# THIRTIETH ANNUAL REPORT

OF THE

# BOARD OF TRUSTEES

OF THE

# OHIO STATE UNIVERSITY

TO THE

GOVERNOR OF OHIO

FOR THE

YEAR ENDING JUNE 30, 1900.



# BOARD OF TRUSTEES

# 1899-1900

JOHN T. MACK	SanduskyMay	13,	1901
LUCIUS B. WING	Newark	46	1902
THOMAS J. GODFREY	.Celina	**	1903
J. McLAIN SMITH	Dayton	a	1904
PAUL JONES	Columbus	46	1905
OSCAR T. CORSON	Columbus	te	1906
DAVID M. MASSIE	.Chillicothe	26	1907.

# OFFICERS OF THE BOARD.

J. McLAIN SMITH	President.
OSCAR T. CORSON	Vice-President.
ALEXIS COPE	Secretary.
L. F. KIESEWETTER	Treasurer.

## COMMITTEES OF THE BOARD.

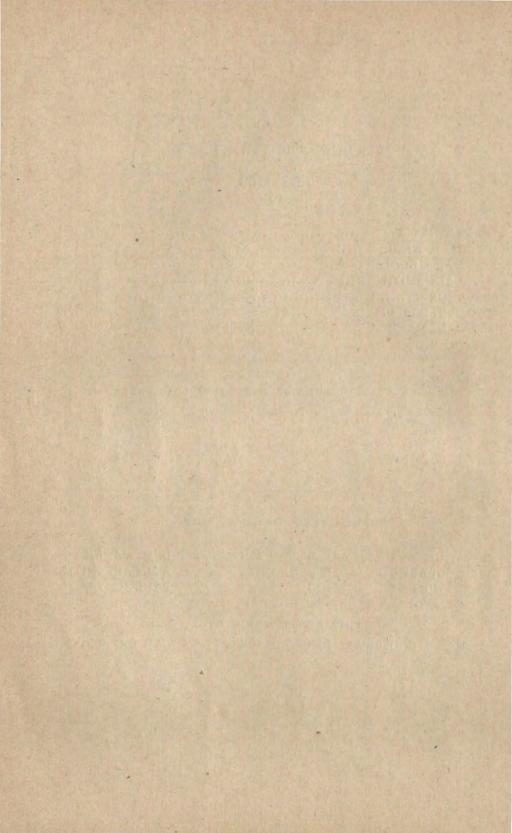
EXECUTIVE
L. B. WING
T. J. GODFREY
PAUL JONES

	FAI	RM
J.	McLAIN	SMITH
L.	B. WING	
TC	HN T A	TACK

FINANCE
D. M. MASSIE
J. McLAIN SMITH
PAUL JONES

## FACULTY AND COURSES OF STUDY.

THOMAS J. GODFREY JOHN T. MACK OSCAR T. CORSON



# MEMBERS OF THE FACULTIES, AND OTHER INSTRUCTORS

#### 1899-1900

WILLIAM OXLEY THOMPSON, President - University Grounds.

EDWARD ORTON,\*

Professor of Geology and State Geologist - 100 Twentieth street.

WILLIAM HENRY SCOTT,
Professor of Philosophy — 181 Fifteenth avenue.

SIDNEY AUGUSTUS NORTON,
Emeritus Professor and Lecturer in General Chemistry — 363 East Town street.

STILLMAN W. ROBINSON, Emeritus Professor of Mechanical Engineering—1353 Highland street.

Professor of Mineralogy and Metallurgy, Director of the School of Mines, and Dean of the College of Engineering — 338 West Eighth avenue.

SAMUEL CARROLL DERBY, Professor of Latin - 93 Fifteenth avenue.

WILLIAM RANE LAZENBY,
Professor of Horticulture and Forestry — 348 West Eighth avenue.

JOSIAH RENICK SMITH, Professor of the Greek Language and Literature, and President pro tempore of the University

Faculty — 950 Madison avenue.

HENRY ADAM WEBER, Professor of Agricultural Chemistry — 1842 Forsythe avenue.

BENJAMIN FRANKLIN THOMAS, Professor of Physics and State Sealer of Weights and Measures — University Grounds.

GEORGE WELLS KNIGHT,

Professor of American History and Political Science, and of Constitutional Law—
University Grounds.

ROSSER DANIEL BOHANNAN, Professor of Mathematics — Sixteenth and Indianola avenues.

. C. NEWTON BROWN,

Professor of Civil Engineering — 1343 Forsythe avenue.

ERNST AUGUST EGGERS, Professor of Germanic Languages and Literatures — University Grounds.

ALBERT MARTIN BLEILE, Professor of Anatomy and Physiology — 218 King avenue.

WILLIAM ASHBROOK KELLERMAN, Professor of Botany - 175 Eleventh avenue.

THOMAS FORSYTH HUNT,

Professor of Agriculture, and Dean of the College of Agriculture and Domestic Science—

188 West Tenth avenue.

GEORGE BEECHER KAUFFMAN,
Professor of Pharmacy, and Dean of the College of Pharmacy — University Grounds.

BENJAMIN LESTER BOWEN,
Professor of Romance Languages and Literatures — 46 Jefferson avenue.

JOSEPH VILLIERS DENNEY,

Professor of Rhetoric and the English Language, and Secretary of the University Faculty—

230 West Tenth avenue.

<sup>\*</sup> Died October 16, 1899.

ALEEN CAMPBELL BARROWS, Professor of English Literature and Dean of the College of Arts, Philosophy and Science -85 West Tenth avenue.

EDWARD ORTON, JR., V

Director of the the Department of Clay Working and Ceramics - The Normandie.

WILLIAM FOREST HUNTER,

Dean of the College of Law; Professor of the Law of Sales, Bailments, Evidence, Wills,

Construction of Contracts, Law of Corporations; Judge of Moot Courts—

1302 Bryden Road; 18 Board of Trade.

DAVID FRANKLIN PUGH,

Professor of Equity Jurisprudence and Law of Real Property - 1320 Highland street.

JAMES HENRY COLLINS,

Lecturer on Federal Practice - 57 Lexington avenue; Ruggery Building.

EMILIUS OVIATT RANDALL,

Professor of Commercial Law - 1025 Oak street; Supreme Court Room.

WILLIAM THOMAS MAGRUDER.

Professor of Mechanical Engineering - 191 King avenue.

J. P. GORDY,

Professor of Pedagogy - 350 West Seventh avenue.

EDGAR BENTON KINKEAD,

Professor of the Law of Pleading and Practice, Torts, and of Criminal Law - Wyandotte avenue; Board of Trade.

WILLIAM HERBERT PAGE,

Professor of Elementary Law - 527 East Broad street; 27 Board of Trade.

WM. McPHERSON, JR.,

Professor of Chemistry - 97 Hamilton avenue.

JOSEPH NELSON BRADFORD,

Professor of Drawing - 54 West Tenth avenue.

DAVID STUART WHITE,

Professor of Veterinary Medicine, and Dean of the College of Veterinary Medicine - West Fifth avenue.

HERBERT OSBORN,

Professor of Zoology and Entomology - 485 King avenue.

. CLARENCE P. LINHART,

Professor of Physical Education, and Director of the Gymnasium - The Vendome.

JAMES MADISON BURNS, U. S. A.,

Professor of Military Science and Tactics - The Columbus Club.

OLIVE BRANCHE JONES, Librarian - 53 Eleventh avenue,

HENRY CURWIN LORD,

Director of the Emerson McMillen Observatory and Associate Professor of Astronomy-Observatory Park.

FRANK EDWIN SANBORN,

Director of the Department of Industrial Arts - 380 West Eighth avenue.

FRANK ARNOLD RAY,

Associate Professor of Mine Engineering - 137 King avenue.

EMBURY ASBURY HITCHCOCK,

Associate Professor of Experimental Engineering - 380 West Eighth avenue.

FRANCIS CARY CALDWELL,

Associate Professor of Electrical Engineering - 401 Sixth avenue.

PERLA G. BOWMAN,

Associate Professor of Domestic Science - The Saint Anna.

FREDERICK CONVERSE CLARK,

(1) and I appell 24 1901

Associate Professor of Economics and Sociology - 1634 Neil avenue.

WILBUR HENRY SIEBERT, Associate Professor of History — 1332 Highland street.

WILLIAM DAVID GIBBS, Associate Professor of Agriculture — 284 West Tenth avenue.

STELLA ELLIOTT CANFIELD,
Associate Professor of Physical Education — 1457 Worthington street.

GEORGE WASHINGTON McCOARD, Associate Professor of Mathematics — 325 West Sixth avenue.

CHARLES WALTER MESLOH.
Associate Professor of German — University Grounds.

ARTHUR WINFRED HODGMAN,
Associate Professor of Classic Languages - 164 West Ninth avenue.

CHARLES SMITH PROSSER,
Associate Professor of Historical Geology — 1362 Highland street.

JOHN ADAMS BOWNOCKER,
Associate Professor of Inorganic Geology - 1594 Neil avenue.

JOHN WRIGHT DECKER.

JOHN WRIGHT DECKER,
Associate Professor of Dairying — 329 West Eighth avenue.

JOHN A. SHAUCK,
Lecturer on Supreme Court Practice, Special Cases, etc.—95 Winner avenue.

J. WARREN SMITH, Lecturer on Meteorology - 55 Cleveland avenue.

JAMES ELLSWORTH BOYD, Assistant Professor of Physics - 25 Maynard avenue.

JOSEPH RUSSELL TAYLOR,
Assistant Professor of Rhetoric - corner King and Worthington.

CHRISTOPHER ELIAS SHERMAN, Assistant Professor of Civil Engineering — 772 Oak street.

WILLIAM LUCIUS GRAVES,
Assistant Professor of Rhetoric — 1818 Forsythe avenue.

Assistant Professor of Rhetoric — 1818 Forsythe avenue.

CLAIR ALBERT DYE,\*

Assistant Professor of Pharmacy — 169 King avenue.

THOMAS EWING FRENCH, Assistant Professor of Drawing - 1458 Worthington.

CHARLES WILLIAM FOULK,\*
Assistant Professor of Genéral Chemistry — 41 Eleventh avenue.

CHARLES LINCOLN ARNOLD,
Assistant Professor of Mathematics - 328 West Eighth avenue.

CHARLES A. BRUCE, Assistant Professor of French - 234 West Tenth avenue.

JOHN H. SCHAFFNER, Assistant Professor of Botany — 40 West Tenth avenue.

WILLIAM FINLEY LAVERY,
Assistant Professor of Veterinary Medicine - 1700 Neil avenue.

CHARLES BYRON FREDERICK,
Assistant Professor of Veterinary Medicine - Veterinary Hospital.

CORNELIA PORTER SOUTHER, Assistant Professor of Domestic Art — 1856 Neil avenue.

CHARLES BRADFIELD MORREY,
Assistant Professor of Anatomy and Physiology - 86 King avenue.

WILLIAM EDWARDS HENDERSON,
Assistant Professor of Analytical Chemistry — 41 West Eleventh avenue.

<sup>\*</sup> Absent on leave.

<sup>&</sup>quot; Resigned September 21, 1900.

JAMES STEWART HINE, Assistant Professor of Entomology - 26 West Fourth avenue.

KARL DALE SWARTZEL,
Assistant Professor of Mathematics - 57 West Eighth avenue.

GEORGE H. McKNIGHT,
Assistant Professor of Rhetoric and English Language — 312 West Seventh avenue.

HERRICK CLEVELAND ALLEN, Assistant Professor of Public Speaking - 275 East Gay street.

BURT BIDWELL HERRICK, Instructor in Cheese-making — 167 Tenth avenue.

> FREDERICK EDWARD KESTER, Instructor in Physics - 1473 Neil avenue.

WILLIAM ABNER KNIGHT,

Assistant in the Industrial Department and Foremen of the Machine Shops - 206 West Lane
avenue.

THOMAS KENYON LEWIS, Assistant in Drawing — 1298 Dennison avenue.

FRANCIS LEROY LANDACRE,
Assistant in Zoology and Entomology — 1332 Highland street.

HARRIET TOWNSHEND, Assistant in Library - 53 West Eleventh avenue.

MAUDE DOROTHY JEFFREY, Assistant in Library — 65 West Eleventh avenue.

ALBERT EARL VINSON, Assistant in Agricultural Chemistry—184 West Ninth,

GERTRUDE STOWELL KELLICOTT, Assistant in Library - 1332 Highland street,

CLARK WISSLER,\*
Assistant in Philosophy and Pedagogy — 1355 North High street.

EDWARD EVERETT SOMERMEIER, Assistant in Metallurgy and Meteorology - 1590 Neil avenue.

> FRANK RUHLEN, Assistant in Agriculture — North Dormitory

LUCY ALLEN,
Assistant in Library - 1490 Neil avenue.

DON CARLOS HUDDLESON, Assistant in Gymnasium — 249 West Lane avenue,

JOSEPH HENRY VOSSKUEHLER, Assistant in Drawing — 201 West Eleventh avenue.

CLAUDE B. GUITTARD, Assistant in Library — 80 McMillen avenue.

ALBERT V. BLEININGER,
Assistant in Ceramics - North Dormitory.

OLIVER V. BRUMLEY, Assistant in Veterinary Medicine — University Grounds.

SILAS MARTIN, Assistant in Drawing - 1269 Dennison avenue.

JOHN B. SANBORN, Assistant in American History — 215 West Tenth avenue.

FRED ALAN FISH,
Assistant in Electrical Engineering - 239 West Eleventh avenue.

HOMER CHARLES PRICE,
Assistant in Horticulture and Forestry - 1594 Neil avenue.

<sup>\*</sup> Resigned September 21, 1900.

WALTER ALEXANDER LANDACRE, Assistant in Pharmacy — 1574 Summit street.

WILLIAM HENRY RENCK,

Assistant in Industrial Arts and Foreman of the Carpenter and Pattern Shops — 910 West

Rich street.

CHARLES PHILIP CROWE,
Assistant in Industrial Arts and Forge Master — 971 Highland street.

FRANCIS MARION HAMILTON,
Assistant in Philosophy and Education — 1355 North High street.

JOHN WESLEY GROVES, Assistant in Civil Engineering — 38 West Eighth avenue.

DELBERT ALONZO CROWNER, Assistant in Butter-making — North Dormitory.

ELISHA SMITH, Assistant in Cheese-making.

MELVIN DRESBACH, Fellow in Anatomy and Physiology — 236 West Eighth avenue.

FRANK ORVILLE CLEMENTS,\*
Fellow and Laboratory Assistant in Chemistry - 252 West Eighth avenue.

FREDERICK J. HALE,
Fellow and Laboratory Assistant in Mechanical Engineering - 239 West Tenth avenue.

EMMA LEANNA BALL, Fellow and Assistant in Mathematics — 225 King avenue.

JOHN BERNARD PARKER, Fellow and Theme Assistant in Rhetoric - 43 West Woodruff avenue.

> ALBERT HEBER McINTYRE, Fellow in Industrial Arts - 240 West Eighth avenue,

DONALD ALEXIS KOHR, Fellow, and Laboratory Assistant in Chemistry - 1590 Neil avenue.

JOHN WESLEY YOUNG, Fellow, and Assistant in Mathematics - 883 East Main street.

HAROLD WARNER BROWN,

Fellow, and Assistant in Physics - 242 King avenue.

HERBERT W. KENNEDY,

Emerson McMillin Fellow in Astronomy - 164 West Ninth avenue.

SAMUEL WILLIAMSON COLLETT, Fellow in Botany — 48 West Woodruff avenue.

HERBERT CHARLES GORE,
Fellow and Laboratory Assistant in Chemistry — 185 West Ninth avenue.

CHARLES ARTEMUS GRATE,
Fellow and Laboratory Assistant in Mechanical Engineering — 1610 Highland street.

GRACE L. PITTS, Fellow in Economics — 309 East Gay street.

ALICE DUFOUR, Fellow and Assistant in Botany — 374 Oak street.

WILBER E. MANN, Emerson McMillin Fellow in Economics — 1340 Hunter street.

WILLIAM C. MILLS, Curator of Archaeology — 91 West Frambes avenue.

<sup>\*</sup> Resigned January 28, 1900.

# EXECUTIVE DEPARTMENT

# 1899-1900

WILLIAM O. THOMPSONPresident
ALEXIS COPE Secretary Board of Trustees and Bursar
W. C. McCRACKENChief Engineer
KATHERINE H. DUNCANExecutive Clerk
EDITH D. COCKINS
EDITH R. HUBLERTelephone Exchange
CARL E. STEEBAccountant
CHARLES LOWFirst Assistant Engineer
WILLIAM STANDLEY Second Assistant Engineer
THOMAS BOUDEFirst Fireman
W. E. CASESecond Fireman
JAMES KELLEYLawnkeeper
JANITORS *
ARTHUR CHANTLER
HENRY CHANTLEROrton Hall
GEO. W. GOODSPEED
JOHN H. BROWN
GEO. DENNY Horticultural Hall and Veterinary Hospital
D. D. GEREN
WILLIAM WHITESTINEBiological Hall
M. N. COOK

# STATE GEOLOGIST.

(1) PROFESSOR EDWARD ORTON.

# STATE SEALER OF WEIGTHS AND MEASURES.

THE PROFESSOR OF PHYSICS, Ex-Officio.

<sup>(1)</sup> Died October 16, 1899, and was succeeded by Professor Edward Orton, Jr.

COLUMBUS, O., June 30, 1900.

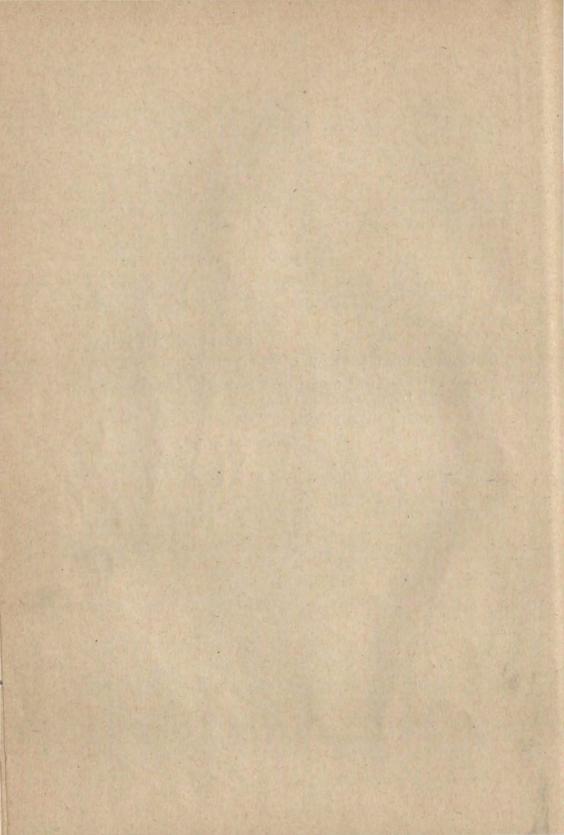
His Excellency, Hon. Geo. K. NASH, Governor of Ohio:

DEAR SIR: I have the honor to transmit herewith the thirtieth annual report of the Board of Trustees, Ohio State University.

Very respectfully,

Your obedient servant,

ALEXIS COPE, Secretary.



# REPORT OF THE BOARD OF TRUSTEES.

# Office of the Board of Trustees, Ohio State University,

COLUMBUS, O., June 30, 1900.

HON. GEORGE K. NASH, Governor of Ohio.

SIR:—In compliance with law, the board of trustees respectfully submits the thirtieth annual report of the Ohio State University, it being for the year ending June 30, 1900.

#### ENDOWMENT.

The part of the irreducible debt of the state which forms the endowment of the university, at the date of the last annual report, June 30, 1899, was \$552,617.66, on which the annual interest was \$33,157.06.

Under the operations of the act of the general assembly of March 14, 1889, entitled "an act to quiet title to unpatented lands in the Virginia military district of Ohio," the following sums were added thereto: July 7, 1899, \$338.00; August 8, 1899, \$130.22; September 11, 1899, \$80.00; November 13, 1899, \$72.70; January 15, 1900, \$428.54; April 18, 1900, \$101.00; May 8, 1900, \$51.50; June 15, 1900, \$74.00; total for the year, \$1,275.96; — making the endowment fund June 30, 1900, \$553,893.62, on which the annual interest is \$33,233.61.

# THE WILLIAM J. BRYAN PRIZE.

It will be remembered that in April, 1898, the Honorable William J. Bryan, in a letter addressed to the president of the university proposed "to give to the university, if agreeable to the trustees, \$250, the same to be invested and the proceeds used as a prize for the best essay discussing the principles which underlie our form of government."

The board of trustees promptly expressed its willingness to receive such gift and Mr. Bryan a few weeks later forwarded a draft for the amount.

On July 20, 1898, pursuant to the provisions of section 4105-15 of the revised statutes of Ohio said sum was certified into the state treasury and became a part of the irreducible debt of the state, bearing interest at the rate of six percent per annum payable semi-annually.

There were no competitors for the prize until June 30, 1900, when the accumulated interest added to the principal sum made the endowment \$282.50, and the interest thereon, \$16.95.

The interest thus accumulated was awarded on competition to Mr. Charles W. Gayman, of the class of 1900, in accordance with the terms of the gift, — he having submitted the best essay on the principles underlying our form of government.

# RECEIPTS AND DISBURSEMENTS.

The following are the receipts and disbursements for the year ending June 30, 1900:

RECEIPTS.

Balance in treasury June 30, 1899	\$9,088 04	
Interest on endowment	33,204 22	×200
State levy	166,076 15	
Sale of refunding bonds	43,611 00	THE RESERVE
Appropriation act of congress, 1890	25,000 00	
Rents	1,111 00	
Virginia military lands	30 00	
	31,920 78	
Student fees	THE RESERVE TO STATE OF THE PARTY OF THE PAR	
Sale store room cards	2,954 04	
Sale store room supplies	459 62	ACT A SOCIAL TO A SOCIAL SECTION OF THE PARTY OF THE PART
Emerson McMillin fellowships	190 00	
N. B. M. A. scholarship in ceramics	250 00	A CHARLES
Diploma fees	735 00	
American Association for the Advancement of Science		A STATE OF THE STA
(unused appropriation returned)	188 51	THE PARTY OF
Sale of Buckeye engine	450 00	
Interest on W. J. Bryan prize	8 1	
	50 00	
Sale of supplies, ceramics department		
From commencement luncheon	59 00	
Miscellaneous receipts	232 33	Maria and
		- \$315,617 80

DISBURSEMENTS.

Salaries	\$153,197 84
Expenses of trustees	387 87
Repairs	10,680 34
Fuel	6,705 60
Gas	1,448 14
Library	5,974 18
Printing and advertising	2,858 12
Special bulletins	1,362 00
Virginia Military Lands	5,059 16
Roads and grounds	1,240 43
Water rates	1,219 77
Bonds and interest	81,313 20
Repairs and extensions, heat, power and light plant	4,682 53
Residence for astronomer	2,585 06
Apparatus	9,558 99
Laboratory supplies	10,320 45
Tools and machinery	1,756 73
Arc lamps	200 00
Orton memorial	121 25
Furniture, cases and shelving	962 29
Lockers	375 00

Blank books and stationery	437 26
Rent for fire alarm and watchman boxes	112 00
Postage	399 90
Commencement expenses	565 45
Installing experimental boiler	1,093 10
Agricultural students' union	119 10
Oils	201 22
Telephone service	365 27
Telegrams	40 58
Messenger service	468 90
Extra clerical services	103 90
General supplies, cleaning materials, etc	434 66
Freight and cartage	666 73
Examination paper	221 90
Live stock	182 00
Feed	300. 29
Seeds and plants	132 26
Miscellaneous	637 87
	*308,491 34
Balance in hands of treasurer June 30, 1900	
and the second of the second o	4,,200

In the treasurer's report filed herewith said receipts and disbursements are set forth in fuller detail.

# THE VIRGINIA MILITARY LANDS.

To June 30, 1899, the total receipts from sales of the Virginia military lands, granted to the university by the act of the general assembly of March 26, 1872, were	\$65,395 28 30 00		
The expenses incident to the survey and disposition of said lands to June 30, 1899, were	23,999 09	\$65,425	28
after mentioned) were	5,059 46	29,058	55
Leaving net cash receipts to June 30, 1900  Of this sum on June 30, 1899, there had been paid into		\$36,366	73
the state treasury to the credit of the endowment fund And expended for building and maintaining residences	13,665 14		
for the professors under act of April 17, 1882  During the year ending June 30, 1900, there was expended for a residence for the director of the Em-	20,052 51		
erson McMillin Observatory	2,585 06	36,302	71
Leaving balance Tune 30, 1900	The state of the s	\$64	02

The receipts and disbursements of this fund for the year ending June 30, 1900, are included in the preceding general account of the aggregate receipts and disbursements.

# ADDITIONS TO ENDOWMENT.

For the period ending June 30, 1899, the additions to the endowment under the operations of an act of the general assembly of March 14, 1889, entitled "an act to quiet title to unpatented lands in the Virginia military district of Ohio," the act of April 21, 1893, entitled "an act for the relief of certain persons who formerly held lands in the Virginia military district of Ohio," an act amendatory of said last mentioned act passed May 21, 1894, and an act passed April 26, 1898, entitled "an act making appropriations for the relief of certain persons who formerly held lands in the Virginia military district of Ohio," were \$14,776.22.

During the year ending June 30, 1900, under the operations of said first mentioned act, there was added to the said endowment the sum of \$1,275.96: making total additions to the endowment under said acts \$16,052.18.

# THE KENDRICK SUITS.

The suits mentioned in former reports which grew out of a contract made with the late Mr. Sam Kendrick in 1882, for the discovery of undiscovered lands in the Virginia military district of Ohio, have been finally settled and compromised by the payment to the plaintiffs of the sum of \$5,000 inclusive of the costs.

As this important and expensive litigation is now closed a brief resumé of the facts which led to it is presented. In 1882, while the board of trustees, through its agents, was endeavoring to ascertain and dispose of the Virginia military lands granted to the university by act of the general assembly of March 26, 1872, Mr. Sam Kendrick of Chillicothe, at that time principal surveyor of said lands, represented to the board that he had in his possession the only complete records of said lands and was able to point out numerous tracts which the agents of the board had failed to discover and which would yield a handsome addition to the funds of the university. After full consideration of these representations, the board, in August 31, 1882, employed said Kendrick "to discover, survey, plat, cause to be appraised, and sell undiscovered lands in the Virginia military district, belonging to the Ohio State University," "the sales and the conduct of all litigations and negotiations concerning the same to be reported to the executive committee of the board and by said committee approved before the same shall be binding upon either party. After said approval, all expenses of surveying, appraising or litigating, and other necessary expenses incurred, save and except the time given by said Kendrick, to be paid out of such funds as may arise from each tract of said lands by sale or compromise, and the residue of each tract to be divided as follows: to the Ohio state university 66 2/3 per centum and to said Kendrick 33 1/3 per centum." It was provided in said contract of employment that \* \* \* "Undiscovered lands shall be held to include all of said Virginia military lands reported by said Kendrick, and not known to the board or any of its former or present agents." And that "the said Kendrick is hereby fully authorized to compromise and settle any case or cases with the approval of the executive committee, this authority to terminate on the 10th day of November, 1883."

Provision was made in the contract for the payment of the moneys received, and the making of proper conveyances, and it was also further provided, "that the said Kendrick is to be entitled to the said 33 1/3 percentum of all cases reported by him and approved by said committee, and not finally settled at the date fixed for the determination of this authority.

Mr. Kendrick accepted such employment on the day aforesaid, August 31, 1882, and on the 14th day of November, 1882, reported to the executive committee the discovery of 38 tracts of land and was authorized by the committee "to investigate the titles of said several tracts."

Mr. Kendrick continued from time to time to report additional discoveries until November 14, 1883, when the number had reached 50. On that day, after hearing a verbal report of his transactions concerning said lands, the board passed a resolution declaring that as his contract by the terms thereof ceased on November 18, 1883, it was the opinion of the board that it should not be renewed or extended and directing him "to close up the business reported by him by the second Tuesday of November, 1884.

While engaged in closing up the discoveries already reported Mr. Kendrick from time to time reported other discoveries and the reports were received and filed. In some cases he was authorized to settle and compromise cases of discoveries reported after the date on which the contract was formally terminated, and after the time fixed by resolution for closing up the business.

In 1884, in the case of Fussell v. Gregg the supreme court of the United States decided, or seemed to decide, that in all cases of lands in the Virginia military district of Ohio, where the survey was made prior to January 1, 1852, and was not filed in the general land office in Washington, until after that date, the proceedings were void, the lands remained unappropriated and passed by the act of cession to the state of Ohio, and by act of the general assembly to the Ohio state university.

Stimulated by this decision Mr. Kendrick began to report these lands to the board as discoveries. The case of Coan v. Flagg, decided by the supreme court of the United States in 1887, confirming the opinion of the same court in the case of Fussell v. Gregg still further stimulated the activity of Mr. Kendrick in reporting the unpatented surveys as discoveries until the alleged discoveries reported by him reached the number of 238.

These decisions and the widely asserted claims of Mr. Kendrick spread consternation among the occupants of these surveys throughout the Virginia military district.

Many of them had been occupied and improved by their then owners and those under whom they claimed title for periods varying from twenty

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to eighty years. They had built their homesteads and had paid taxes upon them and had exercised all the privileges of ownership, all this time, in the belief that their titles were secure. When informed that their titles were absolutely void and that their lands belonged to some one else their feelings can better be imagined than described.

They applied to the general assembly for relief, and on March 14, 1889, an act was passed providing for quieting the titles to these lands. The act provided that on its acceptance by the board of trustees, the occupants of such surveys might, on payment of two dollars and on proof that they or those under whom they claimed had occupied and improved the lands for more than twenty-one years, demand of the board deeds quieting their titles, and thereupon the auditor of state was required to add to the endowment fund of the university one dollar for each acre of land so conveyed. On the 20th day of June, 1889, after full discussion and careful deliberation, the board formally accepted the provisions of said act.

Before such acceptance, an effort was made to effect a settlement with Mr. Kendrick, but his demands were so extravagant that no agreement was possible. After such acceptance, on the 16th day of November, 1889, he filed a suit against the board of trustees in the court of common pleas of Franklin county, setting forth the contract before referred to, the filing of the aforementioned discoveries and asking judgment for the sum of \$133,333.33, with interest from March 14, 1889.

A few months later Mr. N. W. Evans, of Portsmouth, who had been acting as Mr. Kendrick's attorney, also filed a suit in the same court against the board of trustees claiming \$5,000 for legal services rendered in connection with these reported discoveries.

With the advice and consent of the attorney general, Messrs. Harrison, Olds & Henderson were employed to defend these suits.

The preparation for their defence involved a vast amount of labor on the part of the board and its attorneys, requiring a patient and careful examination of the Virginia military land records both in Ohio and in the general land office in Washington. The evans case was tried in January, 1898, and was decided in the court of common pleas in favor of the university, but was carried on error to the circuit court. Two weeks were occupied in its trial. The immense labor involved in the trial of the Kendrick case, which was really two hundred suits in one, - each alleged discovery having its separate and distinct history and the claim therefor depending upon the separate and distinct facts connected therewith, - made the board of trustees very willing to compromise on reasonable terms. When, therefore, a proposition from the plaintiff was made to settle the case for a sum not greater, probably, than it would cost to try it, the proposition was accepted and by agreement the case was settled and dismissed by payment to the plaintiff of the sum of \$4,000 including costs of suit.

As the two cases grew out of the same transaction, the case of N. W. Evans against the board of trustees was at the same time settled and compromised for the sum of \$1,000, out of which the costs in the suit, amounting to \$246.96, were paid by the board of trustees.

## NEW MORRILL FUND.

The following statement shows the receipts and disbursements for the year ending June 30, 1900, of appropriations made by act of congress, approved August 30, 1890, and known as the "New Morrill Fund," and which are included in the preceding statement of the aggregate receipts and disbursements for that period.

# RECEIPTS.

Balance in treasury June 30, 1899	\$37 25,000		\$25,037 31
DISBURSEMENTS.			\$20,001 01
For instruction and facilities in agriculture	\$4,341	61	
For instruction and facilities in mechanic arts	8,178	19	
For instruction and facilities in English language	1,258	99	
For instruction and facilities in mathematical science For instruction and facilities in natural and physical	2,072	82	
science	7,860	40	
For instruction and facilities in economic science	1,126	99	
	3 1 1		24,839 00
Balance in treasury June 30, 1900			\$198 31

The law of congress making the appropriation requires a detailed annual report of the receipts and disbursements of this fund, which report for the year ending June 30, 1900, is appended to the treasurer's report filed herewith.

It will be seen by the foregoing statement that the appropriation of the general government which begun at \$15,000 a year and was to be increased annually by \$1,000 until the amount was \$25,000 and then continued at that sum, has reached its highest limit.

This annuity was, by the act of 1890, which created it, made payable out of the proceeds of the public lands.

In the 55th congress its continuance was threatened by a bill popularly called the "free homes bill", which gave to settlers on the agricultural public lands which had been acquired by treaty or agreement from the various Indian tribes, patents for their lands "upon payment to the local land officers of the usual and customary fees and no other or further charge of any kind whatsoever."

This bill in the opinion of the commissioner of the general land office would give to such settlers about \$35,000,000 of the anticipated receipts from sales of the public lands and would virtually wipe out this source of national revenue. The bill passed the senate and was favorably

reported by a committee of the house, when the executive committee of the American land grant college association, on which the university is represented, met in Washington and organized an opposition to its passage. The opposition was ably led by General C. H. Grosvenor, and was successful in defeating the measure.

At the late session of the 56th congress the bill was again introduced into and passed the senate, but in the house, to allay the opposition of the land grant colleges, the author of the bill accepted an amendment prepared by the executive committee of the land grant college association, providing: "That in the event that the proceeds of the annual sales of the public lands shall not be sufficient to meet the payments heretofore provided by an act of congress approved August 30, 1890, for the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts, established under the provisions of an act of congress approved July 2, 1862, such deficiencies shall be paid by the United States."

The bill passed the house with this amendment, the amendment was concurred in by the senate, and as so amended the bill became a law, thus putting at rest all fears for the permanence of the Morrill annuity.

# SCHOOLS OF MINES

At the late session of congress a number of bills were introduced looking toward a congressional appropriation in aid of schools of mines in the several states and territories.

The executive committee of the land grant college association, watchful of the interests of the institutions they serve, got together the several bills introduced and prepared a bill modeled after the Morrill Act of 1800, which was introduced into the senate by Senator Tillman of South Carolina, and into the house by General C. H. Grosvenor of Ohio. The bill provides an appropriation of \$10,000, increasing the amount \$1,000 annually until it reaches \$15,000, at which sum it is to continue, "for the establishment and maintenance of schools or departments of mines and mining in connection with colleges for the benefit of agriculture and mechanic arts in accordance with the provisions of an act of congress approved July 2, 1862." \* \* \* "to be expended for geological instruction, mining engineering, metallurgy, research in road-building material and its proper application, and the branches of learning related thereto, including the various branches of physical, natural and economic science and the facilities for such instruction, research and experiment, in order to promote a liberal and practical education and secure the most intelligent use, conservation and development of the mineral resources of the country."

Representatives of the executive committee of the land grant college association appeared before committees on mines and mining of the senate and house and advocated its passage. The bill passed the senate by a unanimous vote and in the house was referred to the committee on mines and mining, which on May 22, 1900, reported unanimously in its favor.

The president of the university and the representative of the university on the executive committee of the land grant college association, by authority of the board of trustees, went to Washington and took an active part in urging this legislation.

They found an active and earnest sentiment in the house in favor of the measure, and practically no opposition to it. The pressure of other bills in the closing hours of the session prevented its consideration, but assurances were given that at the adjourned session it should have a day fixed for a hearing on its merits. Its friends have little doubt of its final passage at that time.

#### BONDED INDEBTEDNESS.

The bonded indebtedness of the university June 30, 1899, was \$355,000, due and payable as follows: \$55,000 December 1, 1899; \$10,000 June 1, 1900; \$55,000 December 1, 1901; \$55,000 December 1, 1901; \$10,000 June 1, 1902; \$55,000 December 1, 1902; \$10,000 June 1, 1903; \$10,000 June 1, 1904; \$15,000 December 1, 1904; \$15,000 December 1, 1904; \$10,000 June 1, 1905; \$5,000 December 1, 1905.

Of this indebtedness \$60,000 bore interest at six percent and \$295,000 at four percent per annum, payable semi-annually.

Twenty-five thousand dollars of said indebtedness falling due December 1, 1899, were paid when due and the bonds taken up and cancelled.

Under and pursuant to the provisions of an act of the general assembly entitled "an act to authorize the trustees of the Ohio state university to refund and extend the time of payment of portions of the bonded indebtedness of said institution as the same becomes due," passed April 23, 1898, \$30,000 of the four and one-half percent certificates of indebtedness falling due December 1, 1899, were taken up by an issue of the same amount of four and one-half percent refunding bonds falling due, \$10,000 December 1, 1905, and \$20,000 December 1, 1906.

Said bonds brought a premium of \$2,705. Under the provisions of the same act the \$10,000 of six percent certificates of indebtedness falling due June 1, 1900, were also taken up by a further issue of four and one-half percent refunding bonds falling due \$5,000 December 1, 1906, and \$5,000 December 1, 1907. Said refunding bonds brought a premium of \$906. The premiums received in these operations reduces the nominal interest on the four and one-half percent bonds to a little less than three percent.

Said reductions of principal and interest left the bonded indebtedness June 30, 1900, \$330,000, of which \$50,000 bears interest at six percent and \$280,000 at four and one-half percent per annum, payable semi-

annually. Said remaining indebtedness falls due as follows: \$55,000 December 1, 1900; \$10,000 June 1, 1901; \$55,000 December 1, 1901; \$10,000 June 1, 1902; \$55,000 December 1, 1902; \$10,000 June 1, 1903; \$55,000 December 1, 1903; \$10,000 June 1, 1904; \$15,000 December 1, 1904; \$10,000 June 1, 1905; \$15,000 December 1, 1905; \$25,000 December 1, 1906; \$5,000 December 1, 1907.

#### INCREASE OF UNIVERSITY LEVY.

The necessity for additional buildings occasioned by increasing numbers of students had become so urgent that at a meeting of the board of trustees held in November, 1899, a committee composed of the president, the secretary and representatives of the board of trustees and faculty was appointed to present the matter to the incoming legislature.

The crowded condition of the department of physics and the entire lack of rooms in which the students of the college of law could be comfortably accommodated impelled the committee to make a special appeal in their behalf.

Accordingly when the general assembly met in January said committee matured a bill providing appropriations for erecting a law building and a building for the department of physics.

The bill was introduced into the house by the Hon. F. H. Heywood and referred to the finance committee.

In the hearing before the committee the needs of the university were ably presented by President Thompson.

The finance committee, while recognizing the urgent needs of the university, were averse to making any appropriation for the purpose out of the general revenues, but suggested an increase of the university levy. In accordance with such suggestion Mr. Heywood offered as a substitute for his original bill a bill increasing the university levy five one-hundredths of a mill, the increase to be used solely for the erection and equipment of buildings. The substitute was favorably reported by the finance committee, passed both houses with practically no opposition and became a law March 29, 1900.

No part of the funds provided by such levy will be available until about the middle of March, 1901.

The university is under great obligation to the Hon. F. H. Heywood who so ably championed and wisely guided the measure through the house, and to the Hon. E. H. Howard who had charge of it in the senate and secured its passage in that body. They are both graduates of the university and it is gratifying to have their names connected with an act of such importance to their alma mater.

To the other members of the general assembly who aided in this legislation the trustees on behalf of the university and its friends desire to make profound acknowledgment. It will be their ambition to so administer the funds so generously given that not a dollar shall be wasted

or misapplied, but that the whole shall be used in such a manner as to secure the largest returns for the outlay.

It has been decided to erect a law building before a building for the department of physics and as soon as practicable to have the plans, specichations and estimates therefor matured so as to begin work on the building at the earliest practicable moment.

Other buildings are needed besides those provided for as above set forth, as will be seen by the report of the president, to which attention is invited.

# ASTRONOMER'S RESIDENCE.

The work in research at the Emerson McMillin Observatory has already arrested the attention of leading astronomers both in this country and in Europe.

Early in the spring Professor Vogel of the Pottsdam Observatory in a review of the work done in the last twenty-five years upon motion in the line of sight, mentioned the work along this line done at Paris. Cambridge, England, the Lick Observatory and the *Emerson McMillin Observatory* as showing the marked progress in this new branch of modern astronomy.

Public mention was made last year of the fact that of the 57 stars whose motion in the line of sight had been determined, five of them had been determined at the Emerson McMillin Observatory by its director, Professor Henry C. Lord.

The work at this observatory has been done under unfavorable conditions because the astronomer had no place of residence near the observatory.

An observatory differs materially from other laboratories in the fact that observations are absolutely dependent on the conditions of the sky. The sky must not only be clear but the building must be opened up and cooled off before observations can begin and it frequently happens that the best nights follow days which are cloudy until late in the evening. With the observer living a mile away many hours of right conditions are lost which would not be the case if the observer lived in close proximity to his work.

These objections apply as well to students at work in the observatory as to the astronomer, for their work must be done under the same conditions. It has happened that the work of an entire evening has been lost because the astronomer lived too far away from the observatory to catch the favoring conditions of a break in the clouds which gave an hour of clear sky.

Recognizing the necessity for a residence near the observatory for the astronomer, where advantage could be taken of every favorable opportunity for observations, on September 21, 1899, President Thompson presented the matter to the board of trustees together with preliminary plans, estimates, etc., for such a residence prepared by Professor Henry C. Lord, director of the Emerson McMillin Observatory.

Said plans, estimates, etc., were referred to the farm committee and action thereon deferred to the November meeting.

At the November meeting the farm committee submitted to the board completed plans, specifications and estimates for such building which were adopted by the board and the secretary was directed to present them to the governor, auditor of state and secretary of state for their approval and if approved by them then to give notice as required by law of the time and place when and where sealed proposals would be received for furnishing the materials and performing the labor necessary for the erection of the building. At the same time the sum of \$5,000 of the receipts from sales of the Virginia military lands, as authorized by Section 4105-24 of the revised statutes of Ohio, was appropriated to meet the expenses of such erection. The plans, specifications and estimates were approved by the state officers above mentioned, due notice was given as required by law and on January 23, 1900, the bids were opened and the contract for the erection of the building was awarded to Hugh J. McTeague of Columbus, at his bid of \$4,002.

The plans, specifications and estimates were prepared by Professor Henry C. Lord, director of the Emerson McMillin Observatory, and he was appointed architect and superintendent of construction, under the general direction of a building committee consisting of the president and secretary of the university and Professor J. N. Bradford.

At this date, June 30, 1900, the building is well under way and will be completed ready for occupancy by the latter part of August.

The building is loated about 100 feet east of the observatory.

#### OBSERVATIONS OF THE ECLIPSE.

#### MAY 28, 1900.

As further evidence of the wide recognition of the excellence of the work done at the Emerson McMillin Observatory Professor S. J. Brown of the naval observatory at Washington in organizing expeditions to observe the eclipse of May 28, 1890, requested Professor Henry C. Lord, director of the Emerson McMillin Observatory, to undertake certain observations at Barnesville, Georgia, using the instruments of the Emerson McMillin Observatory.

To accomplish this work it was necessary to make several delicate attachments to the spectroscope and to construct an elaborate stand to carry the instrument. The attachment to the spectroscope consisted of a movable plate holder so arranged that four photographs two inches long and one-half an inch wide could be taken in rapid succession,—the interval between exposures not being over one-third of a second while the exposures themselves could be made long or short as desired, it being only necessary to press a bulb in order to move the plate from

one position to the next. This plate holder was designed and built by Professor Lord with his own hands in the instrument shop of the observatory, and to it is largely due the success of his observations of the eclipse.

In a letter to the secretary of the board of trustees, Professor Lord gives the following account of his work at Barnesville:

"The spectroscope and appliances were finished, set up and tested, boxed and shipped so that I could leave for Barnesville, Ga., May 9. I reached Barnesville on the evening of May 10, and found Professor Updegraff and the corps of the naval observatory already on the ground.

The work of setting up the instrument was at once begun and the first adjustments were made May 17, eleven days before the day of the eclipse but none too soon. These adjustments were already perfected, the final testing being made upon Arcturus on the night of May 26, when everything was found in readiness for the morning of the 28th.

For nearly a week preceding the eclipse I made daily rehearsals of the programme of observations. To this promptness and thoroughness of adjustment, more than to any other one thing, is due the success of my work. This is shown by the fact that on the night preceding the day of the eclipse I was taken quite sick and was but little better the next morning, but so thorough had been my self-imposed drill that I could not have done better had I been in perfect health."

Professor Lord secured seven spectrum photographs at the time of the eclipse; two showing the spectrum of the flash in the orange, green and blue. These photographs are among the best ever taken of this portion of the spectrum. The plates have not been completely measured and much of the work of the observatory has been interrupted and delayed on account of the duties devolved on the professor as architect and superintendent of the astronomer's residence.

When the building is finished, with the increased amount of time at his disposal, and with his abiding place within 100 feet of the observatory he hopes to rapidly complete the eclipse work and to resume his work on motion in the line of sight, which was interrupted by preparation for observations of the eclipse. All expenses connected with the foregoing observations of the eclipse, including Professor Lord's personal expenses, were generously borne by the U. S. naval observatory.

#### THE ROBINSON TESTING PLANT.

Among the important acquisitions during the year was the gift by Doctor S. W. Robinson of an experimental boiler and the machinery and appliances necessary for making accurate tests of boilers and fuels under varying conditions.

Doctor Robinson was led to make this donation, as was stated by him in a letter addressed to the board of trustees, by his interest in the tests of boilers and fuels made at the university by Professor Hitchcock, his former assistant, "by reason of the unusual and high value of the results obtained" "and in the belief that the ability and enthusiasm shown by Professor Hitchcock in this work, would, with the more complete equipment proposed, be able to reach results of hitherto unknown importance."

The gift was made on condition that the trustees should assume the

cost of installation, and was gladly accepted.

The original gift included a 107 HP Babcock and Wilcox boiler of wrought steel construction, capable of carrying a working pressure of 200 pounds; a Green's fuel economizer for heating the feed water by means of escaping flue gases; an air heater for heating by means of escaping flue gases the external air supplied to the fire; a forced draft fan for drawing air through the heater and from boiler room and supplying same to the fire and to furnish draft for varying degrees of combustion; and an induced draft fan for producing any practical amount of draft independent of stack or chimney.

Dr. Robinson afterwards added to the gift a steam engine for driving the economizer and the necessary iron work for connecting up the fans.

The value of the gift is near \$3,000.

The apparatus has been installed at a cost of \$885.78 and the boiler has been connected with the general heating system for use in emergencies at a cost of \$131.33.

Doctor Robinson served on the committee having charge of the installation, gave every detail careful attention, and rejoices with the university authorities, that the institution has the most complete plant of the kind in existence.

# THE CAMPUS.

During the year just ended the sum of \$1,240.43 was expended on the campus. A brick walk was laid between University and Orton Halls at a cost of \$212.05 and the remainder of said sum was expended in mowing the lawn and caring for the roads, walks and drives.

Provision has been made for the beginning of a botanic garden and a few beds of medicinal and other plants have been set out in that part of the campus south of Botanical Hall. An assistant in the department of botany has been employed whose special work is to look after them and make such additions thereto from time to time as the funds will supply, or that can be obtained by gift or exchange with other botanical gardens. With comparatively small expense it is hoped that the university can soon have a botanic garden worthy of the name.

#### THE LIBRARY.

The expenditures for the library for the year ending June 30, 1900, exclusive of the salaries of the librarian and assistants were \$5,974.18.

Of this sum \$427.82 was paid for furniture, cases and shelving:

\$96.24 for current supplies; \$568.85 for binding; and the remainder, \$4,881.27, was expended for books and periodicals.

The report of the librarian shows that the number of accessions during the year was 7,443 and the total number of volumes June 30, 1900, 35,430.

Through the courtesy and interest of Mr. L. C. Ferrel, superintendent of documents, Washington, D. C., about 600 public documents were recently added to the books of the library and 766 valuable reports and documents in the United States embassy at Madrid were secured for the university by payment of the freight thereon.

Many gifts of books from private sources are mentioned in the librarian's report, chief among them a collection valued at \$150, illustrative of the influence of the Quakers in American history, especially during the colonial period, presented by Mr. John J. Janney of Columbus, and over \$400 worth of books on German history presented by Messrs. John and Louis Siebert of Columbus and which have been added to the library bequeathed by Mr. William Siebert of Illinois, whose bequest was mentioned in a former report. Due acknowledgment of these gifts is made elsewhere in this report.

The librarian again calls attention to the pressing need of a library building, which must be provided at an early day.

With such a building in view she has taken up the comparative study of college and university library buildings and has already visited and inspected at her own expense a number of the leading buildings of the kind in the United States.

The board of trustees hopes that at no distant day means will be provided for the erection of such a building, commensurate with the great nd growing needs of the university.

The demand for additional books is greater than the funds of the university can at present supply and the faculty has by resolution petitioned the board to add to the usual annual appropriation for the library the sum (\$1,125) annually saved in interest by reduction of the bonded indebtedness, to be expended solely in the purchase of books.

This petition is still pending before the board.

AMERICAN ASSOCIATION FOR ADVANCEMENT OF SCIENCE.

One of the notable events of the year was the meeting in August, 1899, of the American Association for the Advancement of Science.

The board of trustees united with the board of trade of Columbus, the state historical and archæological society, the Ohio society of mining engineers and other learned societies in extending an invitation to this assocation to hold its annual meeting in Columbus and tendered it the free use of the halls, lecture roome and laboratories of the university, which invitation was promptly accepted.

This great association had recently honored Doctor Edward Orton and honored itself by electing him as its president, and it seemed emi-

nently proper that it should hold its annual meeting at the Ohio State University where he had done so much to advance the cause of science.

The session lasted nearly a week and brought together between three and four hundred workers in science, many of them men of world-wide reputation. The halls, lecture rooms and laboratories of the university were thrown open for these meetings and the faculty, citizens of Columbus, and college men of Ohio outside Columbus vied with each other in paying merited honors to the distinguished visitors. A noonday luncheon was served to the members in the armory at which there was an opportunity for making acquaintances and for exchange of social courtesies which added much to the pleasure of the occasion.

Many important papers were read and discussed, and the interchange of ideas and courtesies between the members of the faculty who were present and the scientific men and women from the leading universities and colleges of the country was profitable and inspiring, and has done much to advertise the university and to increase its reputation in the scientific world. The board of trustees voted the sum of \$500 toward the entertainment of the association, but the subscriptions by the board of trade and private citizens of Columbus were so liberal that after all expenses of such entertainment were met the committee returned \$188.51 of the appropriation.

## NATIONAL GRANGE.

In October, 1899 the national grange held its annual meeting at Springfield, Ohio,—the state grange of Ohio meeting at the same time and place,—and on invitation of the board of trustees these organizations spent a day at the university as the guests of the trustees and faculty. The president of the university delivered a welcome address in the chapel to which responses were made by the officers of the organization, after which the members inspected the various buildings, collections and laboratories and went away duly impressed with the liberal provision made at the university for instruction in the branches related to their calling.

# FACULTY.

During the year the university suffered a great loss in the death of Doctor Edward Orton who for many years had so ably filled the chair of gology. Doctor Orton was the first president of the university and during the years of its early struggles was the central force around which all its interests revolved. He stood for the broad and liberal policy which finally prevailed as against that which would have kept it within a narrow field and restricted its sphere of usefulness. The labors of Doctor Orton and of the first faculty of the university who nobly sustained him in his policy are now recalled with gratitude by all the friends of the university. Their unselfish devotion to high ideals in educational work, their patient toil and the influence of their lofty characters are woven into the web and woof of the institution. They shaped its ideals and

gave it an individuality which it is to be hoped it may never entirely lose. In December, 1891, Doctor Orton suffered a stroke of paralysis which partly disabled him, but he continued in active charge of his department until the latter part of May, 1899, when he asked to be relieved of a portion of his work and that his salary be proportionately reduced. Knowing that it was in entire consonance with his real wishes, the board of trustees reluctantly complied with his request.

This action on his part now seems to have been a premonition of the closing scene. He recognized that his physical powers were failing but continued to meet his classes and to haunt the geological museum which had grown up under his wise and careful labors until about the second day of October, 1899, when he took to his room. On the thirteenth day of October, 1899, the check for his salary for the previous month was sent to him and on the same day he wrote acknowledging its receipt, saying, "It seems that I worked up to my natural limit. There has not been a day this term when I was able to lecture. When a man loses appetite and power to sleep he is pretty well gone. That is my condition now." On October 16, 1899, he passed quietly away.

Memorial services in his honor were held in the chapel November 26, 1899, at which Dr. G. K. Guilbert, one of his associates in the U. S. geological survey, Dr. T. C. Mendenhall, president of the Worcester Polytechnic Institute, one of his old associates in the first faculty, Ex-President W. H. Scott and Professor Samuel C. Derby of the present faculty and Hon. T. J. Godfrey of the board of trustees paid eloquent and appropriate tributes to his memory.

These addresses, preceded by a brief biographical sketch prepared by Professor Samuel C. Derby, were printed at the expense of the university, bound in a tasteful brochure and placed in the hands of the president for distribution to the faculty, alumni and friends of the university and to the libraries of other universities and colleges.

Doctor Orton stood unchallenged as the university's highest exemplar of broad scholarship and liberal culture, and for the noblest and best things in character and human activity.

Recognition of his worth was not delayed until after his death, as is frequently the case, but found expression during his life in honors paid to him by his fellow workers in the field of science, and in increasing reverence and respect shown for him by his associates in the faculty, by alumni and students and by his fellow citizens.

The board of trustees in 1892 honored him by naming the building erected for the safe keeping of the geological museum, "Orton Hall."

Now that he is gone it is seen how appropriate and fitting it was that his name should thus be perpetuated. In it are stored the valuable collections he made during the period of his greatest activity.

It was his ambition to write in a book with his own hand a description and history of each one of the more than ten thousand specimens there deposited, and to mark and number them so that they could be readily identified.

This work was fully completed at the time of his death, — the last entries therein having been made October 2, 1899, the day of his last appearance at the university. This book is deposited in the museum and is a priceless memorial of his patient, untiring labors in the field of science.

The building and what it contains are therefore his fitting monument and will speak for him, we trust, as long as the university endures.

Since Doctor Orton's death the work of the department of geology has been carried on by Mr. Charles S. Prosser, associate professor of historical geology and Mr. John A. Bownocker, associate professor of inorganic geology and curator of the museum.

In November, 1899, in recognition of his former services to the university the name of Doctor Stillman W. Robinson was restored to the faculty roll as *emeritus* professor of mechanical engineering.

In June, 1878, Doctor Robinson was called to the chair of physics and mechanics vice Doctor T. C. Mendenhall who had resigned to accept a professorship in the imperial university of Japan.

In June, 1881, Doctor Mendenhall returned to the university as professor of physics and Doctor Robinson was placed in charge, as professor, of a newly created department of mechanics, the name of the department being subsequently changed to that of mechanical engineering.

Doctor Robinson continued in active charge of this department until the latter part of 1895 when he was compelled to give up work on account of failing health, was granted a leave of absence and shortly afterwards resigned.

Since his resignation he has lived near the university and though occupied with many business cares has kept in touch with the university life and retained his interest in its affairs.

His restoration as a member of the university faculty was warmly welcomed by his former associates in the faculty and by the alumni and students who had profited by his instruction.

While the position to which Doctor Robinson has been elected is purely honorary, requiring no special professional work, the counsel freely given of one so eminent in his profession cannot be otherwise than inspiring and helpful to the university.

At the same time Doctor Sidney A. Norton, in similar recognition of his services as the first professor of chemistry, was elected *emeritus* professor of general chemistry, said election to involve no change in his present duties, that of lecturer in general chemistry.

Other less notable changes in the faculty are mentioned in the report of the president, and in the annual catalogue for the year ending June 30, 1900, which are filed herewith and made a part of this report.

The number of professors in the academic faculty is 30; directors of departments, 3; associate professors, 14; assistant professors, 19; lecturers, 1; fellows and laboratory assistants, 16; librarians, 1; instructors, 2; assistants, 27; curators, 1.

The law faculty consists of the dean, 5 professors and 2 lecturers.

The position and compensation of members of the faculties and other employees of the university are stated elsewhere in this report.

### DEGREES.

At the commencement in June, 1900, on the recommendation of the faculty, the following degrees were conferred:

#### MASTER OF ARTS.

Lucy Allen, B. A., Columbus, O.; William Edward Bohn, B. A., (German Wallace College), Olmsted Falls, O.; Paul Revere Good, B. A., Westerville, O.; Anna Brewster Hirst, B. A., (Antioch College) Yellow Springs, O.; Wilbur E. Mann, B. Ph., Columbus, O.; John Bernard Parker, B. A., Danville, O.; Zella Vina Robinson, B. Ph., Columbus, O.; Herbert Oswald Williams, B. A., Columbus, O.

#### MASTER OF SCIENCE.

Frederick James Hale, M. E., Columbus, O.; Washington J. Machwart, B. S., (Muskingum College) Mt. Eaton, O.; Raymond Carroll Osborn, B. Sc., Fargo, N. Dakota.

## BACHELOR OF SCIENCE

#### (In Agriculture)

Vernon Hayes Davis, Byesville, O.; Elmer Otterbein Fippin, Briggsdale, O.; Merritt Findlay Miller, Ridpath, O.; Charles Napoleon Mooney, Milan, O.; Arthur Gillett McCall, McGaw, O.; Charles Benjamin Steward, Marcy, O.; Frederick Wellington Taylor, Wooster, O.

#### BACHELOR OF SCIENCE

In Horticulture and Forestry

Frederick Jared Tyler, Perry, O.

## BACHELOR OF SCIENCE

(In Domestic Science)

Laura A. Weisman, Columbus, O.

#### BACHELOR OF ARTS.

Eliza Daugherty Barcus, Columbus, O.; Homer Zurmehly Bostwick, Columbus, O.; J. Loring Courtright, Circleville, O.; George William Stimson, Columbus, O.; John Hervey Eagleson, Columbus, O.; Joseph Pentecost Eagleson, Columbus, O.; Arthur Byron Harward, Columbus, O.; George Melville Karshner, Columbus, O.; William Watts Parmenter, Mt. Vernon, O.; Mary Wishington Rice, Columbus, O.; Charles Boyd Sayre, Columbus, O.; Fred Lant

Travis, Pana, Ill.; John Francis Travis, Green Camp, O.; Earle Downs West, Columbus, O.

#### BACHELOR OF PHILOSOPHY

#### (Latin Course)

Ida May Fisher, Columbus, O.; Anna Faye Howard, Columbus, O.; Richard Thomas Jones, Columbus, O.; Grace Lenore Pitts, Columbus, O.; Margaret Glaze Pulling, Columbus, O.; Mae B. Schaff, Columbus, O.; Lawrence David Thomas, Lancaster, O.; Harry Porter Weld, Marysville, O.

#### BACHELOR OF PHILOSOPHY

#### (Modern Language Course)

Edna Alice Andress, Birmingham, O.; Frank Arthur Bohn, Olmsted Falls, O.; Charles Fuller Dowd, Toledo, O.; Hedwig Eloise Gamper, Columbus, O.; Victor Clarence Moon, Columbus, O.; Clara Maud Williams, Columbus, O.; Mary Grace Young, Mt. Vernon, O.

#### BACHELOR OF PHILOSOPHY

#### (English Course)

Royal Albert Abbott, Columbus, O.; Florence Louise Bell, Columbus, O.; James Henry Burgess, Big Horn, Wyoming; Alice Marie Connor, Columbus, O.; Ellen Josephine Connor, Columbus, O.; Dille Augusta Dill, Columbus, O.; Bertha Webb Eisenbeis, Columbus, O.; Ross Garfield Fox, Columbus, O.; Charles Welton Gayman, Canal Winchester, O.; Hattie DeLong Hoffman, Columbus, O.; Allen Brown Jaynes, Columbus, O.; Gordon Donald Kinder, Ottawa, O.; David Klein, Columbus, O.; Caroline Estelle Knight, Columbus, O.; Charles Howard Lisle, Pataskala, O.; Gretchen Pauline Miller, Columbus, O.; Raymond McCallum, Dayton, O.; Talmadge Archer Rickey, Columbus, O.; Carl Fletcher Roebuck, Dalton, O.; Dudley Scott, Columbus, O.; Charles Tod Singleton, Columbus, O.; Albertine Charlleen Smith, Columbus, O.; Virginia Roletta Smith, Columbus, O.

#### BACHELOR OF SCIENCE.

Harvey Clinton Dollison, Columbus, O.; Wilbur Latimer Dubois, Cincinnati, O.; Fred James Jeffrey, Columbus, O.; Edgar Howard Moore, Columbus, O.; Walter Leffingwell Redrow, Williamsburg, O.; Raymond Jesse Seymour, Columbus, O.; Abner Andrews Osborn, Columbus, O.

#### CIVIL ENGINEER.

Harry William Bowden, Minerva, O.; Fred Kellogg Pratt, New Philadelphia, O.; Charles William Shepherd, Huron, O.

## ENGINEER OF MINES.

Frank Stewart Knox, Columbus, O.; Albert B. Myers, Columbus, O.; John H. Nold, Columbiana, O.

#### MECHANICAL ENGINEER.

Andrew Francis Cavanaugh, Dayton, O.; George Winfield Frost, Columbus. O.; Harry Smithson Needham, Columbus, O.; William Abner Knight, Columbus, O.; Alfred Heber McIntire, Mt. Vernon, O.; William George Drummond, Cleveland, O.; Arthur Hollingshead Lyon, Wauseon, O.; Robert Rusk Harkins, Columbus, O.; Joseph Henry Vosskuehler, Dayton, O.

# MECHANICAL ENGINEER (In Electrical Engineering)

Alvin Earnest Buchenburg, Holgate, O.; William Clayton Hayman, Holgate, O.; Whitney Earl Lamb, Commercial Point, O.; Robert Rowse Dunlop, Columbus, O.; Charles Marion Nicholson, Columbus, O.; Madone Carington Hunter, Salt Creek, O.; Corliss Edgar Lee, Speidel, O.; Samuel Houston Kanmacher, Columbus, O.; Earl Stimson Johnson, Plants, O.; George Ernest Schreiber, Ironton, O.; Williard Beverly Marshall, Columbus, O.

# ENGINEER OF MINES

(In Ceramics)

Walter Morgan Fickes, Steubenville, O.

#### BACHELOR OF SCIENCE

(In Chemistry)

Clarence Philander Linnville, Hagenbaugh, O.

#### BACHELOR OF LAWS.

Arthur Everett Addison, B. Ph., Columbus, O.; Clarence Maywood Addison, B. Ph., Columbus, O.; Frederic Ijams Bright, Logan, O.; Anthony Brackett Calvin. A. B., (Northeastern Ohio Normal College) Youngstown, O.; Charles Ross Cary, Millersburg, O.; Alfred Jacobs Croll, A. B., (Ohio Normal University) Tontogany, O.; Roscoe Bryant Darby, Wauseon, O.; D. Homer Graven, A. B., (Ohio Normal University) Nashville, O.; Winfield Scott Hancock, A. B., (Marietta College) Marietta, O.; Ellahue Ansile Harper, A. B., (Ohio Wesleyan University) Columbus, O.; Harry Hartman Hershey, A. B., (Mt. Union College) East Greenville, O.; Benson Walker Hough (as of class of 1899), Delaware, O.; Edward Lafayette Kellison, B. Ph., Quincy, O.; Quinton R. Lane, B. Ph., Canal Winchester, O.; Ingle Alman Morris, Columbus, O.; Clayton Asa Mc-Cleary, Ph. B., (Franklin College) Lorain, O.; Robert Edward McClure, Dayton, O.; Benjamin Di Nicola, Barnhill, O.; Allen J. Seney, B. Ph., (University of Michigan) (as of class of 1899) North Baltimore, O.; Amos Claude Stevenson, A. B., (Oberlin College) Fostoria, O.; Edwin Slusser Wertz, B. Ph., Dalton, O.; Lloyd Thomas Williams, B. Ph., Jackson, O.; Frank Wilson, B. S., (Scio College) Jolly, O.; Charles Hiram Woods, Chillicothe, O.; Paul B. Yockey, B. A., Columbus, O.

BACHELOR OF SCIENCE

(In Pharmacy)

Charles Hubbel Kimberly, Columbus, O.

#### DOCTOR OF VETERINARY MEDICINE.

Clarence Alfred Clawson, B. Sc., (Agr.) Okeana, O.; Harry James Hammond, Sharon Center, O.; William Eddy, Cleveland, O.; Charles James, Morrow, Tiro, O.

#### NUMBER OF STUDENTS.

The enrollment of students during the year was as follows:

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE AND COLLEGE OF LAW.

First semester, 606; second semester, 564.

OTHER COLLEGES.

Fall term, 583; winter term, 546; spring term, 470. 3 O. S. U.

#### ANNUAL REPORT

The whole number in attendance during the year as shown by the catalogue was 1252.

The numbers in the several colleges, departments and classes and the courses of study pursued in each are shown in the appendix to the president's report and in the catalogue filed herewith.

# GIFTS DURING THE YEAR.

Besides those especially mentioned in the preceding pages of the report, the university has received by gift the following additions to its museums and collections:

## DEPARTMENT OF AGRICULTURAL CHEMISTRY.

Set of products from soap works of Proctor & Gamble, Cincinnati, Ohio, packed in glass bottles and valued at \$5.00.

A set of products of the Chicago Sugar Refining Co., in twenty-four glass bottles, value \$10.00.

# DEPARTMENT OF ELECTRICAL ENGINEERING.

Example of early Edison meter by H. W. Brooks, "02." Circuit breaker by Cutter Electric Co.
Set of blue prints and photographs by St. Louis Car. Co.
Set of photographs by Ridgway Dynamo & Engine Co.
Set of samples of cables by National Cable Co.
Set of photographs by General Electric Co.
Set of armature coils by J. C. Lincoln.

#### DEPARTMENT OF INDUSTRIAL ARTS.

Eighty-two assorted files, for displaying case. One 2 in. Sellars shaft coupling from Wm. Sellars Co. One 2 in. Collins shaft coupling from Jones & Laughlin. One sample tuyere from Buffalo Forge Co.

#### DEPARTMENT OF MECHANICAL ENGINEERING.

A quarter turn counter shaft from Mr. T. R. Almond, Brooklyn, N. Y.; an 18 in. hydraulic motor from American Impulse-Wheel Co., New York; a large mounted collection of samples of steel and iron drop forgings from The Billings & Spencer Co., of Hartford, Conn.; a sample boiler scale from Mr. O. F. Conover, Toledo, O.; one 3 in. sectional pop safety valve from the Crosby Steam Gage and Valve Co., Boston, Mass.; a large and complete collection of hangers, shafting, clutches and pulleys from the Dodge Mfg. Co., Mishawaka, Ind.; a set of small sections of the Wharton Harrison safety boiler from the Harrison Safety Boiler Works, Philadelphia, Pa.; a special lever and pop safety valve apparatus with steam gauge from the Lunkenheimer Co., Cincinnati, O.; one can of belt dressing from the Ploms Specialty Mfg. Co., Cleveland, O.; sectional models of exhaust sream injector and ejector from Schaffer & Budenburg, Brooklyn, N. Y.; a model of a universal joint from the Vanderbeek Tool Works, Hartford, Conn.

Besides the foregoing, acknowledgment is made for loan of a six horse power gas engine by the Springfield Gas Engine Co., Springfield, O.; a six horse power oil engine from the Aultman Co., of Canton, O.; a hardness testing machine, by Mr. W. J. Keep, Detroit, Mich.

Acknowledgment is made for samples of belting and belt fastenings presented by the following companies: Boston Belting Co., Boston, Mass.; Belting Co., Cincinnati, O.; Carton Belting Co., Quincy, Mass.; Detroit Oak Belting Co., Detroit, Mich.; Diamond Drill & Machine Co., Birdsboro, Pa.: Diamond Rubber Co., Akron, O.: Oliver P. Clay Co., Cleveland, O.; Fayerweather & Ladew, New York, N. Y.; The Malin & Co., Cleveland, O.; Chicago Rawhide Mfg. Co.; Chicago, Ill.; New York Belting and Packing Co., New York, N. Y.; Page Belting Co., Concord, N. H.; Revere Rubber Co., Boston, Mass.; J. E. Rhoades & Sons, Philadelphia, Pa.; Rossendale-Reddaway Belting & Hose Co., Newark, N. J.: Sampson Steel Belt Hook Co., Philadelphia, Pa.; Chas. A. Schieron & Co., New York, N. Y.; Schultze Belting Co., St. Louis, Mo.; William Sumner Belting Co., Tolland, Conn.; W. O. Talcott, Providence, R. I.; and blue prints from the following companies; Atlas-Engine Works, Indianapolis, Ind.; Baldwin Locomotive Works, Philadelphia, Pa., Ball & Wood Co., New York, N. Y.; Bates Machine Co., Joliet, Ill.; C. H. Brown & Co., Fitchburg, Mass.; C. & G. Cooper Co., Mt. Vernon, Ohio; W. D. Forbes & Co., Hoboken, N. J., Hooven, Owens & Rentschler, Hamilton, O.; Fraser & Chalmers, Chicago, Ill.; Lane & Bodley, Cincinnati, O.; Mason Regulator Co., Boston, Mass.; Nordberg Mfg. Co., Milwaukee, Wis.; Philadelphia Engineering Works, Ltd., Philadelphia, Pa.; Ross Valve Co., Troy N. Y.; Watertown Steam Engine Co., Watertown, N. Y.; Vilter Mfg. Co., Milwaukee, Wis.; Watts-Campbell Co., Newark, N. J. Cuts of different styles of air compressers were presented by The Rand Drill Co., and descriptive catalogues were sent by The C. W. Hunt Co., of New York, N. Y.; The Ridgway Dynamo & Engine Co., of Ridgway, Pa.; B. F. Sturtevant Co., Boston, Mass., and the R. D. Wood Co., of Philadelphia, Pa.

## ESTIMATES.

The following are the estimates for the year ending J	une 30,	1901
Salaries	\$167,760	00
Bonds and interest	40,037	
Expenses of trustees	600	00
Fuel and lights	8,500	00
General repairs	5,500	00
Maintenance and repairs heat, light and power plant	4,200	00
Printing and advertising	3,000	00
Roads and grounds	1,500	00
Virginia military lands	3,500	00
Residence for astronomer	2,250	00
Library	5,500	00
Chemical store room supplies	4,250	00
Water rates	1,200	00
Department apparatus and supplies	24,985	00
Incidentals	4,500	00
Total	\$277,282	50

Which will be amply met by the anticipated income of the university. The reports of the president, the librarian and the treasurer are filed herewith and made a part of the report.

Respectfully submitted,

ALEXIS COPE, Secretary.

## REPORT OF THE PRESIDENT.

Hon. J. McLain Smith, President of the Board of Trustees, Ohio State University,

DEAR SIR: — I have the honor to submit herewith the annual report of the President of the University for the year ending June 30th, 1900.

The year has been marked by a most cordial cooperation of the Faculty with the President in carrying forward the work of the University. The routine work of the University has suffered no interruption worthy of note in this connection. The instruction in the various departments has been of a high grade and the results of the year are most gratifying to the friends of education.

The death of Professor Edward Orton, Ph. D., LL. D., which occurred on the sixteenth day of October, 1899, removed from the University one of the most beloved instructors the University has ever had. Dr. Orton was the first president of the University, serving in that capacity from 1873 until 1881 when he voluntarily resigned the executive duties to continue in the work of teaching. He remained as Professor of Geology until his death. Few men in Ohio have made so deep an impression upon their students. His noble character, his broad and accurate scholarship, his sympathy with students and his untiring devotion to his work united to make Professor Orton not only a commanding figure among the educational forces of the country but a man beloved by all who knew him. He served as state geologist from 1869 until his death with conspicuous ability. The University has published in pamphlet form the addresses delivered at the memorial services held in the University Chapel, Sunday, November 26th, 1890.

The enrollment of students for the year was the largest in the history of the University and reached the number twelve hundred and fifty-two. Of this number eleven hundred and ninety-seven were from the state of Ohio, representing eighty-seven ocunties, and the remaining fifty-five were from eleven different states of the Union, from the province of Ontario, from the District of Columbia and from Cuba. The widespread territory from which the University draws its students is a matter of interest and satisfaction.

Among the changes pertaining to the Faculty I note the change of rule made by the Trustees providing for an advance in rank of teachers. Hitherto it has been the custom to bring a teacher to the rank of full professor only when he was the head of a department and had earned the right to such a rank by conspicuous scholarship and success in his work. The new rule provides that men may come to the rank of full

professor without the necessity of creating new departments when the demands within the department and the experience and success of the teacher render the promotion desirable. This makes it possible to give to men who have devoted their lives to instruction a suitable rank and title when appropriate. This action is commended by the Faculty and cannot fail to produce good results in the future. For the changes in titles in the Faculty to take effect July 1st, 1900, reference is made to pages 25 and 26 of part second of this report.

The University battalion has, for the year, been under the efficient supervision of Major James Madison Burns, U. S. A., retired. During the year a considerable increase in the equipment was provided by the War Department. It was with deep regret that we learned of Major Burns' desire to be relieved of duty at the Ohio State University in order to accept a similar position at the University of West Virginia. Upon request of the Board of Trustees, Captain George L. Converse, U. S. A., retired, was detailed to serve in this position.

At the Commencement, June 13th, the University conferred one hundred and thirty-seven degrees. A detailed account of these degrees will be found in the report of the Secretary of the Board of Trustees.

#### THE GROWTH OF THE UNIVERSITY.

The year just closed has been marked by the largest attendance in the history of the University. This fact has brought clearly to view the needs of the immediate future. Notwithstanding the fact that the past five years have witnessed a very considerable development in the buildings of the University it is plain that a greater development is now a pressing necessity.

The legislature in session during the year with great unanimity provided for a special levy of five one-hundredths of a mill in addition to the levy heretofore made with the provision that the proceeds of the additional levy should be used for the construction of buildings. This will provide for a building for the College of Law and for a building for the department of Physics. These buildings have been a necessity for some time and their erection will prove a great relief to the present crowded quarters now much in demand for other purposes.

In the matter of other new buildings it is difficult to decide which are most needed. With no attempt to settle the question of priority I beg to suggest that the growth of the College of Engineering will soon make it impossible to provide for so large a number properly without a building of suitable plan and size. The need of a building for a library is evident to all departments. The equipment of the University in this particular is entirely too meager to satisfy the reasonable demands, to say nothing of the importance of providing first class facilities.

The departments of Botany and Horticulture need better facilities and the efficiency of the departments will be crippled to a considerable degree until the limitations are removed.

The development of interest in Veterinary Medicine — especially in sanitary lines — has shown that an increasing demand for educated veterinarians may be expected. About half of the graduates of this College are now in the service of the United States. To carry on the work of this College as it ought to be done it will be necessary to provide for advanced scientific work, which can not be done with the present facilities. Suitable buildings are the foundation for the work to which I refer.

#### A WOMAN'S BUILDING.

The need of a woman's building is apparent to every one. The provision by law for women at the University does not wholly meet the needs. Something ought to be done to make provision for young ladies upon the campus for a general headquarters and for a home. The increase of students has made the difficulty of securing suitable accommodations for young ladies greater. The attendance of women is hindered by the lack of accommodations. It would seem that when the state has provided the means of education it might be well to make them more available.

### THE ENLARGEMENT OF BUILDINGS.

It is not possible to foresee the growth of a university. Already the University has outgrown the expectations of many of its friends. The present roll of students taxes to the utmost the buildings. In the case of Hayes Hall the present accommodations for the department of drawing are insufficient and overcrowded. At least ten thousand dollars should be expended in the enlargement of this building. Plans for enlargement have been suggested by Professor Bradford that are in harmony with the architectural design. These additions would greatly increase the efficiency of the department.

The Chemical Hall has already proved too small. The freshman class of the present year, to the number of two hundred and sixty, was required to pursue the study of Chemistry. In addition to this may be mentioned all the advanced and elective work. Any further increase in students will render the building entirely inadequate to meet the needs. An addition of at least one hundred feet to the north of the present structure should be made.

The lack of funds for these needed enlargements and improvements makes the problem of administration more embarrassing as the patronage of the University increases.

#### THE DEPARTMENTS.

The several departments of the University find as the University grows an increasing demand for larger and more complete equipment. The growth and efficiency of a university depends to a large degree upon the condition of its material equipment. In an institution like the State University where scientific and technical education is so prominent there is no practical limit to the money that may be wisely expended in improv-

ing the facilities for education. The growth of the Ohio State University has been very commendable in this particular owing to an intelligent and liberal supervision of the Trustees. However, with every new year new needs arise. I cannot make mention now of the detailed needs in the departments, but make special mention of the fact that the department of electrical engineering needs a considerable equipment in the way of new machinery. In electrical apparatus it is both desirable and necessary that the latest improvements be a part of the equipment. This is an item of considerable expense as the machinery is seldom worn out but usually replaced by newer and better patterns.

In the department of Astronomy considerable progress has been made during the past year in the material equipment. The work has developed the need of a zenith telescope, such as could be purchased for ten or twelve hundred dollars; a house for the same at the cost of about five hundred dollars; a sidereal chronometer at a cost of one hundred dollars; three theodolites at a cost of about one thousand dollars and some smaller items. The importance of astronomical science and the place taken by the University through the efficiency of Professor H. C. Lord abundantly warrant the additional equipment so much needed.

I beg to submit a statement from Prof. J. R. Smith as follows:

"The Board of Trustees has recognized the claims of aesthetics on the institution by adopting a general plan of grounds and buildings, laid down by a professional expert; to which the arrangement must conform; and although opinions must be permitted to differ as to the success of details, there can be no question as to the necessity of some such general plan.

I would respectfully urge the equal claim of the fine arts, historically considered, to recognition at the hands of those who govern the affairs of this growing institution. Architecture, sculpture and painting have been too closely connected with the advance of civilization to be ignored in any schemes of study which deal with the achievements of man in history; and the great improvements and multiplication of reproductive processes have made it possible to present to the eyes of students, in orderly succession the history of these arts (especially of the first two) with a graphic success not achieved before. The teaching of language, literature, history, architecture and engineering would be much helped and stimulated by access to an even moderately equipped museum containing reproductions of the masterpieces of art."

"The following suggestions towards a working plan are herewith respectfully submitted:

 In one of the new buildings now contemplated, or in those portions of University Hall soon to be vacated by the College of Law and the Department of Physics, let a room, with office attached, be set aside for a museum of art. To prepare this room properly (as to light, wall-color, etc.) would cost no more than for any other university purpose.

- 2. With an appropriation of from \$500 to \$1,000 a small but educationally valuable collection of plaster casts and photographs could be purchased as the permanent nucleus of the proposed museum. There are also scattered through the various buildings a number of such objects, whose custodians might be glad to transfer them to such a room, where they could have proper care.
- 3. The care of the collection might, for the present, be vested in an individual or a committee of the Faculty; who should have full charge of the arrangement of the objects in the museum, the purchase of all art-works, and the right to accept or decline any gifts."

I cheerfully join in the suggestions and recommendations made by Professor Smith and call attention to the importance and desirability of developing the plan outlined.

### THE DEPARTMENT OF MECHANICAL ENGINEERING.

During the current year Professor Stillman W. Robinson whose term of service dates from 1878 has made a generous contribution to the department in which he has served so conspicuously. By adding to the equipment for experimental engineering one of the best appointed testing boilers manufactured, Professor Robinson has not only greatly increased the facilities for work but has earned the grateful recognition of the University for his generosity.

#### CONCLUSION.

In concluding this report I cannot refrain from an expression of appreciation of the fidelity manifested by the Trustees in administering the trust reposed in them. It is also a pleasure to note the increasing appreciation of the work of the University by the people of the State.

My personal acknowledgment is due for the cordial reception given me at the beginning of my work and for the hearty cooperation of both the Trustees and Faculty in carrying it forward.

Very respectfully,

W. O. THOMPSON.

# TABLE I - THE WORK OF INSTRUCTORS, 1899-1900.

Wallet San		Hot	irs pe	er we	ek			1	THE STATE OF
	Le	cture	1	-	orate	ory		mber	
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
AGRICULTURE.  Breeds of Live Stock (8)†	3	3		2			32	30	
Breeds of Live Stock (8)† Principles of Breeding (9) Stock feeding and Hygiene (10) Farm Equipment (11) Soils (12) Farm Crops (13) Butter Making and Cheese Making (15) Dairy Farming (5) Butter Making and Cheese Making (6) Butter Making and Cheese Making (7, 15) Special Thesis		2 2			8 2 16		19	20 14 23 23 23 23 8 8	35
AGRICULTURAL CHEMISTRY.  Principles, Nomenclature, etc. (1) Organic Chemistry (8) Applications of Chemistry to Agr. (9) Laboratory (4) Chemistry of Milk and Milk-testing (7)	la cons	2	1300	1	36	1000	55	55	49 5
Anatomy and Physiology.  Human Anatomy and Physiol. (1, 51, 52) General Physiology (2) Histology and Hist-Chemistry (59, 4). Physiological Laborat'y (53, 54, 55, 56). Bacteriology Microscopy (5, 58) Thesis and Similar Work. Chemical Physiology (3)			1	3	10 7 8	10 10	13 9	66 12 10 57 	72 11 12 13 13 6 7
Astronomy.  Astronomy and Geodesy (2).  General Astronomy (52).  Advanced Astronomy (55, 56).  Astronomy (54).  Meteorology (60)  Thesis and similar work.			. 2						

<sup>†</sup> The figures in brackets are the department numbers-for which see Part II of this report

TABLE I - THE WORK OF INSTRUCTORS, 1899-1900 - Continued.

			_						
		Но	urs p	er w	eek			mbe	
	L	ectur	res	La	borat	огу	st	udeu	ts
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
BOTANY.									
Physiological Botany (6)	3	3	3	8 4	8	10 12 8	18 12 11	3 9	13 65 22
CLAY WORKING AND CERAMICS.									
Ceramic Chemistry (8, 3) Lectures (4) Analysis of Clays and Minerals (2) Lectures (6) Analysis of Glasses and Glazes (1, 7) Manufacture of Bricks (5). Thesis and Similar Work. Laboratory (9, 10, 11). Cement Lectures (12). Ceramic Structures (13).  CHEMISTRY.	1	1 5	5	15 20 20	15  30 20	25	7	7 3 2 2	5 4 2 1
Elementary (51, 52). Elementary (7) Qualitative Analysis (12). Qualitative Analysis (53). Quantitative Analysis (55, 56, 4). Organic (57, 58, 8, 9). Advanced Chemistry (59, 60). Applied Chemistry (16). Toxicology (11). Thesis and Similar Work. Inorganic Preparations (61a, 17). Sanitary Analysis (15).	11 2 5	11  2 1  4	3 1  4	62  4 18  4	61  18 8 4 	15 5	204 10 16 15 6	62 152  15 13 5 4  8	37 20 13  7
CIVIL ENGINEERING.									
Land surveying (1). Topography (4) Railroad Surveying (2). Topographical Surveying (3). Working Drawing in Ry. Cons't'n (5). Stereotomy (6) Bridge Strains (7).	i	1	10		15 15	30	8	11 13	21

TABLE I - THE WORK OF INSTRUCTORS, 1899-1900 - Continued.

		Но	urs p	er w	eek		Nu	mbe	r of
	L	ectur	es	La	borat	ory		uden	
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
CIVIL ENGINEERING — Concluded.  Bridge Designing (8) Civil Engineering Laboratory (14) Sanitary Engineering (10). Masonry Construction (15) Highways (16) Water Supply (18) Trusses (19) Surveying (21) Thesis and Similar Work Roof Trusses (20)  Domestic Science.	 2	5 5	2 2	8 6	12 5	6 4 10	5 6 5 1	7  10 7  5	
Domestic Economy (7, 8, 9)	1	1	1 1 1 1 1	12 6	12	12 6	23	18 15	1 1 2
Freehand Drawing (1). Lettering (2). Mechanical Drawing (3). Draughting and Blue Printing (4). Photography (7). Mechanical Drawing (8). Mechanical Drawing (10). Mechanical Drawing (11). Clay Modeling (12). Pen Drawing (14). Domestic Architecture (15). Technical Drawing (5). Orders of Architecture (1). Styles of Architecture (2). Decoration and Ornament (5). Drawing (19). Architecture (6). Architecture (8). Architecture (9). Architecture (1). Architecture (1). Architecture (2). Architecture (3). Architecture (4). Architecture (4). Architecture (7). Drawing (16).	1 1 2 1 1 1 2	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 2 1 2 1 2 1 2 1 2 1	10 4 2 4 4 6	4 2 8 4 4 6 4 8 4 8	18 12  8  4 4 4 2  6  9 6 6  8	99 14 9 52  5 20  12 1	92 5 7 1 5 1 2 1 1 1	2

TABLE I - THE WORK OF INSTRUCTORS, 1899-1900 - Continued.

		Hor	urs p	er we	eek		Nu	mber	of
	Le	ectur	es	Lab	orat	ory		uden	
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
*Economics.	100						101/		PIR
Elements of Political Economy (51, 52) Practical Problems in Economics (55). Industrial and Social Reforms (56) Ind'ial and Fin'ial His'y of the U. S. (60) Seminary (61, 62) Industrial Society (53) Sociology and Statistics (63, 64) Commercial Geography (65) Thesis Socialism (54)	2 2 1 2			4	5		ii	80 33 21 11  11 	
ELECTRICAL ENGINEERING.  Electrical Engineering (2)	2	2		9	9	9 2	10 9 9 24 24 	10 10 7 20 20 11	10 10 10  11 2
Introduction to Eng. Literature (51, 52) The English Bible (55, 56) Shakespeare (57) The Modern Novel (59 From Dryden to Johnson (61) Chaucer (67) Masterpieces (65, 66) Thesis Work Literary Problems (69, 70). Victorian Prose (71) Elizabethan Drama (58) The Drama Since the Restoration (60). American Authors (62). Victorian Poetry (72).	1 3 6 2 2 3 2 3	1  3  2  3 2 6		2	7		15 12 32 7 8 13 5 10 11	11 8 9 13 22 50	
*EDUCATION.  Elementary Educat'l Psychology (51) Modern Educational Theories (52) History of Education (53) The Herbartian Pedagogy (55) Philosophy of Education (58) Plato's Republic (54) Educational Value (67). Child Study (59) Scientific Method (69) Pedagogical Research (72)	2 2	4 2 2						15 10 11 15	

<sup>\*</sup> Semester work.

TABLE I - THE WORK OF INSTRUCTORS, 1899-1900 - Continued.

		Но	urs p	er w	eek		Ne	ımbe	r of
	L	ectur	es	La	borat	ory		uden	
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
Geology.									
Elementary Geology (4) Cosmical Geology (2, 51) Paleontology (53, 54) Petrography (55, 56) Physical Geography (1) Economic Geology (3) Field Term  German Language and Literature.			5 5	6	18 6	17 6	44 3 2	35 6 2	 5 2 25 11 12
Faust I—(59) Deutsche Kulturgeschichte (64). Old High German (68). Mediaeval Lyrics (62). Deutscher Aufsatz (63). Middle High German (61). Sanskrit (71) Gothic (67)	2 1 2	3 2					25 51 14  2  5 7		
*Greek Language and Literature.  Elementary Greek Xenophon's Memorabilia (51) Odyssey (52) Lysias (53) Homer (54) Ancient Art (59, 60) Attic Drama (68) Graduate  *History and Political Science.	4	4 2					17 26	9 	
General History of Europe to close of Middle Ages (51)	6	6					81	69	

<sup>\*</sup> Semester work.

TABLE I - THE WORK OF INSTRUCTORS, 1899-1900 - Continued.

		Но	urs I	per w	eek		Nu	mbe	rof
	L	ectur	res	La	borat	ory		uden	
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
*HISTORY AND POLITICAL SCIENCE.  — Concluded.  HISTORY.									
From Accession of Stuarts to Present Time (54) Political and Constitutional History of United States (55, 5, 56) History of Europe from 1789 to 1815 (57) History of Europe since 1815 (58) History of European Colonies (67, 70) Pro-Seminary (61, 62) American Colonial History (63) United States Colonial and Constitutional History (64) Historical Bibliography (72)  POLITICAL SCIENCE.	2 2	3					63 7  6 18 45	19 46 10 6 18  48 26	
International Law (51).  Municipal Government (52)  Political Institutions of the United States (53).  Comparative Political Institutions of Europe and America (54).  History of Diplomacy (56).  Thesis Work  HORTICULTURE.	3						30	21 26 21 14	
Elements of Horticulture (1) Pomology and Viticulture (5) Vegetable Gardening and Seed Growing (6) Small Fruit Culture (7) Elements of Floriculture (8) Commercial Floriculture (9) Home Flower Gardening (10) Arboriculture (11) Forestry (12) Landscape Gardening (13) Special INDUSTRIAL ARTS AND SHOPWORK.	2  1  2	2	1	4	2	3 2		15	17 10 5 7
Advanced Designing (4). Machine Design (7). Workshop Appliances (5). Shop Equipment (3).			6			6 6		1	1 6 8 1

<sup>\*</sup> Semester work.

TABLE I - THE WORK OF INSTRUCTORS, 1899-1900 - Continued.

		Но	urs p	er w	eek		Nu	mber	rof
	Le	ectur	es	Lat	orat	ory		uden	
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
SHOPWORK.	F								
Carpentry and Pattern Making (7, 1) Forging (11, 2) Foundry Work (3) Chipping and Filing (4) Machine Work (13) Advanced Machine Work (14) Advanced Pattern Making (9) Advanced Forging (12) Advanced Machine Work (15) Cabinet Work (8) Thesis				6 4	8 6		44 39 30 25 9 8 	37 45 40 3 4  4 11 5	46 35 19 19 2 2 2 2 6
Cicero, Livy (51)	8 3 5	8 8 3 5					31 11 22	56 26 12 15 1 5	
MATHEMATICS.  Elementary Algebra (1)	25 20 2	5 5 10 10 15 	10				17 30 182  98	86	
College Algebra (67)	5	1 5 12 5					4		

<sup>\*</sup> Semester work.

TABLE I - THE WORK OF INSTRUCTORS, 1899-1900 - Continued.

		Но	urs p	er w	eek	17		mbe	
	L	ectur	es	La	borat	ory	St	uden	ts
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
MECHANICAL ENGINEERING.									
Mechanism (3)  Analytical Mechanics (6).  Strength of Materials (7).  Thermodynamics (8)  Prime Movers (9).  Machinery and Millwork (10).  Experimental Laboratory (12, 13, 14,	5	5	5				26	19	2
15, 16, 17) Machine Design (18) Hydraulic Machinery (20). Frimber and Masonry (22). Experimental Eng'ring Laboratory (25) Experimental Eng'ring Laboratory (28) Materials of Construction (23) Power Plants (32).	5	5	3			10 4	8	8	
Graduate Work Care of Boiler and Engine Theses (21)  METALLURGY AND MINERALOGY.	4	4		10	10	6	4	3 26 9	1
Metallurgy (4) Metallurgical Laboratory (5) Ore Dressing (8) Assaying (6) Mineral Chemistry (9) Mineralogy (2) Determinative Mineralogy (3) Thesis and Similar Work Metallurgical Construction (7)						13	15 28 4	12 19 14 4	6
MILITARY TACTICS AND SCIENCE.  Military Drill  Factics		2					400	344 86	28
MINE ENGINEERING.  Mine Surveying (1).  Ventilation and Haulage (2)  Mine Engineering (5).  Mine Operating (3)  Mine Surveying (4)  Mine Engineering (6)	5	5	5	9 9	3 3	1 2 8	8 3	5 5	

TABLE I - THE WORK OF INSTRUCTORS, 1899-1900 - Continued.

		Но	urs p	er w	eek		Nu	ımbe	r of
	L	ectur	res	La	borat	ory	st	uden	its
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
PHARMACY,									
Pharmacy (6) (7) Dispensatories (8) Pharmaceutical Chemistry (9) Extemporaneous Chemistry (10) Lectures and Dispensing Practice (11) Materia Medica (12) (13) Materia Medica and Therapeutics (14) Pharmaceutical Assaying (15) Methods of Manufacture (16) Pharmacy (18) (Vet. Students) Special (17)  *Philosophy.	3 3	3	2 2 5	10	10	10	8 8		18 8 7
Pschology (51) Psychology (53) Logic and Ethics (52) History of Modern Philosophy (56) His. of Ancient and Medieval Phil. (57) Advanced Work (59) (60) Physiology & Exp. Psychology (61) (62) Study of Religion (63) (64) Special Ethics (55)		4 6 3 2 2 2 1			4		46  4 6 8 3	45 43 14  5 5 3 1	
Physical Education, Young men				44 16	44 16	44 16	564 85	564 85	564 85
Physics.									
Elementary Physics (1)	10 7 2 3  1	2	2	45 12	45	45	131 11 13 26	81 116 24 60 26 4	108 24 56
Paragraph Writing (51) (5)	30  8 4	27 8 4					38	364 47 68	

<sup>\*</sup> Semester work.

TABLE I - THE WORK OF INSTRUCTORS, 1899-1900 - Continued.

								_	_
		Но	urs p	er w	eek		Nu	mber	rof
	L	ectur	es	Lal	oorat	ory	st	uden	ts
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Seeond Term	Third Term
*RHETORIC AND ENGLISH LANGUAGE.									
— Concluded.									
Rapid Writing (55) (56). Brief Making and Argument (57) Short Stories (60). Poetics (59) Studies in Exposition (58). Rhetorical Theory & Criticism (61) (62) Teacher's Course (67) (68). History of the English Language (69). Old English (71) (72). Middle English Philology (73). Historical English Grammar (74). Development of Prose (70) Extempore Speaking (75) (76)	22222	3 2 2 2		10	10		23  16  14 47 58 25 7	33 21 18 11 40 22 5 40 19	
*ROMANCE LANGUAGES.									
Elementary French (1) (51)	8	16 8 3 1		2			71 12 16 10	140 65 15 11  8	
Grammar and Readings (51) (52)	2	2					15	16	
VETERINARY MEDICINE.							10	10	
Anatomy (28) General Pathology (29) Special Pathology (30) General Surgery (24) Clinic (19) Special Pathology (20) (21) General Therapeutics (22) Lectures and General Pathology (14) Osteology (11) Meat Inspection (27) Special Pathology (15) (16) Diseases of the Cow (17) * Semester work	5 5 5 5	35 3	5 5	10 12	10 12	12	17 6 11 9 13 7 9	17 6 11 9 	17 13 6:

<sup>\*</sup> Semester work.

TABLE I - THE WORK OF INSTRUCTORS, 1899-1900 - Concluded.

	L	Ho	urs p		eek	ory		mber uden	
Subjects	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
Veterinary Medicine — Concl'd.  Surgcial Diseases and Operations (18). Myology (12)  Neurology (13)  Principles of Horse-shoeing (26)  Obstetrics (23)  Canine Disease (31) (32)  Opthalmology (33)  Zoology.	5		553		10 2		6	5 6  12 8 9	6 7 6
Comparative Zoology (1, 51, 52)	2	2	3	6	8 12 10  4	8	86 10  12  5 2	80 6 5 11 23	11 11

TABLE II — SHOWING THE WHOLE NUMBER OF DEGREES IN COURSE CONFERRED SINCE THE FOUNDING OF THE UNIVERSITY.

Bachelor of philosophy		1878.	1879.	1880.	1881.	1882,	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
Bachelor of science	Bachelor of arts	1	1	6	2	9	1	5	4	6	8	6	1	7	2	6	9	12	19	13	17	18	8	14
Bachelor of science in agr.       1 1 1 2 3 3 2 4 4 5 5         Bachelor of science in chemistry       1         Bachelor of science in Dom. Sci.       1 3 1 1 2 1         Bachelor of science in H., F.       1 3 1 1 2 1         Bachelor of Science, Ind. Arts.       1 1 1 2 1         Bachelor of science in Pharmacy       1 1 1 3 3 4 1 2 2 7 9 7 9 11 4 8 7         Mechanical engineer       1 2 4 1 3 1 2 4 2 3 2 5 2 1 2 4 9 5 6         Electrical engineer       4 9 8 15 17 13 10 7         Engineer of mines.       1 1 2 4 1 4 2 1 1 4 1 6 3 2 3         Engineer of mines, in Ceramics       4 9 8 15 17 13 10 7         Graduate in pharmacy       3 2 3 6 5 5 3 11 12 11 7         Master of pharmacy       1 1 4 4 5 4 5 4 2 3         Master of arts       1 1 1 2 2 2 2 3 3 3 2 3 3 2 3 5 2 3         Master of science       1 1 1 2 2 2 2 3 3 3 2 3 3 2 3 5 2 3 5 3 11 12 11 7         Master of science       1 1 1 2 2 2 2 3 3 3 2 3 5 3 11 12 11 7         Master of science       1 1 1 2 2 2 2 3 3 3 2 3 5 2 3 11 12 11 7         Master of science       1 1 1 2 2 2 2 3 3 3 2 3 5 2 3 11 12 11 7         Master of science       1 1 1 2 2 2 2 3 3 3 2 3 3 2 3 5 2 3 11 12 11 1 1 1 1 1 1 1 1 1 1 1 1 1	Bachelor of philosophy				2		2	2	1	1	2	6	7	4	8	8	5	5	19	26	27	27	31	38
Bachelor of science in chemistry	Bachelor of science	5	5	1	2	5	3	2	4	2	4	4	8	2	10	7	11	7	9	- 4	10	10	00	7
Bachelor of science in Dom. Sci.	Bachelor of science in agr								1	1				2	3	3			2	4	4	5	5	7
Bachelor of science in H., F.	Bachelor of science in chemistry																						1	1
Bachelor of Science, Ind. Arts.       1	Bachelor of science in Dom. Sci.								.,															1
Bachelor of Science, Ind. Arts.       1       2       4       1       2       2       4       9       5       6       6       6       Electrical engineer       1       2       4       1       3       2       3       2       5       2       1       2       4       9       5       6       6       Electrical engineer       1       1       1       2       4       9       8       15       17       13       10       7       7       Engineer of mines.       1       1       1       4       9       8       15       17       13       10       7       7       8       11       1       1       4       2       3       3       2       3       3       2       3       3       1       1       1       1       1       1       1       1       1       1<	Bachelor of science in H., F								٧.								1	3	1	1	1	2	1	1
Civil engineer	Bachelor of Science, Ind. Arts.																				1	1		
Mechanical engineer        1        2       4       1       3       1       2       4       2       3       2       5       2       1       2       4       9       8       15       17       13       10       7         Engineer of mines	Bachelor of science in Pharmacy																							1
Electrical engineer	Civil engineer						1	1	1	3	3	4	1	2	2	7	9	7	9	11	4	8	7	3
Engineer of mines	Mechanical engineer			1		2	4	1	3	1	2	4	2	3	2	5	2	1	2	4	9	5	6	9
Engineer of mines, in Ceramics	Electrical engineer													**		4	9	8	15	17	13	10	7	11
Graduate in pharmacy.       3 . 2 3 6 5 5 3 11 12 11 7         Master of pharmacy.       1 . 1 . 1	Engineer of mines			1	1			1	2	4	1	4	92			1	1	4	1	6	3	2	3	3
Master of pharmacy.       1	Engineer of mines, in Ceramic	8														**								- 1
Doctor of veterinary medicine.       1 1 1 4 4 5 4 5 4 2 3         Master of arts.       1 1 1 2 2 2 2 3 3 3 2 3         Master of science.       1 1 1 2 2 2 2 3 3 3 2 3         Master of agriculture.       1 2 1 2 1         Master of Science in H. & F.       1 1 1 2 2         Doctor of philosophy       1 1 1         Doctor of science.       1 1 1         Bachelor of laws.       9 18 15 16 6 23 22 21         Master of laws.       2 4 2 6 6	Graduate in pharmacy										3		2	3	6	5	5	3	11	12	11	7		
Doctor of veterinary medicine.       1 1 1 4 4 5 4 5 4 2 3         Master of arts.       1 1 1 2 2 2 2 3 3 3 2 3         Master of science.       1 1 1 2 2 2 2 3 3 3 2 3         Master of agriculture.       1 2 1         Master of Science in H. & F.       1 1 1 2 3 3 3 3 2 3         Doctor of philosophy       1 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Master of pharmacy																			1		1		
Master of science.       1       1       2       2       3       3       2       3         Master of agriculture.       1       2       1 </td <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>100</td> <td></td> <td></td> <td>100</td> <td></td> <td>10</td> <td></td> <td></td> <td></td> <td>100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td>4</td>				1		100			100		10				100						3			4
Master of agriculture	Master of arts												1	1	1	2			2		4	4	3	1 8
Master of agriculture	Master of science	1			1				1				1	1	2	2		2		3	3	2	3	2
Master of Science in H. & F.       1 <td< td=""><td></td><td>w.</td><td></td><td></td><td>1</td><td>м</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td></td<>		w.			1	м																1		
Doctor of philosophy         1          1          1           1 <t< td=""><td></td><td>43</td><td>10</td><td></td><td>100</td><td></td><td></td><td></td><td></td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>100</td><td></td><td>1</td><td></td></t<>		43	10		100					0											100		1	
Doctor of science					F	1	10	1			100	10	0				100					30	1.	
Bachelor of laws						r	1		1			1			0.7							120	m	1
Master of laws		A	4					1	17								1					1	10	
		-1	4.		1								100					1 .						
Totals		-	-	-[-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-

TABLE III — SHOWING THE NUMBER OF STUDENTS IN THE GENERAL, TECHNICAL AND PROFESSIONAL COURSES.

	1890-91.	1891–92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.
General Courses (College						+ /	11/2		3,5	
of Arts)	137	151	194	245	256	322	327	358	371	419
Technical Courses (other										
Colleges except Law)	166	259	381	368	424	453	453	511	541	603
Professional Courses (Col-										
lege of Law)		55	67	72	65	100	132	148	191	201
*Graduate students and							1.160			
summer school	2			1		94	97	133	75	45
Totals	305	465	642	686	745	969	1,019	1,150	1,178	1,268

<sup>\*</sup> Until 1896, graduate students have been included in the first three classes.

# REPORT OF THE LIBRARIAN.

Dr. W. O. Thompson, President Ohio State University,

DEAR SIR:—The following report on the condition of the university library is herewith respectfully submitted:

#### BUILDING AND EQUIPMENT.

The library has this year occupied the entire east end of Orton Hall and the room formerly used as a faculty room in university hall. The room in university hall has been used for the law library. It has been too small to accommodate properly the law students, and it is earnestly recommended that before the opening of the university next fall another and larger room be provided for these books.

The removal of the law lecture room from the first floor of Orton Hall and the tearing down of the temporary partition which divided it from the library has been of the greatest advantage to the work of the library. This change has made possible a complete rearrangement of the books and papers kept on the first floor. The main room is 70' x 40' in size. In the southwest corner there has been provided a temporary work room for the preparation of books for binding, the southeast corner having cases for unbound papers and magazines. The central part is used for the filing of state and municipal documents and the entire north end is devoted to U. S. government documents. In all three parts of the room space has been left for reading tables, and there is no room in the library where more important work is done by students.

The removal of the law books from the balcony has given room for growth in the classes of science and engineering. The books were not rearranged this year, but the entire balcony arrangement will probably be changed by the beginning of next year. This will necessitate the return to the main library of the oak cases taken to the law library. By the removal of the books on geology to the balcony, room is gained on the main floor for one more reading table.

Special credit is given to Mr. McCracken for his solution of the problem of providing light for the tables. By dropping lamps from the ceiling the proper light has been secured, together with freedom in rearrangement of tables, and without the disadvantage of cutting the cork carpet in order to bring the wires up from the floor.

There is still room in the main library for a year's increase in books without encroaching upon the reading room space. Year after next it

will undoubtedly be necessary to put in more cases which will, of course, mean fewer tables. And this year's use of the library has demonstrated the fact that the reading rooms are already too small. The problem of how to meet the demands which are certain to be made on the library before there is any possibility of finding relief in a new building, promises to be a very difficult one to solve,—if indeed there can be any solution. The prospects are only too sure that within the next two years, and certainly before three years have expired—which time seems to be the very earliest at which there can be hope of having a new building completed—the library will have to ignore many crying demands because of lack of room.

Such conditions make it imperative that everything be done to secure a library building at the earliest possible moment. To that end the librarian is already engaged in the comparative study of college library buildings. By such a study only can the danger of erecting a building, unsuited to its purpose in some particulars, be minimized. In May of this year a visit of inspection was made to the library of the University of Illinois. The new library building of Princeton University ought to be visited as early next year as possible.

