. Φ. Γ. Δ. House. Bangor, Auburn, Φ. Γ. Δ. House. A. T. Ω. House. Biddeford, Pleasantdale, Mayo's Block. Mr. L. P. Harris. Guilford. Bean, Ktaadn Building. Monson, Mass., 204 Oak Hall. Bangor, Bangor. 312 Oak Hall. Easton, Mt. Vernon House. Bangor, B. O. II. House. Bangor, Livermore, 310 Oak Hall. Φ. Γ. Δ. House. Wilton, St. Stephen, N. B., Mr. J. P. [Spearen. Silver's Mills, Mrs. S. Gee. Lubec, 308 Oak Hall. Orono, Mayo's Block. Oldtown, Oldtown. Winchester, N. H., Mr. E. [Webster. Sherman Mills, Miss A. Fitz-[gerald. Portland, B. O. II. House. K. Σ. House. Westbrook, Portland. K. Σ. House. B. O. II. House. Portland, Brunswick, A. T.  $\Omega$ . House. Rev. C. Whittier. Orono, Mrs. Mary Wilson. Monson,

## FRESHMEN.

Adams, John Winter,	Notch, Mr. J. P. Spearen.
Baker, Ernest Linwood,	Deering Centre, Mr. J. P.
	[Spearen.
Bean, Vernon W.,	Oldtown, Oldtown.
Benner, Archie Ray,	Waldoboro, Mr. O. C. Dunn.
Berry, Richard Henry,	Montville, Mr. Chas. Crowell.
Blaisdell, Geneva,	Fort Fairfield, Mt. Vernon
	[House.
Bosworth, Lewis Wellman,	Oldtown, Oldtown.
Bradford, Luther Cary,	Turner, B. O. II. House.
Burns, William Bruce,	Fort Fairfield, $\Phi$ . $\Gamma$ . $\Delta$ . House.
Burrill, Charles Rodney,	Ellsworth, Mr. Chas. Crowell.
Carlton, Roy Hastings,	Fryeburg, Mrs. Robinson.
Carr, Cleora May,	Oldtown, Oldtown.
Carr, Richard David,	Oldtown, Oldtown.
Chandler, Robert Flint,	New Gloucester, $\Phi$ . $\Gamma$ . $\Delta$ . House.
Chesley, Lloyd Almond,	Oldtown, Oldtown.
Coffin, Leroy Melville,	Freeport, Mrs. L. P. Harris.
Cole, Winfield Lee,	Biddeford, A. T. Ω. House.
Collins, Fred,	Bar Harbor, K. Σ. House.
Conner, Ralph Melvin,	East Wilton, Mr. J. P. Spearen.
Cooper, Ralph Leonard,	Belfast, A. T. Ω. House.
Crabtree, Leroy Brown,	Hancock, K. Σ. House.
Crocker, Henry Kennedy,	Rockland, Mrs. Anson Allen.
Crowley, Elmer Bishop,	Indian River, 210 Oak Hall.
Cunningham, Pearl Garfield,	Oldtown, A. T. Ω. House.
Davenport, Arthur Edward,	East Brimfield, Mass., 208 Oak
	[Hall.
Davis, Rodney Clinton,	Lewiston, 305 Oak Hall.
Day, George Milton,	East Hiram, Mr. J. P. Spearen.
Dean, William Robert,	Bath, Mr. Frank Beal.
Delano, Arthur Hastings,	Dorchester, Mass., 206 Oak Hall.
Dinsmore, Ernest LeRoy,	Whiting, 308 Oak Hall.
Dinsmore, Sanford Crosby,	Dover, B. O. II. House.
Dorticos, Carlos,	Woodfords, K. S. House.
Douglass, Frank Libby,	West Gorham. Mrs. Robinson.

Elliott, James Daniel, Everett, Chester Steele,

Fitz, Guy Bearce, Foster, Samuel Joshua, French, Harold Francis, Gage, Arthur Willard,

Gammon, Edee Dakin, Goodridge, Oren Leslie, Goodwin, Burton Woodbury, Goodwin, William Francis, Graves, Sherley Preston, Grows, Charles Sumner, Hadlock, George Harmon, Haines, Henry Hudson, Harris, Liston LeRoy, Harris, Philip Howard, Hartford, Edward Goodnow, Hilliard, John Heddle, Hinchliffe, Henry John, Hinckley, Frances Augusta, Hinkley, Robert Lowell, Howe, Clifford Rollins, Ilsley, Gardner Frederick,

Jordan, Alfred Carroll, Kittredge, Claude Abbott, Lang, Theo. Wayne, Larrabee, Benjamin True, Leary, Thomas Edward,

Lee, Lester Dana, Lewis, Charles Wesley, Libby, Hollis Willard, Lord, Cecil Arthur, Loud, Warren Cornelius, Lucas, Walter Bradford,