#### BOOKS.

The number of books recorded on the accession books of the library June 30th, 1900, is 35,430. These records show that 7,443 have been added within the last year. As a matter of fact about half of this number were received in the library before the close of last year, but were not recorded because of lack of help and lack of room. Most of these were the U. S. public documents, the gift of which was noted in last year's report. Of all the additions to the library, none has been more valuable than these public documents. Another installment of about six hundred volumes came from Washington in the early spring of this year, after Captain Cope had personally visited the document office and had secured the personal influence of Mr. Ferrel, the superintendent of documents. Between five hundred and six hundred more are expected in the fall when they are returned from Spain by the U. S. Minister. It is a matter of special congratulation that the university was given the first chance of securing these books at the small expense of paying the transportation across the ocean. This is undoubtedly due to the efforts of Captain Cope in securing the interest of Mr. Ferrel.

State and municipal documents are being received constantly, and form a very important part of the library. It has been a source of gratification to the librarian to notice that since the special work in public documents was undertaken in the university library other libraries have begun to see the necessity of having special assistants in charge of this work. The claim is not made that this is due to the uni-

versity's action, but it shows that it is beginning to be recognized that document work is an important line of library activity.

A comparatively large number of gifts have come to the library from private sources. A list of donors accompanies this report.

Special mention should be made of a gift relating to the history of the Quakers in America. Through the interest and active effort of Mr. J. J. Janney of this city, the Miami Quarterly Meeting of the Society of Friends in Ohio has donated a collection of books illustrative of the influence of the Quakers in American history, and especially during the colonial period. When completed the collection will have cost one hundred and fifty dollars, and will be of the highest service as it touches a field of American history in which our library was seriously deficient. In addition, Philadelphia Yearly Meetings of both branches of the Society of Friends have donated a considerable number of volumes of historic and doctrinal character, thus supplementing the gift of the Miami Quarterly Meeting.

Mention has been made in previous reports of the gift of the books from the library of Mr. Wm. Siebert. Most of these books have now been received. In addition to these, there have been purchased by Mr. John Siebert and Mr. Louis Siebert over four hundred dollars' worth of books on German history. These will form the more important part of the "Siebert Library of German History," as the collection is to be called. It is understood that one hundred dollars a year will be furnished by each of these gentlemen for keeping up purchases in this line. None of these books have yet been entered on the library records, since it was desired to wait until all the books had been received, before recording them or putting them on the shelves for use.

Many of the books received from Mr. Wm. Siebert's library have no bearing at all on German history and it is definitely understood that these books, after being duly marked as having been received from him, are to be placed in those parts of the library where they naturally belong. This is the only safe principle to follow in accepting gifts for a library, and should be carefully adhered to. Books on a special subject are naturally kept together so that special collections can well be known by their collector's name, but it should never become a practice to accept libraries composed of books on miscellaneous subjects with the understanding that the books are to be kept together. If that were to be done the university library would soon be in a condition similar to that in which a neighboring college found itself when Wesley's sermons could be found in any part of the room.

During the year circulars have been sent out by the alumni association to alumni residents in Ohio, calling attention to the needs of the library. A copy of the circular is attached to this report.

In the annual report of last year it was said that the chief duty of a university library was "to secure books, more books, and always more books." This statement should be repeated this year with even greater emphasis.

USE.

It is a pleasure to report that the use of the library has increased much more rapidly than has the student body, thus showing that the library is performing a more important part in the educational work of the university.

The great aim of the library is to teach the students the use of books, and all the reference work is directed towards the end of helping the student help himself. Much more time is required for this instructional work than would be used in simply supplying the books or information needed.

It was found necessary this year to place on special shelves the books reserved by professors for required reading. These shelves were not open to the students and each book was taken out on a special card for use in the reading room. Next year it will probably be necessary to limit the time during which one student can use the book, because of the large number of students dependent on one book, the library having very few duplicates.

STAFF.

There has been no change in the library staff during the year. Miss Townshend, Miss Kellicott, Miss Jeffrey, Miss Allen and Mr. Guittard all have retained their positions with very few changes in the work for which each is held responsible.

Very respectfully,

OLIVE JONES, Librarian.

# REPORT OF THE TREASURER.

COLUMBUS, OHIO, June 30th, 1900.

To the Honorable J. McLain Smith, President Board of Trustees of the Ohio State University:

SIR: — I hand you herewith my annual report for the fiscal year ending the 30th day of June, 1900. This report is accompanied by proper vouchers for all disbursements.

Respectfully,

L. F. KIESEWETTER, Treasurer.

STATEMENT I.

TATEMENT OF RECEIPTS BY L. F. KIESEWETTER, TREASURER.

DETAILED STATEMENT OF RECEIPTS BY L. F. KIESEWETTER, TREASURER, DURING FISCAL YEAR ENDING JUNE 30, 1900.

Date	e	From whom received	For what purpose	Amount	Total
1899	,				1
July	3	F. W. Prentiss, Treas.	Balance on hand from		40 000 04
	7	O. S. U	former treasurer Sale store room cards	\$111 59	\$9,088 04
		Geo. B. Kauffman	Merchandise	152 07	
		U. S. Treasurer	Annuity act of Aug.		
		M E Fala and Tax	30, 1890	25,000 00	
		M. F. Early and Jane Beal	Deed act of March 14, 1889	2 00	
		Alfred H. Barnes	Deed act of March	200	
			14, 1889	2 00	
		Louisa M. Byers	Deed act of March	2 00	05 060 66
Aug.	9	B. F. Thomas	14, 1889 Ninth and tenth in-	2 00	25,269 66
. rug.		2. I. Indinas	stallm't rent 1898-9	85 00	
		Margaret L. Hurles	Deed act of March		
		Thomas Cloud	14, 1889	2 00	
	7	Thomas Cloud	Deed, act of March 14, 1889	2 00	89 00
Sept.	20	Commrs. Sinking Fund.	Int. on endowment		to the total
		Henry C. Lord	Scrap copper sold	4 25	
	250	B. F. Carmean	Deed, act March 14,	2 00	
		R. W. Funk	Dorm. fee, Mr. King	1 50	
		E. E. Harrold, storekpr.	Sale of 100 storeroom		
			cards	500 00	
		L. H. Godman	Unpaid fees of last	7 50	5,515 28
	23	E. E. Harrold, storekpr.	Sale of 100 storeroom	. 00	0,010 20
			cards	500 00	
		Nat. Brick Mfrs. Assn.	Endowment scholar-		
		E. E. Harrold, storekpr.	Sale of 80 storeroom		
		an an america, moreup.	cards	100 00	1,150 00
Oct.	20	B. F. Thomas, Secy	Amt. retd. of sub. to		
		Alaria Cana Burane	A. A. A. S	188 51	
		Alexis Cope, Bursar Commrs. Sinking Fund.	Students' fees Int. on endowment		18,888 5
Nov.	10	Auditor of State	Req. No. 25, O. S.	0,000	10,000 0
		4. 0	U. fund	. 14,956 67	
		Auditor of State	Req. No. 26, O. S. U. fund	33 437 50	C 100
		Honline & West	Freight paid by mis-		
			take	. 8 70	A STATE OF
		Martha Loister	Deed, act March 14,		10.10
		Margaret Shough	1889 Deed, act March 14,		
		The Burner Subalguiting	1889		The second second
		Joseph Smith	Deed, act March 14,		
		S G Lindson	Deed, act March 14,		OK YES
		S. G. Lindsay	1889		THE STATE OF
S. IN	11/1	Gen. Elec. Co	Credit on account	. 2 00	48,412 8
Dec.	1	Ohio Nat'l Bank			
			refunding bond sold Nov. 9, 1899.		32,705 0
	7	Commrs Sinking Fund	Int. on endowment.		3,500 0

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Date	From whom received	For what purpose	Amount	Total
1899 Dec. 15	Auditor of State	Req. No. 27, O. S.		15 110 00
	E. E. Harrold, storekpr.	80 coupon cards sold to students	400 00	15,110 00
	Benj. F. Thomas	1st and 2nd install- ments rent, 1899-	100.00	
	Geo. B. Kauffman	Ninth and 10th in-	85,00	
		stallment rent, 1898- 1899; 1st, 2nd & 3rd 1899-1900	225 00	
	Alexis Cope, Bursar Nora Heath	Students' fees Deed, act of March	200 00	
	Alexis Cope, Bursar	14, 1889 Fees 38 auditor's	4 00	
20	L. H. Houston	Deed, act of March	38 00	952 00
	Emerson McMillin	14, 1889 Fellowship in astron-	2 00	
	Emerson McMillin	Scholarship in eco- nomics	100 00	192 00
21	M. P. Post	Freight and cartage paid for him	1 25	102 00
	F. E. Sanborn	Freight and cartage	20 54	
30	Alexis Cope, Bursar Commrs. Sinking Fund.	Students' fees Interest on endow-	294 63	316 42
1900		ment		3,093 50
Jan. 11	Auditor of State	Req. No. 28, O .S. U. fund		14,987 06
Feb. 3	Neal Postlewaite	Diploma fee, class of 1899	5 00	
	Paul System Co W. H. Scott	Credit on account Laboratory fees,	49 54	
	E. A. Hitchcock	Fee for testing boil-	14 00	
	C. W. Mesloh	7th, 8th, 9th & 10th installment rent, 1898-99; 1st & 2nd,	10 00	
	Alexis Cope, Bursar Commrs, Sinking Fund.	Students' fees Interest on endow-	108 00 4,500 00	
28	Auditor of State	Req. No. 30, O. S.	5,500 00	10,186 54
	Alexis Cope, Bursar J. W. Stimson	U. fund	4,474 17 8,500 00 1 00	12,975 17
Mar.		Req. No. 29, O. S. U. fund		15,037 72
30	Commrs. Sinking Fund.	Interest on endow-	2,750 00	
	Alexis Cope, Bursar B. F. Thomas	Students' fees 3rd, 4th, 5th & 6th installments rent,	3,800 00	
	Alexis Cope, Bursar	Students' fees	170 00 200 00	The state of
	Buckeys Engine Co F. E. Kester	Sale of old engine	450 00	

## STATEMENT I - Concluded.

Date	From whom received	For what purpose	Amount	Total
1900				1
	W. G. Pengelly	Pictures of Dr. Or-	17 50	7,387 6
April 4	Auditor of State	Req. No. 31, O. S.	11 00	wal see a
25	Auditor of State	Req. No. 32, O .S.		15,166 7
May 18	Auditor of State	U. fund		15,146 1
	Auditor of State	U. fund		14,981 (
20		U. fund	100.00	7,875 (
, 22	Geo. B. Kauffman E. E. Harrold	Store room cards	180 00 400 00	
	Lewis Merriman	Deed, act Mar. 14,		
	Edw. Orton, Jr	Printing memorial	2 00 19 00	
	W. H. Kinnear	Deed, act Mar. 14,		
	Wm. T. Magruder	Use of machinery	2 00 12 30	
	Wm. T. Magruder	Broken tools	12 76	
	W. H. Scott	Lub. oil and deodor-	34	628
31	Ohio National Bank	Sale of \$10,000 re-	01	
June 7	C. W. Mesloh	funding bonds 1st, 2nd, 3rd, 4th,		10,906
, and	C. III	5th, 6th install-		
		ments rent, 1899-		108
	Edward Orton, Jr	Sales of material	50 00	100
	Commrs. Sinking Fund.	Interest on endow -	6,500 00	
	M. P. Post	Test in dept. cera-		
18	Auditor of State	mics	1 25	6,551
		U. fund	1 - 10	14,904
27	Commrs. Sinking Fund.		8 15	
	Commrs. Sinking Fund.	Bryan fund Interest on endow-	0 19	
	T A Pownosless	ment fund	1,860 72	1,868
	J. A. Bownocker E. A. Eggers		59 00 150 00	
	F. E. Sanborn	Sale of scrap iron	36 74	
	Alexis Cope, Bursar		735 00 665 12	
	Alexis Cope, Bursar	Auditor's tickets	30 00	1,675
30	Alexis Cope, Bursar	Storeroom cash sales	(4)	950
	Total			A01E 01F
	Total	***************************************		\$315,617

#### STATEMENT II.

DETAILED STATEMENT OF DISBURSEMENTS BY L. F. KIESEWETTER, TREASURER, DURING FISCAL YEAR ENDING JUNE 30, 1900.

Date	To whom paid	For what purpose	No	Amount
-				
1899 -				
July 1	J. McLain Smith T. J. Godfrey	Expenses as trustee	1	\$5 9
	T. J. Godfrey	Expenses as trustee	2	25 9
3	Wm. Cannan	Labor	3	11 2
	Kuhn Artificl. Stone Co.	Cement walk (balance)		000 0
	Yes T Meets	due on contract	4	380 0
5	Jno. T. Mack	Expenses as trustee	5	18 5
6	Hutton Bros	Gas	7	66 8 12 0
	Buckeye H. and L. Co.	Leather	8	8
	Blackwood, Green & Co.	Repairs	9	3 9
	J. S. Abbott & Co	Glass	10	2 0
	Fish Stone Co	Stone work	11	10 0
	Fitzpatrick & Hoepfner.	Closet bowl	12	8 5
	F. E. Fleischer	Labor	13	18 2
	J. C. Perry	Labor	14	4 2
	Peter Henderson & Co	Lawn mower	15	12 0
	Krauss, B., B. & Co	Tin roller	16	8 4
	Eimer & Amend	Scientific apparatus	17	20 0
	B. F. Thomas	Cash advanced	18	15 0
	West'h'se E. & Mfg. Co. Wards Nat. Sci. Est	Repairs	19 20	4 0
	Glouster Net & Tw. Co.	Lenckhart charts	21	42 ( 9 5
	J. S. Teeter	Labor	22	30 0
	Wm. Roberts	Labor	23	35 (
	E. Doddington & Co	Lumber	24	2 1
	J. S. Schofield	Paint	25	4 2
	Sherwood Mfg. Co	Repairs	26	6.0
	Murphy Iron Works	Pins	27	4.5
	W. H. Case	Labor	28	30 0
	E. Harrington Son & Co.	Chain	29	18 7
	H. Mithoff & Co	Strainer cloth	30	9
	Columbus Brass Co	Castings	31	18 (
	W. C. McCracken New Col. Bridge Co	Cash advanced	32	2 0
	B. D. Potts	Beams, rods, etc	33 34	35 7 4 6
	Palmer & Beck	Repairs	35	50 8
	Lawrence Press Co	Printing	36	4 5
	C. V. Brown	Advertising	37	5 6
	C. L. Kelly	Advertising	38	4 (
	J. L. Trauger	1200 copies Bot. Bulletin		
		No. 1	39	81 9
	J. N. Bradford	Cash advanced	40	13 2
	McClelland & Co	Ink	41	1.8
	Drawing Supply Store	Supplies	42	3 8
	J. M. & W. Westwater.	Electric supplies	43	6 1
	General Electric Co	Electric supplies	44	52 (
	F. A. Fish	Labor	45	12 (
	J. C. Covan P. Hayden S. Hdw. Co.	Castings	46	7 ( 69 2
	Western Elictric Co	Castings	. 48	41 3
	Schilling Foundry Co	Castings	49	12 (
	Shoedinger, Fearn & Co.	Bolts, etc	50	10 7
	J. G. Biddle	Scientific apparatus	51	46 8
	J. B. Colt & Co	Magic lantern	52	30 0
	F. C. Caldwell	Cash advanced	53	31 1
	Philip Long	Commencem't luncheon	1	
		and cafe partitions	54	350 (
	Mrs. Edith R. Hubler.	Extra service as clerk	55	8.5

Date	To whom paid	For what purpose	No	Amount
1899				
uly 6	Western Electric Co	Telegrams	56	\$4 2
	Tracy Wells Co	Jap rods	57	2 7
	R. E. McIntosh	Labor	58	10 8
	M. C. Hunter	Labor	59	- 14 3
	H. C. Nidy	Labor	60	4 6
	Frankenberg Bros	Mailing tubes	61	1 0
	Cherington P. & E. Co.	Rubber stamps	62	10.0
	Green, Joyce & Co	Bunting	63	10 9
	Central Union Tel. Co	Telephone messages	64	2 5
	Hann & Adair	Printing	65 66	15 7
	Paul Jones	Expenses as trustee	67	29 (
	Chas. T. Howe	Music for commencem't	68	1 8
10-10-1	L. B. Wing	Cheese cloth Expenses as trustee	69	5 6
	Columbus Supply Co	Hardware	70	61 7
	Col. Mill & Mine S. Co.	Hardware	71	65
	Mrs. A. Farnham	Brushes	72	9 (
	Florence Bell	Clerical work	73	1 (
	Grace Eagleson	Clerical work	74	8 4
	A. W. Livingston's Sons	Flowers	75	18 1
110000	G. N. Carman, Treas	Membership N. C. A. C.		
		and S. S	76	3 (
	American Dist. Tel. Co.	Watch boxes	77	27 (
	S. M. Tracy	Plants	78	46
	W. A. Kellerman	Cash advanced	79	13 3
	Freda Detmers	Labor	80	25
	L. C. Riddle	Labor	81	58
	W. H. Anderson	Books	82	405
	Howald & Conklin	Tin rollers	83	104
	Erner & Hopkins Tallmadge Hdw. Co	Electric apparatus	84 85	124
	H. Cole Co	Hardware	86	5 7
	Eagle Lock Co	Locks	87	11
	Library Bureau	Outfit	88	2
	W. T. Magruder	Cash advanced	89	18
	Blackwood, Green & Co.	Paint	90	17
	Geo. Trowbridge	Carpentry	91	2
	Keuffel & Esser Co	Tapes	92	5
	Star Milk Cooler Co	Cooler	93	24
	L. Hoster Brewing Co	Sprouts	94	. 9
	John Immel & Son	Repairs	95	18
	Yardley & Harsh	Pail	96	- 1
	Nitschke Bros	Office supplies	97	12
	Central Ohio Paper Co.	Paper	98	10
	A. H. Barber Mfg. Co.	Ammonia	99	6
	Capital City Mach. Wks.	Machinery and castings	100	103
	R. J. Seymour Champlin Printing Co	Messenger service	101	105
	Columbus Transfer Co	Printing	102	135
	J. C. Porterfield	Basket ball	104	6
	Franklin Toilet Sup. Co.	Laundry	105	10
	Engelke & Bigelow	Freight and draying	106	39
	Murray City Coal Co	Coal	107	82
	Frank L. Sikes	Costs O. S. U. vs. Cup-	1	1
		pett & Webb	108	31
	John Wanamaker	Books	1 400	4
7	Columbus Street Ry. Co.	Street car tickets	110	5
29	C. B. Guittard	Salary, June, 1899	111	50
	Alexis Cope	Salary, July, 1899	112	187
	C. E. Barnet	" "	113	65

Dat	е	To whom paid	For what purpose	No	Amount
1899	9				
July	29	Edith D. Cockins	Salary, July, 1899	115	\$58 33
		Dennis Clifford	" " "	116	45 00 25 00
		James Kelley	46 44 *****	117	33 33
		Mrs. Edith R. Hubler Frank Ruhlen	** *****	119	60 00
		F. K. Luke	" "	120	50 00
		J. F. Cunningham	44 44	101	50 00
		A. F. Hall	4 4	122	60 00
		A. G. McCall	" "	123	20 00
	-	W. C. McCracken	" "		150 00
	43	C. M. Low	" " "	125	54 17
		Wm. Standley	24 44 *****	107	50 00
		B. LeBay G. A. Rose		100	65 00
		A. Chantler	4 4	100	40 00
		G. A. Goodspeed		100	40 00-
		J. H. Brown		101	40 00-
		D. D. Geren	4 4		40 00
		W. Whitestine	" " "	133	40 00
		H. Chantler		105	40 00
		W. N. Cook	16 14 ****	100	40 00 40 00
		W. Townsel		137	25 00
	11	Laning Printing Co	Bal. due for ptg. cat		35 00
	15	J. McLain Smith	Exp. m't'g com. July 14		
			1899	. 139	7 21
	17	H. W. Johns Mfg. Co	2-30 bbl. red roof paint	140	47 42
	24	Olive B. Jones	1-10 sal. yr. end'g. June		
	29	C. H. Woodruff	30, 1900 1900	141	135 00
	20	Jos. Garretson	Sal. as carp. July, 1899	142	60.001
Aug.	1	T. J. Godfrey	Salary for July, " Expenses as trustee		35 25 8 55 ~
		R. M. Rownd	Postage		15 00
		L. B. Wing	Expenses as trustee	146	5 25
		Webb Sta. & Print. Co.	Stationery, etc	147	28 35
		Cherington P. & E. Co.	Stamps		4 00
		A. N. Marquis & Co Champlin Printing Co	Book		2 94
		Ruggles-Gale Co	Printing	150	44 25
		Central Union Tel. Co	Telephone service	152	9 00 72 75
		Manufac's' O. & G. Co.	Lard	153	14 82
		Grace Eagleson	Clerical work	. 154	3 60
		Tracy-Wells Co	Sundries	. 155	20 97
		American Dist. Tel. Co.	Messenger service		85
		R. J. Seymour Frank Huddleson	44 44 ****	150	20 25
		Thos. F. Hunt	Exps. to San Francisco	158 159	1 18 126 25
		Columbus Bnk. Note Co.	Stationery	160	37 50
		A. H. Smythe	Office supplies	. 161	1 35
		Berlin Printing Co	Printing	. 162	4 50
		Erner & Hopkins	Electric supplies	. 163	1 95
		American Sand Co Marion Peck	Sand		54 10
		Thos. Boude	Labor		36 00
		W. H. Case			22 50 37 50
		Waters Governor Co	Valve		16 66
		McCabe Hang. Mfg. Co. West. Kieley S. S. Co	Bolts	169	18 00
		West, Kieley S. S. Co		170	72 00
		Wheeler C. & Eng. Co.	Tubes	171	8 25
		Bourne & Know's M. Co. New, Col. Bridge Co		172	23 95
		, rien, con Diluge Co	Iron	173	35 58

Date	To whom paid For what purpose		No	Amount
1899				71 - 12 11
Aug. 1	Adams-Bagnall El. Co.	Are lamps	174	\$200 00
	West'gh'se El. Mfg. Co.	Arc lamps Electric machinery	175	500 00
	McDonald Bros	Cesspool	176	60
30	Kelton & Converse	Lumber	177	47 21
	J. C. Howard	Painting, etc	178	92 00
	Frank Watkins	Painting	179	295 00
	Columbus Sewer P. Co.	Flue lining	180	2 2
	A. F. Fenstermaker	Painting	181	83 00
	Columbus Brass Co	Water closets	182	119 73
	J. W. Cawthon	Carpentry	183	15 7 15 7
2.	J. W. Schneider M. B. Geary	4	185	14 5
	Eli Hiatt	"	186	15 7
	J. S. Abbott & Co	Glass	187	16 7
	A. S. W. Huffman	Plumbing	188	40 2
	Harper's Illus. Syndicate	Advertising cuts	189	17 2
	Champlin Printing Co	Printing	190	64 2
	Oberlin Annual	Advertising	191	10 0
	S. C. Derby	Cash advanced	192	69 2
**)	J. C. Perry	Labor	193	10 5
	F. E. Fleischer	·	194	25 2
	Murray City Coal Co	Coal	195	10 9
	L. L. Hill	Clerical work	196	13 0
	Standard Disinfect. Co. Warren & S'th'k C. Co.	Sheep dip	197 198	2 5 9 0
41	A. A. Hall	B'd'g and breeding cows	199	32 0
	Blackwood, Green & Co.	Hardware	200	41 9
	Jacob Weisheimer	Corn	201	22 3
	Glucose Sugar Ref. Co.	Gluten meal	202	19 5
	Nitschke Bros	Envelopes, etc	203	5 1
All the same of	Kemp & Burpee Mfg. Co.	Repairs	204	4 3
	Franklin Toil. Sup. Co.	Laundering	205	2 1
	Capital City Mach, Wks.	Tools and machinery	206	7 3
	John Immel & Son	Repairs	207	9 1
	W. O. Thompson	Expenses as president	208	70 2
	Creamery Pack Mfg. Co.	Dairy supplies	209	81 8
	W. H. Siebert	Model of brain	210 211	10 0
	Clara Armstrong Karl Kellerman	Labor on herbarium	212	9 1
KFO - N	L. C. Riddle	u u	213	28 (
	Payne, McD. Hdw. Co.		214	21
	Lena Dennis	Labor	215	5 (
	Central Ohio Paper Co.	Paper	216	37 8
	W. A. Kellerman	Cash advanced	217	49
	W. R. Beattie	Labor on herbarium	218	10 (
	Emma Beattie	" " "	219	24 (
100	Harriet G. Burr	****	220	11
	Edna Armstrong		221	24
	Freda Detmers	1111	- MAN	8
	J. H. Randall	Carpentry	223 224	52
	Mabel Huddleson		225	4
	A. F. Fenstermaker		226	50
471	Wm. Burdell, Jr	Roll and truss	227	4
	Hann & Adair	Printing	228	13
	Schoedinger, F. & Co.	Tools		2
	Geo. D. Cross Lum. Co	Lumber	230	32
	D. S. White	Cash advanced	231	11
	T. L. Griffin	Clerical work	- 232	30
	W. H. Hoskins	Advertising	233 234	8 12
	Wm. Burdell, Jr			

-				
Date	To whom paid	For what purpose	No	Amount
1899				
Aug. 1	Columbus Supply Co	Hardware supplies	236	\$419 14
	H. Braun Sons & Co	Drugs & surg. inst'm't's	237	16 83
	Bausch & Lomb Opt. Co.	Optical parts	238	2 88
	E. L. Moseley	Bird skins	239	58 30
	Bauer & Baumeister	Repairs	240	3 50
	Col. Mill & Mine S. Co. Engelke & Bigelow	Hardware	241 242	58 80 33 04
	Fred J. Heer	Freight and draying	243	240 00
	Bucher Engraving Co	Printing	244	96 82
1	A. A. Griffing Iron Co. J. P. Covan	Radiators	245	61 01
	J. P. Covan	Labor	246	55 25
	Columbus Gas Co	Gas	247	52 43
	Lutheran Book Concern. R. M. Rownd, P. M	Paper & covers for cat. Postage	248 249	75 00 20 00
15	James B Loff	Labor	250	6 60
16	James B. Loff	Postage	251	16 00
22	W. O. Thompson	Salary, August, 1899	252	416 67
- 00	Alexis Cope	Salary August 1899	253	187 50
26	C. E. Barnet.	" "	254	65 00
	Jean Blackford W. C. McCracken	" " "	255 256	54 17 150 00
	J. Covan		257	150 00 70 00
	G. A. Rose	44 44	258	65 00
	F. Ruhlen		259	60 00
	A. F. Hall	u u	260	60 00
	Edith D. Cockins	****	261	58 33
	F. K. Luke	11 11	262 263	54 17 50 00
	I. F. Cunningham	- " " " " " " " " " " " " " " " " " " "	264	50 00
	J. F. Cunningham W. Standley	# #	265	50 00
	B. LeBay		266	50 00
	A. Chantler		267	40 00
	G. A. Goodspeed	*****	268	40 00
	J. H. Brown D. D. Geren		269	40 00
	W. Whitestine	46 46	271	40 00
	H. Chantler	44 44	272	40 00
	G. C. Denny	a a	273	40 00
	M. N. Cook	*****	274	40 00
	W. Townsel		275 276	25 00 25 00
	Mrs. E. R. Hubler		277	25 00 33 33
	A. G. McCall	44 44	278	20 00
	Dennis Clifford	4 4	279	8 71
	E. M. Smothers	*****	280	20 32
	Benj. Irwin	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	281	15 97
25	Joe. Garretson	September wages	282 283	40 50 53 50
26	Clinton Schaeffer	Carpentry	284	18 00
	J. W. Schneider	4	285	38 75
	M. B. Geary		286	11 75
	Eli Hiatt	**********	287	38 75
	J. W. Cawthon		288	38 75
	William Bechel C. H. Woodruff	Salary as carp. Aug. '99.	289 290	18 00 65 00
Sept. 5	L. B. Wing	Expenses as trustee	291	2 00
	T. J. Godfrey		292	5 00
	Von Gerichten A. G. Co.	Glass	293	20 00

			- 1	
Date	To whom paid	For what purpose	No	Amount
1899				T. Limit
Sept. 5	A. H. Andrews & Co   Wm. M. Taylor Mantel	Slating	294	\$8 0
	and Grate Co	Mantel	295	135 0
	Frank Watkins	Painting	296	65 6
	J. C. Howard	0:1	297	29 2
	Jas. S. Schofield A. L. Yardley	Oil	299	5 (
	Brust & Bauch	Masonry	300	42
	Columbus Brass Co	Castings	301	98 8
	The Hanna Pt. Mfg. Co.	Bronze	302	5 8
	T. S. Edgington	Papering	303	15 51
	Western Kieley S. S. Co. Lewis Fink	Painting	305	131
	J. H. Ridgway	Taxidermy	306	. 37
	Batterson Decor. House.	Decorating	307	248
	Western Union Tel. Co.	Telegraph service	308	10
	F. C. McKinney	Guide and messenger	309	20
	H. S. King	Guide work	310	5
	E. H. Moore	"	312	5
	K. G. Thompson	"	313	3
	M. F. Osborn	*********	314	3
	H. T. Osborn	*********	315 316	3
	Merle Rickett The Webb Sta. & Pr. Co.	Office supplies	317	4
	R. L. Polk & Co	City directory	318	5
	Central Union Tel. Co	Telephone service	319	
	Orvis & Marshall	Mimeograph ink	320	
	D. H. Derflinger	Gasoline	321 322	23
	Standard Oil Co India Alkali Works	Oil	323	18
	American Dist. Tel. Co.	Alarm boxes	324	32
	Bourne & Knowles	Gaskets	325	1
	Jos. Dixon Crucible Co.	Graphite	326	6
	H. Braun Sons & Co Col. Mill & Mine S. Co.	Hardware	327 328	10
	Scioto Boiler Works	Breeching and heater	329	137
	Thos. Boude	Labor	330	40
	M. Peck	"	331	40
	W. H. Case	***************************************	332	39
	Col. Wire & Iron Wks. Palmer & Beck	Wire guards	333	31 173
	Electric Appliance Co	Electric apparatus	335	33
	W. T. Magruder	Cash advanced	1 000	12
	Cherrington P. & E. Co.	Rubber type	337	4
	A. H. Smythe	Labels	338	10
	J. S. Maclean	Drawers Labor	339 340	58
	E. H. Bailey	Janitoring		25
	Burr Waters	"	ALLA	9
	A. E. Adair	Masonry		4
	P. M. Griffin	Samples of woods		5 29
	Brown & Sharpe Mf, Co.			12
20	Columbus Supply Co			97
5	J. S. Maclean	Lumber	348	18
	Central Ohio Paper Co.			3
	McClelland & Co			3 2
	J. G. Biddle J. P. Covan	1		6
	Lincoln Electric Co	Electric machinery		349

STATEMENT II — Continued.						
Date	To whom paid	For what purpose	No	Amount		
1899						
Sept. 5	Acme Paving Co	Paving	354	\$80 08		
	Erner & Hopkins	Electric supplies	355	19 69		
	M. P. Streett	Masonry	356	135 31		
	Springfield Gas Eng. Co.	Gas engine	357	36 85 150 00		
	Fitzpatrick & Hoepfner.	Connecting gas engine.	359	23 63		
	J. A. Brashear	Spectroscope	360	200 00		
	J. F. Donahue & Co	Hardware	361	6 17		
	Library Bureau Schoedinger, F'rn. & Co.	Cards	362 363	6 00 7 88		
	Bausch & Lomb Opt. Co.	Mica	364	2 94		
	Sheppard & Co	Labels	365	2 25		
	E. T. Jenks	Locks	366	8 00		
	Freda Detmers	Labor on herbarium	367	10 00 7 15		
	Kelton & Converse	Lumber	368 369	105 02		
	Karl Kellerman	Labor		10 20		
	L. C. Riddle	" on herbarium	371	6 30		
	Nitschke Bros	Stationery, etc	372	18 90		
	De Laval Separator Co. Laura L. Hill	Repairs	373	3 20 14 00		
	A. F. Wilcox	Labor	375	261 82		
	Blackwood, Green & Co.	Hardware	376	108 75		
	James Penn	Carting	377	27 70		
	Sells & Co	Feed	378	15 00		
	L. Hoster Brewing Co A. W. Livingston's Sons.	Sprouts	379 380	5 02 10 65		
	Jacob Weisheimer	Corn	381	23 35		
	Columbus Sewer P. Co.	Pipe	382	13 43		
	E. D. Heller	Labor	383	25 37		
	J. C. Perry		384	32 58 8 75		
	J. H. Burgess	"	385 386	15 34		
	F. E. Fleischer	"	387	27 62		
	C. Schaffer	Carpentry	388	40 25		
	M. J. Snow	Labor	389	33 62		
4	A. F. Fenstermaker J. H. Randall	Painting, etc	390 391	157 72		
	O. S. Lear	Typewriter and neostyle	392	122 75		
	Fay & Scott	Lathe	393	145 35		
	Metta L. Seymour	Clerical work	394	7 25		
	R. A. McClure E. Kaiser	Sundries	395 396	131 13 1 48		
	Herbert Osborn	Cash advanced	397	3 45		
	Edward Orton, Sr	"	398	10 95		
	The Fish Stone Co	Labor and stone	399	11 50		
	Spahr & Glenn Krauss, Butler & B. Co.	Printing	400	2 50 110 67		
	Champlin Printing Co	Printing		5 25		
	Hann & Adair	"	403	1 85		
	Lawrence Press Co	Vouchers	404	8 00		
	Christian World Co	Advertising	405	4 78 15 00		
	Republican Publish. Co. O. T. Corson	"	407	22 50		
	Moufort & Co	"	408	14 00		
	Curts & Jennings			16 80		
	The Interior	********	410	22 68		
	Murray City Coal Co	Coal	411	3 08 44 52		
	E. A. Cole & Co	"	413	2 94		
	W. F. Lavery	Extra services	414	27 00		

Date	To whom paid	For wh	at purp	ose	No	Amount
1899		1111		No. 1		
ept. 5	J. L. Trauger	Binding		. August	415	\$0 6
	Keasbey & Mattison Co.	Magnabes	tos		416	121 7
	Engelke & Bigelow	Freight a	nd carti	ng	417	55 9
	E. Doddington & Co	Lumber .			418	249 2
	Tallmadge Hardware Co.	Hardware			419	123 3
	W. C. Mills	Sal., July	and Au	g., '99	420	70 0
00	Columbus Gas Co	Gas			421	39 0
30	W. O. Thompson	Salary, Se	ept., 189	99	422	416 6
23.	Alexis Cope		44		423	187 5
30	C. E. Barnet		"	*****	424	65 0
and the same of	Jean Blackford	44	16		425	54 1
	E. E. Harrold	"	1	*****	426	90 0
	T. F. Hunt		44		427	250 0
		- "	a	*****	428	250 0
	W. F. Hunter	44	44		429	250 0
	C. N. Brown	**	а		430	225 0
	A. C. Barrows	**			431	225 0
F-20 Y 51	R. D. Bohannan		**		432	225 0
200	B. L. Bowen	"	ii		433	225 0
the name of the last	S. C. Derby	**	11		434	225 0
ST 1980	J. V. Denney	44.	- 11	*****	435	225 0
	E. A. Eggers	16	**	*****	436	225 0 225 0
112	J. P. Gordy	44		****	438	225 0 225 0
13	W. A. Kellerman	44	ir		439	225 0
30	W. R. Lazenby	a	44.		440	225 0
3000	Wm. McPherson	44	a		441	225 0
700	W. T. Magruder	46	11		442	225 0
	H. Osborn	46	44		443	225 0
Will I	J. R. Smith	- 11	44		444	225 0
	W. H. Scott	"			445	225 0
A 50 18 18 18 18 18 18 18 18 18 18 18 18 18	B. F. Thomas	**	- 11		446	225 0
10	H. A. Weber	u	"		447	225 0
13	N. W. Lord	11	- 44	20.000	448	200 0
90	F. A. Ray	11	11		449	200 0
	G. B. Kauffman E. Orton, Ir.	44	**		450	200 0
		"	- 11	*****	451	180 0
	J. N. Bradford F. E. Sanborn	de		*****	452	180 0
	H. C. Lord	44		22.444	453	180 0
	F. C. Clark	44	44	****	454	160 0
Mark Co.	G. W. McCoard	- 11	и	*****	455	160 0
POST TO	C. P. Linhart	" "	44		456	160 0
	D. S. White	44	it	*****	457	160 0
Emple of	F. C. Caldwell	- 11	u	*****	458 459	160 0
	Edward Orton	44	a		460	160 0 150 0
	E. A. Hitchcock	15	- 11	N 10 5 1 7 1 10 10 10 10 10 10 10 10 10 10 10 10 1	461	150 0
	C. S. Prosser	- 44	u		462	150 0
	W. D. Gibbs	46	11	*****	463	160 0
	P. G. Bowman.	11	66		464	140 0
	W. H. Page		16.		465	140 0
	W. H. Siebert	- 44	**	*****	466	135 0
1007	S. A. Norton		44		467	120 0
A PERE	E. B. Kinkead	66	"		468	120 0
11 17 4 17	J. E. Boyd C. E. Sherman	66	"	****	469	120 0
	C. E. Sherman	11	**		470	110 0
F 112 - 17	T. E. French		4	*****	471	110 0
The state of the s	J. R. Taylor C. W. Mesloh	11	**	*****	472	110 0
V 100 100 100	C. W. Mesloh A. W. Hodgman	**	26		473	110 0
AND REAL PROPERTY.	J. H. Schaffner				474	110 0

Date	To whom paid	For	what purp	ose	No	Amount
1899		The state of the s				
Sept. 30	W. E. Henderson	Salary.	Sept., 189	99	476	\$100 0
	J. A. Bownocker		14		477	100 0
	W. A. Knight	"			478	100 0
	C. L. Arnold	- 4	"	*****	479	100 0
23	K. D. Swartzel	- 44	"		480	100 0
30	C. B. Morrey	- 44	"		481	100 0
30	W. L. Graves C. A. Bruce		. "	*****	482	100 0
	Geo. H. McKnight	a	**	****	483	100 0
	Wm. Renck	- 14	44	****	484 485	90 0 85 0
	J. S. Hine	66	46	*****	486	85 0
	F. L. Landacre		- 46	*****	487	85 0
	C. P. Crowe	- 11			488	80 0
00	A. E. Vinson	46	"		489	80 0
23 30	C. P. Souther	44			490	80 (
	F. E. Kester	"	- 44		491	80 0
	Mrs. Jas. A. Canfield	"	- 44	*****	492	75 (
	E. O. Randall	44	"		493	70 0
		- 11			494	70 6
	W. A. Landacre W. F. Lavery	11	- 44	*****	495	70 0
	C. B. Frederick	14	16		496	70 0
	Jno. B. Sanborn	16	- (1		497	70 6 70 6
	E. E. Somermeier	. 86			499	70 0
	T. K. Lewis	46	46		500	60 (
	F. A. Fish	.44	14		501	60 0
	O. V. Brumley	44			502	50 (
	S. W. Martin	"			503	50 (
	A. V. Bleiminger	- "		*****	504	40 (
	J. B. Parker	44	44	*****	505	30 (
	Grace L. Pitts	**			506	- 30 (
	M. Dresbach		**	****	507	30 (
	D. A. Kohr H. C. Gore	44.		*****	508	60 (
	J. H. Vosskuehler	44	44.		509	30 (
	A. H. McIntire	44	- 44	****	510 511	30 ( 30 (
	E. L. Ball	- 65	44	*****	512	30 (
	J. W. Young	- 64	66		513	30 (
	F. J. Hale	**	**		514	30 (
	S. W. Collett				515	25 (
	H. W. Brown	"			516	25 (
	J. H. Collins	44	4		517	20 0
	J. A. Shauck	44	44		518	17 5
	E. H. Bailey R. E. McIntosh	- 11			519	15 (
		**			520	12 5
	W. C. McCracken J. P. Covan	ii ii	- 11	* * * * *	521	150 0
	G. A. Rose.	- 11	44	*****	522	70 6
Part of	F. Ruhlen	64	10	*****	524	65 (
	A. F. Hall	44			525	60 (
	E. D. Cockins	-v a	- 14		526	58 5
	C. B. Guittard	44			527	55 (
	H. N. Townshend	-11	ii.		528	55 0
	G. S. Kellicott	"	**		529	55 (
	M. D. Jeffrey	44	"		530	55 (
	Lucy Allen	- 41	- 11		531	55 (
	C. M. Low	44	11		532	54 1
	F. K. Luke	44	11		533	50 (
	H. C. Price	**	10	*****	534	50 (
	Wm. Standley B. LeBay	- 11	111111111111111111111111111111111111111		535	50 0

## ANNUAL REPORT

Date	To whom paid	For what purpose	No	Amount
1899				
Sept. 30	D. C. Huddleson	Salary, Sept., 1899	537	\$50 00
	T. Boude		538	45 00
Oct. 28	W. H. Case	Salary, October, 1899	539	45 00
Sept. 30	M. Peck	Salary, Sept., 1899	540	40 00
	A. Chantler		541	43 33
	G. A. Goodspeed		542	40 00
	J. H. Brown D. D. Geren	m' " " " " " " " " " " " " " " " " " " "	543	40 00
	W. Whitestine		544	40 00
	H. Chantler	" " " " " " " " " " " " " " " " " " " "	546	40 00 40 00
	G. C. Denny	" "	547	40 00
	M. N. Cook	" "	548	40 00
16	Dennis Clifford	" " "	549	8 00
30	W. Townsel	" "	550	25 00
	J. C. Perry		551	12 50
	Mrs. E. R. Hubler	" " "	552	33 33
	James Kelley		553	25 00
	Benj. Irwin	4 4 *****	554	45 00
	W. C. Weir		555	20 00
	W. C. Mills	" " "	556	20 00
9	W. C. Conklin	Extra jan. serv's (meet-	557	35 00
	The Committee of the Co	ing A. A. A. S.) 18 d'ys	558	23 23
11	Edw. Orton, Pres. A. A.	Con. to exp's. of m't'g.	000	20 20
	A. S	Aug. 19-26, 1899	559	500 00
18	Wm. Parks	Labor	560	5 00
	Wm. Cannan	Ceramics scholars'p fees	561	12 50
	Addie Lucas	Labor	562	7 50
10	Geo. Lucas	"	563	2 50
19	Lily Weeks	,	564	5 00
20	Lizzie Keenan	4	565	5 00
25	Mrs. Helen Keenan		566	6 25
20	J. McLain Smith Lily Weeks	Expenses as trustee	567	8 21
30	Earl Conway	Sal., Sep., '99 (20 days)	568 569	5 00
	Alice Dufour	Salary, Sept., 1899	570	13 33 25 00
	C. F. Dowd	" sepan, "	571	20 00
	H. W. Kennedy	Emerson McMillin fel-	0.2	20 00
		lowship in astronomy.	572	30 00
	Wm. Cannan	Ceramics scholarship	573	20 00
	W. E. Mann	Em. McMillin scholar-		
		ship in economics	574	25 00
	F. M. Hamilton	Salary, Sept., 1899	575	80 00
	W. C. Conklin	4 ,	576	40 00
	C. A. Grate H. C. Allen	4 4	577	30 00
29	Mrs. M. J. Kellenberger.	Serv. dept. dom. econ.	578	115 00
30	F. O. Clements	Salary Sept 1800	579 580	20 00 30 00
	J. F. Jeffrey	Salary, Sept., 1899	581	10 00
Oct. 2	Dennis Clifford	Cleaning buildings	582	32 26
	Joe Garretson	Salary, Sept., 1899	583	37 50
	Lily Weeks	Labor	584	5 00
3	R. M. Rownd, P. M	Postage	585	51 80
4	L. B. Wing	Ex. m't'g of b'd & com.	586	7 30
	F. C. Caldwell	Cash advanced as per	-	
	Carl Fraise	receipt filed	587	232 75
5	Carl Freigan	Books	588	7 00
	Publishers' Weekly Chas. Bryson	Trade list	589	2 00
	D. Appleton & Co	Repairing chairs	590	29 65
	Amer. Jour. of Physiol.	Book	591	5 00
	Thirt. Jour. Of Physiol.	TOOK	592	5 00

Date	To whom paid	For what purpose	No	Amount
1899		HE WAS TO SHARE		
Oct. 5	Library Bureau	Blank book	593	\$8 50
	Psychological Review	Book	594	3 00
	Ira Miller	Notarial work	595	3 60
	A. H. Smythe	Let. files, paste, brushes	596 597	3 90 1 13
	Olive Jones	Cash advanced	598	1 25
	Burham Ant. Book Store	Books	599	5 00
	F. E. Inskeep	"	600	7 50
	S. A. Norton	"	601	55 00
	W. Morelan	Carpentry	602	1 00
	Mabel Huddleson	Work in library	603	7 00
	Boston Book Co	Books	604	57 00
	G. E. Stechert Seraphim Bl'nk, Bk, Co.	Binding	605	410 52 210 65
	E. H. Bailey	Labor	607	17 10
	E. G. Bailey	4	608	9 69
	D. L. Auld	Engraving	609	95
	Columbus Brass Co	Fixtures	610	1 75
	A. E. Adair	Masonry	611	4 50
	Columbus Sewer P. Co.	Cement	612	96
	W. T. Magruder	Cash advanced	613	37 28
	L. S. Starrett Co	Tools	614	21 73 5 70
	Crosby St. G. & V. Co.	Gage	615	32 50
1.	J. S. Maclean L. S. Wells	Book-case	617	5 2
	H. F. Whickham	Specimens	618	5 00
	Gold Mine Stores	Dry goods	619	5 1
	H. Osborn	Cash advanced	620	38 75
	DeLaval Separator Co	Rope Belts	621	1 75
	Creamery Package Co	Dairy Supplies	622	23 66
	Sells & Co	Feed	623	37 18
	H. A. Coe	Hulling clover seed	624	15 00 13 00
	L. L. Hill O. V. Brumley	Labor	625 626	13 00 10 00
	H. J. Hammond	"	627	3 6
-	H. Braun Sons & Co	Drugs, etc	628	13 7
	Spahr & Glenn	Paper and printing	629	11 1
0.00	Livingston Seed Co	Seeds	630	36 0
	Franklin Toil. Sup. Co.	Laundering		6 3
	M. L. Seymour	Clerical work	632	3 59
	W. A. Kellerman	Cash advanced	633	15 1 2 7
	James Penn L. A. Bowman	Draying	a market	35 00
	W. E. Case	Apparatus		38 2
	Bourne & Kn'w's Mf. Co.		E COLUMN	1.8
1	J. M. & W. Westwater		000	3 5
	Jeffrey Mfg. Co	Chain and wheels		5.0
	Capital City Mach. Wks.	Castings		56 4
	Columbus Gas. Co			80 8
	Sipe & Sigler	Bells	642	2 5
	B. B. Wells			15 4 2 6
	Hanna Paint Mfg. Co M. C. Hunter		0.10	9 7
	G. M. Berndroth	"		12 0
	Wm. Erdman	"	0.00	8 5
	Hall-Collins Hdw. Co	Hardware	648	12 0
	W. A. Knight	Cash advanced	649	3 4
100	W. A. Knight F. E. Sanborn		650	2 7
	Columbus Varnish Co.	Alcohol		10 3
	W. H. Anderson & Co.			22 5
	F. Charles	Draying	653	5 0

Date	To whom paid	For what purpose	No	Amount	
1899					
Oct. 5	Cherrington P. & E. Co.	Stamp and pad	654	\$2 78	
	W. J. Davidson	Draying	655	50	
	T. J. Dundon & Co	Sawdust	656	3 00	
	T. J. Dundon & Co J. S. Maclean	Lumber	657	11 2	
	r. J. Heer	Electrotypes	658	5(	
0.	renna. ruel Co	Coal	659	4 40	
	P. Hayden S. Hdw. Co.	Hardware	660	50 0:	
	J. G. Pulling & Co	Pump parts	661	10 00	
	Chicago L. S. & S. Co.	Coke	662	14 10	
	Samuel Butler & Co	Soan	663	102 10	
	Columbus Supply Co	Soap	664	22 50 201 48	
	Kood Lumber Co	Lumber	666	25 0	
	Burrows Bros. Co.	Books	667	240 61	
	R. W. Funk.	Labor	668	28 58	
	F. O. Clements.	46	669	8 0	
	L. A. Harsh & Co.	Mop wringer pail	670	6 0	
	J. S. Schofield	Oil	671	2.5	
	Moneypenny-Ham'd, Co.	Sapolio	672	9.0	
	Standard Oil Co	Oil	673	8 7	
	Erner & Hopkins	Electrical apparatus	674	4 8	
	G. T. Johnson Bucher Eng. Co	Toilet paper	675	37 5	
	C. W. Bryant.	Etching	676	2 0	
	Samuel Smith	Cleaning vaults	677	38 0	
	R. I. Fulton	Sapolio	678	10 0	
	Col. Pharmacal Co	Oint jars	680	5 0	
	J. C. Beard	Lettering	681	3 0	
	Nitschke Bros	Rubber bands	682	1 8	
	E. H. Moore	Guide service	683	3 1	
	J. H. Burgess		684	3'	
	Annie McLaughlin	Work on class records	685	6 8	
	H. R. Powell		686	4 9	
	Grace Eagleson F. J. Pavlicek	Clerical work	687	4 9	
	C. C. Wilcox.	Guide service	688 1	3 7	
	C. R. Hambleton		689	3 9	
	F. C. Long	4 ********	690	3 8	
	C. F. Johnson		691	1 2 1 8	
	F. C. McKinney.	**	693	9 1	
	M. Snow	"	694	10 0	
	Miller Furniture Co	Furniture	695	62 9	
	Schoedinger, Frn & Co.	Hardware	696-	13 9	
	Hasbrook, Barger Co	Dishes	697	5 9	
	F. E. Flescher	Labor	698	6 7	
	Eaton Machine Works McClelland & Co	Locker parts and drills	699	7.8	
	Bausch & Lomb Opt. Co.	Office supplies	700	19 2	
	Krauss, Butler & B. Co.	supplies	701	466 1	
	Col. Transfer Co	Shades	702	30 0	
	Webb Sta. & Ptg. Co	Use of wagon	703	9 0	
	U. B. Publishing House	Advertising	705	22 5 15 1	
	Ohio State Journal Co.	" " " " " " " " " " " " " " " " " " "	706	6 0	
	Champlin Printing Co.	Printing	707	255 5	
	Murray City Coal Co	Coal	708	142 9	
	H. W. Johns Mfg. Co	Paints	709	6 8	
	Charles Vogel	Labor	710	6 2	
	Vogelgesang Furn, Co.	Repairs	711	63 2	
	L. Fink	Papering	712	23 0	
	W. R. Beattie	Labor	713	8 1	

Date	To whom paid	For what purpose	No	Amount
1900				75
Oct. 5	J. C. Perry	Tabor	714	\$10 95
Oct. 0	Kelton & Converse	Lumber	715	269 06
	Central Ohio Paper Co.	Paper	716	114 40
	P. A. Fenstermaker	Painting, etc	717	47 86
	J. W. Cawthorn	Carpentry	718	42 75
	F. Fleischer	Labor	719	8 70
	Col. Paint Mfg. Co	Paint	720	28 66
	Col. Supply Co	Hardware	721	247 51
	Col. Wire and Iron Wks.	Wire guards	722	29 40
	Masury. Young & Co	Oil	723	30 00
	B. D. Potts	Hardware	724	86 50
	Palmer & Beck	Roofing	725	105 11
	Tallmadge Hardw. Co	Hardware	726	79 21
	E. Doddington & Co	Lumber	727	280 94
	M. P. Street	Masonry	728	6 75
	J. J. Gheen	Plastering	729	84 15
	E. F. Moore	Labor	730	2 02
	Rilen Masters	Man and team	731	2 40
	A. F. Wilcox	Labor	732	14 25
	W. Morelan	Carpentry	733	9 00
	J. C. Howard	Painting	734	2 55
	J. H. Randall	Carpentry	735	26 75
	J. H. Schaeffer		736	39 00
SQL SHEW	L. Schaeffer	"	737	17 50
	C. Shaffer		738	31 00
	Sheppard & Co	Printing	739	2 00
	C. N. Mooney	Labor	740	10 50
	W. E. Mann	Labor	741	11 55
	P. F. Yoerger	Painting	742	2 00
	Curts & Jennings	Advertising	743	15 12
	Ruggles-Gale Co	Mounting maps, etc	744	4 70
	Col. P. & W. Glass Co.	Glass	745	3 75
	C. B. Morrey	Platinum crucible	746	12.00
	Tracy-Wells & Co	Tags	747	11 20
	Hann & Adair	Printing	748	53 14
	Blackwood, Green & Co.	Hardware	749	31 28
	Kimball & Matthews	Photo supplies	750	162 46
	Mallinckrodt Chem. Wks.	Acids	751	124 31
	W. H. Mullins	Castings	752	9 00
	Green, Joyce & Co	Towels	753	63 00
	H. Troemner	Repairing balances	754	52 75
	Kauffman, Lattimer Co.	Chemical apparatus	755	686 79
	Col. Mill & M. S. Co	Hardware	756	25 88
DI TILL	Engelke & Bigelow	Freight and draying	757	49 10
	J. W. Groves	Salary, Sept., 1899	758	50 00
9	L. Weeks	Work in gymnasium	759	- 5 00
15	C. E. Barnett		760	32 50
12	Sherwood Mfg. Co	Cleaners and cutters	761	37 24
14	Ohio National Bank	Foreign bill exchange	762	11 35
	Ohio National Bank	"	763	21 85
	Ohio National Bank	# # 21.	764	59 90
16	L. Weeks	Services as maid	765	5 00
28	W. O. Thompson	Salary, Oct., 1899	766	416 67
	Alexis Cope	21111	767	187 50
	C. E. Steeb	" " " " " " " " " " " " " " " " " " " "	768	37 50
	J. Blackford	" " "	T POO	54 17
23	E. D. Cockins	" " " " " " " " " " " " " " " " " " " "	770	58 33
	T. F. Hunt	" " "	771	250 00
	G. W. Knight		100 mm Ch	250 00
	W. F. Hunter		773	250 00
	A. M. Bleile	# "		225 00

		NI II—			1
Date	To whom paid	For	what purpose	N	o Amount
1899					
Oct. 28	C. N. Brown	Salary,	Oct., 1899	77	75 \$225 00
	A. C. Barrows	**	4.6	77	
	R. D. Bohannon	44.		77	77 225 00
	B. L. Bowen	**		77	78 225 00
	S. C. Derby	"		77	
- +	J. V. Denney			78	
	E. A. Eggers	"	"	78	
	J. P. Gordy	44		78	
		**		78	
	W. R. Lazenby Wm. McPherson	45	"	78	
	Wm. McPherson W. T. Magruder	44		78	
		44	+_ 4	78	
	J. R. Smith	46		78	
	W. H. Scott	**	66	78	
	B. F. Thomas	44	44	78	
	H. A. Weber	44	66	79	
	N. W. Lord	44	46	70	200 000
	F. A. Ray	44	44	70	
	G. B. Kauffman	44	44	70	
	Ed. Orton, Jr	44.	"	79	
	J. N. Bradford	46	"	770	
	F. E. Sanborn	- 66	44	79	
	H. C. Lord	44	11	79	
	F. C. Clark	44	66	79	
	G. W. McCoard	44	44	80	
	C. P. Linhart	**	44	80	
	D. S. White	44	46	80	
	F. C. Caldwell	a	44	80	
	Ed. Orton	**	66	80	
	E. A. Hitchcock	44	"	80	
	C. S. Prosser	- 44	"	80	
	W. D. Gibbs	44		80	07 160 00
	P. G. Bowen	44		80	08   140 00
	W. H. Page	"		80	09 140 00
	W. H. Siebert			81	10 135 00
	O. B. Jones	"	"	81	100
	S. A. Norton E. B. Kinkead	u		81	
		u		81	
		**	"	81	
	H. C. Allen C. E. Sherman	**	"	81	200 000
	T. E. French	44		81	
	J. R. Taylor	66	44	81	
	C. W. Mesloh		" "	81	
	A. W. Hodgman	86	" "	81	
	J. H. Schaffner	44	44	82	24 200 00
	W. E. Henderson	44	er .	00	
	J. A. Bownocker	"	44.	90	
	W. A. Knight	66	44	82	
	C. L. Arnold	**	- 66	00	
	K. D. Swartzel	**	66	82	
	C. B. Morrey	11	66	82	
	W. L. Graves	66	"	82	
	C. A. Bruce	"	"	82	
	F. M. Hamilton	**	"	88	
	Geo. H. McKnight	u	"	88	
	Wm. Renck	**	"	88	
	J. S. Hine	"	"	88	
	F. L. Landacre	"	"		85 00
	C. P. Crowe	1 11	44		80 00

Date	To whom paid	For wh	at purpose		No	Amount
1899		-		-41		
et. 28	A. E. Vinson	Salary, O	ct., 1899.		836	\$80
	Col. Water Works	Water ren	ts		837	422
	F. E. Kester	Salary, O	ct., 1899.		838	80
	Mrs. James Canfield	11	11		839	75
	E. O. Randall	46	44		840	70 (
	D. F. Pugh	66	4.6		841	70 (
	W. A. Landacre	46	66		842	70 (
	W. F. Lavery	44	44		843	70 (
	C. B. Frederick	- 44	44		844	70 (
	John B. Sanborn	-66	44		845	70 (
	E. E. Somermeier	44	-60		846	70 (
	T. K. Lewis	44	66	000	847	60 (
	F. A. Fish	11 61	11		848	60
	C. B. Guittard	44	24		849	55 (
	H. N. Townshend	.44	44		850	55 (
	G. S. Kellicott	12	46		851	55 (
	Maude D. Jeffrey	44	64.		852	55
	Lucy Allen	44	66		853	55 (
	O. V. Brumley	44	- 66		854	50 (
	S. W. Martin	44	66		855	50 (
	D. C. Huddleson	**	44		856	50 (
	A. V. Bleininger	a	46		857	40 (
	J. B. Parker		66		858	30
	M. Dresbach	44	44		859	30 (
	F. O. Clements	11	. 44		860	45 (
	H. C. Gore	44	44		861	30 (
	J. H. Vosskuehler	46	44		862	30 (
	A. H. McIntire	44	66		863	30 (
	E. L. Ball	14	44		864	30 (
	J. W. Young	44	44		865	30 (
	C. A. Grate	44	44		866	30 (
	F. J. Hale	16	4		867	30 (
	S. W. Collett	16	4.4		868	25 (
	H. W. Brown	44	24		869	25 (
	J. H. Collins	44	44		870	20 (
	J. A. Shauck		. 64		871	17 !
	E. H. Bailey	44	66		872	15 (
	R. E. McIntosh	ii	66		873	12 !
	W. C. McCracken	44			874	150 (
	E. E. Harrold	"	44		875	90 (
	J. P. Covan	"	44		876	70 (
	G. R. Rose	44			877	65 (
	F. Ruhlen	**	# .		878	60 (
	A. F. Hall	"	"		879	60 (
	C. M. Low	"	**		880	54
	F. K. Luke	"	16		881	50 (
	H. C. Price	и			882	50 (
	W. Standley	u			883	50 (
	B. LeBay	**	44		884	50 (
32.	1. Boude	44	"		885	45 (
	M. Peck	**	"		886	40 (
	A. Chantler	"	"		887	45 (
	G. A. Goodspeed	**			888	40 (
	J. H. Brown	44	* "		889	40 (
	D. D. Geren	"	".		890	40 (
	W. W. Whitestine				891	40 (
	H. Chantler	"	"		892	40 (
100	G. C. Denny	"	" .		893	40 (
	M. N. Cook W. C. Conklin	46	"		894	40 (
					895	40 (

_	STATEMENT II — Continued.					
Date	To whom paid	For what purpose	No	Amount		
1899						
Oct. 28		Salary, Oct., 1899	897	\$25 00		
	J. C. Perry		898	12 50		
The same	J. Garrettson		899 900	37 50 45 00		
	James Kelly	" "	901	25 00		
	Mrs. E. R. Hubler W. C. Weir	44 44 4.4.4.4	902	33 33		
	A., G. McCall		903	20 00 20 00		
	W. E. Mann	12 44	905	25 00		
	H. W. Kennedy		906	30 00		
	Wm. Cannan		907	20 00 35 00		
	Alice Dufour	" "	909	25 00		
	Grace Pitts	" " "	910	30 00		
	C. L. Dowd Earl Conway		911	20 00 20 00		
	N. P. Oglesby	" "	913	40 00		
	D. A. Kohr		914	60 00		
	J. A. Jeffrey	u u	915 916	10 00 50 00		
23	Flint & Wall'g Mfg. Co.		917	60 43		
9.4	Lily Weeks	Gym. service	918	5 00		
24	Mrs. M. J. Kellenberger	5 weeks' service dept. domestic economy	919	25 00		
- 26	Chas. H. Woodruff	Salary, Oct., 1899	920	65 00		
Nov. 1	Lily Weeks	Labor	921	5 00		
5	R. M. Rownd, P. M Lily Weeks	Postage stamps	922 923	17 00		
10	W. C. Heller & Co	Serv. as jan. gymnasium Steel boxes	924	5 00 7 70		
	Gregory Electric Co	Lamps and switches	925	13 90		
	Sipe & Sigler Kinkade & Liggett	Cells	926	2 77		
	Western Electric Co	Wire screens	927 928	9 40 2 08		
	The Circleville Ice Co	Ice and refrigeration	929	25 00		
	The Ashcroft Mfg. Co Blackwood, Green & Co.	Guage repairs	930	24 25		
	The P. Hayden Saddlery	Tin, tanks, etc	931	30 60		
	and Hdw. Co	Tin and copper	932	53 84		
	The G. B. Schulte S. Co. Wm. Erdman	Steel and shafting	933	19 75		
	O. I. Dick	Student labor	934 935	17 00 4 88		
	G. M. Berndroth	*6 3	936	32 60		
A hard	Hall-Collins Hdw. Co M. C. Hunter	Brads, screws, etc	937	11 44		
	Col. Forge & Iron Co	Anvil	938 939	10 80 6 88		
	Brown & Sharpe Mf. Co.	Rule, device and hob	940	19 34		
	Cleve'd Twist Drill Co. Burr's Damascus T. Co.	Drills	941	7 32		
	The Hasbr'k-Bargar Co.	Tools Dishes and supplies	942 943	19 62 2 78		
	The Alphea Dairy Co	Milk and butter	944	2 85		
	Logan McCormick	Frames	945	11 90		
	J. A. Wallace Palmer & Beck	Lecture	946 947	5 00 20 00		
	Glucose Sugar Ref. Co.	Gluten meal	948	42 40		
	Champlin Printing Co Sells & Co	Printing postals	949	5 15		
	Woodard Photo Co	Feed	950 951	24 53 7 00		
	Deering Harvester Co	Repairs, oil, etc	952	129 37		
Branda	Laura L. Hill Warren-Southw'k C. Co.	Clerical work	953	13 00		
TO VETTON	W. H. Hoskins	Dairy wagon	954 955	200 00 17 50		

Date	To whom paid For what purpose		No	Amount
1899				And the second
Nov. 10	R. L. McClelland	Labor	956	, \$1 2
	D. S. White	Sundries	957	4 7
	A. N. Irwin	Work and supplies	958	28 8
	The Breeders' Gazette	Advertising	959	22 0
	David C. Beggs Co	Shades	960	5 5
	F. A. Ward	Mounting tiger	961	75 0
	Champlin Printing Co E. C. Livenspire	Printing	962	9 5
	The Griswold, Sohl Co.	Hooks, rings, etc	965	2 3
	John Bower	Masoury	964	10 0
	Neely & Converse	Work on coal bin	965 966	18 0 29 8
	Kinkade & Liggett	Work on roof	967	6 4
	Louis Lind	Sewer pipe	968	38 3
	M. P. Streett	Brick and labor	969	224 3
	Fitzpatrick & Hoepfner.	Plumbing	970	38 4
	J. S. Maclean	Material	971	13 0
	P. Hayden SadH. Co.	Castings, stock, etc	972	60 6
	Eimer & Amend	Pumps	973	4 6
	F. O. Schoedinger	Roof	974	46 0
	Borger Bros. & Co	Work on stock	975	24 4
	H. H. Walling	Painting	976	15 5
	J. S. Maclean Edgar B. Fox	Sawdust	977	3 0
	Robert Lawson	Superintending building	978	25 0
	Arthur Watt	Door sills	979 980	3 2
	Borden & Selleck Co	Milk scales	981	26 6 7 0
	Burrows Bros. Co	Zeller Aristotle	982	4 6
	Schilling Foundry Co	Castings	983	. 4
	Nitschke Bros	Envelopes	984	1 4
	John Lawrence	Generator	985	6 5
	Ziegler Elec. Co	Balances	986	5 1
	Andrew Spittal	Work in physics dept	987	69 1
	Lawrence Press Co	Checks, blanks, etc	988	1 7
	A. E. Foote	Pyrolusite	989	3 3
	Baker & Co	Platinum ware	990	149 8
	Hann & Adair	Printing	991	4 5
	The Seraphim B. B. Co.	Books	992	57 0
	Chicago Bl. Pr. Pap. Co. Kimball & Matthews	B. P. paper	993	2 4
	Kauffman, Lattimer Co.	Photo material	994	8 7
	Amer. Aristotype Co	Plates	995	475 0
	Baker & Adamson C. Co.	Chemicals	997	9 7
	Mallinckrodt Chm. Wks.		998	209 7
	John Carbutt	Plates	999	35 7
	Chicago L. Sup. & S. Co.	Sundries	1000	54 7
	G. F. Balck Mfg. Co	Pumps	1001	1,030 0
	H. A. Getz	Floral wreath	1002	20 0
	B. D. Potts	Flange	1003	8
	Col. M. & Mine Sup. Co.	Supplies	1004	268 0
	J. M. & W. Westwater		1005	20 0
	R. F. Morse	Guage preserver	1006	3 2
	Elec. Appliance Co	Supplies	1007	101 0
	Man. Gen. Con. Co Bugbee & Laycock	Bulb and globe	1008	1 2
	Westing El. Mfg. Co	Crank pin braces	1009	4 4
	C. L. Traver	Switch	1010	15 7
	Journal of C. & C. Bull.	1 copy year book	1011	2 1
	Chas Scribner's Sons	l copy year book Books	1013	1 2
	W. L. Redrow	Student help	1014	15 1
	L. B. Wing	Trustee expenses	1015	8 0
400	U. S. Mort. & Tr. Co	Bonds due Dec. 1st		0.0

Date	To whom paid For what purpose		No	Amount
1899				
ov. 10	U. S. Mort. & Tr. Co	Interest due Dec. 1st	1017	\$2,812 5
	Clinton National Bank.	** **	1018	1,800 0
	Clinton National Bank		1019	3,825 0
	Z. L. White	Shade	1020	1 1
	Green, Joyce & Co	Crash	1021	4 2
	A. M. Bleile M. C. Lilley & Co	Supplies	1022	6 4 12 (
	Miller Furniture Co	Chairs tables and tips	1024	15 8
	Tallmadge Hard, Co	Glass	1025	7 5
	James Penn	Oats	1026	4 7
	A. C. Barrows	Stamp and pad	1027	
	F. C. Clark	Envelopes and cards	1028	18
	Library Bureau	Label holders & supports		7 (
	Univ. of Chicago Press.	Pol. Econ. Journal	1030	14 (
	Spahr & Glenn	Reading statements	1031	1 1
	D. Appleton & Co	Spencers Socialogy	1032	32 : 17
	Burrows Bros. & Co	Standard Dictionary	1033	18
	C. K. Leith	Pipe and fittings	1035	40
	Jas. Penn	Hauling	1036	- 10
	A. E. Day	Work	1037	
	J. J. Gheen	Plastering	1038	33
	Hanna Paint Mfg. Co	Filler and oil	1039	3
	S. S. Rickley, Treas	Labor of A. B. Coover	1040	5
	W. C. Mills	Supplies	1041	5
	B. F. McCarty & Co	Frogs	1042	6
	Orvis & Marshall,	Spacer and paper	1043	3
	J. S. Hine G. V. Bailey	Department supplies Mounting skeleton	1044 1045	9
	F. J. Tyler	Lab. work	1046	2
	Payne-McD. Hdw. Co	Supplies	1047	18
	H. H. & C. S. Brinkey	Department supplies	1048	5
	A. W. Livingston's Sons		1049	17
	O. E. Jennings	Labor	1050	4
	Kimball & Matthews	Repairs, etc	1051	2
	N. M. Glatfelter	Herbarium specimens		5
	C. O. Paper Co	Paper	1053 1054	4
	Edna Armstrong Hann & Adair	Work on herbarium Envelopes and papers		8
	Payne-McD. Hdw. Co.	Bot. dept. supplies	1 down	11
	J. Wanamaker	Books	1057	24
	W. H. Mears	Labor	1058	2
	F. W. Arnold	"	1059	2
	H. Mesloh	************		2
	O. D. Clark	***********		3 6
	C. L. Wottring	***********		5
	Ira McKinley	***********	1 4004	44
	F. W. Nelson	"	1000	2
	Krauss, Butler & B. Co.	Linoleum	1066	30
	M. Rice	Work	1067	4
	M. Huddleson		1	10
	Mason Snow			12
	Robt. Clarke Co			2
	Burrows Bros. Co		1 4000	136
	G. E. Stechert	******		135
	J. W. Shaw	Cards, boxes, etc		11 33
	Library Bureau Boston Book Co			100
	S. A. Norton			22

	- Continued					
Date	To whom paid	For what purpose	No	Amount		
Date 1899 Nov. 10	Seraphim Blank. B. Co. Spahr & Glenn. The H. Cole Co. A. H. Smythe. R. L. Babb. Orvis & Marshall. Miller's Fair Col. Mdse. Co. Jas. Penn T. J. O'Neil. C. F. Slyh, Supt. Spahr & Glenn Geo. Roth F. C. Long W. U. Telegraph Co. W. G. Wallace. Tracy Wells Co. Mrs. F. D. Myers. Amer. Dist. Tel. Co. Green, Joyce & Co. Standard Oil Co. Nitschke Bros C. U. Telephone Co. Nitschke Bros Z. L. White & Co. Chas. Lowe M. C. Lilley & Co. E. L. Orndorff F. C. McKinney C. H. Woodruff C. M. & W. Westwater Agric. Students P. Co. Shaw Walker Co. Cent. O. Paper Co. E. G. Soltman Schilling Foundry Co. Franklin Toilet Sup. Co. The Bristol Co. Crosby St. G. & V. Co. Hohmann, M. Mfg. Co. Cols. Machine Co.	Binding	No 1078 1079 1080 1081 1982 1083 1084 1085 1086 1087 1088 1099 1091 1092 1093 1094 1095 1096 1097 1098 1099 1100 1101 1102 1103 1104 1105 1106 1107 1108 1111 1112 1113 1114 1115 1116 1117	\$22 30 9 25 1 10 2 50 5 00 2 75 9 00 5 30 4 50 10 60 2 25 2 00 3 00 5 65 2 8 00 4 75 27 00 4 4 80 1 25 4 25 5 75 6 50 80 00 4 30 1 25 5 75 6 50 80 00 1 25 1		
	S. W. Smith. E. G. Bailey. F. J. Hale. W. T. Magruder. Nitschke Bros. McClellan & Co.	Office chair Labor Lab. work Telegram Ink Stencil	1119 1120 1121 1122 1123 1124	3 15 3 75 14 38 2 40 50 50 1 05		
	Col. Supply Co	Packing Telephone service Clerical work Laundering Basket balls Lunger Guards and rods Lumber, etc. Magnabestos covering. Pipe Masonry Pipe	1125 1126 1127 1128 1129 1130 1131 1132 1133 1134 1135 1136	7 50 90 6 00 30 00 12 50 2 10 6 50 521 97 40 00 24 46 12 50 11 55		
	James LeRoy	Stone	1137 1138	13 65 + 9 18		

Date	To whom paid	For what purpose	No	Amount
1899				
Nov. 10	Fred Fleischer	Stone	1139	\$13 6
	Eaton Machine Works	Cable, etc	1140	31 8
	Harry Kinnear	Wiring	1141	3 6
	Krauss, Butler & B. Co.	Shades	1142	19 9
	Tallmadge Hardware Co.	Supplies	1143	33 3
	Charles W. Herb	Letter files	1144	15 5
	Engelke & Bigelow	Drayage and freight	1145	79 6
	C. E. Stechert	Books	1146	3 4
	Luth. Book Concern	Binding	1147	2 2
	Osborn, Wil'ms & Horn	Coal	1148	23 4
	Col. M. & Mine Sup. Co.	Supplies	1149	15 5
	Murray City Coal Co	Coal	1150	683 1
	H. Braun Sons & Co	Sundries	1151	10 3
	J. H. Randall	Carpenter work	1152	27 0
	Columbus Brass Co	Goose-necks, etc	1153	6 2
	J. C. Howard	Painting	1154	90 7
	Columbus Supply Co	Supplies	1155	51 2
	Champlin Printing Co	Printing	1156	124 2
	Erner & Hopkins	Supplies	1157	17 7
	Vogelgesang Furn. Co	Register and chim top	1158	59 (
	Cap. City Mach. Wks	Supplies	1159	8 9
	E. Doddington & Co	Lumber	1160	80 1
	Hann & Adair	Sundries	1161	22 6
	Schoedinger, F'rn & Co.	** * **********		14 2
	Kelton & Converse	Lumber	1163	198 7
	J. S. Abbott & Co	Hardware	1164	39 3
	Blackwood, Green & Co.	3.7.5 1 4.2 1 4.2 1 4.2 1	1165	18 3
	Wm. Burdell, Jr	Hames, etc	1166	45 3
	Bausch & Lomb Opt. Co.	Microscopes, etc	1167	167 9
	J. W. Cawthon	Carpentry		20 2
	A. F. Wilcox		1169	12 3
	Wilbert Morelan		1170	13 2
	Louis Schaffer	***************************************		19 8
	Clinton Schaffer	*********		21 2
	M. D. Geary W. H. Waters	Tabor	1173	12 :
	Columbus Gas Co	Labor	1174	36 (
13	John T. Mack	Gas		130 1
10	Lily Weeks	Expense		31 3
16	C. H. E. Moore	Beading math papers		5 (
10	Mrs. Anna D. Orton	Reading math. papers	1178	5 (
	Mis. Time D. Ottomi.	Dec., 1899	1170	300 (
	E. O. Fippin	Military services	1179	50 (
17	D. M. Massie	Expenses as trustee	1181	40 5
10	Ohio National Bank	Bill Exc. order I. Hayez		5 (
18	Ohio National Bank	Same to ord .L. Stender	1183	20 1
20	Bannon & Bannon	Printing brief, O. S. U.	1100	20
	- Samuelli St. Samuelli III	vs. Cuppett & Webb.	1184	25 9
25	W. O. Thompson	Salary, Nov., 1899	1185	416
22	Alex. Cope	16 64	1186	187
21	Carl E. Steeb		1187	50 (
25	Katherine Duncan	" "	1188	50 (
	Edith D. Cockins	" "	1189	58 3
	T. F. Hunt	"	1190	250 (
	Geo. W. Knight	" "	1191	250 (
	W. F. Hunter		1192	250
	A. M. Bleile	" "	1193	225 (
	C. N. Brown	" "	1194	225 (
	A. C. Barrows		1195	225 (
	R. D. Bohannon	" "	1196	225 (
	B. L. Bowen	" "	1197	225 (

	SIAIEME	11 11	Continued.			
Date	To whom paid	For	what purpos	e	No	Amount
1899			Total Warran			The section
Nov. 25	S. C. Derby	Salary,	Nov., 1899		1198	\$225 00
411	J. V. Denney	**	**		1199	225 00
	E. A. Eggers	- 4			1200	225 00 225 00
	J. P. Gordy W. A. Kellerman	16	in in		1201	225 00
	W. R. Lazenby	14	146		1203	225 00
	Wm. McPherson	44	W		1204	225 00
	W. T. Magruder	- 44	16		1205	225 00
	H. Osborn	11	"		1206	225 00
	J. R. Smith	44		* * * * *	1207	225 00
	W. H. Scott B. F. Thomas	44	146	****	1208 1209	225 00 225 00
	H. A. Weber	14	14	*****	1210	225 00
	N. W. Lord	- 11	44		1211	200 00
	Frank A. Ray	44			1212	200 00
	G. B. Kauffman	44			1213	200 00
	Edward Orton, Jr	. 64			1214	180 00
	J. N. Bradford		"		1215	180 00
	F. E. Sanborn				1216	200 00
	H. C. Lord	44	44		1217	160 00
	F. C. Clark G. W. McCoard	- 11			1218	160 00
	G. W. McCoard C. P. Linhart	**	44		1219 1220	160 00
	D. S. White	44	a		1221	160 00 160 00
	F. C. Caldwell	44	u		1222	160 00
	E. A. Hitchcock	24			1223	150 00
	C. S. Prosser	15	44		1224	150 00
	W. D. Gibbs	44	16		1225	160 00
	P. G. Bowman	14	"		1226	140 00
	W. H. Page	44	"	****	1227	140 00
	W. H. Siebert	ii	- 4		1228	135 00
	O. B. Jones S. A. Norton	46	44		1229	135 00
	E. B. Kinkead	- 14	- 11		1230	120 00
	James E. Boyd	is	44		1231 1232	120 00 120 00
	H. C. Allen	- 44	"		1233	115 00
	C. E. Sherman	"	u		1234	110 00
	J. R. Taylor	46	**		1235	110 00
	T. E. French		4 4		1236	110 00
	C. W. Mesloh A. W. Hodgman	16	**		1237	110 00
	A. W. Hodgman J. H. Schaffner	16	14		1238	110 00
	W. E. Henderson	- 11	44.		1239	100 00
	J. A. Bownocker	- 11	14		1240 1241	100 00
	W. A. Knight	ee	"		1242	100 00 100 00
	C. L. Arnold	44.	# 1		1243	100 00
	K. D. Swartzel	- 66	11		1244	100 00
	C. B. Morrey	16	*		1245	100-00
	W. L. Graves	"	21		1246	100 00
	C. A. Bruce F. M. Hamilton	u	"		1247	100 00
	G. H. McKnight			*****	1248	80 00
	Wm. Renck	**	4		1249	90 00
	J. S. Hine	44		*****	1250 1251	85 00 85 00
	F. L. Landacre	- 44	**		1252	85 00 85 00
	C. P. Crowe	- 66	44		1253	80 00
	A. E. Vinson	44	u		1254	80 00
	F. E. Kester	-16	#		1255	80 00
	S. E. Canfield	- 41	14		1256	75 00
	E. O. Randall		и		1257	70 00
	D. F. Pugh				1258	95 00

Date	To whom paid	For what purpose			No	Amount
1899						
Nov. 25	W. A. Landacre	Salary,	Nov., 18	99	1259	\$70 0
	W. F. Lavery				1260	70 0
	C. B. Frederick	"	44		1261	70 0
	J. B. Sanborn	"	- 11		1262	70 0
	E. E. Somermeier	"	"		1263	70 0
	T. K. Lewis	**	- 44		1264	60 0
	F. A. Fish	"	"		1265	60 0
	C. B. Guittard	- 41	"		1266	55 0
	C 17-111	ii	44.	*****	1267	55 0
	Mauda Inffrar	-11	44		1268	55 0
	Maude Jeffrey Lucy Allen	11	"		1269	55 0
	O. V. Brumley	44	11-	*****	1270	55 0
		44.	"		1271	50 0
	S. W. Martin D. C. Huddleson	44	**		1272	50 0
	A. V. Bleininger	14	44	****	1273	50 0
	A. V. Bleininger J. B. Parker	44	16	****	1274	40 0
		a	- 44		1275	30 0
	F. O. Clements	ii	**	****	1276	30 0
	H. C. Gore	15	- 11	*****	1277	45 0
	J. H. Vosskuehler	-66	**	*****	1278	30 0
	A. H. McIntire	ee	46	*****	1279	30 0
	E. L. Ball	44	44		1280	30 0
	Lily Weeks	Cum			1281	30 0
	J. W. Young	Gym. se		00	1282	5 0
	2	Salary,	Nov., 18	19	1283	30 0
		44	44	*****	1284	30 0
	F. J. Hale S. W. Collett	44	"	*****	1285	30 0
+. 5 * *	H. W. Brown	**	44	* * * * *	1286	25 0
	J. H. Collins	ii	10	*****	1287	25 0
	J. A. Shauck	iii.	44		1288 1289	20 0
	E. H. Bailey	44	44.		1290	17 5
	R. E. McIntosh	46	44-		1291	15 0
	W. C. McCracken	46	44		1292	12 5 150 0
	E. E. Harrold	**	16		1293	90 0
	J. P. Covan	66	44	*****	1294	70 0
	G. R. Rose	ee	**		1295	65 0
	F. Ruhlen	44	44		1296	60 0
	A. F. Hall	11	**		1297	60 0
	C. M. Low	44	a		1298	54 1
	F. K. Luke	44	**		1299	50 0
	H. C. Price	66	**		1300	50 0
	W. Standley	68	***		1301	50 0
	B. LeBay	64	41		1302	50 0
	T. Boude	44	**		1303	45 0
	W. H. Case	**	44		1304	45 0
	M. Peck	44	**		1305	40 0
	A. Chantler	**	44		1306	45 0
	G. A. Goodspeed	66	"		1307	40 0
	J. H. Brown	**	44		1308	40 0
	D. D. Geren		**		1309	40 0
	W. Whitestine	11	"		1310	40 0
	H. Chantler	66	**		1311	40 0
	G. C. Denney	"	"		1312	40 0
	M. N. Cook	44	**		1313	40 0
	W. C. Conklin	**	44		1314	40 0
	T. E. Osburn	**	**	*	1315	40 0
	W. Townsel	46	"		1316	25 0
	J. C. Perry	***	"		1317	12 5
	Joe. Garretson	46 .	**		1318	37 5
	B. I. Irwin	44	"		1319	45 0

Date	To whom paid	For what purpose	No	Amount
1000				
1899 Nov. 25	James Kelly	Salary Nov 1900	1990	60E 00.
2101. 20	E. R. Hubler	Salary, Nov., 1899	1320 1321	\$25 00- 33 33
	W. C. Weir	1 11	1322	20 00
	A. G. McCall	# #	1323	20 00
	H. W. Kennedy	" " " "	1324	30 00-
b. 1	W. E. Mann		1325	25 00
	W. C. Mills		1326	20 00 35 00
	Alice Dufour		1327 1328	25 00-
	G. L. Pitts	44 44	1329	30 00
	C. F. Dowd	" "	1330	20 00
	E. Conway	" "	1331	20 00
	E. H. Moore		1332	60 00
	N. P. Oglesby D. A. Kohr		1333	40 00 60 00
	J. F. Jeffrey	" "	1335	10 00
	J. W. Groves	46 44	1336	50 00
	C. L. E. Moore		1337	10 00
Dec 1	G. V. Bailey	Work	1338	32 00
Dec. 1 Nov. 27	Mrs. M. P. Kellenberger T. C. Mendenhall	Serv. dom. econ	1339	20 00
1101. 21	G. K. Gilbert	Exp. Orton Mem. Serv.	1340 1341	51 50 34 50
	C. H. Woodruff	Carpentry	1342	65 00
	T. J. Godfrey	Expenses as trustee	1343	35 25
20	Lily Weeks	Gym. services	1344	5 00
28	Kate Shanahan	Laundry	1345	25 00
Dec. 1	R. M. Rownd, P. M	Postage stamps	1346	18 00
Dec. 1	Clinton Nat. Bank D. F. Pugh	Paymt. certfs. indebt Adv. in Oct., salary	1347 1348	30,000 00
2	Ohio Nat. Bank	Bill of exchange	1349	20 00 564 04
1	J. McLain Smith	Expenses as trustee	1350	7 35
5	Col. Gas Co	Gas	1351	139 80
e	Lily Weeks	Gym, services	1352	3 00
,6	R. M. Rownd, P. M G. Bruder	Stamps	1353	10 00
	W. F. Hunter	Band instruction Stamps	1354 1355	26 00 3 50
9	F. C. Clark	Office supples	1356	1 95
	H. Powell	Clerical work	1357	10 00
	Mason Snow	Work in library	1358	8 60
	J. W. Shaw S. N. Young		1359	8 95
	S. N. Young Mabel Rice	4 4	1360 1361	9 05 2 75
	Mabel Huddleson	" "	1362	10 50
	F. Fleischer	Wheeling coal	1363	40 50
	H. Kinnear	Wiring	1364	10 80
	A. M. Irwin N. A. Burgess	Campus work	1365	1 21
	F. W. Nelson	"	1366 1367	2 87 1 68
	Ira McKinley	"	1368	1 12
	N. L. Seymour	Clerical work	1369	6 37
	F. J. Hale	Lab. work	1370	3 10
	G. G. Leinbaugh	Work	1371	1 35
	E. G. Bailey E. H. Bailey	Pipe fitting, etc	1372	14 00
	W. F. Magruder	Tel. work	1373 1374	4 05
	W. L. Redrow	Student work	1375	3 30
	R. W. Funk	Labor in store room	1376	27 15
	J. H. Nold	Work	1377	1 50
	K. H. Duncan W. R. Lazenby	St. car t'ck'ts for guides		5 00
	W. G. Wallace	R. R. ticket to London	1379 1380	6 00 4 75
		amor illimitellini	1000	4 10

Date	To whom paid	For what purpose	No	Amount	
1899					
Dec. 9	R. Thompson	Guide	1381	\$4 3	
	E. L. Orndorff	"	1382	4 1	
	F. C. McKinney		1383	3 3	
	F. C. Long W. D. Gibbs	*************	1384	3 5	
	R. E. McIntosh	Advertising	1385	6 0	
	G. G. Linebaugh	Labor	1386	9 7	
	F. I Tyler	4	1387 1388	6822	
	G. V. Bailey		1389	12 0	
	A. S. Watts	4	1390	29 2	
	Andrew Spittal	Labor in physics dept	1391	51 8	
	H. J. Hammond		1392	7 2	
	Laura L. Hill	Clerical work	1393	13 0	
	Wm. Erdman	Student labor	1394	6 0	
	M. C. Hunter		1395	11 7	
	G. M. Berndroth		1396	24 0	
	M. L. Seymour	Clerical work botany	1397	14 2	
1	B. LeBay W. Watters	Work	1398	34 5	
	S. E. Canfield	Labor in trench	1399	34.5	
	M. D. Geary	Supplies	1400	3 0	
	W. Morelan	curpenter work	1401	20 7 12 7	
	J. W. Cawthon		1403	19 7	
	A. F. Wilcox		1404	24 7	
	J. H. Randall.	"	1405	32 7	
	Col. Brass Co	Supplies	1406	9 1	
	W. Burdell	Repair medicine balls	1407	3 0	
	Col, Mill & Mine S. Co.	Pipe and supplies	1408	47 3	
	Baker & Adamson C. Co.	Supplies	1409	33 4	
	Kimball & Matthews	n	1410	5 5	
	Chgo. Blue P. Paper Co. Bausch & Lomb Opt. Co.	Blue print paper	1411	5 6	
	Amer. Aristotype Co	Supplies	1412	24 0	
	Chic. Lab. Sup. Co		1413	9 2	
	Kauffman-Lattimer Co	Drugs and Sundries	1415	95 4 168 8	
	Acme Paving Co	Cementing bath room	1416	28 6	
	Wolfram Guitar Co	Piano rent	1417	7 5	
	McAllister, Moh. & Co.	Two stands	1418	2 0	
	Domestic Laundry	Towels for November	1419	28 2	
	Burrows Bros. Co	Books, etc	1420	73 4	
	Seraphim Book Bdg. Co.	Binding	1421	14 6	
	C. of B. of E. N. Dept. N. P. Hyndeman	Nautical almanac	1422	3 0	
	H. Braun Sons & Co	Map Pgh. coal region.	1423	4 0	
	Spahr & Glenn	Supplies	1424	22 7	
	Engelke & Bigelow	Freight and cartage	1425	45 0	
	Krauss, Butler & B. Co.	Shades	1426	37 5 19 0	
	Cherington P. & E. Co.	Stamps	1428	7	
4	Nitschke Bros	Printing, etc	1429	13 0	
	E. Doddington & Co	Lumber, etc	1430	127 8	
	Hann & Adair	Printing	1431	30 9	
	Champlin Printing Co		1432	64 7	
	Tallmadge Hdw. Co	Supplies	1433	34 4	
	G. E. Stechert.	Books	1434	85 0	
	M. C. Lilley & Co J. M. & W. Westwater	Supplies	1435	73 5	
1	W. U. Tel. Co	Telegrams	1436	77 1	
	A. S. W. Huffman	Telegrams	1437	2 1 27 8	
	Erner & Hopkins	Supplies	1438 1439		
	R. A. McClure	Stakes	1440	20 7 6 2	
	H. Haerlein	Profess. services	1441	47 6	

Date	To whom paid	For what purpose	No	Amount
1899				- 400
Dec. 9	Reserve Cons. Co	1000 bricks	1442	\$7 50
	Electric Appl. Co	Supplies	1443	48 70
	Fultonham B. & Tile Co.	Brick	1444	138 00
	E. C. Niederlander	Painting signs	1445	4 20
	W. D. Gibbs	Drayage, etc	1446	60
	Gus. C. Henning Crosby St. G. & V. Co.	Pocket recorder	1447	112 50
	G. H. Barnes	Steam fittings	1448	29 10
	Alpha Dairy Co	Calorimeter connections	1449	5 00
	Lawton & Co	Milk tickets	1450 1451	6 50
	Hager & Graves	Groceries	1452	38 99
	Col. Gas Co	Welsbach lights	1453	1 50
	Eimer & Amend	Chart, stopples, etc	1454	17 46
	Gardiner M. Lane	Book	1455	3 48
	Charles W. Harper	Adv. cuts	1456	8 05
	Kelton & Converse	Lumber	1457	2 70
	McClelland & Co	Supplies	1458	10 65
	Richmond Chair Co	Chairs	1459	75 00
	Col. Wire and Iron Wks.	Mats	1460	10 50
	Strobridge Litho. Co	Commissions & warrants		35 00
	Moneypenny-Ham'd. Co.	500 Bull	1462	4 50
	Orvis & Marshall	Carbon paper	1463	3 00
	Webb. Sta. & Ptg. Co	Office supplies	1464	13 35
	Masury, Young & Co	Cyl. oil	1465	18 03
	L. Hirsch, Prest Stumpf & Steurer	Adv. in German paper.	1466	16 00
100	Lawrence Pub. Co	Advertising	1467 1468	32 00
	O. S. Journal Co	The state of the s	1469	192 78 15 00
	Schoedinger, F'rn & Co.	Screws and washers	1470	40
	Oscar S. Lear	Paper and ink	1471	4 00
	Elec. Sup. & Cons. Co	Wire	1472	2 84
	F. G. Howall & Co	Rollers	1473	50
	Z. L. White & Co	Cheese cloth	1474	1 00
	Cap. City Mchn. Works.	Supplies	1475	38 50
	Osborn, Will's & Horn.	Coal	1476	31 42
	Murray City Coal Co		1477	485 93
	C. L. Wottring	Manure	1478	19 50
10 5 10	The Macmillan Co	Bonar Malthus		3 19
100	Charles Dury	Expense sea lion skins	1480	15 00
	J. C. Pugh Riddle & Son	Mounting charts	1481	11 00
	Columbus Gas Co	Coke	1482 1483	6 18 9 69
	Col. Tent & Awning Co.	Strainers	1484	7 20
11	Haussmann & Dunn	Instruments	The same of	18 00
	Sells & Co	Feed	1486	20 78
11.0	Pitz Bros	Two tons shorts	1487	28 00
	Glucose Sugar Ref. Co.	Gluten meal	1488	84 00
mark to be a second	Blackwood, Green & Co.	Repairs and supplies	1489	8 1
	Creamery Pkg, Mfg, Co.	Jars, brushes, etc	1490	51 63
and the same of	R. M. Ramsey	1 box Lenox soap	1491	3 2
	Wm. Burdell, Jr	Pipe, repairs, etc	1492	89 05
	W. H. Anderson & Co	Mass, and N. Y. Reports	1493	4 78
ALC: N	James Ohlen Sons & Co.	27 foot steel	1494	6 7
	G. G. Quincy & Co	Sheeting	1495	4 00
Carlotte Inch	The L. S. Starrett Co	Supplies	1496	12.90
	The Jeffrey Mfg. Co	Shafting, etc	1497	53 21
	Nicholson File Co	Files	1498	20 80
	Yost & Packard	Bolts, nuts, etc	1499	34 61
	J. S. Abbott & Co	Services as architects	1500	35 00
	J. D. ADDOLL & CO	Dupplies	1501	13 69

Date	To whom paid	For what pur	rpose	No	Amount
1900					
1899 Dec. 9	J. J. Gheen	Diagramina		1500	40.0
200.	J. C. Howard	Plastering		1503	\$3 6
	Hanna Paint Mfg. Co	Painting 1 gallon golden	gloss	1504	95 0
	C. T. Phillips	Papering etc	gioss	1505	3 5 26 1
	Col. Supply Co	Supplies	******	1506	42 4
	Lily Weeks	Gym. work		1508	5 0
	M. J. Kellenberger	Work		1509	25 0
	Thos. F. Hunt	Salary Dec. 1899		1510	250 0
16	W. O. Thompson	14		1511	416 6
	Alexis Cope	14 11		1512	187 5
	Carl E. Steeb	44 44	*****	1513	50 0
	Katherine Duncan	44 44		1514	54 1
	G. W. Knight	" "		1515	250 0
	W. F. Hunter			1516	250 0
	A. M. Bleile C. N. Brown		*****	1517	225 0
	C. N. Brown	11 11	*****	1518	225 0
	R. D. Bohannon		*****	1519	225 0
	B. L. Bowen		*****	1520 1521	225 0 225 0
	S. C. Derby	16 46	1	1522	225 0
	J. V. Denney	11		1523	225 0
	E. A. Eggers	11 11		1524	225 0
	J. P. Gordy	44 24		1525	225 0
	W. A. Kellerman	24 44		1526	225 0
	W. R. Lazenby			1527	225 0
	Wm. McPherson	11 11		1528	225 0
	W. F. Magruder	u u		1529	225 0
	H. Osborn	44 44		1530	225 0
	J. R. Smith			1531	225 0
	W. H. Scott	** **		1532	225 0
	B. F. Thomas	11 11	****	1533	225 0
	H. A. Weber N. W. Lord	11 11		1534	225 0
	F. A. Ray	16 16	*****	1535 1536	200 0
	G. B. Kauffman	44 44		1537	200 0 200 0
	Edward Orton	11 11		1538	180 0
	J. N. Bradford	ii ii		1539	180 0
	F. E. Sanborn	Sal., bal. of S		1540	240 0
	H. C. Lord	Salary, Dec., 1		1541	160 0
	F. C. Clark			1542	160 0
	G. W. McCoard	11 11		1543	160 0
	C. P. Linhart			1544	160 0
	D. S. White	11 11		1545	160 0
	F. C. Caldwell	11 11	*****	1546	160 0
	E. A. Hitchcock C. S. Prosser		*****	1547	150 0
	C. S. Prosser	11 11		1548	150 0
	P. G. Bowman	4 4	*****	1549	160 0
	W. H. Page	***	****	1550	140 0
	W. H. Siebert			1551 1552	140 0
	S. A. Norton	14 44	10.000	1553	135 0 120 0
	E. B. Kinkead	"	11111	1154	120 0
	I E Boyd			1555	120 0
	H. C. Allen	11 11		1556	115 0
	C. E. Sherman.	4 4		1557	110 0
	T. E. French	11 11		1558	110 0
	J. R. Taylor	n n		1559	110 0
	C. W. Mesloh	44 44		1560	110 0
	A. W. Hodgman	16 16		1561	110 0
	J. H. Schaffner			1562	100 0
	W. E. Henderson	11 11	*****	1563	100 0

-	STATEMENT II— Continued.						
Date	To whom paid	For	what purpo	se	No	Amount	
1899							
Dec. 16	J. A. Bownocker W. A. Knight	Salary,	Dec., 1899		1564	\$100 00	
	C. L. Arnold	- 66	44		1565 1566	100 00	
	K. D. Swartzel	- 11	44		1567	100 00	
	C. B. Morrey	16	44		1568	100 00	
	W. L. Graves	14	"		1569	100 00	
	F. M. Hamilton	14	**		1570 1571	100 00	
	G. H. McKnight	15	- 4		1572	80 00 90 00	
	Wm. Renck	44	44		1573	85 00	
	J. S. Hine	16	44		1574	85 00	
	F. L. Landacre	14	11		1575	85 00	
	C. P. Crowe	11	44		1576 1577	80 00 80 00	
	F. E. Kester	11	11		1578	80 00	
	S. E. Canfield	- 66	68		1579	75 00	
	E. O. Randall	u	44	*****	1580	70 00	
	D. F. Pugh	11	"		1581	95 00	
	W. F. Lavery C. B. Frederick	14	ic		1582	70 00	
	J. B. Sanborn		44		1583 1584	70 00 70 00	
	E. E. Somermeier	11	44		1585	70 00	
	T. K. Lewis	44	**		1586	60 00	
	F. A. Fish	11	"		1587	60 00	
	O. V. Brumley Silas Martin	11	а		1588 1589	50 00 50 00	
	A. V. Bleininger	44	и	*****	1590	40 00	
	J. B. Parker	- 64	66		1591	30 00	
	M. Dresbach	"	a		1592	30 00	
	D. A. Kohr	- 44	44		1593	60 00	
	H. C. Gore J. H. Vosskuehler	44	и		1594	30 00	
	A .H. McIntire	-11	16		1595 1596	30 00	
	E. L. Ball	44	44		1597	30 00	
	J. W. Young	44.	"		1598	30 00	
	F. J. Hale	**	11		1599	30 00	
	H. W. Brown S. W. Collett	11	14		1600	25 00 25 00	
	J. H. Collins	11	- 44		1601	25 00 20 00	
	J. A. Shauck	-44	14		1603	17 50	
	E. H. Bailey				1604	15 00	
	R. E. McIntosh	44	**	*****	1605	12 50	
	W. C. McCracken O. B. Jones	11	ii.		1606	150 00 135 00	
	E. E. Harold	.11	"	*****	1607	135 00 90 00	
	J. P. Covan	11	11		1609	70 00	
	G. R. Rose	16			1610	65 00	
	F. Ruhlen	11	"		1611	60 00	
	A. F. Hall E. D. Cockins	**	16		1612 1613	60 00 58 33	
	C. B. Guittard	16	11		1614	55 00	
	H. N. Townshend	44	44.		1615	55 00	
	G. Kellicott	44	"		1616	55 00	
	M. D. Jeffrey	"	16		1617	55 00	
	C. M. Low	11	**		1618 1619	55 00 54 17	
	F. K. Luke	-11	11		1620	50 00	
	W. Standley	16	.46		1621	50 00	
- 4 -	B. LeBay	16	EE	*****	1622	50 00	
1000	D. C. Huddleson	"	16	777.3	1623	50 00	
	T. Boude	1000		****	1624	45 00	

Date	To whom paid	For w	nat purpose	No	Amount
1900	W II C				
Dec. 16	W. H. Case M. Peck	Salary,	Dec., 1899	1625	\$45 0
	A. Chantler	46	44 ****	1626	40 0
	G. A. Goodspeed	- 11	4	1627	45 0
	J. H. Brown	- 64		1628 1629	40 0
	D. D. Geren	44	4	1630	40 0 40 0
	W. Whitestine	46	" """	1631	40 0
	H. Chantler		44	1632	40 0
	G. C. Denny	11.		1633	40 0
	M. N. Cook	**	"	1634	40 0
	I. E. Osburn	44	"	1635	40 0
	W. Townsel	- "		1636	25 0
	J. Garrettson	**		1637	37 3
	E. R. Hubler	"	4	1638	33 3
	James Kelley W. C. Weir			1639	25.0
	J. D. Decker	44		1640	20 0
	Alice Dufour	-		1641	140 0
	J. F. Jeffrey	46		1642	25 0
	J. W. Groves	44		1643	10 0
	Wm. Cannan	- 44	4	1645	50 0 20 0
	W. E. Mann.	44	6	1646	25 0
	Grace Pitts	- 11		1647	30 0
	W. C. Mills	44		1648	35 0
	E. H. Moore	16	14	1649	20 0
	F. O. Clements	**	"	1650	45 0
	H. C. Price	"		1651	60 0
	C. L. E. Moore			1652	10 0
	C. A. Grate W. A. Landacre	**		1653	30 0
	N. P. Oglesby	11		1654	70 0
	C. F. Dowd	44		1655	40 0
	Benj. Irwin	a	"	1656 1657	20 0
	J. C. Perry	46	" " " " " " " " " " " " " " " " " " " "	1658	45 0 12 5
	A. G. McCall	44	"	1659	20 0
	W. Conklin	44		1660	40 0
	Earl Conway	**	"	1661	20 0
10	C. H. Woodruff	**	44	1662	65 0
15	Helen Potts	Accp., in	gym	1663	5 5
	Edith Seymour		***********	1664	3 0
1900	Lily Weeks	Gym. wo	rk	1665	5 0
lan. 5	Col. Gas Co	Gas for	December	1666	136 4
	Wm. Cannan	Fee and	store room	1667	12 5
	Lily Weeks	Salary, o	ne week	1668	5.0
	R. M. Rownd, P. M	Stamped	envelopes	1669	85 6
	Frank C. White	Keturn t	ees, pro rata	1670	5 0
	C. R. Monsarrat	rees C. I	I. Evans	1671	5 0
	Edna Luse	Return o	t tees	1672	5.0
	Blanche Powell	11	" ********	1673	8.0
	E. D. Easton	44		1674	5 0
	Mary E. Dow	44		1675	7 0
	Morton Farrar	**		1676 1677	6 0
	Engelke & Bigelow	Freight a	nd drayage	1678	9 7 62 7
	Murray City Coal Co	Coal		1679	950 5
	Osborn, Will's & Horn.	** ****		1680	57 4
	H. J. Hammond	Hospital	supplies	1681	15 9
	C. B. Frederick	Anatomy	horses	1682	38 5
	Fred Fleischer	Hauling	coal	1683	39 0
	J. S. Abbott & Co	Glass, pr	itty, etc	1684	49 0

Date	To whom paid	For what purpose	No	Amount
1900 Dec. 5	F Doddington & Co	Turnellan ata	1005	****
Dec. o	E. Doddington & Co S. T. Hallsman	Lumber, etc	1685 1686	\$34 55 6 30
	A. F. Wilcox		1687	20 75
	Wilbert Morelan	Carpenter work	1688	19 00
	E. J. Barton J. H. Randall		1689 1690	16 50 30 78
	The Tallmadge Hdw. Co.	Hardware, etc	1691	20 13
	Kelton & Converse	Lumber	1692	7 00
	Yale & Towne Mfg. Co. The Fish Stone Co	One sill and dray	1693 1694	2 43
	M. C. Hunter	Work	1695	28 5
	Harry Kinnear	Wiring	1696	26 5
	R. D. DeWolf	Student labor	1697 1698	9 60
	Andrew Spittal	Labor	1699	29 76
	F. E. Sanborn	Money advanced	1700	48.00
	F. C. Clark		1701 1702	6 2
	Laura L. Hill	Clerical work	1703	12 50
	A. F. Wilcox	Labor	1704	. 17 30
	S. N. Young		1705	9 4
	J. H. Randall J. W. Shaw	4	1706 1707	4 2 7 9
	Grace Young	*	1708	3 3
	W. D. Gibbs, Mgr	500 copies book	1709	18 0
	Metta Seymour S. C. Derby	Clerical services	1710 1711	9 3
	C. L. Sackett	Part pay, of contract	1712	58 3
	James LeBay	Cleaning cistern	1713	3.00
	Gustav Bruder F. C. McKinney	Band instruction	1714	24 00
	C. E. Miller	Student labor	1715 1716	10 0
10	Philip Long	Buffet lunch and meals	1717	148 2
	F. C. Long	Guide work	1718	2 8
	W. G. Wallace		1719 1720	3 8 3 7
	Annis McLaughlin	Clerical work	1721	2 5
	Wm. T. Magruder	Money advanced	1722	3 5
	Earl Orndorff	Guide work	1723 1724	5 2 4 5
	F. J. Hale	Labor	1725	12 5
	Grace Eagleson	Clerical work	1726	2 5
	E. G. Bailey	Labor	1727	6 2 3 0
	C. P. Linhart O. I. Dick	Supplies	1728 1729	4 9
	J. M. Barringer	4 *********	1730	1 9
	J. C. Britton	*******	1731	1 5
	Wm. R. Lazenby S. A. Norton	Department supplies Book	1732 1733	4 3 2 9
	Olive Jones	Money advanced	1734	11 4
	American Book Co	Book	1735	40 0
	Edward Thompson & Co.	Am. Ency. Law		2 7 6 0
	W. H. Anderson & Co.	Reports	1738	8 5
	Sunday Creek Coal Co	Coal	1739	30 0
	James Seaman	Insect cases	1740	40 0
and the party of	George Wahr	Books Subs. to Psyche	1741	7 50 5 00
	Library Bureau	Cabinets and cards	1743	32 5
	R. R. Bowker	2 copies state publicat'ns	1744	4 00
	The Boston Book Co	Books	1745	1 6

Date	To whom paid For what purpose		No	Amount
1900				
Jan. 10	G. E. Stechert	Books, etc	1746	\$5 20
	W. H. Loudermilk & Co.	President's message	1747	4 56
	G. P. Humphreys	Colonial tracts	1748	5 50
	The Seraphim B. B. Co. Louis Siebert	Binding	1749	36 45 1 35
	Burrows Bros. Co	Books	1751	61 15
	Chicago Blue P. P. Co.	Blue print paper		2 40
	Emil Greiner	Tubes, etc	1753	12 25
	Kauffman, Lattimer	Drugs and sundries		170 54
	Eimer & Amend Keyless Lock Co	Locks and repairs	1755	96 20 3 75
	Domestic Laundry	Laundry work		17 75
	The H. Cole Co	Supplies		26 49
	Bausch & Lomb Opt. Co.		1759	1 15
	G. W. Clarke & Co	Stakes		5 38
	L. P. Bailey	Advertisement		12 00
	H. Goldsmith L. C. Maddox	Music and repairs	1762 1763	5 95 10 0.
	Nat. Stockman & Farm.	Advertisement		78 25
	Perry Smythe	Framing picture	1765	5 10
	Akron China Co	Bisque wall	1766	1 00
	Col. Sewer Pipe Co	Pipes	1767	85
	J. & G. Butler	1 box soap	1768	7 50
	Schaffer & Budenberg.	1 Tachometer and charts		156 50
	Crosby S. G. & V. Co Mrs. Weisner, Secy	Adv. in Rep. W. C. T. U.	1770 1771	4 56 15 00
	Adams & Bagnall Co	Globes, etc	1772	3 66
	J. S. Bushnell	Paper and cord	1773	5 20
	W. H. Miller Co	Supplies	1774	215 56
	Col. Machine Co	Rubber	1775	2 00
	Crane & Co	Valves	1776	9 18
	West. Union Tel. Co India Alk. Wks	Telegrams	1777	1 54 17 94
	The Lunkenheimer Co	Valves, etc	1779	25 06
	B. F. Goodrich Co	Mats, etc		30 28
	Webb Sta. & Print. Co.		1781	18 15
	John Wanamaker	Books		25 60
	Standard Oil Co		1783	13 64 3 90
	W. S. Orvis Cent. O. Paper Co	Paper and ribbon		92 30
	Nonotuck Silk Co		4 400	2 50
	Kemp & Burpee Mg. Co.	Manure spreader		- 50 00
	J. H. & F. A. Heyl	Lumber		16 55
	Creamery Pkg. Mig. Co.			23 05
	W. B. Smith & Son		1790 1791	50 00
	Alpha Dairy Co Lewis Fink			41 85
	Col. Brass Co			12 90
	C. L. Wottring	Manure	1794	5 00
	Haydenville M. & M. Co.	Fireclay	1795	2 50
	Franklin Toilet Co	Towel service	1796	1 98
	J. Carbutt	Plates	1797 1798	1 10 80
	Col. Gas Co	Coke	1799	10 20
	Col. Wire & Iron Wks.	Matting and device	1800	5 8
	A. T. Thompson & Co.	Lamp and stand	1801	24 0
	E. G. Soltmann	Frames	1082	14 0
	McClelland & Co		1803	60
	Keuffel & Esser Co			48 0
	Westinghouse Co	Coils, etc	1805 1806	10 0

-				
Date	To whom paid	For what purpose	No	Amount
1900				
Jan. 10	Arthur Geren	Supplies	1807	\$5 53
	E. Doddington & Co	Supplies Lumber	1808	23 97
	Fred Charles	Hauling	1809	5 36
	Blackwood, Green & Co.	Supplies	1810	23 37
	McMillan Co	Books	1811	8 06
	Champlin Printing Co	Printing	1812	21 65
	J. M. & W. Westwater.	Lts and sockets	1813	6 87
	Schoedinger, F'rn & Co.	Supplies	1815	3 60
	Chicago Lab. Sup. Co	***************************************	1816	54 20
	Nitschke Bros	Printing	1817	24 95
	Tallmadge Hdw. Co:	Supplies	1818	7 78
	Elec. Appliance Co Erner & Hopkins	Wire and switches	1819	24 81 26 24
	Spahr & Glenn	Printing	1821	15 00
	Westinghouse Co	Transformer	1822	111 30
	Franklin Toilet Co	Towel service	1823	2 25
15	Lily Weeks	Gym. services	1824	5 00
20 22	W. O. Thompson	Brushes	1825	22 05
	Carl E. Steeb	Salary Jan. 1900	1826 1827	416 67 60 00
25	Alexis Cope	" " "	1828	187 50
27	Katherine Duncan		1829	54 17
	T. F. Hunt	# #	1830	250 00
	G. W. Knight	11 11 11 111111	1831	250 00
7	W. F. Hunter	4 4	1832	250 00
	C. N. Brown		1833 1834	225 00 225 00
	A. C. Barrows	44 44	1835	225 00
	R. D. Bohannon		1836	225 00
200 1	B. L. Bowen	" " "	1837	225 00
	S. C. Derby		1838	225 00
	J. V. Denney E. A. Eggers	" " "	1839	225 00 225 00
	J. P. Gordy		1841	225 00
	W. A. Kellerman	" " "	1842	225 00
	W. R. Lazenby	" " " " " " " " " " " " " " " " " " " "	1843	225 00
	Wm. McPherson W. T. Magruder		1844	225 00
	H. Osborn		1845 1846	225 00 225 00
	J. R. Smith	" "	1847	225 00
	W. H. Scott	# #	1848	225 00
7	B. F. Thomas	# # ······	1849	225 00
	H. A. Weber N. W. Lord		1850	225 00
	F. A. Ray	" " "	1851 1852	200 00
	G. B. Kauffman	a u	1853	200 00
*	Edward Orton		1854	180 00
0.00	J. N. Bradford	" " " " " " " " " " " " " " " " " " " "	1855	180 00
	F. E. Sanborn H. C. Lord	4 4 ******	1856	200 00
	H. C. Lord F. C. Clark		1857 1858	160 00 160 00
	G. W. McCoard	"" " " " " " " " " " " " " " " " " " " "	1859	160 00
	C. P. Linhart	" "	1860	160 00
	D. S. White	" "	1861	160 00
	F. C. Caldwell E. A. Hitchcock	u u	1862	160 00
	E. A. Hitchcock C. S. Prosser	" " "	1863	150 00
	W. D. Gibbs	" " "	1864 1865	150 00 160 00
	P. G. Bowman	" "	1866	140 00
	W. H. Page	11 11	1867	140 00

Date	To whom paid	For	what purpose	No	Amount
1900					37
an. 27	W. H. Siebert	Salary	Jan. 1900	1868	\$135 0
	5. A. Norton	44	*******	1869	120 0
	E. B. Kinkead	**	** ******	1870	120 0
	J. E. Boyd	44		1871	120 0
	J. E. Allen	44		1872	115 0
	C. E. Sherman	44	** ******	1873	110 0
	T. E. French		"	1874	110 0
	J. R. Taylor	"		1875	110 0
	C. W. Mesloh	16		1876	110 0
	A. W. Hodgman	11		1877	110 0
	J. H. Schaffner	**		1878	110 0
	W. E. Henderson	11	"	1879	100 0
	J. A. Bownocker W. A. Knight	44		1880	100 0
		- 61		1881	100 0
	K. D. Swartzel	14		1882	100 0
	C. B. Morrey	44		1883	100 0
	337 5 63	46	** ******	1884	100 0
		44		1885	100 0
	F. M. Hamilton	44	44 ******	1886	100 0
	Geo. H. McKnight	44.		1887	80 0
	W. A. Landacre	ic		1888	90 0
	Wm. Renck	a		1889	70 0
	J. S. Hine	a		1891	85 (
	F. L. Landacre	40		1892	85 (
	C. P. Crowe	14		1893	85 (
	A. E. Vinson	44		1894	80 ( 80 (
	C. P. Souther	11		1895	21 3
	F. E. Kester	44	"	1896	80 ( 80 (
	S. E. Canfield	44	#	1897	75 (
	E. O. Randall	44	4	1898	70 (
	D. F. Pugh	44	"	1899	95 (
	W. F. Lavery	**		1900	70 0
	C. B. Frederick	44	** *******	1901	70 0
	J. B. Sanborn	44		1902	70 (
	E. E. Somermeier	**	**	1903	70 (
	T. K. Lewis	**	"	1904	60 (
	F. A. Fish	44	"	1905	60 (
	O. V. Brumley	"	** ******	1906	50 (
	Silas Martin	44	** ******	1907	30 (
	A. V. Bleininger	11		1908	40 (
	J. B. Parker	**	"	1909	30 (
	M. Dresbach	"	******	1910	30 (
	D. A. Kohr	46		1911	30 (
	H. C. Gore	"		1912	30 (
	J. H. Vosskuehler			1913	30 (
	A. H. McIntire	**		1914	30 (
	E. L. Ball	16	- 44 ******	1915	30 (
	C 4 C	44	4	1916	30 (
	F. J. Hale	- 44		1917	30 (
	S. W. Collett	16		1918	30 (
	H. W. Brown			1919	25 (
	J. H. Collins	44	"	1920	25 (
	J. H. Collins	44	4	1921	20 (
	E. G. Bailey	46	"	1922	17 5
	R. E. McIntosh	44		1923 1924	15 (
	W. C. McCracken	44		1924	12 8
	O. B. Jones	24		1926	150 (
	E. E. Harrold	- 14		1927	135 (
	J. P. Covan	46		1928	90 (

Date	To whom paid	For	what purpose	No	Amount
1900					SE No. 1
Jan. 27	G. A. Rose	Salary	Jan. 1900	1929	\$65 00
	F. Ruhlen			1930	60 00
	A. F. Hall E. D. Cockins	11		1931	60 00
	C. B. Guittard	14	4 ******	1932	58 33
	H. N. Townshend	44	"	1933 1934	55 00 55 00
	G. S. Kellicott	44	. "	1935	55 00 55 00
	Maude Jeffrey	144	44	1936	55 00
	Lucy Allen	16		1937	55 00
22	C. M. Low	-	. "	1938	54 17
27	F. K. Luke	Gym. v	* ****	1939	5 00
-	H. C. Price	Salary	Jan. 1900	1940	50 00
1000000	W. Standley	44	"	1941 1942	60 00 50 00
	B. LeBay	14.	"	1943	50 00
	D C. Huddleson	11		1944	50 00
	T. Boude	26		1945	45 00
	W. H. Case	44	4	1946	45 00
	M. Peck		** ******	1947	40 00
	A. Chantler	a		1948	45 00
100	J. H. Brown	11		1949	40 00
	D. D. Geren	11	# *******	1950 1951	40 00
	W. Whitestine	- 44	"	1952	40 00 40 00
	H. Chantler	44	"	1953	40 00
	G. C. Denney	11	"	1954	40 00
	M. N. Cook	44		1955	40 00
	F. E. Osborn	11	"	1956	40 00
	W. Townsel	44	"	1957	25 00
	J. C. Perry	44		1958	12 50
	E. R. Hubler	44.		1959	37 39
	J. Kelly	44		1960 1961	33 33 25 00
	W. C. Weir	44	4	1962	25 00 20 00
	A. G. McCall	44	"	1963	20 00
	C. H. Woodruff	**		1964	65 00
	E. Conway	"	4	1965	20 00
	W. Conklin	44		1966	40 00
	C. F. Dowd	- 11	44 ******	1967	45 00
	N. P. Oglesby	46	44 *******	1968 1969	20 00
	J. W. Decker	11	"	1970	· 140 00
	A. Dufour	- 44	"	1971	25 00
	J. W. Groves	- (4	"	1972	50 00
	W. Cannan	- 44	44 ******	1973	20 00
	W. E. Mann Grace Pitts	**		1974	25 00
		44		1975	30 00
	Wm. C. Mills E. H. Moore	46		1976 1977	35 00
	C. L. E. Moore	- 11		1978	20 00
	J. F. Jeffrey	4	"	1979	10 00
	E. Smith	44	"	1980	33 33
	D. A. Crowner			1981	33 33
	C. S. Prosser	Office	supplies	1982	1 45
West Control	M. J. Kellenberger	Service	S	1983	21 43
Feb. 1	D. A. Kohr Lily Weeks	Dal. Of	January salary.	1894	30 00
6	Lily Weeks	Gym	ervices	1985 1986	5 00
7	Col. Gas Co	Gas for	r January	1987	5 00 161 02
8	Nora Heath		of fees, act 3,	1001	101 02
		14,	89	1988	2 00

Date	To whom paid	For what purpose	No	Amount
1900				
Jan. 12	Lily Weeks	Salary	1989	\$5 00
15	C. N. Mooney	Stamp and pad	1990	1 25
	Arthur Geren	Drawing utensils	1991	5 40
	W. L. Redrow	Lab. assistance	1992	17 75
	C. P. Linville	Dent quality	1993	5 80
	F. C. Clark	Dept. supplies	1994	3 55
	Frank W. Arnold	Student labor	1995 1996	6 88
	Wm. Erdman		1997	3 00
	M. C. Hunter	4 4	1998	12 30
	O. I. Dick		1999	9 23
	B. B. Wells		2000	8 03
	B. F. Thomas	Dept. supplies	2001	5 61
	Andrew Spittal	Labor	2002	83 47
	M. C. Hunter	44	2003	2 48
	R. E. McIntosh	"	2004	10 88
	Ray McCallum	Adv. in student direc'y.	2005	5 00
	M. B. Lamb	Flooring stalls	2006	4 80
	H. J. Hammond	Hospital supplies	2007	3 60
	Fred Fleischer	Wheeling coal	2008	16 50
	Richard Spencer		2009	24 75
	E. H. Barton	Carpentry	2010	55 00
	Wilbert Morlan	44	2011	11 80
	J. W. Cawthon		2012	15 50 1 50
	J. H. Randall	44	2014	1 50 3 25
	Stella E. Canfield	Dept. supplies	2015	1 75
	Helen Potts	Piano playing	2016	4 00
	S. T. Hallsman	Painting	2017	80
	J. V. Denney	Department supplies	2018	2 00
	S. T. Barrows	Lang's Homer	2019	98
	J. A. Beer	Laboratory assistance	2020	3 60
	M. Dresbach	Department supplies	2021	7 62
	Metta Seymour	Clerical work	2022	4 75
1	E. G. Bailey	Labor	2023	7 20
	R. R. Harkins F. J. Hale	Drafting engine	2024	3 75
	Arthur Geren	Drafting	2025	2 50
	Charles R. Hall	Supplies	2026	1 80
	William Garret	Steam fitting	2028	1 50
	Roger DeWolf	Wiring	2029	3 15
	Harry Kinnear	"	2030	13 05
	Edw. Orton	Drafting	2031	12 00
	Wm. McPherson	Supplies	2032	3 15
	W. O. Thompson F. C. McKinney	Maps	2033	2 40
	F. C. McKinney	Guide	2034	4 50
	Roy Thompson	"	2035	4 13
	Frank C. Long		2036	3 88
	W. G. Wallace		2037	9 18
	E. L. Orndorff	*************	2038	4 00
	H. C. Herrick	17111111111111111	2039	90
	R. W. Funk	Piano playing Work in store room	2040	2 50
	J. W. Shaw		2041	25 00 9 45
	S. N. Young	Assistance law library Library work	2042	10 90
	Mabel Huddleson	Library work	2043	10 50
	Mason Snow	Work in law library	2044	11 50
	J. M. & W. Westwater.	Supplies	2046	10 00
	Cap. City Mchn. Wks		2047	26 62
	Cherington P. & E. Co.	Stamp and pad	2048	1 10
	Nitschke Bros	Printing		3 4

Date	To whom paid	For what purpose	No	Amount
1900		A STATE OF THE STA	Ty	
Feb. 15	The McMillan Co	Books	2050	\$8
	Franklin Toilet Sup. Co.	Towel service	2051	6
	Palmer & Beck	Supplies	2052	39
	The Tallmadge Hd. Co.	Hardware	2053	21
	Spahr & Glenn	Printing	2054	12
	Schoedinger, Frn & Co.	Hardware	2055	29
	James Penn	Freight and drayage	2056	3
	Blackwood, Green & Co.	Hardware	2057	23
	E. Doddington & Co Bausch & Lomb Opt. Co.	Lumber	2058	5
	Columbus Supply Co	Department supplies	2060	49
	G. E. Stechert	Books	2061	76
	Cent, O. Paper Co	Paper	2062	10
	H. Braun Sons & Co	Instruments	2063	14
	Champlin Printing Co	Printing	2064	17
	Hann & Adair	**	2065	2
	Miller Furniture Co	Furniture	2066	47
	Murray City Coal Co	Coal	2067	1,247
	Pharm, Rev. Pub. Co	1 copy review for 1 year	2068	2
	Helman-Taylor Co	Index	2069	10
	Library Bureau	Cabinets and subscrip.	2070	33
	Engelke & Bigelow	Freight and drayage	2071	61
	Nat. Educational Assn.	Volume proceedings	2072	2
	C. A. Waldo	Proocedings, Vol VII.	2073	2
	H. L. Fairchild	Geol. Soc. of Am. Vol X	2074	5
	R. R. Bowker	Society publications	2075	2
	Am. S. of Mech. Eng.	Copy proceedings	2076	1
	Seraphim B. B. Co	Binding	2077	29
	Burrows Bros. & Co	Books	2078	99
	Ohio Furn. Co West, Elec. Inst. Co	Case and book case	2079	31
	Hann & Adair	Supplies	2080	21
	Domestic Laundry	Printing	2081	20
	Funk & Wagnalls	Towel washing	2082	22
	Houghton-Mifflin Co	Books	2084	6
	T. Y. Crowell & Co	Book	2085	2
	John H. Grove	Insurance premium	2086	12
	Samuel Smith	Brush and blacking	2087	4
	Kelton & Converse	Lumber	2088	1
	E. A. Kinsey Co	Steel	2089	5
	Nicholson File Co	Files	2090	12
	G. B. Schulte Sons Co	Steel	2091	10
	Spg. Mchn. & Tool Co	Lathe	2092	570
	H. Kohlbusch	Weights	2093	6
	E. G. Smith	Calipers	2094	22
	Hyatt R. B. Co	Instrument	2095	7
	Hanna Paint Mfg. Co Elec. Sup. & Const. Co	Paint and surfacer	2096	2
	H. Cole Co	Supplies	2097	
	W. I. Carruthers	Telescope	2098	3
	Col. Gas Co	Coke	2099	78
	A. H. Cross, Mgr	Advertisement	2100	8
	Nat. Stockman & Farm.	Advertising	2102	12
	R. M. Donaldson	"	2103	63
	L. S. Wells	Books	2104	5 7
	Buntin Bros	Material for bandages	2105	4 8
	L. P. Bailey	Advertisement	2106	
	Reynolds Bros	Instruments	2107	6
	Sunday Creek Coal Co.	Coal	2108	49 8
	DeLaval Sep. Co	Rope belts	2109	1 7
	Watertown Ther. Co	Thermometers	2110	9 (

Date	To whom paid	For what purpose	No	Amount
1900		NAME OF THE OWNER.		
eb. 15	C. L. Kiewert	Brushes	2111	\$7.5
	Howe Scale Co	Supplies	2112	8 0
	Creamery Package Co	Supplies	2113	58 7
	D. H. Burrell & Co	Apparatus	2114	64 1
	Osborn, Will's. & Horn	Coal	2115	34 2
	M. Armbruster & Sons.	Scenery repairing	2116	2 0
	Ed. P. Budge	Engrav. of Dr. Orton	2117	55 0
	Amer. Grange Bulletin	Advertising	2118	18 9
	Webb Sta. & Ptg. Co	Pad and ink	2119	7
	Globe Wernecke Co	Cabinet	2120	136 0
	W. S. Orvis	Ribbon		1 0
	O. S. Lear	Type writer repairs	2122	4 0
	L. A. Harsh & Co	Mon pails	2123	3 0
	Standard Oil Co	Oil	2124	8 7
	J. M. Kerr	Window rubbers	2125	2 5
	McClelland & Co	Calendar pads	2126	1
	Leader Printing Co	Advertising		12 2
	Central Union Tel. Co	Telephone service	2128	86 (
	E. B. Vorhees, Secv	Mbrsp. ass. agr. colleges	2129	10 (
	Amer. Dist. Tel. Co	Rent of boxes	2130	27 (
	Logan McCormick	Picture frame		2 9
	T. J. Dundon & Co	Sawdust		3 (
	Standard Oil Co	Oil		
	Westingh'se E. Mfg. Co.	Coils		3 (
	Penna. Fuel Co	Lump coal		2 1
	Col. Bolt Works	Bolts	2136	3
	Stand. Thermometer Co.	Globes		
	Sterling Arc Lamp Co	"		1 (
-	Col. M. & Mine Sup. Co.	Supplies		19
	The Elec. S. & C. Co	44		4
	Erner & Hopkins Co	4		22 (
	Kauffman, Lattimer Co.	Drugs and sundries	2142	192 7
	Stillwell-Bierce - Smith-			
	Vaile Co., The	Pumps, etc	2143	1 (
	Sherwood Mfg. Co	Awning	2144	
	Schaffer & Budenburg.	Thermometers	2145	18
	American Meter Co	Gauge meters	2146	7 9
	Deane Steam Pump Co.	Pumps	2147	202
	Andrew Kaiser	Sterilizers	2148	7
	Toledo Blade Co	Advertisement	2149	6 '
	Commercial Tribune Co.	**		9 4
	Plain Dealer Pub Co		2151	7
	O. S. Journal Pub. Co	**	2152	7 1
	Carl Braun	Pressed cork	2153	5
	Philip Neel	Printing labels	2154	2
	J. S. Abbott & Co	Hardware	2155	16 '
	Longmans, Green & Co.	Books	2156	1
	L. Gasteloecchi & Co	Carts	2157	14
	Dunn, Taft & Co	Dry goods	2158	4
	Crystal Ice Mfg. Co	Ice coupon book	2159	2 (
	Hager & Graves	Groceries	2160	47
	Alpha Dairy Co	Milk tickets	2161	3
	M. V. Mitchell & Son	Labor	2162	3 5
	Capital City Mach. Wks.	Iron grate	2163	6 3
	Flint & Walling Mfg. Co.	Figure 434A	2164	4 9
	The A. H. Andrews Co.	Hyloplate	2165	21
	Vogelgesang Fur. Co	Furnace repairs	2166	3 8
	The W. M. Taylor M.		00000	
	& Grate Co	Mantel and trim	2167	17 8
	The B. F. Goodrich Co.	Rubber mat	2168	5 (
	Wm. Bebb	Painting	2169	5 9

Date	To whom paid	For what purpose	No	Amount
7				
1900				
Feb. 15	W. F. Worcester	Stove grates	2170	\$1 2
	Jacob Good	Carpentry	2171	69 3
	Einer & Amend	Chemicals	2172	10 0
	Emil Greiner Kimball & Matthews	Supplies	2173	24 0
	Quaker City Rubber Co.	Tubing	2174	1 6
	Merck & Co	Celloidin	-	21 6
	H. Troemner	Weights, etc	2176	12 3
	Denver Fire Clay Co	Supplies	2178	228 8
	Kauffman-Lattimer Co	Drugs and sundries	2179	43
	C. L. Vogel	Labor and material	2180	15 (
	A. G. Spaulding & Bro.	Lockers	2181	375
	Wm. Burdell, Jr	Repairs	2182	3 9
	E. G. Saltmann	Blue print frames	2183	7 (
24	Gustav Bruder Thomas F. Hunt	Band instruction	2184	42 (
24	Wm. D. Gibbs	Salary Feb. 1900	2185	250 (
	John W. Decker		2186	160
	Frank Ruhlen	4 4	2187	140
	H. A. Weber	4 4	2188 2189	60 ( 225 (
	A. E. Vinson	" "	2190	225 80
	Geo. W. Knight	" "	2191	250 (
	John B. Sanborn	44 44	2192	70
	A. M. Bleile		2193	225
	C. B. Morrey	" "	2194	100
	M. Dresbach	" "	2195	30
	H. C. Lord	u u	2196	160
	W. A. Kellerman J. H. Schaffner		2197	225 (
	C. W. Collett		2198	90 (
	Alice Dufour		2199	25
	Fred Luke	4 4	2200 2201	25 (
	Wm. McPherson		2202	225
	S. A. Norton	- 46 46	2203	120
	W. E. Henderson	4 4	2204	100
	D. A. Kohr	" "	2205	60
	H. C. Gore	" "	2206	30
	J. F. Jeffrey	" "	2207	10
	C. N. Brown	u u	2208	225
	C. E. Sherman J. W. Groves		2209	110
	Edward Orton, Jr		2210	50
	A. V. Bleininger		2211	180
	P. G. Bowman	ee ee	2212	140
	C. P. Souther	it it	2214	140 80
	J. N. Bradford	ie ii iii.	2215	180
	T. E. French	и и	2216	110
	T. K. Lewis	" "	2217	60
	J. H. Vosskuehler	" "	2218	30
	Silas Martin	" "	2219	50
	F. C. Clark	" " "	2220	160
	J. P. Gordy Grace Pitts		2221	225
	F. C. Caldwell	a a	2222	30
	F. A. Fish		2223	160
	J. P. Covan		2224	60
	A. C. Barrows		2226	70 225
	J. R. Taylor	u u	2227	110
	W. H. Siebert	44 44	2228	135
	J. A. Bownocker	" "	2229	100
	Charles Prosser	"	2230	150

Date	To whom paid	For	what	purpose	No	Amount
1900						
Feb. 24	W. C. Mills	Salary	Feb.	1900	2231	\$35 0
	E. A. Eggers	**	4.6		2232	225 0
	C. W. Mesloh	64		********	2233	110 0
	E. H. Moore	44	41	*******	2234	20 0
	J. R. Smith	- 44	- 40	******	2235	225 0
	A. W. Hodgman W. R. Lazenby	46	46	******	2236	110 0
		16		*******	2237	225 0
	F. E. Sanborn	64	- 44	*******	2238	40 0
	W. A. Knight	iv.	- 44		2239 2240	200 0
	C. P. Crowe	(4)	48	*******	2241	100 0 80 0
	W. H. Renck	+4		*******	2242	85 0
	A. H. McIntyre	44	41		2243	30 0
	S. C. Derby	44	46	*******	2244	225 0
	W. F. Hunter	44	40		2245	250 0
	J. H. Collins	- 44	44		2246	20 0
	J. A. Shauck	**	34	*******	2247	17 5
	E. B. Kinkead	- 14	66	******	2248	120 0
	W. H. Page	44	1 86	*******	2249	140 0
	E. O. Randall	.44	44	*******	2250	70 0
	O. B. Jones		44	******	2251	95 0
		- 11	40	*******	2252	135 0
	H. N. Townshend Gertrude Kellicott		40	******	2253	55 0
	Maude Jeffrey	215	46		2254	55 0
	Lucy Allen	44	- 44	*******	2255 2256	55 (
	C. B. Guittard	14	11 44		2257	55 ( 55 (
	R. D. Bohannon	ii	44		2258	225 (
	G. W. McCoard	44	44		2259	160 0
	C. L. Arnold	11	44		2260	100 0
	K. D. Swartzel	35	44	*******	2261	100 0
	Emma L. Ball	44	***	*******	2262	30 0
	J. W. Young	44	14	******	2263	30 0
	W. T. Magruder	4	- 44	******	2264	10 0
	E. A. Hitchcock	- 66			2265	225 0
	F. J. Hale	ii	-		2266	150 (
	C. A. Grate	4	-	*******	2267 2268	30 (
	A. F. Hall	14		*******	2269	30 ( 60 (
	F. A. Ray	4	- 11		2270	200 0
	N. W. Lord	a	44		2271	200 0
	E. E. Somermeier	44.	44		2272	70 0
	G. B. Kauffman				2273	200 (
	W. A. Landacre	44	44	******	2274	70 (
	E. E. Harrold	11	- 16		2275	90 (
	N. P. Oglesby	"	- 66		2276	40 (
	W. H. Scott	"		*******	2277	225 (
	F. M. Hamilton C. P. Linhart		- 11	******	2278	80 (
	S. E. Canfield	- 14	10	******	2279	160 (
	D. C. Huddleson	ii	44	*******	2280 2281	75 (
	B. F. Thomas	11	66		2282	50 ( 225 (
	J. E. Boyd	is	- 44		2283	120 (
	r. E. Kester	44	44		2284	80 (
	H. W. Brown	11	**		2285	25 (
	J. V. Denney	44		******	2286	225 (
	W. L. Graves	44			2287	100 (
	G. H. McKnight		22		2288	90 (
	H. C. Allen	- 44	24		2289	115 (
	J. B. Parker	- 66	64	******	2290	30 (
	B. L. Bowen	44	64	*******	2291	225 (

## OHIO STATE UNIVERSITY

			-			
Date	To whom paid	For	what pt	arpose	No	Amount
1900						
Feb. 24	C. A. Bruce	Salary	Feb. 19	00	2292	\$100 00
	C. F. Dowd	44		******	2293	20 00
	D. S. White W. F. Lavery	17	14	******	2294	160 00
	W. F. Lavery C. B. Frederick	- 11	16	******	2295 2296	70 00
	O. V. Brumley	- 11	- 16	*******	2297	70 00 50 00
	H. M. Osborn	- 11	u	*******	2298	225 00
	Jas. S. Hine F. L. Landacre	11	44	******	2299	85 00
	W. O. Thompson	- 44	n		2300 2301	85 00
	Alexis Cope	и	- 4	*******	2302	416 67 187 50
	Carl E. Steeb	-46	- 4	*******	2303	60 00
	E. D. Cockins	10	**	******	2804	58 33
	K. D. Duncan E. R. Hubler	et.	10	A	2305 2306	54 17
	W. C. McCracken	-44	**	*******	2307	33 33 150 00
	C. M. Low	4	**	******	2308	54 17
	Wm. Standley	66	11	*******	2309	50 00
	Thos. Boude	66	**	******	2310 2311	50 00
	Wm. H. Case	- 44	u	*******	2312	45 00 45 00
	Marion Peck	40	14		2313	40 00
	Geo. R. Rose	60	0		2314	65 00
	Jos. Garrettson Benj. Irwin	a	66	******	2315	37 39
	J. C. Perry	ec		******	2316 2317	45 00 12 50
	G. A. Goodspeed	- 44	68		2318	40 00
	R. E. McIntosh	44	- 44	*******	2319	12 50
	D. D. Geren T. E. Osborn	66	44		2320	40 00
	J. H. Brown		e		2321	40 00
	Wm. Whitestine	и	- 64		2323	40 00
	G. C. Denny	84	- 44		2324	40 00
1	E. G. Bailey	16	ee	******	2325	15 00
	W. Conklin	. 11	ii ii	*******	2326 2327	40.00
	H. Chantler	- 11	**		2328	40 00
	A. Chantler	66	11	*******	2329	45 00
77. 12. 1	James Kelly	- 11	- 6	******	2330	20 00
	W. C. Weir	44		*******	2331 2332	25 00 20 00
	Elisha Smith	it	- 44		2333	33 33
	D. A. Crowner	44	66	*******	2334	33 33
	C. H. Woodruff W. Townsel	u	4	******	2335	65 00
	Wm. Cannan	44	44		2336 2337	25 00 20 00
	W. E. Mann	- 11	- 44		2338	25 00
10	A. G. McCall	44	11	******	2339	27 00
19	Ohio National Bank	Foreig	n money	order	2340	3 40
20	Lily Weeks	Service		********	2341 2342	106 55 5 00
21	Ohio National Bank	Foreig	n money	order	2343	7 25
ne	A. McLaughlin M. J. Kellenberger	Clerica	l work .		2344	2 55
26	Lily Weeks	Service	es		2345	25 00
March 1	A. J. Loyne	Return	of fees		2346 2347	4 00 30 00
5	Lily Weeks	Janitre	SS		2348	5 00
7	Murray City Coal Co	Coal .			2349	932 79
6 7	Thos. J. Godfrey Engelke & Bigelow	Fraigh	e expens	ses ayage	2350 2351	10 25
	Tracy-Wells Co	Suppli	es	ayage	2352	22 99 13 77
		A.A.	2		-	40 11

Date	To whom paid	For what purpose	No	Amount			
1900		THE STREET					
Mar. 7	Kauffman-Lattimer Co.	Drugs and sundries	2353	\$125 10			
	Schoedinger, F'rn & Co.	Shears and nails	2354	2 75			
	Payne McD. Hdw. Co.	Hardware	2355	9 95			
	Erner & Hopkins Cent. O. Paper Co	Paper	2356	25 40			
	James P. Carlisle	Paper	2357 2358	22 41 8 90			
	Tallmadge Hdw. Co	Hardware	2359	23 04			
	Columbus Supply Co	Supplies	2360	15 90			
	Blackwood, Green & Co. Robert A. McClure	Metal and labor	2361	11 72			
	Amer. Dist. Tel. Co	Table frames, etc Messenger, etc	2362 2363	206 02 1 25			
	W. S. Orvis	Paper and ink	2364	1 40			
	H. Braun Sons & Co	Instruments	2365	7 75			
	Columbus Bolt Works	Bolts	2366	80			
	J. S. Abbott & Co Hall-Collins Hdw. Co	Hardware	2367	4 15			
	Elec. Sup. & Const. Co.	Files and sandpaper Electrical supplies	2368 2369	6 63 13 28			
	Miller Fur. Co	Special box	2370	15 00			
4	Champlin Printing Co	Printing	2371	35 50			
	Spahr & Glenn	Oa	2372	7 25			
	Standard Oil Co Col. M. & M. Sup. Co	Oil	2373 2374	34 73			
	Domestic Laundry	Laundry work	2375	41 40 21 83			
	Capital City Mach. Co.	Iron and castings	2376	27 78			
	J. S. Maclean	Rifle molds	2377	93 75			
	E. C. Karshner	Postal guide	2378	2 50			
	Hann & Adair Western Union Tel. Co.	P. O. cards	2379	2 75			
	Nitschke Bros	Telegrams	2381	4 89 9 40			
	Col. Transfer Co	Carriage service	2382	5 00			
	J. F. Ridenour	Half dozen files	2383	1 25			
	Eaton Mach. Works	Lock and hasps	2384	15 18			
	Central Union Tel. Co Wm. Taylor M. & G. Co.	Rent and tolls	2385 2386	12 96			
	Batterson Dec. House.	Papering	2387	75 00 8 20			
	McAllister, Moh. & Co	Desk	2388	18 00			
	Fish Press Brick Co	Brick	2389	13 00			
	New Col. Bridge Co	Plate and drayage	2390	3 06			
	Cherington P. & E. Co P. C. Cull	Mason work	2391 2392	1 55			
	Kimball & Matthews	One dozen plates	2393	6 75 56			
	Hart & Crouse	Shaker bar and labor	2394	2 06			
	J. & G. Butler	Soap and candles	2395	24 82			
	L. A. Harsh & Co Wassall F. C. Co	Springs and wringer	2396	1 50			
	Ruggles-Gale Co	Record	2397 2398	5 70 1 25			
	J. J. Smith & Co	Stamp and pad	2399	1 35			
	Col. Pharmacal Co	Rubber tubing	2400	15			
	Jeffrey Mfg. Co J. M. & W. Westwater.	Chain		8 00			
	Lewis Fink	Wire shades, etc Picture rail	2402 2403	3 40 2 60			
	Lawrence Press Co	Labels	2403	3 00			
	Seraphim Blank B. Co.	Binding	2405	145 15			
	Col. Gas Co	February gas	2406	161 75			
	J. A. Beer	Laboratory work	2407	2 10			
	W. H. Waters Forest Spencer	Wheeling coal	2408 2409	42 00 9 00			
	F. W. Arnold	Student assistance	2410	4 94			
	O. I. Dick	Labor	2411	8 50			
	M. C. Hunter	"	2412	- 9 00			
	J. G. Sterling	"	2413	4 25			

Date	To whom paid	For what purpose	No	Amount
1900				
Mar. 7	B. B. Wells	Labor	2414	\$8.8
	Melvin Dresbach	Dept. supplies	2415	5 7
	Spahr & Glenn	Envelopes	2416	2 2
	J. W. Shaw	Work in library	2417	8 9
	Mabel Huddleson	Labor	2418	10 0
	S. N. Young	Work	2419	9 1
	Mason Snow	Labor in library	2420	8 9
	F. C. McKinney	Guide	2421	5 0
	F. C. Long.	2	2422	3 6
	Helen Powell	Clarical comicas	2423	6 2
	K. H. Duncan	Clerical services	-	3 1
	Grace Eagleson	Street car tickets	2425	5 (
	E. L. Orndorf	Guide	2426 2427	4 4
	Andrew Spittal	Labor	2428	5 8 21 2
	W. L. Redrow		2429	17 7
	R. W. Funk	Work in store room	2430	16 4
	Phil. Long	Luncheon	2431	7 5
	E. G. Bailey	Labor	2432	6 1
	T. A. Panter	Masonry	2433	2 1
	Metta Seymour	Clerical work	2434	6 (
	Edith Seymour	Piano playing	2435	3 (
	Helen Potts		2436	6 9
	H. C. Price	Photographs	2437	2 7
	Richard Spencer	Wheeling coal	2438	42 (
	C. L. Sackett	Lantern, extra copies	2439	8 (
	H. J. Hammond	Hospital supplies	2440	3 (
	J. Stainbrook	Work in boiler house	2441	9 (
	Wilbert Morelan	Carpentry	2442	14 2
	J. H. Randall E. J. Barton		2443	34 5
			2444	13 7
	A. F. Wilcox H. O. Carrington	**********	2445	16 8
	A. H. Barber Mfg. Co.	Lantern	2446	26 6
T. 1	Chic. Blue Pr. Paper Co.	Blueprint paper	2447 2448	9 (
	Baker & Adamson C. Co.	Chemicals, etc	2449	36
	Eimer & Amend	4	2450	13 -
	Emil Greiner	Apparatus	2451	29 8
	Chic. Laboratory S. Co.	Supplies	2452	14
-	Akron Chemical Co	Bisque ware	2453	2 (
	Amer. Aristotype Co	Paper	2454	9 7
	Bausch & Lomb Opt. Co.	Apparatus	2455	7 1
	Open Court Pub. Co	Portraits	2456	12
	Elec. Appliance Co	Conduit and clips		6 (
	Babcock & Wilcox Co	Worm and wheel	2458	18 (
	M. P. Streett	Masonry and material	2459	22 (
	M. R. Shellenberger Jas. McCrea & Co	Advertisement	2460	1 1
	Fairbanks, Morse & Co.	Steam clamp	2461	9 7
	Riehle Bros. & Co	Standard sand	2462	10
	W. H. Anderson & Co.	Reports	2463 2464	47 8 15 (
	C. Scribner's Sons	Commercial Cuba	2465	3 5
	R. B. Hough	Specimen pages	2466	9 7
-	H. O. Carrington	Normal lantern	2467	26 6
	D'Este & Seely Co	Trap	2468	4 (
	M. P. Streett	Material and labor	2469	4 (
	Henry Barnard	Journal of Education	2470	120 (
	Burrows Bros. & Co	Books	2471	94 9
	Boston Test. Lab	Subscription	2472	3 0
	Am. Inst. Elec. Engrs	Reports	2473	6 (
	Boston Book Co	Books		83 (

Date	To whom paid	For	what purpo	se l	No	Amount
100			what purpo	30	NO	Amount
1900						
Mar. 7	Robt. I. Fulton	Desks			2475	\$10 00
	G. E. Stechert	Books			2476	944 07
	Ohio Nat. Bank		money ore		2477	11 95
	R. M. Rownd, P. M J. N. Bradford		or 2nd class		2478	10 00
	Webb Sta., & Ptg. Co	Office s	upplies	ons	2479 2480	14 25 11 00
	Chic. Lab. Sup. & S. Co.	Supplie	S		2481	11 00 5 75
	Osborne, Will's. & Horn	Coal .			2482	59 16
	J. T. Godfrey	Trustee	expense		2483	20 11
	John W. Beech		*********		2484	60 00
	Lily Weeks Postal Tel. Cable Co	Talagra	S		2485	5 00
	D. A. Crowner	Salary	ms	0	2486	33 34
	Elisha Smith	11.	March, 190	****	2488	33 34
	Lily Weeks	Service	s, March, 1	900	2489	5 00
	T. F. Hunt	Salary		0	2490	250 00
	Wm. D. Gibbs	æ	44		2491	160 00
	J. W. Decker Frank Ruhlen	44	16	****	2492	140 00
	H. A. Weber	44	11	****	2493 2494	60 00 225 00
	A. E. Vinson	12			2495	225 00 80 00
	G. W. Knight	66	16	4	2496	250 00
	John B. Sanborn	**	"		2497	70 00
	A. M. Bleile	44	4		2498	225 00
	M. Dresbach		**		2499	100 00
	H. C. Lord	44	44		2500	30 00
	W. A. Kellerman	44	11		2501 2502	160 00 225 00
	J. H. Schaffner	46	46	1	2503	225 00 100 00
	S. W. Collett.	44	4		2504	25 00
	Alice Dufour	44	**		2505	25 00
31	F. K. Luke Wm. McPherson	11	A II		2506	50 00
C. S. F. C. C.	S. A. Norton	ec.	4	****	2507	225 00
	W. E. Henderson	- 11	45 45	****	2508 2509	120 00 100 00
	D. A. Kohr	**	44	1	2510	60 00
	H. C. Gore	"	a		2511	30 00
	J. F. Jeffrey C. N. Brown.	46	"		2512	10 00
	C. N. Brown C. E. Sherman	u	a		2513	225.00
	J. W. Groves	44		****	2514	110 00
	Ed. Orton	46	ir		2515 2516	50 00 180 00
	A. V. Bleininger	167	**		2517	40 00
	Wm. Cannan	**	**		2518	20 00
	P. G. Bowman	- 11	11		2519	140 00
	I N Bradford	**	11		2520	80 00
	T. E. French	- 66	- 44	1000	2521 2522	180 00
	I. K. Lewis	46	44		2523	110 00 60 09
	L. Fl. VOSSKHehler	45	"	14.00	2524	30 00
	Silas Martin	4 .	10	****	2525	50 00
	F. C. Clark W. E. Mann	- 66			2526	160 00
	Grace Pitts	44		****	2527	25 00
	J. P. Gordy	"	46		2528 2529	30 00
	F. C. Caldwell	44	**		2530	225 00 160 00
	F. A. Fish	#	"	1	2531	60 00
	J. P. Covan	66	**		2532	70 00
	A. C. Barrows	**	44		2533	225 00
	J. R. Taylor W. H. Siebert	**	44		2534	110 00
	II. Siebert		Will have been been been been been been been be		2535	135 00

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Date	To whom paid	For	what pu	rpose	No	Amount
1900						
Mar. 31	J. A. Bownocker	Salary	March,	1900	2536	\$100.00
	C. S. Prosser	11	is is	1000	2537	\$100 00 150 00
	W. C. Mills	44	- 44		2538	35 00
	E. A. Eggers	11	- 11	****	2539	225 00
	C. W. Mesloh E. H. Moore			****	2540	110 00
	J. R. Smith		100	****	2541 2542	20 00 225 00
	A. W. Hodgman	16	a		2543	110 00
	W. R. Lazenby	"			2544	225 00
Marie Marie	H. C. Price F. E. Sanborn	4	- 10	****	2545	50 00
	W. A. Knight	-a			2546 2547	200 00
	C. W. Crowe	- 66	1000	****	2548	100 00 80 00
	W. H. Kenck	12	40		2549	85 00
	A. H. McIntire	**	- "		2550	30 00
	S. C. Derby				2551	225 00
	J. H. Collins	11	- 4	1111	2552	250 00
	J. A. Shauck	- 11	* **	Man	2553 2554	20 00 17 50
	E. B. Kinkead		44		2555	120 00
	W. H. Page	"			2556	140 00
	E. O. Randall	"	4 44	****	2557	70 00
	D. F. Pugh O. B. Jones	11	- 10	1143	2558	95 00
	H. N. Townshend	45	44		2559 2560	135 00 55 00
	Gertrude Kellicott	66			2561	55 00
	Maude D. Jeffrey	46	46		2562	55 00
	Lucy Allen	- 11	- 11	****	2563	55 00
	R. D. Bohannon	- 66	- 14	I hater	2564	55 00
	G. W. McCoard	- 24			2565 2566	225 00 160 00
	C. L. Arnold	"	- 44		2567	100 00
	K. D. Swartzel	- 4	**	****	2568	100 00
	E. L. Ball	**	11.		2569	30 00
	J. W. Young C. L. E. Moore	44	- 4	****	2570 2571	30 00 10 00
	W. T. Magruder	.66		****	2572	225 00
	E. A. Hitchcock	**	44	****	2573	150 00
	F. J. Hale	"	11		2574	30 00
	C. A. Grate	46		****	2575	30 00
	A. F. Hall F. A. Ray	44	- 44	****	2576 2577	200 00
	N. W. Lord	11	- 11		2578	200 00
	E. E. Somermeier	- 44	- 44		2579	70 00
	G. B. Kauffman	44	- 11	****	2580	200.00
	W. A. Landacre E. E. Harrold	**	- 11		2581	70 00
ALCOHOL: NO STORY	E. E. Harrold N. P. Oglesby	ii	- 16	****	2582 2583	90 00 40 00
	W. H. Scott	a	16		2584	225 00
	F. M. Hamilton	"		-	2585	80 00
	C. P. Linhart	- 11	**		2586	160 00
	S. E. Canfield	1 10	"		2587	75 00
I THE PARTY	D. C. Huddleson B. F. Thomas		- 11	****	2588 2589	50 00 225 00
	J. E. Boyd	- 11		1	2590	120 00
The second second	F. E. Kester	- 11	"		2591	80 00
	H. W. Brown	**	44		2592	25 00
ALTERNATION OF THE PARTY OF THE	J. V. Denney	66			2593	225 00
A STATE OF	W. L. Graves	65	10	****	2594 2595	100 00
	H. C. Allen	**	- 11		2596	90 00
				COLUMN TOWNS		440 00

-	- Committee						
Date	To whom paid	For what purpos	e	No	Amount		
1900							
Mar. 31	J. B. Parker	Salary March, 190	0	2597	\$30 00		
	B. L. Bowen			2598	225 00		
	C. A. Bruce			2599	100 00		
	C. F. Dowd D. S. White	" "		2600	20 00		
	D. S. White W. F. Lavery	" "		2601	160 00		
	C. B. Frederick	11 (I	****	2602 2603	70 00		
	O. V. Brumley	11 11		2604	70 00 50 00		
	H. M. Osborn	" "		2605	225 00		
	J. S. Hine			2606	85 00		
	F. L. Landacre	"		2607	85 00		
	W. O. Thompson	# # ##		2608	416 67		
	Carl E. Steeb	u u		2609	187 50		
	E. D. Cockins			2610	60 00		
	E. R. Hubler	u u		2611 2612	58 33 33 33		
	K. H. Duncan	"		2613	54 17		
	W. C. McCracken	u u		2614	150 00-		
	C. M. Low	" "		2615	54 17		
	W. A. Standley	44 44		2616	50 00		
	Benj. LeBay T. A. Boude	11 11		2617	50 00		
	W. H. Case		****	2618	45 00		
	Marion Peck	11		2619 2620	45 00 40 00		
	Geo. R. Rose	44		2621	65 00		
	J. Garrettson	11 11	1	2622	37 39		
	Benj. Irwin	16 15		2623	45 00		
	J. C. Perry	- 11 11		2624	12 50		
	G. A. Goodspeed R. E. McIntosh	" "		2625	40.00		
	D. D. Geren	11		2626	12 50		
	T. E. Osborn	44 44		2627 2628	40 00		
	J. H. Brown	44 44		2629	40 00		
	Wm. Whitestine			2630	40 00		
	G. C. Denny			2631	40 00		
	E. G. Bailey	** **		2632	15 00		
	A. G. McCall M. N. Cook	" "		2633	27 00		
	W. Conklin	44 44		2634	40 00		
	H. Chantler	и		2635 . 2636	40 00 40 00		
	Arthur Chantler	44 44		2637	45 00		
	Earl Conway	4 4		2638	20 00		
	James Kelly	ee ee .		2639	25 00		
	W. C. Weir W. Townsel	4 4 4		2640	20 00		
	W. Townsel C. H. Woodruff	11 11	****	2641	25 00		
23	R. M. Cooper	Return fees	****	2642	65 00		
27	Lily Weeks	Salary one week		2643 2644	10 00 5 00		
30	M. J. Kellenberger	Services		2645	20 00		
April 4	M. J. Kellenberger O. I. Dick	Student labor		2646	7 03-		
	A. F. Wilcox.	Carpenter work		2647	25 25		
	F. C. McKinney	Guide, etc		2648	4 17		
	J. H. Randall	Carpenter work		2649	56 00		
	Andrew Spittal	Departmental work		2650	18 25		
	H. C. Price	Express and postage		2651 2652	29 49 5 00		
	B. B. Wells	Student labor		2653	6 50		
	F. W. Arnold	"		2654	1 35		
	A. H. Lyon			2655	4 05		
	T. A. Panter	Janitor work		2656	6 53		
	M. C. Hunter			2657	6 90		

_	STATEMENT II — Continued.						
Date	To whom paid	For what purpose	No	Amount			
1900							
April 4	Hattie Hoffman	Work in library	2658	\$4 00			
	Mason Snow		2659	9 95			
	Mabel Huddleson S. N. Young		2660 2661	10 00 10 60			
	J. W. Shaw	"	2662	10 30			
	Gretchen Miller West. Union Tel. Co	Tolomore	2663	4 50			
	Grace Young	Telegrams	2664 2665	4 00			
	Max Morse	History of England	2666	8 00			
	R. R. Harkins E. G. Bailey	Drafting	2667	90			
	M. W. Mumma	"	2668	9 68			
	E. E. Nobles	Drafting	2670	11 00			
	C. P. Linhart C. B. Frederick	Department supplies Anatomy horses	2671 2672	3 00 10 50			
	F. R. Kunkle	Work in laboratory	2673	5 25			
	F. C. Clark	Department supplies	2674	1 88			
	Arthur Geren E. L. Orndorf	Drawing paper	2675 2676	46 85 4 12			
	W. A. Hite		2677	5 38			
	A. McLaughlin	Clerical work	2678	1 35			
	Helen Powell	4	2679 2680	1 35 2 40			
	F. C. Long	Guide	2681	3 50			
	Roy Thompson	Discolation 1	2682	6 87			
	R. M. Starbuck J. R. Smith	Plumbing charts Expressage	2683 2684	3 00 1 85			
	E. D. West	Roman coins	2685	2 00			
	W. L. Redrow	Lab. asst	2686	15 35			
	C. P. Linville C. L. Sackett	Adv. in Lantern	2687 2688	5 00 58 67			
	R. W. Funk	Work in store room	2689	22 50			
	Jacob Slvh	Labor	2690	4 50			
	Gustav Bruder	Band instruction	2691 2692	20 00 3 10			
1	J. S. Hine	Lab. supplies & expen's	2693	14 85			
	J. C. Perry	Campus work	2694	3 90			
	Warren Severn J. N. Bradford	Drawing materials	2695 2696	2 80 1 50			
	R. E. McIntosh	Wiring, etc	2697	3 25			
	H. B. Kinnear	Wiring Wheeling coal	2698 2699	12 15			
*	Richard Spencer W. H. Watters	wheeling coal	2700	42 00 36 00			
	C. H. Woodruff	Muslin and hooks	2701	86			
	Standard Oil Co Erner & Hopkins	Oil and gasoline Electrical supplies	2702 2703	54 76 14 31			
	Spahr & Glenn	Printing	2704	32 00			
	J. S. Abbott & Co Hann & Adair	Hardware	2705	3 55			
	Kauffman, Lattimer Co.	Printing Drugs and sundries	2706 2707	9 50 132 56			
	J. S. Maclean	Case, brackets, etc	2708	20 50			
	J. S. Maclean	Hardware	2709	54 03			
	Schoedinger, F'rn & Co. Kelton & Converse	Lumber	2710 2711	30 23 67 97			
	Col. Mill & Mine S. Co.	Waste and lamps	2718	28 33			
	Harper Illustrating Co.	Half tone work	2713	11 85			
	Domestic Laundry Penna. Fuel Co	Towel service	2714 2715	23 72 21 50			
	Champlin Printing Co	Printing	2716	234 55			
	Franklin Toil, Sup. Co.	Towel service	2717	4 80			
	E. Doddington & Co	Lumber, etc	2718	51 00			

Date		Parambas -	40	
- 1	To whom paid	For what purpose	No	Amount
7000				
1900	61616			
April 4	Col. Supply Co	Supplies	2719	\$27 57
	R. A. McClure	Lumber	2720	87 95
	Bucher Eng. Co	Half tone, etc	2721	22 78
	J. W. Beach	Trustee expenses	2722	13 50
	Wm. Cannan	Salary for March	2728	60 00
	Murray City Coal Co	Store room supplies	2724	15 50
	Nitschke Bros	Printing	2725 2726	722 00
	Kimball & Mathews	Supplies	2727	9 60 1 00
	Cap. City Mchn. Wks.	Steel rods, etc	2728	9 26
	J. M. & W. Westwater	Chandeliers, etc	2729	109 25
	Payne-McD. Hdw. Co	Hardware	2730	13 40
STATE OF THE STATE OF	McClelland & Co	Supplies	2731	3 98
1350	E. E. Corwin	Claim of Col. Seed Co.	2732	43 75
A. C	Jeffrey Mfg. Co	Red rope ins. paper	2733	3 50
	Walter L. Lillie & Co	Merchandise and frames	2734	4 00
3000	Logan McCormick The H. Cole Co	Frames	2735	6.00
THE PARTY OF THE P	Seraphim B. B. Co	Thumb tacks	2736	3 00
	H. H. Walling	Binding Painting and scraping	2737	58 05
	Eldridge & Higgins Co.	Jars	2738	18 15
1230	Moonstone Copy. Sl. Co.	Filling and ink	2739 2740	5 25
	P. Hayden S. & Hd. Co.	Cube castings	2741	1 45 6 79
	Col. Gas Co	Coke	2742	6 65
	James P. Carlisle	Plaster and cement	2743	5 10
Hone	H. W. Johns Mfg. Co	One gallon No. 56 paint.	2744	1 50
	Burgess Sold. Furn. Co.	Repairing	2745	3 30
	Palmer & Beck	Tin	2746	3 00
10	H. Braun Sons & Co	Plumbago	2747	80
	Lynas Bros	Candles	2748	2 70
	Eaton Machine Works Lewis Fink	Iron pieces, etc		4 81
	Andrew Dobbie	Picture rail	2750	1 80
30 000	D. H. Derflinger	Gasoline	2751	2 40
	Z. L. White & Co	Dry goods	2752 2753	7 00 3 48
	Dunn, Taft & Co	Muslin, etc	2754	1 36
	Scioto Boiler Works	Boiler tube, etc	2755	7 00
	Eimer & Amend	Chemicals, etc	2756	28 60
10.00	Amer. Dist. Tel. Co.	Box rent	2757	26 00
100 m	Webb Sta. & Ptg. Co	Office supplies	2758	22 00
1-1-1	Burrows Bros. Co	Books	2759	91 84
1	G. E. Stechert	D:1	2760	234 04
-	Henry Troemner Baker & Adamson Co	Riders	2761	1 92
	J. Carbutt	Chemicals	2762	14 84
DESIGN OF STREET	Chic. Lab. Sup. & S. Co.	Plates		124 24
S. Rengal	E. H. Sargent & Co	Apparatus	2764 2765	32 40
	W. W. Whiton	Eight bush. potatoes	2766	51 00 8 00
	U. S. Elec. Supply Co	Telegraph receiver	2767	26 00
2000	U. S. Elec. Supply Co Gregory Elec. Co	Water meter	2768	15 15
100	Nicholson File Co	Files	2769	22 73
	The Strelinger Co	Hutler dado head	2770	10 80
The same of	G. H. Kearney	Journals	2771	62 50
The Party of the P	The Boston Book Co	Books	2772	103 00
Maria de la Companya	Boston Book Bind. Co.	Binder	2773	1 15
A CONTRACTOR OF THE PARTY OF TH	H. H. Ballard	Klips	2774	3 12
Service Control	T. C. Trueblood Torrey Bot. Club	N. A. E. reports	2775	2 00
77 30-34	E. L. Field	Memoirs, Vol. 6 and 7	2776	6.00
9 /11	R. R. Bowker	Cards	2777	20 70
And the second	E. M. Knowles	Stilts and pins	2778 2779	5 00 75

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Date	To whom paid	For what purpose	No	Amount
1900				
April 4	W. & L. E. Gurley	Sketching case	2780	\$38 00
	Edward Thompson Co	Encyclopedia	2781	6 00
	W. H. Anderson & Co W. H. Johns Mfg. Co	Reports, law	2782	7 00
	The Gunton Co	Half gallon paint Magazine, etc	2783	1 50
	J. R. Palmenberg's Sons.	Display fixtures, etc	2784 2785	11 20 18 60
	Rand, McNally & Co	Keeps Ancient Greece	2786	8 80
	P. P. Caproni & Bro	Busts	2787	11 05
	C. H. Evans & Co W. J. Holland	Advertisement	2788	5 00
	A. E. Adair	Butterfly book	2789 2790	3 00 4 05
	Lily Weeks	Janitress	2791	5 00
	H. J. McTeague	Estimate, etc	2792	520 25
	Col. Gas Co	March gas	2793	160 20
16	Eimer & Amend Adams-Bagnall Elec. Co.	Hydrometer, etc	2794	6 31
	F. H. McAllister	Outer globes	2795 2796	6 00
	Herman Haerlein	Services	2797	5 20 29 20
	Col. Water Works	Water rents	2798	797 11
	Bucher Eng. Co	Half tone work	2799	3 00
	J. S. Abbott & Co Lily Weeks	Locks and bolts	2800	2 42
	R. M. Rownd, P. M	Janitress work	2801	5 00
	R. M. Rownd, P. M	Postage stamps	2802 2803	16 00 19 50
28	Thos. F. Hunt	Salary, April, 1900	2804	250 00
	W. D. Gibbs	4.4.4.4	2805	160 00
	J. W. Decker	4 4	2806	140 00
	Frank Ruhlen H. A. Weber		2807	60 00
	A. E. Vinson	11 11 11	2808	225 00
	G. W. Knight		2809 2810	80 00 250 00
	J. B. Sanborn	** ** ****	2811	70 00
	A. M. Bleile	" " "	2812	225 00
	C. B. Morrey M. Dresbach		2813	100 00
	H. C. Lord	44 44 ****	2814 2815	30 00
	W. A. Kellerman	и и	2816	160 00 225 00
	J. H. Schaffner	" "	2817	100 00
	S. W. Collett	14 14	2818	25 00
	Alice Dufour F. K. Luke	4 4	2819	25 00
	Wm. McPherson	4 4	2820 2821	50 00
	S. A. Norton	4 4	2822	225 00 120 00
	W. E. Henderson	" "	2823	100 00
	D. A. Kohr	44	2824	60 00
	H. C. Gore	" " "	2825	30 00
	J. F. Jeffrey C. N. Brown	****	2826 2827	10 00
	C. E. Sherman	u u	2828	225 00 110 00
June 16	F. K. Luke	Salary, June. 1900	2829	50 00
April 28	Edward Orton, Jr	Salary, April, 1900	2830	180 00
	A. V. Bleininger Perla G. Bowman		2831	40 00
	C. P. Souther		2832 2833	140 00
	J. N. Bradford		2834	80 00 180 00
	J. N. Bradford T. E. French		2835	110 00
	T. K. Lewis	4 4	2836	60 00
	J. H. Vosskuehler		2837	30 00
	Silas Martin F. C. Clark	u u	2838	50 00
	Grace Pitts	a a	2839 2840	160 00 30 00
				00.00

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Date	To whom paid	For	what purpose	No	Amount
1900			= 1		
April 28	J. P. Gordy F. C. Caldwell.	Salary,	April, 1900	. 2841	\$225 00
	F. C. Caldwell	111	44 44	. 2842	160 00
	J. P. Covan			The state of the	60 00
	A. C. Barrows	66	a "	0045	70 00 225 00
	J. R. Taylor	**	" "	0040	110 00
	W. H. Siebert	16	"		135 00
	J. A. Bownocker C. S. Prosser	44			100 00
	W. C. Mills	**		0050	150 00 35 00
	E. A. Eggers	44	"	DOES	225 00
	C. W. Mesloh	"			110 00
	E. H. Moore	**	. "		20 00
	A. W. Hodgman	a		OOEE	225 00 110 00
	W. R. Lazenby	16	#	0050	225 00
	H. C. Price	46	"	OOME	50 00
	F. E. Sanborn	44	"		200 00
	W. A. Knight	46			100 00
	W. H. Renck	44	44 ***	0001	80 00 85 00
	A. H. McIntire	-	44	0000	30 00
	S. C. Derby	44	46	0000	225 00
	J. W. Beach W. F. Hunter	"	"		60 00
	W. F. Hunter J. H. Collins	***	"	9900	250 00 20 00
	J. A. Shauck	46	"	0000	17 50
	E. B. Kinkead	-11	44	0000	120 00
- 1	W. H. Page	11	"		140 00
	E. O. Randall	**			70 00
	D. F. Pugh O. B. Jones	44	"	0070	95 00 135 00
	H. N. Townshend	- 11		0070	55 00
	Gertrude Kellicott	44	"		55 00
	Maude Jeffrey Lucy Allen		"		55 00
	C. B. Guittard	44		0077	55 00 55 00
	R. D. Bohannon	44	"	0070	225 00
	G. W. McCoard	"	"	0070	160 00
	C. L. Arnold K. D. Swartzel	11			100 00
	K. D. Swartzel E. L. Ball	11		0000	100 00 30 00
	J. W. Young	11		0000	30 00 30 00
*	C. L. E. Moore	11	"	0004	10 00
	W. T. Magruder	44	"		225 00
	E. A. Hitchcock F. J. Hale	46	44		150 00
	C. A. Grate	ii.	"	0000	30 00
	A. F. Hall	68		. 2889	60 00
	F. A. Ray	44	"		200 00
	N. W. Lord E. E. Somermeier	**		0000	200 00
	G. B. Kauffman	- 11	" "	0000	70 00 200 00
	W. A. Landacre	66		0004	70 00
	E. E. Harrold	41		. 2895	90 00
	N. P. Oglesby W. H. Scott	45	"		40 00
	W. H. Scott F. M. Hamilton	11		0000	225 00 80 00
	C. P. Linhart	- 11	"	0000	160 00
	S. E. Canheld	4	"	. 2900	75 00
	D. C. Huddleson	- 46	"	. 2901	50 00

Date	To whom paid	For	what awasses	N.	
-	To whom paid	FOI	what purpose	No	Amount
1900	D D mi				
April 28	B. F. Thomas	Salary,	April, 1900	2902	\$225 00
	J. E. Boyd F. E. Kester	144	" "	2903	120 00
	H. W. Brown	44	" "	2904	80 00 25 00
	J. V. Denny	44	*	2906	225 00
	W. L. Graves		"	2907	100 00
	G. H. McKnight H. C. Allen	"	44	2908	90 00
	J. B. Parker	- 11		2909 2910	115 00
	B. L. Bowen	44	11	2911	30 00 225 00
	C. A. Bruce	- 11	"	2912	100 00
	C. F. Dowd		"	2913	20 00
	D. S. White W. F. Lavery	a		2914	160 00
	C. B. Frederick	**		2915	70 00
	O. V. Brumley	-11		2917	70 00 50 00
	Herbert Osborn	a		2918	225 00
	J. S. Hine	44	***	2919	85 00
	F. L. Landacre W. O. Thompson	16	"	2920	85 00
49	W. O. Thompson	11		2921	416 67
	Carl E. Steeb	46	44	2923	187 50 60 00
	E. D. Cockins	11	"	2924	58 33
	E. R. Hubler	"	"	2925	33 33
	W. C. McCracken	**	"	2926	54 17
	W. C. McCracken C. W. Low	a		2927	150 00
	W. A. Standley	- 44	44	2928	54 17 50 00
	B. LeBay	11		2930	50 00
4 . 1	T. Boude	66		2931	45 00
	W. H. Case Marion Peck	"	"	2932	45 00
	G. R. Rose	a	"	2933	40 00
	Jos. Garrettson	44	11	2934	65 00 37 39
	B. Irwin	44	"	2936	45 00
	J. C. Perry	46	"	2937	12 50
	G. A. Goodspeed R. E. McIntosh	et .	"	2938	40 00
	D. D. Geren	- 11	" "	2939	12 50
	T. E. Osborn	11-1	W 1	2941	40 00
	Wm. Whitestine	46		2942	40 00
	G. C. Denney	66	" .,	2943	40 00
	E. G. Bailey	ee	"	2944	15 00
	M. N. Cook	16	**	2945	27 00
	W. Conklin	11	**	2947	40 00
	H. Chantler	11		2948	40 00
	A. Chantler	11	"	2949	45 00
	Earl Conway	11	"	2950	20 00
	J. Kelley W. C. Weir	10		2951	25 00 20 00
	W. Townsel	"	"	2953	25 00
	J. H. Brown	11	"	2954	15 00
Tune 10	I. H. Brown		1000	2955	25 00
June 16 April 28	W. C. Weir	Salary J	une 1900	2956	20 00
- April 20	C. H. Woodruff	Saidly,	April, 1900	2957	25 00 65 00
20	A. Douglas, Admr	Settleme	nt Kendrick ca	se 2959	4,000 00
	N. W. Evans	Settleme	nt Evans case	2960	753 04
23	C. F. Galloway, clerk	Costs in	Evans case	2961	246 96
20	Lily Weeks	Salary .		2962	5 00

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Date	To whom paid	For what purpose	No	Amount
1900				
April 23	Nitschke Bros	Letter heads	2000	00 00
26	R. M. Rownd	Stamps	2963 2964	\$3 00 16 00
27	Mrs. M. J. Kellenberger	Salary	2965	25 00
May 1	Lily Weeks	Janitress	2966	5 00
	L. B. Wing	Expense as trustee	2967	6 00
1000	R. M. Rownd	Postage deposit	2968	10 00
4	Chicago Lab. S. S. Co.	Instruments and supplies	2969	215 55
2	L. C. Ferrell	Public documents	2970	240 00
3	Bausch & Lomb Co	Condenser	2971	1 09
	Crosby Steam Gauge Co.	Valve and springs	2972	8 58
	Eimer & Amend	Chemicals	2973	9 23
	G. E. Stechert	Books	2974	78 61
	Maher & Grosh Cut. Co.	Cutlery	2975	6 46
	E. H. Sargent & Co	Apparatus and tubes	2976	15 20
	J. Carbutt	Supplies	2977	32 85
	Gen. Electric Co	Electrical appliances	2978	1 48 10 10
	Albaugh Nursery Co	Trees	2980	19 00
	Open Court Pub. Co	Portraits, etc	2981	12 00
	G. B. Carpenter Co	Tents	2982	211 99
	Boston Book Co	Books	2983	97 31
	W. H. Anderson & Co	Digests	2984	139 75
	Am, Inst. Elec. Eng	Subscription	2985	5 00
Part To Go	Am. Pharm. Assn	Proceedings vol. 47	2986	5 50
	Am. Jour. of Physiology	Volume 15	2987	5 00
	Library Bureau	Library supplies	2988	16 57
	N. Y. Botanical Garden.	Journals, etc	2989	5 25
	H. E. Hooper	Century atlas	2990	11 50
March Co.	Burrows Bros. Co	Books	2991	184 67
	E. A. Kinsey Co Thomas Mehan & Sons.	Slide	2992	3 00
	DeLaval Sep. Co	Prints and balts	2993	109 95
	Creamery Package Co	Points and belts Dairy supplies	2995	4 50
	Cornish, Curtis & G. Co.	Cheese molds	2996	45 87 5 00
3000	Wellington Box Co	Boxes	2997	4 00
	D. H. Burrell & Co	Nut for Hood gang pr'ss		2 00
	Keuffel & Esser Co	Mining target	2999	72 00
	Wm. Gartner & Co	Spherometer, etc	3000	22 00
	Queen & Co	Bridge and tubes	3001	124 05
	Babcock & Wilcox Co	Boiler tubes	3002	34 10
	D. C. Heath & Co	Books	3003	1 34
	J. G. Biddle	Instruments	3004	25 58
	Fidelity Int. Agency	Miner's safety lamp	3005	4 40
	T. A. Randall & Co	Vitrified paving brick	3006	1 00
	Christy Fire Clay Co	Clay	3007	4 63
	U. S. Encaustic Tile Co. G. W. Carman	Tiles	3008	13 79
	F. H. Newell	Lecture	3009	3 00 15 00
	India Alkali Works	Savogran and oil soap.	3011	26 27
W. I	C. W. Pomeroy	Stationery	3012	3 50
	Jos. E. Wing	Lecture expenses	3013	4 40
	Wilbert Morelan	Carpentry	3014	4 25
	Honline & West	Books	3015	36 30
	J. H. Randall	Carpentry	3016	46 00
	W. L. Redrow	Lab, assistance	3017	2 25
	O. S. Marckworth	Laboratory work	3018	21 40
	H. C. Price	Department supplies	3019	7 50
100000	F. C. Clark	Drawing materials	3020	1 75
	S. W. Young	Library work	3021	9 65
	C. H. Woodruff	Piece iron		10 50
	Mabel Huddleson	Library work	3023	10 50

# OHIO STATE UNIVERSITY

Date	To whom paid	For what purpose	No	Amount
1900 May 3	Christ Trappe	One bay horse	3024	\$100 0
day o	Christ Trappe	Work in law library	3025	9 7
	Mason Snow	Work in law library	3026	9.9
	Thos. A. Panter	Janitor	3027	10 5
	J. G. Sterling	Student labor	3028	1 8
	O. I. Dick	Accietance	3029	8 8
	F. W. Arnold T. V. Stires	Work on campus	3031	17
	L. P. McAllister	" campastini	3032	1 1
	A. E. Day	Student labor	3033	13
	Morris Bugby	Work on campus	3034	2
	Blain Galloway		3035	10
	J. C. Perry	******	3036	18
	John Frank	Piano mm	DANA	5
	Edith Seymour Helen Potts	Piano, gym	3039	11
	E. G. Bailey	Department labor	3040	8
	F. J. Hale		3041	7:
	M. L. Seymour	Clerical work	3042	3
	H. C. Nidy	Blue printing		01
	E. A. Hitchcock	Cash advanced		31
	Richard Spencer Edward Orton, Jr	Wheeling coal	3045	36
	G. W. Schubert	Guide	3047	2
	F. C. Long		3048	4
	E. L. Orndorf		3049	- 4
	Roy Thompson			3
	Arthur Geren			9
	F. C. McKinney			3
	McClelland & Co			21
	Schoedinger, F'rn & Co.			67
	Col. Supply Co		3056	50
	Blackwood, Green & Co.		3057	10
	Col. M. & M. Supply Co	Valves, etc	3058	54
	Kelton & Converse	Lumber	3059	21
	Hann & Adair	Envelopes, etc	3060	13
	H. Braun Sons & Co		3061	22
	Troy Laundry Co	Washing curtains	3063	13
	Standard Oil Co	Renown engine oil	3064	9
	Tracy-Wells Co	Sundries	3065	27
	Hester Getz	Cardboard	3066	1
	Eva Tipton	Stenographic work	3067	2
	Osborn, Will's. & Horn	Coal	3068	32
	J. P. Carlisle Ohio State Journal Co		3069	13
	Spahr & Glenn	Printing	3071	6
	Hanna Paint Mfg. Co.	White lead	3072	11
	Haydenville M. & M. Co.	Fire clay	3073	5
	F. O. Schoedinger	Can and faucet		2
	Borger Bros	Cylinder	3075	4
	B. D. Potts Columbus Gas Co	Pipe	3076	2
	Wm. Burdell, Jr	Hobbles, etc	3077	12 5
	E. C. Livenspire	"		1
	Col. Wire & Iron Wks.	Partitions, etc		15
	M. P. Streett	Brickwork	3081	500
	Brust & Bauch	Masonry	3082	85
	B. G. Kalb	Stenographic work	3083	3

Continued.						
Date	To whom paid	For what purpose	No	Amount		
1900		Report to the second				
-May 2	Smith Bros. Hdw. Co	Emery, etc	3085	\$1 30		
	F. J. Heer	Electros of map	3086	2 00		
1	G. Drobisch	Shrubs	3087	2 50		
	I. H. Miller	LePages glue Notarial work	3088	2 00 4 00		
1	James Penn	Hauling	3090	3 45		
	Seraphim B. B. Co	Binding	3091	37 85		
4	The H. Cole Co	Range	3092	36 00		
	Payne-McD. Hdw. Co.	Drawing materials	3093	3 20 3 25		
	Livingston Seed Co	Glass	3095	1 60		
	Erner & Hopkins	Wire	3096	1 65		
	J. S. Abbott & Co	Hardware	3097	1 40		
	Robert A. McClure	Table and lumber	3098	49 22		
	Champlin Printing Co Hager & Graves	Printing	3099	75 25 32 97		
	The Alpha Dairy Co	Milk tickets	3101	1 10		
the state of	Busy Bee C. K. Co	Supplies	3102	1 40		
	Kimball & Mathews		3103	6 55		
1	P. Hayden Sad. Hd. Co.	Drugs and sundries	3104 3105	350 85		
77 18 20 19 19	Engelke & Bigelow	Freight and cartage	3106	9 35 72 35		
	Columbus Gas Co	April gas	3107	169 80		
	Engelke & Bigelow	Freight, etc		27 20		
	H. J. McTeague	Est. astron'rs. residence.	3109	465 85		
4	C. H. Davis R. M. Rownd, P. M	Two machines	3110	70 00		
ALL DE COM	John T. Mack	Postage stamps Expenses as trustee	3111	15 00 42 25		
	Lily Weeks	Janitress	3113	5 00		
t	Bucher Engraving Co	Half tone work	3114	31 25		
	Bucher Engraving Co	" " " · · · · · · · · · · · · · · · · ·	3115	3 00		
	J. McLain Smith R. M. Rownd, P. M	Trustee expenses Deposit, pound postage	3116	22 90 10 00		
	F. J. Tyler	Salary for April		25 00		
	Helen Powell	Clerical work	3119	2 00		
	E. E. Nobles	Drafting	3120	. 12 50		
	W. Townsel	Salary, May, 1900	3121	25 00		
	C. H. Woodruff	" " "	3122 3123	20 00 65 00		
	W. E. Mann	46 44	3124	25 00		
	Earl Conway	Salary, June, 1900	3125	20 00		
THE STATE OF	James Kelley	Salary, May, 1900	3126	25 00		
- 4 1	Earl Conway		3127 3128	20 00 45 00		
- 1	H. Chantler		3129	40 00		
	M. N. Cook	44 44	3130	40 00		
Part No. of Street	A. G. McCall	4 4	3131	27 00		
	E. G. Bailey		3132	15 00		
	G. C. Denny	4 4 ****	3133 3134	40 00 40 00		
	J. H. Brown		3135	15 00		
Stranger S	J. H. Brown	" "	3136	25 00		
	T. E. Osborn	" "	3737	40 00		
	D. D. Geren		3138	40 00		
	R. E. McIntosh G. A. Goodspeed		3139 3140	12 50 40 00		
	J. C. Perry	" " " " " " " " " " " " " " " " " " " "	3141	12 50		
	Benj. Irwin	" "	3142	45 00		
.00	J. R. Garrettson		3143	37 39		
26	Geo. R. Rose,	" " "	3144	65 00		
	Marion Peck	****	3145	40 00		

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Date	To whom paid	For	what purpose	No	Amount
1900					The State of
May 26	W. H. Case	Salary,	May, 1900	3146	\$45 00
	T. M. Boude	**	**	3147	45 00
	Benj. LeBay	11	"	3148	50 00
	W. A. Standley Chas. M. Lowr	11	4 *****	3149 3150	50 00 54 17
	W. C. McCracken	a	4	3151	150 00
0.45	K. H. Duncan	44		3152	54 17
22	E. R. Hubler	74	4 *****	3153	33 33
-	E. D. Cockins		-14	3154 3155	58 33 ° 60 00
	Alexis Cope	44		3156	187 50
26	W. O. Thompson	- 4		3157	416 67
	F. L. Landacre		14. *****	3158	85 00
	J. S. Hine	46	4	3159 3160	85 00 225 00
	O. V. Brumley	44	" """	3161	50 00
	C. B. Frederick	**	4	3162	70 00
	W. F. Lavery	11		3163	70 00
	D. S. White		4	3164	260 00
	C. A. Bruce	41	a min	3165	20 00 100 00
	B. L. Bowen	14	"	3167	225 00
	J. B. Parker	46		3168	30 00
	H. C. Allen	46	" "	3169	115 00
	G. H. McKnight W. L. Graves	16	4	3170	90 00
	J. V. Denney	44	"	3172	100 00 225 00
AUTO	H. W. Brown	u	**	3173	25 00
	F. E. Kester	**	"	3174	80 00
	J. E. Boyd B. F. Thomas	41		3175	120 00
	B. F. Thomas D. C. Huddleson	44	4	3176	225 00 50 00
	S. E. Canfield	44	4	3178	75 00
	C. P. Linhart	44	44	3179	160 00
4 7 5	F. M. Hamilton	**	"	3180	80 00
	W. H. Scott N. P. Oglesby	- 11	4	3181	225 00
	E. E. Harrold	66	"	3183	40 00 90 00
	W. A. Landacre	11	#	3184	70 00
	G. B. Kauffman	"	" ·····	3185	200 00
	E. E. Somermeier N. W. Lord	**	4 *****	3186	70 00
	F. A. Ray	u		3187	200 00
13	Lily Weeks	Janitres		3189	5 00
26	A. F. Hall	Salary,	May, 1900	3190	60 00
	C. A. Grate F. J. Hale	**	4	3191	30 00
	F. J. Hale E. A. Hitchcock	"	4	3192	30 00 150 00
	Wm. F. Magruder	16	"	3194	225 00
	C. L. E. Moore	44		3195	10 00
	J. W. Young	46	"	3196	30 00
	E. L. Ball K. D. Swartzel	44		3197 3198	30 00
	C. L. Arnold	- 4	#	3198	100 00 100 00
	G. W. McCoard	"	"	3200	160 00
	R. D. Bohannon	11	"	3201	225 00
	C. B. Guittard Lucy Allen			3202	55 00
	Maude Jeffrey	**	u	3203 3204	55 00 55 00
	Gertrude Kellicott	- 44	"	3205	55 00
3 5 372	H. N. Townshend	"	"	3206	55 00

Date	To whom paid	For w	hat purp	ose	No	Amount
1900						Sil.
May 26	O. B. Jones	Salary, 1	May, 190	0	3207	\$135
	D. F. Pugh	**	11	*****	3208	95
	E. O. Randall	**	"		3209	70
	W. H. Page		4.		3210	140
	E. B. Kinkead		"	****	3211	120
	J. S. Shauck	46.	48		3212	17
	W. F. Hunter	4	. 44	* * * * * * *	3213 3214	20 250
	J. W. Beach	46	11		3215	60
	S. C. Derby	44	11		3216	225
	A. H. McIntire	- 44	11		3217	30
	W. H. Renck	14	44		3218	85
	C. P. Crowe		44		3219	80
	W. A. Knight	44	14.		3220	100
	F. E. Sanborn	"	86		3221	200
	H. C. Price	46			3222	50
	W. R. Lazenby	4	14		3223	225
	A. W. Hodgman	"			3224	100
	J. R. Smith E. H. Moore	14	- "	*****	3225	225
	C. W. Mesloh	- 11	44		3226	20
	E. A. Eggers	14	11	*****	3227 3228	110 225
	W. C. Mills	44	**	*****	3229	35
	C. S. Prosser	44	44		3230	150
	J. A. Bownocker	a	- 11		3231	100
	W. H. Siebert	TR -	44		3232	135
	J. R. Taylor	44	H	****	3233	110
	A. C. Barrows	16	- 64		3234	225
	J. P. Covan	46	"	*****	3235	70
	F. A. Fish	14	**	*****	3236	60
	F. C. Caldwell	"	"		3237	160
	J. P. Gordy		**	*****	3238	225
	F. C. Clark	11	44	* * * * * *	3239	30
	Silas Martin	44	44		3240	160
	L H Vosskuehler	**	- 44		3241	30
	T. K. Lewis	- 44	44		3243	60
22	T. E. French	**	44		3244	- 110
26	J. N. Bradford	44	- 66		3245	180
	C. P. Souther	"	44.		3246	80
	Perla G. Bowman	16	44		3247	140
	A. V. Bleininger	"	44		3248	40
	Edw. Orton, Jr	**	"		3249	180
	C. E. Sherman C. N. Brown	4	-11		3250	110
		**	**		3251	225
	J. F. Jeffrey H. C. Gore	***	44		3252	10
	D. A. Kohr	""	- 11		3253 3254	30 60
	W. E. Henderson	и	**	****	3255	100
	S. A. Norton	44	4		3256	120
	Wm. McPherson	44	ш		3257	225
	F. K. Luke	"	64		3258	50
	Alice Dufour	**	- 11		3259	25
	S. W. Collett	"	9		3260	25
	J. H. Schaffner	11	61	*****	3261	100
	W. A. Kellerman	"	16		3262	225
	H. C. Lord	"	"		3263	160
	M. Dresbach	a	a		3264	30
	C. B. Morrey A. M. Bleile	- 11	u		3265	100 225
	The state of the second second				- B-C-E 18 1	000000

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Da	te	To whom paid	For what purpose	No	Amount
190	00				
May	26	G. W. Knight	Salary, May, 1900	3268	\$250.00
		A. E. Vinson	" "	3269	80 00
		H. A. Weber	4 4	3270	225 00
		Frank Ruhlen		3271	60 00
		J. W. Decker Wm. D. Gibbs		3272 3273	140 00 160 00
		T. F. Hunt		3274	250 00
		W. Conklin	" "	3275	40 00
	21	F. J. Tyler		3276	25 00
	-1	N. P. Oglesby R. M. Rownd, P. M	Return fees	3277 3278	6 00 10 00
		Lily Weeks	Janitress	3279	5 00
		U. S. Mort & Trifst Co.	6 mo. int. on \$100,000		
			41/2% bonds, due June	0000	
June	1	Hayden-Clinton Nat. Bk.	1st, 1900 6 mo. int. on \$170,000	3280	2,250 00
4.	7.5	and the control that the	41/2% bonds, due June		
			1, 1900	3281	3,825 00
		Hayden-Clinton Nat. Bk.	6 mo. int. on \$60,000		
			6% bonds, due June 1, 1900	3282	1 900 00
		Hayden-Clinton Nat. Bk.	Redon. of \$10,000 cert's.	9202	1,800 00
			No. 51-60, due June 1		
35	20	P C C	1900	3283	10,000 00
May	23	B. S. Stephenson Rollo S. Frame	Quartermaster service	3284	5 00
	28	U. S. Mort. & Trust Co.	Return fees Exchange on order 3280	3285 3286	15 00 2 25
		Lily Weeks	Salary, one week	3287	4 00
		.R. M. Rownd, P. M	Pound postage	3288	10 00
June	1	R. M. Rownd	Stamps	3289	35 00
		M. J. Kellenberger Lily Weeks	Services dom. economy.	3290 3291	20 00
		Nathaniel Reell	Guide	3292	2 07
	4	R. M. Rownd, P. M	Postal cards, etc	3293	15 00
	16	G. H. McKnight	Salary, June, 1900	3294	90 00
	10	T. F. Hunt	44 44 *****	3295 3296	250 00
		J. W. Decker	" " "	3297	160 00 140 00
		Frank Ruhlen	44 44	3298	60 00
		H. A. Weber	# #	3299	225 00
		A. E. Vinson G. W. Knight	4 4 4	3300	80
	5	J. B. Sanborn	u u	3301 3302	250 00 70 00
	16	A. M. Bleile	41 11	3303	225 00
		C. B. Morrey	" " "	3304	100 00
		M. Dresbach	" " "	3305 3306	30 00
		W. A. Kellerman		3307	160 00 225 00
		J. H. Schaffner	46 80	3308	100 00
		S. W. Collett	" " " "	3309	25 00
		Alice Dufour W. McPherson	44 44 *****	3310	25 00
		S. A. Norton	# # ****	3312	225 00 120 00
		W. E. Henderson	" "	3313	100 00
		D. A. Kohr		3314	60 00
		H. C. Gore J. F. Jeffrey	4 4	3315	30 00 10 00
		C. N. Brown		3317	225 00
		C. E. Sherman	" "	3318	110 00
		Edw. Orton, Jr		3319	180 00
		A. V. Bleininger	*****	3320	40 00

Date	To whom paid	For	what purp	ose	No	Amount
1900		15 9600 35	No.	244	-	THE PARTY
lune 16	P. G. Bowman	Salary,	June, 190	0	3321	\$140 0
	P. G. Souther	**	4		3322	80 0
	J. N. Bradford	44	44	****	3323	180 0
	1. E. French	44	- 40		3324	110 0
	1. K. Lewis	44			3325	60 0
9	J. H. Vosskuehler	**	4		3326	30 0
	S. Martin	44	10		3327	50 0
7	F. C. Clark	**	46	****	3328	160 0
16	Grace Pitts	.65	60		3329	30 0
	J. P. Gordy	**	40	*****	3330	225 0
		11	44		3331	160 0
	F. A. Fish	**	- 66		3332	60 0
10	J. P. Covan	a	- 44		3333	70 0
13	A. C. Barrows	46	46		3334	225 0
16	J. R. Taylor	u	- 44		3335	110 0
	W. H. Siebert	44	44		3336	135 0
14	J. A. Bownocker	44	44		3337	100 0
16	C. S. Prosser	14	**	****	3338	150 0
13	W. C. Mills	"	16	*****	3339	35 0
11	E. A. Eggers	14	44		3340	225 0
14	L. H. Moore	14	4		3341	20 0
16	C. W. Mesloh	- 44			3342	110 0
	J. R. Smith	46.	44		3343	225 0
5	A. W. Hodgman	- 66	44		3344	110 0
16	W. R. Lazenby	**	- 66		3345	225 6
	H. C. Price	44	64		3346	50 (
	F. E. Sanborn		44		3347	200 0
	W. A. Knight	- 42	44		3348	100 (
	C. P. Crowe	44	44		3349	80 (
	W. H. Kenck	44	- 44		3350	85 0
9	A. H. McIntire	"	44		3351	30 0
16	S. C. Derby	**	- 4		3352	225 (
40	J. W. Beach	- 44	44		3353	60 (
13	W. F. Hunter	44	16		3354	250 (
16	J. H. Collins	44	"		3355	20 (
	J. H. Shauck	a	44		3356	17 8
	E. B. Kinkead	"	44		3357	120 (
	W. H. Page	11	14		3358	140 (
	E. U. Kandall	**	4		3359	70 (
0	D. F. Pugh	46			3360	95 (
8	U. B. Jones	44			3361	135 (
16	H. N. Townshend	- 44	"		3362	55 (
	G. Kellicott	**	"		3363	55 (
0	Maude Jeffrey	44	Tr.		3364	55 (
9	Lucy Allen	"	"		3365	55 (
16	C. B. Guittard	44	4		3366	55 (
14	R. D. Bohannon	"	**		3367	225 (
16	G. W. McCoard		"	The said	3368	160 (
	C. L. Arnold	"	- 4	*****	3369	100 (
11	K. D. Swartzel				3370	100 (
11 16	Emma Ball	11			3371	30 (
10	J. W. Young	14	*		3372	30 (
	C. L. E. Moore	16	STATE OF THE STATE		3373	10 (
10	W. T. Magruder	- "			3374	225 (
13	E. A. Hitchcock	**	"		3375	150 (
16	F. J. Hale		*		3376	30 (
	Chas. A. Grate	44	16		3377	30 (
99	A. F. Hall	- 44	"		3378	60 (
14	F. A. Ray		**		3379	200 0
16	N. W. Lord	"	**	*****	3380	200 (
14	E. E. Somermeier	44			3381	70 (

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Date	To whom paid	For what purpose	No	Amount
1900		STATE OF THE PARTY OF		
June 16	G. B. Kauffman	Salary, June, 1900	3382	\$200 00
-	W. A. Landacre	Salary, June, 1900	3383	70 00
	E. E. Harrold	4 4	3384	90 00
	N. P. Oglesby	** ** ******	3385	40 00
	W. H. Scott	# "	3386	225 00
	F. M. Hamilton	" "	3387	80 00
	C. P. Linhart S. E. Canfield		3388	160 00
	S. E. Canfield D. C. Huddleson	H H	3389 3390	75 00 50 00
14	B. F. Thomas		3391	225 00
16	J. E. Boyd	4 4	3392	120 00
8	F. E. Kester	" "	3393	80 00
16	W. L. Graves	4	3394	100 00
9	H. C. Allen	" "	3395	115 00
	J. B. Parker	" " "	3396	30 00
14	H. W. Brown		3397	25 00
14	J. V. Denney B. L. Bowen	4 4 10000	3398	225 00
16	C. A. Bruce	44 44 *****	3399	225 00 100 00
14	C. F. Dowd	4 4	3401	20 00
16	D. S. White	# #	3402	160 00
14	W. F. Lavery	4 4	3403	70 00
9	C. B. Frederick		3404	70 00
14	O. V. Brumley	" " "	3405	50 00
16	H. Osborn		3406	225 00
9	J. S. Hine F. L. Landacre	" " "	3407	85 00
6	H. R. Marietta	Incidental fee	3408 3409	85 00 15 00
	C. W. Schubert	Guide service	3410	6 88
	J. H. Randall	Carpentry work	3411	38 25
	W. Morlan		3412	10 51
	J. C. Perry	Campus work	3413	14 40
	F. J. Pavlieck	Guide service Drawing supplies	3414	5 50 4 68
9	H. J. Hammond	Department supplies	3416	1 32
6	W. C. Smith	Addressing envelopes	3417	1 65
	E. L. Orndorff	Guide services	3418	5 50
	H. L. Dowd	Addressing envelopes	3419	1 66
	C. E. Schumacher	Typewriting	3420	6 20
	S. E. Canfield T. Rickey	Department supplies	3421	2 55
	E. Seymour	Department labor	3422	10 00 3 50
	H. Potts	Accompanying piano Accompanying classes	3424	4 50
	M. Dresbach	Department supplies	3425	6 93
	F. C. Clark		3426	1 05
	W. C. McCracken	Money advanced	3427	2 60
	C. L. Sackett, Mgr	Adv. in Lantern	3428	58 34
	F. R. Kunkle	Department supplies	3429	3 00
	F. R. Kunkle B. B. Wells	Labor	3430 3431	15 15 5 35
	O. I. Dick		3432	4 50
	F. W. Arnold	**	3433	11 25
The second	T. A. Panter		3434	11 48
	C. P. Linville	Lab. assistance	3435	6 60
	W. McPherson W. L. Redrow	Department supplies	3436	1 96
	Laura Hill	Clerical labor	3437 3438	2 25 13 00
	Chas. R. Hall	Extra labor		63
	E. G. Bailey	Labor on boilers	3440	13 13
	E. A. Hitchcock	Incidentals	3441	2 77
	J. A. Beer	Lab. assistance	3442	6 30

Date	To whom paid	For what purpose	No	Amount
1900		Marine State of the State of th		To the Party
June 6	C. B. Frederick M. L. Seymour	Dept. supplies	3445	\$39 23
	M. L. Seymour E. E. Nobles	Stenographic work	3443	7 3
	E. E. Nobles	Drafting		1 7
	T. E. French	Cleaning guns	3446	3 50
	G. Bruder	Band instruction	3448	68 00
	R. W. Funk	Labor in store room	3449	37 8
	A. V. Bleininger C. Albin	Expenses	3450	4 7
	R. F. Abbott	Band service	3451 3452	15 00
	O. P. Cockerill	Expenses orat, contest.	3453	15 00 21 00
	J. A. Bownocker	Exp. to high school	3454	12 0
	W. O. Thompson	Expenses legislature	3455	5 2
	F. C. Long K. H. Duncan	Guide service Street car tickets	3456	10 6
	F. C. McKinney	Guide service	3457 3458	5 00
	R. Thompson		3459	8 00
	Helen Powell	Clerical service	3460	1 2
	M. Matthews	Guide service	3461	5
	M. Bugby	Guide service	3462	6
	J. Frank	Guide service	3463	4 2 1 0
	J. F. Clevinger	Campus work	3465	1 8
	J. Frank		3466	4 7
	F. E. Fleischer M. Snow	********	3467	20 6
	M. Huddleson	Work in library	3468 3469	12 6 13 0
	J. W. Shaw	Work in law library	3470	12 0
	S. N. Young		3471	11 8
16	Honline & West	Books	3472	9 4
8	Kauffman-Lattimer Co H. J. McTeague	Drugs and sundries	3473	294 3
16	F. A. Stallman	Estimate No. 3 as res Trunk hardware	3474	1,263 2
	Payne-McD. Hdw. Co.	Hardware	3476	6 3 32 1
	New Col. Bridge Co	Beams and stirrups	3477	11 2
	Kimball & Matthews Col. Plate & W. Glass	Drawing supplies	3478	13 5
	W. H. Miller Co	Valve	3479	9 4
	Schilling Foundry Co	Castings	3480 3481	5 4
	H. Cole Co	Tracing cloth	3482	6 4
	H. Goldsmith	Music	3483	17 8
	Wm. Burdell, Jr Perry Smythe	Top dressing	3484	2 5
	Warren Southw'k C. Co.	Framing	3485 3486	22
	Columbus Buggy Co	Hickory kindling	3487	55 0 2 0
8	B. S. Stephenson	Quartermaster service	3488	10 0
	J. W. Smith	Course lec'res met'r'l'gv.	3489	100 0
16	Columbus Gas Co	May gas bill	3490	149 8
11	Bucher Eng. Co Eldridge & Higgins Co.	Mason jars	3491	3
16	Columbus Gas Co	Coke	3493	2 5 13 7
	Penna. Fuel Co	Coal	3494	8 2
	Engelke & Bigelow	Hauling to dumps	3495	30 0
	Miller Furn. Co Col. Lithograph Co	Leather couch	3496	35 0
	F. E. Calloins.	Bond engraving Work in law library	3497	35 0 2 4
	Orvis & Marshall	Office supplies	3499	2 0
	Western U. Tel. Co	Telegrams	3500	6 4
	Postal Tel. & Cable Co.	***********	3501	4
	Columbus Bank Note Co. Hofman Supply Co	Diplomas Engraving	3502	98 0

STATESHAT II — Continued.				
Date	To whom paid	For what purpose	No	Amount
1900	Mary Land			THE RESERVE
June 16	Jones Nat. Fence Co	Repairing fence	3508	\$76 61
	Harrington & Non'm'ch'r	Cleaning nilometer	3504	1 50
	McAuley Sellars Co Kinnear Gager Co	Curtains Steel ceiling	3505 3506	6 50 80 00
	Col. Wire & Iron Wks	Grills	3507	12 00
14 16	J. Ferrell Seraphim B. Book Co	Granite bowl	3509	36 00
9	Alexis Cope	Salary, June, 1900	3510 3511	33 95 187 50
16	McAllister Mohler Co	Book case	3512	13 50
	F. J. Heer Hall-Collins Hdw. Co	Printing bulletins	3513	680 00
	Borger Bros. & Co	Grate bars	3514 3515	13 35
	Andrews & Knight	Lubricator	3516	3 08
	Wolfram Guitar Co Domestic Laundry	Piano rent	3517	31 25
	Beck & Orr	Towel washing Mounting maps	3518 3519	23 92 1 50
	Rich. Munk & Co	Supplies	3520	27 36
	W. H. Miller Co	Gate valves	3521	12 10
	W. W. Semple M. P. Streett	Economizer	3522 3523	10 50 150 00
	E. Doddington & Co	Lumber	3524	17 40
	Murray City Coal Co	Coal	3525	978 80
	Schoedinger, F'rn & Co. Kelton & Converse	Glass	3526 3527	2 52 36 77
	Standard Oil Co	Oil	3528	31 26
	Hann & Adair	Printing	3529	46 70
	R. A. McClure McClelland & Co	Lumber and mill work	3530 3531	18 65 2 40
	Dunn, Taft & Co	Supplies	3532	14 83
	M. C. Lilley & Co	Flags, medals, etc	3533	128 75
	Engelke & Bigelow	Freight and cartage	3534	46 18
	Central Ohio Paper Co. Capital City Mach. Wks.	Paper	3535 3536	22 03 13 28
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	Tallmadge Hard. Co	Hardware	3541	24 45
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	Nitschke Bros Champlin Printing Co.	Printing bulletins	3543 3544	370 05 478 20
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	Chicago Blue Pr. P. Co.	Blue print paper	3562	16 96
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R. E. McIntosh		G. A. Goodspeed	** ** *****	10.000	
J. H. Brown. " " 3607   15 00   25 00   W. Whitestine. " " 3609   40 00   11   M. J. Kellenberger. Serv. in dom. economy. 3610   10 00   16   G. C. Denny. Salary, June, 1900. 3611   40 00   14   E. G. Bailey. " " 3612   15 00   16   A. G. McCall. " " 3613   27 00   M. N. Cook. " " 3614   40 00   H. Chantler " " 3615   40 00   H. Chantler " " 3616   45 00   J. Kelly. " " 3617   25 00   W. Townsel " " 3618   25 00   F. J. Tyler. " 3618   25 00   F. J. Tyler. " " 3619   25 00   14   W. E. Mann. " " 3620   65 00   12   T. J. Godfrey. Expenses trustee. 3622   32 50   14   J. G. Sterling, Treas. Adv. in Makio. 3623   50 00   R. M. Rownd, P. M. Postage deposit 3624   10 00		R. E. McIntosh	4 4	All and the second	
J. H. Brown. " " 3608 25 00 W. Whitestine. " " 3608 25 00 W. Whitestine. " " 3609 40 00  11 M. J. Kellenberger. Serv. in dom. economy 3610 10 00 16 G. C. Denny. Salary, June, 1900. 3611 40 00 14 E. G. Bailey. " " 3612 15 00 16 A. G. McCall. " " 3613 27 00 M. N. Cook. " " 3614 40 00 H. Chantler " " 3615 40 00 A. Chantler " " 3616 45 00 J. Kelly " " 3617 25 00 F. J. Tyler. " 3618 25 00 F. J. Tyler. " 3618 25 00 F. J. Tyler. " 3619 25 00 14 W. E. Mann " 3620 65 00 14 W. E. Mann " 3621 25 00 15 00 17 I. J. Godfrey Expenses trustee. 3622 32 50 18 M. Rownd, P. M. Postage deposit 3624 10 60		D. D. Geren	*****		
W. Whitestine.   Serv. in dom. economy.   3610   10 00		J. H. Brown	u u		
11       M. J. Kellenberger.       Serv. in dom. economy.       3610       10 00         16       G. C. Denny.       Salary, June, 1900.       3611       40 00         14       E. G. Bailey.       " 3612       15 00         16       A. G. McCall.       " 3613       27 00         M. N. Cook.       " 3614       40 00         H. Chantler       " 3615       40 00         A. Chantler       " 3616       45 00         J. Kelly       " 3617       25 00         W. Townsel       " 3618       25 00         F. J. Tyler.       " 3619       25 00         C. H. Woodruff.       " 3620       65 00         14       W. E. Mann       " 3621       25 00         12       T. J. Godfrey       Expenses trustee       3622       32 50         14       J. G. Sterling, Treas       Adv. in Makio       3623       50 00         R. M. Rownd, P. M.       Postage deposit       3624       10 00		W. Whitestine	44	0000	
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16 A. G. McCali. " " 3612 15 00 M. N. Cook. " " 3613 27 00 M. N. Cook. " " 3614 440 00 H. Chantler " " 3615 40 00 A. Chantler " " 3616 45 00 J. Kelly " " 3617 25 00 W. Townsel " " 3618 25 00 F. J. Tyler. " 3618 25 00 F. J. Tyler. " " 3619 25 00 C. H. Woodruff. " " 3620 65 00 14 W. E. Mann " " 3621 25 00 12 T. J. Godfrey Expenses trustee. 3622 32 50 12 T. J. G. Sterling, Treas. Adv. in Makio. 3623 50 00 R. M. Rownd, P. M. Postage deposit 3624 10 60		G. C. Denny	Salary, June, 1900		
M. N. Cook		E. G. Bailey	*****		
H. Chantler " " 3615 40 00 A. Chantler " " 3616 45 00 J. Kelly " " 3617 25 00 W. Townsel " " 3618 25 00 F. J. Tyler " 3619 25 00 C. H. Woodruff " " 3620 65 00 14 W. E. Mann " 3621 25 00 12 T. J. Godfrey Expenses trustee 3622 32 50 14 J. G. Sterling, Treas Adv. in Makio. 3623 50 00 R. M. Rownd, P. M. Postage deposit 3624 10 60	16	A. G. McCall			
A. Chantler " " 3616 45 00 J. Kelly " " 3617 25 00 W. Townsel " " 3618 25 00 F. J. Tyler " 3619 25 00 C. H. Woodruff " " 3620 65 00 14 W. E. Mann " " 3621 25 00 12 T. J. Godfrey Expenses trustee 3622 32 50 14 J. G. Sterling, Treas Adv. in Makio. 3623 50 00 R. M. Rownd, P. M. Postage deposit 3624 10 00		H Chantler			
J. Kelly			4 4	-	75 55
W. Townsel		J. Kelly	44 14		
C. H. Woodruff		W. Townsel	" "		
C. H. Woodruff		F. J. Lyler		-	
12 T. J. Godfrey Expenses trustee 3622 32 50 14 J. G. Sterling, Treas Adv. in Makio 3623 50 00 R. M. Rownd, P. M Postage deposit 3624 10 60	44	C. H. Woodruff			65 00
14 J. G. Sterling, Treas. Adv. in Makio		T I Godfrey			
R. M. Rownd, P. M Postage deposit 3624 10 90	1.4	I. G. Sterling Trees	Adv in Moleio		
19 R. J. Seymour 33 hours' work com'ent 3633 4 95	ES ATT	R. M. Rownd, P. M.	Postage deposit		
	19	R. J. Seymour	33 hours' work com'ent	3633	4 95

#### OHIO STATE UNIVERSITY

#### STATEMENT II - Concluded.

Date	To whom paid	For what purpose	No	Amount
1900 June 19 16 19 20 21 22 25 28	Dr. J. H. Barrows J. McLain Smith J. T. Mack F. R. Kunkle T. A. Panter O. I. Dick H. A. Preston R. M. Rownd, P. M Central Union Tel. Co. D. M. Massie C. W. Gayman R. M. Rownd, P. M Total	Baccalaureate address Expense trustee Trustee expenses Student labor Janitor service Student labor Choir service 500 2ct postage stamps 2000 stamped envelopes. Phone rent to June 30 Trustee expense W. J. Bryan prize Postage stamps	3637 3638	\$50 00 7 55 13 65 16 95 18 00 14 10 25 00 10 00 42 80 81 00 32 37 15 65 10 00

In compliance with section 7 of the *Organic Act*, passed by the Legislature of Ohio, May 1, 1878, (Bates' Annutated Ohio Statutes, sec. 4105-41) which requires the list of "the number of professors, officers, teachers and other employes, and the compensation of each, to be annually reported," I submit the following:

Employes	Position *	Salary
Villiam Oxley Thompson	President	5,000 (
W. H. Scott	Professor of philosophy	2,250 €
1) Edward Orton	" geology	600 (
V. R. Lazenby	" horticulture and forestry	2,250 (
osiah R. Smith	" Greek language & literature	2,250 (
Jenry A Weber	agricultural chemistry	2,250 (
lenry A. Weber	" physics	2,250
ieo. W. Knight	" history and political science	2,500 (
. Daniel Bohannan	" mathematics	2,250
lerbert Osborn	" zoology and entomology	2,250
rnst A. Eggers	" German langauge, literature	2.250
Newton Brown	" civil engineering	2,250
lbert M Bleile	" anatomy and physiology	2,250
Vm. A. Kellerman	" botany	2,250
hos. F. Hunt	" agriculture	2,250
amuel C Derby	" Latin language, literature	2,250
lathaniel W. Lord	" metallurgy and mineralogy	2,000
rank E. Sanborn	Director of industrial department	2,000
llen C. Barrows	Professor of English literature	2,250
oseph V. Denney	" rhetoric and Eng'sh lang'ge	2,250
lenj. L. Bowen	" Romance languages	2,250
V. F. Hunter	Dean of the faculty	2,500
eo. B. Kauffman	Professor of pharmacy	2,000
eo. B. Kauffman P. Gordy	" education	2,250
Vm. T. Magruder	" mechanical engineering	2,250
dward Orton, Jr	Director school of ceramics	1,800
rank A. Rav	Associate professor mining engineering	2.000
os. N. Bradford Vm. McPherson	Professor of drawing	1,800
Vm. McPherson	" chemistry	2,250
ieo. W. McCoard	Associate professor mathematics	1,600
oldney A. Norton	Lecturer in general chemistry	1,200
C. Caldwell	Associate professor electrical eng'eering.	1,500
Jenry C. Lord	Director observatory	1,600
C. E. Sherman	Assistant professor civil engineering	1,100
E. A. Hitchcock	Associate professor experim'al engineering	1,500
W. D. Gibbs	" agriculture	1,600
W. Mesloh	" German	1,100
David S. White	Professor veterinary medicine	1,600
David S. White	Assistant in drawing	1,100
. C. Clark	Associate professor of economics	1,600
Olive B. Jones	Librarian	1,350
William Henry Renck	Foreman carpenter shop	850
William A. Knight	" machine shops	1,000
Charles Philip Crowe	" forge room	800
E. Boyd	Assistant professor physics	1,200
Karl D. Swartzel	mathematics	1,000
W. L. Graves	" rhetoric	1,000
Jas. S. Hine	Assistant professor of entomology	850
Charles B M	in agricultural chemistry	1 000
Charles B. Morrey		1,000
John Wright Decker	Associate professor dairying	980
E. E. Somermeier	Assistant in metallurgy and mineralogy	700
Arthur W. Hodgman	Associate professor classic languages	1,100
Frank Ruhlen	Assistant in agriculture	720
J. A. Bownocker	Associate professor geology	1,000
W. H. Siebert	" European history	1,350

<sup>(1)</sup> Died October 16, 1899.