Bowdoinham, Mr. J. P. Spearen. Attleboro, Mass., Mr. Wm. [Colburn. Mr. J. Frank Beal. Auburn, Bingham, K. Σ. House. East Bangor, Mr. J. A. Walton. Dennisport, Mass., Mr. L. P. [Harris. Oldtown, Oldtown. Orono, Orono. Berry Mills, Φ. Γ. Δ. House. A. T. Ω. House. Biddeford, Northeast Harbor, Mrs. P. Wall. Mr. James Park. Ellsworth, Portland, B. O. H. House. Mr. J. A. Walton. Chester, Orono, Orono. Mr. J. P. Spearen. Portland. Calais, Mrs. P. Wall. Φ. Γ. Δ. House. Oldtown, Worcester, Mass.,  $\Phi$ . $\Gamma$ . $\Delta$ .House. Oldtown. Oldtown. Gorham, K. Σ. House. Merrimac, Mass., Mrs. S. Gee. Wellesley Hills, Mass., Mr. Wm. [Colburn. Mr. J. P. Spearen. Casco, Farmington, Mrs. T. Shatney. Bowdoinham, Mrs. L. P. Harris. Cumberland Mills, K. S. House. East Hampden, Mr. J. P. [Spearen. Weld, Mr. J. P. Spearen. Skowhegan, Stillwater. Machiasport, Miss A.T. Emery. Bar Harbor, Middle Street. 208 Oak Hall. Caribou, Whitman, Mass., Mr. L. P. [Harris.

McCready, John Hollis, Houlton, Mr. J. A. Walton. McCullough, Frank, Lynn, Mass., B. O. II. House. McNamara, Edward John, Orono, Orono. Maxfield, Amy Ines, Sandypoint, Mt. Vernon House. Merrifield, Parker Wilson, South Lincoln, Mr. L. P. Harris. Merrill, Erland Green, Falmouth, Mrs. Mary Wilson. Brownville, Prof. L. H. Merrill. Merrill, Ethel Myra, A. T. Ω. House. Merrill, Merton Allen, Dexter. Millay, James Frank, Bowdoinham, Mr. L. P. Harris. Mr. J. P. Montgomery, Carroll Leland, Deering Centre, [Spearen. Mullaney, Roderick Edward, Bangor, Bangor. Murphy, Clarence Alexander, Mansfield, Mass., 107 Oak Hall. Norwood, Harry Emery, Hampden Corner, Mr. J. P. [Spearen. Page, Arthur Given Chadbourne, Orono, Orono. Patrick, Stephen Edmund, Gorham, Mrs. Byron Hackell. Perry, Estelle M., North Castine, Mt. Vernon [House. Pestell, Walter, Mr. O. C. Dunn. Lynn, Mass., Porter, Ernest Albee, Eustis, K. Σ. House. Puffer, Charles Loring, Epping, Mrs. Good. Robbins, John Lean, Patten, Mr. J. P. Spearen. Robinson, Veysey Hiram, Waterville, Mrs. Robinson. Rogers, Herbert Kemp, Wellfleet, Mass., Mr. Fred [Abbott. Mr. J. A. Walton. Sanford, John Foy, Lewiston, Sawyer, Harry Ansel, Portland, Mr. J. P. Spearen. Scoville, Sorensen L., South Ohio, N. S., Mr. J. A. [Walton. Sheahan, Harold Vose, Dennysville, Mr. J. P. Spearen. Shute, Martyn Hall, Ellsworth, Mr. James Park. Simpson, Paul Dyer, Sullivan. B. O. H. House. Sinclair, Karl Augustus, Malden, Mass., Mr. J. P. [Spearen. Small, Eben Emmons, East Thorndike, Stillwater. Small, Guy Osman, Kingfield, Mrs. Good. Smith, Howard Ausburn, North Truro, Mr. Fred Abbott.

Smith, Lewis Eaton,	North Reading,	Mr. Henry
		[Colburn.
Soper, Henry Melville,	Oldtown,	Oldtown.
Stewart, George Thomas,	Auburn,	104 Oak Hall.
Stone, Charles Wesley, Jr.,	Milo,	Milford.
Strickland, Roy Elgin,	South Paris,	212 Oak Hall.
Towse, Arthur Roy,	North Lubec, Mr.	J. P.Spearen.
Treworgy, Isaac Emery,	Surry,	109 Oak Hall.
Tucker, George Edwin,	Monson, Mass.,	204 Oak Hall.
Usher, Robert Cleveland, Jr.,	Plainville, Conn	K. Σ. House.
Wellman, Edward Francis,	Lewiston,	Þ. Γ. Δ. House.
Wharff, Edward Mansfield,	Danforth, Mr.	J. A. Walton.
White, Ralph Henry,	East Machias, Mis	s A.T. Emery.
Whitney, Harvey David,	Auburn, 4	$\Delta$ . Γ. Δ. House.
Whitten, Eugene McLellan,	Bartlett, N. H.,	104 Oak Hall.
Wiley, Mellen Cleaveland,	Bethel, Mr.	J. P. Spearen.