C. L. Arnold	,000 00 700 00 700 00 900 00 700 00 600 00 ,000 00 400 00 ,000 00
Walter Landacre "in pharmacy veterinary medicine. E. E. Harold. Storekeeper C. B. Frederick Assistant professor veterinary medicine. Thos. K. Lewis Assistant professor of French 1 F. L. Landacre Assistant professor of French 1 F. L. Landacre Assistant in zoology A. V. Bleininger Assistant in ceramics. William E. Henderson Assistant professor analytical chemistry 1 Harriet Townshend Assistant professor analytical chemistry 1 Frederick E. Kester Instructor in physics J. H. Schaffner Assistant professor botany 1 Charles A. Grate Fellow in mechanical engineering F. T. Hale	700 00 700 00 900 00 700 00 600 00 ,000 00 850 00 400 00
Walter Landacre "in pharmacy veterinary medicine. E. E. Harold. Storekeeper C. B. Frederick. Assistant professor veterinary medicine. Thos. K. Lewis. Assistant professor of French. 1 F. L. Landacre. Assistant professor of French. 1 F. L. Landacre. Assistant in zoology. A. V. Bleininger Assistant in ceramics. William E. Henderson. Assistant in ceramics. William E. Henderson. Assistant professor analytical chemistry. 1 Harriet Townshend Assistant in libary. r. Frederick E. Kester Instructor in physics. J. H. Schaffner. Assistant professor botany. 1 Charles A. Grate Fellow in mechanical engineering. 1	700 00 700 00 900 00 700 00 600 00 ,000 00 850 00 400 00
W. F. Lavery.  E. E. Harold. C. B. Frederick. Thos. K. Lewis. Charles A. Bruce. A. V. Bleininger William E. Henderson Harriet Townshend Frederick E. Kester J. H. Schaffner Charles A. Grate F. E. Landacre Assistant professor of French Assistant in zoology. Assistant in ceramics. William E. Henderson Harriet Townshend Frederick E. Kester J. H. Schaffner Charles A. Grate Fellow in mechanical engineering. F. T. Hale  "veterinary medicine. Assistant professor veterinary medicine.  Assistant professor veterinary medicine.  Assistant professor veterinary medicine.  Assistant professor of French Assistant in zoology. Assistant in zoology. Assistant in ceramics.  Instructor in physics J. H. Schaffner Charles A. Grate Fellow in mechanical engineering.	700 00 900 00 700 00 600 00 ,000 00 850 00 400 00
E. E. Harold Storekeeper C. B. Frederick. Assistant professor veterinary medicine Thos. K. Lewis. Assistant in drawing. Charles A. Bruce. Assistant professor of French 1 F. L. Landacre. Assistant in zoology. A. V. Bleininger. Assistant in ceramics. William E. Henderson. Harriet Townshend Assistant in libary. r Frederick E. Kester. Instructor in physics. J. H. Schaffner. Assistant professor botany. 1 Charles A. Grate. Fellow in mechanical engineering. F. T. Hale	900 00 700 00 600 00 ,000 00 850 00 400 00
C. B. Frederick. Assistant professor veterinary medicine. Thos. K. Lewis. Assistant in drawing. Charles A. Bruce. Assistant professor of French. 1 F. L. Landacre. Assistant in zoology. A. V. Bleininger. Assistant in ceramics. William E. Henderson. Harriet Townshend Assistant in libary. r. Frederick E. Kester. Instructor in physics. J. H. Schaffner. Assistant professor botany. 1 Charles A. Grate. Fellow in mechanical engineering. 1 F. T. Hale. ""	700 00 600 00 ,000 00 850 00 400 00
Thos. K. Lewis. Assistant in drawing. Charles A. Bruce. Assistant professor of French. 1 F. L. Landacre. Assistant in zoology. A. V. Bleininger. Assistant in ceramics. William E. Henderson. Harriet Townshend Assistant professor analytical chemistry. 1 Harriet Townshend Assistant in libary. r. Frederick E. Kester. Instructor in physics. J. H. Schaffner. Assistant professor botany. 1 Charles A. Grate. Fellow in mechanical engineering. F. T. Hale	,000 00 850 00 400 00
Charles A Bruce. Assistant professor of French. 1 F. L. Landacre. Assistant in zoology. A. V. Bleininger. Assistant in ceramics. William E. Henderson Assistant professor analytical chemistry. 1 Harriet Townshend Assistant professor analytical chemistry. 1 Frederick E. Kester Instructor in physics.	850 00 400 00
F. L. Landacre. Assistant in zoology. A. V. Bleininger. Assistant in ceramics. William E. Henderson. Assistant professor analytical chemistry. 1 Harriet Townshend Assistant in libary. r. Frederick E. Kester. Instructor in physics. J. H. Schaffner. Assistant professor botany. 1 Charles A. Grate. Fellow in mechanical engineering. F. T. Hale	400 00
William E. Henderson. Harriet Townshend Assistant professor analytical chemistry.  Frederick E. Kester Instructor in physics. J. H. Schaffner. Assistant professor botany.  Charles A. Grate. Fellow in mechanical engineering.  F. T. Hale ""	
Harriet Townshend Assistant in libaryr. Frederick E. Kester Instructor in physics. J. H. Schaffner. Assistant professor botany. Charles A. Grate. Fellow in mechanical engineering. F. T. Hale	000 00
Frederick E. Kester Instructor in physics	Caralla and
J. H. Schaffner Assistant professor botany 1 Charles A. Grate Fellow in mechanical engineering 1	550 00
Charles A. Grate Fellow in mechanical engineering	800 00
F. T. Hale	,000 00
F. A. Fish Assistant in electrical engineering	300 00
T. A. Pish Assistant in electrical engineering	600 00
	000 00
Donald Alexis Kohr Assistant in chemistry	600 00
Herbert Charles Gore Fellow in chemistry	300 00
Maud Jeffreys Assistant in library	550 00
Gertrude Kellicott	550 00
G. B. Guittard " "	550 00
Lucy Allen " "	550 00
F. K. Luke Florist	600 00
C. P. Linhart Director physical training 1	,600 00
	,400 00
Cornelia P. Souther Assistant in domestic science	800 00
	,100 00
Francis M. Hamilton " in philosophy and pedagogy Stella Elliott Canfield Associate director physical training	800 00
Stella Elliott Canfield Associate director physical training  M. Dresbach Fellow in anatomy and physiology	750 00 300 00
Emma L. Ball " mathematics	300 00
John Wesley Young " mathematics	300 00
A. H. McIntire " industrial arts	300 00
Homer Charles Frice Assistant in horticulture and forestry	600 00
W. H. Page Professor of law 1	1,400 00
E. B. Kinkead	,200 00
D. F. Fugu	950 00
E. O. Kandall	700 00
J. H. Collins.	200 00
John A. Shauck	175 00
John B. Sanbori Assistant in American history	700 00 500 00
J. H. Vosskuehler " drawing	300 00
Delbert A. Crowner Student assistant in butter making	100 00
Elisha Smith " " dairying	100 00
John B. Parker Fellow in rhetoric	300 00
Herbert W. Kennedy Emerson McMillin fellow in astronomy.	300 00
Samuel W. Collett Fellow in botany	250 00
Alexis Cope Secretary	2,250 00
Carl E. Steeb Accountant	720 00
Katharine H. Duncan Executive clerk	650 00
Edith D. Cockins Registrar	700 00
	$1,800 \ 00$ $650 \ 00$
Chas. Low	600 00
Wm. Stanley	780 00
Geo R Rose Plumber	540 00
Geo. R. Rose Plumber	
Geo. R. Rose	300 00
Geo. R. Rose Plumber	

#### STATEMENT III - Concluded.

Employes	Position	Salary
Wash. Townsel	Janitor	300 0
G. A. Goodspeed		480 00
Henry Chantler		480 00
Arthur Chantler		540 0
H. Brown	" "	480 0
M. N. Cook		480 0
D. D. Geren		480 0
Wm. Whitestine	***********************	480 0
G. C. Denny		480 0
E. H. Bailey		150 0 125 0
R. E. McIntosh Wm. Weir		200 0
W. C. Mills	Elevator attendant	350 0
A .G. McCall		240 0
Thomas Boude	First fireman	450 0
W. E. Case		360 0
Marion Peck		400 0
Alice Dufour	Fellow in botany	250 0
F. O .Clements	" chemistry	300 0
J. F. Jeffrey	Laboratory assistant in chemistry	100 0
J. W. Groves	Assistant civil engineering	150 0
Wm. Cannan		200 0
Silas Martin	Assistant in drawing	500 0
W. E. Mann	McMillin fellowship in economics	250 0
Grace Pitts		300 0
J. P. Covan		770 0
Chas. S. Prosser	Associate professor geology	1,500 0
E. H. Moore	Student assistant in German	200 0
J. W .Beach	Assistant in Latin	300 0
C. L. E. Moore		150 0
A. F. Hall	Machinist	720 0
N. P. Oglesby	Assistant storekeeper	360 0 250 0
H. W. Brown	Fellow in physics	250 0 900 0
G. H. McKnight	Asst. prof. rhetoric and public speaking	1.150 0
H. C. Allen Chas. F. Dowd		200 0
O. V. Brumley		500 0
Joseph Garrettson	Helper to plumber	450 0
J. C. Perry		125 0
T. E. Osburn	*	320 0
W. Conklin		360 6
Earl Conway	Helper	240 (
C. H. Woodruff	Carpenter	780 (
F. J. Tyler	Gardener	75 (

COLUMBUS, OHIO, September 26, 1900.

To the Board of Trustees of the Ohio State University:

The finance committee, in obedience to your instructions, has examined the accounts and vouchers of L. F. Kiesewetter, treasurer of the university, for the fiscal year ending June 30, 1900, and has carefully compared them with the accounts and vouchers in the hands of the secretary, and hereby certifies that said report is correct.

D. M. MASSIE, J. McLain Smith, Paul Jones,

Finance Committee.

#### REPORT OF RECEIPTS AND DISBURSEMENTS "NEW MORRILL FUND."

Report of treasurer of Ohio State University to the secretary of agriculture and the secretary of the interior, of amount received under act of congress of August 30, 1890, in aid of colleges of agriculture and the mechanic arts, and of the disbursements thereof, to and including June 30, 1900.

Balance on hand July 1, 1899 Date of receipt of installment for 1899–1900, July 7, 1899, Amount	\$37 25,000	
Total available for year ended June 30, 1900	25,037	3
Disbursements thereof for and during the year ended June 30, 1900:		
Agriculture, as per Schedule A  Mechanic Arts, as per Schedule B  English Language, as per Schedule C.  Mathematical Science, as per Schedule D  Natural or Physical Science, as per Schedule E  Economic Science, as per Schedule F	4,341 8,178 1,258 2,072 7,860 1,126	19 99 83 40
Total expended during year	24,839	00
Balance remaining unexpended July 1, 1900	198	3

I hereby certify that the above account is correct and true, and, together with the schedules hereunto attached, truly represents the details of expenditures for the period and by the institution named, and that said expenditures were applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical physical, natural, and economic science, with special reference to their application in the industries of life, and to the facilities for such instruction.

L. F. KIESEWETTER,

Treasurer.

#### SCHEDULE A.

Disbursements for instruction in Agriculture and for facilities for such instruction, during the year ended June 30, 1900.

Name of instructors	Subjects taught for which paid from "Morrill Fund"	Amount
I. For salaries of instructors:		
Frank Ruhlen, Assistant Perla G. Bowman, Asso. Prof Cornelia Louther, Assistant H. A. Weber, Professor A. E. Vinson, Assistant	Agriculture  Dairy Husbandry Agriculture Domestic Science Domestic Art Agricultural Chemistry  " Horticulture  Veterinary Medicine  " " " Agriculture	\$500 320 140 120 300 80 450 160 450 70 70
Text-books and reference books	The state of the s	\$69 28
Department of Ag	griculture.	
Seeds, \$46.70; tools and hardwa live stock, \$32.00; harness, \$86.2 ments, \$9.00; machinery, \$356.77 \$5.71	; teed, \$322.20; tarm imple- ; apparatus, \$40.23; supplies,	<b>\$968</b> 80
Dairy Labora	atory.	
Dairy implements, \$24.00; dairy chinery, \$100.79; scales, \$7.00	supplies, \$163.58; dairy ma-	\$295 37
Horticulture and	Forestry.	
Pots, \$20.00		\$20 00
Veterinary Me	dicine.	
Jars, \$13.58; hospital supplies, \$16.5 \$10.00	22; instruments, \$23.36; cages,	\$63 16
Total		\$4,341 61

#### SCHEDULE B.

Disbursements for instruction in Mechanic Arts and for facilities for such instruction, during the year ended June 30, 1900.

Name of instructors	Subjects taught for which paid from "Morrill Fund"	Amount
I. For salaries of instructors:		
C. N. Brown, Professor C. E. Sherman, Asst. Professor John W. Groves, Assistant W. T. Magruder, Professor E. A. Hitchcock, Asso. Prof. C. A. Grate, Assistant F. J. Hale, Assistant N. W. Lord, Professor E. E. Somermeier, Assistant Edward Orton, Jr., Asso. Prof. A. V. Bleininger, Assistant F. C. Caldwell, Asso. Professor F. A. Fish, Assistant J. P. Covan, Assistant Geo. B. Kauffman, Professor W. A. Landacre, Asst. Prof. N. P. Oglesby, Assistant F. E. Sanborn, Professor W. A. Knight, Assistant W. H. Renck, Assistant C. P. Crowe, Assistant A. H. McIntyre, Assistant J. N. Bradford, Professor T. E. French, Asst. Professor T. H. Lewis, Assistant	Metallurgy and Mineralogy Mine engineering Metallurgy Mine engineering Metallurgy Ceramics Electrical engineering  ""  Pharmacy  Industrial Arts Machine work Carpenter and Pattern work Forge work Industrial Arts Drawing	\$450 220 50 450 300 30 30 400 400 140 360 90 320 120 70 400 380 100 170 160 60 360 220 120
Silas Martin, Assistant I. H. Vosskuehler, Assistant		50 30
II. For facilities, as follows:  Text-books and reference books  Department of	Cerámics.	\$161 37
Supplies, \$25.22; hardware, \$19.6 kiln, \$351.99; pump, \$4.61		541 92
Department of Civ		5 36
	es, \$22.50	253 25
Department of Electric		
Castings, \$81.28; electrical suppl	ies, \$98.90; lantern, \$30.00; mo- 5.85; tools and hardware, \$27.41.	544 44

#### SCHEDULE B - Concluded.

	Amount.
Department of Industrial Arts.	
Lumber, \$546.19; tools and hardware, \$169.24; paints, \$10.30; iron and steel, \$64.74; supplies, \$5.67; patterns, \$32.60; machinery, \$4.84	833 58
Department of Mechanical Engineering.	
Supplies, \$14.90; machinery, \$102.12; paints, \$17.55; tools, \$29.95; apparatus, \$32.50; thermometers, \$26.25; ice, \$25.00	248 2
Total	\$8,178 19

# SCHEDULE C.

Disbursements for instruction in English Language and for facilities for such instruction, during the year ended June 30, 1900.

Subjects taught for which paid from "Morrill Fund"	Amount
English Literature  English and Rhetoric	\$450 220 225 115 100 90
	\$28 99 \$1,258 99
	English Literature

#### SCHEDULE D.

Disbursements for instruction in Mathematical Science and for facilities for such instruction during the year ended June 30, 1900.

Name of instructors	Subjects taught for which paid from "Morrill Fund"	Amount
I. For salaries of instructors:  R. D. Bohannan, Professor G. W. McCoard, Asst. Professor C. L. Arnold, Asst. Professor. K. D. Swartzel, Asst. Professor. E. L. Ball, Fellow J. W. Young, Assistant H. C. Lord, Professor	"	\$450 320 200 200 60 60 320
II. For facilities, as follows:		
Text-books and reference books.  Department of A	Park Spill Bar San	\$11 93
Spectroscope, \$200.00; electrical sparatus, \$89.00; gas engine, \$15	supplies, \$11.89; electrical ap-	\$450 89
Total		\$2,472 82

#### SCHEDULE E.

Disbursements for instruction in Natural or Physical Science and for facilities for such instruction during the year ended June 30, 1900.

	SUPPLIED THE PROPERTY OF THE PERSON IN	
Name of instructors	Subjects taught for which paid from "Morrill Fund"	Amount
I. For salaries of instructors: A. M. Bleile, Professor C. B. Morrey, Asst. Professor M. Dresbach, Assistant W. A. Kellerman, Professor. J. H. Schaffner, Assistant S. W. Collett, Assistant Alice Dufour, Assistant W. McPherson, Professor S. A. Norton, Lecturer W. E. Henderson, Asst. Profe D. A. Kohr, Assistant F. O. Clements, Assistant H. C. Gore, Assistant Edward Orton, Professor C. S. Prosser, Asso. Profes J. A. Bownocker, Asso. Profe B. F. Thomas, Professor J. E. Boyd, Asst. Professor. J. E. Boyd, Asst. Professor. H. W. Brown, Assistant H. Osborn, Professor J. S. Hine, Asst. Professor. F. L. Landacre, Asst. Professor.	Botany  Chemistry  essor  Geology  sor  Physics	\$450 200 60 450 210 50 25 450 240 200 120 45 30 25 120 80 25 25 85 85
The Control of the Co	ooks	\$298 98
Model of brain, \$10.00; supp	atomy and Physiology.  blies, \$6.46; microscopes, \$161.20	177 60
Collections, \$177.05; herbari \$41.17; herbarium paper, camera and plates, \$181.90;	664 26	
Apparatus, \$488.17; chemical ical supplies, \$969.13; plati bles, \$54.77	1,874 78	
	nt of Geology.	15 95
	nt of Physics.	10 90
Balances, \$5.10; apparatus,	\$147.47; supplies, \$31.80	184 37

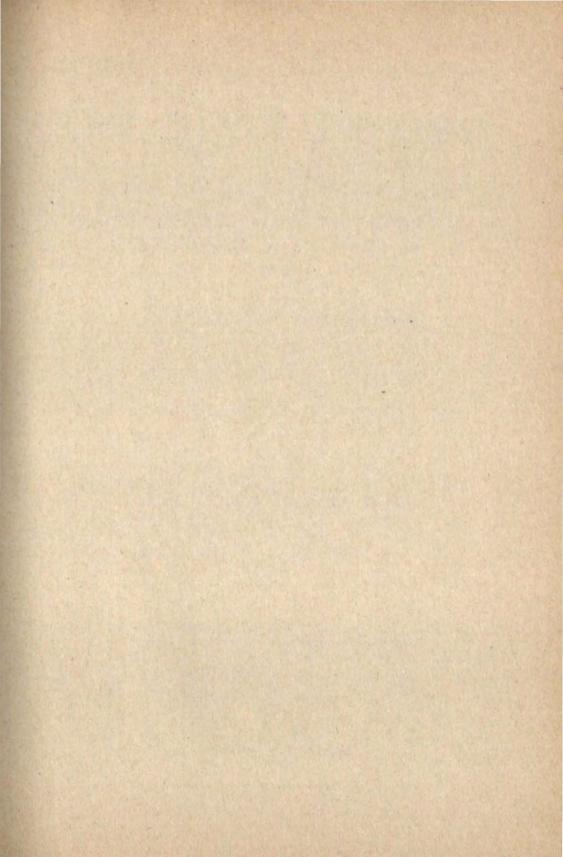
#### SCHEDULE E - Concluded.

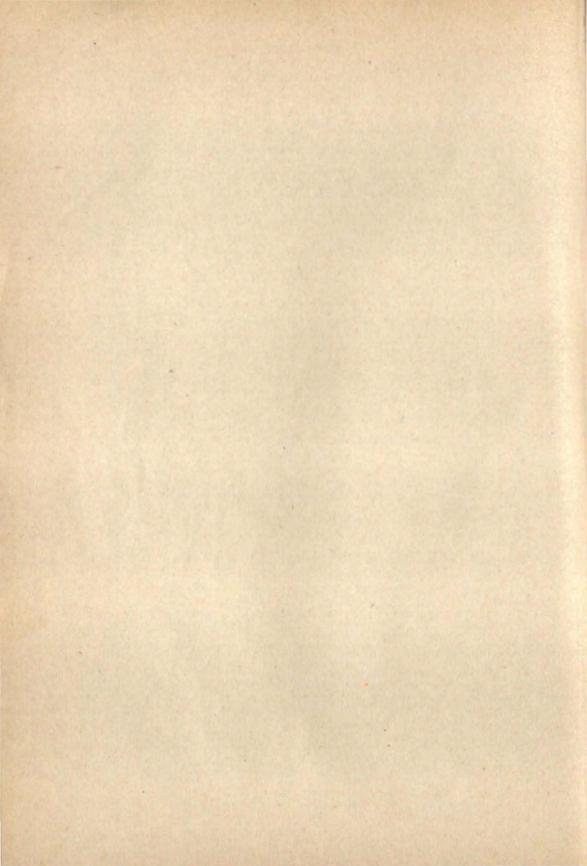
	Amount.
Department of Zoology and Entomology.	
Charts, \$42.00; net, \$9.50; bird skins, \$58.30; mounting specimens, \$177.25; specimens, \$5.00; microscopes, \$253.33; dissecting material, \$15.95; drugs, \$18.07; collections, \$40.00	619 40
Total	\$7,860 40

#### SCHEDULE F.

Disbursements for instruction in Economic Science and for facilities for such instruction, during the year ended June 30, 1900.

Name of instructors	Subjects taught for which paid from "Morrill Fund"	Amount
I. For salaries of instructors: Geo. W. Knight, Professor J. B. Sanborn, Assistant F. C. Clark, Asso. Professor Grace L. Pitts, Assistant	Economics and Sociology	\$500 140 320 30
II. For facilities, as follows:		
Text-books and reference books.		\$136 99
Total		\$1,126 99





# OHIO STATE UNIVERSITY

# THIRTIETH ANNUAL REPORT

OF THE

# **BOARD OF TRUSTEES**

TO THE .

# GOVERNOR OF OHIO

FOR THE

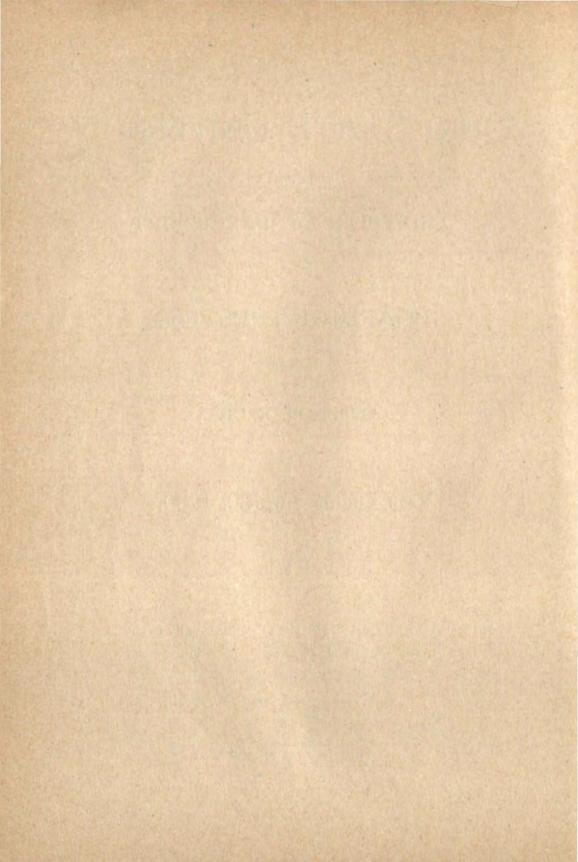
Year Ending June 30, 1900.

# PART II.

The State has no material resources at all comparable with its citizens, and no hope of perpetuity except in the intelligence and integrity of its people.

COLUMBUS
PUBLISHED BY THE UNIVERSITY
JUNE, 1900.

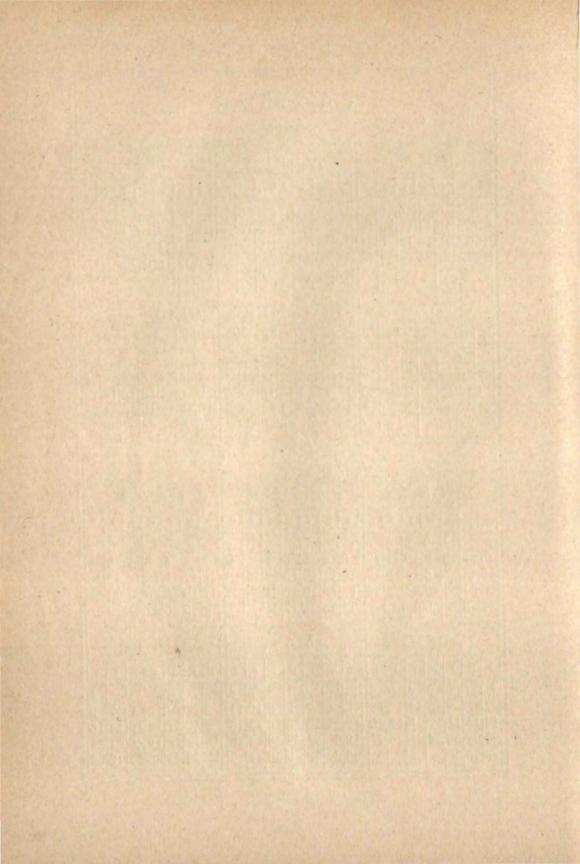
Entered at the Postoffice at Columbus, Ohio, as Second-Class Matter.



# CALENDAR

1900

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# DAYS AND DATES

# 1900

*/00			
Entrance Examinations (8 A. M.)	Monday,	September	17.
Registration Day	Tuesday,	September	18.
Lectures and Class-work begin (all Colleges)	Wednesday,	September	19.
Annual Address by the President (11 A. M.)	Friday,	September	
Meeting of Trustees	Wednesday,	September	26.
Thanksgiving Recess	Thursday, Friday,	November November	
Latest date for announcing Subjects of Theses	Saturday,	December	15.
First Term ends	Wednesday,	December	19.
Christmas Vacation.			
1901			
Second Term begins—Registration Day	Wednesday,	January	2.
First Semester (College of Arts, Philosophy and			
Science, and College of Law) ends	Friday,	February	8.
Second Semester (College of Arts, Philosophy and			
Science, and College of Law) begins-Regis-			
tration Day.	Monday,	February	11.
University Day	Friday,	February	22.
Second Term ends	Friday,	March	29.
Spring Recess—From 4 o'clock P. M.	Friday,	March	29.
to 8 o'clock A. M.	Wednesday,	April	3.
Third Term begins—Registration Day	Wednesday,	April	3.
Meeting of Trustees	Wednesday,	April	3.
High School Day	Friday,	May	17.
Field Day—Athletic Association	Saturday,	May	18.
Senior Vacation begins	Saturday,	May	25.
Competitive Drill—Cadet Battalion	Saturday,	May	25.
Memorial Day	Thursday,	May	30.
	Monday,	June	10.
Final Examinations (all Colleges)	to		
	Friday,	June	14.
Baccalaureate Sermon	Sunday,	June	16.
Butrance Examinations (8 A. M.)	Monday, Tuesday,	June June	17. 18.
Class Day	Monday,	June	17.
Meeting of Trustees	Tuesday,	June ·	18.
Alumni Day	Tuesday,	June	18.
COMMENCEMENT	Wednesday,	-	19.
Summer Vacation.	wednesday,	June	10.
Entrance Examinations (8 A. M.)	Monday,	September	16.
Registration Day	Tuesday,	September	17.
Lectures and Class-work begin (all Colleges)	Wednesday,	September	18.
Annual Address by the President (11 A. M.)	Friday,	September	20:
Meeting of Trustees	Wednesday,	September	25.

# BOARD OF TRUSTEES

# 1899-1900

	Term E	expires.
JOHN T. MACK Sandusky Sandusky	May 1	13, 1901.
LUCIUS B. WING Newark		1902.
THOMAS J. GODFREY Celina	"	1903.
J. McLAIN SMITH Dayton	"	1904.
PAUL JONES Columbus	"	1905.
OSCAR T. CORSON Columbus	a	1906.
DAVID M. MASSIE Chillicothe	"	1907.
OFFICERS OF THE BOARD		
J. McLAIN SMITH.	Preside	nt.
OSCAR T. CORSON	Vice Pr	esident.
ALEXIS COPE		
		-
LOUIS F. KIESEWETTER	Treasur	rer.

#### COMMITTEES OF THE BOARD

EXECUTIVE L. B. WING T. J. GODFREY PAUL JONES

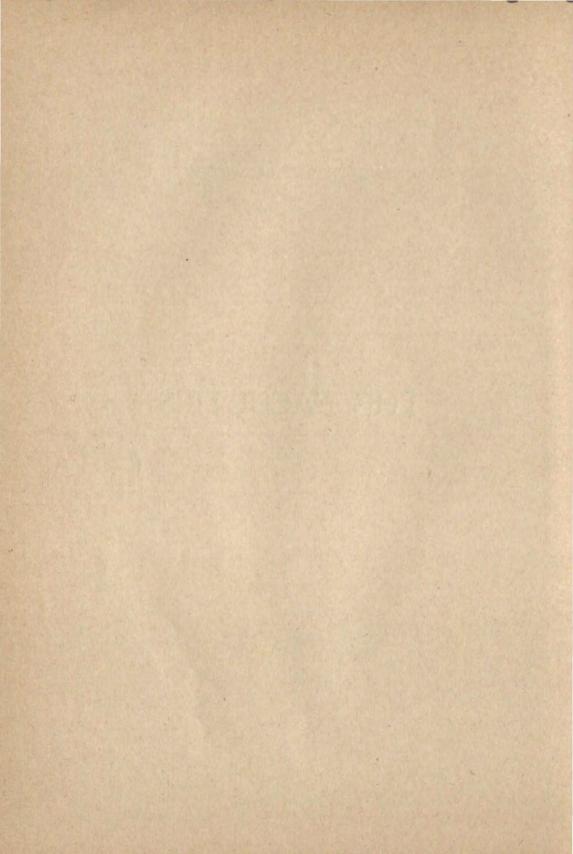
FARM J. McLAIN SMITH D. M. MASSIE L. B. WING JOHN T. MACK

FINANCE J. McLAIN SMITH PAUL JONES

FACULTY AND COURSES OF STUDY

THOMAS J. GODFREY OSCAR T. CORSON JOHN T. MACK

# THE FACULTIES



### Members of the Faculties, and Other Instructors

### 1899-1900

### 

#### President

A. B., Muskingum College, 1878; A. M., ibid., 1881; D. D., ibid., 1891; LL. D., Western University of Pennsylvania, 1897. Licensed by the Presbytery of Zanesville, Dresden, Ohio, April, 1881; Ordained by Presbytery of Fort Dodge, Iowa, July, 1882; Pastor Odebolt, Iowa, 1882-85; Pastor Longmont, Colorado, 1885-91; President Longmont College, 1885-89; President Miami University, 1891-99; present position since 1899.

### 

A. B., Hamilton, 1848; Ph. D., Hamilton, 1875; LL. D., Ohio State University, 1881. Student of Theology, Lane Seminary, 1849; Student at Lawrence Scientific School, Harvard University, 1852; Student, Andover, 1854; Professor of Natural Science, State Normal School, Albany, N. Y., 1856-'59; Principal, Chester Academy, N. Y., 1859-'65; Professor of Natural History, Antioch, 1865-'72; President of Antioch, 1872-'73; President of the Ohio State University, 1873-'81; State Geologist, 1869; present position since 1881.

### 

A. B., Ohio University, 1862; M. A., Ohio University, 1865; LL. D., Ohio University and Ohio Wesleyan, 1884. Superintendent of Public Schools, Athens, Ohio, 1862-'64; Principal of the Preparatory Department of Ohio University, 1864-'65; Pastor of Main Street (now Trinity) M. E. Church, Chillicothe, Ohio, 1865-'67; Pastor of Town Street (now First) M. E. Church, Columbus, Ohio, 1867-'69; Professor of Greek, Ohio University, 1869-'72; President and Professor of Philosophy, Ohio University, 1872-'83; President and Professor of Philosophy, Ohio State University, 1883-'95; present position since 1896.

### 

A. B., Union, 1856; A. M., Union, 1859; M. D., Miami Medical College, 1867; Ph. D., Kenyon, 1878; LL. D., Wooster, 1831. LL. D., Union, 1899. Student at Bonn, Leipsic, Heidelberg; Teacher, Poughkeepsie Collegiate Academy, 1856; Tutor, Union, 1857; Principal Hamilton (Ohio) High School, 1858; Instructor of Natural Science, Cleveland High Schools, 1859-'66; Teacher of Natural Science, Mt. Auburn, 1866-'72; Professor of Chemistry, Miami, 1897-'72; Acting Professor of Physics, Union, 1872-'73; Professor of Chemistry, Ohio State University, 1873-'95; Lecturer in Chemistry, 1895-'99; Present position since 1899.

### 

C. E., University of Michigan, 1863; D. Sc., Ohio State University, 1896; Assistant Engineer U. S. Lake Survey, 1863-'66; Instructor in Engineering, University of Michigan, 1806-'67; Assistant Professor Mining Engineering and Geology, University of Michigan, 1807-70; Professor Mechanical Engineering and Physics, University of Illinois, 1870-'78; Professor Mechanical Engineering and Physics, Ohio State University, 1878-'81; Professor Mechanical Engineering, Ohio State University, 1881-'95. Resigned in 1895. Consulting Mechanical Engineer and Inventor for Wire Grip and McKay Shoe Machinery Companies, 1884-'98; Re-elected Emeritus Professor of Mechanical Engineering, Ohio State University, 1899. State Inspector of Railroads and Bridges, 1880-84. Consulting Engineer Santa Fe R. R., 1887-'90, Consulting Engineer Lick Telescope and Mountings, 1887.

<sup>\*</sup>Died, October 16, 1899.

E. M., Columbia, 1876; Assistant Engineer, Cincinnati, 1877; Engineer and Metallurgist Monte Grande Gold Mining Co, Nicaragua, 1878; Assistant School of Mines, O. S. U., 1879; Chemist Ohio Geological Survey, 1880-'88; Assistant Professor of Mining and Metallurgy, O. S. U., 1880-'87; Professor Mining and Metallurgy, O. S. U., 1887-'91; Professor Metallurgy and Mineralogy, O. S. U., 1896; Chemist State Board of Agriculture, 1881-'99; Chemist State Board of Health, 1896-'98; present position since 1896.

### SAMUEL CARROLL DERBY ....... 93 Fifteenth avenue

### Professor of Latin

A. B., Harvard, 1866; A. M., Harvard, 1869 (in course), 1877 (by examination). Principal of Schools, Ilion, N. Y., 1866-'67; Assistant in Dixwell's Classical School, Boston, 1807-'70; Professor of Language, Antioch, 1870-'81; President, Antioch, 1877-'81; Student, Latin and History, Harvard, 1876-'77; Student, Latin and History, Johns Hopkins, 1880-'81; Student, Latin, Harvard, 1892-'93; present position since 1881.

### 

B. Agr., Cornell, 1874; M. Agr., Iowa Agricultural College, 1887. Instructor Horticulture and Botany, Cornell, 1874-77; Assistant Professor of Horticulture, Cornell, 1877-81; Lecturer, N. Y. State Grange, 1874-81; Director Ohio U. S. Experiment Station, 1882-87; Professor of Botany and Horticulture, Ohio State University, 1881-792; present position since 1892.

### 

A. B., Amherst, 1871; A. M., Amherst, 1883; Principal, Mound Street School, Columbus, 1871-773; Teacher, Columbus High School, 1873-776; Assistant Professor of Ancient Languages, Ohio State University, 1876-781; Student at Leipsic, 1881-783; present position since 1883.

### 

Graduate of Polytechnic School, Kaiserslautern, 1896; Student, Chemistry under Von Liebig and Reischauer, and of Mineralogy under Von Kobell, Munich, 1866-'68; Ph. D., Ohio State University, 1879; Ohio Geological Survey, Chemical Department, 1869-'74; Professor of General Chemistry and Mineralogy, Illinois State University, 1874-'82; Chemist to State Board of Agriculture, Illinois, 1874-'82; Chemist to State Board of Health, Illinois, 1874-'82; State Chemist and Chief Chemist to Ohio State Dairy and Food Commissioner, 1885-'97; present position since 1884.

### 

B. Sc., Ripon, 1874; M. Sc. Ripon, 1877; Ph. D., Stevens Institute, 1880. Instructor in Mathematics and Physics, Carleton College, Northfield, Minnesota, 1876-79; Professor of Physics, University of Missouri, 1880-785; Member of the Board of Examiners at the International Electrical Exhibition at Philadelphia, 1884; Member of the Jury of Awards, Department of Electricity, at the World's Columbian Exposition, Chicago, 1893; present position since 1885.

### 

A. B., University of Michigan, 1878; A. M., University of Michigan, 1883; Ph. D., University of Michigan, 1884; Student, Law, University of Michigan, 1878-'79; Principal of High School, Lansing, Michigan, 1879-'81; Student, History and Political Science, University of Michigan, 1882-'84; Instructor in History, Ann Arbor High School, 1883-'85; Professor of History and English Literature, Ohio State University, 1885-'87; Professor of History and Political Science, Ohio State University, 1887-'98; Student at Universities of Halle, Berlin, and Freiburg, 1889-'90; present position since 1898.

ROSSER DANIEL BOHANNAN......Sixteenth and Indianola avenues
Professor of Mathematics

B. Sc., C. E., E. M., University of Virginia, 1876; Student of Mathematics and Physics, Cambridge, England, 1880-'82; Göttingen, 1882-'83; Teacher of Mathematics and Latin, Suffolk Collegiate Institute, Virginia, 1876-'77; Teacher of Mathematics and English, New York Latin School, New York City, 1877-'78; Professor of Mathematics and Natural Science, Emory and Henry College, 1878-'80; Acting Professor of Mathematics, University of Virginia, 1883-'84; Assistant in Mathematics and Physics, University of Virginia, 1894-'87; Professor of Mathematics and Astronomy, Ohio State University, 1887-'95; present position since 1896.

### 

C. E., Miami, 1886; Resident Engineer of the Ironton Extension of the Pittsburg, Cincinnati, Chicago & St. Louis R. R., 1881; Ohio Geological Survey, 1882; Assistant in Mathematics and Civil Engineering, Ohio State University, 1883-'85; Associate Professor of Civil Engineering, Ohio State University, 1885-'90; present position since 1890.

Student in Gymnasium at Hanover, at Michigan State Normal School, the Sorbonne, College de France; Instructor in German in the High Schools of Michigan for ten years; Assistant in German, Ohio State University, 1886-'88; Assistant Professor of German, same institution, 1888-'90; present position since 1890.

### 

M. D., Starling Medical College, 1876; Student, Vienna, Chemistry and Physiology, 1876-77; Student, Physiology, Leipsic, 1877-78; Student Anatomy and Histology, Paris, 1878-79; Lecturer on Experimental Physiology, Starling Medical College, 1879; Professor of Physiology, Starling Medical College, 1884; present position since 1891.

### 

B. Sc., Cornell, 1874; Ph. D., Zurich, 1881; Professor of Natural Science, Wisconsin State Normal School, 1874-779; Professor of Botany and Horticulture, Kentucky State College, 1881-82; Professor of Botany and Zoology, Kansas State Agricultural College, 1883-787; Professor of Botany, Kansas State Agricultural College, 1888-91; Botanist, Kansas State Board of Agriculture, 1883-91; Ohio Geological Survey (Botany) 1892-93; Founder and Editor of the Journal of Mycology, 1885-789; present position since 1891.

### 

B. Sc., University of Illinois, 1884; M. Sc., University of Illinois, 1892; Assistant to Illinois State Entomologist, 1885-'86; Assistant in Agriculture, University of Illinois, 1886-'88; Assistant Agriculturalist, Illinois Experiment Station, 1888-'91; Professor of Agriculture, Peansylvania State College, 1891-'92; present position since 1892.

### 

B. Sc., Ohio Wesleyan University, 1877; Pharm. D., Scio, 1894; Associate Professor of Pharmacy, Ohio State University, to 1894; present position since 1894.

A. B., University of Rochester, 1881; Ph. D., Johns Hopkins University, 1888. Post-graduate work, University of Rochester, 1881-'82; Professor of Languages, New Windsor College, Maryland, 1882-'83; Graduate Student and Assistant in French, Johns Hopkins University, 1883-'86, and 1887-'88; Student at the University of Paris, Bonn, Rome and Madrid, 1885, and 1886-'87; Professor of French and Latin, Bowdoin College, 1888-'89; Acting Associate Professor of French Language and Literature, Ohio State University, 1889-'90; Associate Professor of Romance Languages and Literatures, Ohio State University, 1890-'94; present position since 1894.

A. B., University of Michigan, 1885. Journalist, 1885-'88; Principal of the Aurora (Illinois) High School, 1888-'90; Instructor in English and Graduate Student, University of Michigan, 1890-'91; Associate Professor of Rhetoric, Ohio State University, 1891-'94; present position since 1894.

A. B., Western Reserve, 1861; A. M., Western Reserve, 1866; D. D., Iowa College, 1889. Teacher, Latin and Greek, Phillips Academy, 1865-'06; Professor of Physics, Western Reserve, 1866-'70; Professor of Latin and English Literature, Western Reserve, 1870-'71; Professor of English Literature and History, Iowa Agricultural College, 1887-'94; present position since 1894.

E. M., Ohio State University, 1884. Assistant on Ohio Geological Survey, 1882; Chemist for Columbus and Hocking Coal and Iron Company, 1885-'86; Superintendent of Blast Furnace at New Straitsville, O., 1887-'88; Superintendent of Victoria Furnace, Goshen Bridge, Va., 1888; Steel Worker, Homestead Steel Works, Homestead, Pa., 1889; Superintendent Ohio Paving Company's Factory, Columbus, Ohio, 1890-'92; Special Assistant on Clays, Ohio Geological Survey, 1892; Superintendent Acme Vitrified Brick Co., Louisville, Kentucky, 1893; State Geologist of Ohio, 1899; present position since May, 1894.

Admitted to the Bar in 1861; Student, University of Michigan Law School; practicing attorney since 1866; Dean of the Law School, Ohio State University, 1892-'96; present position since 1896.

Member of West Virginia Constitutional Convention, 1872; Member of Legislature, West Virginia, 1874-75; Prosecuting Attorney, Tyler County, West Virginia, 1870-'80; Common Pleas Judge, Franklin County, Ohio, 1887-'90; present position since 1891.

Ph. B., Cornell, 1874; LL. B., LL. M., Ohio State University, 1892. Admitted to practice, 1890; Secretary Ohio State Historical Society; Reporter Supreme Court of Ohio. Present position since 1893.

Assistant State Law Librarian, 1887-1894; Special Counsel for Attorney-General of Ohio, 1897-1900. Present position since 1895.

B. A., Yale, 1889; L.L. B., Ohio State University, 1892; L.L. M., same institution, 1894. Instructor in Central High School, Columbus, Ohio, 1889-'96. Present position since September, 1896.

M. E., Stevens Institute of Technology, 1881. Practical Experience in Machine Design and Shop Practice, Taunton, Mass., 1881-'86. Student in Chemistry and Mathematics, etc., Johns Hopkins University, 1886-'87; Professor of Mechanical Engineering (practical and theoretical) Vanderbilt University, 1887-'96; present position since September, 1896.

### Professor of Education

Ph. D., University of Leipsic, 1884; LL. D., Western University of Pennsylvania, 1897. Student in Philosophy at Leipsic, 1883-'84; Student in Philosophy at Johns Hopkins University, 1886; Assistant in Revision of Webster's Dictionary, 1884-'85; Professor of Philosophy and Pedagogy, Ohio University, Athens, 1886-'96; present position since September, 1896.

B. Sc., Ohio State University, 1887; M. Sc., Ohio State University, 1890; D. Sc., Ohio State-University, 1895; Ph. D., University of Chicago, 1899; Instructor in Chemistry and Physics, Toledo High School, 1887-'89; Instructor in Chemistry and Latin, Toledo High School and Manual Training School, 1889-'92; Assistant in Chemistry, Ohio State University, 1892-'93; Assistant Professor in Chemistry, Ohio State University, 1893-'96; Associate Professor, General Chemistry, Ohio State University, 1895-'97; present position since 1897.

### Professor of Drawing

M. E., Ohio State University, 1883. Draftsman, Ohio Geological Survey, 1882; Machinist and Draftsman, Pittsburg, Cincinnati & St. Louis Railroad, 1883-85; Assistant in Mechanical, Engineering and Drawing, Ohio State University, 1895-'90; Assistant Professor of Drawing, Ohio State University, 1890-'93; Associate Professor of Drawing, Ohio State University, 1893-'99. Present position since 1899.

D. V. S., Ohio State University, 1890. Student, Royal Veterinary Schools of Hanover, Berlin, 1890-'91; at Imperial Veterinary Institute of Vienna, 1892; Royal Veterinary College of Dresden, 1898; Assistant in Veterinary Medicine, Ohio State University, 1893-'95. Present Position since 1895.

B. Sc., Iowa Agricultural College, 1879. M. Sc., same institution, 1880. Student of Entomology at Museum Comparative Zoology (Cambridge, Mass.) 1881-'82; College of Physicians and Surgeons, Des Moines, 1884-85 (Anatomy and Physiology); Zoological Station Naples (Smithsonian table), 1894-'95. Assistant in Zoology and Entomology, Iowa Agricultural College, 1880-'83; Assistant Professor of Zoology and Entomology, Iowa Agricultural College, 1884-'85. Professor of Zoology and Entomology, Iowa Agricultural College, 1886-'98; Special Agent Division of Entomology, U. S. Department of Agriculture, 1885-'94; Entomologist, Iowa Experiment Station, 1890-'98; State Entomologist, Iowa, 1898. Present position since 1898.

S. B., in Mechanical Engineering, Massachusetts Institute of Technology, 1889. Assistant in Drawing, Massachusetts Institute of Technology, 1889-'90; Teacher in Manual High School Department, Pratt Institute, 1800-'91; Walker Special Instructor, Tufts College, 1891-'94; Instructor in Mechanical Department, Tufts College, 1894-'98. Present position since September, 1898.

B. Sc., University of Wisconsin, 1889. Assistant in Washburn Observatory, University of Wisconsin; with Thompson-Houston Electric Company, 1889; Assistant in Mathematics and Astronomy, Ohio State University, 1891-'94; elected Fellow, Royal Astronomical Society, 1897; Present position since 1895.

M. D., Western Reserve University, Cleveland, 1882. Post-graduate student, same institution, 1882-'83. Student and Instructor, Dr. Anderson's Normal School of Physical Education, 1886; student in Harvard Summer School, 1887; House Physician and Surgeon, Cleveland City Hospital, 1883-'85; Assistant Demonstrator of Anatomy, Western Reserve University, 1885-'86, and Assistant Visiting Physician Charity Hospital, Cleveland, 1886; Director of Y. M. C. A. Gymnasium, Orange, N. J., 1886 and 1888; Instructor in Physiology and Physical Education, Newark, (N. J.), Academy, 1887 and 1890, and Director of Physical Education, Newark, N. J., Public Schools, 1888-'90; Medical Director Manhattan Athletic Club, 1891 and 1892; Instructor in Physiology and Physical Education, Union College, 1892-'97. Present position since 1897.

Graduate of the Beaver Academy, Pennsylvania. Entered the volunteer service 1861; discharged July 17th, 1865. Appointed second lieutenant 17 infantry U. S. A.; promoted to first lieutenant and captain same regiment; served thirty-one years in that organization, the greater portion of the time on the extreme frontier. Promoted to major and retired on account of disability incurred in the line of duty, May 22, 1899. Appointed to present position October 1st, 1899.

E. M., Ohio State University, 1887. Superintendent building construction, Elah Terral & Co., 1887-'88; Assistant Mining Engineer C. & H. C. & I. Co, 1888-'89; Chief Engineer C. & H. C. & I. Co, 1889-'95; Assistant Professor of Mine Engineering, O. S. U., 1895-'97; present position since 1897.

A. B., Cornell, 1890; M. E. Cornell, 1891. With Thompson-Huston Electric Co., Lynn Mass., 1891-'92; Student at the National Polytechnic, Zurich, 1892-'93; Assistant Professor of Electrical Engineering, Ohio State University, 1893-'97. Present position since 1897.

Graduate of Toledo High School; Graduate of Toledo Manual Training School; Student at Wells College; Instructor in Toledo Manual Training School; Director of Domestic Science, Toledo Manual Training School; Special Student at Pratt Institute (Brooklyn), and the University of Michigan. Present position since September, 1897.

A. B., University of Michigan, 1887; A. M., University of Michigan, 1888; Ph. D., University of Michigan, 1891. Student at Halle and Berlin, 1893-'95; Instructor in History and Economics, Ann Arbor High School, 1888-'92; Assistant Professor of Political Economy, Stanford University, 1892-'93; Assistant Professor of Economics and Sociology, Ohio State University, 1895-'98. Present position since 1898.

A. B., Ohio State University, 1888; A. B., (with honorable mention) Harvard University, 1889; M. A., Harvard, 1890. Student, Freiburg and Berlin, 1890-'91; Student, Harvard, 1896; Assistant in History and Political Science, Ohio State University, 1891-'93; Assistant Professor of History, Ohio State University, 1893-'95, 1897-'98; Student, Harvard University, 1895-'97. Present position since 1898.

#### Librarian

Assistant Librarian, 1887. Present position since 1893.

M. E., Cornell, 1890. Straightline Engine Company, Syracuse, N. Y., 1889; Corliss Steam Engine Company, Providence, R. I., 1890-'93; Assistant in Mechanical Engineering, Ohio State Univerversity, 1893-'95; Assistant Professor of Mechanical Engineering in charge of the Department, 1895-'96; Assistant Professor, Experimental Engineering, Ohio State University, 1896-'97. Present position since 1897.

B. Sc., University of Illinois, 1898. Fellowship in Agriculture, University of Illinois, 1893-'94; Post-graduate work, University of Illinois and University of Wisconsin, 1896; Expert Assistant in Division of Agricultural Soils of the United States Department of Agriculture, summer of 1895; Teacher of Bacteriology, University of Illinois, fall term, 1893; Assistant in Animal Husbandry, University of Illinois, winter term, 1894; Assistant in Agriculture, Ohio State University, spring and fall terms, 1895; Assistant Professor of Agriculture, 1895-'98. Present position since 1898.

Student, University of Nebraska, three years; Chautauqua School of Physical Education, summer of 1807; Assistant in Physical Training, University of Nebraska, two years; Y. M. G. A. classes in Physical Training, Lincoln, Nebraska, one year, and in Aurora, Illinois, one year; Medical Gymnastic Course, Chautauqua School of Physical Education, Summer, 1809; Assistant Director of Gymnasium, 1807-'98. Present position since 1808.

B. A., Bethany, West Virginia, 1873; M. A., Bethany, 1882. Principal of Oakdale Classical Normal Institute, Allegheny County, Pennsylvania, 1873-74; Private Tutor in Cleveland, Ohio, 1874-'80; Principal of Public Schools, Irving Park, Chicago, 1880-'81; Teacher of Latin and Mathematics, Columbus High School, 1881-'82; Assistant in Mathematics and Latin, Ohio State University, 1882-'87. Assistant Professor of Mathematics, Ohio State University, 1887-'99. Present position since 1899.

A. B., Ohio State University, 1889; M. A., Ohio State University, 1895. Student in the University of Chicago, 1894; Student, University of Berlin, 1896-'97; Assistant in German, Ohio State University, 1889-'96. Present position since 1895.

A. B., Harvard, 1800; A. M., Harvard, 1803; Ph. D. (Classical Philology) Harvard, 1896. Student in Graduate School, Harvard, Classical Philology, 1892-'96. Instructor in Preparatory Schools, Quincy, Duxbury, Mass., 1890-'92; Assistant in Greek and Latin, Ohio State University, 1806-'97. Assistant Professor of the Classic Languages, Ohio State University, 1807-'99. Present position since September, 1899.

B. S., Cornell University, 1883; M. S., Cornell University, 1886. Fellow in Natural History, Cornell, 1884-'85; Instructor in Paleontology, Cornell University, 1885-'88; Assistant Paleontologist, U. S. Geological Survey, 1883-'92; Professor of Natural History, Washburn College, Topeka, Kansas, 1892-'94; Assistant Geologist, U. S. Geological Survey, 1893-'94; Professor of Geology, Union College, Schnectady, N. Y., 1894-'99. Assistant Geologist, N. Y. Geological Survey, 1895-'99; Assistant Geologist, University Geological Survey of Kansas, 1896; Chief of Appalachian Division, Maryland Geological Survey since 1898. Present position since 1899.

Associate Professor of Inorganic Geology

B. Sc., Ohio State University, 1889; D. Sc., Ohio State University, 1897. Principal of High

School, Martins Ferry, 1889-'92; Fellow in Geology, University of Chicago, 1892-'94; Graduate-Scholar, Yale University, 1894-'95; Assistant Geological Survey of Ohio, 1892; Assistant Geological Survey of New Jersey, 1898; Assistant in Geology, 1895-'98. Assistant Professor 1898-'99. Present position since 1899.

Associate Professor of Dairying

B. Agr., University of Wisconsin, 1890. Fellow in Agriculture, University of Wisconsin, 1890-'91. Instructor in Dairying University of Wisconsin, 1891-99. Present position since 1890.

Assistant Professor of Physics

B. Sc., Ohio State University, 1891; M. Sc., Cornell, 1896. Student in Physics and Mathematics, Ohio State University, 1898-'95; Student in Experimental and Theoretical Physics, Cornell, 1895-'96; also Student in Sibley College of Mechanic Arts, Cornell, summer of 1895. Assistant in Physics, Ohio State University, 1891-'95; held scholarship in Physics, Cornell, 1895. Present position since September, 1896.

Assistant Professor of English Literature

B. A., Ohio State University, 1887; M. A., Columbia University, 1897. Assistant in Drawing, Ohio State University, 1889-'94; Assistant in Rhetoric, Ohio State University, 1894-'97; University Fellow in Literature, Columbia University, 1896-'97; Assistant Professor of Rhetoric, Ohio State University, 1807-'99; present position since 1899.

Assistant Professor of Civil Engineering

C. E., Ohio State University, 1894. Engaged in Civil Engineering in Ohio, Tennessee, Virginia, North Carolina and Arizona for three years during college course. Engaged in railroad, geological and governmental engineering from graduation until September, 1896. Engineer to Park Commission, Springfield, Ohio, and U. S. Assistant Engineer at Tampa, Florida, and Huntsville, Alabama, summer of 1898. U. S. Assistant Engineer on road surveys of Yellowstone National Park, summer of 1899. Assistant in Civil Engineering, Ohio State University, 1896-'97. Present position since 1897.

Assistant Professor of Rhetoric

B. A., Ohio State University, 1893; M. A., Ohio State University, 1897. Principal High School, Coshocton, 1894-'95; Fellow and Assistant in Rhetoric and English Language, Ohio-State University, 1895-'96. Present position since 1896.

Assistant Professor of Pharmacy

G. Ph., Ohio State University, 1891. Post-graduate student in Chemistry and Pharmacy, Ohio State University; Assistant in Chemistry and Pharmacy, 1890-'94; Assistant in Pharmacy, 1894-'98. Present position since 1898.

THOMAS EWING FRENCH.......1458 Worthington street Assistant Professor of Drawing

M. E., Ohio State University, 1805. Assistant in Drawing Department three years preceding graduation; Draftsman, The Smith-Vaile Company, Dayton, 1888-'90; Instructor in Mechanical Drawing, Y. M. C. A., Dayton, 1888-'91; Chief Draftsman, The Smith-Vaile Company, Dayton, 1891; Assistant in Drawing, 1892-'98. Present position since 1898.

\*CHARLES WILLIAM FOULK......Leipzig, Germany Assistant Professor of Analytical Chemistry

B. A., Ohio State University, 1894. Assistant in General Chemistry, 1896-'98. Present. position since September, 1898.

<sup>\*</sup> In Europe on leave of absence.

B. Sc., Ohio State University, 1890; M. Sc., Ohio State University, 1894. Post-graduate Student, University of Chicago and Ohio State University, 1894-'95. Assistant in Methematics Ohio State University, 1890-'99. Present position since 1899.

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B. Sc., Ohio State University, 1893; M. Sc., Ohio State University, 1894. Fellow and Assistant in Mathematics, Ohio State University, 1894-'95. Assistant in Mathematics, Ohio State University, 1895-'99. Present position since 1809.

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### Assistant Professor of the Romance Languages

A. B., Ohio State University, 1895; Student of French, Amherst, Summer School, 1895; Graduate Student, University of Chicago, Summer Quarter, 1896; Student, University of Geneva, Summer School, 1898; Student at the Sorbonne, College de France, and Ecole des Hautes-Etudes, Paris, 1898-'99; Assistant in French, Ohio State University, 1895-'99. Present position since 1899.

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A. B., Baker University, Kansas, 1803. A. M., University of Michigan, 1804; M. S., Baker University, 1806. Student in Botany, Zoology and Geology, University of Michigan, 1803-'95. Student in Botany and Paleo-Botany, University of Chicago, 1896-'97. Assistant in Botany, University of Michigan, 1894-'95. Professor of Natural Sciences, South Dakota University, 1805-'96; Assistant in Botany, Ohio State University, 1806-'99. Present position since 1809.

### 

V. M. and S., Ontario Veterinary College, 1893. In practice since graduation. Fellow in Veterinary Medicine, 1897-98; Assistant in Veterinary Medicine, 1898. Present position since 1898.

# CORNELIA PORTER SOUTHER......The Dennison Assistant Professor of Domestic Art

Graduate of Mary Institute (Washington University), St. Louis, Mo., 1883; Certificated Student at Mary Institute, 1883-'85; Handarbeitslehrerinnen-Seminar des Carola-Vereins, Leipzig, 1806-'97. Investigations in Domestic Art Methods in foreign cities, 1896-'98; Teacher of Sewing, Mrs. Ball's Private School, St. Louis, 1898; Special Student at Pratt Institute, Brooklyn, and Teachers' College, Columbia University, New York. Present position since February, 1899.

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B. A., Ohio State University, 1890; Post-graduate Student, Ohio State University, 1890-'91; M. D., Starling Medical College, 1896. Assistant in Latin, Ohio State University, 1890-'91; Assistant in Latin and Physiology, 1891-92; Assistant in Physiology, Ohio State University, 1892-'95; Student in Vienna and Paris, 1897-'99. Present position since 1899.

### 

A. B., University of Wooster, 1891; M. A., 1894; Ph. D., Johns Hopkins University, 1897.

Graduate Student Johns Hopkins University, 1893-'97. Fellow in Chemistry, Johns Hopkins University, 1896-'97. Professor of Natural Sciences, College of Emporia, Kansas, 1891-'98.

Professor of Chemistry, Ohio University, 1897-'99. Present position since 1899.

### 

A. B., Cornell, 1892, Ph. D., Cornell, 1896. Instructor in English at Cornell, 1892-'97; Cornell Traveling fellow in English Philosophy, 1897-'98. Student in Freiburg, 1897-'98. Student in Paris and London, 1898-'99. Present position since 1899.

Assistant Professor of Pharmacy G. Ph. Ohio State University, 1891. Chemist Braun Sons & Co., 1891-'97. Post-graduate Student Ohio State University, 1897-'99. Present position since 1899. HERRICK CLEVELAND ALLEN......The Dennison Assistant Professor of Public Speaking Student Union College 1894-'95-'96. LL. B. Cornell University, 1898. Instructor Department of Oratory and Debate. Cornell University, 1898, '99. Present position since 1899. Assistant in Veterinary Medicine. D. V. M., Ohio State University, 1890. Veterinary practitioner, 1892-'96. Present position since 1896. Lecturer on Federal Practice In practice for thirty years. Present position since 1891. Lecturer on Supreme Court Practice and Special Cases B. A., Otterbein University; LL. B., University of Michigan, 1867; A. M., Otterbein University, 1870; LL. D., Otterbein University, 1897. Judge of the Supreme Court of Ohio. Lecturer on Meteorology Assistant in the Industrial Arts and Instructor in Machine Work Thirteen years' practical experience in workshops. Present position since 1893. Assistant in Library Present position since September, 1895. Assistant in Drawing B. Sc., Ohio State University, 1894. Graduate Student, Ohio State University, 1894-95. Summer of 1897 and summer of 1898 at Cincinnati Art Academy. Present position since graduation. Assistant in Zoology

B. A., Ohio State University, 1895. Student in Chicago University, summer quarters of 1898 and of 1899. Professor of Embryology in Ohio Medical University since 1896. Present position since graduation.

B. Sc. (H. and F.), Ohio State University, 1893. Superintendent of the N. W. Substation of the Ohio Agricultural Experiment Station, 1893. Assistant in Horticulture, Ohio State University, 1894. Student in Entomology, Cornell, 1895. Assistant in the Division of Entomology of the United State Department of Agriculture, summers of 1897 and 1899. Present position since 1895.

MAUD DOROTHY JEFFREY
B. Ph., Ohio State University, 1895. Student of Library Science, Ohio State University, 4895-'96. Student of Library Science, Amherst, summer of 1897. Present position since September, 1896.
GERTRUDE STOWELL KELLICOTT
Student, Ohio State University, 1888-'95. Student of Library Science, Ohio State University, 1895-'96. Student of Library Science, Amherst, summer of 1897. Present position since September, 1896.
ALBERT EARL VINSON
Instructor in Chemistry, Y. M. C. A., Dayton, Ohio, 1895. Present position since September, 1896.
FREDERICK EDWARD KESTER
M. E. (in E. E.), Ohio State University, 1895. M. A., Cornell, 1899. Fellow and Assistant in Physics, Ohio State University, 1895-'97. Assistant in Physics, Ohio State University, 1897-'98, held scholarship in Physics, Cornell, 1898. Present position since 1899.
FRANK RUHLENNorth Dormitory
Assistant in Agriculture
B. Sc., (Agr.) Ohio State University, 1896.
LUCY ALLEN
B. A., Ohio State University, 1897. M. A., Ohio State University, 1899. Student in Library Science under Dr. G. E. Wire, summer of 1898 at Ohio State University. Student in Harvard University, summer of 1899. Present position since September, 1898.
ALBERT V. BLEININGER
Present position since 1898.
EDWARD EVERETT SOMMERMEIR
G. Ph., Ohio State University, 1898. Student Laboratory Assistant in Chemistry, 1897-'98. Present position since September, 1898.
DON CARLOS HUDDLESON
G. Ph., Ohio State University, 1897. Medical Student, 1897. Summer School of Physical Training Chautauqua, 1898. Present position since 1898.
BURT BIDWELL HERRICK
Instructor in Cheese Making
ELISHA SMITH
JOSEPH HENRY VOSSKUEHLER
Designer, Gross Lithographing Co., Dayton, Ohio, 1889-'90; Draftsman, The Stilwell-Bierce and Smith-Vaile Co., Dayton, 1890-'96; Finckel & Finckel, Patent Attorneys, Columbus, 1897. Present position since September, 1898.

Assistant in Library Student in Ohio State University, 1892-'96, Assistant in Ohio State Library, 1897-'98. Student in Library Science, Washington, D. C., summer of 1899. Present position since November, 1898. Assistant in Industrial Arts and Foreman of the Carpenter and Pattern Shops. Fifteen years' practical experience in pattern shops and foundries, seven years as foreman. Present position since 1899. Assistant in Industrial Arts and Forge Master. Student, Ohio Business College, Delaware, Ohio; Lebanon Normal School, Lebanon, Ohio; Teacher in Public Schools of Delaware and Union Counties, two years; Forge shop experience, seven years; Manufacturer of Steel Forgings and Springs, six years. Present position since 1899. Assistant in Horticulture and Forestry B. Sc. (Agr.), Ohio State University, 1897. M. S. A., Cornell University, 1899.; Fellowship in Agriculture, Cornell, 1898-'9. Present position since September, 1899. JOHN WESLEY GROVES..... Assistant in Civil Engineering C. E., Ohio State University, 1898. Engineer for the C. & H. C. & I. Co., 1808-'99. Present position since October, 1899. Assistant in Philosophy and Education. B. A., Indiana University, 1897. Graduate Student in Philosophy and Education, Indiana University, 1897-'98. Assistant in Philosophy, Indiana University, 1897-'98. Assistant Director of Association College, Central Y. M. C. A., Chicago, 1898-'99. Fellow-elect in Psychology in Clark University for 1899-1900. Present position since 1899. DELBERT ALONZO CROWNER......North Dormitory Assistant in Butter Making Assistant in Electrical Engineering M. E. (in E. E.), Ohio State University, 1898. Fellow and Laboratory Assistant, 1898-'99; present position since 1809. Assistant in American History B. L., University of Wisconsin, 1896; M. L., University of Wisconsin, 1897; Ph. D., University of Wisconsin, 1899. Graduate Student of Wisconsin, 1896-'99. Graduate Scholar in American History, University of Wisconsin, 1898-'99. Present position since 1899. 

Assistant in Veterinary Medicine

Veterinary Surgeon's Certificate, Ohio State University, 1897. Practiced 1897-'98. Present position since 1898.

Assistant in Drawing

Studied Art with J. H. Witt, E. F. Andrews and Homier. Private Teacher in Art for twenty years. Present position since 1899.

†FRANK ORVILLE CLEMENTS
Assistant in Chemistry
MELVIN DRESBACH
Fellow, in Anatomy and Physiology
B. Sc., Ohio State University; M. Sc., Ohio State University, 1899.
FREDERICK JAMES HALE
Fellow, and Laboratory Assistant in Mechanical Engineering
M. E., Ohio State University, 1898.
M. 12, Onto State University, 1000.
TOTAL REPORTED BARRES
JOHN BERNARD PARKER
Fellow, and Assistant in Rhetoric
B. A., Ohio State University, 1898. Present position since September, 1898.
EMMA LEANNA BALL
Fellow, and Assistant in Mathematics
B. Sc., Ohio State University, 1895; M. Sc., same institution, 1896.
ALFRED HEBER McINTIRE
Fellow in Industrial Arts
M. E. (in E. E.), Ohio State University, 1898.
DONALD ALEXIS KOHR
Fellow, and Laboratory Assistant in Chemistry
B. Ph., Ohio State University, 1898. Graduate Student in Chemistry and Mathematics,
1898-'99. Laboratory Assistant in Chemistry, 1898-'99.
JOHN WESLEY YOUNG
Fellow, and Assistant in Mathematics
B. Ph. Ohio State University, 1899.
HAROLD WARNER BROWN
Fellow, and Assistant in Physics
B. Sc., Cornell, 1898. Present position since 1899.
†HERBERT W. KENNEDY
Emerson McMillin Fellow
Emerson McMillin Fellow
SAMUEL WILLIAMSON COLLETT
Fellow in Botany
B. Sc., Moore's Hill College, Indiana; M. Sc., Moore's Hill College, 1894; Teacher of Physiology and Chemistry, High School, and Normal College, Glidden, Iowa, 1890-'91;
Professor of Natural Science, Taylor University, Upland, Ind., 1893-'96; Professor of Natural
Science, Dakota University, Mitchell, South Dakota, 1896-'99.
HERBERT CHARLES GORE
Fellow and Laboratory Assistant in Chemistry
B. S., University of Michigan, 1899.

<sup>†</sup> Resigned in January, 1900.

CHARLES ARTEMUS GRATE	reet
M. E., Ohio State University, 1898.	
GRACE L. PITTS245 East Gay str	reet
Fellow in Economics	
ALICE DUFOUR	reet
Ph. B., Defiance College, 1899. Student in Botanical Department O. S. U., 1898-'99.	13
WILLIAM C. MILLS	nue

B. Sc. (H. and F.), Ohio State University, 1898. Curator and Librarian of the Ohio State-Archæological and Historical Society. Museum and Library, Orton Hall, O. S. U.

### CHANGES, 1900-1901

### WITHDRAWN

Professor John Thomas Martin, Professor James M. Burns, Associate Professor Stella Elliott Canfield, Assistant Professor Herbert James Noyes, Assistant Professor Clair Albert Dye, Assistant Professor Edwin D. Shurter, Lecturer Faxon Franklin Duane Albery, Assistant Clark Wissler, Assistant John Ferguson Cunningham, Assistant George Washington Rightmire, Assistant Joseph K. Vosskuehler, Assistant Fred A. Fish, Assistant John B. Sanborn, Fellow and Laboratory Assistant Horace Judd, Fellow and Laboratory Assistant S. W. Collett, Fellow and Laboratory Assistant Alice Dufour, Fellow and Laboratory Assistant Donald A. Kohr, Fellow and Laboratory Assistant A. V. Bleininger, Fellow and Laboratory Assistant A. H. McIntire, Fellow and Laboratory Assistant C. A. Grate, Fellow and Laboratory Assistant F. J. Hale, Fellow and Assistant Benjamin Maag, Fellow and Assistant J. W. Young, Fellow and Assistant J. B. Parker, Fellow Edward L. Fulmer, Fellow David T. Keating, Fellow Grace L. Pitts, Fellow Emma L. Ball, Fellow William Cannan, Student Assistant J. F. Jeffrey, Student Assistant Charles F. Dowd, Emerson McMillin Scholar Wilbur E. Mann.

### · APPOINTMENTS

CAPTAIN GEORGE L. CONVERSE, U. S. A. (Retired)
J. WARREN SMITH
WALLACE S. ELDEN
EDWIN E. NOBLES
S. S. EDMANDS
S. E. RASOR
HENRY DAVIES
HARRIET BURR. Fellow in Botany
C. P. LINVILLEFellow in Chemistry
W. L. DUBOIS

### CATALOGUE

CHARLES F. KIMBERLEY
*B. H. HIBBARDFellow in Economics
reliow in Economics
MARY W. RICE
J. F. TRAVIS
Fellow in Mathematics
WILLIAM E. BOHN
C. L. C. MOORE
W. E. DAVIS
CLARA MAUD BERRYMAN
ALONZO H. TUTTLE.
Instructor in American History
SELDEN F. SYMSER
Fellow in Economics
GEORGE W. FROST
Fellow in Mechanical Engineering
CHADLES D SAVDE
CHARLES B. SAYREFellow in American History
N. O. FORD
*Resigned.

### CHANGES IN TITLES

SIDNEY AUGUSTUS NORTON,

Lecturer in Chemistry Emeritus Professor of Chemistry

WILBUR HENRY SIEBERT,

Associate Professor of History Associate Professor of European History \*

CHARLES BYRON FREDERICK. Assistant in Veterinary Medicine

Assistant Professor of Veterinary Medicine

WILLIAM FINLEY LAVERY.

Assistant in Veterinary Medicine Assistant Professor of Veterinary Medicine

MAUD DOROTHY JEFFREY,

Library Assistant Assistant in Library

FREDERICK EDWARD KESTER, Assistant m Physics

Instructor in Physics

LUCY ALLEN.

Library Assistant Assistant in Library

ALBERT V. BLEININGER.

Assistant Director of the Department of Clay Working and Ceramics

Laboratory Assistant, Department of Clay Working and

Ceramics

CLAUDE B. GUITTARD.

Library Assistant Assistant in Library

\*FRANK ORVILLE CLEMENTS.

Fellow and Laboratory Assistant in Chemistry Assistant in Chemistry

W. D. GIBBS.

Associate Professor of Agriculture Professor of Agronomy

JOHN W. DECKER,

Associate Professor of Dairy Husbandry Associate Professor of Agriculture

MELVIN DRESBACH,

Fellow and Laboratory Assistant in Anatomy and Physiology

Assistant in Anatomy and Physiology

H. C. LORD.

Director of the Emerson McMillin Observatory and Associate Professor of Astronomy

Professor of Astronomy and Director of Emerson

McMillin Observatory

HERBERT C. GORE,

Fellow and Laboratory Assistant in Chemistry

Assistant in Chemistry

EDWARD ORTON, JR.,

Director of the Department of Clayworking and Ceramics Professor and Director of the Department of Clayworking and Ceramics

o Resigned in January, 1900.

CORNELIA P. SOUTHER,

Assistant Professor of Domestic Art Associate Professor of Domestic Art

F. C. CLARK,

Associate Professor of Economics Professor of Economics

C. S. PROSSER,

Associate Professor of Organic Geology Associate Professor of Historical Geology and Acting Head of the Department of Geology

J. A. BOWNOCKER,

Associate Professor of Inorganic Geology Associate Professor of Inorganic Geology and Curator of the Museum

F. E. SANBORN.

Director of the Department of Industrial Arts Professor and Director of the Department of Industrial Arts

WILLIAM H. RENCK,

Assistant and Instructor in Pattern Making Instructor in Pattern Making and Founding

W. A. KNIGHT,

Assistant and Instructor in Machine Work Instructor in Machine Work

CHARLES P. KROWE,

Assistant and Forge Master Instructor in Forging

W. F. HUNTER,

Dean and Professor of Sales, etc Dean of College of Law and Professor of Law

J. H. COLLINS.

Lecturer on Federal Practice Professor of Law

J. A. SHAUCK.

Lecturer on Supreme Court Practice

Professor of Law

G. W. KNIGHT

Professor of Constitutional Law and Private Corporations-Professor of Law

E. B. KINKEAD,

Professor of Pleading, etc Professor of Law

W. H. PAGE.

Professor of Elementary Law Professor of Law

Pills Colon

Professor of Agency, etc

E. O. RANDALL,

Professor of Law

D. F. PUGH,

Professor of Equity Juris, etc Professor of Law

E. A. HITCHCOCK.

Associate Professor of Experimental Engineering Associate Professor of Mechanical Engineering

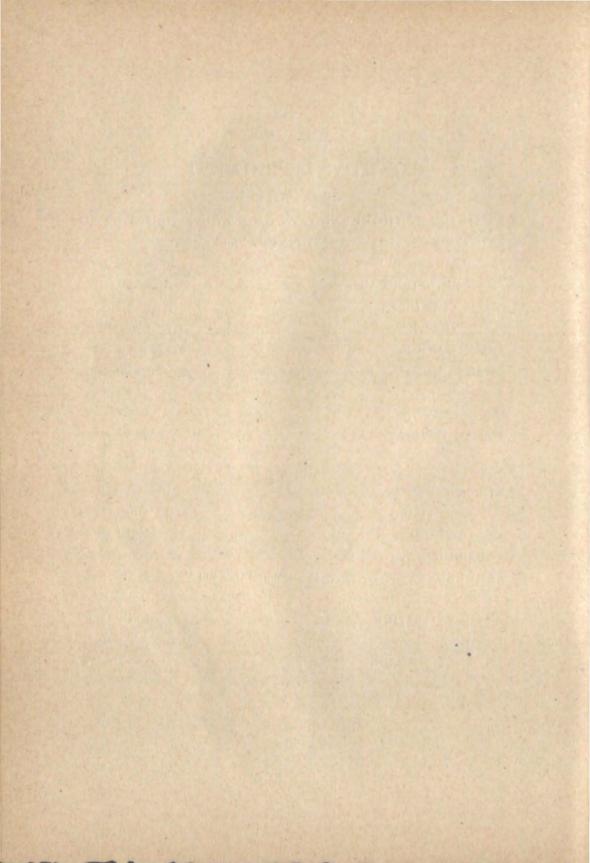
FRANK A. RAY.

Associate Professor of Mine Engineering Professor of Mine Engineering

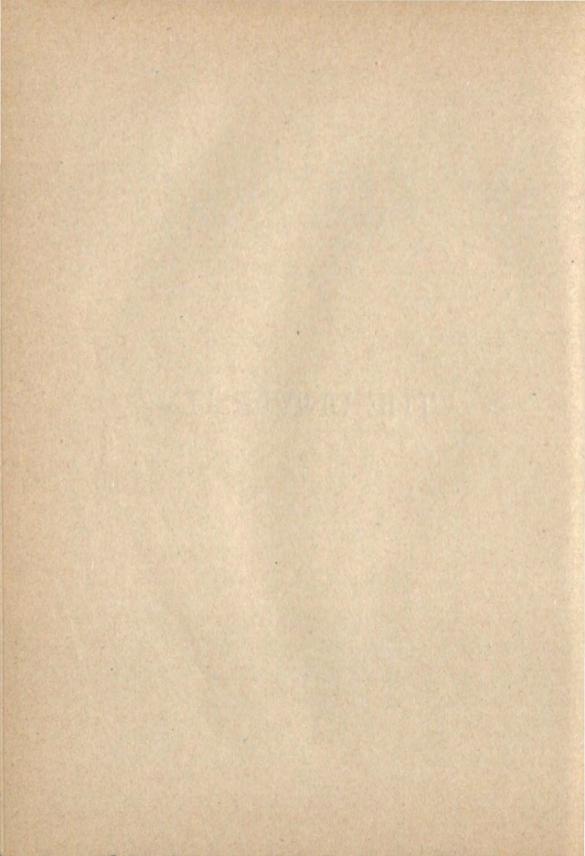
# EXECUTIVE DEPARTMENT

### 1899-1900

WILLIAM OXLEY THOMPSON	President	
ALEXIS COPE	Secretary Board of Trustees and Bursar	
W. C. McCRACKEN	Chief Engineer	
KATHARINE H. DUNCAN	Executive Clerk	
EDITH D .COCKINS	Registrar	
CARL E. STEEB	Accountant	
CHARLES LOWE		
THOMAS BOUDE	First Fireman	
W. E. CASE	Second Fireman	
JAMES KELLEY	Lawnkeeper	
BENJAMIN IRWIN		
JANITORS		
ARTHUR CHANTLER	University Hall	
HENRY CHANTLER	Orton Hail	
G. A. GOODSPEED	Chemical Hall	
JOHN H. BROWN		
GEO. C. DENNEY	Horticultural Hall and Veterinary Hospital	
D. D. GEREN	Gymnasium	
WILLIAM WHITESTINE	Biological Hall	
M. N. COOK	Townshend Hall	



# THE UNIVERSITY



## OHIO STATE UNIVERSITY

### HISTORY

The land grant made by the United States under an act approved by President Lincoln, July 2nd, 1862, provided that there should be granted to each State an amount of public land equal to thirty thousand acres for each Senator and Representative to which the State was entitled by the apportionment of the census of 1860. The proceeds under this act were to constitute a perpetual fund the capital of which was to remain forever undiminished and the interest of the same was to be inviolably applied by each State which should take and claim the benefits of the act to the endowment, support and maintenance of at least one "College where the leading objects 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 a 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 of life."

Governor Tod, in November, 1862, brought the subject before the State Board of Agriculture and later to the attention of the Legislature. In January, 1864, Hon, Columbus Delano introduced a bill accepting the grant. This became a law February 9th, 1864, and pledged the faith of the State to the performance of all the conditions and provisions contained therein. In 1866, an act introduced by Hon, J. T. Brooks, was passed, which provided for the establishment of the Ohio Agricultural and Mechanical College, but the provisions were not carried into effect and a second act introduced by Hon, R. P. Cannon was passed in 1870 entitled "An act to establish and maintain an Agricultural and Mechanical College in Ohio." Under the provisions of this act the institution was located in Columbus and the Board proceeded to the organization of the college and the election of a Faculty of instruction, and the institution was opened for the reception of students on the seventeenth day of September, 1873.

In 1878 the legislature passed "An act to reorganize and change the name of the Ohio Agricultural and Mechanical College and to repeal certain acts therein mentioned." The act provided that the institution should be thereafter designated as "The Ohio State University." Up to this time but one appropriation had been made by the State for the support of the institution. With the reorganization came the larger and broader view of the State's relation to public education and since that time the Ohio State University has shared with other public educational institutions a more generous support by the State.

The governing body of the institution is a Board of Trustees, appointed by the Governor of the State and confirmed by the Senate, for terms of seven years, as provided in the law organizing the University. The original endowment has been supplemented, and the objects of the University promoted, by a permanent annual grant from the United States, under an act of 1890, by special appropriations of the General Assembly; and in 1891, by a permanent annual grant from the State, which grant was doubled by the legislature of 1896. In accordance with the spirit of the law under which it is organized, the University aims to furnish

ample facilities for education in the liberal and industrial arts, the sciences and the languages, and for thorough technical and professional study of agriculture, engineering in its various departments, veterinary medicine, pharmacy and law. Through the aid which has been received from the United States and from the State it is enabled to offer its privileges, with a slight charge for incidental expenses, to all persons of either sex who are qualified for admission.

### LOCATION OF THE UNIVERSITY

The University is situated within the corporate limits of the City of Columbus, two miles north of the Union Depot and about three miles from the State Capitol. The University grounds consist of three hundred and forty-five acres, bounded east and west by High Street and the Olentangy river, respectively. The western portion, about 235 acres, is devoted to agricultural and horticultural purposes, and is under the management of the College of Agriculture and Domestic Science, The eastern portion is occupied by the principal University buildings, campus, athletic and drill grounds, a park-like meadow, and a few acres of primitive forest.

The grounds are laid out with care, ornamented with trees, shrubs and flower beds; and are so managed as to illustrate the instruction in Botany, Horticulture, Forestry, Landscape Gardening and Floriculture.

The University may be reached by either the North High street or the Neil avenue electric cars. Those wishing to go to the principal buildings of the University, to the residences on the grounds, or the Athletic field, should take a High street car going north. Those wishing to visit the Emerson McMillin Observatory, the Veterinary Hospital, Townsend Hall, Horticultural Hall and the Dormitories, will find the Neil avenue cars more convenient.

The University has thirteen buildings devoted to instruction, one Boiler House, one Power House, two Dormitories, six residences and some farm buildings. These buildings represent an investment for construction of about eight hundred thousand dollars. The equipment and apparatus amount to about one hundred and seventy thousand dollars. The land now occupied as a site with the farm is valued at one million five hundred thousand dollars.

### BUILDINGS

University Hall contains the Executive offices, the office of the Secretary of the Trustees, the assembly room (seating twelve hundred persons), four halls for literary societies, the Y M. C. A. and King's Daughters' room, the Young Woman's League room and class rooms and laboratories for the departments of Economics, English Literature, German, Greek, History, Latin, Mathematics, Pedagogy, Political Science, Philosophy, Physics, Rhetoric and English Language, and Romance Languages. An electric passenger elevator connects all floors.

MECHANICAL HALL contains a room fitted up with cases for the care of models, instruments of precision, etc.; a room for instruction in laboratory mechanics and draughting, and laboratories with the engines, hydraulic plant, testing machines, etc.

BOTANICAL HALL has on the first floor the lecture room of the department of Botany. There are also an office, a store room, a dark room, and a private laboratory for Physiological Botany. On the second floor is the botanical museum, the main laboratory and the assistant's laboratory. Connected with this building is a large greenhouse and propagating house.

ELECTRICAL HALL devotes the first floor to the dynamo room. The floor of this room is of asphalt, laid on a solid concrete foundation. On the second floor

are a lecture and draughting room, a photometric room, a library room, and office, stock and locker rooms.

CHEMICAL HALL is now occupied by the departments of Chemistry, Mining and Metallurgy and Pharmacy. The department of Chemistry occupies the middle portion of the first floor and the middle and western portion of the second floor. The main lecture room has a seating capacity for one hundred and fifty students. The laboratory for introductory work and qualitative analysis has accommodation for two hundred and sixty-four students. There is also a special laboratory for qualitative analysis with accommodations for twenty-five students. The main quantitative laboratory accommodates fifty students. There is also an organic laboratory, a room for the preparation of experiments, a balcony accessible both from the lecture room and preparation room, a room for combustion work, a dark room for spectroscopic work, in addition to a number of smaller rooms used for private laboratories.

The departments of Mining and Metallurgy occupy the east end of the building. In the basement are the smelting furnaces, the assay laboratory, a room for rough work and store room for supplies. On the first floor is the lecture room of the professor of Metallurgy, with a seating capacity for forty; a laboratory with desks for sixteen students, a store room, a balance room, a private laboratory and an office. On the second floor is the lecture room of the associate professor of Mine Engineering, a draughting room, a room for instruments and an office.

The department of Pharmacy occupies the first floor and basement in the west end of the building, and has a lecture room provided for sixty students; a preparation room, a laboratory with desks for twenty-five students; a room for

supplies, a balance room, a model drug store and a private laboratory.

ORTON HALL is designed for the permanent accommodation of the large geological collection of the University and for work and instruction in the department of Geology. A portion of it is eccupied by the library and reading room. The building is two stories in height, with a high basement, is built of brick and faced with sandstone, and is fireproof throughout. At the right of the main entrance is the geological lecture room and professor's private room; at the left is the University library, reading room and librarian's private room. The central and rear portion is occupied by the geological and paleontological museums. The petrographical laboratory is located on the second floor. In the basement a room is used for work in geographical modeling, the finished models being afterward placed in the collection of such models in a room set apart for the purpose on the second floor. The basement accommodates also the museum of economic geology. A paleontological laboratory or working room is also provided on the second floor.

The greater part of the basement of Orton Hall is occupied as a laboratory by the department of Clay-working and Ceramics. This department is also accommodated with a large room on the first floor for recitation and exhibition purposes. In the rear of Orton Hall is a small brick structure used for the kilns. of this department.

HAYES HALL is devoted to instruction in Industrial Arts, Drawing, Civil Engineering and Domestic Economy. On the first floor are two offices, the rooms of the department of Domestic Economy and two lecture rooms, the machine shop, the forge shop and the foundry. On the second floor are the carpenter and pattern shops and six large lecture rooms, with private rooms annexed.

The department of Drawing occupies the third floor for instruction in mechan-

ical drawing and free-hand drawing and photography.

HORTICULTURAL HALL contains recitation rooms and indoor laboratories of the department of Horticulture and Forestry. An extensive greenhouse is attached.

THE VETERINARY HOSPITAL contains on the first floor a veterinary museum and library, a dispensary and two private rooms for the persons in charge. On the second floor are a class room, a bacteriological laboratory and a microscopical laboratory. The rear extension contains an operating hall and a room provided with stalls, cages, etc., for the care of animals under treatment.

THE EMERSON McMILLIN OBSERVATORY is the gift of Mr. Emerson McMillin of New York. The first floor is divided by a hall and stairway into two parts. The east wing contains an office, library, clock room and a large, well-lighted room for the students, furnished with tables, where they reduce their observations and keep the records of their work. The west wing contains the transit house, the dome and photographic dark room. The transit house is a light frame structure, so designed as to be kept as free as possible from heat radiated by any heavy walls of masonry. The dome is a wooden frame-work, covered on the outside with canvas. The rest of the building is of pressed brick, the foundation and second story being "rock-faced."

The equipment consists of a twelve-inch equatorial telescope, mounting by Messrs. Warner & Swasey, objective by Mr. Brashear, with a large and powerful spectroscope by Mr. Brashear. This instrument is adapted to use either one or two prisms or a grating, and is provided with a double set of objectives, one corrected for the visual and one for the photographic rays; a positive micrometer with a seven-inch circle by Messrs. Warner & Swasey; a combined zenith telescope and transit instrument of three inches clear aperture by Mr. G. N. Saegmüller; a sidereal clock by Clemens Riefler of Munich; a comparator by Carl Ziliss; a four inch portable equatorial by Alvan Clark; a chronograph by Warner & Swasey; sextants, chronometers, meteorological instruments, etc. In addition to the above, Mr. McMillin's gift provides for an excellent astronomical library.

Townsend Hall is devoted exclusively to the instruction given in the College of Agriculture.

On the left of the entrance is the office of the Department of Agriculture and a private office, a stenographer's room and fireproof vault. Connected with the office on the south is an assistant's room, opening into a laboratory for advanced students. At the extreme south end of this floor is a large laboratory for studentwork in soils and farm crops. Connected with this laboratory is a balance room, a store room and an instructor's laboratory. On the west side of the main corridor, and connected with the instructor's room, is a large class room opening into a preparation room with a dark room. This class room is fitted with all appliances for showing lantern slides of livestock, buildings, machinery, etc. On the same side of the corridor, and on the right of the stairway leading to the basement and second floor, are the class room and instructor's room for dairying. On the right of the main entrance is the department reading room. The north end of this floor is occupied by the museum with an attendant's room.

The north end of the high basement is occupied by the dairy department. This consists of a receiving room, a pasteurizing room, a store room, a refrigerator room, a lawatory, butter-making room, cheese-making room, two cheese-curing rooms and an instructor's room.

In the south end of the basement is a livestock room about forty feet square. One third of this room is occupied by raised seats, the remaining floor space being used for exhibiting and judging livestock. Connected with this is a room fitted with stalls for the temporary accommodation of livestock when needed for class exercises. The basement also contains soil storage room, bath room, toilet rooms, repair shop, locker rooms, bicycle room and janitor's room. A small detached building will furnish steam and power for the dairy department. Detached from the main building, but connected with the soil storage room by a

tramway, is a glass house for the study of soils and the experimental growth of plants.

The north end of the second story contains a large student laboratory for the department of Agricultural Chemistry, connected with an organic and analysis laboratory, a balance room, a store room and a private laboratory. The lecture room of this department is at the south end of this floor and will seat one hundred and sixty students on raised seats, with a preparation room adjoining. There is also in this floor a class room connecting with preparation room, store room and instructor's room, which is used (temporarily) by the department of Veterinary Medicine. There is also an extra class room, ladies' toilet and locker rooms and a hall for the use of the Townsend Society, designed to seat about two hundred persons.

BIOLOGICAL HALL is designed for the special accommodation of the departments of Entomology, Zoology, Anatomy and Physiology, and is fully equipped with all the latest and best apparatus for this work. It consists of a basement, in which is done all the work of preparation of subjects for the lecture tables and for the special laboratory work for the advanced students; the first floor, on which are lecture rooms, general and special laboratories, and private work rooms for the professor of Entomology and Zoology and his assistants; the second floor, similarly arranged for the work in Anatomy and Physiology; and a large wing, in which is the museum and a large lecture room. The building is fireproof throughout, and in design and general appearance is one of the most attractive on the campus.

THE GYMNASIUM AND ARMORY was first occupied in January, 1898. The drill hall and gymnasium floor is eighty feet wide by one hundred and fifty feet long. The roof is carried on curved steel arches, lighted from a clear story at the top. There is a running track around the entire room about twelve feet from the floor, back of which is a visitors' gallery seating about seven hundred persons. At the northwest corner of the floor is a stairway leading down to the men's locker and dressing room, while the young women go down a similar way at the southeast corner to their rooms. On the levtl with the main floor, near the main entrance at the south, is a large room for the use of the Commandant and his classes and rooms for the Director of the Gymnasium. Above the Commandant's room is the room for the officers of the University Cadet Corps.

The basement is very high and well lighted. On the young men's side are dressing and locker rooms, the bath room with shower and plunge baths, a bicycle room, a lecture room, the cannon room, the band room, and a large room, which is to be the home of the University Athletic Association. On the young women's side are the locker rooms and bath rooms—precisely like those provided for the young men—a bicycle room, lecture room and private office for the instruction in sanitation and hygiene for young women.

THE NORTH DORMITORY is situated at the northern limit of Neil avenue, and fronts Eleventh avenue. It is at the terminus of the Neil avenue electric car line. It is a plain structure of brick, and affords accommodation for sixty-four students.

THE SOUTH DORMITORY stands near Neil avenue within a few rods of the North Dormitory. It is also built of brick, and contains rooms for twenty students.

RESIDENCES. There are seven dwelling houses upon the University campus. Five of these are brick and two are frame structures. One is occupied by the President of the University, five by professors, and the seventh is the farm house.

### ORGANIZATION OF THE UNIVERSITY

The Ohio State University is divided into six colleges, as follows:

The College of Agriculture and Domestic Science consists of those departments represented in the course leading to the degrees of Bachelor of Science in Agriculture, Bachelor of Science in Horticulture and Forestry and Bachelor of Science in Domestic Economy, and in the Course in Dairying.

The College of Arts, Philosophy and Science consists of those departments represented in the courses leading to the degree of Bachelor of Arts, Bachelor of Philosophy, and Bachelor of Science; and in the Courses Preparatory to Law and to Journalism.

The College of Engineering consists of those departments represented in the courses leading to the degrees of Civil Engineer, Engineer of Mines, Engineer of Mines in Ceramics, Mechanical Engineer, Mechanical Engineer in Electrical Engineering, and Bachelor of Science in Industrial Arts, Bachelor of Science in Chemistry or in Metallurgy; in the Course in Architecture, in the Short Course in Clay-Working and Ceramics, and in the Short Course in Mining.

The College of Law consists of those departments represented in the course leading to the degree of Bachelor of Laws.

The College of Pharmacy consists of those departments represented in the courses leading to the degree of Bachelor of Science in Pharmacy," and in the Short Course in Pharmacy.

The College of Veterinary Medicine consists of those departments represented in the course leading to the degree of Doctor of Veterinary Medicine, and to a certificate of Veterinary Surgeon.

Each college is under the direction of its own Faculty, which has power to act in all matters pertaining to the work of students in that college.

### LABORATORIES AND EQUIPMENT

### AGRICULTURE

The equipment of this department may be divided along three general lines: the plant, the museum and the illustrative materials.

THE PLANT. This consists of a farm of about two hundred acres, a general farm barn, a horse barn, and several smaller buildings. The farm lies along the Olentangy river, and includes both first and second bottom land. On this farm are grown general farm crops in the rotation deemed best suited to the circumstances of the Department. At present a few experiments are conducted, the general idea being to conduct such experiments as will have the largest instructional value to the students who attend the College of Agriculture. The Ohio Agricultural Experiment Station continues to conduct here the elaborate fertilizer experiments with wheat, corn and oats, which it has been making on this farm during the past five years. Different species and varieties of farm crops are grown to some extent for the purpose of class illustration and instruction, and it is expected to enlarge this feature.

Specimens of the draft, coach and roadster type of horse are kept and used in the farm work. The Department manages a milk dairy; having a herd of about forty cows, composed of pure bred and grade Jerseys and Shorthorns.

The general farm barn contains a well arranged stable for forty cows, with underground drainage and sewage cistern, a milk cooling room, a silo, a roof cellar, a work-shop, with room for hay, grain and other foodstuffs.

THE MUSEUM. This contains a large number of samples of farm products in various forms and their by-products, such as soils, grains, grasses, wools, cotton,

forage plants and foodstuff. Milling and other processes are illustrated by samples of the various products of manufacture.

The museum contains Auzoux models, samples of tools and a considerable miscellaneous collection. The collections are intended primarily for student use and not for display.

ILLUSTRATIVE MATERIALS. These consist of charts, pictures and lantern slides showing results of experiments, representative and noted specimens of livestock, farm machinery, fences, buildings, etc. The Department has and uses constantly in the class room a Beseler double oxygen—ether stereopticon. The collection of several hundred lantern slides for this purpose is constantly receiving additions.

THE AGRICULTURAL LIBRARY. While not considered as belonging specifically to this Department, there is in the general library a fairly good collection of books and periodicals devoted to agriculture, a large use of which is required of the student.

THE LABORATORY OF SOIL PHYSICS is located on the second floor of Horticultural Hall, and is supplied with apparatus for the mechanical analysis of soils and for testing their physical properties. (See also Buildings — Townshend Hall.)

### ARCHITECTURE

This work is carried on in connection with the Department of Drawing. The facilities for this work consist of a large, well-lighted drawing-room for the designing and drawing part of the work, a recitation room specially fitted with stereopticon lantern to illustrate the lectures, several hundred lantern slides of typical specimens of architecture from all parts of the world, a collection of scale design drawings, a collection of specifications of buildings that have been erected, a collection of plaster ornaments used in architectural decoration and a well selected collection of useful books in the library. The City contains many buildings of interest to the architectural student, both in a completed state and in process of erection.

#### BOTANY

The general Botanical Laboratory occupies a part of the second floor of Botanical Hall. It is 23x33 feet, and is furnished with both movable and fixed tables. The latter are attached to the west and south walls near windows, suitably shaded. Water, gas and an evaporating hood are also provided. The laboratory is equipped with compound microscopes of the Baush and Lomb, the Leitz and other patterns; and accompanying each is a tray of tools and a case of reagents. There are more than fifty dissecting microscopes, also charts, and several minor pieces of apparatus for experiments in vegetable physiology. Three smaller rooms are also provided as laboratories for special work, as well as a dark room for photography. Other facilities for the illustration of the courses in botany, and for practical training in the same, are: A general herbarium, including flowering plants, ferns, mosses, fungi and algae; a state herbarium, a collection of fruits and seeds, valuable timbers, woods, grasses and various economic products of the vegetable kingdom; ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; and a greenhouse with a fair collection of native and exotic plants. (See also Museum - The Botanical Museum; and BUILDINGS-Botanical Hall.)

#### CHEMISTRY

The laboratories of the department accommodate from three to four hundred students. Each laboratory is equipped with all the necessary conveniences as water, gas, electric lights, distilled water piped from a large still in the attic,

steam ovens, automatic air blasts, suction pumps, etc. The department is liberally supplied with the best apparatus and materials for both lecture room and laboratory work. Each student has his own desk with drawers and locker. All supplies are procured from the chemical store room which has always on hand a complete stock of all necessary materials. (See also Buildings—Chemical Hall.)

### CIVIL ENGINEERING

The facilities provided for the illustration of the courses in civil engineering and for practical training are as follows: One high grade and three ordinary transits, four leveling instruments, solar compass, prismatic compass, improved telescope compass, Abney hand level, level and stadia rods, sight poles, chains, tapes; twenty-six improved drawing tables with 30" by 36" top; Schroeder's models in stereotomy of roof trusses; large set of models of wooden joints; collection of photographs of bridges, both when finished and in course of erection; collections of strain sheets and shop drawings of bridges; new improved cement testing machines and outfit for making all kinds of cement tests; stone mason tools for working models out of plaster blocks; magic lantern and slides; collections of samples of building materials; calculating machines; sets of drawing instruments; blue print room with outfit; sets of tracings of standard structures from which each student may make a set of blue prints. The equipment is growing each year by the addition of materials purchased, presented, or made by students of the Department.

#### CLAY-WORKING AND CERAMICS

The University is the first, and at this time the only institution in the United States offering special facilities for the study of clays, clay-working, and the chemical technology of the ceramic art. The facilities of the Department comprise: 1st. A convenient chemical laboratory, specially designed and equipped for the analysis and decomposition of silicates. Provision has been made for the use of hydrofluoric acid with safety, and the platinum ware has been made to order with this purpose in view. 2d. A complete mechanical outfit for the preparation of clays for pottery manufacture and the production of the ware itself, of any grade from earthen wares to porcelain. The machinery is of the latest types and comprises all important varieties in use for grinding, tempering, washing, filtering and molding. 3d. A similar plant for the manufacture of brick, tiles, pipes and hollow goods. The machinery here is of full size and samples up to a ton in weight can be received and transformed into the finished article by any or all of the standard methods in commercial use. The power for this purpose is derived from a fine electric motor, driven from the University power plant. 4th. A kiln house, equipped with a kiln in which several hundred bricks, or an equivalent quantity of sewer-pipe, stoneware, or pottery can be burnt. The fuel is intended to be coke, except in special cases where the fuel available for burning clay wares is to be made the subject of test. There is also provided a crucible melting furnace and a muffle furnace for testing glazes. A muffle kiln of large size for burning pottery, glazed ware and decorated wares has recently been put into operation. 5th. A ceramic museum, containing a fine collection of American pottery and clay products of every class, is in process of installation. 6th. A library of the best literature on the subject, mainly German but containing a few English and French works, and the trade periodicals. (See also Buildings-Orton Hall.)

### DOMESTIC ECONOMY

The Department of Domestic Economy (for young women) will secure for the course all that experience and observation may suggest. At present it has a large

kitchen, with dining room adjoining, each fitted with the latest and best appliances for the work undertaken. About a thousand dollars has been expended to make this department entirely practical, and to permit its instruction to be as thorough and as scientific as that of any other department in the University.

#### DRAWING

The Department occupies the entire third floor and one room in the basement of Hayes Hall, and is provided with the following equipment for the illustration of the work in drawing and for the practical training in same:

For freehand drawing, water color and oil painting:—A large studio thirty-five by eighty feet, specially arranged and provided with adjustable tilting tables and easels, a well selected collection of pencil, pen and ink, charcoal and color specimens of work, wooden models of geometric forms, plaster-casts of ornaments, flowers, fruit and the antique.

For clay-modeling:—A specially arranged and equipped studio twenty-six by thirty-two feet for modeling in clay and casting in plaster, consisting of modeling stands, moisture box, casting table, modeling tools of wood and steel, stove and vent-hood for the preparation of gelatine molds and lockers.

For mechanical drawing and mechanical and architectural designing:—A large, well lighted room forty by eighty-five feet, provided with O. S. U. drawing tables (30" by 36" tops), a set of Schroeder models, a collection of shop drawings and facilities for blue-printing.

For photography:—A well arranged and equipped dark-room, printing apparatus, copying camera, six view cameras, lenses of long and short focus, tele-photographic lens, shutters for instantaneous exposures and an excellent outfit for photo-micrography.

In addition to the above, the library contains a well selected collection of books pertaining to the work of the Departments. (See also Buildings—Hayes Hall.)

### ECONOMICS AND SOCIOLOGY

The University, through the efforts and generosity of its friends, is possessed of a unique equipment for study purposes in these lines. This equipment comprises a large collection of railroad, municipal and school bonds; of stocks of all kinds; of letters of credit, drafts, foreign bills of exchange, bills of lading, checks, enclosures, statements, insurance policies, trust certificates, notes, mortgages and all the necessary forms of business paper; also collections of coins illustrative of various periods in our monetary history, foreign coins, and scrip; also sets of maps and charts and a Kiepert-Commercial Globe 80 cent, in diameter. Ample facilities for statistical work are provided and a seminary room set apart for the use of laboratory material, documents, etc., is always open to advanced students. It is the policy of the Department to make the statistical investigations and research work of advanced students contributory to the permanent equipment of the Department, thus enriching the facilities from year to year with material of scientific and pedagogical value.

### ELECTRICAL ENGINEERING

The Electrical Laboratory affords very good facilities for practical experimental work with dynamo machinery and other electrical apparatus. The dynamo equipment consists of twenty-five machines of various makes and sizes from 40 H. P. down; aggregating over 200 horse power. These include direct and alternating current generators, polyphase motors, are and incandescent lighting generators, railway and station motors and unipolar dynamo. The latter, with an alter-

nating current generator and a 2-phase motor, were built by the students; it being the policy of the Department to build as much of its apparatus as possible. There are also a number of transformers of different makes, including one for welding,built at the University. Are lamps of different styles, a 10-kilowatt-hour storage battery, condensers and resistances, and magnetic testing apparatus also form part of the equipment. The list of measuring instruments is quite complete, and includes a standard Weston voltmeter and eleven other Weston volt and am-meters, also four Kelvin static voltmeters, five dynamo-meters, one watt-meter, three galvanometers and a dozen other am-meters and voltmeters of different makes. A telephone laboratory—with apparatus for comparative tests, a variety of transmitters and receivers, and lines running to another building, has been in use for two years. Photometry is given at present in the Physical Laboratory, where the equipment in this line is excellent. Power for running the dynamo laboratory is supplied by three induction motors from the University Power Plant. This latter is a model 2-phase plant, and the electrical part of it has been for the most part installed by the students of the Department. The repair and maintenance of this plant is done by the students, who receive compensation for the time so spent.

#### GEOLOGY

The University is able to present unusual advantages for the study of Geology. By an act of the Legislature it has been put in possession of all the collections made by the late Geological Survey, and these collections have been supplemented by valuable additions of fossils and minerals from various sources. The State collection embraces a very complete representation of every geological formation shown in Ohio. In its new and ample quarters the Department offers exceptionally good opportunities for work in the lithological, petrographical and modeling labotatories. (See also Museums—the Geological Museum; and Buildings—Orton Hall.)

### HORTICULTURE AND FORESTRY

Among the facilities provided for the illustration of the courses in horticulture, and for practical training in the same, are: (1) a collection of horticultural tools for budding, grafting, pruning, etc.; (2) an orchard, containing well-selected varieties of the apple, pear, cherry, plum and quince; (3) a small vineyard, containing numerous varieties of the grape; (4) a garden of small fruits, containing all the best varieties of the strawberry, raspberry, blackberry, current and gooseberry; (5) a vegetable garden, with forcing houses, cold frames, experimental plats, conveniences for irrigation, etc.; (6) small nursery and forest tree plantations, with practice rows of budding, grafting, pruning and training; (7) ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; (8) a greenhouse, with a fair collection of native and exotic plants; (9) a collection of preserved natural specimens, and models of fruits, seeds, woods, etc.; (10) a laboratory fairly well equipped with balances, charts and other appliances for study and research. (See also Museums—the Botanical Museum; and Butldings—Horticultural Hall.)

### MECHANICAL ENGINEERING

The greater part of Mechanical Hall is devoted to laboratory purposes.

The south laboratory is used for applied mechanics and for gas engineering. Here are located the machines for testing the strength and elasticity of engineering materials, and recording their physical properties automatically and autographically. Oils are tested as illuminants and as lubricants. Belts and pulleys are tested for their slippage, friction and horse-power transmitted. The gas engine plant has three engines, representing gas and gasoline, three methods

of ignition, and fly ball and inertia governors. The air is supplied by a fan through a large meter. Temperatures and pressures of air, gas and water are measured. The fresh and burnt gases are analyzed and their heating values determined by a calorimeter. The power is measured at both the indicator and the brake. The laboratory machine shop and tool room are in this room.

The north laboratory is used as a steam engineering and hydraulic laboratory. Four 35-horse-power engines give facilities for testing single and duplex condensing or non-condensing, simple or compound, throttling or automatic cut-off engines, using either a jet or a surface condenser. Pressure and vacuum guages are calibrated. Indicator springs of five makers are tested either cold or hot. Five kinds of calorimeters determine the moisture in steam before and after passing three different separators. Injectors are tested for lift, quantity, pressure and steam consumption. Steam pumps of six makes, ranging to 800 gallons per minute capacity; two centrifugal and a rotary pump, enable tests of pumps to be made and deliver water at pressures below 150 pounds to two stand-pipes, which in turn supply turbine and cascade, and Pelton water wheels, and enable experiments to be made on the flow of water through orifices, pipes, valves, etc. Three cisterns, provided with a variety of weirs up to five feet wide, give practice in measuring flowing water. A Venturi meter and a Pilot tube are also used. Ericsson and Rider hot air engines are tested. A Rife hydraulic engine, a Humphreys ram, Gem and Eureka water motors, and a pulsometer, are included in the hydraulic apparatus, all of which are connected and prepared for complete tests.

A complete set of Westinghouse air-brake apparatus, a blower and a ventilating fan, enable experiments to be performed in the flow of air. They are supplemented by tests of the heating and ventilating plants in the buildings of the campus.

In addition to the apparatus and equipment of the power plant of the University the power house at Townshend Hall contains a horizontal, return tubular boiler, two steam engines and an ammonia refrigerating machine, making the facilities on the campus for testing quite complete. Machinery, apparatus and appliances are continually being presented, built or purchased, and the student is given an opportunity to test everything under practical conditions of operation. Besides the laboratory facilities, opportunities frequently arise to test machinery, engines or boilers in the city, and in these tests the students take part.

### METALLURGY

The metallurgical laboratory has all the appliances for the most modern methods of technical analysis as practiced in iron and steel laboratories, including gas analysis. A furnace room in the basement is fitted for gold and silver assaying, with improved muffle and crucible furnaces.

The lecture room in metallurgy has arrangements for projecting photographs of machines, mines and furnaces, for class illustration, and there is a large collection of such views. There is a photographic room with blue-printing facilities, where students learn to make copies of the drawings used in illustrating the lectures.

A collection of minerals and rocks with a large set of rock sections is provided for illustrating the mineralogy, as well as sets of blow-pipe apparatus for the students in determining mineralogy. (See also Buildings—Chemical Hall; and Museums—The Geological Museum.)

### MINE ENGINEERING

The Department is equipped with all of the latest improved instruments and apparatus used in mine engineering; surveying and the study of mine ventilation.

There is a collection of models of mine machinery and supplies, to which additions are being made which are valuable as illustrations. The draughting room is large, well lighted and provided with a desk for each student, where he is personally taught map making and the platting of actual surface and underground surveys; the making of tracings of drawings and how to make blue-prints. He is also taught the proper methods of keeping notes and all records necessary to an efficient engineers' office. The students are given practical experience by making actual surveys of coal mines and in working up their notes complete in all of the necessary details. The students are also taught how to make working drawings, plans, estimates and specifications of mining operations and equipment.

The lecture room has arrangements for projecting photographs of machines, mines and mine equipment, for class illustration, and there is a collection of such views. Also photographic room with blue-printing facilities, where students learn to make copies of the drawings made by themselves and those used in illustrating the lectures.

#### PHARMACY

The facilities provided for illustration of this work and for practical training are as follows: The apartments assigned to this work occupy the west end of the Chemical Hall, first floor and basement. The lecture room will accommodate sixty students, and is provided with a large lecture table and supplied with gas and water, and other conveniences for experiment. About the walls are arranged cases in which are exhibited rare and costly chemicals, curious drugs, and highgrade pharmaceuticals. Adjoining this room is the preparation room and storeroom, where the supplies and apparatus and material are kept, and where the apparatus for experiment and illustration before classes is prepared. Also adjoining this room is the professor's private laboratory. The main laboratory has desks for thirty-five students, each one provided with gas and water, and sufficient storage space for material and apparatus. The laboratory is furnished with apparatus for distilling, and reclaiming, with ntills, balances, drying closets, steam vaporizers, hoods and other special apparatus for pharmaceutical work. Opening into the laboratory is the drug store. This drug store is complete, and is in itself a cabinet of official drugs, and all preparations thereof. It is provided with a prescription desk and all apparatus adapted for training in prescription work. Adjoining the laboratory is the reading room, where are kept the various pharmaceutical journals, the dispensatories, and many books of reference. Also adjoining the main laboratory is the balance room, which is well provided with analytical balances, specific gravity balances and microscope, all of which are intended for higher pharmaceutical work.

In the reading room is also a cabinet of crude drugs, which have been classified and numbered but bear no name. This cabinet is adapted to the study of pharmacognosy.

In addition to the foregoing equipment, the Department is possessed of an extensive range of apparatus, by means of which any branch of work in pharmacy can be successfully pursued. The Department is complete in all its details, and affords unexcelled opportunity for the study of pharmacy. (See also Buildings—Chemical Hall.)

#### PHYSICS

The Department has an excellent equipment of apparatus, to which additions are constantly being made. The apparatus includes a large collection of pieces for illustration of the general lecture room work, but is principally chosen for accurate measurement in the laboratory. A set of standards of length, capacity and mass, sent under the act of Congress supplying such sets to the several agricultural

colleges, is in the possession of the Department. The pieces are copies of the United States standards made by the Coast Survey at Washington.

Among the principal pieces of apparatus are a dividing machine by Fauth & Co.; chronometers by Parkinson & Frodsham and by Negus, the latter a breakcircuit; a chronograph by Fauth & Co.; a Hipp's chronoscope; cathetometers by Salleron and by the Geneva Society, the latter an exceptionally fine instrument; Regnault's apparatus for vapor tension, for expansion of gases and for specific heat; Melloni-Tyndall apparatus for radiant heat; standard thermometers by Baudin and others: Rutherford and Rowland, different gratings: Rowland's spectrum photographs; spectroscopes by Brashear, Browning, Apps and others; Salleron's complete apparatus for projections in polarized light; lanterns for projections by the lime light and the arc light; a variety of sound apparatus from Koenig; portable and quadrant electrometers; Kelvin galvanometers of high and low resistance; Weidemann, Kohlrausch and other galvanometers; standard resistance coils, with Cavendish laboratory certificate; several sets of resistance coils and bridges; a Kew magnetometer; Kelvin standard balances; Weston ammeters and voltmeters; standards of self-induction; standard battery cells; photometric standards and photometers; X-ray apparatus, etc.

Under the laws of Ohio, the professor of physics is ex officio State Sealer of Weights and Measures, and all of the standard weights, measures and balances received from the United States government are in the rooms of the Department.

#### PSYCHOLOGY

The facilities provided for the study of anatomy, bacteriology, histology and physiology are excellent. The laboratory is supplied with skeletons, papier-mache manikin, and many models, including models of the eye, ear, larynx, etc. The apparatus of the Department for work in bacteriology and physiology is of the best and most approved construction, and is adapted to the accurate investigation of bacterial forms, as well as to the thorough performance of the fundamental physiological experiments. Myographs, spectroscopes, microscopes and the necessary chemical outfit are also provided. For work in histology the equipment includes twenty-four individual tables for student experiments, each table being supplied with a good microscope, microscopical accessories, microscopical reagents; and for advanced work, the needed apparatus for instruction in the various methods of hardening, staining, imbedding, section-cutting and injection. The laboratory also has excellent microtomes, imbedding baths and other essentials of a histological outfit. The equipment of the laboratory makes it possible to offer a large range of work for the choice of students in advanced courses. (See also Buildings-Biological Hall.)

#### PSYCHOLOGY AND EDUCATION

The psychological laboratory occupies three rooms on the fourth floor of University Hall and is reasonably well equipped for work in physiological and experimental psychology and for research in related educational lines. For the study of motor processes and development the most improved form of ergograph with complete sets of myographic, chronographic, dyamometric and pneumatic recording appliances, has been provided. A complete outfit of apparatus for the study of sensation, memory and association make it possible for students of education to acquire methods of exact observation of the various mental and motor processes involved in school work. Provision has also been made for work in comparative psychology.

### SHOPWORK

The shops, which occupy the north wing of Hayes Hall, afford excellent facilities for instruction in both the practical details and the underlying principles of carpentry, pattern-making, forging, moulding, foundry work and machine work.

The carpenter and pattern shop is equipped with twenty-five benches with complete sets of carpenter tools for each and a large number of special tools for general use, twenty-three pattern-makers' turning lathes with cupboards containing the necessary turning and pattern-making tools under each, a pony planer, a buzz-planer, a circular rip and cross-cut saw, a scroll saw, a trimmer and a power grindstone.

The forge shop is equipped with twenty stationary forges with anvils and tools for each, a heating forge, a portable hand forge, a foot-power hammer, a blacksmith's drill and a punch, shear and bar cutter. The blast for the forges is furnished through underground piping by a 45" Buffalo pressure blower, and the smoke is removed by a 55" Buffalo exhaust fan overhead. Both of these fans are driven by a 15-horse-power electric motor.

The foundry is equipped with a 24" Calliau cupola, the blast for which is furnished by a 30" Buffalo blower; two brass furnaces, one 16 inches in diameter and the other 20 inches in diameter; a core oven, benches for iron and brass moulding, core making and cleaning of castings, a space for floor moulding 30 feet by 40 feet, besides all the necessary moulding tools, flasks, crucibles, ladles, tongs, etc.

The machine shop is driven by a 30-horse-power electric motor from above, and is equipped with the following tools: Twenty-eight benches for vise work with complete sets of tools, eight speed lathes, sixteen engine lathes, two planers, two shapers, a milling machine, an upright drill, a sensitive drill, grinding machines for both plane and cylindrical surfaces, tool grinders, emery wheels, etc. This machinery is furnished with all the necessary tools, and the tool room is equipped with full sets of drills, taps, dies, milling cutters, standard plugs, gauges, threads, etc., micrometers and a great variety of special tools. (See also Buildings—Hayes Hall.)

### VETERINARY MEDICINE

The Veterinary Hospital affords excellent facilities for the treatment and care of animal patients, and also gives the students the opportunity to become practically familiar with the diseases to which our domesticated animals are subject. It contains box stalls, stalls for cold water applications, a large and well lighted operating hall and a special ward for dogs. The front part of the Hospital contains a lecture room, a museum of anatomical and pathological preparations, a drug dispensary and an office. In the museum are skeletons of the horse and ox, a complete manikin of the horse, papier-mache models of various anatomical parts, pathological specimens preserved in alcohol, etc.

In the library are choice collections of works in veterinary medicine and allied sciences and also copies of the leading veterinary periodicals.

The College is well equipped for surgical work. Instruments of the latest and most approved makes are kept in the instrument room for use in operations.

In the daily clinics not only are horses and dogs presented, but also the meat-producing animals from the barn, near the College.

The bacteriological laboratory in the biological department is supplied with apparatus of the most modern and improved construction, the microscopic appliances being adapted to the most accurate work in bacteriology. (See also Build-Ings—The Veterinary Hospital, Biological Hall.)

## ZOOLOGY AND ENTOMOLOGY

Instruction in this department is largely by the laboratory method with lectures and use of text or reference books, the effort being to lead the student to observe and think for himself. The various courses are intended to provide instruction in the elements of the science, familiarity with methods of study and investigation, and opportunity for special research involving field, laboratory, museum and library work. The adjacent fields, wood, lake and river; the various well equipped laboratories, extensive collections and libraries furnish excellent opportunities for every phase of the study.

The Department occupies the first and third floors of the fine new Biological Hall providing two lecture rooms, one general and five special laboratories, museums, offices for professor and assistants, besides room for storage, workshops, aquaria, cold-storage, photography, etc. The laboratory equipment includes microscopes, microtomes, incubators, injectors, etc., for most approved methods of work in morphology, embryology and neurology. The collections include a fine series of skeletons, a number of large mammals, series of the birds of Ohio, of the birds of North America, of Ohio fishes, of mollusks and especially rich collections of insects particularly in Odonata Hemiptera and Diptera. (See also The Museums.—The Zoological Museum, Biological Hall.)

The Lake Laboratory maintained at Sandusky and open during the summer vacation offers courses of instruction and exceptional opportunities for original investigation in a very interesting and delightful locality. (See Lake Laboratory.)

#### THE LAKE LABORATORY

The University maintains a lake laboratory during the summer vacation at Sandusky where it occupies a convenient building, the former Hatchery building, 22x26 feet located by the city water works and close to the waters of the bay and convenient to good boarding places.

It has good facilities in the way of boats, tables, aquaria, collecting appliances, while microscopes, reagents, etc., are fully supplied from the home laboratory.

It offers for the coming season courses in botany and zoology outlined below, and also opportunities for special research in any branch of biology. The professors of the departments of Botany and Zoology and Entomology with their assistants will constitute the staff of instruction.

The courses will be open to students and teachers generally and students of the University may receive credit for courses equivalent to University courses.

Investigators engaged upon special problems relating to the fauna or flora of the region are given the privilege of the laboratory without charge but are expected to furnish their own microscopes or other special apparatus unless otherwise arranged. For the courses of instruction, a fee of twenty dollars will be charged which will cover all expense of instruction, laboratory supplies and use of boats and admit to two full courses of eight weeks.

#### COURSES IN ZOOLOGY

- (a) Laboratory and field courses including dissection of type forms, aquaria and field studies with instruction in collecting and preparing material for laboratory use and permanent collections. Special attention will be devoted to fishes and their food supply.
  - (b) Advanced courses in Invertebrate Morphology or Embryology.
  - (c) Special courses in Entomology, field and laboratory work.

(d) Special course in Ichthyology devoted particularly to the lake fishes, their habits and food supplies.

#### COURSES IN BOTANY

- (a) Laboratory and field courses including a study of type forms. The course will consist of collection trips in the field where the common species of each class are found, classification of familiar forms, study of structure and special parts of interest in connection with each group, with methods of preserving and mounting for immediate use or permanent preservation.
  - (b) General Botany consisting largely of Morphology and Ecology.

(c) Laboratory course; the work to be arranged.

For further information write for special circular on Lake Laboratory.

#### THE MUSEUMS

THE GEOLOGICAL MUSEUM of the University has been collected and arranged with reference to instruction rather than to display. The basis of it is a large and comprehensive collection of the rocks, fossils and economic minerals of Ohio. The collection embraces the following named series:

- (a) An excellent representation of the leading divisions of the geological scale of the State, so far as it can be illustrated by rock specimens. The specimens represent the leading phases of each formation, and in many cases carry the characteristic fossils of the horizons from which they are derived.
- (b) A collection of the animal and vegetable fossils of the rocks of Ohio. This series includes a large majority of the described fossils of our formation, and in the number are many type specimens. While all the ages of our geological history are well represented, the collection of the Upper Silurian and Devonian animal fossils is particularly rich and complete. A remarkably fine series of coal plants is also included in the museum. The list of fossils has been greatly extended in the number of species and individuals by the recent purchase of the collection of Mr. Henry Moores, of Columbus.
- (c) The economic minerals of the State are also shown to excellent advantage in the museum. The coals, petroleums, iron ores, clay and building stones produced in Ohio are represented in large collections. Many of the specimens upon which chemical examinations or physical tests have been based in the work of the geological survey of the State are included here.
- (d) Petrographical collections: These collections were selected with a view to their use in petrographical instruction, and embrace the Hawes collection, the Krantz collection and the Rosenbusch complete series of typical rock specimens from important centers abroad. These hand specimens are supplemented by two series of thin sections, including Voigt and Hochgesang's collections of typical rocks and of the petrographically important minerals.

In addition to the collections above described, the museum contains a great deal of valuable material in the line of general geology and mineralogy. Among other things it includes several valuable suites of ores and many fine mineral specimens.

There also belong to the museum a number of geological casts, models and maps. In this series are included a relief map of the State of Ohio, and also the models of the basins of the Atlantic ocean and Caribbean sea, prepared under the supervision of the United States Coast and Geodetic Survey.

The catalogue of the museum contains more than 10,000 entries; but as only one number is as a rule given to a fossil or a mineral species, the individual speci-

mens make an aggregate list of many thousands in addition to the catalogue list, and probably double this list.

The skeleton of a mastodon, one of the extinct elephants of Ohio, has recently been presented to the museum by N. S. Conway, of Catawba, O., on whose farm it was found. It has been mounted by Prof. H. A. Ward, of Rochester, N. Y.,

and proves to be one of the largest in the country.

The museum also has a mounted skeleton of Megalonyx Jeffersonii, one of the great ground sloths. This specimen has the distinction of being the first and thus far the only mounted skeleton of this animal in the world. The bones were discovered by Abraham Drushell and others in a swamp in Berlin township, in Holmes county, O., in 1890. They were mounted in Ward's Natural Science Establishment, Rochester, N. Y. The entire outlay involved in the purchase of the bones and in mounting them was borne by Mr. Emerson McMillin, of New York.

THE ZOOLOGICAL MUSEUM is located on the ground floor of the wing of Biological Hall. The foundations of a zoological museum have been laid and the work begun on a generous plan. Every effort is being made to secure and preserve excellent specimens in all groups of animals. Not only the adult animals are preserved but the preparatory stages as well, their work and architecture, in fact all that can illustrate the life-history and habits.

Among special features are the Wheaton collection of birds of Ohio, numbering about 1,000 skins; a collection of North American birds, about 1,500 skins, representing very fully the North American fauna; a number of fine specimens of larger mammals, moose, hippopotamus, deer, tiger, peccary, lion, tapir, etc., most of which have been generously donated by Sells Brothers; a collection of about 3,500 molluscan shells; a fine series of Ohio fishes; numerous reptiles, amphibians, etc.

There is an excellent series of skeletons, crania and alcoholic material for courses in comparative anatomy.

The collection of insects is being rapidly enlarged and the purchase of the Kellicott collection of Odonata makes it especially rich in that order.

Professor Osborne's private collection of Hemiptere is deposited in the Department and available to students for comparison and study.

THE BOTANICAL MUSEUM occupies the second floor of Botanical Hall. It contains the University herbariums, both general and state, also Professor Kellerman's private herbarium of over 20,000 specimens deposited for use in the Botanical Department; a complete collection of the native woods of Ohio; a collection of the seeds and fruits of plants; a collection of native medicinal plants; a general collection of vegetable products, including seeds, textile fibres, coloring substances, etc., illustrating economic or applied botany.

THE AGRICULTURAL MUSEUM. For a description of this museum, see BUILD-INGS—Townshend Hall.

THE ANATOMICAL AND PATHOLOGICAL MUSEUM. For a description of this museum, see Laboratories and Equipment, Veterinary Medicine.

THE MUSEUM OF CLAY-WORKING AND CERAMICS is now in process of formation. Some excellent specimens of ceramic products have already been collected, and efforts are being made to increase the collection.

ARCHAEOLOGIC COLLECTION. Orton Hall now contains the second best archæologic exhibit in the Ohio Valley, the total number of specimens owned by the Ohio State University, the Ohio State Historical and Archæological Society and by private individuals, amounting to 46,200. Although the Museum is but three years old, it has shown a remarkable growth.

Field work has been carried on in various parts of the State during the summers of 1894, 1895 and 1896, and as a result the contents of more than eighty

mounds, graves and village sites are now on exhibition. The chief exhibits, illustrating the life of ancient tribes are from Fort Ancient in Warren county, from the mound graves of the lower Scioto and from the Muskingum Valley. It is considered that in Ross county aboriginal culture reaches its highest development in the whole Ohio Valley. This fact is well attested by the presence of numerous copper objects, effigy pipes, fine ornaments and ceremonials, pottery, delicate work in polished stone and flint implements, etc.

The collection from the valley of Brush Creek and along the Ohio itself, and from the hill regions of Ohio, show a much lower grade of culture. Careful comparison of the work of man from these localities is exceedingly interesting.

There is an exhibit from Flint Ridge, illustrating the manufacture of arrow and spear heads. The Museum contains nearly 150 specimens of pottery from Missouri and Arkansas, many of which are effigies of animal, bird and human form.

The founders of the Archæologic Museum are arousing public interest in the preservation and study of Ohio antiquities; and by means of exchanges, lectures and personal solicitation, the growth of the collection is considerable.

## LIBRARIES

#### THE UNIVERSITY LIBRARY

The University Library is located in the east end of Orton Hall. The system of department libraries prevails to a limited extent, small collections of books specially needed in connection with laboratory and class room work being deposited in several departments.

During term time the Library is open six days in the week, legal holidays being excepted. From Monday until Friday the hours are from 7:30 a. m. until 9:30 p. m.; Saturday from 7:30 a. m. until 4 p. m.

The management of the Library is vested in a Library Council which is composed of the President, the Librarian and the Deans of the six colleges.

## STATE LIBRARIES

Students are privileged in being near the two State libraries.

The Ohio State Library numbers about 70,000 volumes and is a circulating one for all the citizens of Ohio. It occupies a room in the State House.

The State Law Library, also in the State House, is the largest and most complete law library in the State. It contains complete sets of the English, Scotch, Irish, Canadian, United States and State reports, statutes and digests. The important legal periodicals are on file.

## CITY LIBRARIES

The students of the University, as residents of Columbus, have access to the City Library and the Public School Library, under the usual regulations. The City Library numbers 28,000 volumes. It has specially pleasant reading and reference rooms. The Public School Library numbers 35,000 volumes, and is a well selected collection of books. Students will find both libraries valuable in supplementing the University Library.

## SPECIAL LIBRARY IN ECONOMICS

The University possesses a special library in Economics consisting of several hundred volumes and pamphlets. Over thirty financial, commercial and trade

journals are received and filed regularly. The business men of Columbus have contributed over \$1,200 for the equipment of this commercial library.

## SPECIAL LIBRARY IN ZOOLOGY AND ENTOMOLOGY

The Department of Zoology and Entomology possesses a special library the nucleus of which was the scientific library of the late Prof. Kellicott which was generously donated to the Department. This has been increased by gifts of special papers by a number of the leading investigators of the country and will be enlarged as rapidly as possible. The private library of the professor is also accessible for reference.

## AIDS TO MORAL AND RELIGIOUS CULTURE

Chapel services are held daily (except Saturday and Sunday) at the University, at which the attendance of all instructors and students is expected. The services consist of singing, reading the Scriptures, and prayer.

One of the most commendable organizations in the University is a branch of the International Young Men's Christian Association, organized in 1883. It has a large membership and steadily grows in influence. Services are held weekly. New students are made cordially welcome, and young church members will here enjoy Christian influences and fellowship in college life. A University Circle of the International Order of the King's Daughters and Sons holds its meeting once a week, and includes in its membership a majority of the women attending the University. A club for the study and practice of philanthropy has recently been organized by the King's Daughters.

An effort is being made, to complete, by subscription, the fund which was begun two years ago by students, alumni and professors, for the erection of a building to accommodate the student organizations of the University.

## LITERARY AND OTHER SOCIETIES

The Alcyone Literary Society, open to young men, was founded in 1874; the Horton Literary Society, open to young men, was founded in 1875; the Athenaan Literary Society, open to young men, was founded in the winter of 1896-'97. The Browning Literary Society, founded in 1883, and the Philomathean Literary Society, founded in 1894, are open to young women. These societies have commodious and well furnished apartments in University Hall. They meet weekly, and their work, offering to the student a very desirable training in composition, public speaking, and parliamentary order, is a valuable adjunct to collegiate education.

The Townshend Literary Society was established in 1883 as a technical society under the name of the Kirtland Agricultural Society. In 1894, the name Townshend was substituted. In 1898, the Society changed its constitution so as to admit any student of the University and thus became a literary rather than a technical society. It meets weekly in its commodious and well arranged society room in Townshend Hall.

The Biological Club is an organization of professors and students for mutual assistance and improvement in the line of natural science. Its meetings are regularly held every two weeks, at which papers are read, notes of observation and research presented, and current biological literature discussed.

The Chemical Association, composed of the more advanced students and instructors in the Department of Chemistry and Pharmacy, has for its object the discussion of such subjects as are of importance to students of chemistry, special

stress being placed on recent discoveries. The meetings are held semi-monthly and are of great interest. Both professors and students contribute to each program.

The Political Science Club is an organization of instructors and students in political science and history for the consideration of questions in those fields. At the regular bi-weekly meetings papers are read, researches reported, and current questions and publications in political science, considered and discussed.

The Engineering Society is a similar organization of students and instructors, holding meetings bi-weekly, for the consideration of questions in the various branches of engineering.

The Organic Evolution Club was organized in the winter of 1896-'97 by those students and members of the Faculty especially interested in the study of Evolution. The Zoological Department has a similar club known as the Journal Club.

The O. S. U. Dramatic Club was organized in 1898. Its object is to present each year to the University world one of the standard legitimate dramas. Its membership is confined to University circles.

The musical organizations of the University are: The O. S. U. Glee Club, composed of sixteen members; the O. S. U. Mandoline and Guitar Club of twenty members; the O. S. U. Banjo Club of five members; the O. S. U. Orchestra of fifteen members; the O. S. U. Male Quartet and the University Cadet Band.

The Ornithological Club encourages observation and research in the study of birds and their habits, especially of our native species. The Wheaton collections in the possession of the University forms a basis of study. The programs consist of papers and discussions and reports of observation and personal work. Anyone interested in birds is eligible to membership and visitors are always welcome. The Club meets on the second and fourth Monday evenings of each month.

The O. S. U. Sketch Club has for its purpose the promotion of art interests among the students and ex-students. Any one who is or has been connected with the University in any capacity is eligible to membership. The members meet once a week and sketch from the draped human figure. Twice a month the members present sketches illustrating some word, etc., previously selected. All work is criticised by members of the club for mutual benefit.

The English Club, composed of the instructors and advanced students of the English departments, holds bi-weekly meetings at which new books in current literature are discussed and papers on literary topics are presented.

The William F. Hunter Society, in the College of Law, meets for moot-court practice and quiz-work every two weeks.

#### MILITARY SCIENCE AND TACTICS

Under the law of Congress establishing the University, it is required that instruction shall be given in military science and tactics. In accordance with this provision an officer of the regular army has been detailed to take charge of the Department of Military Science and Tactics; and the Trustees have directed that all male students, except those in the Law College, and such others as may be specially excused for physical disability or for having reached the age limit of twenty-five years, shall render two years of cadet service as a condition of graduation. A uniform has been prescribed with which each member is required to provide himself; and fifty minutes a day are devoted to drill, except on those days when instruction in tactics and art of war is given.

The course of instruction is both practical and theoretical. It is given by means of a systematic drill, supplemented by lectures and recitations, and is so

arranged as to occupy five hours per week throughout the year. For purposes of drill, all students enrolled in the Department are organized in a battalion, the officers of which are selected from those students who have shown special proficiency in their University work and the work of the Department. Commissioned officers and non-commissioned officers receive certificates of satisfactory service, issued by the University. A cadet band has been organized in connection with this Department, and is supplied with instruments belonging to the University and to the cadets.

The practical course in infantry embraces all the movements prescribed by the drill regulations of the U. S. Army applicable to a battalion. Instruction in artillery embraces such portions of the United States drill regulations as pertain to the formation of detachments, manual of the piece, mechanical maneuvers and aiming drill. Instruction also includes duties of sentinels, the various ceremonies performed by troops, and military signaling. The theoretical instruction includes a systematic and progressive course in drill regulations of the U. S. Army, the organization and administration of the U. S. Army and the elementary principles governing in the art of war.

Competitive drills are held yearly for two medals; one, the first prize, of gold, presented to the University by the M. C. Lilley Co., of Columbus, Ohio; the other, the second prize, of silver, presented by Lieut. Wilson, when commandant. These medals remain the property of the University, the winner wearing them until the next competition. The "President's Prize" consists of an officers' sword, given to the captain of the company having the best record for attendance for the year.

The equipments of the Department consist of three hundred Springfield cadet rifles and sets of infantry equipment, twenty officers 'swords and belts, the necessary equipment for instruction in signaling, and a few instruments for the band.

The U. S. Ordnance Department furnishes an annual allowance of one thousand rounds of ball and one thousand rounds of blank cartridges for cadet rifles.

## PHYSICAL TRAINING

Competent instruction in hygiene and general sanitation is given by the director of the Gymnasium, who has entire charge of the physical training and well-being of all students. Supplementing this work, the practical instruction in military tactics is found to be a most valuable aid. In addition to this, the University grounds afford excellent opportunities for general athletics, and the students support well organized clubs in base ball, foot ball and lawn tennis. These and other sports are participated in by large numbers, and friendly contests are occasionally held with other colleges. Besides the special clubs named above, the students have an athletic association which holds an annual "Field Day," in which prizes are given to the victors in the various contests usual on such occasions.

## OHIO FORESTRY BUREAU

This Bureau has been established and located at the University by the Legislature for the purpose of inquiring into the best means of preserving and utilizing the forests of the State.

## TERMS AND VACATIONS

The first term of the University year 1900-1901 and thereafter will begin on the Tuesday following the sixteenth day of September and will close on the Wednesday following the 17th day of June. The first term will close on the Wednesday preceding Christmas; the second term will begin on the Tuesday following the first day of January and will close on the Friday preceding the first Monday in April; the third term will begin on the Wednesday following the close of the second term. The second semester will begin on Monday of the eighteenth week preceding commencement week; and the first semester will close on the Friday preceding the opening of the second semester.

Regular college exercises will be suspended from 4 o'clock p. m. of the Wednesday preceding Christmas until 8 o'clock a. m. of the Tuesday following the first day of January; on Thanksgiving and the day following; on University day which is the twenty-second day of February; from 4 o'clock p. m. of the Friday preceding the first Monday in April until 8 o'clock a. m. of the Wednesday following the first Monday in April; and on Memorial Day.

#### FEES

#### THE COLLEGES

INCIDENTAL FEE.—A charge of fifteen dollars a year is made against all students, under the head of incidental expense. In the case of former students if this fee is not paid until the second day of the term one dollar will be added, and for each succeeding day of delinquency fifty cents will be added.

LABORATORY FEES.—Students in the laboratories and shops are required to pay fees to cover, in part, the cost of the material consumed, and the decerioration of the expensive instruments used by them. The fees charged per term in the laboratories mentioned below are as follows:

Agriculture, 6	\$10 00	
" 15	5 00	
Anatomy and Physiology, 53, 54, 55, 56, 59, 60	7 50	
" (Vet. Medicine) 4,	5 00	
Botany, 4, 6, 7, 8, 6a	2 00	
" 53, 55, 57, 58, 59, 60, 64	3 00	
" 56 (half semester)	1 50	
Ceramics, 1, 2, 3, 7, 8	1 50	
" 9, 10, 11, 12	5 00	
Chemistry, 8, 14, 16, 61b, 11, 18, per term \$1 50, per semester	2 25	
" 61a Lab	1 50	
Domestic Science, 1, 2, 3, 4, 11, 12, 13	5 00	
" 5, 6, 7, 8, 9	1 00	
Drawing, 7	2 00	
Elec. Engineering, 4, 5, 4 or 5 hrs., \$7.00; 3 hrs. or less	5 00	
" ", 6 and 7 combination	5 00	
Gymnasium, per term, \$1.00; per semester	2 25	
Law of Contracts (Engineering)	5 00	
Law when elected 5 hours or less, per semester	7.50	
Metallurgy, 3, 5, 6	1 50	
Mechanical Engineering, 12, 13, 14, 15, 16, 17, 23, 24, 25	5 00	
Pharmacy, 7, 8, 9, 10, 11, 15, 17, 18, 51	1 50	
Pharmacy, 52	2 25	
Physics, 5, 6, 7, 9, 3hrs., \$5.00; over 3 hrs		
Physics, 55, 56, 57, 58, 60, 3 hrs., \$7.50; over 3 hrs	10 50	
Shopwork, 4 hrs, or less	5 00	
Shopwork, 5 hrs. or more	7 00	

Zoology and	Entomology,	53, 5	4, 55,	56,	61,	-62	 	 	 	 	 	\$7	50
Zoology and	Entomology,	57, 5	8, 59,	60.			 	 	 	 	 	4	50
Zoology and	Entomology	(Agric	culture	). 4	. 7.		 	 	 	 	 	1	00

The fees of the College of Law are \$30 per semester, including the usual incidental fee.

In the laboratories of the Department of Chemistry and Agricultural Chemistry, each student is required at the beginning of each term to pay a fixed charge of one dollar and fifty cents for gas and water (\$2.25 each semester). He is also required to buy his own supplies, as he needs them, at the general storeroom in Chemical Hall, where laboratory supplies are sold to students at first cost to the University.

All term dues must be paid at the opening of each term as a condition of admission to classes.

#### AUDITOR'S FEE

On presentation to the Bursar of the written consent of the head of a department, and on payment to the Bursar of an auditor's fee of one dollar, any person engaged in teaching is permitted to attend, in that department, any class or course (not to exceed three hours a week for one-half year) which is announced to be especially for teachers or those intending to teach.

Graduation Fee.—A fee of five dollars, to cover expense of graduation, diplomas, etc., is required of each person receiving one of the ordinary degrees from the University, and this fee must be paid before the degree is conferred. A like fee of ten dollars is charged to each person receiving one of the higher graduate degrees.

FREE SCHOLARSHIP IN AGRICULTURE AND DOMESTIC SCIENCE, AND IN VETER-INARY MEDICINE .- A free scholarship, good for the two-year Courses, or for the First year of the Short Courses and the First year of the four-year Courses in the College of Agriculture and Domestic Science, is granted to one student annually from each county in Ohio. Each scholarship is valid two years from its grant, and covers the incidental fee and all laboratory fees (except gymnasium fee), but the person appointed to receive its benefits is subject to all the other conditions prescribed for admission to the Course. If in any county there is no applicant for the free scholarship in Agriculture, then a free scholarship, good for two years in the College of Veterinary Medicine, may be granted, subject to the same conditions as are prescribed for the free scholarship in Agriculture. The appointments are made by the county boards of agriculture, and are not transferable by the appointees. To learn whether the scholarship of a given county for the current year has been granted, inquiries should be addressed to the Secretary or President of the County Agricultural Society. For further information concerning these scholarships, inquiries should be addressed to the Dean of the College of Agriculture and Domestic Science.

## THE COLLEGE OF LAW

INCIDENTAL FEE.—An incidental fee of fifteen dollars per year is charged to regular undergraduate students.

Upon payment of the incidental fee, law students will be admitted to all the privileges of all the other Colleges of the University, upon the same terms as to admission, discipline, character of studies selected, etc., as other students in the University.

Tuition Fee.—In addition to the incidental fee named above, a tuition fee of twenty-two dollars and fifty cents per semester is charged to regular undergraduate students. Graduate Fee.—A graduate fee of fifteen dollars per semester, payable in advance, is charged to all who take the full graduate work.

DIPLOMA FEE.—A fee of five dollars (to cover the expense of graduation, diplomas, certificates, etc.,) is charged to all who receive the diploma or certificate, and a fee of ten dollars is charged to those taking the degree of Master of Laws. These fees must be paid before the degrees are conferred or certificate delivered.

Special students are required to arrange their fees satisfactorily with the Dean or Secretary before being admitted.

#### OTHER EXPENSES

There are two dormitories on the University grounds for the use of students. Each occupant is charged by the University a rent of a dollar and a half a term.

The South Dormitory affords unfurnished rooms to such students as desire to board themselves, and thus to reduce their expenses to a minimum. The expense of living in this way is about two dollars per week. Applications for rooms should be made to the President of the University.

The North Dormitory will accommodate more than sixty students. Board, furnished rooms, fuel, light and washing are, at present prices, supplied for about three dollars and fifty cents a week. Students will be admitted on special recommendation to the President of the University.

Boarding clubs are also formed in the neighborhood of the University. Furnished rooms are rented at seventy-five cents to one dollar a week for each student, and the cost of table board is two dollars to three dollars a week.

Board with furnished rooms can be obtained in private families, within convenient distances of the University, at rates varying from three and a half dollars to five dollars a week. The ruling rate may be taken as four dollars.

The uniform with which the members of the battalion are required to provide themselves costs (without overcoat) about fourteen dollars. It is quiet in pattern, and is designed to be worn daily in place of civilian dress.

The expenses of a student in the University for a year may be estimated as follows, excluding clothing (except uniform) and traveling expenses:

	Lov	v Aver	age	His	gh
Incidental fees	\$15 0	0 \$15	00	\$15	00
Laboratory fees	15 0	0 20	00	54	00
Books and stationery	15 0	0 25	00	40	00
Room	4 5	0 37	00	75	60
Furniture	10 0	0			
Board	70 0	0 110	00	150	00
Uniform	14 0	0 14	00	14	00
	\$143 5	0 \$221	00	\$348	00

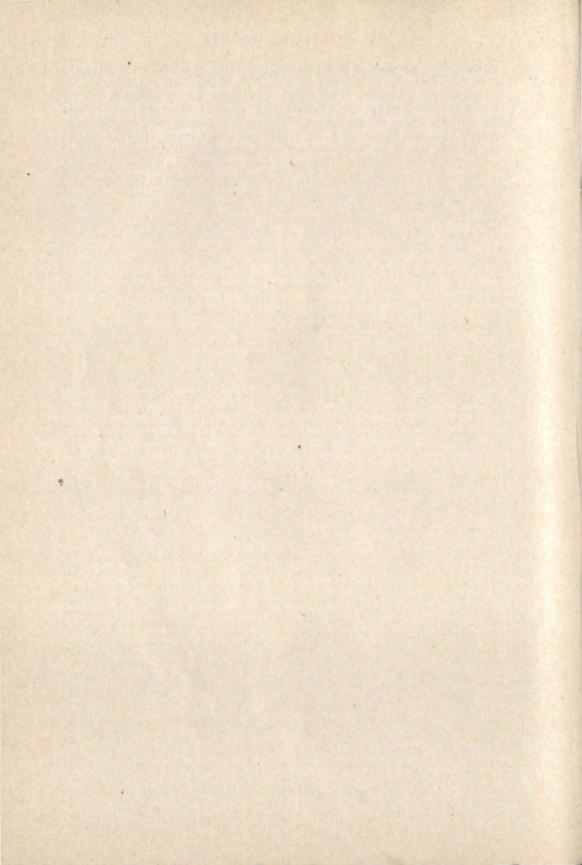
The second and third estimates for room include light, fuel and care. The third estimate is for a room occupied by a single student. The requirements for laboratory fees and books depend upon the course of study pursued.

#### SELF-SUPPORT

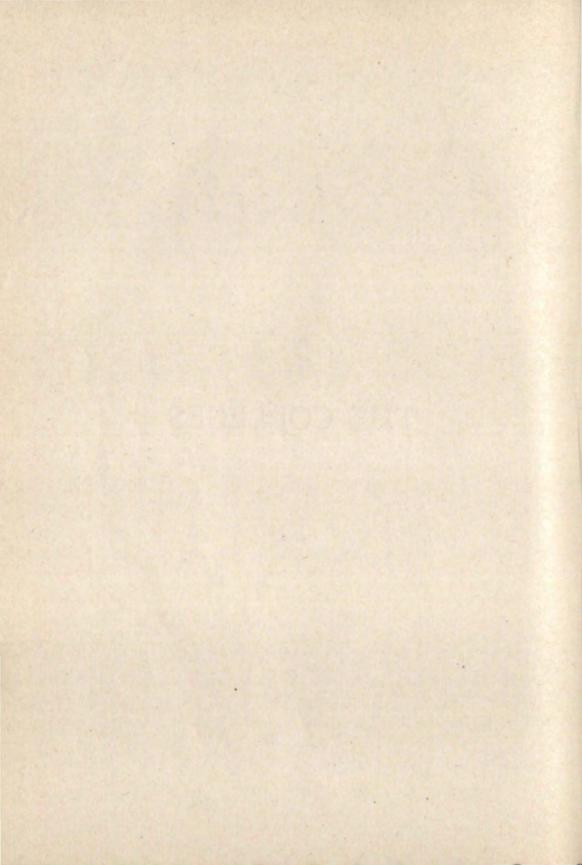
There is a large amount of work upon the University farm which is assigned to students, preference being given to those who are studying Agriculture. But the University cannot promise work to all applicants. Many students find work in private families, in offices, and in various occupations, by means of which they

defray at least a portion of their expenses. A person of ability and energy, who is master of a trade, or who can do good work of any kind, can generally find remunerative employment. It has seldom been known that any student of ordinary energy and industry was obliged to leave the University because of a lack of money for necessary expenses, after having been say sixty days on the ground—or long enough to inform himself as to the opportunities for securing employment. An employment bureau is maintained at the University, where the names of those seeking work and of those desiring workers are recorded.

For further information, address "Executive Office, State University, Columbus, Ohio."



# THE COLLEGES



## THE COLLEGES

## ADMISSION

The University is open on equal terms to both sexes.

The entrance examinations for 1900 will be held on Monday and Tuesday, June 11 and 12, and on Monday and Tuesday, September 17 and 18. A part of the examinations may be taken in June and the remainder in September. Conditions incurred at the June examinations must be removed at the September examinations.

Applicants for admission to the Colleges of Agriculture, of Arts, Philosophy, and Science, or of Pharmacy, must be at least sixteen years of age; for admission to the College of Engineering or of Veterinary Medicine must be at least seventeen years of age; for admission to the College of Law must be at least eighteen years of age. Each must be provided with credentials of scholarship from his last instructor or from the last institution with which he has been connected, and with a certificate of good moral character.

There are three modes of admission to the University:

 Certificates of the preparatory departments of Colleges of approved standing and of Normal schools in Ohio are accepted, if found satisfactory, in lieu of examination for preparatory studies, under the following conditions:

Each certificate must contain a detailed statement of the studies pursued, the text books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the applicant's rank or standing in it. A copy of the course of study should accompany the certificate; and both should be sent to the University not later than the first of September. The University cannot promise this recognition to those certificates presented during entrance week.

Blank certificates will be furnished on application.

Applicants for admission who come from other Colleges or Universities are required to bring certificates of honorable dismissal.

Teachers' certificates (in force) will be accepted at their face value.

2. From time to time the University approves the courses of study in certain High Schools of the State; and the graduates of these High Schools are admitted on certificates in accordance with following rules:

Rule 17. Upon request from the Board of Education or the Superintendent of Public Schools of any town in Ohio for the inspection of the High School, the Faculty shall appoint a committee of two of its own number to visit such school. This committee shall thoroughly inspect the school to ascertain whether its graduates may be reasonably supposed to possess the necessary qualifications for admission to the University. After such inspection, the committee shall report its conclusions in writing, with the reasons therefor, to the Faculty, which shall then decide by vote whether the graduates of the school shall be admitted without examination, such privilege, if granted, not to extend beyond the period of three years without re-examination of the school.

Rule 94. Such diplomas and certificates shall be accepted in lieu of examination for preparatory studies only under the following conditions:

(a) The certificate must state in detail the studies pursued, the text-books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination in it, and the rank or standing of the candidate in it.

(b) The certificate will be accepted for such studies only, or such part of

each, as it shall show to have been satisfactorily accomplished.

- (c) Every such certificate must be accompanied with a diploma showing that the candidate has completed the course of study in the school from which he comes. But the General Faculty may except from this condition schools whose work is known to be exceptionally good, provided that the candidate has attended the school two full years.
- (d) In case the authorities of any high school, academy or normal school in Ohio desire to have a definite standing fixed for the admission of its graduates, a committee of the General Faculty will visit the school, and on the report of this committee a standing will be fixed for the graduates of the school. Such standing shall not be good, without re-examination, after three years.

(e) Whenever, after a sufficient trial, it becomes evident that the graduates of any school are not adequately prepared, the diploma and certificate of such

school will no longer be accepted.

Rule 95. No applicant for admission to the University will be accepted who is deficient or conditioned in required entrance work representing in the aggregate more than one daily recitation for a year. In the case of candidates for admission to the College of Arts, Philosophy and Science, not more than two-thirds of this deficiency may be in any one subject; and in the case of candidates for admission to the College of Engineering, not more than one-third of this deficiency may be in mathematics.

 All other applicants are subject to examination on the groups of study mentioned below under the headings of those Colleges and Courses in the University which they desire to enter.

Full equivalents for the text-books named will be accepted.

## ADMISSION TO SPECIAL STUDIES

Students who desire to pursue special lines of work in any of the Colleges of the University, and do not desire to become candidates for degrees, will be admitted on the following conditions.

Rule 96. Students who desire to pursue special lines of work in the University, and do not desire to become candidates for degrees, will be admitted on the following conditions:

(a) The regular entrance examinations must be satisfied.

(b) But applicants who are not less than twenty-one years of age (eighteen years in the College of Engineering and of Pharmacy), after obtaining credit for the common English branches, may be excused from examination in such studies as may be deemed best by the Executive Committee of the appropriate college; provided, that if any such student afterwards becomes a candidate for a degree he shall pass the omitted examinations at least one year before the degree is conferred.

Rule 97. Students desiring to pursue special lines of work in the University shall, upon admission, lay before the Executive Committee of the appropriate college for approval or modification, a written statement of the end they have in view, the studies proposed for the attainment of that end, and the probable period of residence at the University. Such students shall be held as regularly to their

accepted schemes of work as are regular undergraduates to their prescribed courses of study. Admission will be refused to, or withdrawn from, all of whose definiteness of purpose the Executive Committee fail to receive satisfactory evidence.

## ADMISSION TO ADVANCED STANDING

Rule 98. Applicants for advanced standing who do not come from some other university or college will be examined in the studies preparatory to admission to the appropriate college, and also in such undergraduate studies as they may wish to be credited with in advance. Applicants who have completed at least one years' work in an approved college, and who bring explicit and official certificates describing their courses of study and scholarship, and letters of honorable dismissal, will be admitted without examination, except such as may be necessary in order to determine what credit they are to receive for work done in the college from which they have come, and what courses of study they may with profit pursue in the University.

## GRADUATION

Rule 99. No one will be admitted to candidacy for a degree at any Commencement who has not done the last year of work required for the degree, in residence at this University, and no student will be registered in such candidacy later than the first day of October.

Rule 128. Except by unanimous consent of the Faculty, no candidate for graduation will be recommended for a degree whose record is not in all respects complete by the Friday evening previous to the Commencement Day at which he seeks the degree; and all students shall be notified of this rule at the beginning of their graduation year, and the rule (except the last clause) shall be printed in the annual catalogue.

Rule 137. No candidate for graduation will be permitted to register for the second term or semester of his graduating year except upon presentation to the Bursar, of the President's certificate that his thesis subject has been announced and approved.

## XI. EXAMINATIONS AND STANDING

Rule 111. Students shall be regarded as strictly on probation until they have removed all deficiencies and conditions in entrance requirements.

Rule 112. Students who have any entrance conditions outstanding at the beginning of the third year of residence at the University will not be allowed to join their classes until such conditions have been removed.

Rule 116. The standing of students in each study shall be reported at the end of each term or semester, as "merit," "passed," "conditioned," or "failed." This standing shall be determined by the head of each department by such means and methods as he may choose, but no student shall be reported "failed" without having had the opportunity of a written examination.

Rule 117. The standings "merit" and "passed" indicate that the student has full credit for the term's or semester's work in the study in which this standing is

obtained.

Rule 118. The report "credit" (K) shall be used only for work done in regular class at the University.

Rule 119. The standing "conditioned" indicates that credit for the term's or semester's work in the study in which the condition was incurred is withheld. In the following term the student shall be given an opportunity to obtain credit by a special re-examination; or, if the study be a continuous one, the instructor in charge may, at his discretion, excuse the student from re-examination, and may allow him to obtain credit by pursuing the study successfully during the following term or semester. If the student thus excused from re-examination does not pass upon the work of the second term or semester, he shall be reported as "failed" in the work of both terms or semesters. Any condition that is not removed within one year from the beginning of the term or semester in which it was incurred shall lapse into a "failure."

Rule 120. The standing "failed" indicates that the student has obtained no credit whatever for the term's or semester's work in which the mark is given. The student must, at the first opportunity, repeat in class the study in which he has failed. But a student who has failed in an elective study may be excused from repeating such study by the Executive Committee of his college. In case of failure in any continuous study, the work of the term or semester in which the failure is incurred must be repeated in class before any subsequent term's or semester's work in that study can be commenced. Unexcused absence from any regular examination is construed as a failure therein.

Rule 121. Any student who fails at the end of any term or semester to secure full credit for two-thirds of his work shall be put on probation for the following term or semester with restricted work, and, if similarly delinquent in his studies at any time within the next ten academic months, shall thereby cease to be a member of the University.

Rule 122. If, for any cause, the preparation, progress or success of any student in the work assigned him be found unsatisfactory, the President may remove him from a class or dismiss him from the University.

## ADMISSION TO GRADUATE WORK

Graduates of this or other institutions may, on application to the Faculty, enter the University and pursue such lines of work as may be arranged or approved by the appropriate collegiate committee. Such graduate students are subject to all the ordinary regulations (as to fees, attendance, etc.), prescribed for undergraduates.

IN THE COLLEGES OF AGRICULTURE AND DOMESTIC SCIENCE, ENGINEERING, LAW AND PHARMACY

Masters degrees are conferred upon graduates in Agriculture, Horticulture and Forestry, Engineering, Law and Pharmacy at the end of not less than one year's residence, which shall be wholly devoted to the completion of an approved course of study in the University. Each is required in addition to present an acceptable thesis upon some subject connected with his course of study.

## IN THE COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

1. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. from this University or from other institutions making equivalent requirements for those degrees, upon the satisfactory completion, during not less than one year of residence (devoted exclusively to such work), of an approved course of study, covering a major subject and an allied minor subject. The major subject (two-thirds) shall be graduate work, taken in one of the departments of the Arts, Philosophy and Science College. The minor subject (one-third) may be in graduate work.

- 2. The degree of Master of Science will be conferred upon candidates holding the degree of B. Sc. from the General Science Course of this University or from institutions making equivalent requirements for this degree, and also upon graduates from the College of Engineering of this University, upon the terms specified for the degree of Master of Arts; except that the major subject must be taken in one of the Departments of Science in the Arts, Philosophy and Science College. The minor subject must be in an allied Science.
- 3. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. and the degree of Master of Science upon candidates holding the degree of B. Sc. from this University or from other institutions making equivalent requirements for these degrees, and the degree of Master of Science will be conferred on graduates from the College of Engineering of this University, on the completion, during not less than one year of residence of a course of study in one or more of the departments of the College of Arts, Philosophy and Science, not less than one-third of which course must be graduate work and not more than two-thirds may be such undergraduate work as is announced to be elective, such course to be subject to the approval of the Executive Committee of the Faculty of the College of Arts, Philosophy and Science. But a degree conferred under the provisions of this paragraph shall in no case be counted towards the degree of Doctor of Philosophy, or Doctor of Science.
- 4. With the consent of the Faculty the work of candidates for the Master's degree may be distributed over more than one year.
- Each candidate for a Master's degree must also prepare and submit a thesis, and after its acceptance, be examined upon the work assigned him.
- 6. The degree of Ph. D. or of D. Sc. will be conferred upon holders of the appropriate baccalaureate degree from this University, or from other institutions making equivalent requirements for the first degree, upon the satisfactory completion of three years of resident graduate work in the Arts, Philosophy and Science College, including thesis and examinations. Holders of the degree of Master of Arts or Master of Science from this University, under the conditions prescribed in paragraph one or two, or from other institutions making equivalent requirements for these degrees, may receive the Doctor's degree on the satisfactory completion of two years of resident graduate work after obtaining the Master's degree. On approval of the Faculty, the work of the first year or of the first two years, of the three, may be done at another University which offers equivalent graduate work.
- Candidates for the degree of Doctor of Science must take their work wholly in Science.
- 8. With the consent of the Faculty the work required of candidates for Doctor's degrees may be distributed over more than three years.

## FELLOWSHIPS

To encourage graduates of this University, and of other similar and approved institutions in this state, to continue their work and to complete the courses necessary to second (and other) degrees, the University authorities have established fellowships in several departments. These demand about one-half of the time of the fellow for laboratory instruction or other similar assistance—as far as possible, along the line of his graduate study. The remainder of his time is given to graduate work. The fellowships pay from \$250 to \$300 for the University year.

Rule 151. So far as student work is concerned, Fellows shall be subject to the regulations of the various colleges in regard to graduate students.

Following are the fellowships for the academic year 1899-1900 as far as at present determined:

Anatomy and Physiology, Botany, Chemistry (two), American History and Political Science, Industrial Arts, Mathematics (two), Mechanical Engineering, Philosophy, Rhetoric and English Language, Veterinary Medicine.

In addition to these, Mr. Emerson McMillin has established two fellowships: one in Astronomy, \$300 for the academic year; and one in Economics, \$250 for the academic year. No service is required in these fellowships, and fellows are expected to give their entire time to their graduate work.

Correspondence should be directed to the Executive Office of the University.

## PRIZES

Through the generosity of Hon. William J. Bryan an annual prize of fifteen dollars is offered for the best essay on the principles underlying the form of government of the United States. Competition for this prize is open to all students of the University.

The Edward Thompson Company offer annually to the student writing the best essay on a legal theme selected by the Faculty of the College of Law, the second edition of the English and American Encyclopedia of Law, which includes about thirty volumes.

Other prizes are offered in special departments, for which see department circulars or the heads of the departments

#### GENERAL RULES FOR STUDENTS

Rule 51. Each student shall at the beginning of the year give, in writing, his or her local address to the President, and shall promptly report all subsequent changes of address.

Rule 53. Smoking is prohibited in the halls, basements, and lecture rooms of the University buildings.

Rule 56. The rooms of University student organizations which are located in the University buildings shall not be used for purposes other than the usual exercises of such organization without the previously obtained consent of the General Faculty.

Rule 57. No arrangements or announcements shall be made by students for any public gathering or exercises in the University buildings without the previously obtained consent of the President.

Rule 66. All absences of individual students from the city, for any purpose, involving absence from college exercises, must be accounted for to the President; and in all possible cases permission must be previously obtained.

Rule 86. All students are required to register on the first day of each term or semester.

Rule 88. In the case of former students, if the incidental fee is not paid until the second day of the term or semester, one dollar will be added, and for each succeeding day of delinquency fifty cents will be added.

Rule 89. The assignment of work shall be made and recorded for each student, as shall be determined by the several faculties; but at the beginning of each term or semester, each student's card shall be signed by the Secretary of his College before presentation to the Bursar.

## COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

#### FOR ADMISSIONS

The following are the requirements:

. 1. Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.

2. English Composition and English Classics.—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following Books, or equivalents: Shakespeare's Merchant of Venice, Julius Caesar and Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Conciliation with the Colonies; Macaulay's Essays on Milton and Addison; The Sir Roger de Coverly Papers in The Spectator; Goldsmith's The Vicar of Wakefield; Coleridge's The Ancient Mariner; Scott's Ivanhoe; Carlyle's Essay on Burns; Tennyson's The Princess; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

To meet the English requirement the schools should provide courses in compositionpractice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

- 3. Algebra-Venable's Easy Algebra, complete.
- Botany—Gray or Kellerman's Elementary Botany and Spring Flora, or equivalent.
- 7. Latin—Pronunciation (the Roman method): Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the De Bello Gallico.

Or French—The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good Modern French, with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (not the seventeenth) century should be included.

Or German—Joynes-Meissner's or Thomas's Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, i. e., declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions,

regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages.)

Joynes's or Whitney's Reader, Hillern, Höher als die Kirche, Riehl, Der Fluch der Schönheit, Freytag, Die Verlorne Handschrift, Gerstäcker Irrfahrten.

Until the year 1902, the German or French required for admission may be begun at the University, but without University credits. For the year 1902 and thereafter, the full requirements as above stated will be held to.

- 5. Plane Geometry-White, Venable, Wentworth, or Wells.
- 6. Physics-Gage, Carhart and Chute, Avery, or Appleton.
- 7. Either of the following:

  Civil Government—Fisk or Thorpe preferred.

  History—Myers's General History.

## OUTLINE OF THE COURSE IN AGRICULTURE

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

## FIRST YEAR

#### REOUIRED

	REQU	IRED		
Credi	t	Credit	Cr	edit
FIRST TERM hour	SECOND !	TERM hours	THIRD TERM he	ours
Agr'l Chemistry (1) Principles.	Agr'l Chemist Organic.	try (8) 5.	Agr'l Chemistry (9) Applications.	5.
Botany (6) Physiological.	Botany (7) Physiologi Econor		Botany (8)  Economic Botany and Vegetable Patholo	
Drawing (10)				
Rhetoric (5) 2½ English Composition.	English C	omposition.	Rhetoric (5) English Composition.	21/2.
Zoology (1) Sinvertebrate.	Shopwork (1) Zoology (1) Invertebra	3.	Zoology (1) Vertebrate.	3.
Cadet Service (men).*	Cadet Service	(men).	Cadet Service (men).	
Hygiene and Physical Training (women).	Hygiene and Training (		Hygiene and Physical Training (women).	
	SECON	D YEAR		
	REQU	TRED		
Agriculture (8) Breeds of Live Stock.	Agriculture (1 Principles	of Breeding.	Agriculture (10) Stock Feeding.	4.
Agr'l Chemistry (4) Laboratory.	Agr'l Chemis Laborator		Agr'l Chemistry (4) Laboratory.	5.
Horticulture (1)	. Shopwork (2)	3.	Horticulture (1)	4.
Elements.	Physiology (1	) 3.	Plant Propagation.	
Physiology (1)	B. Physiology	y.	Physiology (1)	3.
Anatomy.	Zoology (4)	2.	Physiology.	
2000083		Entomology.	Zoology (4)	2.
Economic Entomology.	Cadet Service		Economic Entomolog	y.
Cadet Service (men). Hygiene and Physical Training (women).	Hygiene and Training		Cadet Service (men). Hygiene and Physical Training (women).	

<sup>\*</sup> A rule of the Board of Trustees requires each male student (except students in the College of Law) to render two years' cadet service as a condition of graduation. Students physically incapacitated for cadet service will be assigned an equivalent in special gymnasium work. The President has authority to excuse from cadet service under certain conditions.

Young women are required to carry Hygiene and Physical Training in place of cadet service.

## THIRD YEAR

		REQUIRED			
Cr	edit		Credit	C	redit
FIRST TERM ho	urs	SECOND TERM	hours	THIRD TERM h	ours
Agriculture (11)	4.	Agriculture (12)	4.	Agriculture (13)	4.
Farm Equipment.		Soils.		Crops.	
				Drawing (16)	3.
†French (1)	1	†French (1)	1	†French (1)	1
Elementary,		Elementary,		Elementary,	
†German (1)	4.	†German (1)	14.	†German (1)	14.
Elementary.	1	Elementary.		Elementary.	1
Geology (2)	5.	Geology (5)	8.	Astronomy (3)	2.
General.		General.		Meteorology.	
Veterin'y Medicine (28)	5.	Veterin'y Medicine (	29) 5.	Veterin'y Medicine (30)	5.
	White.	General Patholog		Special Pathology.	
		FOURTH YE	AR		100
		TOOKIH IL			
		REQUIRED			
Agriculture (14)	4.	Agriculture (15)	4	Agriculture (16)	4.
Animal Mechanics.		Dairy.		Rural Economics.	
History (5)	4.	History (5)	4-2.	Economics (2)	4.
U. S. Political.		U. S. Political.		Political Economy.	
		Economics (2)	4-2.		
		Political Economy	у.		

#### ELECTIVE

Ten hours a week through the year, including two hours for thesis, chosen from any of the courses given in any College of the University upon which the student is qualified to enter; except in the College of Law.

#### THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

<sup>†</sup> Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

## OUTLINE OF THE COURSE IN HORTICULTURE AND FORESTRY

## FIRST YEAR

## REQUIRED

	Credit		Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Agr'l Chemistry (1)	5.	Agr'l Chemistry (8)	5.	Agr'l Chemistry (9)	5.
Principles.		Organic.		Applications.	
Botany (6)	5.	Botany (7)	5.	Botany (8)	8
Physiological.		Physiological Eco	nomic.	Economic Botany	
				Vegetable Pathole	ogy.
Drawing (10)	2.				
Rhetoric (5)	21/2.	Rhetoric (5)	21/2.	Rhetoric (5)	21/2-
English Compositi	on.	English Composit	ion.	English Composit	tion.
		Shopwork (1)	3.		
Zoology (1)	3.	Zoology (1)	3.	Zoology (1)	3.
Invertebrate.		Invertebrate.		Vertebrate.	
Cadet Service (men).		Cadet Service (men).		Cadet Service (men)	
Hygiene and Physical	1	Hygiene and Physica	1	Hygiene and Physic	al
Training (women)		Training (women	).	Training (women	).

## SECOND YEAR

## REQUIRED

Agr'l Chemistry (4)	5.	Agr'l Chemistry (4)	5.	Agr'l Chemistry (4)	5_
Laboratory.		Laboratory.		Laboratory.	
*French (1)	1	French (1)	1	French (1)	1
Liementary,		Elementary,		Elementary,	
or	74.	or	14.	or	14-
*German (1)		German (1)		German (1)	
Elementary.	1	Elementary.		Elementary.	-)
Horticulture (1)	4.	Shopwork (2)	3.	Horticulture (1)	4
Elements.				Plant Propagation.	
Physiology (1)	3.	Physiology (1)	3.	Physiology (1)	3_
Anatomy.		Physiology.		Physiology.	
Zoology (4)	2.	Zoology (4)	2.	Zoology (4) .	2.
Economic Entomolo	gy.	Economic Entomo	logy.	Economic Entomolo	gy.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical		Hygiene and Physica	1	Hygiene and Physical	
Training (women).		Training (women)		Training (women).	
training (women).		rianning (women)		training (women).	

## THIRD YEAR

## REQUIRED

		The second secon			
Agriculture (11) Farm Equipment.	4.	Agriculture (12) Soils.	4.	Agriculture (13) Crops.	4.
				Astronomy (3) Meteorology.	2.
				Drawing (16)	3.
French (2)	1	French (2)	1	French (2)	1
	14.	or	-4.	or	14.
German (4)	)	German (4)		German (4)	
General.		Geology (5)	3.	Zoology (4)	8.
Geology (2)	5.	General.		Economic Entomo	logy.
Horticulture (5)	4.	Horticulture (6)	4.	Horticulture (7)	4.
Varieties of Fruit.		Principles of Fruit		Small Fruits and	
		Culture.		Spraying.	
	_				

<sup>†</sup> Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

## FOURTH YEAR

	Credit	REQUIRED	Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Horticulture (8)	2.	Horticulture (9)	2.	Horticulture (10)	2.
Elementary Flori	culture	Commercial Flori	culture	Home Floriculture	
Horticulture (11) Arboriculture.	2.	Horticulture (12) Forestry and Sylviculture.	2.	Horticulture (13) Landscape Garden	ing.
History (5) U. S. Political.	4.	History (5) U. S. Political. Economics (2)	4-2.	Economics (2) Political Economy	y. 4.
		Political Econom	y.		

#### ELECTIVE

Ten hours a week through the year, including two hours for thesis, chosen from any of the courses given in any College of the University upon which the student is qualified to enter; except in the College of Law.

#### THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

Horticulture (8)

Elements of Floriculture.

- 2.

## OUTLINE OF THE COURSE IN DOMESTIC SCIENCE

## FIRST YEAR

	PIRSI IDAK	
	REQUIRED	
Credit	Credit	Credit
FIRST TERM hours	SECOND TERM hours	THIRD TERM hours
Agr'l Chemistry (1) 5.	Agr'l Chemistry (8) 5. Organic.	Agr'l Chemistry (9) 5. Applications.
Principles. Botany (6)	Botany (7) 5.	Botany (8) 5.
Physiological.	Physiological and	Economic Botany.
	Economic.	Vegetable Pathology.
Drawing (1) 2.	Drawing (1) 2.	Drawing (1) 2
Rhetoric (5) 2½	Rhetoric (5) 21/2.	Rhetoric (5) 2½-
English Composition. Zoology (1) 3.	English Composition. Zoology (1) 3.	English Composition. Zoology (1) 3.
Invertebrate.	Invertebrate.	Invertebrate.
Hygiene and Physical	Hygiene and Physical	Hygiene and Physical
Training.	. Training.	Training.
	SECOND YEAR	
	REQUIRED	
Agr'l Chemistry (4) 5.	Agr'l Chemistry (4) 5.	Physiology (3) 3.
Laboratory.*	Laboratory.*	Chemical Physiology.
		Physiology (10) 2.
Domestic Economy (1) 4. Drawing (10) 2.	Domestic Economy (2) 4. Drawing (15) 2.	Domestic Economy (3) 4. Drawing (15) 2.
Drawing (10) 2. Mechanical.	Drawing (15) 2. Architectural.	House Designing.
†French (1)	French (1)	French (1)
Elementary,	Elementary,	Elementary,
†German (1)	German (1)	German (1)
Elementary.	Elementary.	Elementary.
Physiology (1) 8. Hygiene and Physical	Physiology (1) 3.  Hygiene and Physical	Physiology (1) 3. Hygiene and Physical
Training.	Training.	Training.
	THIRD YEAR	
	THIRD TEAR	
	REQUIRED	
Domestic Economy (4) 4.	Domestic Economy (6) 4.	Domestic Economy (6) 4.
French (2)	French (2)	French (2)
German (4)	German (4)	German (4)
History (5)	History (5) 4-2.	Economics (2) 4.
U. S. Political.	U. S. Political.	Political Economy.
Education (1) 4.	Economics (2) 4-2.	English Literature (3) 4.
	Political Economy.	
	Education (1) 4-2.	
Elective: Two hours a v	English Literature (2) 4-2.	
	FOURTH VEAR	
	FOURTH YEAR	
	REQUIRED	
Domestic Economy (7) 4.	Domestic Economy (8) 4.	Domestic Economy (9) 4.

<sup>\*</sup> Specific laboratory work will be provided for students in this course, where necessary.
† Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

Commercial Floriculture.

2.

Horticulture (10)

Home Floriculture.

Horticulture (9)

#### ELECTIVE

Ten hours a week through the year chosen from any of the courses given in any college of the University upon which the student is qualified to enter; except in the College of Law.

#### THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

#### THE SHORT COURSES

A two-year course in Agriculture and a two-year course in Domestic Economy have been provided for those who have neither the time nor the means to pursue four-year courses. These short courses also enable those who lack the preparation for entering the four-year courses to obtain such preparation. The studies of the first year of the short courses, it will be noticed, nearly prepare the student to enter the first year of the four-year courses. The student having had chemistry in the first year of a short course can finish his preparation for either of the four-year courses during the first year of the latter course, in place of the chemistry required.

At the end of the first year of the Short Course in Agriculture, for example, the student has three strings to his bow. He may finish the second year of the short course by taking the more technical studies from the four-year courses, if lack of time or means demand it; or he may enter either the four-year course in Agriculture or the four-year course in Horticulture and Forestry. The same is practically true of the Short Course in Domestic Economy.

These short courses are not, of course, to be compared in breadth, strength, or thoroughness with the full courses of the University. They are far better preparation for the work to which they lead than no preparation; but all students are urged to take or to continue into the full four-year courses wherever possible.

## ADMISSION TO THE SHORT COURSES IN AGRICULTURE AND DOMESTIC ECONOMY AND THE COURSE IN DAIRYING

Applicants must be at least fifteen years of age, and unless over twenty-one years of age must pass an examination in Arithmetic, Geography, Grammar and United States History, or bring High School or other certificates for those branches. Applicants who are over twenty-one are admitted without examination.

## OUTLINE OF THE SHORT COURSE IN AGRICULTURE

#### FIRST YEAR

	Credit	REQUIRED	Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Mathematics (1) Algebra.	5.	Mathematics (3) Geometry.	5.	Botany (1) Elementary.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Physiography.	5.
Drawing (10) Mechanical.	2.	Shopwork (1)	. 3.	Physiology (2) General.	S.
Cadet Service.		Cadet Service.		Cadet Service	

#### SECOND YEAR

Not less than fifteen hours per week through the year; chosen from any of the following courses subject to conditions named under "Departments of Instruction."

Agriculture (8)	4.	Agriculture (9)	4.	Agriculture (10)	4.
Breeds of Live Stock.		Principles of Breeding		Stock Feeding.	*
Agriculture (11)	4.	Agriculture (12)	4.	Agriculture (13)	4.
Farm Equipment.		Soils.		Crops.	
Agriculture (17)	3.				
Milk Sanitation.					
Botany (6)	5.	Agriculture (15)	4.	Zoology (7)	3.
Physiological.		Dairy.		Entomology.	
Horticulture (1)	4.	Horticulture (1)	4.	Horticulture (1)	4.
Elements.		Greenhouse Construction	on.	Plant Propagation.	
		Shopwork (2)	3.		
Veterinary Medicine (28)	5.	Veterinary Medicine (29)	5.	Veterinary Medicine (30)	5.
Anatomy.		General Pathology.		Special Pathology.	
Horticulture (5)	4.	Horticulture (6)	4.	Horticulture (7)	4.
Varieties of Fruit.		Principles of Fruit		Small Fruits and	
		Culture.		Spraying.	
		Physiology (6)	2.		
Cadet Service.		Cadet Service.		Cadet Service.	

## COURSE IN DAIRYING

The course in dairying begins each year on the Wednesday following the first day of January, and continues during the entire term. Butter-making, as practiced in the farm dairy and in the creamery, is thoroughly taught. The student performs all necessary operations in the manufacture of butter by these two methods, under the guidance of the instructors. In cheese-making the principles are taught, with elementary practice.

Agriculture (5). Dairy Farming.—Three hours each week. Lectures and recitations on breeds, breeding, feeding, selection and judging of dairy stock, equipment and management of dairy farms.

Agriculture (6). Butter and Cheese-making.—Four half days each week. Laboratory practice in running separator, churning, working butter, making cheese, milk testing, etc.

- Agriculture (7). Butter and Cheese-making.—Two hours each week. Lectures and recitations.
- Agricultural Chemistry (7). Milk Chemistry and Milk Testing.—Two hours each week. Lectures and laboratory practice.
- Physiology (6). Bacteria in their relation to Milk, Butter and Cheese.—Two hours each week. Lectures and laboratory practice.
- Veterinary Medicine (17). Diseases of the Cow.—Three hours each week. Mehanical Engineering (26). Steam Machinery.—One hour each week.

## SHORT COURSE IN DOMESTIC SCIENCE

## FIRST YEAR

## REQUIRED

	Credit		Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Agr'l Chemistry (1)	5.	Agr'l Chemistry (8)	5.	Agr'l Chemistry (9)	5.
Principles.		Organic.		Applications.	
Physics (1)	5.	Physics (1)	5.	Botany (1)	5.
Elementary.		Elementary.		Elementary.	
French (1)	1	French (1)	1	French (1)	1
OT	}·4.	or	14.	or	74.
'German (1)		German (1)		German (1)	
Rhetoric (5)	21/2.	Rhetoric (5)	21/2.	Rhetoric (5)	21/2-
English Composit	ion.	English Composit	ion.	English Composit	tion.
Hygiene and Physica	1	Hygiene and Physica	1	Hygiene and Physica	al
Training.		Training.		Training.	

## SECOND YEAR

## REQUIRED

Domestic Economy (1) 4. Domestic Economy (4) 4. Hygiene and Physical Training.	Domestic Economy (2) 4. Domestic Economy (5) 4. Hygiene and Physical Training.	Domestic Economy (3) 4. Domestic Economy (6) 4. Hygiene and Physical Training.
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#### ELECTIVE

Not less than seven hours per week through the year; chosen from any of the following courses subject to conditions named under "Departments of Instruction."

Botany (6) Physiological.	5.	Botany (7) Physiological and Economic.	5.	Botany (8)  Economic Botany.  Vegetable Pathology.	5.
Drawing (1)	2.	Drawing (1)	2.	Drawing (1)	2.
Education (1)	4.	Education (1)	4-2.	English Literature (2)	4.
	-	English Literature (2)	4-2.	and an arrest of the	
Hortjculture (8)	2.	Horticulture (9)	2.	Horticulture (10)	2.
General Floriculture.		Commercial Floricul	ture.	Home Floriculture.	
Zoology (1)	3.	Zoology (1)	3.	Zoology (1)	3.
Invertebrate.		Invertebrate.		Vertebrate.	

## COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

## FOR ADMISSION TO THE COURSE IN ARTS1

The following are the requirements:

- 1. Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.
- 2. English Composition and English Classics.—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, or equivalents: Shakespeare's Merchant of Venice, Julius Caesar, and Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Conciliation with the Colonies; Macaulay's Essays on Milton and Addison; The Sir Roger de Coverly Papers in The Spectator; Goldsmith's The Vicar of Wakefield; Coleridge's The Ancient Mariner; Scott's Ivanhoe; Carlyle's Essay on Burns; Tennyson's The Princess; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

To meet the English requirement the schools should provide courses in compositionpractice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

- 3. Algebra-Taylor's Academic or equivalent.
- 4. Botany-Kellerman's Elementary Botany and Spring Flora or equivalent.
- 5. Civil Government-Fiske or Thorpe preferred.
- 6. Geometry, Plane and Solid-Venable, White, Wentworth or Wells.
- 7. Greek—Grammar (Goodwin's preferred) and Prose Composition; or the first 100 lessons of White's Beginner's Greek Book. Reading: The first three books of Xenophon's Anabasis. At least two years should be devoted to this work.
- 8. History—Either Myers's General History (or equivalent); or, if the teacher's training and the school library will warrant, Greek and Roman History on the topical method. A circular concerning the topical method will be sent on application.
- 9. Latin—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the De Bello Gallico; Cicero, six orations, including Pro Lege Manilia; Vergil, the first six books of the Aeneid, with Prosody; Prose Composition, Daniell or Collar or Jones or Dodge and Tuttle, entire.

10. Physics-Carhart and Chute, Gage, Avery, or Appleton.

For the present, the *Greek* required for admission may be begun at the University, but without University credits.

#### TO THE LATIN COURSE IN PHILOSOPHY

The requirements are the same as for admission to the Course in Arts; except that instead of *Greek*, the applicant must offer *French* or *German*, as follows:

French.—The requirements under this head are those of the elementary course or grade of preparatory instruction, as formulated in the "Report of the Committee of Twelve of the Modern Language Association of America," and are here stated in the terms of that report.

Applicants should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life, or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar as defined below.

Two years should be given to this preparation.

During the first year the work should comprise: (1) Careful drill in pronunciation; (2) the rudiments of grammar, including the inflection of the regular and the more common irregular verbs, the plural of nouns, the inflection of adjectives, participles and pronouns; the use of personal pronouns, common adverbs, prepositions and conjunctions; the order of words in the sentence, and the elementary rules of syntax; (3) abundant easy exercises, designed not only to fix in the memory the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (4) the reading of from 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English), and in reproducing from memory sentences previously read; (5) writing French from dictation.

During the second year the work should comprise: (1) The reading of from 250 to 400 pages of easy modern (nineteenth century) prose in the form of stories, plays or historical or biographical sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, with constant application in the construction of sentences; (6) mastery of the forms and use of pronouns, pronominal adjectives, of all but the rare irregular verb forms, and of the simpler uses of the conditional and subjunctive.

German -

(a) The Aim of the Instruction.

At the end of the elementary course in German the pupil should be able to read at sight, and to translate, if called upon, by way of proving his ability to read, a passage of very easy dialogue or narrative prose, help being given upon unusual words and constructions; to put into German short English sentences taken from the language of every-day life or based upon the text given for translation, and to answer questions upon the rudiments of grammar as defined below.

(b) The Work to be Done.

During the first year the work should comprise: (1) Careful drill upon pronunciations; (2) the memorizing and frequent repetition of easy colloquial sentences; (3) drill upon the rudiments of grammar, that is, upon the inflection of the articles, of such nouns as belong to the language of every-day life, of adjectives, pronouns, weak verbs, and the more usual strong verbs, also upon the use of the more common prepositions, the simpler uses of the model auxiliaries, and the elementary rules of syntax and word-order; (4) abundant easy exercises.

designed not only to fix in mind the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (5) the reading of from 75 to 100 pages of graduated texts from a reader, with constant practice in translating into German easy variations upon sentences selected from the reading lesson (the teacher giving the English), and in the reproduction from memory of sentences previously read.

During the second year the work should comprise: (1) The reading of from 150 to 200 pages of literature in the form of easy stories and plays; (2) accompanying practice, as before, in the translation into German of easy variations upon the matter read, and also in the off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easy selected passages; (3) continued drill upon the rudiments of the grammar, directed to the ends of enabling the pupil, first, to use his knowledge with facility in the formation of sentences, and, secondly, to state his knowledge correctly in the technical language of grammar.

Until the year 1902, the German or French required for admission may be begun at the University, but without University credits. For the year 1902 and thereafter, the full requirements as above stated will be held to.

#### TO THE MODERN LANGUAGE COURSE IN PHILOSOPHY

The requirements are the same as for admission to the course in Arts; except that instead of Latin and Greek, the applicant may offer Latin and French, or Latin and German, or French and German, in the amounts specified above.

Until the year 1902, either the *French* or the *German* (but not both), required for admission may be begun at the University, but without University credits. For the year 1902, and thereafter, the full requirements as above stated will be maintained.

## TO THE ENGLISH COURSE IN PHILOSOPHY

The requirements are the same as for admission to the Modern Language Course in Philosophy. But in place of one of the foreign languages the applicant may offer the following group:

- 1. Chemistry-Williams or Remsen.
- English Literature—Pancoast's Introduction to English Literature and an acquaintance with representative works in each period; or, English History— Montgomery.
  - 3. Physiology-Martin (briefer course).

Until the year 1902, one modern language required for admission may be begun at the University, but without University credits. For the year 1902, and thereafter, the full requirements as stated above will be held to.

## TO THE COURSE IN COMMERCE AND ADMINISTRATION

The requirements are the same as for admission to the Modern Language \*Course in Philosophy.

#### TO THE COURSE IN SCIENCE

The requirements are the same as for admission to the Modern Language Course in Philosophy.

## TO GRADUATE WORK

1. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. from this University or from other institutions making equivalent requirements for those degrees, upon the satisfactory completion, during not less than one year of residence (devoted exclusively to such work), of an

approved course of study, covering a major subject and an allied minor subject. The major subject (two-thirds) shall be graduate work, taken in one of the departments of this (the Arts, Philosophy and Science) College. The minor subject (one-third) may be in graduate work.

- 2. The degree of Master of Science will be conferred upon candidates holding the degree of B. Sc. from the General Science Course of this University, or from institutions making equivalent requirements for this degree, and also upon graduates from the College of Engineering of this University, upon the terms specified for the degree of Master of Arts; except that the major subject shall be taken in one of the Departments of Science in this (the Arts, Philosophy and Science) College. The minor subject shall be in an allied Science.
- 3. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. and the degree of Master of Science upon candidates holding the degree of B. Sc. from this University, or from other institutions making equivalent requirements for these degrees, and the degree of Master of Science will be conferred on graduates from the College of Engineering of this University, on the completion, during not less than one year of residence, of a course of study in one or more of the departments of this College, not less than one-third of which course shall be graduate work and not more than two-thirds may be such undergraduate work as is announced to be elective, such course to be subject to the approval of the Executive Committee of the Faculty of this College. But a degree conferred under the provisions of this paragraph shall in no case-be counted towards the degree of Doctor of Philosophy, or Doctor of Science.
- With the consent of the Faculty the work of candidates for Master'sdegree may be distributed over more than one year.
- 5. Each candidate for a Master's degree must also prepare and submit a thesis, and, after its acceptance, be examined upon the work assigned him. The regulations as to undergraduate theses apply to theses for Master's degree also.
- 6. The degree of Ph. D., or of D. Sc., will be conferred upon holders of the appropriate baccalaureate degree from this University, or from other institutions making equivalent requirements for the first degree, upon the satisfactory completion of three years of resident graduate work in the Arts, Philosophy and Science College, including thesis and examinations. Holders of the degree of Master of Arts or Master of Science from this University, under the conditions prescribed in paragraph one or two, or from other institutions making equivalent requirements for these degrees, may receive the Doctor's degree on the satisfactory completion of two years of resident graduate work after obtaining the Master's degree. On approval of the Faculty, the work of the first year, or of the first two years, of the three, may be done at another University which offers equivalent graduate work.
- Candidates for the degree of Doctor of Science shall take their work wholly in Science.
- 8. With the consent of the Faculty the work required of candidates for Doctor's degrees may be distributed over more than three years.

## COURSE IN ARTS

## Degree: Bachelor of Arts

## FIRST YEAR

	Credit		Credit
FIRST SEMESTER	hours	SECOND SEMESTER	hours
Greek (51)	4.	Greek (52)	4.
Xenophon.		Herodotus, Homer.	
Latin (51)	4.	Latin (52)	4.
Cicero.		Livy, Horace.	
Mathematics (67)	3.	Mathematics (68)	3.
Algebra, Analytics, Calculus.		Trigonometry, Analytics, Calculus.	
Rhetoric (51)	21/2	Rhetoric (52)	21/2.
Composition.		Composition.	
Cadet Service (men).*		Cadet Service (men).	
Hygiene and Physical Training (women	1).	Hygiene and Physical Training (women	).

## One of the following (the choice being for the year):

3.	Botany (52) or (58)	3.
4.	Zoology (64)	4.
	Comparative.	
3.	Chemistry (52)	8.
	Inorganic.	
3.	Physics (52) or (54)	3.
	Electricity, Magnetism, etc.	
3.	Zoology (52)	8.
	Comparative Zoology.	
	4. 3. 3.	4. Zoology (64) Comparative. 3. Chemistry (52) Inorganic. 3. Physics (52) or (54) Electricity, Magnetism, etc. 3. Zoology (52)

## SECOND YEAR

FIRST SEMESTER	hours	SECOND SEMESTER	hours
	Credit		Credit
'Greek (53)	4.	Greek (54)	4.
Lysias.		Homer, Plato.	
†History (55) United States		Economics (52) Elementary	1
or	}4.	or	14.
†Economics (51) Elementary.		History (56) United States	
Latin (53)	4.	Latin (54)	4.
Horace, Pliny.		Tacitus, Juvenal.	
English Literature (51)	4.	Rhetoric (54)	4.
Introductory.		Analysis of Prose.	
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training	(women).	Hygiene and Physical Training (v	women).

## THIRD YEAR

Philosophy (51)	4.	Philosophy (52)	4.
Psychology. *Major Study	4.	Logic and Ethics. Major Study	4.

## ELECTIVE

Eight hours a week through the year—chosen from the courses in this College (See "The Departments," page 119); except that, not earlier than the third

Young women are required to carry Hygiene and Physical Training in place of cadet service.

<sup>\*</sup> A rule of the Board of Trustees requires each male student (except students in the College of Law) to render two years' cadet service as a condition of graduation. Students physically incapacitated for cadet service will be assigned an equivalent in special gymnasium work. The President has authority to excuse from cadet service under certain conditions.

year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

## FOURTH YEAR

*Major Study	5.	Major Study	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

#### THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

## LATIN COURSE IN PHILOSOPHY

## Degree: Bachelor of Philosophy

## FIRST YEAR

	Credit		Credit
FIRST SEMESTER	hours	SECOND SEMESTER	hours
French (51)	1	French (52)	1
Elementary, or (55)		Prose and Plays	The state of
Or Or	14.	Or (real)	14.
German (51) Elementary, or (55)		German (52) Elementary, or (56)	
Latin (51)	4.	Latin (52)	4.
Cato, Cicero.		Livy, Horace.	
Mathematics (67)	3.	Mathematics (68)	3.
Algebra, Analytics, Calculus.		Trigonometry, Analytics, Calculus.	
Rhetoric (51)	21/2.	Rhetoric (52)	21/2.
Composition.		Composition.	
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women	n).	Hygiene and Physical Training (wome	n).

## One of the following (the choice being for the year):

Botany (51) or (57)	3.	Botany (52) or (58)	3,
Botany (55)	4.	Zoology (64)	4.
Systematic and Physiological.		Comparative.	
Chemistry (51)	3.	Chemistry (52)	3.
Inorganic.		Inorganic.	
Physics (51) or (53)	3.	Physics (52) or (54)	3,
Mechanics, Heat, etc.		Electricity, Magnetism, etc.	
Zoology (51)	3.	Zoology (52)	3.
Comparative - Zoology.		Comparative Zoology.	

<sup>\*</sup> Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

## SECOND YEAR.

French (55) Modern Literature or German (55) Literature.	4.	French (56) Modern Literature or German (56) Lyrics.	4.
*History (55) United States or *Economics (51) Elementary.	4.	Economics (52) Elementary or History (56) United States.	4.
Latin (53) Horace, Pliny.	4.	Latin (54) Tacitus, Juvenal.	4.
*English Literature (51) Introductory. Cadet Service (men).	4	Rhetoric (54) Analysis of Prose. Cadet Service (men).	4
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

## THIRD YEAR

Philosophy (51)	4.	Philosophy (52)	4.
Psychology. †Major Study	4	Logic and Ethics. Major Study	4

#### ELECTIVE

Eight hours a week through the year—chosen from the courses in this College, except that, not earlier than the third year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

#### FOURTH YEAR

†Major Study	5.	†Major Study	5.
Electives (as in third years)	10	Electives (as in third year)	10.

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the fifteenth day of December of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

No one will be admitted to candidacy for a degree later than the first day of October of his last year.

<sup>\*</sup> The subject not taken the first semester, to be taken the second semester.

<sup>\*</sup> Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

## MODERN LANGUAGE COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

## FIRST YEAR

	Credit		Credit
FIRST SEMESTER	hours	SECOND SEMESTER	hours
French (51) or (55)	4.	French (52) or (56)	4.
German (51) or (55)	4.	German (52) or (58)	4.
Mathematics (67)	3.	Mathematics (68)	3.
Algebra, Analytics, Calculus.		Trigonometry, Analytics, Calculus.	
Rhetoric (51)	21/2.	Rhetoric (52)	21/2-
Composition.		Composition.	
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women)	).	Hygiene and Physical Training (women	en).

## One of the following (the choice being for the year):

Botany (51) or (57)	3.	Botany (52) or (58)	8.
Botany (55)	4	Zoology (64)	4.
Systematic and Physiological.		Comparative.	
Chemistry (51)	3.	Chemistry (52)	3.
Inorganic.		Inorganic.	
Physics (51) or (53)	3.	Physics (52) or (54)	3.
Mechanics, Heat, etc.		Electricity, Magnetism, etc.	
Zoology (51)	3.	Zoology (52).	
Comparative Zoology.		Comparative.	

## SECOND YEAR.

French	4.	French 4.
German	4.	German 4.
*History (55) United States	1	Economics (52) Elementary
or *Economics (51) Elementary.	4.	or History (56) United States.
Rhetoric (53) Analysis of Prose.	4.	English Literature (52). Introductory.
Cadet Service (men). Hygiene and Physical Training (women).		Cadet Service (men). Hygiene and Physical Training (women).

## THIRD YEAR.

Philosophy (51)	4.	Philosophy (52)	Mark Town	4
Psychology.		Logic and Ethics.		
imajor Study	*	imajor Study		-

## ELECTIVE

Eight hours a week through the year—chosen from the courses in this College, except that, not earlier than the third year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

<sup>\*</sup> The subject not taken the first semester, to be taken the second semester.

<sup>†</sup> Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

## FOURTH YEAR.

	Credit		Credit
FIRST SEMESTER	hours	SECOND SEMESTER	hours
†Major Study	5.	†Major Study	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

#### THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the fifteenth day of December of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

No one will be admitted to candidacy for a degree later than the first day of October of his last year.

## ENGLISH COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

## FIRST YEAR

	Credit		Credit
FIRST SEMESTER	hours	SECOND SEMESTER	hours
French (51)	1	French (52)	1
Elementary	1.	Prose and Plays	1.
German (51)	14.	German (52)	14.
Elementary.		Elementary.	1
History (151)	3.	History (152)	3.
European.		European.	
Mathematics (67)	3.	Mathematics (68)	3.
Algebra, Analytics, Calculus.		Trigonometry, Analytics, Calculus.	
Rhetoric (51)	21/2.	Rhetoric (52)	21/2-
Composition.		Composition.	
Rhetoric and English Language (69)	2.	Rhetoric and English Language (70)	2.
History of English.		Development of Prose.	
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (wome	en).	Hygiene and Physical Training (women)	).
One of the following (the ab	aina bair	or for the money.	
One of the following (the ch	oice beir	ig for the year):	
to deal deal	-	Ti (#0) (#0)	-

Botany (51) or (57)	3.	Botany (52) or (58)	3.
Botany (55)	4.	Zoology (64)	4.
Systematic and Physiological.		Comparative.	
Chemistry (51)	3.	Chemistry (52)	3,
Inorganic.		Inorganic.	
Physics (51) or (53)	8.	Physics (52) or (54)	3.
Mechanics, Heat, etc.		Electricity, Magnetism, etc.	
Zoology (51)	3.	Zoology (52)	3.
Comparative.		Comparative.	

<sup>\*</sup> Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

## SECOND YEAR.

	Credit		Credit
FIRST SEMESTER	hours	SECOND SEMESTER	hours
French (55)	1	French (56)	1
Modern Literature		Modern Literature	
or	}4.	or	14.
German (55)		German (56)	
Literature.	)	Lyrics.	1
*History (55)		Economics (52)	
United States		Elementary	
*Economics (51)	4.	History (56)	14.
Elementary.		United States.	
Philosophy (53)	3.	Philosophy (54)	3.
Rhetoric (53)	4.	English Literature (52)	4.
	3.		2.
Analysis of Prose.		Introductory.	
Rhetoric and English Language (71 Old English.	) 2.	Rhetoric and English Language (72) Old English.	2.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (won	ien)	Hygiene and Physical Training (wome	(n)
any sent and any sent arming (non	cu).	*	,.
	THIRD	YEAR.	
Philosophy (55)	3.	Philosophy (56)	3.
†Major Study	4.	Major Study	4
The state of the s			3.

#### ELECTIVE

Eight hours a week through the year—chosen from the courses in this College, except that, not earlier than the third year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

## FOURTH YEAR.

Major Study	5.	Major Study	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

## THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the fifteenth day of December of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

No one will be admitted to candidacy for a degree later than the first day of October of his last year.

<sup>\*</sup> The subject not taken the first semester, to be taken the second semester.

## COURSE IN COMMERCE AND ADMINISTRATION

Degree: Bachelor of Philosophy

## FIRST YEAR

Cr	edit		Credit
FIRST SEMESTER he	ours	SECOND SEMESTER	hours
French (51)	4.	French (52)	4.
Elementary.		Prose and plays.	
German (51)	4.	German (52)	4.
Elementary.		Elementary.	
History (151)	3.	History (152)	3.
European.		European.	
Mathematics (67)	3.	Mathematics (68)	3.
Algebra, Analytics, Calculus.		Trigonometry, Analytics, Calculus.	
Rhetoric (51)	21/2.	Rhetoric (52)	21/2.
Composition.		Composition.	
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women	).

## SECOND YEAR.

French (55) Modern Literature		French (56) Modern Literature	1
German (55) Literature.	4.	German (56) Lyrics.	4.
*History (55) United States		Economics (52) Elementary	1
eEconomics (51) Elementary.	4.	Or History (56) United States.	4.
History (153)	3.	History (154)	3.
England. Rhetoric (5)	4.	English Literature (52)	4.
Analysis of Prose. Cadet Service (men).		Introductory. Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women	1).

## One of the following (the choice being for the year):

Botany (51) or (57)	3.	Botany (52) or (58)	3.
General Chemistry (51)	3,	General Chemistry (52)	8.
Inorganic.		Inorganic.	
Physics (51) or (53).	3.	Physics (52) or (54)	3.
Mechanics, Heat, etc.		Electricity, Magnetism, etc.	
Zoology (51)		Zoology (52)	3.
Comparative.		Comparative.	

## THIRD YEAR.

†Elementary Law	6.	†Contracts	4.
Philosophy (51)	4.	Philosophy (52)	4.
‡Major Study	4.	‡Major Study	4.

#### ELECTIVE

From the courses mentioned in the departments below, selection may be made to make up the required number of hours. Not less than sixteen nor more than

<sup>\*</sup> The subject not taken the first semester, to be taken the second semester. † In place of Elementary Law six hours; Commercial Law four hours and Corporations (Private and Municipal) two hours may be substituted. Also in place of Contracts, four hours, any two of the following may be substituted; Corporations (Private), Insurance, Agency, Sales, Mortgages.

<sup>‡</sup> See note page 79.

eighteen hours a week are permitted and no substitutions or options further than those indicated below.

	Credit		Credit
FIRST SEMESTER	hours	SECOND SEMESTER	hours
Economics	2 or 3.	Economies	2 or 3.
German	2 or 3.	German	2 or 3.
History	2 or 3.	History	2 or 3.
Political Science	2 or 3.	Political Science	2 or 3.
Rhetoric (57)	3.	Rhetoric (58)	3.
Romance Language	2 or 3.	Romance Language	2 or 3.
	FOURTH	YEAR.	
†Major Study	5.	†Major Study	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

#### THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the fifteenth day of December of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

No one will be admitted to candidacy for a degree later than the first day of October of his last year.

## COURSE IN GENERAL SCIENCE

Degree: Bachelor of Science

## FIRST YEAR

	Credit		Credit
FIRST SEMESTER	hours	SECOND SEMESTER	hours
Botany (51)	1	Botany (52)	1
Elementary		Morphology and Classification	0
Zoology (51)	3.	Zoology (52)	3.
Comparative.		Comparative.	7
French (51)	1	French (52)	1
Elementary		Prose and Plays	100
German (51)	14	German (52)	14.
Elementary.		Elementary.	
Chemistry (51)	3.	Chemistry (52)	3.
Inorganic.		Inorganic.	
*Mathematics (67), (65)	] 4.	*Mathematics (68), (68)	74.
Algebra, Analytics, Calculus	1	Trigonometry, Analytics, Calculus	
Mathematics (55), (57)	5.	Mathematics (56), (58)	5.
Trigonometry and Algebra.		Algebra and Analytics.	
Rhetoric (51)	21/2.	Rhetoric (52)	21/2.
Composition.		Composition.	
Cadet Service (men).		Cadet Service (men).	8 111
Hygiene and Physical Training (wor	nen).	Hygiene and Physical Training (wome	n).

<sup>†</sup> Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

\* Students taking both Botany 51 and 52 and Zoology 51 and 52 will take Mathematics 67

and 68 as the required Freshman Mathematics.

## SECOND YEAR

	Credit		Credit
FIRST SEMESTER	hours	SECOND SEMESTER	hours
Economics (51)	4.	Rhetoric (54)	4.
Political Economy.		Analysis of Prose.	
‡French	1	French	1
or	4.	or	4.
‡German	1	German	1
Physics (51)	3.	Physics (52)	3.
Mechanics, Heat, etc.		Electricity, Magnetism, etc.	
Physiology (51)	3.	Physiology (52)	3.
Human Anatomy.		Physiology.	
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women	n).	Hygiene and Physical Training (won	nen).

Together with one of the following subjects, to be continued through the year:

(a) Botany (57), (58), each three hours credit or (59), (60), each five hours' credit for a semester. (b) General Chemistry (53), (54), each five hours' credit. (c) Mathematics (59), (61), (60), (62), each five hours' credit for a semester. (d) Zoology (53), (54), each three hours' credit, or (55), (56), each five hours' credit.

## THIRD YEAR

**Geology (61) and Astronomy (61) General	3.	Geology (62) and **Astronomy (62) General	3. 2.
‡French or German**	4.	**Astronomy (54) Mathematical.	5.
Philosophy (53)	3.	Philosophy (54)	3.
*Major Study	4.	Major Study	4.

Elective: Four hours a week through the year—chosen from the courses in this College, except that not earlier than the third year:

First: Studies equivalent to five hours a week for one year may be chosen from any courses taught in the University; provided, that the studies chosen are such as the student is qualified to pursue.

Second: Additional studies equivalent to five hours a week for one year may be chosen in the College of Engineering.

#### FOURTH YEAR.

Major Study (as in third year)	5.	Major Study (as in third year)	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

#### THESIS

As a requisite for graduation each student must present an acceptable thesis embodying the results of a special research. The line of research must lie within

<sup>‡</sup> It is desired that the student on completing this course, shall possess a good reading knowledge of both French and German. Therefore, the student entering on both French and German will take both languages in the University, each for one year. He who enters on one Modern Language will continue that language one year in case he cannot read easy prose at sight and take the other language for one year. In case a reading knowledge of one Modern Language is possessed, the student will take the other language two years. The third year of Language in the case of students making the Mathematics a specialty will be that language of which the student has the less knowledge.

<sup>\*\*</sup> Students who elect Mathematics as their Major Study shall, in the Third Year, take French or German four hours the first semester and Astronomy five hours the second semester.

<sup>\*</sup> Major Study. Not later than the beginning of the Third Year each student in this course shall elect a Major Study in Mathematics or in a Science in which Laboratory instruction is given. This Major Study shall be in one department, or with the consent of the professors in charge in two allied departments in this college. To the Major Study the student shall devote not less than five not more than ten hours a week during the Fourth Year.

the field of the major study, and is subject to the approval of the professor or professors having the major study in charge; and the student shall enter on this work not later than the beginning of the Senior year, and shall devote to it not less than two hours a week, or its equivalent, for one year, independently of his other work. The subject of thesis, together with a written approval of it by the professor or professors directing the investigation, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day. In case two or more students are pursuing the same major study, a joint research and thesis may be made.

## THE SPECIAL COURSES

## COURSE PREPARATORY TO LAW AND TO JOURNALISM

## FOR ADMISSION

The requirements for admission to any of the four year courses in the College of Arts, Philosophy and Science; except that the applicant must not be less than eighteen years of age.

#### FIRST YEAR

C	redit	C	redit
FIRST SEMESTER h	ours	SECOND SEMESTER h	ours
English Literature (51)	4.	Economics (52)	4.
Introductory.		Elementary.	
French (51) Elementary	100	French (52) Prose and Plays	
Or Or	4.	or	4.
German (51) Elementary.		German (52) Prose and Plays.	
History (151)	8.	History (152)	8.
European.		European.	
Rhetoric (51)	21/2.	Rhetoric (52)	21/2-
Composition.		Composition.	
Science, Elective	3.	Science, Elective	8.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

## SECOND YEAR

Economics (55)	2.	Economics (56)	2.
Practical Problems.		Industrial Reforms.	
English Literature	2 or 3.	English Literature	2 or 3.
Elective.		Elective.	
European History (153)	3.	European History (154)	3.
England.		England.	
American History (55)	4.	Rhetoric (54)	4.
United States.		Analysis and Prose.	
Philosophy (53)	8.	Philosophy (54)	3.
Psychology.		Logic.	
Rhetoric (55)	1.	Rhetoric (56)	1.
Newspaper work.		Newspaper work.	
Rhetoric (69)	2.	Rhetoric (70)	2.
History of English.		Development of Prose.	
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (wo	men).	Hygiene and Physical Training (	women).

Note — A student desiring to continue French or German may substitute French (55 and 56), or German (55 and 56), for four hours of the studies of the second year. The studies thus deferred must be taken in the third year.

#### THIRD YEAR.

Not less than sixteen nor more than seventeen hours a week, including studies deferred from the second year; selections to be made from the following, subject to the conditions named in the "Departments of Instruction." In view of the fact that this is a special course for special purposes, no substitutions or options further than those indicated below, will be permitted.

	Credit		Credit
FIRST SEMESTER	hours	SECOND SEMESTER	hours
American History (63), (65)	2.	American History (64), (66)	3.
Economics (53), (57), (59)	2.	Economics (54), (58), (60)	2
English Literature	2 or 3.	English Literature	2 or 3.
European History (155), (157), (161)	2.	European History (156), (158), (162)	2.
Education (57)	2.	Education (54)	2.
Philosophy (55)	3.	Philosophy (56)	3.
Ethics.		Modern.	
Political Science (51), (55)	2.	Political Science (52), (56)	2.
Political Science (58)	3.	Political Science (54)	3.
Rhetoric (57), (69), (75)	3.	Rhetoric (58), (70), (76)	3.
Rhetoric (59)	2.	Rhetoric (60)	2.

#### COURSE PREPARATORY TO THE STUDY OF MEDICINE

The three-year course preparatory to the study of Medicine has been discontinued owing to the fact that the completion of this course would not, under the present requirements of the Association of Medical Colleges, enable the student to gain credit for a year's time in the medical course. While it is deemed wiser for the present not to offer a special four-year course leading to a degree, it is desired to point out that a student having a medical career in view when entering here, or determining on such a career within the first year or two of his university course, may make such elections in any of the general courses as to gain a full year's credit, both in work and time allowance in a medical college.

While studies differ in different medical curricula it may be noted that Chemistry, Zoology, Comparative Anatomy, Embryology, Histology, Physiology, Bacteriology and Materia Medica, as taught here will be accepted in the medical schools and election of these in their proper sequence will enable the student to qualify himself very thoroughly for his medical course.

Students having medicine in view will do well to consult with the professors having these studies in charge, with reference to the best sequence of election and those having a particular medical college in view can make their selections with special reference to its requirements. Students already entered in the Course Preparatory to the Study of Medicine may complete the work as arranged at the time of their entrance.

## THE COLLEGE OF ENGINEERING

## FOR ADMISSION TO THE FOUR-YEAR COURSES, AND TO THE COURSE IN ARCHITECTURE

The following are the requirements:

- 1. Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.
- 2. English Composition and English Classics.—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, or equivalents: Shakespeare's Merchant of Venice, Julius Caesar, and Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Conciliation with the Colonies; Macaulay's Essays on Milton and Addison; The Sir Roger de Coverly Papers in The Spectator; Goldsmith's The Vicar of Wakefield; Coleridge's The Ancient Mariner; Scott's Ivanhoe; Carlyle's Essay on Burns; Tennyson's The Princess; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

To meet the English requirement the schools should provide courses in compositionpractice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

- 3. Algebra-Taylor's Academic or equivalent.
- 4. Civil Government-Fiske or Thorpe preferred.
- 5. Geometry, Plane and Solid-Venable, Wentworth, White, or Wells.
- 6. History-Myers's General History.
- 7. Latin-Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential), Cæsar, the first four books of the De Bello Gallico.

Or French—The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The text read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (not the seventeenth) century should be included.

Or German—Joynes-Meissner's or Thomas's Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, i. e.,declen—

sions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages): Joynes's or Whitney's Reader, Hillern's Höher als die Kirche, Riehl's Der Fluch der Schönheit, Freytag's Die Verlorne Handschrift, Gerstäcker Irrfahrten.

Until the year 1902, the German or French required for admission may be begun at the University, but without University credits. For the year 1902 and thereafter, the full requirements as above stated will be held to.

8. Physics-Gage, Carhart and Chute, Avery or Appleton, complete.

Note — An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up this work in the Columbus High Schools, which are fully accredited by the University.

No student will be admitted to the College of Engineering who is in arrears more than fifteen hours, of which not more than five hours may be in Mathematics.

#### COURSE IN CIVIL ENGINEERING

This course is arranged for students expecting to become surveyors or civil engineers. The plan of the course is to give (1) a thorough training in mathematics and mechanics, (2) the general principles underlying all branches of civil engineering, (3) the application of the general principles to the several branches of civil engineering. The subjects of land, railroad and topographical surveying are important features, and students can at once begin practical work. In the engineering work special attention is given to iron and steel bridge work, masonry construction and cement testing, road and railroad building and maintenance, water supply and the subject of the collection and disposal of sewage.