### SPECIALS.

Barrows, William Edward, Jr.,	Augusta,	B. O. II. House.
French, Joseph Edward,	South Chest	terville, 202 Oak Hall.
Kelley, Mrs. Alice H.,	Fort Fairfi	eld, Mt. Vernon
		[House.
Nichols, Mrs. Mabel Carlton,	Orono,	Mt. Vernon House.
Tolford, Arthur Roebuck,	Portland,	107 Oak Hall.

### SHORT COURSES IN AGRICULTURE.

Chubbuck, Alfred Seely,	East Fairfield	, Mr. Fred Abbott.
Colcord, Allen Dodge,	West Winterp	ort, Mr. Fred
		[Abbott.
Morse, Frank Harris,	Waterford,	Mr. Fred Abbott.
Richardson, Joel,	Stetson,	Oldtown.
Wheeler, Chester,	Auburn,	Mr. Fred Abbott.
Witham, John Perley,	Upper Glouce	ester, Mr. Fred
		[Abbott.
Wood, Joel Prescott,	Belfast,	Mr. Fred Abbott.

## STUDENTS IN THE SCHOOL OF LAW.

SENIORS.

Barker, Lewis Appleton,	Bangor,	292 Hammond St.
Brown University.		
Cook, Harold Elijah,	Vassalboro,	65 Second St.
Dolan, John Frederick,	Bangor,	77 Second St.
Foss, Paul Frank,	Weston,	212 Harlow St.
Gerrish, Hiram,	Brownville,	Harlow St.
Gibbs, Bernard, B. S.,	Glenburn,	210 Forest Ave.
University of Maine.		
Graton, Claude Dewing,	Burlington, V	t., 11 Cedar St.
Hobson, Ernest Emery,	Palmer, Mass.	, 50 Charles St.
Hutchings, Edward, B. A.,	Brewer,	Brewer.
Bowdoin College.		
Ludgate, Verdi,	Lubec,	49 High St.
McCarthy, Matthew,	Bangor,	182 York St.
Mackay, John Daniel,	Lake Ainslie,	Cape Breton,
		[365 Union St.
Mills, Chester Horace,	Skowhegan,	278 Main St.
Phillips, Harold John,	Skowhegan,	Summer St.
Pierce, Howard,	Blaine,	100 Ohio St.
Price, Arthur Wellington, B. A.	, North Waldo	boro, 65 Sum-
Wesleyan University.		mer St.]
Robinson, Agnes May,	Sherman Stati	ion, 16 Maple St.
Sargent, Walter Joseph, B. A.,	Brewer,	Brewer.
Bowdoin College.		
Schwartz, Lewis Harry,	Lawrence, Ma	ass., 265 Main St.
Small, Frank Jackson, B. A.,	Oldtown,	Oldtown.
Bowdoin College.		
Stevenson, James Bissett,	Farmington,	265 Main St.
Theriault, Dana Leo,	Caribou,	182 York St.
Thompson, Frederick Everett, F	S.A., Bangor,	27 Sixth St.
Brown University.		
Waterhouse, William Henry,	Oldtown,	Oldtown.
Williams, Dana Scott,	Lewiston,	11 Cedar St.

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### JUNIORS.

Butterfield, Benjamin Franklin,	Weston,	212 Harlow St.
Dunn, Patrick Henry,	Brewer,	Brewer.
Foster, Nathan Grant, B. A.,	Webb,	128 Date St.
Colby College.		
Higgins, Morris Prescott,	Orrington Cente	er, Orrington
		[Center.
Holmes, William Harrison,	Ellsworth,	217 State St.
Lord, Harry,	Bangor,	53 Fourth St.
O'Halloran, James,	Oldtown,	74 Jefferson St.
Plumstead, Frank, B. A.,	Wiscasset,	29 Forest Ave.
Bates College.		
Ritter, George William,	Monson, Mass.,	50 Charles St.
Robinson, William Henry,	Bangor,	74 Jefferson St.
Sawyer, William McCrillis,	Bangor,	64 Forest Ave.
Seavey, Wesley Shelsea,	Orrington Cente	er, Orrington
		[Center.
Selkirk, Robert William,	Wilder, Vt.,	265 Main St.
Thurlough, Harry Harding,	Litchfield Corne	r, 182 York St.
Weatherbee, Albert Washington,	Bangor,	198 Broadway.
Woodcock, Ernest Melville,	Bangor,	17 Adams St.

## SPECIALS.

Oliver, Charles Richard,	Bangor,	3 Park St.
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