#### FIRST YEAR

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

	Credit		Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Drawing (1)	2.	Drawing (1)	2.	Drawing (2)	3.
Freehand.		Freehand.		Lettering.	
French (1)	7	French (1)	1	French (1)	1
or or	14.	or	14.	or	14.
German (1)		German (1)	1	German (1)	1
Chemistry (7)	5.	Chemistry (7)	5.	Metallurgy (2)	3.
Inorganic.		Inorganic.		Mineralogy.	
Mathematics (14)	5.	Mathematics (15), (1	6) 2, 3.	Mathematics (17)	5.
Plane Trigonome	try.	Trigonometry, Al	gebra.	Plane Analytics.	
Rhetoric (5)	21/2.	Rhetoric (5)	21/2.	Rhetoric (5)	21/2.
Paragraph Writin	g.	Theme Writing.		Prose Analysis.	
Cadet Service.		Cadet Service.			
		SECOND YE	AR		
Civil Engineering (1)	6.	Civil Engineering (4	0 4.	Civil Engineering (2	6.
Surveying.		C. E. Drawing.		Surveying.	
Drawing (3)	3.	Drawing (3)	5.	Drawing (3)	3.
Projections.		Descriptive Geom	etry.	Shades, Shadows	
Mathematics (18)	5.	Mathematics (19)	5.	Mathematics (20)	5.
Space Analysis.		Calculus.		Calculus.	MILE
Physics (2)	3.	Physics (2)	3.	Physics (2)	3.
Mechanics and 1		Electricity & May		Light and Sound	
Cadet Service.	No. of the	Cadet Service.	B.1.0.1.0.111	Cadet Service.	
		Cades Del tites		Onder Delvice.	

#### SUMMER COURSE

Civil Engineering (22). Four weeks - six days per week. Field work in land and railroad surveying.

## THIRD YEAR

Cr	edit		Credit		Credit
FIRST TERM he	ours	SECOND TERM	hours	THIRD TERM	hours
Civil Engineering (3) Topog. Surveying.	4.	Civil Engineering (24) C. E. Drawing.	5.	Astronomy (6) Mathematical.	4.
Civil Engineering (16) Roads and Streets.	5.	Civil Engineering (6) Stereotomy.	4.	Civil Engineering (7) Bridge Stresses.	5.
Astronomy (4) Mathematical.	3.	Astronomy (5) Mathematical.	3.	Drawing (7) Photography.	2.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength Materials.	
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

#### SUMMER COURSE

Civil Engineering (23). Four weeks - six days per week. Field work in railroad and topographical surveying.

#### FOURTH YEAR

Civil Engineering (8) Bridge Designing.	5.	Civil Engineering (17) Railways.	5.	Civil Engineering (18) Water Supply.	5.
*Civil Engineering (15) Masonry.	5.	Civil Engineering (14) Cement Testing.	2,	Civil Engineering (10) Sanitary Engineering.	5.
Elec. Engineering.		Elec. Engineering.			
Lectures (6)	2.	Lectures (6)	2		
		Laboratory (7)	2.		
		Mech. Engineering (17)	3.	Mech. Engineering (35)	5.
	- 2	Laboratory.		Laboratory.	
Geology (5) General.	5.	Geology (6) Economic.	3.		

#### \* VOLUNTARY

\* French (3), two hours; or German (2), two hours; or Rhetoric (4), two hours; each for the year.

## THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of Civil Engineering. The subject must be announced to the President of the University (dependent upon the approval of the head of the Department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

#### COURSE IN MINE ENGINEERING

This Course is arranged for students intending to become mining engineers and surveyors, metallurgical or technical chemists. The plan of work, therefore, while keeping mathematics, drawing and engineering prominent, also provides extended work in applied chemistry, chemical analysis, assaying, mineralogy, geology, and surveying with especial application to mines and underground work, while the treatment of ores, both mechanical in ore dressing and chemical in metallurgy, forms an important feature.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

## FIRST YEAR

	Credit	Con	edit	Cre	die
	hours		urs		urs
Drawing (1) Freehand.	2	Drawing (1) Freehand.	2.	Drawing (2)	3.
French (1)	1	French (1)	7	Lettering. French (1)	1
or	4.	or	14.	or	4.
German (1)		German (1)	]	German (1)	1
Chemistry (7)	5.	Chemistry (7)	5.	Metallurgy (2)	3.
Inorganic.	5.	Inorganic. Mathematics (15), (16) 2	6	Mineralogy.	5.
Mathematics (14) Plane Trigonometr		Trigonometry, Algebra		Mathematics (17) Plane Analytics.	Di.
Rhetoric (5)	21/2.		21/4.		21/2_
Paragraph Writing.		Theme Writing.		Prose Analysis.	/=-
Cadet Service.		Cadet Service.		Cadet Service.	
		SECOND YEAR			
Drawing (3)	3.	Drawing (3)	3.	Drawing (3)	8.
Projections.		Descriptive Geometry		Shades & Shadows.	
Mathematics (18)	5.	Mathematics (19)	5.	Mathematics (20)	5.
Space Analytics.		Calculus.		Calculus.	
Metallurgy (5)	5.	Metallurgy (5)	5.	Metallurgy (5)	5.
Laboratory.		Laboratory.		Laboratory.	
Physics (2) Mechanics and He	3.	Physics (2)	3.	Physics (2) Light and Sound.	3.
Shopwork (7)	2	Electricity & Magneti Shopwork (11)	2.	Shopwork (4)	2.
Woodwork.	-	Forging.		Chipping and Filing.	-
Cadet Service.		Cadet Service.		Curpping and Time.	
					W.
		VOLUNTARY			
French (3)	2,	or German (2)	2.	or Rhetoric (4)	2
		Each for the year.			
		THIRD YEAR			
Mech. Engineering (6 Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength Materials.	5.
Metallurgy (4)	5.	Metallurgy (4)	5.	Civil Engineering (19)	5.
Fuels and Iron.		Steel, Copper, Gold,	etc.	Truss Stresses.	
Mine Engineering (4)	5.	Metallurgy (6)	5.	Metallurgy (3)	5.
Mine Surveying.		Assaying.	1.251/1	Deter. Mineralogy.	311
Rhetoric (3)	2.	Rhetoric (3)	2.	Rhetoric (3)	2.
Advanced.		Advanced.		Advanced.	100
		FOURTH YEAR			
Elec. Engineering.		Elec. Engineering.		Mech. Engineering (3)	5.
Lectures (6)	2.	Lectures (6)	2.	Plans and Specificati	
Laboratory (7)	2.	Laboratory (7)	2.		
Geology (5)	5.	Geology (6)	3.	Mine Engineering (6)	5.
General.		Economic.		Plans and Specificati	ons.
Mine Engineering (5)		Metallurgy (7)	3.	Mine Engineering (5)	5.
Mine Engineering		Metal. Construction.		Mine Engineering.	1 -4
Metallurgy (8)	2.	Mine Engineering (5)	- 5.	Drawing (7)	2.
Ore Dressing.		Mine Engineering. Geology (7)	2.	Photography.	
		Petrography.			

## THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of such study must lie within the field of Metallurgy or of Mine Engineering. The subject must be

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announced to the President of the University (dependent upon the written approval of the head of the department) not later than the beginning of the second term of the fourth year; and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

## COURSE IN MECHANICAL ENGINEERING

This Course has for its object the qualifying of men for the mechanical engineering profession. It aims to embrace preparation for such lines of pursuit as the successful management of machinery in manufacturing establishments; the superintendence of construction; the designing and laying out of machinery plants for mills and factories; the construction of machines for particular purposes, and the designing and drawing of the same, the making of calculations respecting strength, shocks, proportion, endurance, and suitability of material for specific purposes.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

## FIRST YEAR

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	Credit		Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Drawing (1)	2.	Drawing (1)	2.	Drawing (2)	3.
Freehand.		Freehand.		Lettering.	
French (1)	1	French (1)	1	French (1)	1
Or (1)	4.	Or (1)	14.	or (1)	4.
German (1)		German (1)		German (1)	1
Chemistry (7)	5.	Chemistry (7)	5.	Shopwork (7)	4
Inorganic.		Inorganic.		Carpentry and Pa	attern
** * * * * * * * * * * * * * * * * * * *	71 1000	** * * * * * * * *		Making.	
Mathematics (14)	б.	Mathematics (15), (1		Mechanics (17)	Б.
Plane Trigonomet		Trigonometry, A	1000	Plane Analytics.	
Rhetoric (5)	21/2.	Rhetoric (5)	21/2.	Rhetoric (5)	21/2.
Paragraph Writing	g.	Theme Writing.		Prose Analysis.	
Cadet Service.		Cadet Service.		Cadet Service.	
		SECOND YE	EAR		
Drawing (3)	3.	Drawing (3)	3.	Drawing (3)	3.
Projections.		Descr. Geometry		Shades & Shado	
Mathematics (18)	5.	Mathematics (19)	5.	Mathematics (20)	5.
Space Analytics.	0.	Calculus.		Calculus.	0.
Physics (2)	3.	Physics (2)	3.	Physics (2)	3,
Mechanics and H		Electricity & Ma		Sound and Ligh	
Shopwork (11)	3.	Physics (7)	2.	Physics (7)	3.
Forging.	0.	Laboratory.		Laboratory.	0.
Rhetoric (3)	2	Rhetoric (3)	2.	Rhetoric (3)	2.
Advanced.	-	Advanced.	2-	Advanced.	2.
Shopwork (3)	2.	Shopwork (4)	3.	Shopwork (13)	3.
Foundry.		Chipping and Fi		Machine Work.	0.
Cadet Service.		Cadet Service.	ning.		
Cadet Service.		Cader Service.		Cadet Service.	
		VOLUNTAR	Y		
French (8)	2.	or German (2)	2.	or Rhetoric (4)	2.
		Each for the year	ir.		

## THIRD YEAR

Credit	Credit	Credit
FIRST TERM hours	SECOND TERM hours	THIRD TERM hours
Drawing (5) 3.	Mech. Engineering (6) 5.	Drawing (7) 2.
Technical.	Mechanics.	Photography.
Mathematics (11) 1.	Mech. Engineering (22) 3.	Civil Engineering (19) 5.
Differential Equations.	Timber and Masonry.	Truss Stresses.
Mech. Engineering (6) 5.	Mech. Engineering (3) 5.	Mech. Engineering (7) 5.
Mechanics.	Mechanism.	Strength Materials.
Metallurgy (4) 5.	Metallurgy (4) 2.	
Fuels and Iron.	Steel.	
Shopwork (14) 3.	Shopwork (15) 4.	Mech. Engineering (3) 2.
Machine Work.	Advanced Machine	Mechanism.
Mech. Engineering (12) 2.	Work.	Mech. Engineering (32) 5.
Laboratory.		Power Plants.
	FOURTH YEAR	
Elec. Engineering.	Elec. Engineering.	Industrial Arts (5) 3.
Lectures (6) 2.	Lectures (6) 2.	Shop Appliances.
Laboratory (7) 2.	Laboratory (7) 2.	
Mech. Engineering (27) 5.		Mech. Engineering (19) 5
Laboratory.		Machine Design.
Mech. Engineering (33) 5.	Mech. Engineering (34) 5.	Mech. Engineering (15) 3.
Engines & Boilers.	Thermodynamics.	Laboratory.
	Mech. Engineering (14) 4.	Mech. Engineering (31) 3.
	Laboratory.	Hydraulic Mach.
Mech. Engineering (18) 5.	Mech. Engineering (18) 5.	Mech. Engineering (21) 5.
Mach. Design.	Mach. Design.	Thesis Work.

#### THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of such study must lie within the field of Mechanical Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

## COURSE IN ELECTRICAL ENGINEERING

The object of this Course is to prepare students for the various pursuits in which the applications of electricity are prominent. Physics, especially theoretical and applied electricity, and mechanical engineering are naturally the leading subjects of the Course. General theory is treated in ample breadth, and is tested by experiments in well equipped laboratories. The laboratories are so conducted as to afford the student a degree of facility in the use of instruments and machinery only acquired by continued practice.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

	FIRST YEA	IR		
redit		Credit		Credit
iours	SECOND TERM	hours	THIRD TERM	hours
2.	Drawing (1)	2.	Drawing (2)	3.
	Freehand.		Lettering.	
1	French (1)	1	French (1)	7
. 14.	or	14.	or	14.
)	German (1)		German (1)	1
5.	Chemistry (7)	5.	Shopwork (7)	4
	Inorganic.		Carpentry & Pat	tern
			Making.	
5.	Mathematics (15), (	16) 2, 3.	Mathematics (17)	5.
	Trigonometry, A	Algebra.	Plane Analytics.	
21/2.	Rhetoric (5)	21/2.	Rhetoric (5)	21/2-
	Theme Writing.		Prose Analysis.	
	Cadet Service.	100	Cadet Service.	
	2. 2. 3. 5. 5.	redit fours  2. Drawing (1) Freehand. French (1) or German (1) 5. Chemistry (7) Inorganic.  5. Mathematics (15), ( Trigonometry, A Rhetoric (5) Theme Writing.	SECOND TERM hours 2. Drawing (1) 2. Freehand. French (1) or German (1) 5. Chemistry (7) 5. Inorganic.  5. Mathematics (15), (16) 2, 3. Trigonometry, Algebra. Rhetoric (5) Theme Writing.	redit Credit Credit Cours SECOND TERM hours 2. Drawing (1) 2. Drawing (2) Lettering. Freehand.  French (1) or German (1) 5. Chemistry (7) 5. Shopwork (7) Carpentry & Pat Making.  Mathematics (15), (16) 2, 3. Trigonometry, Algebra.  2½. Rhetoric (5) 2½. Rhetoric (5) Prose Analysis.

## SECOND YEAR

		DILCOIT III			2374
W	Credit	C	Credit		redit
FIRST TERM	hours	SECOND TERM	hours		ours-
Drawing (8)	3.	Drawing (3)	3.	Drawing (3)	3.
Projections.		Descriptive Geome		Shade & Shadows.	14
Mathematics (18)	5.	Mathematics (19)	5.	Mathematics (20)	5
Space Analytics.		Calculus.		Calculus.	
Physics (2)	3.	Physics (2)	3.	Physics (2)	3.
Mechanics, Heat.		Electricity, Magne		Light, Sound.	
Physics (3)	2.	Physics (3)	2.	Physics (3)	2.
Problems.		Problems.		Problems.	
Shopwork (11)	2			Physics (5)	4
Forging.		71 1 (0)		Laboratory.	
Rhetoric (3)	2.	Rhetoric (3)	2,	Rhetoric (3)	2.
Advanced.		Advanced.		Advanced.	
Shopwork (4) Chipping and Fili	2.	Shopwork (13) Machine Work.	3.		
Cadet Service.		Cadet Service.		Cadet Service.	
		VOLUNTARY			
T - 1 (0)		- C (a)		- Distante (A)	
French (3)	2	or German (2)	2.	or Rhetoric (4)	2
		Each for the year,			
		muunn unu			
		THIRD YEAR	K		
Drawing (5)	3.	Mech. Engineering (3	5.	Industrial Arts (7)	3
Technical.		Mechanism.		Machine Design.	
Mech. Engineering (	(6) 5.	Mech. Engineering (6	5) 5.	Mech. Engineering (28)	2.
Mechanics.		Mechanics.		Laboratory.	
Physics (6)	3.	Physics (6)	5.	Mech. Engineering (7)	5.
Laboratory.		Laboratory.		Strength Materials.	
Physics (4)	3.	Elec. Engineering (8)	4.	Mech. Engineering (32)	5.
Electricity & Mag	gnetism.	D. C. Machine.		Power Plants.	
Shopwork (14)	3.			Elec. Engineering (9)	4
Machine Work.				Laboratory.	
		FOURTH YEA	AR		
Elec. Engineering (	10) 3.	Elec. Engineering (1	0) 3.	Elec. Engineering (13)	5
Alt. Current. Ma		Alt. Current Mac		Applications.	D
Elec. Engineering (		Elec. Engineering (1		Elec. Engineering (14)	
Laboratory.		Designing.	.,	Designing.	4.
Mech. Engineering	(4) 5.	Elec. Engineering (1	1) 3.	Elec. Engineering (4)	5.
Laboratory.		Laboratory.	, ,,	Laboratory and The	
Mech. Engineering	(8) 5.	Elec. Engineering (	)) 5.	and the	
Engines & Boile		Transmission.			
*Elective	3-5.	*Elective	3-5.	*Elective	3-5.
	111111111111111111111111111111111111111				-

## THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the result of a special study. The subject of such study must lie within the field of Electrical Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the Department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

## COURSE IN CERAMICS

This course is designed to create a class of engineers who shall be fitted to render to the Clay, Glass and Cement Industries the same kind of services which

<sup>\*</sup> Subject to the approval of the Professor of Electrical Engineering.

have long been rendered to Mining and Metallurgical Industries by graduates of Schools of Mines.

The problems of the Ceramic Industries are not unlike those of the Mining Industries, either in kind or in adaptation to methods of technical control; but the information and scientific equipment necessary to solve these problems successfully are peculiar to those industries alone, and in the past have received little or no attention from technical schools in this country.

This course is offered with the hope of filling this long standing gap in the scheme of engineering education in this country. It is essentially an Engineering Course, following closely the lines of the other engineering courses, up to the end of the second year. In the last two years, the training specializes along the lines of Ceramic and of the application of Chemistry to this subject.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

of Courses.					
		FIRST YEA	R		
Cr	edit		Credit	(	Credit
FIRST TERM ho	ours	SECOND TERM	hours	THIRD TERM	hours
Drawing (1)	2.	Drawing (1)	2.	Drawing (2)	3.
Freehand.		Freehand.		Lettering.	
Chemistry (7)	5.	Chemistry (7)	5.	Shopwork (7)	4.
Inorganic.		Inorganic.		Carpentering & Patt Making.	tern
German (1) or (4)	4.	German (1) or (4)	4.	German (1)	1
				or	F4.
				French (1)	J
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (1 Trigonometry, A		Mathematics (17) Plane Analytics.	5.
Rhetoric (5)	21/2.	Rhetoric (5)	21/2.	Rhetoric (5)	21/2.
Paragraph Writing.		Theme Writing.		Prose Analysis.	
Cadet Service.		Cadet Service.		Cadet Service.	
		SECOND YE	EAR		
Ceramics (1)	5.	Ceramics (2)	5.	Ceramics (3)	5.
Laboratory.	17.	Laboratory.	-	Laboratory.	
Drawing (8)	3.	Drawing (3)	3.	Drawing (3)	3.
Projections.		Descriptive Geor		Shades, Shadows.	
Mathematics (18)	5.	Mathematics (19)	6.	Mathematics (20)	5.
Space Analytics.		Calculus.		Calculus.	
Physics (2)	3.	Physics (2)	3.	Physics (2)	3.
Mechanics and Heat.		Electricity & Ma	gnetism.	Light and Sound.	
Physics (3)	2.	Physics (3)	2.	Physics (3)	2.
Problems.		Problems.		Problems.	
Cadet Service.		Cadet Service.		Cadet Service.	
		VOLUNTAR	Y		
French (8)	2.	or German (2) Each through the	2. e year.	or Rhetoric (4)	2.
		THIRD YE	AR		
Ceramics (4)	4.	Ceramics (5)	5.	Ceramics (6)	5.
General Principles.		Bricks.		Pottery.	
Mine Engineering (4)	5.	Ceramics (7)	5.	Metallurgy (2)	3.
Mine Surveying.		Advanced Chem Laboratory		Minerology.	
Mech. Engineering (6)	5.	Mech. Engineering		Mech. Engineering (7)	5.
Mechanics.		Mechanics.		Strength Materials.	1
Rhetoric (3)	2.	Rhetoric (3)	2.	Rhetoric (3)	2.
Advanced.		Advanced.		Advanced.	
				Shopwork (11)	3.
				92 contain	

Forging.

#### FOURTH YEAR

	Credit		Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Ceramics (9)	5.	Ceramics (10)	5.	Ceramics (11)	5.
Manufacture of B	odies.	Glasses and Glaz	es.	Enamels and Co	lors.
Shopwork (4)	3.	Ceramics (12)	5.	Ceramics (15)	5.
Chipping and Fil	ing.	Cement.		Thesis Work.	
Geology (5)	Б.	Ceramics (17)	4.	Ceramics (14)	5.
General.		Ceramic Construc	ction.	Reports.	
Metallurgy (4)	5.	Geology (6)	3.	Drawing (7)	2.
Fuels and Iron.		Economic.		Photography.	1

#### THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of Ceramic Engineering. The subject must be announced to the President of the University (dependent upon the approval of the head of the Department), not later than the beginning of the second term of the fourth year; and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

## COURSE IN INDUSTRIAL ARTS

This course is designed to furnish a strong basis for those wishing to become teachers of Manual Training, and for those intending to enter the various branches of manufacture and industry, not as engineers, but as practical managers, superintendents or business men. The required part of the course combines with a general science training a large amount of drawing and shop work, in which the underlying principles and methods employed in various branches of industry are dwelt on. Large liberty of election of studies is allowed the student. His election, properly exercised, together with the required work will equip the student for a wide range of occupations along the lines stated. The aim of the course is educational as well as professional, the training of the mind and hand together.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

## FIRST YEAR

	Credit		Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Drawing (1)	2.	Drawing (1)	2.	Drawing (2)	3.
Freehand.		Freehand.		Lettering.	
Chemistry (7)	5.	Chemistry (7)	5.	Chemistry (2)	5.
Inorganic.		Inorganic.		Qualitative Analy	sis.
Mathematics (14)	5.	Mathematics (15), (1	6) 2, 3.	Mathematics (17)	5.
Plane Trigonome	try.	Trigonometry, Al	gebra.	Plane Analytics.	
Rhetoric (5)	21/2.	Rhetoric (5)	21/2.	Rhetoric (5)	21/2.
Paragraph Writin	g.	Theme Writing.		Prose Analysis.	
German (1)	4.	German (1)	4.	German (1)	4.
Cadet Service.		Cadet Service.		Cadet Service.	

## SECOND YEAR

		SECOND TEAR			
Cree	lit	Cre	dit	Cree	dit
FIRST TERM hou	irs	SECOND TERM hou	ITS	THIRD TERM hou	irs
Drawing (3)	3.	Drawing (3)	3.	Drawing (3)	3.
Projections.		Descriptive Geom.		Shades, Shadows.	
Physics (2)	3.	Physics (2)	3.	Physics (2)	3.
Mechanics, Heat.		Electricity, Magnetism	la	Light, Sound.	
Physics (3)	2.	Physics (3)	2.	Physics (3)	2.
Problems.		Problems.		Problems.	
Shopwork (7)	3.	Shopwork (9)	3.	Shopwork (8)	3.
Woodwork.		Adv. Pattern Making.		Cabinet Work.	
Shopwork (3)	3.	Shopwork (11)	3.	Shopwork (12)	3.
Foundry.		Forging.		Adv. Forging.	
Rhetoric (3)	2.	Rhetoric (3)	2.	Rhetoric (3)	2.
Advanced.		Advanced.		Advanced.	
Economics (51)	4.	Economics (51 and 56).		Economics (56)	2
Elementary.				Ind. and Soc. Ref.	
Military Drill.		Military Drill.		Military Drill.	
		THIRD YEAR			
		THE THE			
Drawing (5)	3.	Industrial Arts (2)	3.	Industrial Arts (2)	3.
Technical.		Designing.		Designing.	
Industrial Arts (1)	3.	Industrial Arts (1)	3.	Industrial Arts (1)	3.
Tools and Machines.		Tools and Machines,		Tools and Machines.	
Shopwork (4)	3.	Shopwork (13)	3.	Shopwork (14)	3.
Chipping and Filing.		Machine Work.		Machine Work.	
Metallurgy (4)	5.	Metallurgy (4)	2.	Civil Engineering (21)	3,
Fuels and Iron.		Steel.		Surveying.	
Economics (65)	2.	Economics (65).		Economics (58 or 66)	2.
Commercial Geog.		History (56).		History (56)	4.
Economics (55 or 57)	2.	Economics (55 or 57).		U. S. Political.	
		Economics (58 or 66).	-		
		Mech. Engineering (22)	3.		
		Timber and Masonry.			
		FOURTH YEAR			
Shopwork (15)	3.	Shopwork (16)	3.	Shopwork (17)	6.
Adv. Mach. Work.		Adv. Mach. Work.		Adv. Mach. Work.	
Political Science (53)	3.	Political Science (53).			
Polit. Inst. of U. S.		Polit Inst. of U. S.			
Elec. Engineering (6)	2.	Elec. Engineering (6)	2.	Mech. Engineering (32)	5.
Lectures.		Lectures.		Power Plants.	
Elec. Engineering (7)	2.	Elec. Engineering (7)	2.		
Laboratory.	4	Laboratory.	0		
Industrial Arts (3)	3.	Industrial Arts (3)	3.	Industrial Arts (3)	3.
Shop Equipment.	1	Shop Appliances.		Shop Management.	
Industrial Arts (4)	3.	Industrial Arts (4)	3.	Industrial Arts (4)	3.
Adv. Designing.		Adv. Designing.		Adv. Designing.	11
Mech. Engineering (28)	2	Mech. Engineering (29)	2.	Mech. Engineering (30)	2.
Laboratory.		Laboratory.		Laboratory.	
		Thesis.		Thesis	3.

#### THESIS

As a requisite for graduation, each candidate must present an acceptable thesis embodying the results of a special study. The subject of such study must lie within the field of Industrial Arts. The subject must be announced to the President of the University (dependent upon the written approval of the head of the Department), not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

8.

## COURSE IN CHEMISTRY

The object of this Course is to prepare students for work in Industrial Chemistry or Metallurgical Chemistry, according to electives chosen. With proper electives it will also be found a desirable course for students expecting to become general analytical chemists.

The electives are subject to the approval of the head of the department of Chemistry, or of Metallurgy and Mineralogy for students in Metallurgical Chemistry.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

	FIRST YEAR	
Credit	Credit	Credit
FIRST TERM hours	SECOND TERM hours	THIRD TERM hours
Drawing (1) 2.	Drawing (1) 2.	Drawing (2) 3.
Freehand,	Freehand.	Lettering.
Chemistry (7) 5.	Chemistry (7) 5.	Chemistry (12) 5.
Inorganic.	Inorganic.	Qualitative Analysis.
German (1) or (4) 4.	German (1) or (4) 4.	German (1) or (4) 4.
Mathematics (14) 5.	Mathematics (15), (16) 5.	Mathematics (17) 5.
Plane Trigonometry.	Trigonometry, Algebra.	Plane Analytics.
Rhetoric (5) 21/2.	Rhetoric (5) 21/2.	Rhetoric (5) 21/2.
Paragraph Writing.	Theme Writing.	Prose Analysis.
Cadet Service.	Cadet Service.	Cadet Service.
	ancoun unun	
	SECOND YEAR	
Chemistry (20) 4.	Chemistry (20) 4.	Chemistry (20) 4.
Quantitative.	Quantitative.	Quantitative.
Chemistry (21) 2.	Chemistry (21) 2.	Chemistry (21) 2.
Physical Chemistry.	Physical Chemistry.	Physical Chemistry.
German (5) 4.	German (5) 4.	German (5) 4.
Scientific Reading.	Scientific Reading.	Scientific Reading.
Physics (2) 3.	Physics (2) 3.	Physics (2) 3.
Mechanics and Heat.	Electricity & Magnetism.	Sound and Light.
Shopwork (7) 3.	Shopwork (11) 3.	Metallurgy (2) 3.
Woodwork.	Forging.	Mineralogy.
Cadet Service.	Cadet Service.	Cadet Service.

Electives three to five hours throughout the year.

The following are suggested: Mathematics (18, 19, 20), 5 hours; Drawing (3), 3 hours; Physiology (3) 3 hours; History (5), 4 hours; Economics (1), 4 hours.

## THIRD YEAR

Chemistry (8) Organic.	5.	Chemistry (9) Organic.	5.	Chemistry (9) Organic.	5.
Metallurgy (5)	5,	Metallurgy (6)	5.	Metallurgy (5)	5.
Laboratory. Rhetoric (3)	. 2.	Assaying. Rhetoric (3)	2.	Laboratory. Rhetoric (3)	2.
Advanced.		Advanced.		Advanced.	

Electives five to eight hours throughout the year.

The following are suggested: Physical Laboratory, 3 to 5 hours; Geology, 5 hours—or Geology and Determinative Mineralogy, 5 hours; Shopwork, 3 hours.

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Chemistry (17)	4.	Metallurgy (4)	5.	Chemistry (15)	
Inorganic Preparati	ons.	General.		Sanitary.	
Metallurgy (4)	5.	Chemistry (16)	3.	Ceramics (16)	
Fuels and Iron.		Appned.		Applied.	
		Physiology (8)	2.		
		Bacteriology.			

Electives to make the total work equal sixteen or eighteen hours, including Thesis work.

Students in Metallurgical Chemistry will take Ore Dressing the first term. and Metallurgy (4) 5, through the second term. For such students Chemistry (14, 15, 16) and Physiology (8) will not be compulsory.

#### THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of the study must lie within the field of Chemistry or Metallurgy. The subject must be announced to the President of the University (dependent upon the approval of the head of the department), not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

## COURSE IN ARCHITECTURE

This Course was established in 1896, to meet a growing demand for special training along this line. The extremely rapid developments, in late years, of novel methods of construction, the constantly extending list of materials used, and the creation of types of building entirely without precedent in the history of architecture, render it not only desirable, but imperative, that a large class of thoroughly trained and equipped men shall be brought forward, if this progress is to be maintained.

The employment in architecture of so many young men trained in other branches of engineering seems to prove the urgent need of those whose training is directed expressly to this end.

The Course offered gives a good training in mathematics, physics and mechanics, which are fundamental, together with a thorough drill in drawing, designing, shopwork, and the more technical branches of architecture proper.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

		FIRST YEAR			
	Credit		Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Drawing (1)	3.	Drawing (1)	3,	Mathematics (17)	5
Freehand.		Freehand.		Plane Analytics.	
Chemistry (7)	5.	Chemistry (7)	5.	Metallurgy (2)	3.
Inorganic.		Inorganic.		Mineralogy.	
Mathematics (14)	5.	Mathematics (15), (16)	2, 3,	Modern Language	4.
Plane Trigonome	try.	Trigonometry, Alg	ebra.	French or German	n.
Rhetoric (5)	21/2.	Rhetoric (5)	21/2.	Rhetoric (5)	21/2-
Paragraph Writin	ig.	Theme Writing.		Prose Analysis.	
Modern Language	4.	Modern Language	4.	Drawing (2)	3
French or Germa	in.	French or German	n.	Lettering.	
Cadet Service.		Cadet Service.		Cadet. Service.	
		SECOND YEA	AR		
Drawing (3)	3.	Drawing (3)	5.	Drawing (3)	5.
Projections.		Descriptive Geom.		Shades, Shadows.	
Mathematics (18)	5.	Mathematics (19)	5.	Mathematics (20)	5.
Space Analytics.		Calculus.		Calculus.	
Physics (2)	8.	Physics (2)	3.	Physics (2)	3.
Mechanics, Heat		Electricity, Magne	tism.	Light, Sound.	
Architecture (9)	3.	Architecture (10)	3,	Architecture (11)	3.
History of Archi	tecture.	History of Archite	ecture.	History of Archite	ecture.
Architecture (12)	2	Architecture (18)	2.	Architecture (14)	2.
Detail Drawing.		Detail Drawing.		Detail Drawing.	
Drawing (14)	2.				
Pen Drawing.					
Cadet Service.		Cadet Service.		Cadet Service.	

## THIRD YEAR

Cre	edit	Cre	dit	Cre	edit
FIRST TERM ho	urs	SECOND TERM hou	ırs	and the second s	urs
Mech. Engineering (6)	5.	Mech. Engineering (6)	5.	Mech. Engineering (7)	5.
Mechanics.		Mechanics.		Strength Materials.	
Architecture (15)	4.	Architecture (16)	2.	Architecture (17)	4.
Designing.		Designing.		Designing.	
Drawing (7)	2.	Drawing (12)	2	Drawing (12)	2
Photography.		Clay Modeling.		Clay Modeling.	-
Elec. Engineering (6)	2	Elec. Engineering (6 & 7)	4.	and and and	
Lectures.		Lectures and Lab.			
Architecture (5)	3.	Civil Engineering (6)	4.	Civil Engineering (19)	5.
Decorations, etc.		Stereotomy,		Trusses.	
Rhetoric (3)	2.	Rhetoric (3)	2.	Rhetoric (3)	2.
				7	
		FOURTH YEAR			
		POURTH TEAR			
Architecture (18)	4.	Architecture (4)	2.	Architecture (6)	4.
Designing.		Specifications.		Estimates and Supt.	
Civil Engineering (15)	5.	Architecture (7)	5.	Architecture (19)	4.
Masonry.		Heating, Vent., etc.		Designing.	
Mech. Engineering (23)	4.	Architecture (8)	5.	Architecture (20)	5.
Materials of Const.		Designing.		Thesis.	
Geology (5)	5.	Geology (6)	8.	Civil Engineering (21)	3.
General.		Economic.		Surveying.	
		Drawing (18)	3.	Drawing (19)	2.
		Color Work.		Color work.	

#### THESIS

At the beginning of the fourth year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

# REQUIREMENTS FOR ADMISSION TO THE SHORT COURSES IN MINING, IN CLAY-WORKING AND CERAMICS, AND IN INDUSTRIAL ARTS

Applicants must not be less than sixteen years of age; and unless they are over twenty-one years of age must pass an examination in Arithmetic, Geography, Grammar and Orthography, or bring High School or other certificates for these branches.

Applicants who are over twenty-one years of age are admitted without examination.

## SHORT COURSE IN MINING

The Short Course in Mining is especially designed for young men who have had a practical experience in mines, and wish to study Mine Surveying, Drafting, the problems of Ventilation, Drainage, Haulage, Mine Operating, etc., and also something of the sciences bearing upon their work, but have neither the time nor the preparation for a full college course. The first year is devoted to a thorough study of the elementary mathematics and sciences necessary to prepare the student for the practical work of the second year. The experience of the past eight years

has shown beyond any doubt that any enterprising young miner can master the subject sufficiently well in the time assigned to materially increase his earning capacity and chances for promotion in his occupation.

Personal instruction is given, and it is made thoroughly practical and of such a character as to best adapt it to the needs of the individual student.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

		FIRST YEA	R		
	Credit		Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.
Mathematics (3)	5.	Mathematics (13)	5.	Mathematics (14)	5.
Plane Geometry.		Geometry.		Trigonometry.	
Physics (1)	5.	Physics (1)	5.	Geology (1)	5.
Elementary.		Elementary.		Physical Geography	
Cadet Service.		Cadet Service.		Cadet Service.	
		SECOND YE	AR		
Drawing (1)	2.	Drawing (4)	3.	Drawing (2)	2.
Freehand.		Draughting.		Lettering.	
Drawing (3)	8.	Geology (4)	5.	Metallurgy (9)	5.
Projections.		Elementary.		Mineral Chemistry.	
Chemistry (7)	5.	Chemistry (13)	3.	Mine Engineering (3)	5.
Inorganic.		Laboratory.		Mine Operating.	
Mine Engineering (1)	5.	Mine Engineering (	2) 5.	Shopwork (11)	8.
Mine Surveying.		Ventilation and I	Haulage.	Forging.	
Cadet Service.		Cadet Service.		Cadet Service.	

#### SHORT COURSE IN CLAY-WORKING AND CERAMICS

The two-year or Industrial Course is designed to assist young men who have already been actively engaged in the Ceramic industries, and who, on account of mature years, or lack of means, or lack of previous educational advantages, are unable to avail themselves of the full and complete course, and yet who wish to increase their earning power or chances of promotion by fitting themselves for other than routine labor. The requirements for admission to this course are very low, and the work required throughout is much less severe than that of the four-year course; in fact, anyone who is willing to really apply himself, can retain his membership in this class, but there is no place for any but those who are thoroughly in earnest, and poor work will not be accepted from those who are able to do good work.

In short, in this Industrial Course, the department recognizes its closest medium of communication with the wants of the clay industries, and it is intended to so maintain this course as always to render the greatest good to the greatest number.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

		FIRST YEA	R		
	Credit		Credit		Credit
FIRST TERM	hours	SECOND TERM	hours	THIRD TERM	hours
Chemistry (7)	5.	Chemistry (7)	5.	Chemistry (12)	5.
Inorganic.		Inorganic.		Analytical.	
Physics (1)	5.	Physics (1)	5.	Geology (1)	5.
Elementary.		Elementary.		Physical Geograp	hy.
Mathematics (1)	5.	Mathematics (3a)	5.	Shopwork (11)	3.
Algebra.		Geometry.		Forging.	
				Shopwork (4) Chipping and Fi	ling.
Cadet Service.		Cadet Service.		Cadet Service.	

## SECOND YEAR

Credit		Credit		Credit
FIRST TERM hours	SECOND TERM	hours	THIRD TERM	hours
Ceramics (1) 5.	Ceramics (2)	5.	Ceramics (3)	5.
Chemical Analysis.	Analysis of Clays.		Analysis of Glaz	es.
Ceramics (4) 5.	Ceramics (5)	5.	Ceramics (6)	6.
General Principles.	Bricks.		Pottery.	
Geology (2) 5.	Geology (6)	3.	Drawing (11)	5.
General.	Economic.		Mechanical.	
	Drawing (1)	2.		
	Freehand.			
Cadet Service.	Cadet Service.		Cadet Service.	

## SHORT COURSE IN INDUSTRIAL ARTS

This Course is primarily designed to extend the benefits of the same kind of training as that given in the four-year course in this subject to that class of young men who may be unable for any reason to undertake a course of four years' duration, but who aspire to become actively engaged in factory work. It has been the aim to give, in as condensed a form as possible, those studies which will most rapidly and easily be turned to practical account in manufacturing operations; such as drawing, shop work, use of machine, tools, etc., together with a grounding in the physics and mathematics which underlie these operations.

The Course will be found most valuable to young men already engaged in factory work, who find themselves limited from rising in their work on account of lack of technical education.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

#### FIRST YEAR

Credi	it	Cre	dit	(	Credit
FIRST TERM hour	s	SECOND TERM hot	ırs	THIRD TERM	hours
Drawing (1)	1.	Drawing (1)	1.	Drawing (1)	1.
Freehand.		Freehand.		Freehand.	
Drawing (8)	2.	Drawing (8)	2.	Drawing (2)	2.
Geometric.		Projections.		Lettering.	
Mathematics (2)	5.	Mathematics (2)	5.	Mathematics (2)	5.
Algebra.		Algebra.		Algebra.	
Mathematics (3)	5.	Mathematics (13)	5.	Mathematics (14)	5.
Plane Geometry.		Space Geometry.		Trigonometry.	
Shopwork (7)	3.	Shopwork (9)	3.	Shopwork (11)	3,
Carpentry & Pattern		Advanced Pattern		Forging.	
Making.		Making.			
Cadet Service.		Cadet Service.		Cadet Service.	
		SECOND YEAR			
		DECOME TEM			
Drawing (3)	3.	Drawing (3)	3.	Drawing (3)	3.
Projections.		Descriptive Geometry.		Shades, Shadows.	
Industrial Arts (1)	3.	Industrial Arts (1)	3.	Industrial Arts (1)	3.
Tools and Machines.		Tools and Machines.		Tools and Machine	s.
Physics (1)	5.	Physics (1)	5.	Geology (1)	5.
Elementary.		Elementary.		Physical Geography	
Shopwork (8), (4)	5.	Shopwork (13)	5.	Shopwork (15)	5.
Foundry and Chipping		Machine Work.		Advanced Machine	
and Filing.				Work.	
Cadet Service.		Cadet Service.		Cadet Service.	

## THE COLLEGE OF LAW

#### FOR ADMISSION

(Until September, 1901.)

The following are the requirements:

- 1. To the First Year—Applicants for admission to the First Year must present satisfactory evidence (by teacher's certificate—High School, Academy or College diploma—or by examination) of having a good common school education, including United States History, Civil Government and a thorough training in English Composition.
- The Second Year—In addition to the requirements for admission to the First Year, applicants for admission to the Second Year must present satisfactory evidence of having completed the work of the First Year or its equivalent.
- To the Third Year—In addition to the requirements for admission to the Second Year, applicants for admission to the Third Year must present satisfactory evidence of having completed the work of First and Second years, or its equivalent.

Students seeking a degree must, at the time of registration, present in addition to the requirements above mentioned satisfactory evidence of having completed a course of study, the minimum requirement of which is as follows:

Arithmetic, Civil Government, Geography, Grammar, History of the United States, Physical Geography, Physiology, Rhetoric, Physics, (Gage or an equivalent) Geometry, Algebra, (Wentworth's elements or an equivalent); and, in addition, the equivalent of 75 hours per week for one term of 12 weeks (a total of 900 hours) chosen from any five or more of the following subjects, one at least being a Science and two at least being in History or Political Science (unless the applicant is especially permitted to offer approved substitutes): Botany, Chemistry, English Constitutional History, English History, English Literature, French, Geology, General History, German, Greek, Latin, Logic, Physics, Political Economy, Psychology, Surveying, Trigonometry, United States Constitutional History; provided, that not less than 65 hours for twelve weeks (a total of 780 hours) of this work shall be of collegiate or university grade. If this last mentioned work has been done by the candidate in a College or University of good standing, certificates of such institution will be accepted. In all other cases the candidate is subject to examination on the work required from this last group. In general, in the absence of satisfactory certificates, opportunity will be given for examination in any subject required for admission as above indicated. Blanks for applications for degrees will be furfurnished on request.

## FOR ADMISSION

(On and after September, 1901.)

The following are the requirements:

- 1. Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.
- 2. English Composition and English Classics.—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, or equivalents: Shakespeare's Merchant of Venice, Iulius Caesar, and Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Conciliation with the Colonies; Macaulay's Essays on Milton and Addison; The Sir Roger de Coverly Papers in The Spectator; Goldsmith's The Vicar of

Wakefield; Coleridge's The Ancient Mariner; Scott's Ivanhoe; Carlyle's Essay on Burns; Tennyson's The Princess; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

To meet the English requirement the schools should provide courses in compositionpractice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recom-

mended that the memorizing of notable passages of prose and poetry be required.

3. Algebra-Taylor's Academic or equivalent.

4. Botany-Kellerman's Elementary Botany and Spring Flora

5. Civil Government-Fiske or Thorpe preferred.

- 6. Geometry, Plane and Solid-Venable, Wentworth or Wells.
- 7. History—Either Myers's General History (or equivalent); or, if the teacher's training and the school library will warrant, Greek and Roman History on the topical method. A circular concerning the topical method will be sent on application.
  - 8. Physics-Carhart and Chute, Gage, Avery, or Appleton.
- 9. Any two of the following languages, in the quantity indicated below. Latin, Greek, French or German, or any one of them and the group of subjects named under (e) below.
- (a) Latin—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the De Bello Gallico; Cicero, six orations, including Pro Lege Manilia; Vergil, the first six books of the Aeneid, with Prosody; Prose Composition, Daniell or Collar or Jones, entire.
- (b) Greek—Grammar (Goodwin's preferred) and Prose Composition; or the first 100 lessons of White's Beginner's Greek Book. Reading: The first four books of Xenophon's Anabasis. At least two years should be devoted to this work.
- (c) French—The whole subject of French Grammar. Applicants will be expected to read at sight easy French; and to translate correctly into French, simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (not the seventeenth) century should be included.
- (d) German—Joynes-Meissner's or Thomas's Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, i. e., declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax. The following books or their equivalents must have been read (not less than 600 pages). Joynes's or Whitney's Reader; Hillern's Höher als die Kirche; Riehl's Der Fluch der Schönheit; Freytag's Die Verlorne Handschrift, Gerstäcker Irrfahrten.

- (e) While the preferred requirement is that each candidate shall offer any two of the foregoing languages, he will be permitted to offer in place of one of the two the following group:
  - 1. Chemistry-Williams' or Remsen's.
  - 2. Physiology-Martin's (briefer course).
- 3. English Literature—Pancoast's Introduction to English Literature and an acquaintance with representative works in each period; or, English History, Montgomery.

In addition to the foregoing requirements for admission to the work of the College, each candidate for a degree must submit satisfactory evidence that he has successfully pursued a course of study equivalent to the first two years of any course leading to a degree in the College of Arts, Philosophy and Science, of this University. Where this work has been done in a college or university of approved standing, the certificate of said college or university will be accepted. In all other cases the candidate will be subject to examination in such work.

## COURSE IN LAW

## FIRST YEAR

FIRST SEMESTER Elementary Law (including Relations)			8 2
	_	_	
	15		15

#### TEXT-BOOKS

First Semester — Elementary Law (Robinson, Walker, Tenth Ed., and Blackstone).

Second Semester — Agency (Mechem); Contracts (Bishop); Criminal Law (Hawley); Sales (Tiedeman); Torts (Cooley).

SEC	COIN	DIEAR	
Bailments Commercial Law Evidence	5	Construction of Contracts Evidence	2
Pleading	4	Pleading Real Property Wills Moot Court	2 4 2
	15		15

#### TEXT-BOOKS

First Semester — Bailments (Hale); Commercial Law (Tiedeman); Evidence (Greenleaf, Sixteenth Ed.); Pleading (Phillips), and Kinkead's Selections.

Second Semester — Construction of Contracts (Jones); Partnership (Parsons); Real Property (Tiedeman); Wills (Page).

#### THIRD YEAR

TILL	ND IEAR
Circuit and Supreme Court Practice 1 Constitutional Law International Law	Corporations (Municipal) Naghigance of 8
Corporations (Private) 2 Corporations (Municipal) 2 Equity Jurisprudence 4	Mortgages 2
Probate Law	Moot Court 1

Thesis for graduation to count for two hours through second semester.

#### TEXT-BOOKS

First Semester — Constitutional Law (Black); Private Corporations (Taylor); Municipal Corporations (Tiedeman); Equity Jurisprudence; Probate Law (Whittaker's Probate Code).

Second Semester — Ethics (Sharswood); Trial Practice (Kinkead); Negligence of Municipal Corporations (Jones); Suretyship (Baylies).

## PURPOSE AND METHODS

It is the purpose of this College to furnish such legal training as will secure the most favorable judgment of the profession, and such as will fit students for practice in any part of the country.

The aim is to teach an accurate knowledge of the principles of the law, and to illustrate the application of these principles to the practical affairs of life—to teach students both to know and to apply the law. The instruction offered includes a Course containing three years of nine months each. It requires about fifteen hours of lecture and recitation work per week each year, and embraces all the elementary and practical studies necessary for admission to the Bar of any State administering the Common Law.

The methods of instruction combine the advantages of all approved systems and appliances—the text-book and recitation system, the lecture system, and the case system. Charts, outlines, analyses, essays, note-taking, oral and written lectures, reviews and examinations are used; and exercises are given in drafting contracts, abstracts, conveyances, wills, protests, mercantile contracts, pleadings, indictments, and other legal papers. Briefs, arguments in moot courts, etc., are required. Attention is given to the study and accurate analysis of leading cases.

#### GENERAL REGULATIONS

#### IRREGULAR STUDENTS

In special cases, students who have had part of the studies of the First Year and part of those of the Second Year, or part of those of the Second Year and part of those of the Third Year, may be examined on whatever subjects they may select and may take part of the studies of both years, if the Faculty is satisfied that the applicants can do so to advantage. If candidates for a degree, such applicants must meet all the other requirements and have all the other qualifications of those seeking a degree.

#### SPECIAL STUDENTS

Persons wishing a knowledge of legal principles for business purposes only, but not intending to apply for a degree or to take a full course, may be admitted at any time as special students, and may avail themselves of such advantages of the College as they may deem expedient. Their convenience will not be taken into consideration in arranging classes, and they must make satisfactory arrangements as to fees, hours of recitation, etc., with the Dean.

#### ENTRANCE EXAMINATIONS

Entrance examinations, except for those seeking a degree, will not be technical; the object being to ascertain the results of previous training and practical capacity to appreciate the technical study of the law.

#### APPLICATIONS FOR DEGREES

At the time of registration all applicants who seek degrees should present their diplomas and certificates of work done. These certificates should state in detail

the studies pursued, the text-books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the rank or standing of the candidate in it. A copy of the course of study must accompany the certificate in all cases, and must accompany it where equivalents are offered. These statements should also be accompanied by information as to age, occupation, experience, and work done since leaving school. Blanks for application will be furnished on request made to the Dean.

#### EXAMINATIONS

Examinations are held from time to time to test the student's knowledge of the work he has gone over. They are usually written, but sometimes oral.

#### THESIS

Each candidate for a degree is required to prepare and deposit with the Faculty, at least six weeks before the end of the year of graduation, a thesis of not less than fifteen hundred nor more than five thousand words, exclusive of citations of authorities, upon some subject selected by himself with the approval of the professor giving instruction in that division of law from which the subject is chosen.

#### DEGREES

The degree of Bachelor of Laws (LL. B.) will be conferred on all who, being at least twenty-one years of age and having met the requirements necessary for entrance for a degree, pass satisfactorily the examinations at the close of the Senior year, after having done at least the last year's work in the College of Law at the University, and having presented a thesis acceptable to the Faculty.

The degree of Master of Laws will be conferred upon any one who has received the degree of Bachelor of Laws at this University, or other approved University or College, upon completing the studies of the Graduate year, and satisfactorily passing an examination therein, and presenting a satisfactory thesis; the subject of which has been chosen from the field included in the Graduate year.

#### CERTIFICATES OF WORK DONE

Those who have completed the studies of the College, but have not complied with the requirements for a degree, will be given an official certificate, showing the work done, and signed by the President of the Board of Trustees, the President of the University, and the Dean of the College of Law.

#### ADMISSION TO THE BAR

The regular Supreme Court examination for the admission to the bar is held on the first Tuesday in June of each year. Seniors are required to take this examination before they can receive the degree or certificate above mentioned.

## COURSE OF INSTRUCTION

The Course of Study is three years of nine months, or thirty-six weeks, each; covering about fifteen hundred hours of work. It is so arranged that each class will have an average of three recitations a day, each one hour in length, thereby doing the same amount of work that is done in a regular University course.

## MOOT COURT

Second Year and Third Year students will have Moot Court, under the supervision of the Dean, throughout the year, not less than one hour each week. The object of Moot Court is to give practical insight into the conduct of trials, examination of witnesses, production of evidence, etc.

#### ADVANTAGES

#### LOCATION

Attention is called to Columbus as a place in which to study law. Here the Legislature meets. Here are the Supreme Court and Circuit Court; four branches of the Common Pleas Court, in almost daily session throughout the college year; the Probate Court, the County Commissioners, the City Court, the several Magistrates' Courts; also the U. S. Circuit and District Courts. All are easy of access from the College. "There is no place where law is learned so quickly and thoroughly as among the lawyers. No teaching is so effective as the object lessons of the trial of cases in court."

#### LIBRARIES

The following libraries are accessible to the students:

The Law Library of the College contains the Noble Law Library, the Emerson McMillin Law Library, the Critchfield Law Library, and three sets of the Ohio and the Ohio State Reports; about 3,000 well selected volumes.

The University Library contains 25,000 volumes of very carefully selected books upon all subjects. This is quite complete in the more recent standard works upon history and political science, philosophy, etc. A good collection of the leading scientific, technical and literary magazines and journals is to be found here.

The State Law Library, of about 35,000 volumes—the largest and most complete Law Library in the State. It contains complete sets of the English, Scotch, Irish, Canadian, United States, and State Reports, Statutes and Digests, as well as all the important text books and leading periodicals published. This library is located in the new State Supreme Court building. It is designed wholly for reference, and students are warned that they must not use the library rooms as a study room, and that the text books found here are to be used for reference only. No student is expected, nor will he be permitted, to use these books instead of providing himself with those required in the course.

The State Library, in the State House—a library of general literature, history, science, biography, political and social science, philosophy, etc., comprising some 65,000 volumes. The leading magazines, journals, etc., are also to be found here.

The University Libraries are open from 7:30 a. m. to 9:30 p. m. during the five days in which the University is in session, and on Saturdays from 8 a. m. to 4 p. m. The State Law Library is open six days in the week, from about 8:30 a. m. to 5:30 p. m., with the exception of about an hour or an hour and a half at noon. The State Library is open six days in the week from 9 a. m. to 12 m., and from 2 p. m. to 5 p. m.; and when the Legislature is in session, from 7 p. m. to 9 p. m.

The City Library, with 30,000 volumes and a fine reading room, may also be used by students, under reasonable restrictions.

#### THE UNIVERSITY COURSES

Attention is called to the great advantage of attending a law school in close and vital connection with the University affording the means of a liberal, practical and technical education. Students who are disposed to work faithfully may, at the same time that they are acquiring a technical knowledge of the law, supplement their general education by joining University classes, in departments which they may elect, subject to the requirements for admission to such departments, without extra charge except for laboratory work. Not alone from the courses in History and Political Science, or from those in Mental and Moral Philosophy, should this

work be selected, but also from the courses in Civil, Mine, Mechanical, and Electrical Engineering, from the courses in Anatomy and Physiology, Economic Geology, etc. To the average practitioner, there will come ten questions involving the principles of surveying or engineering to one of the constitutional law or English history. Not a day passes in the litigation of the courts but that numerous questions of anatomy, physiology, surveying or engineering arise and are to be decided. Particular attention, therefore, is called to the technical courses offered by the University, which will be open to those in the College of Law who are able to take them without interfering with the required law work. The following departments offer courses which will prove beneficial to those who have not had such training as would enable them to take more technical work: Botany, Physiology, Physics, Civil Engineering, Mine Engineering, Chemistry (Toxicology), Geology, Philosophy, History, English.

## EXPENSES

Each undergraduate student of the University is required to pay an incidental fee of fifteen dollars a year, and in this College a tuition fee of forty-five dollars; a total of thirty dollars for each semester, which is payable at the beginning of each semester.

Graduate students are required to pay a fee of thirty dollars for the year.

A fee of five dollars (to cover the expenses of graduation, diplomas, certificates, etc.,) is charged to all who receive the diploma or certificate, and a fee of ten dollars is charged to those taking the degree of Master of Laws. These fees must be paid before the degrees are conferred, or certificates delivered.

Good boarding and lodging, convenient to the University, can be obtained at from \$3.50 to \$5.00 per week.

The text-books used in this College can be obtained at the University at students' prices. The University has no pecuniary interest in these books or the sale of them, and they are permitted to be sold here merely for the convenience of the students.

The	books for the	first year.	 	 \$41 00
	the second ye			
For	the third year		 	 36 00
	Total for three	vears	 Trajec in colo	\$ 117 00

## THE COLLEGE OF PHARMACY

## FOR ADMISSION TO THE FOUR-YEAR COURSE'

The following are the requirements:

- Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.
- 2. English Composition and English Classics.—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, or equivalents: Shakespeare's Merchant of Venice, Iulius Caesar, and Macbeth; Milton's Lycidas, Comus L'Allegro, and Il Penseroso; Burke's Conciliation with the Colonies; Macaulay's Essays on Milton and Addison; The Sir Roger de Coverly Papers in The Spectator; Goldsmith's The Vicar of Wakefield; Coleridge's The Ancient Mariner; Scott's Ivanhoe; Carlyle's Essay on Burns; Tennyson's The Princess; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

To meet the English requirement the schools should provide courses in compositionpractice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of oll of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recom-

mended that the memorizing of notable passages of prose and poetry be required.

3. Algebra-Taylor's Academic or equivalent.

- 4. Botany-Kellerman's Elementary Botany and Spring Flora or equivalent.
- 5. Civil Government-Fiske or Thorpe preferred.

Or History-Myers's General History.

- 6. Geometry, Plane and Solid-Venable, White, Wentworth, or Wells.
- Latin—Pronunciation (the Roman Method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first three books of the De Bello Gallico.

Or German—Joynes-Meissner's or Thomas's Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, i. e., declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages.) Joynes's or Whitney's Reader; Hillern's Höher als die Kirche; Riehl's Der Fluch der Schöenheit; Freytag. Die Verlorne Handschrift; Gerstäcker Irrfahrten.

For the present, the German required for admission may be begun at the University, but without University credits.

8. Physics-Carhart and Chute, Gage, Avery, or Appleton.

## COURSE IN PHARMACY

Note—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

Degree: Bachelor of Science in Pharmacy

## FIRST YEAR

Cred	lit	Credit		Cre	edit
FIRST TERM hou	irs	SECOND TERM hours	5	THIRD TERM ho	urs-
Chemistry (7)	5.	Chemistry (7) 5.		Chemistry (12)	5.
Inorganic.		Inorganic.		Qualitative Analysis.	
Latin (1)	5.	Latin (1) 5.		Latin (1)	5
Pharmaceutical		Pharmaceutical		Pharmaceutical	
or		or		or	
German (1)	4.	German (1) 4.		German (1)	de.
Elementary,		Elementary.		Elementary.	
Mathematics (14)	5.	Mathematics (15), (16) 5.		Mathematics (17)	5
Plane Trigonometry.		Spherical Trigonometry,		Plane Analytics.	
Rhetoric (5) 2	1/2.	Algebra. Rhetoric (5) 21/2		Dhatesia (E)	23/2-
Paragraph Writing.	72-	Rhetoric (5) 2½ Theme Writing.		Rhetoric (5) Prose Analysis.	-72-
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical		Hygiene and Physical		Hygiene and Physical	
Training (women).		Training (women).		Training (women).	
Contract of the contract of th				The state of the s	
		SECOND YEAR			
Botany (6a)	5.	Botany (4) 2			
Systematic,		Medical.			
Physiological.					
Chemistry (20)	4.	Chemistry (20) 4		Chemistry (20)	4_
Laboratory.		Laboratory.		Laboratory.	
German (2)	2.		2	German (2)	2
Scientific Reading.		Scientific Reading.		Scientific Reading.	
Pharmacy (6)	3.	Pharmacy (7) 5	5.	Pharmacy (8)	5.
General Processes.		U. S. Pharmacopeia.		Dispensatories, etc.	
Physics (11)	3.	Physics (11)	3.	Physics (11)	3_
Mechanics and Heat.		Electricity & Magnetism	1.	Sound and Light.	
				Metallurgy (2)	3
Charles of the Control of the Contro		The state of the s		Mineralogy.	
Chemistry (21)	2.	Chemistry (21)	2.	Chemistry (21)	2
Advanced Inorganic		Advanced Inorganic		Advanced Inorganic	
and Physical.		and Physical.		and Physical.	
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	
Training (women).		Training (women).		training (women).	
		THIRD YEAR			
Pharmacy (0)				Pharman (11)	5.
Pharmacy (9) General Processes.	5.	Pharmacy (10) Prescriptions.	5.	Pharmacy (11) Dispensatories, etc.	100
Pharmacy (12)	3.		3.	Pharmacy (14)	3.
Materia Medica.	0.	Materia Medica.		Mat. Medica & The	-
Physiology (1)	3.		3.	Physiology (1)	3
Human Anatomy.	100	Physiology.		Physiology.	
General Chemistry (8)	5.		2.	Physiology (5)	2.
Organic.		Bacteriology.		Microscopy.	
		General Chemistry (9)	5.	General Chemistry (9)	5.
		Laboratory.		Laboratory.	
		POTENCE TO A		party with party in the party of	
		FOURTH YEAR	1114	of the state of the state of	
Geology (5)	5.	Geology (6)	3.	General Chemistry (11)	4.
General.		General.		Toxicology.	MAL
Pharmacy (15)	5.		5.	Pharmacy (17)	5,
Assaying.		General.		General.	
Thesis.		Thesis.	100	Thesis.	
	Chemis	stry elective for the year - f	ive ho	ours.	

Elective, three hours through the year.

#### THESIS

As a requisite for graduation, each candidate must present an acceptable thesis embodying the results of special study and research. The subject must be within the field of Pharmacy, and must be announced to the President of the University (dependent upon the written approval of the proper authorities) not later than the beginning of the second term of the fourth year of the Course. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

## SHORT COURSE IN PHARMACY

## FOR ADMISSION

Candidates for admission who are less than twenty-one years of age must be prepared in the common English branches. Teachers' certificates (in force), or credentials from approved schools, will be accepted in lieu of an examination.

## FIRST YEAR

	Credit		Credit	Crea	dit
FIRST TERM.	hours	SECOND TERM.	hours	THIRD TERM hot	irs
Chemistry (7)	5.	Chemistry (7)	5.	Botany (1)	5.
Inorganic.		Inorganic.		Elementary.	
Latin (1)	. 5.	Latin (1)	5.	Chemistry (12)	à.
Pharmaceutical.		Pharmaceutical.		Qualitative Analysis.	
Physics (1)	5.	Physics (1)	5.	Latin (1)	ă.
Elementary.		Elementary.		Pharmaceutical.	
Pharmacy (6)	3.	Pharmacy (7)	5.	Pharmacy (8)	5.
General Processes.		U. S. Pharmacope	ia.	Dispensatories, etc.	
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical		Hygiene and Physical	1	Hygiene and Physical	
Training (women)		Training (women).		Training (women).	
		SECOND YEA	AR		
-		71			
Botany (6a)	5.	Botany (4)	2.	Chemistry (11)	4,
Systematic, Phys.		Medical.	W TO LET	Toxicology.	
Chemistry (18)	5.	Chemistry (18), (19)	5.	Chemistry (19)	5.
Organic.		Organic.		Organic, Quantitative.	
Pharmacy (9)	5.	Pharmacy (10)	5.	Pharmacy (11)	5.
Phar. Chemistry.		Prescription Pract	ice.	Dispensing Practice.	
				Physiology (1)	3.
-				Physiology.	
Physiology (1)	3.	Physiology (1)	3.	Physiology (5)	2.
Human Anatomy.		Physiology.		Microscopy.	
		Physiology (8)	2.		
		Bacteriology.			
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physica		Hygiene and Physical		Hygiene and Physical	
Training (women)		Training (women)	4	Training (women).	

## COLLEGE OF VETERINARY MEDICINE

#### FOR ADMISSIONS

The following are the requirements:

- I. For applicants for certificates of Veterinary Surgeon: Arithmetic, Geography and Grammar.
- II. For applicants who intend to become candidates for the degree of Doctor of Veterinary Medicine:
  - 1. Arithmetic, Grammar, and Descriptive and Physical Geography.
- 2. English Composition and Rhetoric—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience; as "A description of my native town," "The most remarkable person I ever met," "My reasons for seeking a University education." The second essay will be upon a subject drawn from a list of classics which will be furnished on application.
  - 3. History-History of the United States, Johnson preferred.

4. Latin or German-One year.

- 5. Pyhsics-Gage, Carhart and Chute, Avery, or Appleton.
- 6. Botany-Kellerman's Elementary Botany and Spring Flora or equivalent.

## COURSE IN VETERINARY MEDICINE

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

## Degree: Doctor of Veterinary Medicine

#### FIRST YEAR Credit Credit Credit SECOND TERM. hours THIRD TERM. FIRST TERM. hours hours Agr'l Chemistry (1) Agr'l Chemistry (8) 5. Agr'l Chemistry (9) 5. Principles. Organic. Applications. 3. Physiology (1) Physiology (1) 3. Physiology (1) 3. Physiology. Physiology. Human Anatomy. 5. Physiology (4) Physiology (4) 5. Physiology (4) Histology. Histology. Phys. Chemistry. Veterinary Medicine (28) 5. Veterinary Medicine (28) 5. Veterinary Medicine (28) 5. Anatomy. Anatomy. Anatomy. Cadet Service. Cadet Service. SECOND YEAR

Agriculture (8)	4.	Agriculture (9)	4.	Agriculture (10)	4.
Breeds of Live Stock.		Stock Breeding.		Stock Feeding and Hygiene.	
Pharmacy (12) Materia Medica.	5.	Pharmacy (13) Materia Medica.	5.	Pharmacy (18) Laboratory.	5.
Veterinary Medicine (14) General Pathology.	4.	Veterinary Medicine Theory & Practice.	5.	Veterinary Medicine Theory & Practice.	5.
Veterinary Medicine Helminthology.	1.	Veterinary Medicine (18) Surgical Diseases.	5.	Veterinary Medicine (18) Surgical Diseases.	5.
Veterinary Medicine (19) Clinic.	12.	Veterinary Medicine (19) Clinic.	12.	Veterinary Medicine (19) Clinic.	12.
Veterinary Medicine (24)	5.				

<sup>&</sup>lt;sup>1</sup>An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up this work in the Columbus High Schools, which are fully accredited by the University.

Cadet Service.

Cadet Service.

## THIRD YEAR

Cred	lit	
FIRST TERM. hou	rs	SE
Veterinary Medicine	3.	Veterin
Theory & Practice.		The
Veterinary Medicine (19)	12.	Veterin
Clinic.		Pra
Veterinary Medicine (27)	4.	Veterin
Meat Inspection.		Cli
Veterinary Medicine (18)	5.	Physio
Surgical Diseases.		Bac
Veterinary Medicine (31)	3.	Veterin
Canine Diseases.		Ob
Veterinary Medicine	1.	Veterir
Milk Inspection.		Car
		Thesis

	Credit
SECOND TERM.	hours
Veterinary Medicine	(21) 3.
Theory & Practic	ce.
Veterinary Medicine	(25) 3.
Practice in Opera	ating.
Veterinary Medicine	(19) 12.
Clinic.	
Physiology (6)	3.
Bacteriology.	
Veterinary Medicine	(23) 3.
Obstetrics.	
Veterinary Medicine	(32) 3.
Canine Diseases.	

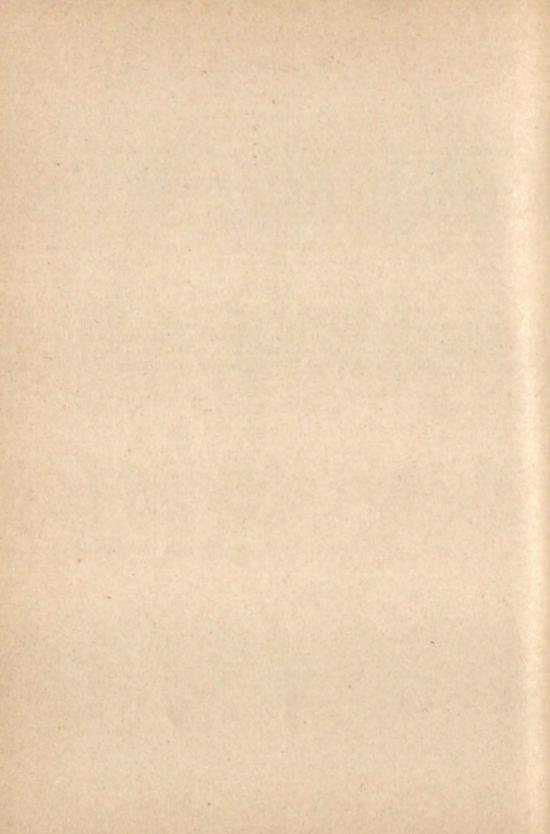
	Cre	dit
THIRD TERM.	ho	urs
Veterinary Medicine	(22)	5.
Therapeutics.		
Veterinary Medicine	(19)	12.
Clinic.		
Veterinary Medicine	(26)	5.
Horse Shoeing.		
Veterinary Medicine	(33)	2.
Opthalmology.		
Thesis		2

#### THESIS

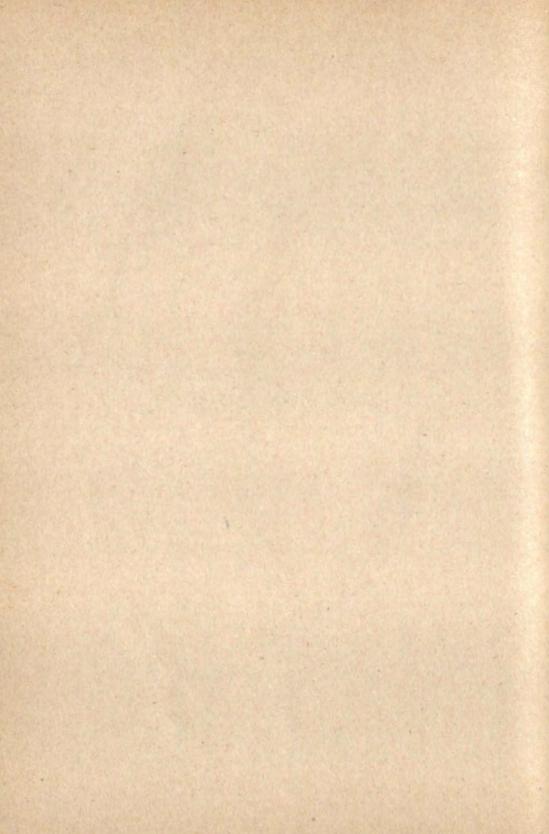
2

As a requisite for graduation candidates for the degree of D, V, M, must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the third year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

Candidates for a Certificate of Veterinary Surgeon are not required to present a thesis.







# The Departments

# 1900-1901

The subjects set forth under each Department limit and define the administrative authority and responsibility of the head of that Department.

## AGRICULTURE

# [TOWNSHEND HALL]

Professor Hunt, Associate Professor Gibbs, Assistant Professor Decker, Mr. Herrick, Mr. Ruhlen.

- 81. BREEDS OF LIVE STOCK. Lectures and recitations three times a week upon the history, characteristics, adaptation, care and management of the different breeds of domestic animals. Practicum once a week in scoring and judging live stock. First term.
- PRINCIPLES OF BREEDING. Lectures and recitations three times a week upon laws of heredity and their practical applications. Practicum once a week in scoring and judging live stock, and in writing and tracing pedigrees. Second term.
- 10. STOCK FEEDING AND HYGIENE. Lectures and recitations three times a week upon the laws of nutrition, the character of food stuffs, the relation of the food to the animals, and the kind and quantity of food to produce given effects. Practicum once a week in calculating digestibles, nutritive ratios and feeding standards. Third term.
- 11. FARM EQUIPMENT. Lectures and recitations three times a week upon selecting, planning and equipping farms; planning and erecting farm buildings and fences; building roads; farm vehicles and machinery; power, water and drainage. Practicum once a week in drawing plans of farms and farm buildings; leveling and laying drains; dynamometer tests of wagons and farm implements. First term.
- 12. SOILS. Lectures and recitations three times a week upon the origin, formation, kinds, and physical properties of soils, and their improvement by cultivation, fertilization, drainage, and irrigation. Practicum once a week in laboratory testing physical properties of several soils, determining the relation of soils to heat, moisture, air, and fertilizers, and making mechanical analysis. Second term.
- 13. FARM CROPS. Lectures and recitations three times a week upon the history, production, marketing, cultivation, and harvesting of farm crops. Practicum once a week with growing and dried specimens of farm crops, including grasses, clovers, and other forage crops. Third term.
- 14. ANIMAL MECHANICS AND EXTERIOR. Lectures and recitations three times a week upon animal mechanics, proportions, and the relation of the latter to specific uses. Practicum once a week in measuring animals and testing the value of given measurements for given purposes. First term.

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<sup>&</sup>lt;sup>1</sup> These numbers are "finding numbers," and do not necessarily indicate the sequence of topics.

- 15. BUTTER MAKING AND CHEESE MAKING. Recitations twice a week. Laboratory practice two half days each week in running separators, churning and working butter, making cheese, and testing and pasteurizing milk. Second term.
- 16. HISTORY OF AGRICULTURE AND RURAL ECONOMICS. Lectures and recitations upon the history of agriculture; present agricultural methods in various countries; cost and relative profits of various farm operations and systems. Four times a week. Third term.
  - DAIRY FARMING. Lectures twice a week upon breeds, and upon feeding, breeding and selecting dairy stock; equipment and management of dairy farms.
     Practicum once a week in scoring and judging live stock, writing pedigrees, and calculating feeding standards. Second term.
  - BUTTER MAKING AND CHEESE MAKING. Practice in running separators, churning and working butter, etc., making cheese and testing and pasteurizing milk. Four half days each week. Second term.
  - BUTTER MAKING AND CHEESE MAKING. Lectures and recitations. Two hours each week. Second term.
- 15. BUTTER AND CHEESE MAKING. Lectures twice a week. Laboratory practice twice each week. This course is the same as courses 6 and 7, except that less laboratory practice is taken. Second term.
- MILK SANITATION. Three times a week. First term. Lectures on and laboratory practice in what constitutes pure dairy products.

## AGRICULTURAL CHEMISTRY

[Townshend Hall, Rooms 29, 35, 34 and 30]

# Professor Weber, Mr. Vinsom

- PRINCIPLES OF CHEMISTRY AND CHEMICAL NOMENCLATURE. Lectures and textbooks for three or four weeks, five times a week; then lectures twice a week on Chemistry of Non-metals, and laboratory practice three times a week. First term.
- ORGANIC CHEMISTRY. Lectures twice a week; laboratory practice three times a week. Second term.
- APPLICATION OF CHEMISTRY TO AGRICULTURE. Lectures twice a week; laboratory three times a week. Third term.
- LABORATORY. Analysis of fertilizers, feed-stuffs, dairy products, fruits, vegetables, alcoholic liquors, etc. Five laboratory periods a week through the year.
- 7. CHEMISTRY OF MILK AND MILK TESTING. Twice a week. Dairy Course.
- 6. LABORATORY. Elective. Five or three times a week through the year.

## AMERICAN HISTORY AND POLITICAL SCIENCE

(See History.)

#### ANATOMY AND PHYSIOLOGY

[BIOLOGICAL HALL, Rooms 12 and 20]

Professor Bleile, Assistant Professor Morrey, Mr. Dresbach Vm Ball

COLLEGES OF AGRICULTURE, PHARMACY, AND VETERINARY MEDICINE

 HUMAN ANATOMY AND PHYSIOLOGY. Lectures, recitations and laboratory work three times a week. First, second and third terms. This course must be preceded by, or accompanied with, a course of chemistry.

- GENERAL PHYSIOLOGY. Lectures recitations and demonstrations. Three times a week. Third term. [Short Course in Agriculture.]
- CHEMICAL PHYSIOLOGY. Three times a week. Third term. [Domestic Economy Course.]
- HISTOLOGY AND HISTO-CHEMISTRY. Five times a week through the year. This
  course must be preceded by, or accompanied with, a course in chemistry.
- MICROSCOPY AND URINARY ANALYSIS. Lectures and laboratory work. Twice a week. Third term.
- BACTERIA, in their relation to Milk, Butter and Cheese. Lectures and laboratory work. Twice a week. Second term.
- 7. BACTERIOLOGY. Three times a week. Second term. [Veterinary Medicine.]
- 8. BACTERIOLOGY. One lecture, one laboratory period, a week. Second term. [Pharmacy.]
- PHYSIOLOGICAL LABORATORY. Three times a week. [May include work in bacteriology.]

## COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

## First Semester

- -511. HUMAN ANATOMY AND PHYSIOLOGY. Lectures, recitations and laboratory work.

  Three times a week.
- 53. PHYSIOLOGICAL LABORATORY. Three laboratory periods a week.
- 55. PHYSIOLOGICAL LABORATORY. Five laboratory periods a week.
- 57. BACTERIOLOGY. One lecture, one laboratory period a week.
- HISTOLOGY AND HISTO-CHEMISTRY. Laboratory. Five laboratory periods a week.
- 61. BACTERIOLOGY. One lecture, two laboratory periods a week.

## Second Semester

- 52. Continuation of Course 51. Three times a week.
- 54. Continuation of Course 53. Three laboratory periods a week.
- 56. Continuation of Course 55. Five laboratory periods a week.
- MICROSCOPY. Lectures and laboratory work. Twice a week. Last half of semester.
- 60. Continuation of Course 59. Five laboratory periods a week.
- 62. Same as Course 61.

## ANCIENT ART

(See Greek Language and Literature.)

# ARCHITECTURE

(See Drawing.)

<sup>1 &</sup>quot;Finding numbers" from 51 upwards always indicate Semester work.

# ASTRONOMY

# [THE EMERSON McMILLIN OBSERVATORY.]

Associate Professor H. C. Lord, Director of the Observatory.

Mr. J. Warren Smith, Lecturer on Meteorology.

## COLLEGE OF ENGINEERING

- ASTRONOMY, GEODESY AND LEAST SQUARES. Lectures on practical Astronomysupplemented by practice with the instruments of the Emerson McMillin Observatory. Text-book, Doolittle. Three times a week. (First Term, third year, Course in Civil Engineering.)
- Continuation of 4. Three times a week. (Second Term, third year, Course in Civil Engineering.)
- Continuation of 5. Four times a week. (Third Term, third year, Course in Civil Engineering.)

# COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

- 61, 62. GENERAL ASTRONOMY. Lectures and recitations twice a week throughout the year.
- 63, 64. ASTRONOMY AND GEODESY. Lectures on practical Astronomy, supplemented by practice with the instruments of the Emerson McMillin Observatory. Open to students who have had the Calculus. Text-book, Doolittle. Three times a week throughout the year.
- 55, 56. THEORETICAL ASTRONOMY. Lectures and Observatory practice. The theory of the undisturbed motion of a planet or comet and the calculation of ephemerides. Parabolic orbits from three complete observations. Orbits from three complete observations, including the eccentricity. Work in the Observatory with the twelve-inch equatorial. Definite orbits. Observatory work continued. Authorities: Watson, Klinkerfeus, Appolzer, and the astronomical journals. Five times a week throughout the year.
- 57, 58. ASTRO PHYSICS. Lectures on the theory of the Spectroscope and its use in Astronomy, supplemented by practice with the large spectroscope of the Observatory. Five times a week through the year.
  Astronomy 55, 56, 57, 58 are open only to students who have had Calculus.
- 60. METEOROLOGY. Twice a week. Second half, second semester. Same as 3.
- METEOROLOGY. Lectures on practical meteorology, supplemented by laboratory work in map and chart making, and regular observations with the instruments in use by Weather Bureau. Text-book, Davis; with the daily weather maps issued by the Bureau. Twice a week, third term.

#### BOTANY

## [BOTANICAL HALL]

Professor Kellerman, Mr. Schaffner, Mr. Collett, Miss Dufour

COLLEGES OF AGRICULTURE, PHARMACY AND VETERINARY MEDICINE

ELEMENTARY BOTANY. Lectures, recitations and field work. Text-book: Kellerman's Elementary Botany and Spring Flora Must precede all offier courses in this department except course 9. Five times a week. Third term.

- MEDICAL BOTANY. Twice a week, second term. Similar to course 56 in the College of Arts, Philosophy and Science. Rerefence book: Maisch's Organic Materia Medica.
- PHYSIOLOGICAL BOTANY. Lectures, recitations and laboratory work. Coulter's Plant Structures. Five times a week. First term.
- 6a. SYSTEMATIC AND PHYSIOLOGICAL BOTANY. Lectures, recitations and laboratory work. Coulter's Plant Structures. Five times a week. First term.
- PHYSIOLOGICAL AND ECONOMIC BOTANY. Lectures, recitations and laboratory work. Coulter's Plant Structures. Five times a week. Second term.
- 8. VEGETABLE PATHOLOGY. Lectures, recitations and laboratory work. Five times a week. Third term.
- DENDROLOGY. Lectures, field and laboratory work. Twice a week, first term.
   Open to students who have not studied Botany.

## COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

## First Semester

- ECOLOGY AND PHYSIOLOGY. Lectures and recitations twice a week; laboratory work once a week; credit three hours. Coulter's Plant Relations.
- 57. LABORATORY WORK. Fungi, Algæ, Bryophyta. Two or three times a week.
- ADVANCED LABORATORY WORK IN HISTOLOGY AND PHYSIOLOGY Five times a week. Open to students who have taken Course 51, or 57.
- SYSTEMATIC BOTANY, PHENOGAMIC AND CRYPTOGAMIC. Three to five times a week. Open to students who have taken Course 51, or 57.
- 63. MONOGRAPHIC WORK. Graduate Course. Credit five or ten hours.
- 65. RESEARCH WORK IN MORPHOLOGY AND PHYSIOLOGY. Graduate Course. Credit five or ten hours.

#### Second Semester

- MORPHOLOGY AND CLASSIFICATION. Lectures and recitations twice a week; laboratory work once a week; credit three hours. Coulter's Plant Structures.
- Continuation of Course 57. Pteridophyta, Gymnospermæ, Angiospermæ.
   Two or three times a week.
- 60. Continuation of Course 59. Five times a week.
- 62. Continuation of Course 61. Three to five times a week.
- 64. Continuation of Course 63. Credit five or ten hours.
- Continuation of Course 65. Credit five or ten hours.
   For Summer Courses in Botany, see Lake Laboratory.

# CHEMISTRY

[CHEMICAL HALL, Rooms 24, 25, 14, 21, 22, 7 and 18]

Professor McPherson, Professor Norton, Assistant Professor Henderson Mr. Kohr, Mr. Gore

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

# First Semester

51. ELEMENTARY CHEMISTRY. Arranged for students who have little or no knowledge of Chemistry. Three sub-divisions; one lecture, one quiz, and three hours' laboratory practice weekly. In the laboratory the student performs an extended series of experiments illustrating the principles of Chemistry. Three hours credit.

- 53. QUALITATIVE ANALYSIS. Laboratory, lectures and quiz. Students familiarize themselves with the properties of the elements with a view to their detection, and then apply this knowledge to analysis of unknown substances. Three to five times a week. This course must be preceded by Courses 51 and 52.
- 55. QUANTITATIVE ANALYSIS. Laboratory, lectures and recitations. Use of the balance and general principles of gravimetric analysis. Drill in the solution problems in quantitative analysis; study of properties of precipitates; principles of volumetric analysis. Selections are made from such analytical methods as best meet the needs of the student. The samples used for analysis are mixtures or commercial products the percentage composition of which is not made known to the student until he has reported his own results. Three to five times a week. This course must be accompanied by course 69.
- 57. ORGANIC CHEMISTRY. Laboratory, lectures and recitations. Open only to students who are familiar with at least the principles of quantitative analysis. Five times a week.
- 50. ADVANCED CHEMISTRY. Laboratory. Arranged for special students who have had courses 53, 54, 55, 56, 57; also course 58 for students in Organic Chemistry. Students are allowed to select such work as they are capable of undertaking—as, the critical examination of analytical methods as well as the study of new methods. Five times a week.
- 61a. INORGANIC PREPARATION. Laboratory. This course includes the preparation of inorganic substances from the crude materials. Special attention is given to the preparation of chemically pure compounds, to be used in certain quantitative processes. Thorpe's text-book on Inorganic Preparations is used, and reference is made to Bender and Erdmans' Anorganische Preparate and Krausche's Pruefung Chemischer Reagientien. This course must be preceded by quantitative analysis. Four times a week until the Christmas Recess.

Students electing this course must follow with theoretical chemistry and sanitary analysis.

- 61c. HISTORICAL CHEMISTRY. Lectures and recitations. A course of twelve weeks beginning after the Christmas Recess. Four times a week. Given biennially, offered in 1900-1901.
- 63. CHEMICAL SEMINARY. Special students will meet to discuss special topics and reviews of current literature. Once a week.
- 65. ELECTROLYTIC ANALYSIS. Laboratory. Extended practice is given in quantitative electrolytic analysis. Twice a week.
- 69. ADVANCED GENERAL CHEMISTRY; PHYSICAL CHEMISTRY. This course includes (a) a general survey of inorganic chemistry based upon the arrangement of the elements in accordance with the Periodic Law and (b) a discussion of the main principles of physical chemistry and their application to general processes. Twice a week.

## Second Semester

- 52. Continuation of Course 51. Three hours credit.
- 54. Continuation of Course 53, including use of Spectroscope.
- QUANTITATIVE ANALYSIS. Continuation of Course 55. Three to five times a week. This course must be accompanied by Course 70.

- 58. ORGANIC CHEMISTRY. Laboratory and lectures. Continuation of Course 57. Arranged for students who wish to specialize in organic chemistry. The course includes further preparation of typical organic compounds, their purification and analysis. Five times a week.
- 60. Continuation of Course 59.
- 64. Continuation of Course 63.
- 66. Repetition of Course 55.
- 68. SANITARY ANALYSIS. Laboratory and lectures. A study of the most important chemical methods for the analysis of water and air. This course must be preceded by quantitative analysis, and at least the equivalent of Course 61 in Anatomy and Physiology (bacteriology). The course extends over the last ten weeks of the second semester. Four times a week.
- Continuation of Course 69.
   Students who can elect but one year of Analytical Chemistry, will take Courses 53 and 66. Others will take 53 and 54, then follow with 55, 56 and 57.

# COLLEGES OF ENGINEERING AND PHARMACY

- ELEMENTARY CHEMISTRY. Inorganic. Lecture, Laboratory and Quiz. Laboratory work; First Term, experiments upon the non-metals; second term, principles of quantitative analysis. Five times a week.
- 8. ORGANIC CHEMISTRY. Lectures. Five times a week, first term.
- ORGANIC CHEMISTRY. Laboratory and recitations. Five times a week. Second and third terms.
- 11. TOXICOLOGY. Four times a week. Third term.
- 12. QUALITATIVE ANALYSIS. Five times a week. Third term.
- 13. QUALITATIVE ANALYSIS. Three laboratory periods a week. Second term.
- SANITARY ANALYSIS. Laboratory and lectures. A study of the most important chemical methods for the analysis of water and air. Four times a week. Third term.
- 16. APPLIED CHEMISTRY. Lectures on Industrial Chemistry. These are made as practical as possible by visits to different chemical works. When possible specialists deliver lectures on subjects belonging to their particular line of work. Four times a week. Second term.
- INORGANIC PREPARATIONS. This course includes the preparation of chemically
  pure inorganic substances from the crude materials. Four times a week.
  Third term.
- ORGANIC CHEMISTRY. Lectures and laboratory. Five times a week, for the first half of the year.
- QUANTITATIVE ANALYSIS. Lectures and Laboratory. Five times a week for the second half of the year.
- QUANTITATIVE ANALYSIS. Laboratory, lectures and recitations. Four times a week.
- 21. ADVANCED GENERAL CHEMISTRY; PHYSICAL CHEMISTRY. Twice a week.

  For Courses in the technical analysis of iron, steel and allied products, see the Department of Mining and Metallurgy.

  Four Courses dealing with the application of Chemistry to Agriculture, see

the Department of Agricultural Chemistry.

# CIVIL ENGINEERING

# [HAYES HALL, Rooms 14 and 19]

# Professor Brown, Assistant Professor Sherman, Mr. Groves

- LAND SURVEYING. Recitations and field work. Johnson's Theory and Practice of Surveying. Six times a week. First term. Second year.
- RAILROAD SURVEYING. Recitations and field work. Searle's Field Engineering. Six times a week. Third term. Second year.
- TOPOGRAPHICAL SURVEYING. Lectures, field work and drawing. Johnson's Surveying used for reference. Four times a week. First term. Third year.
- TOPOGRAPHY. Platting, pen and tinted work. Reed's Topographical Drawing and Sketching. Four times a week. Second term. Second year.
- STEREOTOMY. Recitations, drawing and model cutting. Warner's Stereotomy.
   Four times a week. Second term. Third year.
- BRIDGE STRAINS. Recitations and lectures. Part I of Dubois's Strains in Framed Structures. Five times a week. Third term. Third year.
- BRIDGE DESIGNING. Lectures and drawing. Part II of Dubois's Strains in Framed Structures and Johnson's Modern Framed Structures used for reference. Five times a week. First term. Fourth year.
- SANITARY ENGINEERING. Lectures. Five times a week. Third term. Fourth year.
- CIVIL ENGINEERING LABORATORY. Cement testing, adjustment of instruments.
   Twice a week, Second term. Fourth year.
- MASONRY CONSTRUCTION. Recitations and lectures. Baker's Masonry Construction. Five times a week. First term. Fourth year.
- H/GHWAYS. Lectures on roads, streets, canals, railroads and rivers. Five times a week. Second term.
   Fourth year students in Civil Engineering must elect either 16 or 17.
- RAILWAY LOCATION. Recitations and lectures. Wellington's Economic Theory
  of Railway Location. Five times a week. Second term.
  Fourth year students must elect either 16 or 17.
- WATER SUPPLY. Recitations and lectures. Fanning's Water Supply. Five times a week. Third term. Fourth year.
- TRUSSES. Lectures and drawing. Five times a week. Third term. Third year, Mine Engineering and Mechanical Engineering.
- ROOF TRUSSES. Lectures and drawing. Five times a week. First term.
   Third year, Architecture.
- SURVEYING. Recitations and field work. Davies' Surveying. Three times a week. Third term. Third year, Architecture.
- 22. SUMMER COURSE IN FIELD WORK. The students are taken into camp in a rough, broken country and given a thorough drill in land and elementary railroad surveying. The course begins directly after commencement day, and continues four weeks of six days per week, ten hours per day. The work of the student and the discipline of the camp is in the hands of competent instructors. This course must be preceded by Courses 1, 2 and 4. Students conditioned on any of these courses, may be admitted at discretion of instructor in charge. (At conclusion of second year of course.)

- 23. SUMMER COURSE IN FIELD WORK. Similar to Course 22. Students work on advanced railroad surveying and topographical surveying. This course must be preceded by Courses 3, 22 and 24. Students conditioned in any of these courses may be admitted at discretion of instructor. (At conclusion of third year of course.)
- 24. DRAWING OF ENGINEERING STRUCTURES. Five hours a week. (Second Term, third year, Course in Civil Engineering.)

## CLAY WORKING AND CERAMICS

[ORTON HALL, Rooms 18, 27, 26 and 25]

Professor Edward Orton, Jr., Mr. Bleininger

- 1. CERAMIC CHEMISTRY. This course is open only to those who have Completed General Chemistry 12. The student begins the quantitative analysis of salts and chemicals, and later works on limestone and other easy materials. Five times a week. (First Term, second year, Course in Ceramics and Short Course in Clay-working.)
- Continuation of Course 1. The student begins the quantitative analysis of clays
  and complex minerals, working first on samples of known composition,
  and later on unknown materials. Five times a week. (Second Term,
  second year, Course in Ceramics and Short Course in Clay-working.)
- Continuation of Course 2. The student completes the ultimate analysis of clays and begins the proximate "Rational" analysis of clays and pottery bodies, following the methods of Seger. Five times a week. (Third Term, second year, Course in Ceramics and Short Course in Clayworking.)
- 4. LECTURES ON CLAY MANUFACTURE. (supplemented by frequent recitations). The origin, composition and properties of clays and other minerals employed in the clay, glass and cement industries. Five times a week. (First Term, third year, Course in Ceramics; and second year, Short Course in Clayworking.)
- 5. Continuation of Course 4. A series of lectures, with recitations, on the general principles of the manufacture of bricks and the coarser clay wares, including the selection and winning of the materials, their preparation, manufacture, burning and testing. Five times a week. (Second Term, third year, Course in Ceramics; and, second year, Short Course in Clayworking.)
- 6. Continuation of Course 5. A series of lectures, with recitations, on the classification and manufacture of pottery and the finer grades of clay wares, including the selection of the materials, preparation of the bodies, manufacture of the ware, preparation of the glazes, burning and decoration of the wares and the pyrometry of ceramics. Five times a week. (Third term, third year, Course in Ceramics; and, second year, Short Course in Clay-working.)

Course in Ceramics; and, second year, Short Course in Clay-working.)

7. CERAMIC CHEMISTRY. Continuation of Course 3. Open only to those who have completed that course. The analysis of glasses and glazes, devoting special attention to the use of hydrofluoric acid in silicate analysis, and to the determination of lead and boracic acid. Five times a week. (Second term, third year, Course in Ceramics.)

- 9. LABORATORY WORK IN CERAMICS. Open only to those who have completed Courses 3 and 6. The student will undertake the production of such wares as are made from single clays; then wares made by blending two or more natural clays; and, then, such wares as are made from an artificial body. In each case the bodies made will be burnt and tested. Five times a week. (First Term, fourth year, Course in Ceramics.)
- 10. Continuation of Course 9. The student will practice on the production of glasses and glazes, beginning with the natural "slip glazes" and taking successively the soft raw-lead glazes, the fritted lead-boracic-acid glazes, and the hard-fibre leadless porcelain glazes. In each case the glazes will be made for use on some definite body, and will be made to "fit." Five-times a week. (Second Term, fourth year, Course in Ceramics.)
- 11. Continuation of Course 10. The student will practice on the use of the coloring and opacifying oxides in glazes, and on the production of colors for the decoration of pottery, and of body-stains. Five times a week. (Third term, fourth year, Course in Ceramics.)
- 12. LECTURES ON CEMENT MANUFACTURE. The theory of hydraulicity, the compounding, manufacture and testing of natural and Portland cements and hydraulic silicates. Open to students who have had courses 3 and 6. Facilities for laboratory work in making, burning and testing cements will be given. Five times a week. (Second Term, fourth year, Course in Ceramics.)
- 14. MINERAL REPORTS. A series of lectures on the prospecting and opening of mineral properties and ceramic plants. Frequent trips will be made to the important clay-working centers of Ohio for field work and practice in observation. Students will be allowed to specialize along their intended lines. Five times a week. (Third Term, fourth year, Course in Ceramics.)
- 15. THESIS. As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of the degree sought. The subject must be announced to the President of the University (dependent upon the approval of the head of the Department), not later than the beginning of the second term of the fourth year; and the completed thesis must be presented on standard paper of certain size and quality, type-written, bound, and titled, not later than the second Saturday before Commencement Day.
- GENERAL PRINCIPLES OF APPLIED CERAMICS. A series of lectures on the chemical technology of the clay, glass and cement industries. Three times a week. (Third Term, fourth year, Course in Chemistry.)
- 17. PRACTICE in making drawings and specifications for brick kilns, brick dryers, pottery kilns, gas producers, glass pot-furnaces, glass tanks, cement kilns and burning cylinders. Students will be allowed to specialize along the lines they intend to follow. Four times a week. (Second Term, fourth year, Course in Ceramics.)

# DOMESTIC ECONOMY

[HAYES HALL, Rooms 1, 3, 10.]

Associate Professor Bowman, Assistant Professor Souther

## Domestic Science

- FOOD ECONOMICS. One lecture and three laboratory periods each week. Four
  hours credit. Lectures embracing a study of the evolution of society as
  affected by food conditions; second, a study of food principles. Laboratory work includes experimental work with foods, and the preparation
  and serving of typical foods of certain classes. Offered in the first term
  of each year.
- 2. FOOD ECONOMICS. One lecture and three laboratory periods each week. Four hours credit. By lecture and research work, the relative nutritive and money values of foods are considered. Each student prepares a weekly dietary for the family; the amount to be expended limited by the instructor. United States Agricultural Bulletin standards used. Laboratory work is a continuation of Course 1. Offered in second term of each year.
- 3. EMERGENCY WORK AND HOME NURSING. One lecture and three laboratory periods each week. Four hours credit. The lectures, demonstrations and practical work are designed to set forth the principles underlying good nursing, to take up the dietetic treatment of various diseases and to consider such emergency cases as frequently require prompt treatment in the home. Food suitable for invalids, infants and convalescents is prepared in the laboratory. Offered in the third term of each year.
- 4a. PRESERVATION OF FOODS. Four weeks.
- b. HYGIENE OF CLOTHING. Eight weeks.

One lecture and three laboratory periods each week. Four hours credit.

- (a). Includes a brief study of the causes of decomposition, a history of the methods employed in the preservation of foods, and practical work in canning, preserving, etc.
- (b). Includes a study of fibres and their proper treatment. The properties and cleansing effect of water and soap; disinfecting clothing; the chemical treatment of stains and demonstrated work in practical laundry methods. Offered in the first term.
- 10. HOUSEHOLD ECONOMICS. Two hours lecture course. Elective. A consideration of the best location for a house; its hygienic and sanitary construction and arrangement and approved methods of lighting, heating and ventilating. Offered in the third term of each year.

#### DOMESTIC ART.

- 5. LECTURES on the Industrial and Artistic Evolution of Society. History of the early race considered with special reference to the development in culture gained through hand-work. Practice work; Preparations of a series of models comprising the different stitches used in plain hand sewing; ornamental stitches and simple embroidery. One lecture and three practice periods each week. Four hours credit. Second term.
- 6. LECTURES ON TEXTILES. Study of fibres; their growth and the processes of manufacture. Comparative economic values of fabrics. Practice work; Machine and hand work on underwear; drafting from simple measurements; designing in pencil; use of patterns; making shirt waists or wash gowns; Simple straw hats and bows. One lecture and three practice periods a week. Four hours credit. First term.

- 7. LECTURES ON HISTORIC COSTUME. Consideration of line, form and color; hygienic and artistic dress; treatment of wool and silk fabrics. Practice work: Drafting patterns by use of Tailoring System. Cutting and fitting. Making wool dress. Making of hat frames, covering and trimming the same. One lecture and three practice periods a week. Four hours credit. First term.
- 8. LECTURE AND PRACTICE WORK. Continuation of Course 7. As much time as possible being given to pencil and water coloring designing of costumes and hats suitable to different wearers. Original designs required to be made and carried out in the case of each individual pupil. One lecture and three practice periods a week. Four hours credit. Second term.

9. LECTURES ON HISTORY OF DOMESTIC ART AND ARCHITECTURE AND THE APPLICATION OF ART TO MODERN HOUSE DECORATION. Practice work: Continuation of Course 8. Further work in practical costume making as may be designated by the instructor; the aim being to foster good taste and judgment in the use of expensive and inexpensive materials. Expressions of individuality encouraged but held subservient to general artistic principles, to rules of hygiene and to prevailing modes. One lecture and three hours practice work each week. Four hours credit. Third term.

Note. Individual instruction is given throughout. Pupils are required to furnish all materials except those used in making models of Course 5. A certain amount of work is required to be completed before admittance is given to the next higher grade of work.

## DRAWING

# [HAVES HALL, Rooms 22, 24 and 37]

Associate Professor Bradford, Assistant Professor French, Mr. Lewis

 FREEHAND DRAWING. Practice and occasional lectures. Pencil, charcoal, pen and water-color drawing from copies, models and plaster casts.

One drawing period a week, three terms, Industrial Arts.

Two drawing periods a week, first term, Short Mining and Domestic Economy.

Two drawing periods a week, first and second terms; all four-year Engineering Courses.

Three drawing periods a week, three terms, Architecture.

2. LETTERING. Practice and occasional Lectures.

Two drawing periods a week, third term, Industrial Arts, and Short Mining.

Three drawing periods a week, third term, Ceramics, Civil, Electrical, Mechanical and Mine Engineering, and Architecture.

This Course must be preceded by Course 1.

MECHANICAL DRAWING. Lectures or recitations one period a week. Practice
two periods a week. All Engineering, Industrial Arts, Architecture. Subjects: Orthographic, Isometric and Oblique Projection and elementary
Working Drawings. First term.

Lectures or recitations two periods a week. Practice one period a week, in Industrial Arts and in all Engineering Courses except Civil Engineering; three periods a week in Civil Engineering and Architecture. Subject: Descriptive Geometry. Second term.

Lectures or recitations, one period a week. Practice, two periods a week in Engineering Courses; four periods a week in Architecture. Subject: Shades, Shadows and Perspective. Third term, in all four-year Engineering and Industrial Arts Courses and the Course in Architecture. First term in the Short Mining and Domestic Science Courses.

This Course must be preceded by Course 2.

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- DRAUGHTING AND BLUE-PRINTING. Practice and occasional Lectures. Three
  periods a week, second term. Arranged especially for the students in the
  Short Mining Course. This Course must be preceded by the first term of
  Course (3).
- 5. TECHNICAL DRAWING. Lectures and Practice. Rules and methods for working drawings, tracing, blue-printing, machine design and practice in making same to represent form and dimensions for shop use. Three periods a week. First term, Mechanical and Electrical Engineering Courses. This Course must be preceded by Courses (2) and (3).
- 7. PHOTOGRAPHY. Lectures and Practice. Lectures: Optics of Photography, chemistry of photography, exposing and developing, printing, lantern slides, orthochromatic photography and some of the applications of photography. Practice in outdoor, interior, instantaneous and flash-light photography, copying, lantern slides, and printing. Two periods a week. Ceramics. Architecture, first term. Civil, Mechanical and Mine Engineering, third term. The first term of this Course is elective.
- 8. MECHANICAL DRAWING. Lectures' and Practice. Geometric and Projection Drawing. Two periods a week, first and second terms, Industrial Arts.
- MECHANICAL DRAWING. Lectures and Practice. Arranged especially for the students in Agriculture. Two periods a week, first term,
- MECHANICAL DRAWING. Lectures and Practice. Arranged especially for the students in Short Course in Ceramics, five periods a week, third term.
- CLAY MODELING. Modeling in Clay and Casting in Plaster, ornamental forms from designs, photographs, nature and original designs. Two periods a week; first, second and third terms.

This Course must be preceded by Course (1).

Domestic Economy Course, second term. Architectural Course, second and third terms. This Course must be preceded by Course (1).

- 13. TECHNICAL AND DECORATIVE DESIGN. Lectures and Practice. Lectures on the principles of decorative design in monochrome, color and relief, and practice in the same. Two periods a week; first, second and third terms.
- 14 PEN DRAWING. Two periods a week, first term. Arranged especially for the Course in Architecture. This Course must be preceded by Course (1).
- TECHNICAL DRAWING. Lectures and Practice. House Designing. Five periods a week, third term. Domestic Economy.
- LECTURES AND PRACTICE. Technical Drawing consisting of the designing and
  preparation of specifications of structures related to agriculture. Three
  periods a week, third term.

#### ART.

An elective course in Art offered by Department of Drawing. Must be preceded by Course 1 in Drawing or its equivalent elsewhere.

 LECTURES AND PRACTICE. Lectures on color standards, color theory, color harmony, color appearances, tone and gradation, atmosphere and values. Practice in color work either water or oil color. First term. Lectures illustrated by lantern slides.

18. LECTURES AND PRACTICE. Lectures on objects of art, ideas and subjects, style and individuality, schools of art, great artists including old and modern masters. Illustrated by lantern slides. Practice in water or oil painting from still life. Second term.

19. LECTURES AND PRACTICE. Lectures will be a continuation of second term's work and including sculpture and the master sculptors. Illustrated by lantern slides. Practice in water or oil painting from life and nature or clay modeling. Third term. The above is to be offered as an elective for two or three hours as follows: Lecture for one hour and practice for two or four hours as the student has time.

## ARCHITECTURE.

- SPECIFICATIONS. Lectures and practice in preparing Specifications for Architectural Structures. Two periods a week. (Second Term, fourth year, Course in Architecture.)
- DECORATION AND ORNAMENT. Lectures on the different styles of carved ornament and decorative color. The practice part of this subject will be incorporated in the clay Modeling and Designing. Three periods a week. (First Term, third year, Course in Architecture.)
- ESTIMATES AND SUPERINTENDENCE. Lectures and practice in preparing estimates for structures designed in Courses 8, 11, 12 and 13, and the duties of superintendence. Four periods a week. (Third Term, fourth year, Course in Architecture.)
- 7. HEATING, VENTILATING AND PLUMBING. Lectures and experimental work. Lectures on the principles and methods of heating and ventilating and sanitary plumbing. Experimental work is carried on with the heating and ventilating plants in the different University buildings. Five periods a week. (Second Term, fourth year, Course in Architecture.)
- DESIGNING. Lectures and Practice. Steel skeleton and fire proof construction. Five periods a week. (Second Term, fourth year, Course in Architecture.)
- 9. HISTORY OF ARCHITECTURE. Lectures illustrated by Jantern slides. Three periods a week. (First Term, second year, Course in Architecture.)
- 10. Same as 9. (Second Term, second year, Course in Architecture.)
- 11. Same as 10. (Third Term, second year, Course in Architecture.)
- 12. ARCHITECTURAL DRAWING. Drawing architectural ornament, details of orders and styles with the special object of impressing upon the student's mind the architectural characteristics considered in Course 9. Two periods a week. (First Term, second year, Course in Architecture.)
- 13. Same as 12. (Second Term, second year, Course in Architecture.)
- 14. Same as 12. (Third Term, second year, Course in Architecture,)
- 15. DESIGNING. Lectures and practice in designing structures adapted to modern requirements. Four periods a week. (First Term, third year, Course in Architecture.
- DESIGNING. Lectures and practice. Two periods a week. (Second Term, third year, Course in Architecture.)
- DESIGNING. Lectures and practice. Four periods a week. (Third Term, third year, Course in Architecture.)
- DESIGNING. Four periods a week. (First Term, fourth year, Course in Architecture.)
- DESIGNING. Four periods a week. (Third Term, fourth year, Course in Architecture.)
- THESIS. Original design, to be accompanied with written description, specifications and estimate. Five periods a week. (Third Term, fourth year. Course in Architecture.)

# ECONOMICS AND SOCIOLOGY

[UNIVERSITY HALL, Rooms 17 and 18]

Associate Professor Clark.

Course 51 or Course 52 must precede all other Courses.

#### FIRST SEMESTER

- 51. ELEMENTS OF POLITICAL ECONOMY. A careful study of the laws of production, exchange, distribution and consumption of wealth; combined with an analysis of the industrial actions of men as regards land, labor, capital, money, credit, rent, interest, wages, etc. Text-book, lectures and individual investigations. Four times a week. This Course is repeated in the Second Semester (as Course 52). Students who are required to take the subject, those whose names begin with the letters L to Z will take it in the First Semester; others will take it in the Second Semester (as Course 52).
- 53. THE HISTORY OF INDUSTRIAL SOCIETY. A general view of the evolution of industrial society; and a study of causes and effects of past economic policies together with their bearing on existing conditions; with special reference to England and America. Lectures and assigned readings. Twice a week.
- PRACTICAL PROBLEMS IN ECONOMICS. A rapid study of immigration, money, railroads, crises and tariff. Lectures and collateral readings. Twice a week.
- 57. THE TRANSPORTATION PROBLEM. A study of the development and present economic status of roads, canals and railroads in their relation to industry and to the state. Lectures. Twice a week.

  Not offered in 1899-00.
- 59. PUBLIC FINANCE AND TAXATION. This course aims to make the student acquainted with the theory of public revenue and expenditure; and with the leading systems of financial administration throughout the world. Municipal indebtedness and corporate financiering are incidentally treated. Textbook and lectures. Twice a week.

  Not offered in 1800-00.
- 61. SEMINARY IN ECONOMICS. Two hours a week at one meeting. All students who elect their Major Study in Economics must take this course in their fourth year. Open, as elective, to other students, graduate and advanced under-graduate, on permission of the instructor.
- SOCIOLOGY AND STATISTICS. Lectures and laboratory work, One hour credit.
   This course may accompany courses 55, 57, 59 or 65.
- 65. COMMERCIAL GEOGRAPHY. A scientific study of business relations and conditions, domestic and foreign; the sources, quantity and quality of products, and the distribution of the same; trade routes and the means of communication. The Consular Reports will constitute one basis of study. Texts and lectures.

- 52. ELEMENTS OF POLITICAL ECONOMY. Text-book, lectures and individual investigations. Four times a week. (This is a repetition of Course 51, and will be taken in the Second Semester by those students (of whom it is required) whose names begin with the letters A to K.)
- 53. THE HISTORY AND THEORY OF SOCIALISM. Lectures and collateral readings.

  Twice a week.
- 56. INDUSTRIAL AND SOCIAL REFORMS. A study of labor problems, charities and corrections, monopolies, insurance, trusts, etc. Lectures and collateral readings. Twice a week.

- 58. MONEY, CREDIT AND BANKING. This course involves the history and theory of the subject; a comparative study of monetary systems, currency, etc.; together with various methods of banking; national banks, clearing houses, sub-treasury, etc.; and a critical analysis of proposals for reform. Texts, lectures and collateral readings. Twice a week.

  Not offered in 1890-00.
- 60. INDUSTRIAL AND FINANCIAL HISTORY OF THE UNITED STATES. A complete survey of American industries, financial resources and policies; public lands, government subsidies, internal revenue, etc.; history and description of the Treasury and Interior Departments, the Mints, etc. Lectures and collateral readings. Twice a week.
- 62. SEMINARY IN ECONOMICS. Two hours a week at one meeting. This is a continuation of Course 61, and is open only to those who have had that course. All students who elect their Major Study in Economics must take this Course in their fourth year. Open, as elective, to other students, graduate and advanced under-graduate, on permission of the instructor.
- 64. SOCIOLOGY AND STATISTICS. A continuation of Course 63. One hour credit. May be taken separately or accompany Courses 56, 58, 60 or 66. Courses 1 and 2 in the College of Agriculture and Domestic Science are the same as Courses 51 and 52 described above.
- 66. COMMERCE AND TRADE. Theory and practice of business. Standard business forms, commercial paper, stocks and bonds, insurance policies and investment securities of all kinds will be studied with the aid of sample copies. This is an advanced course and should be preceded by four elective courses in the department including Course 60. Required readings and reports on current commercial and financial literature. Lectures.

#### EDUCATION

[University Hall, Rooms 51 and 54]

Professor Gordy, Mr. Hamilton.

FIRST SEMESTER

- 51. ELEMENTARY EDUCATIONAL PSYCHOLOGY. This course is intended to be helpto three classes of students: (1) Those who are not preparing to teach, but
  who wish to make some study of education in order that they may perform
  their duties as members of society more intelligently: (2) Those intending to teach and who wish to study the relations between Psychology and
  education; and (3) Those preparing to be superintendents and who wish to
  get suggestions as to the best method of teaching Psychology to teachers.
  The text used is Gordy's Psychology. Students will be required to do collateral reading and bring in reports of their work. Four hours a week.
- 53. HISTORY OF GREEK EDUCATION. Students of this course will make a study of the history of the education of the Greeks from the time when life was their only school to the time when Greece became the teacher of the world. The connection between Greek life and Greek education will be sharply emphasized; the defects of Greek ideals of life will be shown as reappearing in Greek ideals and methods of education, and these in turn as exerting an influence on Greek life. This course will be essentially a study of Greek civilization, but with the practical purpose of getting light for the solution of our own problems. It is believed that the course will be especially helpful to those preparing to teach history, and the classics. The texts used are Davidson's Greek Education, and Davidson's Aristotle. Readings are required of students in Greek history and Plato's Dialogues. Four hours a week.

- 55. THE HERBARTIAN PEDAGOGY. The object of this course is three-fold: (1) To ascertain what the Herbartian Pedagogy is: (2) To determine its truth, and (3) To consider carefully its applicability—so far as it is true—to the schools of this country. Special attention will be given to these Herbartian theories that are most widely current in this country. The texts used are Herbart's Science of Education, De Garmo's Herbart and Lange's Apperception. Four hours a week.
- 59. CHILD STUDY. An elementary course in the growth and development of children, giving special attention to the pedagogical aspect of the subject. Though arranged primarily for teachers this course treats of subjects of universal interest such as the child as a social factor, function of play, the child and self-government, the child and the race, etc. Open to all students. Twice a week.
- 67. EDUCATIONAL VALUES. This course seeks to determine the capacity of the various subjects pursued in elementary and secondary courses to contribute to true educational ideals. The work is based on Fouillie's Education from a National Standpoint. Twice a week.
- A STUDY OF SCIENTIFIC METHOD: intended especially for those preparing to teach Science. Twice a week.
- 71. PEDAGOGICAL RESEARCH. For teachers and advanced students. Various school problems will be taken up for exhaustive study, thus offering opportunity for an insight into the organization of the school not usually open to undergraduate students. The work will be by topics and largely individual. Special facilities for original investigation will be at the command of students showing themselves competent to do such work. As only a small number of students can be accommodated applications for admission should be made as soon as possible. Twice a week.
- 73. MODERN EDUCATIONAL SYSTEMS OF EUROPE. A brief historical and statistical study of secondary education in Germany, France and England. The work will be based upon such texts as Russel's German Higher Schools, Holman's English National Education, and will consist of recitations and reports upon original topics. Open to all students. Twice a week.

- 52. MODERN EDUCATIONAL THEORIES. These theories will be studied from three points of view; (1) As the expression of a certain philosophy of life; (2) from the point of view of their consistency; and (3) from that of their truth. The work is based on Quick's Educational Reformers. Twice a week.
- 54. PLATO'S REPUBLIC. This course is essentially seminary work for the benefit of those students of Course 53 who wish to make a critical study of Plato's Philosophy of Education. Twice a week.
- 56. THE KINDERGARTEN. This course is intended especially for those who are preparing to do kindergarten and primary work, and to be superintendents of schools. Twice a week.
- 58. THE PHILOSOPHY OF EDUCATION. This course aims to make a systematic exposition of the philosophy of education. Four times a week.
- 60. EDUCATION IN THE UNITED STATES. A comparative study of secondary education in the United States and Europe presupposing Course 73. Twice a week.
- 68. A continuation of 67. Twice a week.
- 70. A continuation of 69. Twice a week.
- PEDAGOGICAL RESEARCH. Continuation of Course 71. Open to students credited with 59 or 71. Twice a week.

## ELECTRICAL ENGINEERING.

[ELECTRICAL HALL, Room 9 and Laboratory.]

Associate Professor Caldwell, Mr. Fish

- ELECTRICAL ENGINEERING. Lectures on direct and alternating circuits, dynamo machinery, transformers, accumulators and applications. Twice a week. (First and Second Terms, third year, Course in Architecture; and fourth year, Courses in Industrial Arts and Manual Training.)
- ELECTRICAL ENGINEERING. Laboratory work on the subjects treated in Course
  6, which it accompanies. Twice a week. (First and Second Terms,
  fourth year, Courses in Industrial Arts, Manual Training, Mining and
  Mechanical Engineering; Second Term, third year, Course in Architecture; fourth year, Civil Engineering.)
- DIRECT CURRENT DYNAMO MACHINERY. Generators and Motors, their theory, construction and operation. Lectures, recitations and problems. Four times a week. (Second Term, third year, Course in Electrical Engineering.)
- ELEMENTARY DYNAMO LABORATORY. Handling and testing of circuits, generators, motors, accumulators, lamps, etc. Nine actual hours per week. (Third Term, third year, Course in Electrical Engineering.)
- ALTERNATING CURRENT CIRCUITS AND MACHINERY. Generators, 'transformers, single and polyphase motors, apparatus and systems. Lectures, recitations and problems. Three times per week. (First and Second Terms, fourth year, Course in Electrical Engineering.)
- 11. ADVANCED DYNAMO LABORATORY. Continuation of the work begun in Course 12, together with alternate current apparatus, telephone apparatus, etc. (First and Second Terms, six actual hours. Third Term, with thesis work nine actual hours. Fourth year, Course in Electrical Engineering.)
- ELECTRICAL TRANSMISSION AND DISTRIBUTION. Systems, operation and apparatus. Twice a week. (Second Term, fourth year, Course in Electrical Engineering.)
- 13. APPLICATION OF ELECTRICITY. Brief treatment of the elements of Illumination, Street Railway Work, Telephone, Telegraph, Electro-metallurgy, Mining, etc. The seminary method is used in this course to the extent of each student writing one paper on some assigned subject, and reading the same before the class. Five times per week. (Third Term, fourth year, Course in Electrical Engineering.)
- 14. ELECTRICAL DESIGN. Includes wiring of buildings, Direct and Alternate current generators, transformers, distribution, etc. Eight hours per week in the drawing room. (Second and Third Terms, fourth year, Course in Electrical Engineering.)

## ENGLISH LITERATURE

[UNIVERSITY HALL, ROOM 31.]

Professor Barrows, Assistant Professor Taylor

All Courses except 51 and 52 are elective; but no elective is open to one who has not taken, or is not taking 51 or 52. Students, whose major study is in English literature must take 69 and 70, in either the third or fourth year. Biennial courses will alternate as follows: 53 with 61, 54 with 60, 63 with 71, 64 with 72.

#### FIRST SEMESTER.

51. AN INTRODUCTION TO ENGLISH LITERATURE. Four times a week.

Required in the Course of Arts, the Latin Course in Philosophy, and the

Course preparatory to the study of Law and Journalism.

- Course 51 includes (1) an outline of the history of English literature. For this part of the work Pancoast's "Introduction to English Literature" is covered in three examinations. (2) Lectures on the elements of literary analysis and interpretation. (3) Study of selections characteristic of different authors and of different periods, to secure acquaintance with literary problems, to cultivate perception of literary qualities, and to verify and apply the assertions of the lectures and of the manual. The book first used is Palgrave's "Golden Treasury."
- 53. POETRY, FROM SPENCER TO MILTON, exclusive of the drama. Twice a week. (Omitted in 1899-1900.) Historical and critical lectures; papers and discussions. Required books: "Spenser's Faery Queene" (Kitchin); "Elizabethan Lyrics" (Schilling): "Milton's Poetical Works."
- 55a. THE ENGLISH BIBLE. The Pentateuch. Once a week. Given in 1901-'02.
- 556. THE ENGLISH BIBLE. The Histories. Once a week. Given in 1899-1900.
- 55c. THE ENGLISH BIBLE. The Gospels. Once a week. Given in 1900-1901.
  - The study of the Bible is continued through three years. The old authorized version is the text-book; but students must also have, for correction and comment, the revised version.
- 57. SHAKSPERE. Three times a week. Literary study of Shakspere's plays, with no more reference to historical and philological matters than is necessary to an understanding of the text. Various problems of dramatic art are discussed in connection with the plays that best illustrate them.
- THE MODERN NOVEL. Three times a week. (Omitted in 1900-1901.) Lectures, reading and reports.
- FROM DRYDEN TO JOHNSON. Twice a week. (Omitted in 1900-1901.) Lectures, reading and reports. Both prose and poetry will be reviewed in this course.
- 63. PROSE, FROM COWPER TO THE VICTORIAN PERIOD. Three times a week. (Omitted in 1899-1900.) Lectures on the history of thought in this period, on the relations of authors to each other and to the times, and on their literary significance. Critical study of selections from Burke, Coleridge, Landor and the essayists.
- 65. MASTERPIECES: A STUDY OF LITERARY TYPES. Three times a week. This with course 66 constitutes one continuous course. The course covers the whole field of English Literature topically. It is designed for graduates, but is open to undergraduates who have taken two elective courses in this department. The study is of literary types, their origin and development, the best examples in English being chosen for basis; the types will include the drama, the epic, the idyll, the lyric, and in prose the novel, the short story and the essay. The whole will be based upon Aristotle's "Poetics" and the theory of ideal literature; and will include lectures, readings and essays.
- 67 CHAUCER. Twice a week. The Prologue to the Canterbury Tales, and the most important of the tales will be read. The Morris-Skeat edition of the Prologue, and Skeat's edition of Chaucer's Works are required.

- LITERARY PROBLEMS. Twice a week. A series of topical studies. Lectures
  and illustrative readings drawn from the entire range of our literature;
  reports and discussions.
  - Required in the third or fourth year of students whose major study lies in this department.
- 71. VICTORIAN LITERATURE PROSE. Three times a week. (Omitted in 1900-1901.) Victorian prose, centering on the essayists,—Ruskin, Newman, Arnold, Pater, Stevenson, Lectures, readings and reports.

- 52. AN INTRODUCTION TO ENGLISH LITERATURE. Four times a week.

  Required in the Modern Language and English Courses in Philosophy and in the Course in Commerce and Administration. See description of Course 51, of which this is a repetition.
- 54. PROSE, FROM SIDNEY TO MILTON. Twice a week. (Omitted in 1899–1900.)

  Lectures on the intellectual life, and the political, religious, and social problems of the period as they affected its literature; papers and discussions. Required books: Bacon's "Essays and Advancement of Learning" (Selby); Browne's "Religio Medici" (Camelot Classics); Cowley's "Essays" (Cassei's National Library); Fuller's "Wit and Wisdom" (R. T. S. Library). Sidney, Taylor and others will be investigated in the library.
- 56a. THE ENGLISH BIBLE. Course 55a continued. Given 1901-1902.
- 56b. THE ENGLISH BIBLE. The Psalms and Prophets. Once a week. Given in 1899-1900.
- 56c. THE ENGLISH BIBLE. The Acts and Epistles. Once a week. Given in 1900-1901.
  - The study of the Bible is continued through three years. The old authorized version is the text-book; but students must also have, for correction and comment, the revised version.
- 58. THE DRAMA FROM THE MIRACLE PLAYS TO THE CLOSING OF THE THEATRES.

  Three times a week. Lectures on the Mysteries, the Moralities, the Interludes, the Rise of the Regular Drama, Shakspere and his Predecessors, Contemporaries and Successors. Select plays will be read by the class.
- THE DR MA SINCE THE RESTORATION. Twice a week. (Omitted 1900-1901.)
   Lectures, readings and reports.
- AMERICAN AUTHORS. Three times a week. (Omitted 1900-1901.) Lectures, readings and reports.
- 64. POETRY FROM COWPER TO THE VICTORIAN PERIOD. Three times a week. (Omitted in 1899-1900.) Lectures on the rise of the romantic spirit, on the history of thought in this period, and on the relation of the poets of the times and to current problems. Study of selections from Cowper, Burns, Wordsworth, Shelley and Keats.
- 66. MASTERPIECES: A STUDY OF LITERARY TYPES. Three times a week. Course 66 is a continuation of Course 65 and must be preceded by 65. See description of Course 65.
- 68. THE GREAT TRANSLATIONS. Twice a week. (Omitted in 1899-1900.) This is a graduate course, for the discussion of various problems of universal literature, and the investigation of the indebtedness of English to other literatures. Undergraduates must obtain permission to take this course.
- LITERARY PROBLEMS. Twice a week. A continuation of Course 69, and required of students whose major study lies in this department.
- 72. VICTORIAN LITERATURE POETRY. Three times a week. (Omitted 1900-1901.)

## ENTOMOLOGY

(See Zoology and Entomology)

# EUROPEAN HISTORY

(See History)

# GENERAL CHEMISTRY

(See Chemistry)

#### GEOLOGY

[ORTON HALL, Rooms 1, 5, 4, 7 and 13]

Professor Orton, Associate Professor Prosser, Associate Professor Bownocker.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE.

#### FIRST SEMESTER.

- 53. PALEONTOLOGY. Careful training in systematic classification which may be used in the philisophical study of the development of plant and animal life, or as a means of becoming acquainted with the faunas and floras that characterize the various geological formations.
  - At first the student devotes some time to conchology, studying recent shells in which the characters used in classification are well preserved, and after this preliminary work, fossils are studied. Fossils afford the most reliable data for identifying and correlating geologic formations, and the critical study of faunas is a field especially adapted to independent research.

Laboratory, museum and field work. Two to five hours credit.

- 55. PETROGRAPHY 1. Laboratory and Lectures. Optical crystallography, with practical determination of rock-forming minerals, macroscopically and microscopically. Study of the igneous rocks in the hand specimen and thin section. Twice a week. The Sturtz rock collection and Voight Hochgesang thin sections of typical minerals and rocks will be carefully studied. Books of reference:—Mitchel Levy—Les Minneaux des Roches; Rosenbusch—Mikroscopische Physiographie der Petrographisch Wichtigen Mineralien, 3d ed.; Mikroscopische Physiographie der Massigen Gesteine, 2d ed.; Teall's British Petography; Spottiswoode's Polarization of Light. Prerequisites; Chemistry, 51 and 52; Metallurgy, 52 (Mineralogy and Crystallography).
- 59. FIELD GEOLOGY. Field and laboratory study of the geological formations readily accessible from Columbus. This course is intended to acquaint the student with the ordinary methods of field investigation, and involves the collection and identification of specimens, the measurement of geologic sections and the preparation of a report describing the region studied. Two to five hours credit.
- 61. COSMICAL GEOLOGY. Lithological Geology, Dynamic and Structural Geology, Books of reference used in preparation of the work: Green's Physical Geology, Geike's Text-book of Geology, LeConte's Elements of Geology, Hunt's Chemical Geology, Daubree's Geologic Experimentale. Three times a week.

63. PHYSIOGRAPHY. Study of the features of the earth's surface with special reference to North America; the agencies producing these features and geographical changes now in progress. Recitations, lectures, map-work, field excursions. Books used in preparation of work: Standard Works on Physical Geography; Russel's Rivers of North America; Lakes of North America; and Glaciers of North America; Shaler's Aspect of the Earth; Wright's The Ice Age of North America; The National Geographic Magazine; Maps of the Mississippi River Commission, etc. Twice a week.

#### SECOND SEMESTER.

- Continuation of Course 53. These two Courses may be continued through a second year.
- 56. Continuation of Course 55. Twice a week.
- 58. GEOGRAPHIC GEOLOGY. The origin, development and destruction of topographic forms. Rivers, lakes, oceans, ice, and winds as agents modifying the surface of the earth. The great ice age in North America. [Primarily for teachers.]
  - Books of reference: Journal of Geology; American Geologist; The Great Ice Age; (Geike's) The Ice Age in North America; (Wright) The Reports of the United States Geological Survey; The Maps of the Mississippi River Commission, etc. Three hours per week. Lectures, recitations, map work. Third term.
- 60. AREAL GEOLOGY. Instruction in the methods of preparing geological maps and reports. The student compiles from a geological report a map with sections showing geologic structure, and later traces the outcrops and prepares a geological map of some region. Two to five hours credit.
- 62. HISTORICAL GEOLOGY. A general course in paleontological and stratigraphical geology with excursions and laboratory study of the Ohio Geological Reports and characteristic fossils. The development of organisms and the classification and distribution of the geological formations are considered. Continuation of Course 61. Lectures and recitations three hours.
- 64. Continuation of Course 63. Twice a week.

## COLLEGES OF AGRICULTURE, ENGINEERING AND PHARMACY.

- 2. GENERAL GEOLOGY. Structural, historical and dynamical geology. Three hours lectures and recitations and four laboratory and field work. In the laboratory. Dana's Manual of Geology, the Ohio Geological Reports and characteristic fossils will be studied. In the field, specimens will be collected, sections measured, formations identified and the student will be given an idea of the methods of work pursued by a field geologist. Credit five hours. First term.
- 5. ECONOMIC GEOLOGY. The common minerals and rocks composing the earth's crust, their alteration and decomposition. Soils, their origin and classification; the soils of the United States and especially those of Ohio. Fuels: Coal, oil and gas. Building stones, limes and cements. Iron and the most useful metals. Three hours. Second term. Lectures and laboratory work.
- PHYSIOGRAPHY. The probable origin of the earth and its relation to other heavenly bodies. The features of the earth's surface and the agencies producing these. The atmosphere, climate, etc. Oceans, rivers and lakes. Recitations, lectures and map work. Five hours. Third term.

- 5. GENERAL GEOLOGY. Structural, Historical and Dynamical Geology. Three hours lectures and recitations and two hours laboratory and field work. In the laboratory the Ohio Geological Reports and characteristic fossils will be studied. In the field, sections will be measured, formations identified, specimens collected and the student given an idea of the method of work pursued by a field geologist. (Required in the first and second term of fourth year in the Long Course.)
- 6. ECONOMIC GEOLOGY. Lectures, Economic materials of stratified rocks, clay, limes, cements, coals, iron ores, phosphates, petroleum, etc. Economic materials derived from veins and igneous rocks, gold, silver, copper, mercury. Gems. Books of reference used by students in preparation of their work: Publications of U. S. Geological Survey, State Geological Surveys, Phillips' Ore Mining. Three times a week. (Required in second term of fourth year in Long Course.)
- 1. PHYSIOGRAPHY. Recitations, lectures, map work. The probable origin of the earth and its relations to other heavenly bodies. The features of the earth's surface and the agencies producing these. The atmosphere, climate, etc. Oceans, rivers and lakes. Five hours. Third term, first year. Short Courses in Mining, Clay-working; and second year, Short Course in Industrial Arts.
- 4. ELEMENTARY GEOLOGY. Recitations, lectures, laboratory work. Lithological, dynamical, structural and historical geology. Five hours. (Second term, second year, Short Course in Mining.)
- GENERAL GEOLOGY. Structural, historical and dynamical geology. Three hours lectures and recitations and four hours laboratory and field work. In the laboratory Dana's Manual of Geology, the Ohio Geological Reports and characteristic fossils will be studied. In the field specimens will be collected, sections measured, formations identified and the student given an idea of the methods of work pursued by a field geologist. Credit five hours (First term, fourth year, Course in Architecture, Ceramics, Civil and Mining Engineering; and second year, Short Course in Clay-working.)
- 6. ECONOMIC GEOLOGY. Lectures and assigned reading. Economic materials of stratified rocks, clays, limes, cements, coals, iron ores, phosphates, petroleum and gas. Economic materials derived from unstratified rocksgold, silver, copper, mercury, etc. Three hours. (Second Term, fourth year, Courses in Architecture, Ceramics, Civil and Mining Engineering; and second year, Short Course in Clay-working.)
- 7. PETROGRAPHY. Lectures and laboratory work. The ingenious, sedimentary, and metamorphic rocks,-their origin and classification. The volcanic rocks of the western United States,-their composition, structure and alteration products. The object of this course is to give the student a practical acquaintance with rocks. Two hours. (Second Term, fourth year, Course in Mining Engineering.)

## GERMAN LANGUAGES AND LITERATURES

[UNIVERSITY HALL, Rooms 32 and 33]

Professor Eggers, Associate Professor Mesloh
COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

FIRST SEMESTER

- 51. ELEMENTARY GERMAN. Four times a week.
- 53. SCIENCE READING. Twice a week.

- INTERMEDIATE GERMAN. Lectures upon outline of German Literatrue. Reading of selections. Four times a week.
- THE GERMAN DRAMA. Lectures and reading of Selections. Three times a week.
- 59. FAUSTI. Twice a week. (Can be taken only by those who propose to take 60.)
- 61. MIDDLE HIGH GERMAN. Mediæval Epics. Twice a week.
- 63. DEUTSCHER AUFSATZ. Original compositions in German. Once a week.
- 65. COLLOQUIAL EXERCISES. For advanced students. Twice a week.
- 67. GOTHIC. Wright's Primer. The relation between Gothic and allied languages will be considered. Twice a week.
- OLD NORSE. Lectures on Grammar and Reading of Sagas.
   The last two courses will alternate.
- SANSKRIT. Perry's Primer. Lectures introductory to the study of Indo-Germanic philology.
- 73. MODERN GERMAN DRAMA. Critical study of contemporary dramatists, Hauptmann, Sudermann and others, with references also to the dramas of Ibsen and other dramatists of Germanic countries. Lectures and reading, Composition. After 1901 this course will alternate with 57. Three hours a week.
- 75. PHONETICS. Lectures. The course is intended to give the student a knowledge of the various sounds of language and of the relations between them.

  One hour a week.

- 52. Continuation of Course 51. Four times a week,
- 54. Continuation of Course 53. Twice a week. Courses 53 and 54 must have been preceded by Courses 51 and 52.
- 56. GERMAN LITERATURE. Lectures and reading of Selections. Four times a week. Course 55 must have been preceded by Courses 51 and 52.
- 58. THE GERMAN PROSE. Lectures and reading of Selections. Three times a week. 57 and 58 must have been preceded by 51, 52, 55 and 56.
- 60. FAUST II. Twice a week.
- 62. MEDIÆVAL LYRICS. Twice a week.
- 64. DEUTSCHE KULTURGESCHICHTE. Once a week.
  - Courses 59, 60, 61, 62, 63 and 64 can be taken only with the approval of Professor Eggers; and must have been preceded by Courses 51, 52, 55 and 56, or their equivalents.
- 66. COLLOQUIAL EXERCISES. For advanced students. Twice a week.
- 68. OLD HIGH GERMAN. Lectures on Grammar and Literature. Reading of Selections. Twice a week.
- COMPARATIVE GRAMMAR. Lectures. Twice a week.
   The last two courses will alternate.
- 72. Continuation of Course 71.
- 74. MODERN GERMAN PROSE. Lectures and reading. The great contemporary writers of prose in Germany will be discussed. Some of their critical and philosophical works will be read. References will be made to the great prosaists of other Germanic countries. This course will alternate after 1901 with 58. Three hours a week.

## COLLEGE OF AGRICULTURE, ENGINEERING AND PHARMACY

- 1. ELEMENTARY. Four times a week, through the year.
- 2. SCIENCE READING. Twice a week, through the year.
- 4. GERMAN LITERATURE. Four times a week, through the year.
- SCIENCE READING. Four times a week. Open to those who have completed Course 1 or its equivalent. Required of all students who offer German as their entrance language.

# GREEK LANGUAGE AND LITERATURE

[University Hall, Room 37]

Prrofessor Smith, Associate Professor Hodgman

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

ELEMENTARY GREEK. White's First Greek Book and one or two books of Xenophon's Anabasis. This course is designed to meet, partially, the wants of those who are deficient in the Greek required for admission. It cannot receive University credit. Five times a week, through the year.

#### FIRST SEMESTER

- 51. XENOPHON'S HELLENICA, Books I, II (Manatt). Greek Prose Composition. Herodotus, Book VII. Four times a week.
- LYSIAS, Select Orations (Morgan.) Attic Antiquities. Homer's Iliad (Seymour). Four times a week
- LECTURES ON HISTORY OF ANCIENT ART. Twice a week.
   (Given biennially. Not offered in 1900-1901.)
- 61. THE ATTIC DRAMA. Lectures, collateral readings and quiz. Twice a week.
- 63. LECTURES ON THE HISTORY OF MEDIÆVAL AND MODERN ART. Twice a week.

  (Given biennially. Not offered in 1901-1902.)
- 65. LYRIC POETRY. Selections from the Greek Lyric Poets. Twice a week.

- 52. HERODOTUS (continued). Myers's History of Greece. Homer's Odyssey (Perrin). Four times a week.
- HOMER'S ILIAD (continued). Plato's Apology of Socrates, Crito, and selections from Phaedo. Four times a week.
- LECTURES ON HISTORY OF ANCIENT ART. Continuation of Course 59. Twice a week.
   (Given biennially. Not offered in 1900-1901.)
- 62. THE ATTIC DRAMA. Continuation of Course 61. Rapid reading of two or three plays. Twice a week.
- LECTURES ON MEDIÆVAL AND MODERN ART. Continuation of Course 63, Twice a week.
   (Given biennially. Not offered in 1901-1902.)
- GREEK PRIVATE LIFE. Lectures, illustrated by photographs and lantern-slides.
   Twice a week.

#### CLASSICAL PHILOLOGY

Courses 69-70. HISTORICAL GRAMMAR. These courses include lectures upon such topics as: The Indo-European family of languages; alphabets and pronunciation of Greek and Latin; accent and its effects as seen in vowel weakening, syncopation, etc.; vowel graduation; inflection of noun and verb; Grimm's Law and the associated laws; the passage of Latin into French and thence into English, etc. The courses include, also, the study of selected inscriptions, of a portion of Quintilian, Book I, and assigned reading in such manuals as Giles's Comparative Philology, and Thompson's Palæography. Twice a week through two semesters.

(Given biennially. Not offered in 1901-1902.)

## HISTORY

#### AMERICAN HISTORY

[University Hall, Rooms 27 and 18]

Professor Knight, Dr. J. B. Sanborn

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Course 55 (or 56) must precede all other courses in American History. All students intending to take advanced courses in American History should take English History (European History 153 and 154, Department of European History) as early as possible in their course.

## FIRST SEMESTER

- 55. POLITICAL HISTORY OF THE UNITED STATES. Lectures, text-books, prescribed readings and topical reports. Hart's Formation of the Union; Wilson's Division and Reunion. Four times a week. This course is repeated in the Second Semester (as Course 56). Of students who are required to take this subject, those whose names begin with the letters from A to K will take it in the first semester; others will take it in the second semester (as Course 56). Two sections.
- Seminary for Research Work in American History and Political Science.
   Two hours a week (at one meeting).
  - In 1900-1901 all fourth year students, who elect their Major Study in the departments of American History and Political Science must take this course. Open, as elective, to other students, graduate and advanced undergraduate, on permission of the instructor.
- 63. AMERICAN COLONIAL HISTORY. The political and social development of the American Colonies, the growth of colonial self-government and of the idea of union. Lectures, assigned readings and special reports. Three times a week.

(Given biennially. Not offered in 1900-1901.)

65. CONSTITUTIONAL AND POLITICAL HISTORY OF THE UNITED STATES. 1850-1876. Secessions, Civil War and Reconstruction; a study of the causes and the effects of the downfall of slavery. Lectures and assigned readings. Three times a week.

Given biennially. Offered in 1900-1901.)

- 71. HISTORICAL MATERIAL AND ITS USE. Lectures on elementary historical bibliography and the use of American historical documents, with practical exercises. Especially designed for students intending to do advanced work in American history and political institutions. Once a week.
  - All students electing their Major Study in the department of American History and Political Science are expected to take this course in their third year. Open as elective to others on permission of the head of the department.
- 73. TERRITORIAL DEVELOPMENT OF THE UNITED STATES, 1789-1850. Growth of the United States, the acquisition and settlement of new territories, and the effect of those territories on the life of the nation. Lectures and assigned readings. Twice a week.
- 56. POLITICAL HISTORY OF THE UNITED STATES. Lectures, text-books, prescribed readings and topical reports. Hart's Formation of the Union; Wilson's Division and Reunion. Four times a week. (This is a repetition of Course 55 and will be taken in the second semester by those students (of whom it is required) whose names begin with letters from L to Z.) Two sections.
- SEMINARY FOR RESEARCH WORK IN AMERICAN HISTORY AND POLITICAL SCIENCE.
   Two hours a week (at one meeting).
  - This is a continuation of Course 61, and is open to those only who have had Course 61. In 1900-1901 all fourth year students electing their Major Study in the department of American History and Political Science must take this course. Open, as elective, to other students, graduate and advanced undergraduates, on permission of the instructor.
- 64. CONSTITUTIONAL AND POLITICAL HISTORY OF THE UNITED STATES. The Formative Period, 1776-1815. An advanced course covering the organization and establishment of the United States as a nation. Lectures, assigned readings and special investigations. Three times a week. (Given biennially. Not offered in 1900-1901.)
- 66. AMERICAN DIPLOMATIC HISTORY. History of the foreign relations, policy and treaties of the United States. Lectures and special investigations. Three times a week.
  (Given biennially. Offered in 1900-1901.)
- 72. TOPICAL RESEARCH IN AMERICAN HISTORY. The preparation of special topics on the basis of the work of Course 71. Some special period of American History will be taken up each year. Once a week.
  - Open to those who have had Course 71. All students electing their major study in the department of American History and Political Science are expected to take this course in their third year.
- 74. TERRITORIAL DEVELOPMENT OF THE UNITED STATES, 1850-1900. A continuation of Course 73. Particular attention will be paid to the country west of the Mississippi, and to the growth of American interests in the Pacific. Lectures and assigned readings. Twice a week.

## COLLEGE OF ENGINEERING

56. POLITICAL HISTORY OF THE UNITED STATES. Lectures, text-books and prescribed reading. Hart's Formation of the Union; Wilson's Division and Reunion. Two sections. Four times a week. (Last half Second Term and Third Term, third year, Courses in Industrial Arts and Manual Training.)

#### COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

5. POLITICAL HISTORY OF THE UNITED STATES. Lectures, text-books and prescribed readings. Hart's Formation of the Union; Wilson's Division and Reunion. Four times a week during the first term and the first half of the second term. Two sections. The aim of this course is to give the student such knowledge of the political history of the United States as shall make for intelligent citizenship and a clearer understanding of current political conditions.

# EUROPEAN HISTORY

[University Hall, Rooms 7, 17, 36]

# Associate Professor Siebert

Courses 151 and 152, in the order named, must precede all other courses in European History, except Courses 153, 154 and 157.

#### FIRST SEMESTER

- 151. GENERAL HISTORY OF EUROPE TO THE CLOSE OF THE MIDDLE AGES. Lectures, text-book and collateral readings. Adams, Civilization during the Middle Ages. Three times a week. Two sections.
- 153. POLITICAL AND CONSTITUTIONAL HISTORY OF ENGLAND TO THE ACCESSION OF THE STUARTS. Lectures, text-book and assigned readings. Gardiner's Student's History of England. Three times a week.
- 155. HISTORY OF EUROPE FROM 1789 TO 1815. The French Revolution. Lectures, recitations and collateral reading. Stephen's Europe, 1718-1815. Three times a week.
- ROMAN HISTORY AND INSTITUTIONS. Lectures and text-book. Pelham, History of Rome. Twice a week.
- 159. HISTORY OF EUROPEAN COLONIES. A study of colonial development of Portugal, Spain, England, the Netherlands, France and Germany during the fifteenth, sixteenth and seventeenth centuries. Lectures, collateral readings and special reports. Twice a week.
  Omitted in 1900-1901.
- 161. HISTORY OF FRANCE TO THE MIDDLE OF THE EIGHTEENTH CENTURY. Lectures, assigned readings and special reports. Given biennially. Omitted in 1900-1901.

- 152. GENERAL HISTORY OF EUROPE FROM THE MIDDLE AGES TO THE PRESENT TIME. Lectures, text-book and collateral reading. Schwill's History of Modern Europe. Three times a week. Two sections.
- 154. POLITICAL AND CONSTITUTIONAL HISTORY OF ENGLAND FROM THE ACCESSION OF THE STUARTS TO THE PRESENT TIME. Lectures, text-book and assigned readings. Gardiner's Student's History of England. Three times a week.
- 156. HISTORY OF EUROPE SINCE 1815. Lectures, text-book and assigned readings. Fyffe's Modern Europe. Three times a week.
- 158. HISTORY OF THE PERIOD OF THE PROTESTANT REFORMATION. Lectures and text-book. Hauser's Era of the Reformation. Twice a week.

- 160. HISTORY OF EUROPEAN COLONIES. History of colonization by the important States of Europe during the eighteenth and nineteenth centuries. Lectures, collateral reading and special reports. Twice a week. Omitted in 1900-1901.
- 162. DOCUMENTARY AND BIBLIOGRAPHICAL STUDIES IN EUROPEAN HISTORY. Lectures, readings and criticism of documents, and investigations. Given biennially. Omitted in 1900-1901.

## HORTICULTURE

# [HORTICULTURAL HALL]

# Professor Lazenby, Mr. Price.

- ELEMENTS OF HORTICULTURE. Lectures, text-book and laboratory work in garden, orchard and green-house. A study of the principles of plant growth and culture, preparation of soil, drainage and irrigation, weeds and insects. Four times a week. First term.
- a. GREENHOUSE, CONSTRUCTION AND MANAGEMENT. A study of the different types of plant houses, including methods of heating, ventilating and watering. The vegetable forcing house, and the crops grown therein. Lectures, recitations and laboratory work in greenhouse. Four times a week. Second term.
- b. PLANT PROPAGATION. The theory and practice of multiplying plants by seeds, cuttings, divisions, layers, budding and grafting. A study of special garden crops, including fertilizers, tools and implements. Practice in transplanting, pollinating and the use of insecticides and fungicides. Lectures and laboratory work in garden and orchard. Four times a week. Third term.
- 5. VARIETIES OF FRUIT. A study of the history, characteristics, adaptation and general qualities of orchard and garden fruits, including their commercial and food value. Practice in judging and scoring apples, pears, peaches, grapes, citrous and nut fruits. Lectures, recitations and laboratory exercises. Four times a week. First term.
- 6. PRINCIPLES OF FRUIT CULTURE. A study of the location, tillage and fertilizing of fruit lands; the selection of varieties, laying out and planting of fruit grounds; the care of fruit plantations, including diseases, insects and fungi; spraying and the use of insecticides and fungicides; harvesting, preserving and marketing fruit. Lectures and recitations four times a week. Second term.
- 7. SMALL FRUIT CULTURE. A study of the varieties and methods of culture of the small or bush fruits. Practice in cross-pollinating, judging and scoring of small fruits; the relation of bees and birds to horticulture; insect enemies; fungus diseases and the theory and practice of spraying. Lectures, recitations and laboratory work in garden and orchard. Four times a week. First term.
- ELEMENTS OF FLORICULTURE. A study of the origin, history, classification, general characteristics and development of ornamental plants. Lectures and laboratory work. Twice a week. First term.
- COMMERCIAL FLORICULTURE. A study of the propagation and culture of ornamental plants, including the general management of plant houses, the marketing of cut flowers and bedding plants. Lectures, recitations and laboratory work, Twice a week. Second term.

- 10. AMATEUR OR HOME FLORICULTURE. Including the study of window gardening and general management of house plants; the out-door flower garden and treatment of flower beds and borders. Lectures, recitations and laboratory work. Twice a week. Third term.
- ARBORICULTURE. A study of native and introduced trees and shrubs; their use for timber, ornament, shade, shelter and hedges; methods of propagation and culture. Lectures and field work. Twice a week. First term.
- 12. FORESTRY AND SYLVICULTURE. A study of the influence of forests upon soils, crops and climate; forestry in Europe; value of trees for timber; establishment and management of small plantations of forest trees; how to improve and extend existing woodland. Lectures and laboratory work. Twice a week. Second term.
- 13. LANDSCAPE GARDENING. A study of the art of producing picture-like or landscape effect; the making of lawns, walks and drives, and the correct planting of trees, shrubs and flowers for the external adornment of home and public grounds. Lectures and practice. Twice a week. Third term.

# INDUSTRIAL ARTS AND SHOPWORK

[HAYES HALL, Rooms 9, 12, 17, 18, 5 and 6]

#### INDUSTRIAL ARTS

Professor Sanborn, Mr. Knight, Mr. Renck, Mr. Crowe, Mr. McIntire

- TOOLS, MACHINES. Lectures and recitations on hand and machine tools and the principles of mechanism and mechanics underlying their design, construction and operation. Three times a week.
- DESIGNING. Problems in drawing and design to accompany Course 1. Three drawing periods a week.
- 3. SHOP EQUIPMENT, APPLIANCES AND MANAGEMENT. A continuation of Course 1. Lectures and recitations on the strength and durability of the materials used in construction; shop and factory buildings and their construction; power, power transmission and prime movers; automatic machines and other special devices for turning out cheap and accurate work; methods of compensation and shop accounts and management. Three times a week.
- ADVANCED DESIGNING. Problems in the design of buildings and the arrangement of machinery, line-shafting, etc., for manufacture plants; to accompany Course 3. Three drawing periods a week.
- 5. WORKSHOPS AND APPLIANCES. Lectures and problems on the construction of shop buildings and the arrangement of machinery; power required and the means of transmission: friction in line-shafting and the efficiency of machinery; automatic machines and special shop appliances. Three times a week.
- MACHINE DESIGN. Application of the principles of mechanics and strength of materials to the problems of machine designing. Five times (ten hours' practice) a week.

# SHOPWORK

CARPENTRY AND PATTERN MAKING. Exercises and practice in carpentry, wood-turning and pattern making, including sawing, planing, mortising, splicing, framing and other work involving the use of the ordinary carpenter tools; center and chuck turning; the making of finished patterns; and enough elementary moulding to illustrate draft, parting, cores, etc.

- FORGING. Exercises and practice in iron and steel forging, including such operations as drawing, bending, forming, upsetting, welding and the making and tempering of punches, drills, chisels, lathe tools and springs.
- FOUNDRY WORK. Exercises and practice in tempering sand and preparing moulds of machine parts in the sand, core-making, melting iron and brass, and the pouring of castings.
- CHIPPING AND FILING. Exercises and practice in vise work, including chipping in cast and wrought iron; surface filing, squaring, fitting, finishing, and the scraping of surface plates.
- 7. CARPENTRY AND PATTERN MAKING. Similar to Shopwork 1.
- 8. CARPENTRY: CABINET WORK. Exercises and practice in cabinet making including panelling, mitre and dovetail joints, etc.; use of power tools.
- 9. ADVANCED PATTERN MAKING. Continuation of pattern work of Shopwork 7.
- 11. FORGING. Similar to Shopwork 2.
- ADVANCED FORGING. Tool making, tempering of taps, dies, cutters, etc.; annealing; case hardening; ornamental iron work, etc.; visits to shops.
- 13. MACHINE WORK. Exercises and practice in hand-turning in iron and brass on speed lathes; and straight and taper turning, boring, fitting, chucking, thread-cutting, etc., on engine lathes,
- 14. MACHINE WORK. Exercises and practice on the lathe, planer, shaper, drill press and milling machine, with use of small tools as drills, taps, dies, reamers, counterbores, etc.; construction of parts of actual machines.
- ADVANCED MACHINE WORK. Exercises and practice on turret lathe, universal, surface and tool grinding machines, gear cutting, etc.
- 16. ADVANCED MACHINE WORK. The construction and use of jigs and templates; the accurate laying out of work; the duplication of parts, the production of work rapidly and economically, etc.
- 17. ADVANCED MACHINE WORK. The making and use of special tools and fixtures, standard plugs and collars, standard caliper and limit guages; error limits in modern machine construction; methods of testing the accuracy of machine tools; etc.

## SHOPWORK REQUIRED

Number	Credit	Year	Term	Courses in	Number	Credit	Year	Тетш	Courses in
3 4	2133 2133 33 21 21 33 21 4	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	111123331	M.E.: I. A. (short). I. A.: Man. Tr. I. A.: Man. Tr. I. A.: (short). M. E. Clay-work (short). E. M. Cer. I. A. (short). Chem.: I. A.: Man. Tr E. M. E. E.: M. E.	12 13 14	2122222	22123 2 2322 33	2 2 3 3 3 3 2 2 2 3 3 1 3	E. M. Chem.: I. A.: Man. Tr. Clay-w'k (short): I. A. (short) Mining (short). Cer. I. A.: Man. Tr. E. E. I. A.: Man. Tr. I. A. (short). M. E. M. E.: E. E. I. A.: Man. Tr.
8 9	5 3 3 2 3	2 2 1 2 2	3 2 2 1 1	I. A.: Man. Tr. I. A.: Man. Tr. I. A. (short). E. E. M. E.	15 16 17	3 4 5 3	4 3 2 4 4	1 2 3 2 3	I. A.: Man. Tr, M. E. I. A. (short). I. A.: Man. Tr. I. A.

#### LATIN

# [UNIVERSITY HALL, Rooms 29, 28 and 39]

Professor Derby, Associate Professor Hodgman, Assistant Professor Elden

# COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Courses 51, 52, 53, and 54 in the order named must precede the Elective Courses 55, 56, 57, 58, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78.

#### FIRST SEMESTER

- 51. LIVY BOOKS XXI AND XXII; TERENCE-Pharmio. Four times a week.
- HORACE Odes; CATULLUS Selections; TACITUS Agricola. Four times a week.
- 55. ROMAN HISTORIANS -TACITUS Historiae; SUETONIOUS. Three times a week.
- 57. ROMAN PHILOSOPHY. Three times a week. (Not offered in 1900-1901.)
- 59. PHARMACEUTICAL LATIN. Five times a week.
- LINGUISTICS AND INSCRIPTIONS. Two times a week. (Not offered in 1900-1901.)
- 63. TEACHERS' COURSE. Two times a week.
- 65. ROMAN RHETORIC AND ORATORY. Three times a week.
- 67. GREEK AND ROMAN ANTIQUITIES. Lectures, illustrated. Two times a week.
- 69. CICERO'S PHILOSOPHY. Tusculanae Disputationes, De Finibus. Three times a week.
- 71. LATIN LITERATURE. Once a week.
- 73. ROMAN POLITICAL AND LEGAL ANTIQUITIES. Once a week.
- 75. LATIN WRITING. Twice a week.
- 77. LATIN PROSEMINARY. Three hours a week.

- EARLY LATIN COMEDY PLAUTUS Mostellaria: CICERO Selected Letters.
   Four times a week.
- 54. PLINY'S Letters; TIBULLUS, PROPERTIUS, OVID. Four times a week.
- 56. ROMAN SATIRE. Three times a week.
- 58. JUVENAL. MARTIAL. Three times a week.
- 60. PHARMACEUTICAL LATIN Continuation of Course 59. Five times a week.
- 62. Continuation of Course 61. Two times a week.
- 64. Continuation of Course 63. Two times a week.
- 66. LATER LATIN WRITERS. Three times a week.
- 68. GREEK AND ROMAN ANTIQUITIES. Lectures, illustrated. Two times a week.
- 70. SENECA, Selections; PLAUTUS, two plays. Three times a week.
- 72. Continuation of Course 71. Once a week.
- 74. Continuation of Course 73. Once a week.
- 76. Continuation of Course 75. Twice a week.
- 78. Continuation of Course 77. Three hours a week.

#### COLLEGE OF PHARMACY

1. PHARMACEUTICAL. Five times a week. First, second and third terms.

#### LAW

## [UNIVERSITY HALL]

#### FIRST YEAR

#### FIRST SEMESTER

Elementary Law (Robinson, Walker and Blackstone).

#### SECOND SEMESTER

Agency (Mechem); Contracts (Bishop); Criminal Law (Hawley); Sales (Tiedeman); Torts (Cooley).

#### SECOND YEAR

#### FIRST SEMESTER

Bailments (Hale); Commercial Law (Tiedeman); Evidence (Underhill or Greenleaf); Pleading (Phillips).

#### SECOND SEMESTER

Construction of Contracts (Jones); Partnership (Parsons); Real Property (Tiedeman); Wills (Schouler).

## THIRD YEAR

#### FIRST SEMESTER

Constitutional Law (Black); Private Corporations (Taylor); Municipal Corporations (Tiedeman); Equity Jurisprudence (Fetter).

# SECOND SEMESTER

Ethics (Sharswood); Insurance (Richards); Negligence of Municipal Corporations (Jones); Suretyship (Baylies.)

#### MATHEMATICS

[University Hall, Rooms 39, 41, 43 and 45]

Professor Bohannan, Associate Professor McCoard, Assistant Professor Arnold, Assistant Professor Swartzel, Mr. Rasor, Miss Ball

## A. TERM COURSES

- ELEMENTARY ALGEBRA. Venable. Five times a week. First term (Short Course in Agriculture.)
- 3. PLANE GEOMETRY. Venable. Five times a week. First or second terms.
- 3a. PLANE GEOMETRY. Venable. Five times a week. Second term. (Short Courses in Agriculture and Clay-working.)
- 13. SOLID GEOMETRY. Venable. Five times a week. Second term.
- 14. PLANE TRIGONOMETRY. Loney. Five times a week. First or third terms.

- ANALYTICAL AND SPHERICAL TRIGONOMETRY. Loney, with notes on Spherical Trigonometry. Twice a week. Second term.
- 16. COLLEGE ALGEBRA. Taylor. Three times a week. Second term.
- 17. PLANE ANALYTICS. Loney. Five times a week. Third term.
- ANALYTICS AND DIFFERENTIAL CALCULUS. Loney, Venable, Edwards. Five times a week. First term.
- 19. DIFFERENTIAL CALCULUS. Edwards. Five times a week. Second term.
- 20. INTEGRAL CALCULUS. Edwards. Five times a week. Third term.
- 11. DIFFERENTIAL EQUATIONS. Edwards. Once a week. First term.
- 8. LEAST SOUARES. Merriman. Twice a week. First term.

#### B. SEMESTER COURSES

#### FIRST SEMESTER

- 55. PLANE TRIGONOMETRY (Loney) and 57, ALGEBRA, (Taylor). Five times a week.
- ANALYTICS (Loney, Venable) and 61, DIFFERENTIAL CALCULUS (Edwards). Five times a week.
- 63. ADVANCED MATHEMATICS. Topics will be changed from year to year to meet the wishes of the students. Selections may be made from the following courses: (a) Advanced Calculus (Picard Houel); (b) Differential Equations (Johnson, Murray, Forsythe, Craig); (c) Higher Plane Curves (Salmon); (d) Advanced Analytical Geometry (Casey, Salmon); (e) Analytical Geometry of Three Dimensions (Chas. Smith, Frost, Salmon); (f) Theory of Equations (Burnside and Panton); (g) Modern Higher Algebra (Chrystal Salmon, Serret, Cole's Netto); (h) Modern Geometry (Cremona, Reye, Steiner, Von Staudt, Chasles); (i) Determinants (Muir); (j) Elliptic Functions (Weber, Halphen, Durege, Hermite, Greenhill, Briot and Bouquet); (k) General Theory of Functions (Forsythe, Harkness and Morley, Tannery, Weierstrass, Durege, Thoame, Biermann); (1) Potential Functions (Clausius, Riemann, Dirichlet, Peirce); (m) Mathematical Theory of Electricity (Mascart and Joubert); (n) Higher Geodesy (Clarke, Helmert, Jordan); (o) Spherical Harmonics (Byerly, Ferrers, Heine); (p) Mathematical Optics; (q) History of Mathematics. Credit, one to ten hours.
  - 65. PROBLEMS ON ALL PAST WORK. Once a week.
- 67. ALGEBRA, ANALYTICS, CALCULUS. Three times a week. Taylor's College Algebra.

- 56. ALGEBRA (Taylor), and 58, PLANE ANALYTICS (Loney). Five times a week.
- 60. CALCULUS and 62, DIFFERENTIAL EQUATIONS (Edwards.) Five times a week.
- 64. Continuation of Course 63. Credit, one to ten hours.
- 66. Continuation of Course 65. Once a week.
- 68. TRIGONOMETRY, ANALYTICS, CALCULUS. Three times a week. Lyman and Goddard's Trigonometry.

## MECHANICAL ENGINEERING

[HAYES HALL, Room 12; MECHANICAL HALL, Second Floor]

Professor Magruder, Associate Professor Hitchcock, Mr. Hale, Mr. Grate

- 3. MECHANISM. Lectures and recitations on the principles of mechanism and mechanical movements. Five times a week. (Second Term, third year, Mechanical and Electrical Engineering Courses.)
  - The accurate laying out of movements, embodying the principles of mechanism. Twice a week. (Third Term, third year, Course in Mechanical Engineering.)
- ANALYTICAL MECHANICS. Five times a week. (First and Second Terms, third year, Courses in Architecture, Ceramics, and Civil, Electrical, Mechanical and Mining Engineering.)
- 7. STRENGTH OF MATERIALS. Recitations and lectures on the elastic and ultimate resistance of the materials of engineering to stress and their use in structures and machines. Lectures on elementary hydraulics and the flow of water through orifices and pipes over weirs, and in streams, and on measuring the same. Five times a week. (Third Term, third year, same as 6.)
- EXPERIMENTAL ENGINEERING LABORATORY. Twice a week. (First Term, third year, Course in Mechanical Engineering.)
- The same. Four times a week. (Second Term, fourth year, Course in Mechanical Engineering.)
- The same. Three times a week. (Third Term, fourth year, Course in Mechanical Engineering.)
- The same. Three times a week. (Second Term, fourth year, Course in Civil Engineering.)
- MACHINE DESIGN. Recitations on Unwin's Machine Design, with lectures on American Practice. Five times a week. (First and Second Terms, fourth year, Course in Mechanical Engineering.)
- MACHINE DESIGN. Practical applications of the principles of machine design.
   Five drawing periods a week. (Third Term, fourth year, Course in Mechanical Engineering.)
- 21. THESIS WORK. Five times a week. (Third Term, fourth year, Course in Mechanical Engineering.)
- 22. TIMBER AND MASONRY. Lectures on the construction of foundations and structures in timber and masonry. Five times a week, (The last threefifths of Second Term, third year, Courses in Mechanical Engineering and Industrial Arts.)
- 23. MATERIALS OF CONSTRUCTION. Lectures on the materials used in architecture and building construction, and laboratory exercises on their properties. Four times a week. (First Term, fourth year, Course in Architecture.)
- 24. EXPERIMENTAL ENGINEERING LABORATORY. Three times a week. (First and Second Terms. Elective to third and fourth year engineers.)
- 35. The same. Five times a week. (Third Term, fourth year, Courses in Civil and Mining Engineering.)
- 27. 'The same. Five times a week. (First Term, fourth year, Course in Mechanical Engineering.)

- 28. The same. Twice a week. (Third Term, third year, Course in Electrical Engineering; First Term, fourth year, Course in Industrial Arts; and Third Term, Course in Manual Training.)
- The same. Three times a week. (First Term, fourth year, Course in Electrical Engineering.) Twice a week. (Second Term, fourth year, Course in Industrial Arts.)
- 30. The same. Twice a week. (Second Term, fourth year, Course in Electrical Engineering; Third Term, fourth year, Course in Industrial Arts.)
- 31. HYDRAULIC MACHINERY. Recitations and lectures on pumping machinery.

  Three times a week. (Third Term, fourth year, Course in Mechanical Engineering.)
- 32. MECHANICAL ENGINEERING AND POWER PLANTS. A descriptive study of steam and gas engines, boilers, pumps, injectors and other machinery used in plants generating power. Five times a week. (Third Term, third year, Courses in Mechanical and Electrical Engineering; Third Term, fourth year, Courses in Industrial Arts and Manual Training.)
- 33. STEAM ENGINES AND BOILERS. A detail study of steam using and steam generating machinery. Five times a week. (First Term, fourth year, Courses in Mechanical and Electrical Engineering.)
- 34. THERMODYNAMICS. Lectures and recitations on the transmutations of heat and mechanical energies in steam, gas and air engines, and in air and ammonia compressors, together with a study of the tests of ideal and actual engines and of their indicator diagrams; the flow of gases through pipes and orifices. Five times a week. (Second Term, fourth year, Course in Mechanical Engineering.)

# METALLURGY AND MINERALOGY

[CHEMICAL HALL, Rooms 4 and 3]

Professor N. W. Lord, Mr. Somermeir

#### COLLEGE OF ENGINEERING

- MINERALOGY. Lectures. Similar to Course 52 in College of Arts, Philosophy and Science, but more practical, and arranged so as to be preparatory to Determinative Mineralogy (Course 3). Three times a week. Third term.
- DETERMINATIVE MINERALOGY. Laboratory course in practical determination
  of minerals by physical and chemical tests. Each student is furnished with
  a set of apparatus, and works under an instructor's inspection. Brush's
  Determinative Mineralogy is used as a manual. Five times a week. Third
  term.
- 4. METALLURGY. A course of lectures upon fuel and its uses, iron and steel, copper, lead, gold and silver, their properties, tests, ores and details of the modes of reduction. The lectures are supplemented by a careful study of references to standard works and journals. Five times a week. First and second terms.
- 5. METALLURGICAL LABORATORY. Lectures and laboratory work. Laboratory practice in the analysis of iron and steel, fuel and slags, and the assays of lead, copper and zinc ores by wet methods, using approved methods as practiced in technical laboratories of metallurgical works. Course 5 must be preceded by Agricultural Chemistry, Courses 1, 8, 9; or by General Chemistry, Courses 7 and 12. Five laboratory periods a week. Three terms.

- ASSAYING. Laboratory work. Practical work in the assaying of gold, silver and lead ores, by furnace methods. Oral instruction, with reference to standard books on assaying. Five laboratory periods a week. Second term.
- METALLURGICAL CONSTRUCTION. Practice in the designing of furnaces and other metallurgical machinery, including detail drawings and estimates. Three times a week. First term. (Professors Lord and Ray.)
- ORE DRESSING AND COAL WASHING. Lectures. Instruction in the methods of
  concentrating and enriching ores and fuels by mechanical means. Lectures
  with reference to Rittinger's Aufbereitung; Callon's Course d' Exploration
  des Mines; Kunhardt's Ore Dressing, and various papers in technical journals. Twice a week. First term.
- MINERAL CHEMISTRY. Lectures and laboratory practice. Lectures upon fire damp, mine explosions, explosives, boiler, waters, poisonous gases, iron ores; iron and steel, their properties and modes of manufacture; coal and coke. Five hours a week. Third term.

# MILITARY SCIENCE AND TACTICS

[ARMORY]

Major J. M. Burns, U. S. A., Retired

- 1. MILITARY DRILL. Three times a week through the year.
- 2. TACTICS. Lectures and recitations. Twice a week. Second term.
- 3. ART OF WAR. Lectures and recitations. Twice a week. Second term.

# MINE ENGINEERING.

[CHEMICAL HALL, Room 26]

Associate Professor Ray

- ELEMENTARY ALGEBRA. (Mathematics 2.) Wentworth. Five times a week. Three terms.
- MINE SURVEYING. Lectures and field practice. This is similar to Course 4, but more elementary. The same text is used. The students have more practice in the drawing-room. Five times a week. First term.
- VENTILATION AND HAULAGE. Lectures illustrated by experiments and maps of
  mines and models when possible, tests by safety lamps and anemometers,
  and solution of air distribution in coal mines. Five times a week. Second
  term.
- MINE OPERATING. A course of lectures and practical instruction in mine book-keeping and accounts, cost of working, etc., particularly adapted to Ohio coal mining. Five times a week. Third term.
- 4. MINE SURVEYING. Field Practice in the use of instruments for surface and underground surveys. Full notes are taken, and maps and plans made in the drawing-room. Davie's Surveying, by Van Amringe, is used as a text-book. Five times a week. First term.
- 5. MINE ENGINEERING. Lectures. Mine operating, mining machinery, ventilation, shaft-sinking, working out deposits, etc. Constant reference is required to the standard works and to the leading technical journals, with practice in designing mine plants, draughting and estimates. Five times a week through the year.
- PLANS AND SPECIFICATIONS. Five times a week. Third term. [Professors Lord and Ray.]

# PHARMACY

# [CHEMICAL HALL, Rooms 13 and 12]

Professor Kauffman, Assistant Professor Landacre, Assistant Professor Dye

- PHARMACY. General pharmaceutical processes. Lectures three times a week.
   First term.
- PHARMACY. United States Pharmacopeia official preparations. Lectures twice a week. Laboratory practice daily. Second term.
- DISPENSATORIES. Official preparations. Lectures twice a week. Laboratory
  practice daily. Third term.
- PHARMACEUTICAL CHEMISTRY. Unofficial preparations. The National Formulary. Lectures twice a week. Laboratory practice daily. First term.
- EXTEMPORANEOUS PHARMACY. Prescription practice. Lectures once a week.
   Laboratory practice three times a week. Second term.
- GENERAL PRACTICE. Lectures twice a week. Dispensing practice daily. Prescription practice daily. Third term.
- 12. MATERIA MEDICA. Official drugs and classification. Three times a week.

  First term.
- 13. MATERIA MEDICA. Official and unofficial drugs. Three times a week. Sec-
- MATERIA MEDICA AND THERAPEUTICS. Snythetic Products. Poisons and Antidotes. Three times a week. Third term.
- 15. PHARMACEUTICAL ASSAYING. Three times a week. First term.
- 16. METHODS OF MANUFACTURE. Three times a week. Second and third terms.
- GENERAL PHARMACY. Two lectures, three laboratory periods a week. Through the year.
- LABORATORY. Special work for veterinary students. Five times a week.
   Third term.

# PHILOSOPHY

# [University Hall, Rooms 33, 50, 49 and 51]

# Professor Scott, Mr. Hamilton

### FIRST SEMESTER

- 51. GENERAL PSYCHOLOGY. Logic Begun. Four times a week. Required in the Courses for B. A., B. Ph. (L), and B. Ph. (M. L.)
- GENERAL PSYCHOLOGY. Three times a week. Required in the Courses for B. Ph. (E.), B. Sc., for Law and Journalism.
- 55. ETHICS. Three times a week. Required in Course for B. Ph. (E.).
- HISTORY OF ANCIENT AND MEDIÆVAL PHILOSOPHY. Three times a week. Elective after Courses 51 and 52.
- 59. INTRODUCTION TO PHILOSOPHY. Twice a week. Elective after Courses 51, 52, 56 and 57 or after Courses 53, 54, 55 and 56.
- 61. PHYSIOLOGICAL AND EXPERIMENTAL PSYCHOLOGY. Twice a week. Elective.

  This course begins with a general survey of the organic basis of personality, attention, etc., taking up in turn the sense organs and perception, motor processes and the personal equation.
- LEADING WORKS IN PHILOSOPHY. Twice a week. Elective on the same conditions as Course 59.

#### SECOND SEMESTER

- 52. LOGIC COMPLETED, ETHICS. Four times a week. Follows Course 51.
- 54. LOGIC. Three times a week. Follows Course 53.
- HISTORY OF MODERN PHILOSOPHY. Three times a week. Required after Course 55. Also elective after Courses 51 and 52.
- METAPHYSICS. Twice a week. Elective after Courses 51, 52, 57 and 56 or after Courses 53, 54, 55 and 56.
- 62. PHYSIOLOGICAL AND EXPERIMENTAL PSYCHOLOGY. Twice a week. Elective. The work of this semester presupposes Course 61. Individual topics will be assigned and the student will be required to report upon the general literature of the subject as well as to make an experimental study of some of the controverted points.
- LEADING WORKS IN PHILOSOPHY. Twice a week. Elective on the same conditions as Course 60.

## PHYSICS

[University Hall, Rooms 10, 14, 23 and 24] Professor Thomas, Assistant Professor Boyd, Mr. Kester

COLLEGES OF AGRICULTURE, ENGINEERING AND PHARMACY

- ELEMENTARY PHYSICS. Recitations and experimental lectures. Five times a
  week. First and Second Terms. Text: Carhart & Chate's "Elements of
  Physics." (Required in all Short Courses.)
- MECHANICS AND HEAT. Electricity and Magnetism, Sound and Light. Lectures and recitations. Three times a week. Through the year.
- PHYSICS. Extension of Course 2, with practice in solution of problems.
   Twice a week. Through the year.
- ELECTRICITY AND MAGNETISM. Lectures and recitations. Three times a week
  First term. (Third year, Electrical Engineering).
- PHYSICAL LABORATORY. Elementary manipulation. Length, mass and time measurements. Work in density, elasticity and heat. Three times a week. Second and third terms.
- 6. PHYSICAL LABORATORY. Theory and practice of magnetic and electrical measurement, including the testing and standardizing of instruments; conductivity of conductors; insulation, capacity and resistance of insulated conductors and cables; temperature co-efficients; commercial measuring and testing instruments; strength and distribution of magnetic fields, magnetic moments, permeability: work in light including optical constants; spectroscopy; photometry of gas, electric and other lights. Five times a week. First, second and third terms. (Third year, Electrical Engineering.)
- PHYSICAL LABORATORY. Two to three times a week. Through the year. Course
   must be preceded by Course 2.
- PHYSICAL LABORATORY. A second year's work in the Physical Laboratory.
   Three times a week, with five hours' credit. Course 9 must be preceded by Course 7.
  - The work in the Physical Laboratory begins with exercises in length, mass and time measurement, making use of scales, tapes and bars, micrometer screws, micrometer microscopes, the dividing engine, the cathetometer, the balance, chronometers, chronoscopes, etc. This course is intended to give the student facility in the use of instruments and knowledge of the theory of their construction and adjustment.

- The determination of various physical constants follows, with elementary exercises in heat, light, electricity and magnetism; after which the student takes up such advanced work as his taste and skill permit. The experimental work is accompanied by instruction in methods and in the discussion of results.
- MECHANICS, SOUND AND HEAT. One lecture, two laboratory periods a week.
   Required in the Course in Pharmacy.

## COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

#### FIRST SEMESTER

- 51. MECHANICS, HEAT, ETC. Three times a week. Second year. Science Course. Elective in the first year of the Courses of Arts and Philosophy.
- MECHANICS, SOUND AND HEAT. One lecture, two laboratory periods a week.
   Elective in the First year of the Courses of Arts and Philosophy.
- 55. LABORATORY. Three to five times a week.
- 57. LABORATOXY. Three to five times a week. Course 57 must be preceded by Course 55.
- 59. THEORETICAL PHYSICS. Five times a week. Lectures and assigned readings.

  Graduate and advanced undergraduate course.
- LABORATORY. Five hours a week. To be preceded by Courses 55, 56, 57 and 58.

# SECOND SEMESTER

- 52. ELECTRICITY. MAGNETISM, ETC. Three times a week. Follows Course 51.
- ELECTRICITY, MAGNETISM, ETC. One lecture, two laboratory periods a week.
   Follows Course 53.
- 56. LABORATORY. Continuation of Course 55.
- 58. LABORATORY. Continuation of Course 57.
- 62. THEORETICAL PHYSICS. Five times a week. Follows Course 59.
- 64. LABORATORY. Five hours a week. Continuation of Course 61.

#### PHYSIOLOGY

(See Anatomy and Physiology)

# POLITICAL ECONOMY (See Economics)

# POLITICAL SCIENCE

[UNIVERSITY HALL, Room 27]

# Professor Knight

(All Courses in Political Science must be preceded by History 55 or 56)
FIRST SEMESTER

- INTERNATIONAL LAW. Lectures and text-book. A study of public international law. Lawrence's Principles of International Law. Twice a week. (Given biennially. Not open in 1900-1901.)
- 53. POLITICAL INSTITUTIONS OF THE UNITED STATES. Lectures and recitations. A study of the origin, nature and workings of the political institutions of the United States, and an analysis of the form and powers of the government. Bryce's American Commonwealth. Three times a week.

55. GOVERNMENT OF DEPENDENCIES. A study of the political institutions of the leading colonial governments. Lectures, assigned readings and special reports. Twice a week.

(Given biennially. Not offered in 1900-1901.)

## SECOND SEMESTER

- 52. MUNICIPAL GOVERNMENT. Lectures, collateral readings and special reports. A study of the development and status of modern municipalities, and a comparative study of recent American municipal charters. Twice a week. This Course forms a good sequent to Political Science 55, but is not dependent upon it.
- 54. COMPARATIVE POLITICAL INSTITUTIONS OF EUROPE AND AMERICA. Lectures, recitations, collateral readings and special reports. A comparative study of the political institutions and governmental forms and powers in the United States, England, Germany, France and Switzerland. Three times a week. Course 54 must be preceded by Course 53.
- -56. HISTORY OF TREATIES AND MODERN DIPLOMACY. A study of the leading treaties of modern times with special reference to their bearing upon international law. Accompanied by collateral reading and special reports. Twice a week. This course must be preceded by Course 51.

# RHETORIC AND ENGLISH LANGUAGE

[University Hall, Rooms 38, 40, 42, 44, 55.]

Professor Denney, Assistant Professors Graves, McKnight, Allen, Mr. Parker

Courses 51, 52, and either 53 or 54 are fundamental; Courses 55, 56, and 60, are advanced courses in composition; Courses 57, 58, 75 and 76 are advanced courses in public speaking; Courses 69, 70, 71, 72, 73 and 74 are philological; Courses 67 and 68 are pedagogical. Courses 59, 61, 62, 73 and 74 are usually found suitable for graduate students as well as for advanced undergraduates. Further courses of study exclusively for graduate students are arranged at the beginning of each year to meet individual needs and purposes.

### FIRST SEMESTER

- 51. ENGLISH COMPOSITION. Three times a week. Credit two and one-half hours.
- (a) Scott and Denney's "Paragraph Writing." Themes. Twice a week.
- (b) Oral Practice. Once a week with the instructor in public speaking.
- 53. STUDIES IN EXPOSITION. Four times a week.
- (a) Rhetorical analysis of prose; with essay-writing. Three times a week.
- (b) Oral composition. Once a week with the instructor in public speaking. Course 53 must be preceded by Course 52.
- 55. RAPID W RITING. Once a week. The preparation of articles for the press, with exercises in observation, reporting, abstracting, condensation, expansion, interviewing, proof-reading, correspondence, and a study of newspaper forms. A special course for students preparing for journalism. Open to those who have passed Course 53 or 54.
- 57. BRIEF MAKING AND ARGUMENTATION. Three times a week. Practice in making briefs of noted speeches and original briefs for debate; lectures on logical analysis, evidence and argumentation. Class debates once a week, criticised by the instructor in public speaking. Course 57 must be preceded by Course 53 or 54.

- 59. POETICS. Twice a week. Lectures, prescribed readings, and reports. Gummere's "Hand-book" and Aristotle's "Theory of Poetry" used for reference. Course 57 must be preceded by Course 53 or 54.
- 61. RHETORICAL THEORY. Two hours a week. Lectures on the principles of style, and theories of rhetoric as historically developed, accompanied by special investigations of rhetorical problems with reports and discussions. An introduction to methods of research and the use of material. Exclusively for advanced undergraduates and graduates, who are making their theses in one of the English Departments.
- 67. TEACHERS' COURSE IN RHETORIC. Two hours a week. Lectures, conferences and prescribed readings on the teachings of composition and rhetoric in the schools. A special course for teachers and those intending to teach. Open only to advanced undergradutes, and to teachers who hold auditors' tickets.
- 69. HISTORY OF THE ENGLISH LANGUAGE. Twice a week. Emerson's "Brief History," with lectures and reading.
- OLD ENGLISH PROSE. Twice a week. Bright's "Anglo-Saxon Reader."
   Course 71 must be preceded by Courses 69 and 70.
- OLD AND MIDDLE ENGLISH PHILOLOGY. Two hours a week. Course 73 must be preceded by Courses 71 and 72.
- 75. EXTEMPORE SPEAKING. Two hours a week. Speaking from briefs and topical outlines on subjects previously mastered. Course 75 must be preceded by Courses 57 and 58.

#### SECOND SEMESTER

- ENGLISH COMPOSITION. Three times a week. Credit two and one-half hours.
- (a) Cairns' "The Forms of Discourse." Themes. Twice a week.
- (b) Oral Practice. Once a week with the instructor in public speaking. Course 52 must be preceded by Course 51.
- 54. STUDIES IN EXPOSITION. Four times a week. Repetition of Course 53. Course 54 must be preceded by Course 52.
- RAPID WRITING. Once a week. Continuation of Course 55, and must be preceded by Course 55.
- BRIEF-MAKING AND ARGUMENTATION. Three times a week. Continuation of Course 57 and must be preceded by Course 57.
- 60. SHORT STORIES. Twice a week. Lectures, prescribed readings, reports, and practice under criticism. A study of the plan, purpose, diction, and structure of selected narratives, with plot analysis. Course 60 must be preceded by Course 53 or 54.
- 62. PROBLEMS IN CRITICISM. Two hours a week. Special research work, reports and a thesis. Course 62 must be preceded by Course 61.
- 68. TEACHERS' COURSE IN ENGLISH LANGUAGE AND GRAMMAR. Two hours a week. A special course for those engaged in teaching and those intending to teach. Open only to advanced undergraduates, and to teachers who hold auditors' tickets.
- DEVELOPMENT OF ENGLISH PROSE. Twice a week. A rapid survey of the history of English idiom, with lectures and readings. Course 70 must be preceded by Course 69.
- OLD ENGLISH PROSE AND POETRY. Continuation of Course 71 and must be preceded by Course 71.

- OLD AND MIDDLE ENGLISH PHILOLOGY. Continuation of Course 73 and must be preceded by Course 73.
- EXTEMPORE SPEAKING. Continuation of Course 75 and must be preceded by Course 75.

COLLEGES OF AGRICULTURE AND DOMESTIC SCIENCE, ENGINEERING AND PHARMACY

# 6. ADVANCED RHETORIC. Twice a week.

- A. Prescribed readings in the literature of technology and science; and the analysis of specimens of this literature. Once a week.
- B. Reports, abstracts, memoranda, and notes of lectures and of articles in the technical journals; practice in drawing specifications and writing brief papers on technical and scientific subjects. Once a week.
- Two hours a week. (First, Second and Third Terms, second year, Courses in Industrial Arts, Manual Training, and Electrical and Mechanical Engineering; third year, Courses in Architecture, Ceramics, Chemistry, and Civil and Mining Engineering.)

## 5. ENGLISH COMPOSITION.

- A. Scott and Denney's Paragraph-Writing; Macaulay's Warren Hastings; Cairn's Forms of Discourse; Themes. Twice a week.
- B. Oral practice with the instructor in public speaking. Once a week. (First, Second and Third Terms, first year.) Three times a week. Credit two and one-half hours. All four-year courses.
- 4. ADVANCED COMPOSITION. Twice a week. Elective,

# ROMANCE LANGUAGES AND LITERATURES

[University Hall, Rooms 35 and 34.]

Professor Bowen, Assistant Professor Bruce

The Department of Romance Languages and Literature offers courses of instruction and research in the three leading languages of the group whose origin is to be traced to the Latin or Roman idiom. These three languages are the French, Italian and Spanish. The foremost place in the work of the Department is naturally assigned to the French. In the study of this language the first desideratum is a thorough reading knowledge, which shall lead directly to the study of the literature. For all the languages taught in this department, it is assumed that the highest educational value lies in the acquiring of the ability to read them intelligently, to translate them correctly, to understand, appreciate and compare the various phases of their literatures, and to grasp the principles of their historic development. The practical side of the work, that which deals mainly with the acquiring of the ability to speak these languages with accuracy and ease, is regarded as supplementary, and as such receives due attention.

Exclusive of library facilities, the Department possesses, as aids in illustrating and supplementing the work, the following collections: Complete set of maps (including Paris); illustrated volumes showing various phases of the arts and sciences, costumes and manners, public instruction, dramatic representations, etc., in France at different epochs; large photographs and engravings of the principal French writers; collections of French prose extracts for use in sight reading.

#### I. FRENCH

#### FIRST SEMESTER

- 51. ELEMENTARY FRENCH. Four hours a week. Grammar: Edgren's (Part I). Grandgent's Essentials, or Joynes' Minimum, with written exercises. Reader: Super's (from Part II) or Whitney's (Parts I and II) or Kuhns' French Reading for Beginners. In this course the study of the language is taken up from the beginning. Stress is laid at first upon the acquisition of a correct pronunciation, after which the entire energy of the student is directed toward the attainment of a full and accurate reading knowledge of the language. Grammar and composition are made to contribute to this end.
- 53. SCIENCE READING. Two hours a week. A course introductory to the vocabulary of scientific literature, designed to familiarize the student with technical terms and style. Open to those who have completed Courses 51 and 52, or who have received credit for French as an entrance subject.
- 55. MODERN FRENCH LITERATURE. Four hours a week. Contes and Novels:

  Bercy's Contes et nouvelles modernes. Balzac, Eugénie Grandet. Prose
  Composition: Edgren's French Grammar [Syntax] or Chardenal's French
  Exercises for Advanced Pupils. Lectures supplement the work; private
  reading required; systematic attention given to syntax and idiom. Open to
  those who have completed Courses 51 and 52, or who have received credit
  for French as an entrance subject.
- 57. FRENCH COMEDY. Three hours a week. Study of the growth of French Comedy, with work centering upon Molière [four plays], Regnard [le Joueur] and Beaumarchais [le Barbier de Séville]. Lectures and collateral reading. Open to those who have completed Courses 55 and 56.
- 59. ADVANCED PROSE COMPOSITION. One hour a week. Practice in speaking and writing French. Intended for advanced students who desire special training on the practical side of the language. Open to those who have completed Courses 55 and 56.
- 61. FRENCH TRAGEDY. Three hours a week. Racine and Voltaire. Lectures and readings, with assigned topics, reports and discussions. Part of the lectures given in French. Practical work continued. An advanced Course intended for students who have completed Courses 57, 58, 59 and 60. Any others must have the special consent of the head of the Department.
- 63. FRENCH LITERATURE BEFORE THE SEVENTEENTH CENTURY. Three hours a week. Special study of la Chanson de Roland. General Survey of the Old French period. Critical study of Montaigne [De l'institution des enfans]. Lectures (partly in French) on the literature of the sixteenth century. Assigned topics and reports. An advanced Course with the same conditions as in Course 61.

(Given biennially. Not offered in 1900-1901.)

65. LITERARY CRITICISM IN FRANCE. Two hours a week. Readings and lectures. Selections from Sainte-Beuve, Lemaitre, Brunetière and others. Open to those who have completed Courses 55 and 56.

#### SECOND SEMESTER

MODERN PROSE AND PLAYS. Continuation of Course 51. Four hours a
week. Historical and narrative prose; one or more prose comedies. Sight
reading is emphasized.

- 54. SCIENCE READING. Continuation of Course 53. Two hours a week.
- 56. MODERN FRENCH LITERATURE. Continuation of Course 55. Four hours a week. Lyric Poetry: Bowen's Modern French Lyrics. Drama: Comparative study of the classical and the romantic drama: Corneille, Horace; Hugo, Hernani. Private reading: Hugo's la Chute.
- 58. RECENT FRENCH PROSE. Three hours a week. Rapid reading with lectures. Critical study of some of the leading prose writers of the present, such as Bourget [Selections ed. Van Daell], Coppée [On rend l' argent], Daudet [le Nabab], Zola [la Débacle]. Open to those who have completed Courses 55 and 56.
- 60. ADVANCED PROSE COMPOSITION. Continuation of Course 59. One hour a week.
- 62. CHATEAUBRIAND AND THE PRECURSORS OF THE ROMANTIC MOVEMENT. Three hours a week. Lectures and readings, with assigned topics, reports and discussions. Part of the work conducted in French. Practical drill continued. An advanced course intended for students who have completed Courses 57, 58, 59, 60 and 61 (or 63.) Any others must have the special consent of the head of the Department.
- 64. THE DEVELOPMENT OF THE FRENCH NOVEL. Three hours a week. An advanced course with the same plan of work and the same conditions as in Course 62.

(Given biennially. Not offered in 1900-1901.)

Courses 62 and 64 are supplemented, toward the close of the year, by several lectures on: Methods of teaching French and the teacher's equipment.

66. FRENCH TRAVEL - WRITERS. Two hours a week. Readings and lectures. Scenes of travel from Gautier, Hugo and Dumas. Open to those who have completed Courses 55 and 56.

#### II. ITALIAN

- 51. GRAMMAR AND READINGS. Two hours a week. First Semester. Grandgent's or Edgren's Italian Grammar and Bowen's First Italian Readings. Open to those who have completed Courses 51 and 52 (or an equivalent) in French.
- .52. GOLDONI AND DANTE. Continuation of Course 51. Two hours a week. Second Semester.

(Italian is given biennially. Above Courses not offered in 1899-1900.)

#### III. SPANISH

- 51. GRAMMAR AND READINGS. Two hours a week. First Semester. Edgren's Spanish Grammar and Matze's First Spanish Readings.
- 52. MODERN PROSE AND DRAMA. Continuation of Course 51. Two hours a week. Second Semester. Alarcón el Capitán Veneno (Ford); Galdós, Dona Perfecta; Cortina, el Indiano. Brief talks on Spanish literature and philology.

(Spanish is given biennially. Above Courses not offered in 1900-1901.)

#### SANSKRIT

(See Germanic Languages)

SHOPWORK

(See Industrial Arts)

#### SOCIOLOGY

(See Economics and Sociology)

## VETERINARY MEDICINE

[VETERINARY HOSPITAL AND TOWNSHEND HALL]

Professor White, Dr. Lavery, Dr. Frederick, Dr. Brumley

COLLEGES OF VETERINARY MEDICINE AND AGRICULTURE

- VETERINARY ANATOMY: Osteology. Lectures illustrated with skeletons and anatomical preparations. Dissections. Five times a week First term.
- MYOLOGY, SPLANCHNOLOGY. Practical dissections and demonstrations on cadavers. Five times a week. Second term.
- ANGIOLOGY AND NEUROLOGY. Lectures illustrated by drawings, in the dissecting room, and on anatomical models. Five times a week. Third term. Books recommended for reference and study: Strangeway's Veterinary Anatomy (new edition); Chauvau's Comparative Anatomy; McFaydean.
- GENERAL PATHOLOGY AND MORBID ANATOMY. Lectures four times a week.
   First term. Text-book: Green's Morbid Anatomy.
- THEORY AND PRACTICE OF VETERINARY MEDICINE. Sporadic, non-infectious diseases. Four times a week. Second term.
- THEORY AND PRACTICE OF VETERINARY MEDICINE. Four times a week. Third term.
- 17. THEORY AND PRACTICE OF VETERINARY MEDICINE. Four hours a week. First
- THEORY AND PRACTICE OF VETERINARY MEDICINE. Infectious and contagious diseases. Four times a week. Second term. Text book: Friedberger and Froehner
- 19. GENERAL THERAPUETICS. Lectures. Five times a week. Third term.
- GENERAL SURGERY. Lectures and demonstrations on the use of antiseptics in wound healing; suturing and bandaging; use of local and general anæsthesis, etc. Five hours a week. First term.
- SURGIC'L DISEASES" Lectures; illustrated by practical demonstrations, by drawings, on clinical cases. Head and neck. Five hours a week. Second term.
- SURGICAL DISEASES. Continuation of 21, Trunk and limbs. Five hours a week. Third term.
- 23. SURGICAL DISEASES. Continuation of 22. Five hours a week. First term.
- OPERATIVE SURGERY. Practical operations on narcotized subjects Three hours a week. Second term. Text books: Moeller; Liautard; Fleming.
- 25. PRINCIPLES OF HORSESHOEING. Lectures and demonstrations. Includes diseases of the foot and pathological shoeing. Four hours a week. First term. Text book: Dollar.
- MEAT INSPECTION. Lectures and recitations. Text book: Peter's Meat Inspection.
- 27. CANINE DISEASES. Lectures and recitations. Three times a week. First term.

- 28. CANINE DISEASES. Continuation of 27. Three times a week. Second term. Text book: Mueller Glass.
- VETERINARY OBSTETRICS. Lectures, recitations, and clinical practice. Three
  hours a week. Second term. Text books: Fleming; Dalrymple.
- 30. OPHTHALMOLOGY. Diseases of the Eye. Two hours a week. Third term.
- 31. CLINIC IN THE VETERINARY HOSPITAL: Stationary and Ambulatory. Daily at 10 to 12 m. Students of the second and third years are required to take part in the clinics. First, second and third terms.
- DISEASES OF THE COW: Special Course for dairy students. Three times a week. Second term.
- 33. VETERINARY MEDICINE FOR AGRICULTURAL STUDENTS. Veterinary anatomy. Five times a week. First term.
- VETERINARY MEDICINE FOR AGRICULTURAL STUDENTS. Contagious and non-infectious diseases. Five hours a week (one hour devoted to practical, clinical work). Second term.
- VETERINARY MEDICINE FOR AGRICULTURAL STUDENTS. Contagious and non-infectious diseases. Five hours a week (one hour devoted to practical, clinical work). Second term.

# ZOOLOGY AND ENTOMOLOGY

[BIOLOGICAL HALL, Rooms 3, 4, 7, 8, 9 and Third Floor]

Professor Osborn, Assistant Professor Hine, Mr. Landacre

#### COLLEGE OF AGRICULTURE

- INVERTEBRATE AND VERTEBRATE. Three times a week. Invertebrate, first and second term; Vertebrate, third term. This course includes a general discussion of groups, dissection of types and an outline of classification. Especial attention is given to forms of economic importance either from their detrimental effects on crops, stock, etc., or from their utility in various industries or as domesticated species.
- ECONOMIC ENTOMOLOGY. Insects of Forest, Orchard and Garden. Three
  times a week. Third term. A detailed study of injurious species intended
  particularly for students of Horticulture. The work includes field studies,
  collections, reports on observation, etc.
- 4. ECONOMIC ENTOMOLOGY. Twice a week, through the year. This Course must be preceded by Course 1. A systematic study of the group of insects with special reference to injurious and beneficial species. A foundation is laid for special study in Entomology. Preparation of collections, essays, life history studies and use of remedial measures along with laboratory studies on general anatomy and class recitations and lectures.
- SYSTEMATIC AND PRACTICAL ENTOMOLOGY. Two lectures and one laboratory
  period a week. Third term. An elementary practical Course for students
  in the Short Course in Agriculture.
- PARASITES OF DOMESTIC ANIMALS. A lecture course devoted to the principal
  parasitic animals affecting domestic animals intended especially to meet
  the needs, of those who intend to give particular attention to stock raising.
  Once a week. First term.
- SPECIAL ENTOMOLOGY. Studies of life-histories, collection and classification in selected groups. Field work and lectures. Four periods each week. Elective. Fall term.

- SPECIAL ENTOMOLOGY. Studies of winter condition of Insects, Insecticides, Insecticide machinery, Methods of preparing insect illustrations, Green-house pests, etc. Four periods each week. Elective. Winter term.
- SPECIAL ENTOMOLOGY. Investigations of selected groups or species. Lectures on Insects legislation, distribution, natural enemies, special methods of control, etc. Four periods each week. Elective. Spring term.
  - Courses 9, 10 and 11 are intended as practical courses in entomological research adapted especially for those who wish to give special attention to this branch with reference to future work in Agriculture or Horticulture and to furnish a preparation for those who have in view work as entomological investigators in experiment stations or as teachers in agricultural schools. They may be taken as graduate courses if not elected earlier or continued as special lines of research during a graduate course embracing other special subjects.

# COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Courses 57, 58, 59, 60, 61, 62 must be preceded by 51 and 52, 53 and 54, 64 or Zool. 1, of College of Agriculture.

#### FIRST SEMESTER

- 41. COMPARATIVE ZOOLOGY. Two lectures and one laboratory period a week. This course includes studies of types of different groups, discussions of principles and an outline of classification. Thomson's "Outlines" used as a basis.
- 53. COMPARATIVE ANATOMY OF VERTEBRATES. A laboratory course. Two laboratory periods and one quiz each week; devoted to Osteology, Myology, Splanchnology, Neurology and a full study of certain type forms. Weidersheim's "Comparative Anatomy of Vertebrates" is followed as a basis.
- 55. COMPARATIVE ANATOMY OF VERTEBRATES. A laboratory course. Four laboratory periods and one quiz each week. Similar to 53, but more extended.
- ZOOLOGY AND ANATOMY. Advanced laboratory. Three laboratory periods a week.
  - On entering this course one may choose his work from any of the following lines:
- (a). ANATOMY OF THE FROG. The guides used are Ecker's "Anatomy of the Frog," and Huxley and Martin's "Practical Biology." Both the gross anatomy and the histology will be studied, the student himself preparing the tissues, as directed; as time may permit, comparisons will be made with other Amphibia.
- (b). COMPARATIVE ANATOMY OF INVERTEBRATES. The manuals used are: Shipley's "Invertebrate Zoology," Lang's "Text-book of Comparative Anatomy," McMurrich's Invertebrate Morphology" and Parker and Haswell's "Text-book of Zoology."
- (c). INVERTEBRATE EMBRYOLOGY. Text-book, Translation of Korschelt and Heider's "Embryology of Invertebrates."
- (d). VERTEBRATE EMBRYOLOGY. The embryology of the chick or frog will be thor oughly studied as a basis; this will be followed by a study of the embryology of the fish, amphibian, and mammal. The course aims to give thorough drill in embryological and histological technique. The books used are Foster and Balfour's "Elements of Embryology," and the works of Hertwig, Minot, Balfour and Marshall.

- (e). COMPARATIVE NEUROLOGY. This is a course in the anatomy and histology of the central nervous system, and will include a study of the brain and spinal cord of all classes of vertebrates. Edinger's "Lectures on the Central Nervous System" will be followed, and numerous treatises and special papers used as a reference.
- (f). CELLULAR BIOLOGY. Text-books, Hertwig's "The Cell and the Tissues;" and Wilson's "The Cell in Development and Inheritance."
  - A student whose major lies in Zoology may take two full years' work selected from subjects named in the foregoing paragraph.

    Zoological Seminar. The class will meet weekly to discuss methods and present reviews of current literature. Each student will be expected to

present at least one major and one minor review each term.

present at least one major and one minor review each term.

- ZOOLOGY AND ANATOMY. Advanced laboratory. Five times a week. Similar to 57, but more extended.
- 61. ENTOMOLOGY. An advanced Practical Course. Five periods a week. The courses are designed for those who wish to make a thorough study of some particular group of insects or to follow some definite line of the science, either morphological or systematic, or to fit themselves for professional entomological work. The work will be arranged with each student.

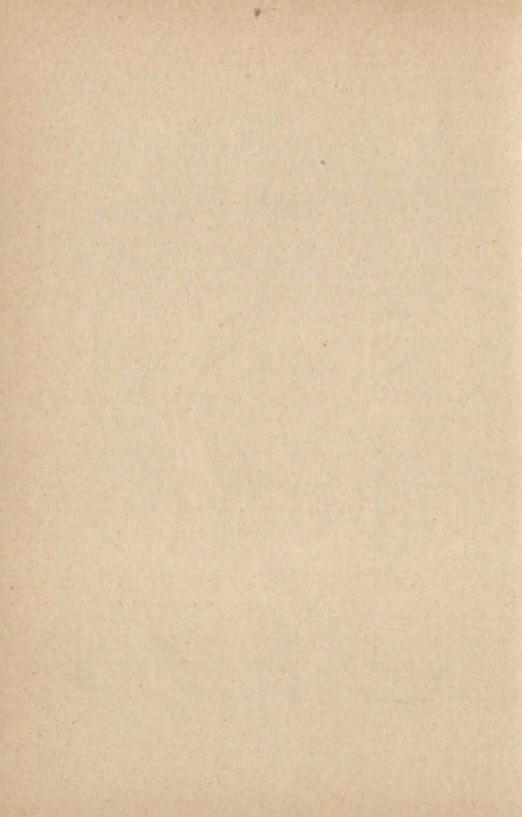
The collections, monographs, and apparatus at the command of the Department afford excellent opportunities for advanced work in Entomology.

Students are required to take part in the Zoological Seminar of the preceding paragraph.

ORNITHOLOGY. Two laboratory periods a week. Advanced work on Morphology, Ecology and Classification of Birds.

#### SECOND SEMESTER

- 52. Continuation of Course 51. Lectures twice a week. One laboratory period.
- 54. Continuation of Course 53. Three laboratory periods a week.
- 56. Continuation of Course 55, Five laboratory periods a week.
- 58. Continuation of Course 57. Three laboratory periods a week.
- 60. Continuation of Course 59. Five laboratory periods a week.
- 62. Continuation of Course 61. Five laboratory periods a week.
- 66. Continuation of Course 65. Two periods a week.



# ENROLLMENT 1899-1900

# COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

# GRADUATE STUDENTS-4

Derby, Florence,	B. Ph			Columbus
Gilmore, William	Henry, B	. Sc. (Agr.)		
Nichol, Gertrude,	B. Ph			Columbus
Sheldon, Helen G	riswold, A	A. B. (Vassar	College)	Shepard

# UNDERGRADUATES - 153.

	The second second second		Credit	
*Abbott, George Franklin	200		Hours	Home Address Medina
	Agr.			
Abbott, Carl B		-		Medina
Adcock, James G	Agr. S.		202 (40)	Webb Summit
Armstrong, Edgar Manley				Zanesville
Armstrong, Clara			10000000	Columbus
*Arnold, Frank Washington		2101	431	Somerset
*Atherton, William Thomas	-	2101	71	Carrollton
Baldwin, Ethel Florence	Dom. Sci.	2021	47	Columbus
Bauman, Christian William	Dairying.			Axtel
*Beale, Harry Glenn	Agr.	206	99	Mt. Sterling
*Beatty, Madge	Dom. Sci.	2021	411	Columbus
Beneker, Robert Edgar		2101	541	Cincinnati
Boggs, Howard Shannon	Agr. S.	98	601	Kingston
Bratton, Alice May		203	144	Columbus
Breckenridge, William Kemper	Agr. S.	98	98+5	Watertown
Breese, Clarence Nye	Agr. S.	98	97-1-6	Lima
Bugby, Morris O		2101	511	Kingsville
*Bundy, Lyman Edmund	Special		47	Colerain
Byers, William Gerald	Agr. S.	98	48	Lilly Chapel
Cahill, Verrill W	Agr. S.	98	44	Tiro
Candy, Ella Belle	Special		24	Columbus
			1176	Gurneyville
Carey, Nathan Harold	Dairying	000	EE1	Palmyra
*Church, James Scott	Agr.	206	551	Medina
Clark, Herman Alfred	H. & F.	206	96	
Clark, Ollie Dwight		98	48	Wheaton
Clawson, Lucy Blanche			The second second	Okeana
Coberly, Edward D	9	98	50+2	Georgesville
Conradi, Albert Frederick		206	98	New Bremen
*Cotton, Edwin Charles		206	$115\frac{1}{2}$	Elyria
Cotton, George Washington			***	Elyria
Crabb, James Byel		98	98+11	Mt. Sterling
Crawford, Mary B		203	195+10	Blaine
Creamer, Jesse Carlton	Agr. S.	98	54	Jeffersonville
Dallas, John Thomas, B. Sc	(Agr.)			Pine Valley
Davis, Carrie Samantha	Special		***	Rio Grande
*Davis, Ella Augusta		2021	521	Constantia
		100	Will The	

<sup>\*</sup> Preparatory work incomplete.

	Course	Credit	
	Course Hours	Hours	Home Address
Davis, Vernon Hayes, B. Sc	(Agr.)	***	Byesville
Day, Albert Edward	Agr. S. 98	89+29	Mt. Carmel
*Demorest, Herbert Russell	Agr. 206	91	Columbus
Dixon, Eva Nicholson	Dom. Sci. 203	122	Columbus
Dock, Norton	Agr. S. 98	59+2	Cincinnati
*Dresbach, Mary		132	Columbus
Dunlap, Frederick	Special	19	Chillicothe
Dunn, Hattie Franklin	Special	29	Columbus
Everett, William Russell	Dairying	***	Gnadenhutten
Ewart, John Weston	Dairying		Mogadore
*Ferguson, Ollie	Agr. 210½	331	Steubenville
*Finlay, Annetta Jane	AND RESERVED ASSESSMENT OF THE PARTY OF THE	104	Keene
Fippin, Elmer Otterbein, B. Sc	(Agr.)	11	Galloway
Fisher, Milo Eddison	Agr. S. 98	44	Chili
Flory, Charles Henry	H. & F. 206	73	Arcanum
*Foster, Emma Warwick		681	Higbys
Foster, John Cook, Jr	Agr. S. 98	61+11	Higbys
Foster, Michael Leander	Dairying	Account to	Axtel
Frank, John Nicholas	Agr. S. 98	32+4	North Amherst
*Galehouse, David William	Agr. 206	142	Doylestown
*Gibson, Herbert R	Agr. S. 98	34+48	Camp Chase
*Gladding, Maynard Marcus	Agr. 206	93	Windsor
Graber, Christian	Dairying		Burton
*Hamilton, Frank Edward	Agr. 206	93	Brownsville
Hanna, Charles Mitchell	Agr. S. 98	47	Tiro
*Hard, Jesse M	Agr. 210½	21	Olentangy
Harper, Merritt	Agr. 206	150	Grove City
Hatfield, Clifford Christian	Agr. S. 98	52	Lebanon
Hayden, Cassius Clay, B. Sc	(Agr.)		Oakdale
Heller, John	Dairying	200	Ona, W. Va.
Henderson, Harry Harold	Agr. S. 98	16	West Cairo
	Dom. Sci. 203	65	North Columbus
*Hess, Flora Louise			Columbus
*Hill, Mamie Faye		116	
*Holloway, Carrie		50	Columbus
Holt, David C	Dairying	***	Galloway
Hoover, Clarence Boal	Agr. 210	A PROPERTY OF THE PARTY OF THE	Venice
*Hoover, Edna Brown	Dom. Sci. 2023	24	Columbus
Hunt, Jay Horatio	Dairying	***	Columbus
Hyatt, James Vernon	Agr. S. 98	44	Augusta
Immell, Woodford Elias	Agr. S. 98	29+3	Chillicothe
Innis, Byron Schofield	Agr. S. 98	51	Wagram
*Irwin, Arthur Milton	Agr. 210	371	Parkman
*James, Harold Francis	H. & F. 210	321	Pekin, China
Jennings, Otto Emery	Agr. 206	93	Olena
Jones, Lloyd	Agr. S. 98	98+71	Columbus
Karrer, Carl	MAY THE SAME	5	Dublin
Kaylor, Rollie Washington	Dairying		Bellefontaine
*Kelley, William Lester	THE RESERVE TO A PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN THE PERSON NAMED IN COLUMN TWO IS NA	85	Newark
Kinney, Charles C			Yellow Springs
Klein, Edith May		11	Columbus
			Collier, W. Va.
Kynett, Albert Gardner	Dairying	See W	Collier, vv. va.

<sup>\*</sup> Preparatory work incomplete.

			Credit	
			Hours	Home Address
Ladrach, John J				Birmingham
Langdon, Elmer		98	63+3	Sabina
Lanman, Faith Robinson			521	Columbus
Lindley, Lulu			38	Fredericktown
*Linsley, Frank Preston	Agr.	2101	151	Gallipolis
*Long, Frank C	Agr.	206	73	West Sonora
Mallow, Harry Campbell	Agr. S.	98	40	Washington C. H.
Marshall, Ida			89	Hemlock
Mason, Arthur Devillo		206	119	Wellington
Mears, William Holt	Agr.	-	48+3	
	Agr. S.		45	Moscow
Meek, Eunice			22 4 42	Afton
Meiche, Louis	Agr. S.	98	98+7	North Royalton
Mesloh, Harry Smith		98	55	New Bremen
Miller, Merritt Finley, B. Sc	(Agr.)			Ridpath
Miller, Maynard Everett, B. Sc	Dairying			Dodgeville
Miner, Charles Austin	Agr. S.	98	98+16	Bristolville
Mooney, Charles Napoleon, B. Sc	(Agr.)		***	Milan
Murray, Edna Earl	Dom. Sci.		132	Columbus
*McAlister, Lee Paden	Agr.	2101	31	Thornville
McCall, Arthur Gillet, B. Sc			***	McGraw
McClelland, Chester Arthur		$210\frac{1}{2}$	48	Terrace Park
McKinley, Ira Esdras	Agr. S.	98	20	Vaughnsville
McMahon, Mary Gertrude	Dom. Sci. S	5. 90	801	Columbus
*McOwen, James Jr	H. & F.	206	157	Ovid
*Neill, Nelson Prentice		206	150	Venice
Nelson, Fred Burgess		98	79	Coe Ridge
Nelson, Fred Walker		98	52	Salem Center -
Nelson, Homer Thrall		98		Selma
Oliver, Charley Ray				Portersville, Pa.
Orton, Louise Taft			4	Columbus
Osborn, Alice		5. 90	90+43	Cadiz
*Osborn, Harry Lester		2101	48	Chardon
Oswald, Rudolph		-		Aurora
Perry, Elma Brooks			176	Troy
Perry, John Cole		206	165	Columbia Station
Peters, Frances Bush				Columbus
Poindexter, Charles Cardoga		2101		Park'sb'g, W.Va.
Postle, Stuart A	Dairying	-	1	Camp Chase
Richards, Don Arthur				Medina
*Riley, Valeria			131	Washington C. H.
		-	1047	
*Ruhlen, La Mott		206	100000000000000000000000000000000000000	Plain City
*Schaeffer, Freelan Wilbert		206	188	Spanker
*Scott, Edith Clare			1	Mt. Pleasant
Senter, Pearl			45	Shepard
Shaffer, Jesse	. Dairying		100	Black Lick
Shaw, Edward Lee	. Agr.	206	108	Newark
Shepard, Allen Day	. Dairying			Conneaut
*Sigrist, John Larkum	. Agr.	206	107½	Congress
*Skiles, Blanche Gertrude			115	Shelby
*Smith, Wilford B	. Agr.	210	4 4 4 4	Chesterhill
Snyder, Addison Hogan	. Agr.	206	158	Tacoma

<sup>\*</sup> Preparatory work incomplete.

	Course	Credit	
	Course Hours	Hours	Home Address
Stahl, Price Ewing	Agr. S. 98	47+21	Jewett
Steward, Charles Benjamin, B. Sc	(Agr.)		Marcy
Stiers, Thomas Vernon	Agr. S. 98	26	Zaleski
Sumner, Mrs. R. M	Special	12	Columbus
Taylor, Frederick Wellington, B. Sc	(Agr.)	***	Wooster
Thomas, Elmer Ellsworth	Dairying	****	Newark
Thompson, Jesse Eugene	Agr. S. 98	53	Bristolville
Trowbridge, Warner Wesley	Agr. S. 98	98+6	Painesville
Tyler, Fred J., B. Sc	(H. & F.)	***	Perry
*Walker, William	Agr. 210	36	West Canaan
Wampler, Milton Eugene	Agr. S. 98	55+3	Dayton
Weisman, Laura Anna, B. Sc	(Dom.Sci.)		Columbus
Wheeler, Leroy Thomas	Agr. S. 98	58+6	Chillicothe
Williamson, Frances Glade	Dom. Sci. S. 94	36	Columbus
Wolfe, La Verne Florence	Dom. Sci.S. 94	45	Lucas

<sup>\*</sup> Preparatory work incomplete.

# COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

# GRADUATE STUDENTS-25

Allen, Lucy, B. A., 1897Columbus
Barrows, Sarah Tracy, M. L
Blakiston, Mary, B. Ph., 1893
Bohn, William Edward, B. A. (German Wallace College)Olmsted Falls
Brown, Harold Warner, B. Sc. (Cornell University)Oberlin
Collett, Samuel William, M. Sc. (Moore's Hill College)
Converse, Edward Jasper, B. A., 1886, B. D. (Yale University)Columbus
Doney, Carl Gregg, B. Sc., 1891, LL. B., M. A
Good, Paul Revere, B. A., 1899
Gore, Herbert Charles, B. Sc. (University of Michigan)
Hannum, William H., B. A., 1887
Hirst, Anna Brewster, B. A. (Antioch College)
Huddleson, Don Carlos, G. Ph., 1897
Jeffrey, Maude Dorothy, B. Ph., 1895
Kirby, Harriet Rebecca, B. A., 1898
Maag, Benjamin (Wooster University)
Machwart, Washington J., B. S. (Muskingum College)
Mann, Wilbur Edwin, B. Ph., 1899
Milligan, Mrs. Clara F., B. A., 1886
Parker, John Bernard, B. A., 1898
Raymond, Maude, B. Ph., 1899
Robinson, Zella Vina, B. Ph., 1898
Rogers, Ellen Chapin, Ph. B. (University of Michigan)Grand Rapids.
Williams, Herber Oswald, B. A., 1894
Young, John Wesley, B. Ph., 1899

# UNDERGRADUATES-419

		Course	Credit	
		Hours		Home Address
Abbott, Roy A., B. Ph	June 1			Columbus
*Adams, Elizabeth Jane	Arts	126	68	Columbus
*Adams, Margaret E	Arts	126	58	Columbus
*Adamson, James Manley	L. & J.	. 99	15	Dayton
*Aldrich, Wesley Richard	L. & J		17	Columbus
*Althauser, Louis Girod	Arts	127	10.5-7	Kenton
*Alward, Benjamin Clyde	E. Ph.	129	12	Pataskala
Andress, Edna Alice, B. Ph				Birmingham
*Andrews, John Davis	Arts	127	9	Hamilton
Armstrong, Dan Hinkle	Special		33	Jackson
Ash, Ray Charles			54	Ashland
Baldwin, Mabel Dennison	Special		131	
*Ball, Danforth Ewers	Science		111	Columbus
*Ball, Ernestine Faye		127	32	Columbus
	Arts			Columbus
*Ballard, Marion Imrie	L. & J		***	Canton
Barcus, Eliza, B. A				Columbus
*Barnet, Clarence Elwood	Special		80	New Paris
*Bartram, Faith Alberta	L. & J		22	Columbus
Bauman, Samuel	Special		31	Birmingham
Beck, Edwin Long	L. Ph.		92	Lithopolis
*Beebe, Carl Vorhees	L. & J		3	Mt. Gilead
*Beer, James Anderson	The second			Ashland
Beery, Harry Reber	Arts	127	24	Canal Winchester
Bell, Florence Louise, B. Ph			150	Columbus
Bell, Mary Edith	Special		11	Columbus
*Bellows, Gertrude Halm	E. Ph.	128	65	Columbus
*Bigelow, Bernard Barton	L. Ph.	127	30	Findlay
*Bigelow, Hosea Bradley	Arts	127	24	Columbus
Bittner, William Pitt	L. & J.	98	68+2	Sandusky
Bohn, Frank, B. Ph				Olmsted Falls
Bonnet, Alvin Cook	Arts	127	33	Columbus
Booth, Carl Howard	L. Ph.	127	25	Columbus
*Booth, Cora Vrooman	L. Ph.	126	52	Columbus
*Booth, George Hamilton	L. Ph.	127	4	Columbus
Bostwick, Homer Z., B. A				Columbus
Bostwick, Valeria	Arts	126	64	Columbus
*Bower, Alice Ethel	E. Ph.			Worthington
*Bowles, John Porter	L. & J		65	Columbus
Bradford, Frances Elizabeth	E. Ph.		29	Columbus
*Braun, Bertha Elizabeth	M. L. P.			Columbus
*Bridge, Effie Irene	Arts	127	33	Columbus
	Science	1400	70	Columbus
Brooks, Stanley Grange	-			
Brown, Alexander Lackey	Special		60	Catlettsburg, Ky.
Brown, Jessie L. P	Arts	126	60	Columbus
Brown, Winfred	Special		er.	Moscow Vince Const
*Bryant, William Cheney	L. Ph.		65	King's Creek
*Buck, Ralph William	Science		29	Cardington
*Bulen, Elwood Joseph			51/2	Columbus
Burgess, James Henry, B. Ph				Big Horn, Wy.

<sup>\*</sup> Preparatory work incomplete.

	Co	urse	Credit	
	Course H	ours	Hours	Home Address
Burgess, Norman Almon	Prep. Med.	100	161	Parkman
*Burkey, Charles Paul	Special		41+11	Pleasantville
*Burr, Mary	E. Ph.	129	29	Worthington
Butler, Blanche Woodruff	Arts	126	102	Wellsville
*Cannon, Anna Cathrine	L. & J.	98	86+11	Columbus
Carpenter, Jessie Marie		128	66	Columbus
Carson, Nellie Eliza		126	86	Harrisburg
Chamberlain, Robert M		133	92	Columbus
*Chaney, James William		128	77	Columbus
*Clagett, Arthur E		135	66	Dayton
*Clapp, Katharine B			64	Norwalk
*Clevenger, Charles Henry		131	55+19	Fletcher
*Clevenger, Joseph Franklin		131	57	Fletcher
		127	12	
*Coad, James Earl		127		St. Lewisville
*Coates, Elmer William			25	Pomeroy
Cockerill, Orville Porter			75	Washington C.H.
*Coe, Bertha L		100	12	North Columbus
Cole, Fred		127	181	Zanesville
Colgan, Lillian Katharine			71	Columbus
Collins, Walter Scott		126	95	Columbus
*Compton, Edward Cass	L. & J.	99	27+12	Coshocton
*Connolley, Augusta	L. Ph.	126	72	Columbus
Connor, Alice Marie, B. Ph	*******			Columbus
Connor, Ellen Josephine, B. Ph				Columbus
*Connors, John Leo	. L. & J.	99	14	Columbus
Cooke, Levi	Arts	127	20	Columbus
*Corkery, Thomas Jefferson	. Arts	127	25 -	Toledo
Corner, Edith		127	87	Columbus
Cottom, Frank W		100	59+6	Dayton
Courtright, Elizabeth Pauline		128		Columbus
Courtright, J. Loring, B. A		12.	1	Circleville
Courtright, Stella Van		126		Columbus
Coy, William Stacey		127		Columbus
Craig, Francis Miron			1 22	Clarion
*Cunningham, Charles Gilman	The second second second	128		Fostoria
*Davidson, Harold Glenn				
				Dayton
*Davidson, Ruth Emily		129		Chicago, Ill.
*Davis, William Edgar		128	25	Columbus
Dean, Wilbur Spencer				Warsaw
*Dean, Ethel Sourbray	The state of the s	99		Columbus
*DeNune, Ethel		126		Columbus
Derby, Alice G		126		Columbus
Dickinson, George Codwice		126	90 P.S. 34 H. W.	Columbus
*Diehl, William Ross		129		Columbus
Dill, Augusta Dille, B. Ph			***	Columbus
Dollison, Harvey Clinton, B. Sc		144		Zanesville
*Dolson, Benjamin Reimmund		99		Lancaster
Donovan, Dennis Aloysius		128	3 78	Columbus
Dow, Mary Edna	. Special			Bellefontaine
Dowd, Charles Fuller, B. Ph				Toledo
Dubois, Wilbur L., B. Sc				Cincinnati

<sup>\*</sup> Preparatory work incomplete.

	Co	ourse	Credit	Contract of the same of
	Course H	lours	Hours	Home Address
Dufour, Alice	Special	***	93	Columbus
Durbin, Samuel Clyde	E. Ph.	128	100	McConnelsville
Dyer, Clarkson Werter	Arts	127	25	Plano
Eagleson, John Hervey, B. A			422	Columbus
Eagleson, Joseph Pentecost, B. A				Columbus
*Eastman, Katharine	L. Ph.	127	27	Columbus
Easton, Ernest Doane	B. Sc.	129	77	Springboro
*Ebright, Bessie	E. Ph.	129	17	Columbus
Edwards, Norma	Special		27	Columbus
Eisenbise, Bertha, B. Ph	1000			Columbus
Enderlin, Louis Charles	Special		***	
	200	190	100	Allegheny, Pa.
Ewalt, Clara Converse	E. Ph.	130	100	Columbus
*Farrar, Morton	L. Ph.	127	***	London
*Ferenbaugh, Burchard Blaine	Arts	127	33	Buckeye City
*Fink, Henry Emil	L. & J.	99	30	New Bremen
Fisher, Ida May, B. Ph	*******	222	***	Columbus
Follett, Mary Pelton	L. Ph.	127	33	Columbus
Foster, Asa Emmanuel	Arts	126	58	New Salem
Fox, Ross Garfield, B. Ph			Torre	Columbus
Frederick, Albert Augustus	Special		teas 1	Millersburg
French, Louis Vincent	E. Ph.	129	22	Jefferson
*Fullerton, Rutherford	L. & J.	99	33+3	Columbus
*Game, Francis Harvey	E. Ph.	128	60	Canal Winchester
Gamper, Hattie, B. Ph		14.		Columbus
Gardner, Blanche	Arts	127		Columbus
	E. Ph.	131	41	Dayton
Garman, Susan Editha			64	
Gauch, James Arlando	Arts	126		West Manchester
Gayman, Charles Welton, B. Ph		***	***	Canal Winchester
Ginder, Floyd Edwin	~ ~ ~		25	Lancaster
*Godman, Leroy Hayes		98	57	Columbus
*Gordon, Earl Augustus	Prep. Med.	. 100	34	Junction City
*Gordon, Sarah Bryarly	Special	***	86	St. Mary's
*Gorham, Ira Garfield	Arts	126	44	Perrysville
*Graham, Reuben Jacob	E. Ph.	12	8 77	Northup
Greener, Gussie Howe	L. Ph.	126	102	Columbus
Griggs, Robert Fiske		130	41	Columbus
Guittard, Claude B		. 126	41	New Bedford
Haecker, Christofer Frederick			31	Sandusky
Hagenbach, George Edwin		127	25	Urbana
Hahn, George Philip			33	Napoleon
Hambleton, Ethel Ada		126	91	Columbus
		129		Hooksburg
*Hambleton, Charles Reverdy				The second secon
*Hammond, Harvey George	L. & J.	99		Millwood
*Harbine, Sarah Smith	E. Ph.	129		Xenia
*Hard, Ansel Shallcross	L. & J.	99		Bowling Green
Hardy, Caroline Church		***	48	Columbus
Harward, Arthur Byron, B. A		1944		Columbus
Hatcher, Wesley	Special		elen II	Raymond
*Hauk, Will Comrie	Arts	126	101	South Charleston
Heitman, William L	Science	132	29	New Bremen
Henderson, Herbert B			91	Laceyville
THE RESERVE THE PARTY OF THE PA	THE RESERVE TO SERVE			

<sup>\*</sup> Preparatory work incomplete.

	The state of the s		Credit	
			Hours	Home Address
Hensel, Donald Dean			69	Eaton
Herrick, Sara Ethel	E. Ph.	128	83	Wellington
*Herrman, Bessie	E. Ph.	128	69	Worthington
Hertlein, Alice Kelley	Special	100	61	Sandusky
*Hicks, Blanche	L. Ph.	129	27	Centerburg
Hicks, Nellie	Arts	128	99	Centerburg
*Hickey, Thomas Owen		100	***	Caylick
Hirsch, Rudolph		133	91	Columbus
Hite, Bertha	Special		14	Columbus
Hoffmann, Hattie DeLong, B. Ph	******	+++		Columbus
*Holcomb, Harry John	Arts.	128	90	Columbus
*Hommon, Harry Britton	E. Ph.	129	17	Marble Cliff
Honline, Mose A	Special		50	Columbus
Hopkins, Bertha Marie		126	64	Columbus
Hopkins, Clara M	L. Ph.	126	61	Columbus
Hopkins, Edith Estelle	L. Ph.	126	65	Columbus
Houghton, Henry Spencer	Special	***	99	Columbus
Howard, Anna Faye, B. Ph				Columbus
*Hubbard, Desha Darling	L. Ph.	127	19	Columbus
Huddleson, Mabel Lee	Special		9	Columbus
Hudson, Clara Putnam		128	58	Middleport
Huling, Frank		127	261	Columbus
Humphrey, Stella Hale			401	Peninsula
Hungelmann, Arthur		129	74	Columbus
*Hunt, Mary Fulton	L. Ph.	126	90	Columbus
Hunter, Anna Eliza			66	Columbus
*Hunter, Joseph Symmes	Arts	126	87	Seven Mile
Hurst, Louise Kate	Special		17	Piketon
*Huston, Frank Arilda	M. L. Ph.	222	87	Columbus
*Jacoby, Benjamin	Science	130	33	Marion
*Jacoby, Ethelwyn	Arts	127	22	Columbus
Jacoby, Mrs. S. C	Special		17	Columbus
Jaynes, Allan Brown, B. Ph				Columbus
Jeffrey, James Fred, B. Sc	********			Columbus
Jefferey, John Ralston	Special		80	'Huron
*Jennings, Elma	M. L. Ph.	126	65	Eaton
*Jones, Daniel C	E. Ph.	128	60	
*Jones, Gilbert Haren	Arts	127	271	Jackson
*Jones, John William	E. Ph.	128	87	Columbus
Jones, Richard Thomas, B. Ph				Jackson
Jones, Victor Waite	E. Ph.	100	88	Columbus
	The state of the s	128		Columbus
*Jordon, Homer Garfield	Arts	127	221	Columbus
*Justice, Charles Lloyd	Arts	126	22	Leipsic
Karshner, George Melville, B. A	7. 7. 7.	100		Columbus
Kauffman, Margaret Glenn			78	Columbus
Kauffman, Henrietta Christine	M. L. Ph.		92	Columbus
Keiser, Forest Le Grand	Science	130	22	Bryan
Kennedy, Herbert Welles	E. Ph.	128		Coe Ridge
Kerr, May Lizzie	E. Ph.	129	25	Rushville , III.
*Kimball, Mabel Fawn	E. Ph.	129	191	Woodstock
Kinder, Gordon Donald, B. Ph			***	Ottawa

<sup>\*</sup> Preparatory work incomplete.

<sup>12</sup> O. S. U.

	Cour	rse Credit	
		rs Hours	Home Address
King, Bernice	Arts 1	26 48	Columbus
Kirk, George Barlow	Arts 1	26 82	Columbus
Klein, David, B. Ph			Columbus
Knight, Caroline Estell, B. Ph			Columbus
Knight, Margaret Amanda	Special .	28	Columbus
Kohl, Clayton Charles	L. Ph. 1	26 90	Perryburg
*Kohr, Paul Homer	Arts 1	27 261	Columbus
Lambert, Elza Jay	Special .	33	Plantsville
Latimer, Thomas Erwin	L. & J.	99 25+3	Hilliards
*Lawrence, Osa Alonzo	M. L. Ph. 1		Oxford
*Leeper, Charles		29 3	
*Lentz, Florence	M. L. Ph. 1		Marysville
Leonard, Hannah Margaret		27 19	Columbus
†*Lincoln, Elsie		29 174	Woodstock
Lisle, Charles Howard, B. Ph			Pataskala
Lisle, Thomas G			Columbus
Long, Mila Myrtle	and the same of the	21	Columbus
Loren, Mary		40	Columbus
			Marysville
*Loughrey, John Larison		$99   15\frac{1}{2}$ $28   99$	
Luse, Jessie Edna	-		Columbus
Lyon, Maud Eliose		29	Westfield, N. Y.
MacAdam, Lida Allison	The same of the sa	8	Worthington
Mack, Egbert Hiram		29 30	Sandusky
Mark, Mary Louise		27 35	Columbus
Marriott, Robert Henry		29 89	Richwood
*Martin, Franklin Ewing		27 7	Columbus
Martin, William Kooken		27 25	Lancaster
Martz, Velorus		26 103	Columbus
*Matthews, Max Moses		29 49	Vinton
Mayfield, Victor Hugo		3	Prospect
Meade, Caroline Annis	M. L. Ph. 1	26 78	Columbus
Merkle, Albert Edward	Prep. Med. 1		Chillicothe
*Merrick, Lawrence Hildreth	Arts 1	$27  22\frac{1}{2}$	Zanesville
*Miesse, Frank H	L. Ph. 1	27 49	Chillicothe
Miller, Albert Morris	Special .	22	Columbus
*Miller, Charles Reed	E. Ph. 1	128 57	Bellville
Miller, Fred A		128 104	Columbus
Miller, Gretchen Pauline, B. Ph			Columbus
*Miller, Paul Scott		30 241	Marion
Mills, Donald P		36	Norwalk
Mitchell, Lynn Boal		27 41	Piqua
Mitzenberg, Allena May		126 94	Columbus
Mitzenberg, Fannie Katheryn	20 22 3	27 33	Columbus
Mock, Marcia Inez	The state of the s	26 102	Columbus
Malloy, Mary Aloysia		27 25	Sandusky
Maloney, William Patrick		72	Prospect
			Farmer's Station
Moon, Clarence Victor, B. Ph		129 98	
			Washington C. H.
Moore, Edgar Howard, B. Sc		128 70	Columbus
*Morgan, Roy			Greenland
Morse, Max Withrow	Science 1	130 27	London

<sup>†</sup> Died March 13, 1900. \* Preparatory work incomplete.

	Con	urse	Credit	
	Course Ho			Home Address
Morton, Max De Los	Special		33	Ashtabula
*Muirie, Frederick John		126	61	Youngstown
Mull, Ernest Clinton	L. & J.	99	30	Lebanon
Mumma, Marion W		133	108	Dayton
McAllister, Earl Saddler		128	86	Columbus
McAlpine, Maude A			12	Columbus
McCallum, Raymond, B. Ph	The second	***		
		100	00	Dayton
McDonald, Joseph Slyvester		128	98	Rendville
McDowell, James Keen		127	41	Columbus
*McGugin, Elizabeth Winifred		127	45	Ohio Furnace
*McKinley, Mary Ann		127	191	Trinway
McKinney, Frank C		126	108	Columbus
McPherson, Clarence Githeus	Science	130		Xenia
*McQuigg, Charles Wesley	L. & J.	99	15+8	Pomeroy
*Nachtrieb, Clarence R	L. Ph.	127	221	Wauseon
Nash, Simeon	Arts	126	103	Columbus
*Needles, Ada Ruckle	Science	129	38	Groveport
Neiswender, Lisle W	Prep. Med.	100	68+2	Grove City
Nichols, Ada May	M. L. Ph.		68	Chillicothe
*Nida, William Lewis	E. Ph.	128	92	Lincoln
Norris, John S	M. L. Ph.		80	Columbus
*O'Brien, Charles Francis	L. & J.	99	33	Urbana
*Orndorf, Earl Luther		129	35	Wauseon
		127	25	New Salem
*Ortman, Earl Hill				
Orton, Samuel Torrey		133	83	Columbus
Osborn, Abner Andrews, B. Sc			***	Columbus
Parmenter, William Watt, B. A				Mt. Vernon
Parsons, George McLellan		126	98	Columbus
Patterson, Bertha Gildersheve		126	105	Columbus
*Pavlicek, Frank J	L. Ph.	126	85	Toledo
*Peoples, Emmet W	Arts	126	21	Pomeroy
Pitts, Grace Lenore, B. Ph	******		***	Columbus
*Plum, Harley Martin	Arts	126	67	Ashville
Plummer, Alice Greenwood	Special		17	Columbus
*Pocock, Lucy Hunt	E. Ph.	128	68	Columbus
Porter, George Henry	L. Ph.	126	98	New Philadelphia
*Postle, Carlton David		100	33+6	Alton
Postle, Carl Haldy			17	Columbus
Potts, Beulah Josephine	Arts	127	29	Columbus
*Potts, Helen Georgiana	Special		32	Columbus
	Special			Mt. Cory
Powell, Blanche		127	60	
*Powell, Cornelia	Arts			Columbus
*Powell, Raymond Thompson		127	6	Columbus
*Pratt, Edna Stuart	Arts	127	***	Columbus
Pulling, Margaret Glaze, B. Ph		***	***	Columbus
Pumphrey, Josiah Merton	Prep. Med.			Martinsburg
*Rathburn, James Irwin				Gallipolis
*Raymond, Maybelle	E. Ph.	128		Columbus
*Raymond, Stockton	L. Ph.	127	22,	Columbus
Redrow, Clara M	M. L. Ph.	126	50	Williamsburg
Redrow, Walter Leffingwell, B. Sc	*******			Williamsburg

<sup>\*</sup> Preparatory work incomplete.

	-		A	
	Course H		Credit	Home Address
Rees, Edith Celeste	Arts	126	104	Home Address
*Reese, David R				Columbus
		126	94	Shawnee
Reinhard, Frank J., Jr		128	40	Columbus
Reütinger, Ernest Victor	Prep. Med.	100	62+8	Chillicothe
Rice, Mary Washington, B. A			***	Columbus
Rickard, Alexander	Special		5	Columbus
Rickey, Tallmadge Archer, B. Ph	******		***	Columbus
*Ridenour, Walter Ashton	L. & J.	98	52+13	Jackson
*Robinson, John Fletcher			26+5	Columbus
*Rockey, Noble Warren		129	21	Dayton
*Rodebaugh, Mabel Mary			22	
				Marysville
Roebuck, Carl Fletcher, B. Ph	P 35 4		07	Dalton
Roekel, Frederick Augustus	the same of		27	Zanesville
Roney, Mary Malvina	L. Ph.	126	103	Columbus
Ruebesh, Joseph Keiffer	Special		311/2	Dayton
*Rushton, Norman	Com. & Ad.	131	56	Selkirk, Ontario
*Sadler, Anna Belle	L. Ph.	126	74	Columbus
Salm, Edna Esther	L. Ph.	127	39	Columbus
Sayre, Charles Boyd, B. A				Columbus
Schaff, Mae B., B. Ph				Columbus
*Schantz, Albert J		135	66	Dayton
			10	
Schilling, Emelia Jahana				Columbus
*Schneider, Earnest True	L. & J.	99	251	Dayton
Schoedinger, Ferdinand P	Arts	126	74	Columbus
*Schönthal, Derso Clarence	E. Ph.	128	60	Columbus
Scott, Dudley, B. Ph	*******			Columbus
*Seymour, Edith Lillian	Arts	127	27	Columbus
Seymour, Raymond Jesse, B. Sc	*******			Columbus
*Schaeffer, Ray	Arts	127	191	Coshocton
*Shaw, Harry R	E. Ph.	128	85	Zanesville
*Sherman, Richard Jay		127	35	Toledo
Shigley, Anna B	-		29	Jamestown
Simpson, Warner Pike			34	
				Worthington
Singleton, Charles T., B. Ph			***	Columbus
Smith, Albertine Charleen, B. Ph		***		Columbus
*Smith, Harold Osborn	L. Ph.	126	64	Columbus
Smith, Lida May	Special		1	Columbus
Smith, Ralph Harvey	Prep. Med.	. 100	19	Columbus
Smith, Stanley Robb	Special		18	Columbus
Smith, Virginia Roletta, B. Ph			7	Columbus
*Snyder, Henry Williams	The same of	129	241	Ironton
Souder, Charles Granville		130	51/2	Logansport, Ind.
*Southwick, Myrtle Minerva	and the same	129		Kendallville, Ind.
*Southworth, Ruth	-	129	27	Columbus
		128	91	Mt. Vernon
Sperry, Wilmot, Jr				
Sproat, Martha Evans		127	37	Columbus
*Staley, Homer F		126	48	Columbus
Stephenson, Bertram Sheaver		126		Jackson
*Stevenson, Ray David	Special		62	Fostoria
*Steward, James Clarence	E. Ph.	129	29	Marcy
*Stewart, George Francis		99	91/2	Coshocton
	The state of the s			

<sup>\*</sup> Preparatory work incomplete.

	Co	urse	Credit	
	Course H			Home Address
*Stewart, Gilbert H., Jr	L. & J.	98	47	Columbus
Stimson, George, B. A				Columbus
*Stults, Newton Delano	E. Ph.	129	164	Fremont
Sullivan, Oscar M	Arts	126	72	Columbus
Swaney, Sara C	L. & J.	98	61+1	East Liverpool
*Swift, Samuel Ferguson	E. Ph.	128	47	Jackson
*Tarbill, John Wesley	Arts	126	114	Atlanta
*Tatje, Oral D			34	Columbus
Taylor, Bessie Battelle	L. Ph.	126	70	Columbus
*Taylor, Mary Hill	L. Ph.	127	33	Columbus
*Taylor, William Harry	E. Ph.	128	74	Columbus
Teter, Sumner	Science	129	63	Columbus
*Teter, Millicent	M. L. Ph.		12	Columbus
Thomas, Lawrence David, B. Ph				Lancaster
Thomas Pohart Park	Special		7.550	Kennard
Thomas, Robert Park	Special		74	
*Thompson, King Gibson	Special	107	74	Georgetown
*Thompson, Roy Washington	L. Ph.	127	27	Gallipolis
Tietjens, Otto			001	Napoleon
Tilden, Samuel Jay	Special	***	281	Garrettsville
*Tilton, Josephus Howard	E. Ph.	128	110	Jelloway
Timberman, Andrew	Special	***	***	Columbus
Tipton, Robert	Special		***	Milo
Trauger, Bertha Elizabeth			6	Columbus
Trauger, Clara Salome	Special		7	Columbus
Travis, Fred L., B. A			***	Pana, Ill.
Travis, John F., B. A			***	Green- Camp
Türcke, Therese	Special		12	Columbus
Turner, Bertha Louise	M. L. Ph.	126	38	Columbus
Turner, Lucile E	Special		1. A. /	Columbus
*Ulsamer, Fritz Martin	M. L. Ph.	127	51/2	Gallipolis
*Veach, Esther Louise	E. Ph.	129	231	Newark
Vinson, Albert E	Special		116	Dayton
Wagner, Charles John	Special		13	Belle Centre
Wallace, William Garvey	Special			Bellefontaine
Walsh, Frances Lyon	COLUMN TO SERVICE AND ADDRESS OF THE PARTY O	126	A Comment	Columbus
Walters, Barton			32	Circleville
Ward, Annette Persis			26	Columbus
*Ward, Lila Lucile		126		Reynoldsburg
*Warner, John Howell		127		W. Shelby, N. Y.
Waugh, Helen Grace		129		Bowling Green
*Weaver, Mima Jacobs	E. Ph.	131		Dayton
Weber, Sophia Frances			-	Columbus
Weick, Carrie Rosina	Science	129		Columbus
Weld, Harry Porter, B. Ph				Marysville
*Weller, Charles Ralph		127		Portsmouth
Welling, Faith Cornelia		126		Worthington
		129		Ostrander
*Wells, Byron Bliss				Columbus
*Wells, Harry B		126		
West, Earle Downs, B. A		107		Columbus
Whetsel, James Anderson Garfield	Arts	127		Columbus
*Whitaker, William Earl	E. Ph.	128	99	Wauseon

<sup>\*</sup> Preparatory work incomplete.

	Co	oursé	Credit ·	
	Course H	lours	Hours	Home Address
*White, Carroll Agnew	L. Ph.	126	45	Marysville
Whiteside, John Wesley	E. Ph.	128	93	Bloomingburg
Wilkinson, John Anderson	L. Ph.	127	33	Piqua
*Williams, Anna Florence	E. Ph.	129	26	Jackson
Williams, Clara Maude, B. Ph				Columbus
Wilson, Charles Robert	L. & J.	99	26	Circleville
*Wilson, Willard Aleck	Com. & Ad.	131	25	Columbus
Wing, Lucius Arthur	Science	130	35	Columbus
*Woods, William Burroughs	L. & J.	99	36+3	Garrettsville
Wright, Nellie	E. Ph.	128	80	Worthington
Yoder, Harvey Elmer	Special		11	North Industry
*Young, Claude Burnett	L. Ph.	127	27	West Rushville
*Young, Mary Grace, B. Ph				Mt. Vernon

<sup>\*</sup> Preparatory work incomplete.

# COLLEGE OF ENGINEERING

# GRADUATE STUDENTS - 11

Edwards, Clarence J  B. S. Pacific College.		Home Address Newberg, Ore.
Ford, Nile Otis	E. M	Wheeling, W.Va.
Grate, Charles A	М. Е	Yale.
Groves, John Wesley	E. M	Batavia.
Hale, Frederick James	M. E	Mogadore.
Ludlow, Stephen H	*Cer	Union City, Ind.
McIntire, Alfred Heber E. E. Ohio State University.	M. E	Mt. Vernon
Schlochtermeyer, Carl Fred	E. E	Cincinnati
Somermeir, Edward Everett	E. M	Westwood
Williams, Ira A  B. S. Iowa State College.	*Cer	Ames, Iowa
Wynne, Francis Edmund B. A. and M. A. Bethany.	E. E	Bethany, W. Va.

<sup>\*</sup> Pursuing a special course.

# UNDERGRADUATES - 394

		Course Credit	
	Course	Hours Hours	Home Address
Albin, Carl	E. E.	$219\frac{1}{2}$ 52	Columbus
Alford, Arthur Milton	M. E.	22 138+4	Windham
*Ames, Holiday	C. E.	209 34+3	Ashland
*Archer, Carl Hunter	E. E.	2191	Columbus
Armstrong, Hugh Cook	E. E.	2191 431+3	Clintonville
Arndt, Mrs. Mary Korst	Special	2	Columbus
*Arnold, Charles H	M. E.	222 91	New London
Bahrke, Charles Frederick	I. A., S.	. 96 35	Columbus
Eailey, Ervin George	E. E.	218 92	Damascus -
*Bailey, Edward Harding	†M. E.	66	Damascus
*Bailey, Purdy Sanford	C. E.	2101 291+5	Warren
*Baker, Charles Carroll	E. E.	2191	St. Paris
*Balz, Ernest	C. E.	209 98	Columbus
*Balz, Louis Christian Fred	C. E.	209 98	Columbus
Barker, Russel David	M. E.	2231 431	Brooklyn, N. Y.
Barlow, Moses Henry	C. E.	209 159	Columbus
*Barringer, John Martin	Chem.	202 136	Washingt'n, D.C.
Barringer, Lawrence Eugene	Cer.	211 170+5	Washingt'n, D.C.
*Barry, William John	C. E.	209 78	New Straitsville
*Battenfield, John Milton	E.E.	218 681	Delaware
*Baughman, Norman	E. E.	2191 42	Roseville
Baumann, John Carl Bernhardt		The state of the s	Gütersloh, Germ.
*Bauroth, Walter John	M. E.	222 83	Springfield
Beard, Frank Andrew		222 38	Jacksontown
*Bedwell, Charles Francis	I. A.	218 46	Columbus
Benbow, James D	E. E.		Milo
	I. A., S		
Berndroth, Geary Martin	M. E.		Geneva
*Berry, Charles Watson	E. E.	2191 19	Columbus
Besse, Thomas Samuel	E. E.	2191	Pataskala
*Bigelow, Clarence C	E. M.	208 103½	Findlay
Billingsley, Robert Wallace	M. E.	222 99	Lisbon
*Bleininger, Albert Victor	†Chem.	126+31	Columbus
Boehme, Adolph Joe	M. E.	222 157+3	Youngstown
Bomesberger, Walter Nelson	E E.	2191 451+5	Columbiana
Boothman, Dale Maxwell	M. E.	2231 551	Bryan
*Bostwick, Oliver Newton	C. E.	209 93	Mt. Sterling
Bott, George Robert.	M. E.	222 156	Columbus
Bowden, Harry William, C. E			Minerva
*Boynton, Henry Percy	E. M.	$209\frac{1}{2}$ $14\frac{1}{2}+1$	Elyria
Bradshaw, Eugene Bingham	Special		East Liverpool
*Bramble, Bennett Glenn	Chem.	$209\frac{1}{2}$	Bellefontaine
Brannan, Thomas Hayes	C. E.	$210\frac{1}{2}$ $42+3$	Marysville
*Brashear, Edward Rosemond	C. E.	2101 541	Columbus
*Bridinger, Leon A	E. M.	2091 221	Tiffin
*Britton, William Miller	E. E.	219½ 28+13	Columbus
Britton, Lloyd C	C. E.	209 88	Williamsburg
Brooks, Herbert Barton	E. E.	218 111+6	Piqua
Buchenberg, Alvin Ernest, M. E. in E. E.			Holgate

<sup>†</sup> Pursuing a special course. \* Preparatory work incomplete.

		Cours	e Credit	
	Course		s Hours	Home Address
Burch, Orrin	E. E.	218	631	Columbus
Buydden, Wade Jennings, Jr	E. M.	2091	7	Dayton
*Cameron, James L	Arch.	2171	471+2	Malvern
Cameron, Harry Ezra	C. E.	209	159	Lisbon
Cameron, Gaylor Malcomb	E. E.	2191	41	Jeromeville
Campbell, Willis Elmer	Chem.	208	92	Fostoria
Campbell, Rolo Wilbur	C. E.	209	53	Fostoria
Cannan, William	†Cer.		75	Plymouth
*Carmichael, Robert	M. E.	2231	29	Columbus
*Carr, William Brewster	E. E.	2191		Yellow Springs
Cartzdafner, Roy Edwin	M. E.	2231	53	London
*Caskey, George Alexander	M. E.	222	96	Columbus
Cavanaugh, Andrew Francis	M. E.			Dayton
*Cavin, Frank Thomas	E. E.	218	116	Spencer
*Chaffin, Wendel Wilson	C. E.	209	57+12	Dayton
	C. E.			
*Chamberlain, John Ross		209	56	Tiffin
Chandler, Homer Payne	E. E.	218	95+13	Columbus
*Chandler, William H	C. E.	2101	****	Bellefontaine
Chenoweth, Howard	†E. E.	0101	56	Range
Childs, Harry Jesse	C. E.	2101	211+6	Troy
Chubb, Joseph Horace	C. E.	2101	47	Columbus
Clarke, James Ulrick	E. E.	218	111	Lancaster
Colgan, Frank J	Cer., S.		30+52	Columbus
Conrad, Vern Louis	C. E.	209	104+6	Columbus
*Cook, Spencer Nye	E. M.	208	501	Chillicothe
*Cooke, Royal Alstan	E. E.	219	132+10	Wyoming
Cooley, James Riddile	E. E.	2191		Nelsonville
Cooper, Ralph McClelland	I. A., S	. 96	15	Struthers
*Copland, James Samuel, Jr	†M. E.	***	7	Dresden
Cosley, Harvey Harter	C. E.	209	154	Troy
Crabill, Pearl P	†M. E.		86	Springfield
Crable, Arthur	C. E.	209	180+5	Columbus
Crable, George	E. M.	208	107	Columbus
Creed, Frank Roy	Mining,	S. 91	27	Struthers
Cridland, Harry Clifford	E. E.	2191	551	Dayton
Crooks, Thomas Elliott	E. E.	2191	551	Van Wert
Cryder, Howard Michael	Arch.	215	69	Chillicothe
Cryder, Ross Warner	E. E.	2191	351	London
Damon, Owen H., C. E				Hinckley
*Dann, Walter M	E. E.	218	112	Columbus
Darrah, John Francy	E. E.	219	$31\frac{1}{2}+2$	Toronto
Davison, Holmes Bergen	Cer., S	5. 90		South River, N.J.
*Day, Stanley Frank	E. E.	2193	91	Columbus
*Denmead, Edward Graham	M. E.	2231	32+3	Columbus
*Denny, Charles Wampler	E. E.	219	136	Middletown
DeWolf, Roger Dennison	E. E.	219	164+2	Madison, Ga.
Dick, Owen Quinton	I. A., S		33+4	Marshall
Dickenson, Morris L	†I A.			Columbus
*Diehl, Joseph A	C. E.	209	81+8	Defiance
*Dierdorff, Percy Cyrus	M. E.	222	70	Columbus
Dill, Raymond	E. E.	219	162+3	Columbus
			7 7 7	

<sup>†</sup> Pursuing a special course. \* Preparatory work incomplete.

Course Credit

		Course Credit	
*D Chalanta	Course	Hours Hours	Home Address
*Doty, Charles Wilgerson	E. M.	209½ 11+5	Hanging Rock
Drummond, William George, M. E	******	*** ***	Cleveland
Dunlop, Robert Rowse, M. E. in E. E.	******		Columbus
*Dupuy, Benjamin Francis	C. E.	2101 521+8	Ironton
*Ecker, Harrison Grant	E. E.	$218  53\frac{1}{2}$	Columbus
*Edgerly, Raymond John	C. E.	2101 391-6	Pataskala
*Elliott, Emmett Foster	Arch.	215 103	Chester Hill
Elsner, Richard E	C. E.	209 61+4	Newark
Emswiler, John Edwin	E. E.	2191 541	Morgan Center
Erdmann, William	I. A.	201 191+10	Chillicothe
Escobar, Raphael		22	Puerto Principe,
*Espy, Frank	†E. E.	104	Kenton [Cuba
Euchenhofer, Albert John	E. E.	2194 39	Dayton
Evans, Charles Hopkins			Evanston
*Evans, William Ruthrauff	M. E.	2231	Salem, Va.
*Eysenbach, Louis, Jr	Ceramics		Delphos
*Faulkner, Eldridge Rhodes		Lucia La	
	E. M.	2091 91	Tippecanoe City
Faulkner, Samuel Starrett	E. E.	2191	Troy
*Fay, Sherman	M. E.	$223\frac{1}{2}$ $55\frac{1}{2}$	Wyoming
Rickes, Walter M., E. M in Ceramics		200 00101	Steubenville
Fleming, Joseph Hamilton	C. E.	209 99+24	Olentangy
Follett, George Alfred	C. E.	209 83+17	Columbus
Foster, George C	E. M.	208 107+2	Schooley
Foster, Vause	E. M.	2091 511	Higby
*Fox, Lewis	C. E.	$210\frac{1}{2}$ $26\frac{1}{2}+6$	Payne
Frame, Rollo St. Clair	C. E.	209 159	Washington
Frankenberg, George T	M. E.	222 109	Columbus
Frechtling, Arthur George	M. E.	222 166+4	Hamilton
Freer, Will Davis	Cer.	211 49+4	Cortland
*Friedland, Francis William	M. E.	222 641	Coalton
Frost, George Winfield, M. E			Columbus
Fulton, James Stewart	M. E.	2231 551	Steubenville
*Funk, Leo William	M. E.	2231 411-5	Chester Hill
Gates, Ellis Day	Cer., S.	90 45+25	Hinsdale, Ill.
Geren, Arthur G	Mining, S		Columbus
Gilchrist, Edward Luce	E. E.	218 76	Ashtabula
*Gleichauf, Frank S		215 103	Newark
	Arch.		
*Goodell, Frank Herbert	Chem.		Columbus
*Gould, William Stewart	M. E.	2231 501	Wyoming
*Gray, Thomas M	M. E.	2231 30	Pittsburg, Pa.
Green, Homer Stewart	E. E.	218 122	Raymond
Grindel, Charles Stanton	E. E.	2191 391	Jacksontown
Hager, LeRoy William	C. E.	209 132	Piqua
*Hall, Robert Gilbert	E. M.	209½ 21	Dayton
Halsema, Eusebius J	C. E.	2101 52+4	New Bremen
Halverstadt, Herbert	Cer.	2141 341	Columbiana
Hamilton, Ross Elroy	C. E.	2101 52	Keene
Hammond, John Miller	C. E.	209 104+2	Columbus
Hance, Harry Thomas	Chem.	202 156	Columbus
Hapgood, Eugene Palmer	Chem.	202 118	Sabina
Hardy, Paul	E. M.	208 871+5	
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<sup>\*</sup> Pursuing a special course. \* Preparatory work incomplete.

		Course Credit	
H. J. D. L. D. L. M. P.		Hours Hours	Home Address
Harkins, Robert Rusk, M. E		*** ***	Columbus
Harmar, Frederick Sturgis		AND LAND	Columbus
Harrop, Carl B	E. M.	208 107	Columbus
Harvey, Clarke Kenerly	C. E.	2101 53+3	Brownsville
*Hatton, Frederic George	Arch.	2171 11	Columbus
Hayman, Will Clayton, M. E. in E. E.		*** ***	Holgate
Hayes, Charles Bradford	E. E.	2191 551	Hilliards
Hedges, Benson Rice	M. E.	222 107	Columbus
Helvey, George Stanley	M. E.	2231 53	Hamilton
*Herrick, Hobert C	Chem.	2091 19	Wellington
*Hershey, Herbert Clover	I. A.	222 4	Columbus
Hill, Harry Earl	C. E.	2101 100	Richwood
Hill, Cortland Latimer	C. E.	209 47	Berlin Heights
Hirst, Harry	E. M.	208 93	Midvale
Hitch, James Frank	C. E.	209 104	Batavia
Holbrook, George Frederic	E. M.	208 97	Bucyrus
*Holloway, Thurman Welferd	E. E.	2191 421	Zanesville
Horn, Charles Curtis	E. E.	2191	Pipesville
Hoster, Herman A	M. E.	222 431+6	Columbus
*Howard, Oscar David	Arch.	212 100+40	Circleville
*Huddleson, Frank	†E. M.	129	Columbus
Hulbert, William Rowsell	M. E.	222 791+3	New York, N.Y.
Hull, Walter Austin	Cer.	211 107+8	Orangeville
Hummel, Edmund Ray	E. E.	2191 2	Carroll
*Hunter, James Williamson	C. E.	2101 541-5	Zanesville
Hunter, Madone Carrington, M. E. in	-		
E. E		*** ***	Norwich
*Hylton, Gratwoods Walter	†M. E.	60	Springfield
Jackson, Charles Edwin	Cer. S.		Wheeling, W.Va.
Jackson, Elmer Collins	C. E.	2101 41	Columbus
*James, Frank Richard	E. M.	208 82	Columbus
Johnson, Earl S., M. E. in E. E			Plants
Johnson, Walter A	M. E.	222 109	Columbus
*Johnston, Edward G	M. E.	2231 23+3	Bangor, Mich.
Jones, Howard Martin	E. E.	218 113	Marysville
*Jones, James Albert	C. E.	2101 38	New Straitsville
Judson, Walter Raymond	E. E.	2194 554	Dayton
Kanmacher, Samuel Houston, M. E. in	L. L.	2109 009	Dayton
			Columbus
E. E Thomas	Cham	208 100	Columbus
*Keating, Harvey Thomas	Chem.		
Keim, Herbert Edward	C. E. E. E.	2101 371+2	
Keller, Daniel Casteel		218 54	Washington C. H.
Keller, William	E. E.	219½ 20½	Washington C. H.
Kennedy, William McCreery	Cer. S		New Brighton,
Kern, William Frederick	Chem.		Bellaire [Pa.
Kettering, Charles Franklin		218 54	Loudonville
Kettler, Frank Christian		209 155	New Bremen
*Kidder, Leonard		2101	Woodstock
*Killinger, Claud H	C. E.	2101 7	Toledo
*Kimmel, Fred Bernham		2191 461+3	
King, Francis Emmet	Mining,	5. 91 89+10	Leisenring, Pa.

<sup>†</sup> Pursuing a special course. \* Preparatory work incomplete.

Course Credit

			e Credit	
	Course		Hours	Home Address
King, Herbert Sumner	C. E.	209	181+9	Medina
*Kinnear, Harry Baldwin	Chem.	208	88	Mt. Sterling
*Kinnison, Ernest Eugene	C. E.	209	99	Jackson
Kirker, Gaylord B	Mining, S	. 91	88+19	Catlettsburg, Ky.
Kittle, James Monroe	M. E.	2231	661	Columbus
Klie, Walter	M. E.	2231	48	Columbus
Knieling, Charles August	E. E.	218	103+2	Willoughby
*Knies, Daniel	E. E.	218	711	Columbus
Knight, William Abner, M. E				Columbus
*Knoderer, Homer Guy	E. E.	218	112	Columbus
Knox, Frank S., E. M				Columbus
Krumm, Thomas Zettler	C. E.	209	83	Columbus
Kunkle, Fred Raymond	E. E.	218	79+14	Bryan
*Laiblin, Garfield	M. E.	222	80	Canton
Lamb, Whitney Earl, M. E. in E. E				Commercial Point
*Lampert, John Martin	M. E.	222	96	Xenia
			17	
*Lanning, Adrian Roy	C. E.	209		Dennison
Lee, Corlis Edgar, M. E. in E. E	**************************************	200	100 10	Pugh Postoffice
*Leinbaugh, George Gurden	M. E.	220	160+3	Bellevue
*Lesh, John Howard	M. E.	220	146	Louisville
*Lied, Ernst Mitchell	E. E.	218	72	Columbus
Linville, Clarence Philander, B. Sc. in				
Chemistry			***	Urbana
Linxweiler, Otto	M. E.	2231	431	Dayton
Lloyd, Donald K	Mining, S	5. 91	5	Columbus
Lockwood, Howard Thomas	C. E.	209	92	Batavia
Loewensohn, David	C. E.	2101	421	Urbana
Long, George Garfield	E. M.	2091	541	Tippecanoe City
*Luse, Herbert James	M. E.	2231	12	Columbus
Lyon, Arthur Hollingshead, M. E				Wauseon
*Marckworth, Otto Stanley	†Chem.		168	Cincinnati
Marietta, Harry Riefsnider	E. E.	218	100+3	Dayton
Marriott, John Minges	Arch.	215	821	Delaware
*Marshall, Charles Howard	M. E.	2231		Fair Haven
Marshall, Willard Beverly, M. E. in	2.41	2002		zun zuren
E.E.				Piqua
Martin, John D., Jr	M. E.	222	174+19	New Straitsville
Marting, Samuel Arthur			7	
	†Chem.	1771		Portsmouth Columbus
Mason, John T	†Chem.	0101	25	NEGOTOR TO
Maxwell, Howard McGee	E. E.		101	Columbus
*Melick, Cyrus Alan	C. E.	2101		Columbus
Melick, Neil Albert, C. E		***	***	Columbus
Mercer, Robert Wood	E. M.	2000	51½	Chester Hill
*Miller, Albert Sanford	E. M.	2091		Tiffin
Miller, Charles Emmitt	Arch.	212	150+5	Spencer
*Miller, Ralph Charles	C. E.	209	138+11	Zanesville
*Minor, Wells Hammond	E. M.	2091	-	Akron
Moist, Harvey Clinton	E. E.	2191	***	Kinsey
Monserrat, Charles R	M. E.	2231	31	Columbus
Mooney, George Lewis	E. E.	2191	551	Woodsfield
*Mooney, William Joseph	C. E.	2101	1111-3	Cleveland

<sup>†</sup> Pursuing a special course. \* Preparatory work incomplete.

		Course	Cualita	
	Course		e Credit s Hours	Home Address
*Morlan, Wilbert	†M. E.		91+7	Rogers
Morris, Robert Hamilton	E. M.		135+20	Columbus
Morris, Samuel	E. E.	2191	121	Bloomingburg
Morris, Willard Bernard	M. E.	222	91	Columbus
*Morris, William Blaine	M. E.	222	109	Massillon
Morrison, Franklin Houston	Cer. S.	90	45+10	Denver, Col.
*Murphy, Joseph Lincoln	C. E.	2101	491	McArthur
Myers, Albert B., E. M.,	- Livias	411	1	Columbus
Myers, Fred	C. E.	2101	441	Louisville
McComb, Hoyts Sherman	E. E.	2191	41	Columbus
*McEowen, Hugh Elsworth	C. E.	2101	17+9	Greenville
*McFarland, Horace M	E. M.	208	97	Columbus
McIntosh, Roscoe Everitt	E. E.	219	158+5	Ravenna
McKeon, Robert Dale	C. E.	209	99	Arcanum
*McKinlay, William Shields	E. E.	218	7	Denver, Col.
*McMullin, Roy	E. E.	2191	24	Columbus
*McOwen, Thomas	C. E.	2101	47+34	Ovid
*McWhinney, Harry Ozias	E. E.	2191	Committee of the commit	Lewisburg
*Nauss, Ralph Welty	Chem.	202	153	Greenville
Needham, Harry Smithson, M. E				Columbus
Nicholson, Charles Marion, M. E. in				
E/E		4		Columbus
*Nidy, Herbert C	E. E.	219	162+2	Greentown
Nobles, Edwin Earl	†C. E.		24	Flint, Mich.
Nold, John H., E. M				Columbiana
*Nye, Ralph D	E. E.	2194		Zanesville
Ogden, Ellsworth	M. E.	2231	641	Columbus
*Ohliger, Clyde C	C. E.	2101	The second second	Wellsville
Osborn, Liphe Andrews	M. E.	2231	47	Columbus
O'Shaughnessy, Joseph	I. A., S.		96	Columbus
*Panter, Thomas Alfred	E. E.	218	104	Niagara Falls,
*Parkin, William Z	M. E.	222	77	Columbus [N.Y.
Parrett, Benjamin Creamer	Chem.	208	91	Washington C. H.
Patton, William Arthur	M. E.	2231	91	Circleville
Peck, Alfred Steven			53	Cleveland
*Perks, George Wheldon	M. E.	222	85	Springfield
Peterson, John William	Arch.	2171	541	Port Clinton
Pleukharp, Erwin Hiram	I. A., S		42	Columbus
Pope, Mrs. Edna L	Special		2	Columbus
*Post, Malcolm Phelps	Cer.	211	83+10	St. Louis, Mo.
Poto, Frank B	Chem:	202	167	Alliance
Potts, Royal Warren	†C. E.		29	Columbus
Pratt, Fred Kellogg, C. E				New Philadelphia
Price, Fred Raymond	E. E.	219		Columbus
Reed, Nathaniel Garfield	M. E.	2231		Youngstown
Reel, Walter C	C. E.	210	The second second	Columbus
Rennard, John Hiram		The second second	44+1	Wheeling, W.Va.
*Riebel, Leroy Clemens	Arch.	217		Columbus
Rightmire, Robert Elwood	M. E.	222	120+6	Wheelersburg
Ritchie, George Alexander	C. E.	210		Hudson
Robinson, Robert Thane	E. E.	219		Bryan
Robert Halle	E. E.	2137	3.2	Diyan

<sup>†</sup> Pursuing a special course. \* Preparatory work incomplete.

			e Credit	
	Course		s Hours	Home Address
Rogers, Rutherford Hayes	E. E.	218	46+5	Columbus
*Romick, Howard Samuel	M. E.	1-14/11	122	Hilliards
*Ross, Calvin Burt	E. E.	2191	551	Urbana
I *Ross, Edward McKinstry	M. E.	2231	241	Jerseyville, Ill
*Roth, George Lewis	E. E.	2191	16	Port Clinton
*Roudebush, Howard John	E. E.	2191	26	Owensville
*Rupert, Jesse Solomon	E. E.	2191	7	New Waterford
*Ryland, Paul Dillen	C. E.	209	189+2	Columbus
Sanderson, Clarence Herbert	E. E.	218	94	Logan
*Sanderson, Ray Rochester	E. M.	208	70+6	Washington C. H.
Sayers, Delbert Bancroft	E. M.	208	105+9	Marits
*Schlafly, Raydeon Karl	C. E.	2101	691	Mt. Eaton
Schoenlaub, Thomas Jacob	C. E.	209	77	Marion
*Schott, Alvin Christian	Chem.	208	56	Massillon
Schreiber, George Ernest, M. E. in E.E.				Ironton
Schubert, Charles Wesley	C. E.	2101	541	Columbus
Schwab, Frank Wilbert	Chem.	208	94	New Philadelpiha
*Scott, Cyrus Ellison	E. M.	2091	391+9	Columbus
Scott, James Blaine	E. E.	2191	101	Batavia
Senter, Herbert Pike	C. E.	209	104	Columbus
Sessions, Elizabeth	Special			Columbus
Sharp, John McDowell	C. E.	2103	361+2	Columbus
*Shaw, Lucian	C. E.	209	72+3	West Lafayette
Shepherd, Charles William, C. E				Huron
Sherman, John K	C. E.	209	154	Columbus
*Sherwood, Frank Porter	†E. E.		128	Ashtabula
Shumate, Frank Douglass	M. E.	222	94+2	Urbana
Siddall, John William			45	Streator, III.
*Sigrist, Charles Ferdinand	C. E.	2101		Congress
*Simpson, Henry Jerome	C. E.	209	58+3	Worthington
*Singer, Lewis Parmlee	E. E.	2191	161	Lewisburg
*Sinks, George Theodore	M. E.	2231	20	Youngstown
Smith, Harry Ford	M. E.	222	109	Lexington
Smith, Roy Brooke	M. E.	2231	561+2	Columbus
Sosman, Robert Browning	Chem.	2091	561	Chillicothe
Sowers, Emory Blose	I. A.	222	52	Westville
Spangler, Thomas McClellan	†C. E.		23	Pleasantville
	E. M.	208	107+8	Chillicothe
Sproat, Amasa Delano	Chem.	2091	21+15	
Stanton, Frederic Moses		1 1000	16	Ridgeville
Starbuck, John Clancy	I. A., S	222		Somerton
*Sterling, James Gilman	M. E.		101	Springfield
*Stocker, James Arthur	C. E.	209	104	Gnadenhutten
Stone, Thomas Wade	M. E.	222	1001	New Bremen
Stout, Wilber	Cer., S.		40+15	Sciotoville
Strong, Harry Miller	†Min'g,S		39	Wilkesville
Strong, Jonathan Edgar	M. E.	2231	161	Columbus
*Stull, Raymond Thomas	Cer.	211	101	Elkland, Pa.
*Talbot, Edgar Carl	E. E.	2191		Columbus
*Tanner, Edward Wood	M. E.	222	104	Zanesville
Taylor, William Oliver	E. E.	2191	551	Urbana

<sup>†</sup> Pursuing a special course. \* Preparatory work incomplete. † Died August 13, 1900.

			. Credit	
			Hours	Home Address
*Templin, John Richard		2191	200	Salem
Thomas, Alfred Redman	Mining, S.	91	87	Glouster
*Thomas, Edward	Chem.	2091	371	Navarre
*Thornton, Nyman	M. E.	2231	471	Wyoming
Trish, George	Mining, S.	91	88	Nevada
Tubbs, Alfred Stowe	Mining, S.	91	38	Tubbsville
*Tudor, Glenn E	The state of the s	2101	$42\frac{1}{2} + 3$	Chicago
Tyler, John Sherrerd		2231		Dayton
Van Dyke, Clifford Steel			160	Ansonia
		2231		Hilliards
*Van Schoyck, Ray		-	00	Salar
*Van Tine, Charles Hovey		2231	62	Tiffin
Vosskuehler, Joseph Henry		***		Dayton
*Waddell, Starling	E. E.	218	55	Columbus
*Walker, Walter Hamilton	E. E.	2191	2	West Canaan
*Walsh, George E	M. E.	2231	13	Columbus
*Ward, Samuel Edwin	M. E.	2231	56	Green Spring
*Ward, Vernon C., Jr	M. E.	222	72	Columbus
*Warnock, David Ross		2191	41	Urbana
*Webber, Frank Merrill		2191	32	West Richfield
Weber, Frederick Clarence		202	138	Evanston
*Weidman, Charles Albert		2191	21	Navarre
*Weiss, William Winfred		2101	331	Canal Dover
		20.35		
Wellbaum, Arvy E	1 3		109	Brookville
*Wells, Ralph P		2231	141	Lisbon
*Whetsel, Emerson Jay		209	82+5	Jackson
*White, Frederick Lewis	M. E.	$223\frac{1}{2}$		Gambier
Wiel, Arthur Bernard	Special	***	17	Cleveland
Wilcox, Carl Clifford	M. E.	2231	47	Columbus
*Wildermuth, Troy Dreslan	M. E.	$223\frac{1}{2}$	2	Columbus
Williams, Harry Ernest	M. E.	222	109	Harlem
*Williams, Howard Insco	C. E.	209	39+4	Dayton
Williamson, Homer Davison	Chem.	202	179	Monroe
*Wilson, James Sommerville	M. E.	222	162+22	Columbus
Winger, Stanley DuBoise	M. E.	222	921	Springfield
Wittich, Manuel	Cer., S.	90	20+5	Mt. Sterling
Wolf, Richard Ludwig	Cer., S.	90	45+17	Detroit, Mich.
		90	20	
Wright, John	Cer., S.			Antrim, Pa.
Wright, Lawrence Robert	E. E.	2191		Gambier.
Wright, Otis H	E. E.	2191	471	Worthington
*Wyer, Samuel S	M. E.	$223\frac{1}{2}$	481	Barberton
Yost, Benjamin Franklin		2.5		Columbus
Yost, Lloyd	M. E.	222	103	Somerset
Youmans, W. Raymond	E. E.	2191	531	Pataskala
Zbinden, Hermann Christian	C. E.	2101	130+6	Toledo
*Zeller, Ralph	E. M.	2091	661	Ottawa
Zwerner, Fred George	E. E.	2191	54+6	Columbus
			ALCOHOLD STORY	

<sup>†</sup> Pursuing a special course. \* Preparatory work incomplete.

# COLLEGE OF LAW

## UNDERGRADUATES - 201

	The AVII	and the second
A LU Andrew France	Year	Home Address Columbus
Addison, Arthur Everet	Third Third	Columbus
Addison, Clarence Maywood	Second	
Alvord, Justus Elvin	Second	Bryan Sidney
Amos, Frank Craig	First	Dennison
Anderson, Ralph	Third	Celina
Armstrong, Russel Livingston	Second	Columbus
Arnold, Harry Crumley	Second	Coshocton
Ashman, Frank Baggott, Roland Webb.	Third	Dayton
Bamer, Merton Leonard	Second	Grand Rapids
	First	New Paris
Barnet, Clarence Elwood	Second	
Beatty, Robert Jay		Cardington
Bechtol, John M	First	Fayette
Beetham, Rupert Rennison	Third	Cadiz
Benedict, Charles Yeddo	Third	Mansfield
Berry, Edmond Franklin	Second	Celina
Bininger, James Wolfgang	Third	Lancaster
Bock, Theodore E	Second	Hamilton
Bolton, Thomas Bennett	First	Cleveland
Bostwick, Homer Z	First	Columbus
Bowden, Harry W	Special	Minerva
Bowers, Walton S	Second	Hamilton
Branum, Frank C	First	Bridgeport
Bright, Frederick Ijams	Third	Logan
Brown, Albert Marion	First	Wauseon
Brown, James Earl	Second	De Graff
Burgess, James Henry	Second	Big Horn, Wy.
Burkey, Charles Paul	First	Pleasantville
Byers, William E	Third	Loudonville
Calderwood, Charles Barton	Second	Columbus
Calkins, Frank Elwood	Third	Grand Rapids
Calvin, Anthony B	Third	Youngstown
Carey, John T	Second	Upper Sandusky
Cary, Charles Ross	Third	Millersburg
Clark, Lawrence Hayes	First	Cumberland
Clark, William Whittier	First	Canton
Clum, Harry Ernest	Second	Thornville
Cockerill, Orville Porter	First	Washington C.H.
Courtright, Thurman Thomas	Third	Greencastle
Crawford, William Harry	Third	Massillon
Croll, Alfred Jacobs	Third	Tontogany
Crout, Ray Durand	First	Columbus
Cullen, William Barnes	First	Hamilton
Curran, Bernard Franklin	Second	Corning
Damon, Owen H	Special	Hinckley
Darby, Roscoe Bryant	Third	Wauseon
Dawson, Nathan Charles	Second	Columbus
Determan, Hugo Philip	First	Columbus
De Witt, Claude Bennett	Third	Sandusky

	Year	Home Address
Donley, Russell Lee	Third	West Bedford
Doud, Harry L	Second	Norwalk
Downing, Earl Summerville	Second	Middleport
Du Bois, Aaron Smock	Third	Franklin
Duff, Alfred L	Second	Port Clinton
Dunlap, Carl Reed	Second	Columbus
Eagleson, Joseph Pentecost	First	Columbus
Euans, William Weldon	First	Columbus
Evans, Thomas Daniel	First	Newark
Feibel, Louis	Second	Hillsboro
Fippin, Elmer Otterbein	First	Galloway
Frankenberg, Don Juan	Second	Tempe, Arizona
Foster, George Gruel	First	Columbus
Friedlich, Alfred	Third	Troy
Galloway, Arthur Clyde	Second	Columbus
Gardner, Howard Julius	First	Kent
Graven, D. Homer	Third	Nashville
Haberer, Harry Andrew	Second	Dayton
Hahn, Howard Edward	Third	Coshocton
	Second	
Hammond, Frank Nathan		Smithfield
Hammond, Frederic Mathas	Second	Smithfield
Hancock, Winfield Scott	Third Third	Marietta
Harper, Ellahue Ansile	V Charles Cold	Columbus
Harris, Claudius Earl	First	Martinsville
Hershey, Harry Hartman	Third	East Greenville
Hertlein, John F	Third	Sandusky
Hite, William A	First	Thornville
Hornbeck, Ross Garfield	First	London
Houss, Eugene Augustus	First	Wapakoneta
Howells, George A	Third	Massillon
Hummell, Edwin Ray	First	Carroll
Jacobs, Horace K	Third	Waynesville .
Jahn, Nan	Third	Columbus
Johnson, Charles Foster	First	New Albany
Jones, Abbe Linhart	Second	South Zanesville
Jones, David Thomas	First	Youngstown
Jones, Hanby Raymond	Second	Westerville
Jones, Victor Waite	First	Columbus
Judge, James	First	Columbus
Keating, David Thatcher	First	'Columbus
Keith, Donald Roscoe	First	Spencerville
Kellison, Edward Lafayette	Third	Quincy
Kennard, Oron Ellsworth	First	Chester Hill
Kinzel, Harry Gilbert	Second	Eagleport
Kistler, Charles Edward	First	Carroll
Kistler, Jonathan Aaron	First	Carroll
Lane, Quinton R	Third	Canal Winchester
Lash, Henry Lloyd	Second	Bolivar
Laybourne, Lawrence E	First	Springfield
Layne, Andrew J	Second	Ironton
Leonard, Ralph Sherman	First	Granville
	Second	Westerville
Lloyd, Erastus Guy	First	West Carrollton
Long, Albert Taylor	First	west Carrollton

	Year	Home Address
Loup, Thomas M	Third	Steubenville
Lynch, John Woods	Second	Greenville
Mallow, Lewis Earl	Second	Washington C. H.
Marquis, Fred Samuel	Third	Mansfield
Mattison, George C	Second	Wauseon
Meier, William Henry	Third	Mt. Carmel
Melick, Neal A	Special	Columbus
Minshall, Thaddeus Ellis	Second	Chillicothe
Minshall, William Edwin	Third	Coshocton
Moore, Henry Curtis	Third	Bainbridge
Morgan, Lewis W	Third	Gibsonburg
Morris, Ingle Alman	Third	Columbus
Murphy, Frank Hayes	Second	New Comerstown
McCleary, Clayton Asa	Third	Science Hill
McClure, Robert Edward	Third	Dayton
McCray, Thomas Yates	Third	Mansfield
McCulloch, Roscoe Conkling	First	Millersburg
McGarry, James F	First	East Liverpool
Nesbitt, David M	First	Bellaire
Nevin, Lurton K	First	Dayton
Nicholas, Edward Mithoff	First	Columbus
Nicholas, William Renfrew	Second	Columbus
Nicola, Benjamin Di	Second	Barnhill Newark
Norpell, Ralph	Third	Clarksburg
	Second	Columbus
Pence, William D  Plagman, Lester W	First	Fremont
Folk, Winfred Whittington	Third	New Vienna
Poole, Loren Winfield	First	De Graff
Pratt, Fred Kellogg	Special	New Philadelphia
Price, Jonathan A	Second	Chili
Ramsey, Russell Kenney	Second	Columbus
Ranney, Jesse Fred	First	Columbus
Reed, Bert	Second	Piqua
Rightmire, George Washington	Second	Wheelersburg
Roebuck, Carl Fletcher	First	Dalton
Royon, Joseph Charles	First	Houston
Ryland, Paul Dillen	Special	Columbus
Sackett, Carl Leroy	Second	Big Horn City,
Sampson, John Henry	First	Columbus [Wy.
Scarlett, Henry Launcelot	First	Columbus
Schantz, Edwin Michael	First	Zimmerman
Schoedinger, Frederick H	First	Columbus
Schwenck, William Jennings	Third	Kenton
Shaw, John William	Second	Troy
Sheetenhelm, Curtis Cicero	First	Columbus
Sheetz, George W	First	New Washington
Shepherd, Charles William	Special	Huron
Shepherd, George Harvey	Second	Dayton
Shoemaker, William Allen	First	Zanesville
Shotwell, Franklin Albert	First	Marengo
Sigrist, Charles Ferdinand	Special	Challer
Skiles, Roscoe Carleton	Second	Shelby

	Year	Home Address
Smith, Wellington Cornell	Second	Lytle
Snow, Mason J	First	Columbus
Southworth, Ferdinand Leek	Third	Alliance
Sparks, Homer H	First	Columbus
Sprague, William Ralph	Second	Columbus
Springer, Nevada Weston	First	Columbus
Spurrier, Emery Allen	First	Chester Hill
Steinemann, George Charles	First	Minster
Sterrett, Frank Marion	First	Troy
Stevenson, Amos Claude	Third	Fostoria
Stewart, Gabrielle Townshend	Third	Cleveland
Stoolfire, Henri Stanton	Third	Columbus
Strader, Maynard	First	Zuber
Tangemann, Theodore H	Second	Ketterville
Tanner, John Robert	Third	Mt. Sterling
Taylor, Everett Buren	First	New Albany
Taylor, Frank Stewart	First	Alliance
Terwilliger, Meeker	Second	Circleville
Thomas, Herbert Spencer	First	Wheeling, W.Va.
Tipton, Robert	First	Milo
Toland, Harford Aquilla	Third	Columbus
Turner, Edward C	Second	Columbus
Veneman, Nevin Edward	First	Dayton
Voegele, William Frederick, Jr	Third	Mansfield
Wakefield, George W	Second	Reynoldsburg
Walker, Mary Ray	First	Dayton
Warden, Hosea Gilford	Second	Columbus
Wertz, Edward Sleeser	Third	Dalton
West, Frederick Rollin	Second	Columbus
Westwater, James Gulick	First	Columbus
Wharton, Homer Franklin	Second	Washington
Wheeler, Newberry William, Jr	Second	Portland
Williams, John William	Second	Roseville
Williams, Lloyd Thomas	Third	Jackson
Williamson, Allen Thurman	Second	Grandview
Wilmot, Charles Austin	Third	Claridon
Wilson, Frank	Third	Jolly
Wilson, Lewis Ernest	First	Columbus
Wise, Charles Clifton	First	Millersburg
Wolf, Edward Christofer	First	Circleville
Woods, Charles Howard	Third	Chillicothe
Worcester, Wood Frank	First	Columbus
Worman, Horace Dye	Second	Dayton
Wulff, August R	Second	Dayton
Yockey, Paul B	Third	Columbus
Young, Samuel N	Third	Lima

# COLLEGE OF PHARMACY

## UNDERGRADUATES - 39

			Credit	
The same of the sa	Course		Hours	Home Address
*Ashinger, William E	Long	2081	181	Uphur
Barrick, Alfred Ashberry	Special	***	144	Columbus
Block, Arthur William	Short	112	49.	Galion
Bodman, Edgar Sereno	Long	2081	491	Bement, Ill.
*Bowen, Charles Flood	Long	206	171+24	Columbus
Briggs, Claude Nicholas	Short	112		Briggsdale
Canfield, Delos Wilford	Short	112	105+26	Chardon
Cassady, Clyde Brint	Short	112	69	Alliance
Crosson, Stanley Berry	Short	112	40	Blanchester
Day, Levi Wille	Short	112		Mt. Oreb
*Funk, Roy William	Long	206	137+12	Chesterhill
Gardner, Charles Alfred	Short	112	107	Danville
Haudenschild, Harry J	Short	112	43+6	Loudonville
Harvey, Lucy Manola	Short	112		Pomeroy
Hollingsworth, Clyde Evans	Short	112	37	Mt. Gilead
Hoover, Walter Emmett	Short	112	67	Ashville
Horst, Herman Henry	Short	112	28	Marysville
Hurst, Grace	Short	112		Piketon
*Keller, Charles Franklin	Short	112	38	Arcanum
Kerr, Franklin Pierce, Jr	Special		The state of the s	Columbus
Kimberly, Charles Hubbell, B. Sc	Special		110   10	N. Fairfield
Knowlton, Fred A	Short	112	57	Granville
		112	48	Cleveland
Krebs, Otto	Short	112		The state of the s
Lefferson, Charles Henry	Short			Middleton
Morris, Harry Long	Special	000	161	Springfield
*Naddy, Charles Joseph	Long	206	114	Columbus
Oglesby, Nicholas Perkins	Short	112	102+6	Lucretia, Va.
Phillips, James McIlvaine	Special	200	3	Columbus
Pope, Harry Bentley	Short	112	53	E. Liverpool
Roush, Katherine Layzelle	Short	112	10	Syracuse
Sherman, James Garfield	Short	112	38+12	Columbus
Snyder, Roy Bernard	Short	112	43	London
Squire, Clarence W	Short	112	73	Ashville
Stoelzel, Julius Frederick	Short	112	15	Loudonville
Tracy, John Baptist	Short	112	68	Circleville
Wagstaff, Harry Garfield	Special		112	Niles
Ware, George H	Short	112	20	Dayton
Webb, Edward Nathan	Long	206	113	Rome
Young, Cyrus Homer	Long	206	118	Wooster

<sup>\*</sup> Preparatory work incomplete.

# COLLEGE OF VETERINARY MEDICINE

#### GRADUATE STUDENTS-5

Clawson, Clarence Alfred, B. Sc. (Agr.)	Home Address Okena
Hanawalt, David Christopher, V. S. (Ontario)	Greenfield
Hart, Arthur Clark, V. S. (Ontario)V	Vest Richfield
Imes, Marion, B. Sc. (Agr.)	Bashan
Murray, Frank Erskine, D. V. M	Greenfield

## UNDERGRADUATES-17

	Course	Credit	
	Hours	Hours	Home Address
*Auer, Curtiss	172	18	Lewisville
Brown, Harry Wilbur	172	54	Columbus
Eddy, William D. V. M	Want Mil		East Cleveland
*Forrester, Harry Arthur	172	54	Reynoldsburg
*Griffin, Frank	177	165	Columbus
Hammond, Harry James, D. V. M		444	Sharon
*Henderson, Charles Logan	172	54	Crescent
*Irwin, Albert N	177	112	Columbus
*Johnson, Theodore Charlemagne	177	106	Akron
*Lamb, Morgan Baxter	172	34	Barlow
*Metzger, Edward Louis	177	108	Louisville
Morrow, Charles James, D. V. M	+1.00		Tiro
*McClelland, Robert Lyle	172	66	Andover
*Pettiford, Oscar Collins	172	54	Wauseon
*Sater, Clinton Huron	172	54	Sater
*Severn, Warren	172	54	Cuba, N. Y.
Worcester, Warner Special		186	Columbus

<sup>\*</sup> Preparatory work incomplete.

# GENERAL SUMMARY

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE—		
Graduate Students	4	
Undergraduates	153	
		157
College of Arts, Philosophy and Science—		
Graduate Students	25	
Undergraduates	419	
		444
College of Engineering—		***
Graduate Students	11	
Undergraduates	304	
	004	405
College of Law-		201
College of Pharmacy-		39
COLLEGE OF VETERINARY MEDICINE—		03
Graduate Students		
Undergraduates	17	
	11	99
Total		1 052
Names counted twice		
Net total		1 000
		1,252

### SUMMARY BY COUNTIES

		Carlotte Control of the Control of t	100		
Adams	1	Guernsey	4	Morrow	6
Allen	5	Hamilton	13	Muskingum	18
Ashland	9	Hancock	. 3	Ottawa	3
Ashtabula	11	Hardin	3	Paulding	1
Athens	3	Harrison	5	Perry	13
Auglaize	10	Henry	5	Pickaway	14
Belmont	9	Highland	4	Pike	2
Brown	2	Hocking	3	Portage	8
Butler	14	Holmes	5	Preble	10
Carroll	3	Huron	9	Putnam	4
Champaign	14	Jackson	11	Richland	10
Clark	10	Jefferson	9	Ross	24
Clermont	12	Knox	17	Sandusky	4
Clinton	8	Lake	3	Scioto	6
Columbiana	16	Lawrence	6	Seneca	10
Coshocton	13	Licking	22	Shelby	3
Crawford	5	Logan	10	Stark	22
Cuyahoga	15	Lorain	8	Summit	9
Darke	6	Lucas	6	Trumbull	6
Defiance	1	Madison	17	Tuscarawas	12
Delaware	6	Mahoning	9	Union	12
Erie	16	Marion	6	Vinton	3
Fairfield	20	Medina	9	Van Wert	2
Fayette	14	Meigs	11	Warren	7
*Franklin	423	Mercer	2	Washington	5
Fulton	9	Miami	16	Wayne	11
Gallia	8	Monroe	2	Williams	5
Geauga	6	Montgomery	39	Wood	7
Greene	9	Morgan	11	Wyandot	2
			1832		-

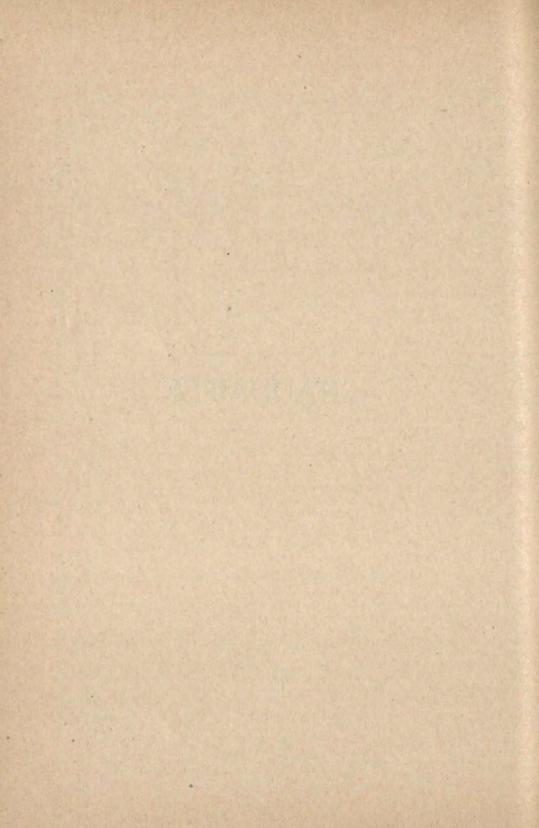
### SUMMARY BY STATES AND COUNTRIES

(As far as known)

Alamaba	1	Iowa 1	Ontario	1
Colorado	2	Kentucky 2	Oregon	1
Cuba	1	Michigan 5	Pennsylvania	6
Georgia	1	Missouri 1	Virginia	3
Germany	1	New Jersey 1	Washington, D. C.	2
Illinois	9	New York 6	West Virginia	7
Indiana	2	Ohio 1197	Wyoming	2

<sup>&</sup>lt;sup>6</sup> Nearly forty-two per cent. of the students registered from Franklin county are those whose homes are at Columbus only during their University course.

# **GRADUATES**



# **GRADUATES**

The faculty of the Ohio State University are anxious to place a copy of each annual catalogue in the hands of every graduate. They will esteem it a favor of any alumnus who changes his residence will notify the Executive office of his new address and occupation. They will also be grateful for any information from any source, that may assist in making or keeping the Directory of the Alumni complete and correct.

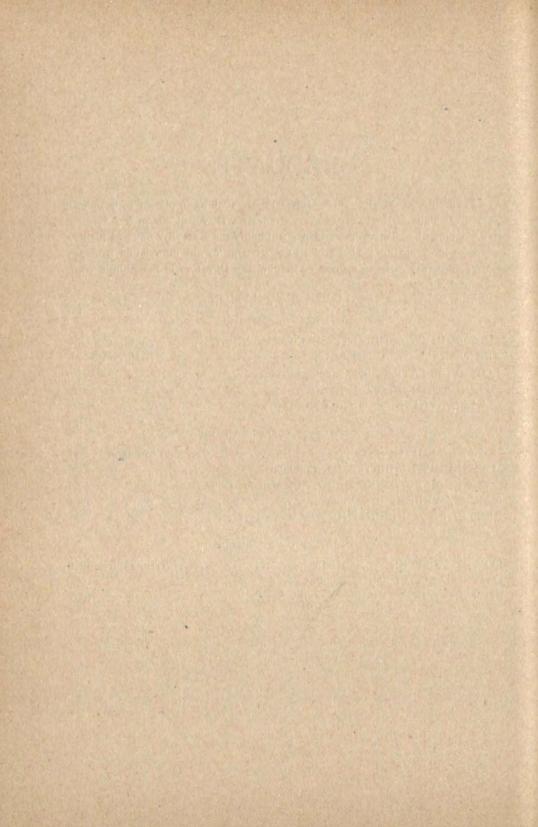
#### ALUMNI ASSOCIATION

#### OFFICERS FOR 1900-1901

OFFICERS FOR 1000-1001		
MRS. ANNIE W. SIEBERT, '84, Columbus	ice-PresSecrTrea	ident etary surer
COMMITTEE ON COLLEGE AFFAIRS		
FLORIZEL SMITH, '80, Columbus	expires " " " "	1901 1902 1903 1904 1905
LOWRY F. SATER, '95, ColumbusTerm DAISY M. SCOTT, '87, Columbus	expires	1901 1902

1903

EDWARD J. CONVERSE, '86, Columbus.....



# DIRECTORY

#### A

Abbott, Arthur Grant, 1899, B. Sc. (Agr.), Medina.

Abbott, Royal A., 1900, B. Ph., Columbus.

Ackerman, Eli Osborn, 1884, C. E., 2664 North High street, Columbus, Columbus Street Railway Co.

Ackerman, Fremont, 1883, C. E., Los Angeles, Cal., civil engineer.

Addison, Arthur Everett, 1895, B. Ph., 1900, LL. B., Columbus, teacher East High School.

Addison, Louis Granville, 1892, LL. B., Columbus, attorney-at-law.

Addison, Clarence Maywood, 1896, B. Ph., 1900, LL. B., Columbus, teacher Central High School.

Agler, Eulalia, 1895, G. Ph., Columbus, with Columbus Pharmacal Company. Albert, Louisa Mary, 1895, B. A. (Ohio Wesleyan University), 1896, G. Ph., Mrs. A. E. Vinson, Columbus.

Aldrich, Chester H., 1888, B. A., LL. B., David City, Neb., attorney-at-law.
Aldrich, Edgar S., 1897, M. E. in EE., Proprietor and Manager Electric Light Plant, Waynetown, Ohio.

Alexander, St. Clair, 1893, M. E. in EE., Bridgeport.

Alexander, Charles P., 1896, M. E. in EE., Canton, O., District Manager Northwestern Mutual Life Insurance Company.

Allaman, William Ernest, 1896, G. Ph., Columbus, Student O. M. U.

Allen, Edward Harrison, B. A. (Ohio Wesleyan University), 1899, LL. B., Lena, Allen, Lucy, 1897, B. A., 1900, M. A., Columbus, library assistant, State University.

Alsdorf, Percy Reed, E. M., Central City, Col., Standard Assay office.

Alsdorf, Frederick Charles, 1892, E. M., Central City., Col., Superintendent Mt. Wilson Gold and Silver Mining Co.

Alspach, Rufus Edwin, 1897, M. A. (B. A. Heidelberg), Thornville.

Anderson, James T., 1884, B. A., Colorado Springs, Col., 1st Lieutenant U. S. Army.

Anderson, Newton M., 1879, B. Sc., Cleveland, Principal of the University School.

Andress, Edna A., 1900, B. Ph. (Mrs. Julius Stone) Columbus.

Andrews, Albion Joseph, Jr., 1893, LL. B. (B. S., Ohio Wesleyan University), Zanesville.

Andrews, Lincoln Elmer, 1893, LL. B., 1895, B. Ph., Columbus, attorney-at-law.

Armstrong, Edna, 1897, B. Ph., Columbus.

Armstrong, William H., 1890, G. Ph., Marysville, druggist.

Arnold, Charles Lincoln, 1890, B. Sc., 1894, M. Sc., West Eighth ave., Columbus, assistant professor in mathematics, State University.

Arnold, Edwin E., 1898, M. E., Westinghouse Machine Co., Pittsburg, Pa.

Atkins, G. Glenn, 1898, B. A., Greenfield, Mass., pastor Congregational Church Atkinson, Warren, 1899, M. E., Tester of steam pumping engines at works of H. R. Worthington, Brooklyn, N. Y.

Auld, James A., 1897, M. E. in EE., Columbus, with D. S. Auld, 76 East Gay street.

Austin, John Gustave, 1899, LL. B., Sparta.

B

Bachtell, Nellie May, 1895, B. A., New London, teacher.

Backhaus, Henry Ward, 1894, B. A., Wapakoneta, cashier People's National Bank.

Baer, Philip, Jr., 1897, B. Sc. (Agr.), Canal Dover, Dairy Farmer.

Bagley, Anna Gertrude, 1894, G. Ph., Columbus, with Hallwood Cash Register Company.

Baker, James Burt, 1898, LL. B., Salem.

Baker, John Ezra, 1897, B. A., 1898, LL. B., St. Paris.

Baker, William Hollister, 1892, B. Agr., Hazelhurst, Mo., farmer and stock raiser.

Baldwin, Elizabeth Grant, 1899, B. Ph., Columbus.

Baldwin, Zoa Belle, 1896, B. A., Neil Av. Columbus.

Ball, Emma Leanna, 1895, B. Sc., 1896, M. Sc., Columbus.

Ball, Fred S., 1888, B. Ph., Montgomery, Ala., attorney-at-law.

Bancroft, Gay, 1898, B. A., Columbus, 26 West Gay street.

Barcus, Eliza D., 1900, B. A., Columbus.

Barcus, Miner, 1897, M. E., in EE., Schenectady, N. Y., with General Electric Company.

Barlow, Helen M., 1898, B. Ph., Columbus.

Barnaby, Charles L., 1898, C. E., 37 South Ninth street, assistant on Engineer Corps, Cincinnati Division, P. C. C. & St. L. Ry.

Barnaby, Josephine, 1896, B. Ph., Warren, teacher.

Barrows, Harry Holbrooke, 1898, C. E., Lexington, Ky., resident engineer Cincinnati Southwestern R'y.

\*Bartholomew, Clyde Stanley, 1896, C. E., died June 23rd, 1900.

Basterdes, Ada Mabel, 1890, B. Ph., Plano, Ill., teacher in High School.

\*Bates, Josephine M., 1881, B. Ph., Mrs. Florizel Smith, died ----, 1900.

Bates, Wesley, C., 1882, LL. B., 354 N. High street, Columbus, Attorney.

Baughman, George W., 1897, G. Ph., Springfield, Pharmacist.

Beach, David Price, 1895, C. E., Wellsville, in employ of Pennsylvania Railroad.

Beach, Margaret Alice, 1891, B. Ph., Mrs. Wilson Holman, Bayonne, N. J.

Beardsley, Orsamus D., 1898, B. Ph., Garrettsville.

Beattie, William Renick, 1894, B. Sc., 1897, M. Sc. (in Horticulture), Washington, D. C., U. S. Department of Agriculture.

Beck, Arthur Andrew, 1893, C. E., Columbus, county surveyor's office.

Belden, Sanford Bonner, 1895, E. M., Manager Pittsburg Office Jeffrey Manufacturing Company.

Bell, Florence Louise, 1900, B. Ph., Columbus, 382 East Town street.

Bell, Mary Edith, 1894, B. Ph., teacher in Central High School, Columbus.

Bennet, Henry C., 1890, B. A., 100 Washington street, Chicago, Ill, Attorney-at-law.

Bennett, Samuel E., 1890, D. V. M., Kansas City, Mo., Government Meat Inspector.

Bently, William Preston, 1885, B. Agr. (B. A. 1890, M. A. 1893, Bethany College) 15 Miller Road, Shanghai, China, missionary.

Bertsch, Joseph Franz, 1896, LL. B., Columbus, 124 West Ninth avenue.

Bibbee, George E., 1897, LL. B. (A. B. Ohio Wesleyan University), Columbus, 41 King avenue.

Biebel, Herman Matthews, 1896, M. E. in EE., Chicago, Ill., electrical engineer with Western Electric Co.

Bischoff, John Wallace, 1899, E. M., Thomas, W. Va., assistant engineer Davis Coal and Coke Co. Bissing, William, 1893, M. E. in EE. (A. B. Johns Hopkins University), examiner in U. S. patent office, Baltimore, Md.

Blackburn, Frank H., 1896, M. E. in E.E., Fostoria, Electric Engineer, Fostoria. Incandescent Lamp Co.

Blaire, Edward Grey, 1895, G. Ph., Shawnee, pharmacist.

Blakiston, Anna Houston, 1897, B. Ph., Mrs. Powell.

Blakiston, Mary, 1893, B. Ph., Columbus, teacher in East High School.

Blinn, Ray S., 1893, B. S.

\*Bloom, Edwin M., 1893, B. Sc., died, 1894.

Bloom, J. George, 1889, C. E., Chillicothe, division engineer B. & O. S. W. Ry-Bloomfield, Lloyd Morris, 1891, B. Agr., Central America.

Bock, Harrison W., 1898, LL. B., 1899, B. Ph., Canton.

Bockius, Harry Graham, Ph. B. (Yale University), 1899, LL. B., Canton.

Bodman, Mary E., 1898, B. Ph., Bement, Iil.

Boesche, Felix John, 1896, G. Ph., Denver, Col.

Boesel, Frank Tilden, 1896, B. Ph., student, Harvard Law School.

Bogue, Ernest Everett, 1894, B. Sc. H. & F., 1896, M. Sc., Professor of Botany and Horticulture, Agricultural and Mechanical College, Stillwater, Okla.

Bohn, Frank A., 1900, B. Ph., Olmsted Falls.

Bohn, William Edward, B. A. (German Wallace College), 1900, M. A., Olmsted Falls.

Bond, Charles Grosvenor, 1899, LL. B., Columbus, 595 Oak street.

Bone, John H., 1893, B. Sc., 1896, B. Sc. (Agr.), New Richmond, Ind.

Booth, Lucy Adelaide, 1892, M. A. (B. A., Ohio Wesleyan University), 1894, Ph. D., Columbus.

Bope, George W., 1897, LL. B., Columbus, third assistant director of law, 275 East State street.

Bostwick, Homer Z., 1900, B. A., Columbus, Student O. S. U. Law School.

Bowden, Harry W., 1900., C. E., Minerva.

Bower, Jerome G., 1897, M. E., 295 North High, Columbus.

Bownocker, John A., 1889, B. Sc., 1897, D. Sc., Columbus, associate professor of Inorganic Geology, State University.

Boyd, Emma, 1888, B. Ph., 38 W. Woodruff ave., Columbus, teacher in the North High School.

Boyd, James Ellsworth, 1891, B. Sc., Columbus, assistant professor of Physics, State University.

Boyd, James G., 1897, D. V. M. Columbus.

Boyd, Martin L., 1897, LL. B., Columbus, 265 East Eleventh Ave.

Bradford, Ernst, 1892, G. Ph., Columbus, chemist, with N. W. Lord, O. S. U.

Bradford, Joseph Nelson, 1883, M. E., 54 West Tenth Ave., Columbus, associate professor of drawing, State University.

Brand, Harry Frank, 1896, B. Ph., 1897, LL. B., Worthington.

Brandt, James Herbert, 1899, B. A., Greencastle.

Brandt, Ulysses Sherman, 1895, B. A., Canal Winchester.

Braun, Joseph G., 1897, G. Ph., Columbus, 802 South Champion avenue, Pharmacist.

Brelsford, Harley, 1898, B. Ph., Christiansburg.

Brewer, Charles Reed, LL. B., Bowling Green.

Brewer, John Whitney, 1896, G. Ph., Columbus, 126 West Tompkins street, Pharmacist.

Bright, Frederick I., 1900., LL. B., Logan.

Britton, John Carr, 1898, B. Sc. (Agr.), Buffalo, N. Y.

Brier, Harvey E., 1890, D. V. M., Tippecanoe City, veterinary surgeon.

Bronson, Herman S., 1897, LL. B. (B. L., Cornell University), Columbus, Attorney, 120 Wilson avenue.

Brophy, James Francis, 1899, E. M., Sun, W. Va., Sun Coal and Coke Co.

Brown, Frank, 1899, M. A. (A. B., Macalester College), Columbus, teacher in High School.

Brown, Frederick W., 1888, E. M., Superintendent of Colorado Portland Cement Co., Florence, Colorado.

Brown, Newton H., 1893, M. E. in EE., Newark, Del., professor of Electrical Engineering, Delaware College.

Bruce, Charles A., 1895, B. A., Columbus, assistant professor of Romance Languages, State University.

Brumley, David, 1895, C. E., Louisville, Ky., with L. & N. Ry.

Bruning, Henry Dietrick, 1896, C. E. Pittsburg, Pa., engineer on P., C., C. & St. L. R. R.

Buchenberg, Alvin E., 1900, M. E. in E. E., Holgate.

Buckman, Arthur Leslie, 1897, M. E., in EE., Central Union Telephone Co., Toledo.

Buckman, Ola., 1895, B Sc. (M. D., Cleveland University of Medicine and Surgery), Norwalk.

Bunnell, Larone A., 1898, G. Ph., Dayton, Pharmacist.

Burgess, James Henry, 1900, B. Ph., Big Horn, Wy.

Burkett, Charles William, 1895, B. Sc. (Agr.), 1898, M. Sc. (Agr.), Durham, N. H., professor of Agriculture, New Hampshire State College.

Burkett, Dora Van Buren, 1897, B. Ph., Columbus.

Burns, James Ferguson, 1891, C. E., Hopkinsville, Ky., assistant engineer L. & N. Ry.

Burr, Harriett G., 1897, B. A., Worthington.

Butler, James Marion, 1894, LL. B. (A. B., Ohio Wesleyan University), Carmel.
 Butterworth, William H., 1898, B. A., Columbus, 45 North Seventeenth street.
 Bygate, Harry Goldsmith, 1899, M. E., Draftsman, Homestead Steel Works,
 Homestead, Pa.

Byers, Clara, 1894, B. Ph., Mrs. Coles A. Raymond, Youngstown, O.

#### C

Cahen, Alfred, 1894, LL. B., Allegheny, Pa.

Calkins, George Herbert, 1895, M. E. in EE., with Gen. Electric Co. Testing Department, Schenectady, N. Y.

Calkins, William Bartlett, 1898, G. Ph., New Straitsville, Chemist, Steel Works. Callender, Sherman D., Ph. B. (Oberlin College), 1898, LL. B., 326-330, The Nasby, Toledo, Attorney.

Calvin, Anthony B. (A. B. Northeastern Ohio Normal), 1900, LL. B., Youngstown.

Canfield, Charles H., 1897, D. V. M., Government Meat Inspector. Kansas City, Mo.

Canfield, Dorothea Francis, 1899, B. Ph., graduate student, Columbia University, New York City.

Canfield, Leander Randall, 1896, B. Ph., Chardon.

Capron, Marshall Fremont, 1888, M. E., architect, Cleveland.

Carr, Hugh Stanley, 1896, M. E. in EE., assistant professor Electrical Engineer, Lawrence, Kansas.

Carr, James Gray, 1897, B. A., Coshocton.

Carroll, Patrick Henry, 1894, E. M., Herrin, Illinois, Supt. Big Muddy Coal and Iron Co. Carroll, William Hunt, 1894, LL. B., Wilmington.

Carson, Samuel King, 1895, M. E. in EE., M. D. (Ohio Medical University), Acting Assistant Surgeon U. S. A., Manila, P. I.

Cary, Charles R., 1900, LL, B., Millersburg.

Cathcart, Josephine M., 1888, B. Sc., 1131 Cedar avenue, Cleveland, accountant. Catlin, Homer Clark, 1896, C. E., Bridge Department, N. Y. C. R. R., Grand Central Station, N. Y.

Canaga, George Orlando, 1895, LL. B. (B. A., Scio College).

Cartwright, Henry Gilroy, 1895, LL. B.

Cavanaugh, Andrew F., 1900, M. E., Dayton.

Cellarius, Frederick Julius, 1888, C. E., Dayton, civil engineer.

Chamberlain, Helena W., 1884, B. A., Mrs. Ellis Lovejoy, Union Furnace.

Chalmers, Agnes Florida, 1895, B. Ph., Bay City, Mich., teacher in High School. Chappell, Walter Evans, 1898, M. E. in EE., first-class electrician, U. S. S. Chicago, care U. S. Despatch Agent, New York.

Charters, William Filson, 1887, B. Ph., Sidney, tax inquisitor.

Cherryholmes, W. K., 1881, B. Sc., M. D., Hamilton, physician.

Cilley, Raymond, 1896, C. E.

Clark, Alexander B., A. B. (Yale University), 1899, LL. B., Canton.

Clark, Clarence J., 1899, C. E.

Clawson, Clarence Alfred, 1899, B. Sc. (Agr.), 1900, D. V. M., Okena.

Clay, Albert Arlington, 1893, LL. B. (B. A., Tri-State Normal College), Hicksville.

Claypoole, Bessie Smith, 1895, B. Ph., Columbus, student, 1080 North High St.

Claypool, Charlotte Lake, 1892, B. Ph., Columbus, 1080 North High St.

Clements, Frank Orville, 1899, M. Sc. (M. A., Otterbein University), Westerville.

Clum, George V., 1893, B. A., Mendota, Ill., president of Mendota College.

Clum, Harry Ernest, 1899, B. Ph., Westerville.

Cockins, Edith D., 1894, B. A., Columbus, registrar, State University.

Coddington, Edwin F., 1896, C. E., 1897, M. Sc., fellow in Astronomy, Lick Observatory, Mount Hamilton, California.

Cole, George Nathan, 1891, M. E., in EE., Chicago, Ill., 112 Clark street.

Cole, Marietta C., 1897, B. Ph., Columbus, 897 Franklin avenue.

Collins, Curtis, 1895, M. E. in EE., Salesman, General Electric Co., Baltimore, Maryland.

Coney, William Hawks, 1894, B. Sc., Honolulu, S. I.

Connell, Laura Jewell, 1896, B. Ph., Columbus, teacher of German, 433½ Long street.

Connell, William A., 1886, E. M.

Connor, Alice M., 1900, B. Ph., Columbus.

Connor, Ellen J., 1900., B. Ph., Columbus.

Converse, Edward Jasper, 1886, B. A. (B. D., Yale University), Columbus, assistant pastor, First Congregational Church, 808 North High street.

Converse, Howard Pendleton, 1887. B. Sc., 166 Devonshire street, Boston, Mass., manager Boston office Cooper, Hewitt & Co., steel and iron manufacturers.

Converse, Walter, 1899, B. A., Plain City.

Conway, Hugh Lawrence, 1896, C. E., assistant engineer, Water Works, Cincinnati.

Cope, Albert N., 1897, M. E. in EE., Columbus, foreman Columbus Street R. R. Corner, Florence, 1897, B. Ph., Columbus, 642 East Rich street.

Corns, Harry, 1887, B. A., Columbus, teacher in Central High School.

Corwin, Edwin E., 1880, B. A., Columbus, attorney-at-law, 1462 Neil avenue.

Cotes, Albert E., 1897, B. Sc., Columbus, medical student, Ohio Medical University.

Courtright, J. Loring, 1900, B. A., Circleville.

Coursault, Ida May, 1899, B. Ph., Columbus, 770 East Long street.

Coursault, Jesse H., 1893, B. A., 1898, M. A., Columbus, teacher in Central High School.

Covell, Vernon Royce, 1895, C. E., Pittsburg, Pa., county engineer's office.

Craig, Moses, 1889, B. Sc. (M. S., Cornell University, 1890), 1896, M. Sc. (H. F.), Auburn, Ala., assistant in Horticulture Experiment Station.

Cratty, John Mason, 1897, B. Sc., Cincinnati, chemist.

Crawford, Ira, Jr., 1893, LL. B. (B. S., Denison University), Dayton.

Crawford, William Sterling, 1888, B. Ph.

Croll, Alfred J. (A. B., Ohio Normal University), 1900, LL. B., Tontogany.

Cromley, Alva M., 1897, G. Ph., pharmacist, Circleville.

Crooks, Charles Melvis, 1892, B. A. (D. D., Harvard University, 1896), Colerain, Mass., pastor Congregational church.

Crowner, Delbert Alonzo, 1896, B. Sc. (Agr.), Wellsville, N. Y.

Cummins, Henry Rollins, 1891, G. Ph., Akron, pharmacist.

Cunningham, Arthur, 1880, B. A., 107 Lincoln street, Columbus, book-keeper. Cunningham, Edward Walker, 1894, C. E., civil engineer, Schoenberger Wks. Am. Steel and Wire Co., Pittsburg, Pa.

Cunningham, George S., 1886, B. Ph., LL. B., Lancaster, attorney-at-law.

Cunningham, John Ferguson, 1894, B. Sc. (H. & F.), 1899, M. Sc. (H. & F.), Cleveland, assistant editor "Ohio Farmer."

Curtis, Leigh Goodrich, 1899, C. E., Zancsville, Dept. M. of U., B. & O. R. R.

#### D

Daily, Henry G., 1892, D. V. M., Wooster, veterinary surgeon.

Dally, John Randolph, 1899, LL. B., Centerburg.

Damron, Carson W., 1897, M. E., Columbus, Jeffrey Mfg. Co.

Daniels, David Edwin, 1893, LL. B., B. Ph., Denison University), 1896, LL. M., Columbus, 1326 Madison avenue.

Darby, Roscoe B., 1900., LL. B., Wauseon.

Davenport, Adrian E., 1897, B. A., Columbus, 1449 Franklin avenue.

Davidson, David Millen, 1894, B. A.

Davidson, George Edwin, 1899, LL. B., East Liverpool.

Davies, Jennie C., 1897, B. Ph., Columbus, 590 East Spring street.

Davies, John Lodwick, 1894, LL. B., Columbus.

Davis, Charles William, 1894, E. M., Colorado Springs, Col., care J. Mck. Terriday & Co.

Davis, Oscar Allen, 1897, M. E. in EE., Alliance, draughtsman Morgan Engineering Co.

Davis, Vernon Hays, 1900, B. Sc. (Agr.), Byesville.

Deahl, Walter Smith, 1896, C. E., 268 Fisk St., Pittsburg, Pa., Pittsburg Bridge

Deardurff, Carl Mason, 1895, B. A.

DeLamater, Clayton William, 1884, A. B., LL. B., Omaha, Neb., attorney-at-law.

DeLoffre, Andre, 1896, M. E. in EE., Schenectady, N. Y., Engineering Department General Electric Co.

DeLoffre, Samuel Middleton, 1895, B. A.

Dennis, Jerry, 1892, LL. B., 1893, LL. M., Columbus, attorney-at-law, 690 Franklin avenue.

Derby, Florence Harlow, 1896, B. Ph., Columbus, graduate student, State University, 93 East Fifteenth avenue.

Detmers, Frederica, 1887, B. Sc., 1891, M. Sc., 1315 Neil avenue, Columbus, teacher.

Devol, William Stowe, 1886, B. Agr., Riverside, Cal.

Dice. Jesse Peck, 1898, LL. B., Akron.

Dickinson, Thomas Herbert, 1899, B. Ph., N. Y. City, graduate student Columbia College.

Diemer, Hugo, 1896, M. E. in EE., Greenwood, N. C., professor of mechanical engineering, A. & M. College.

Dietrich, Charles Henry, 1878, B. Sc., with American Book Co., general manager for Kentucky.

Dietrich, George C., 1898, B. Ph., Groveport, principal of High School.

Dill, Dille Augusta, 1900, B. Ph., Columbus.

Doan, Frank C., 1898, B. Ph., Athens, professor of philosophy, Ohio University.

Dollison, Harvey C., 1900, B. Sc., Columbus.

Doney, Carl Gregg, 1891, B. Sc., 1893, LL. B., Delaware, pastor M. E. Church.

Donham, Maurice, 1896, M. E., Struthers, Wells & Co., Warren, Pa.

Donham, William W., 1882, B. Sc.

Dowd, Charles F., 1900, B. Ph., Toledo.

Dresbach, Melvin, 1897, B. Sc., Columbus, Fellow in Physiology, State University.

Drummond, William G., 1900 M. E., Cleveland.

Dubois, Wilbur L., 1900, B. Sc., Columbus, Fellow in Chemistry, State University.

Dun, George William, 1884, B. Sc., Columbus, business manager "Columbus Citizen."

Dun, John J, 1883, E. M., Fifteenth avenue, Columbus, consulting engineer.

\*Dun, Walter Angus, 1878, B. Sc., M. D., died November 7, 1887.

Dungan, Irvine Laird, 1892, B. Ph., Cincinnati, Lane Theological Seminary.

Dunlap, Thaddeus Cox, 1895, M. E. in EE., consulting engineer, 8 West Seventh street, Chattanooga, Tenn.

Dunlap, William Renick, 1895, B. Sc., Kingston, farmer.

Dunlap, Robert R., 1900, M. E. in EE., Columbus.

Dunnick, Edward, 1897, C. E., Mt. Vernon Bridge Co., Mt. Vernon, O.

Duvel, Joseph W. T., 1897, B. Sc., Wapakoneta

Dye, Clair, Albert, 1891, G. Ph., Bern, Switzerland, student at University.

#### E

Eagleson, Grace, 1897, B. Ph., Columbus, 601 Oak street.

Eagleson, John H., 1900., B. A., Columbus, 601 Oak street.

Eagleson, Joseph P., 1900, B. A., Columbus, 601 Oak street, student O. S. U. Law School

Early, Franklin E., 1893, D. V. M.

Easterday, Charles Todd, 1891, G. Ph., Wellston, Druggist.

Eddy, William, 1900, D. V. M., Cleveland.

Edwards, Mary Winifreda, 1897, B. A., New Richmond, Prin. of High School. Egbert, Knott C., 1890, B. Agr., Yainax, Oregon, Supt. Indian Boarding School Eisenbise, Bertha, 1900, B. Ph., Columbus.

Eisenlohr, Berthold A., 1898, B. Ph., Corning, mining engineer.

Ellis, Charles, 1898, D V. M., 3230 Locust street, St. Louis Mo., veterinarian.

Emery, Peyton Randolph, 1893, LL. B., London.

Emery, Vernon Judson, 1887, B. A. (A. M., University of Nebraska), Cleveland. assistant professor of Latin, Western Reserve University.

Erf, Oscar, 1899, B. Sc. (Agr.), Champaign, Ill., Instructor in Dairying, University of Illinois.

Erskine, John H., 1886, E. M., Lowellsville, fire brick manufacturer.

Estep, Frank Leslie, 1898, M. E. in E.E., Draughtsman, Schoenberger Works, American Steel and Wire Co., Pittsburg, Pa.

Evans, Ernest, 1892, B. Sc., Mingo Junction, chemist, Laughlin Junction Steel Co.

Evans, Peter Platter, 1892, C. E., Boston, Mass., with King Bridge Co.

Evans, William Lloyd, 1892, B. Sc., 1896, M. Sc., Colorado Springs, Col., teacher of chemistry in High School.

Eysenbach, Ernest E., 1896, E. M., Columbus, Superintendent Columbus Gas Co

#### F

Fairchild, Harmon Scott, 1894, LL. B., Springfield.

Farber, Charles Harker, 1894, B. A., Columbus, with State Savings Association.
Fassig, Oliver L., 1882, B. Sc., Baltimore, Md., instructor in Climatology,
Johns Hopkins University.

\*Fay, Frederick Willis, 1882, B. A., B. Arch., died August, 1892. Fay, Mona, 1897, B. Ph. (Mrs. Eugene Gee), Wheeling, W. Va.

Feicht, Russell Stimson, 1890, M. E. in EE., Engineering Department Westinghouse E. & M. Co., Pittsburg, Pa

Feiel, Ida Louise, 1898, B. Ph., Columbus, 520 East Main street.

Fenner, Jessie Albertus, A. B. (Wittenberg College), 1898, LL. B., Shiloh.

Fergus, Guy Carlton, 1898, M. E. in EE., partner in Zanesville Electrical Co.

Fergus, John Franklin, 1892, LL. B., Columbus, attorney-at-law.

Fickes, Walter M., 1900, E. M. (Ceramics) Steubenville.

Finley, Harry Marshall, 1894, B. A., McConnelsville, principal of High School.

Fippin, Elmer Otterbein, 1900, B. Sc. (Agr.) Briggsdale.

Fischer, Paul, 1891, B. Agr., D. V. M., professor of Veterinary Medicine, Manhatten, Kas.

Fischer, Robert, 1895, G. Ph., 1896, M. Ph., 1898, B. Sc., Ithaca, N. Y., laboratory assistant, Cornell University.

Fischer, Walter, 1897, B. Sc., Columbus, 810 Franklin avenue.

Fish, Fred Alan, 1898, M. E. in EE., Columbus.

Fisher, Clara, 1886, B. A., Mrs. J. Porter Milligan, Columbus.

Fisher, Georgietta, 1895, B. A., teacher in High School, Ottumwa, Iowa.

Fisher, Ida May, 1900, B. Ph., Columbus.

Fitzgibbon,, James Robert, 1894, LL. B., Newark.

Fitterer, John Conrad, 1898, B. Sc., Butler.

Flickinger, George A., 1898, B. Sc., (Agr.), Knoxville, Tenn., Dairyman at University of Tennessee.

Floto, Julius, 1889, E. M., Chicago, Ill., Monadnock Building, with C. L. Strabel.

Flynn, Benjamin H., 1898, C. E., Columbus, with State Board of Health.

Flynn, Harry Franklin, 1892, C. E., Washington, D. C., U. S. Geodetic and Coast Survey.

Flynn, Maud, 1896, B. Sc., Columbus, student, Columbus Normal School, 40 East Fifth avenue.

Flynn, Oscar Rodgers, 1896, B. Sc., teacher in High School, Columbus.

Foley, William J., 1894, D. V. M., Lexington, Ky.

Ford, Ruth L., 1898, B. A., Ashtabula, teacher in High School. Ford, Stanley Hamer, 1898, B. Ph., 1st Lieut, in U. S. Army.

\*Forgy, Ralph Morris, 1896, B. Ph., died March, 1899.

Foster, Dudley Hampton, 1895, B. Ph., LL. B., attorney-at-law, Corning. Foster, Frank McMillan, 1894, M. E. in EE:, with John N. Poage, Cincinnati, manufacturer water columns and valves.

Foster, Israel Moore, 1898, LL. B., Athens.

Foulk, Charles William, 1894, B .A., student, in Germany.

Fowler, Harry R., 1894, M. E. in EE., Toledo, electrical contractor.

Fox, Charles P., 1890, B. Agr., 1895, M. Agr., Columbus. Fox, Frederick Hugh, 1896, B. Ph., McConnelsville.

Fox, John Herbert, 1897, M. E., Cleveland, Brown Hoisting Machine Co.

Fox, Ross G., 1900, B. Ph., Columbus.

Francis, Edward, 1894, B. Sc., M. D. (Ohio Medical College), Assistant Surgeon, U. S. Marine Hospital, Stapleton, S. I., N. Y.

Francis, Mark, 1887, D. V. M., College Station, Brazos Co., Tex., professor of Veterinary Medicine, Agricultural and Mechanical College.

Frankenberg, John Theodore, 1899, M. E., in EE., Columbus, 851 Neil avenue. Fravel, George B., 1888, M. E., Road Foreman of Panhandle Lines, Cincinnati, O.

Frayer, Lee Ambrose, 1896, M. E., Columbus, Rarig Engineering Co.

Freeman, Stanton Sholes, 1898, E. M., St. Carbon Iron and Steel Co., Parry-ville, Pa.

French, Thomas Ewing, 1895, M. E., Columbus, assistant professor of drawing, State University, 1458 Worthington street.

Fritchle, Oliver Parker, 1896, B. Sc., Mt. Hope.

Frost, George W., 1900, M. E., Columbus.

Fullmer, Edward L., 1897, B. Sc., 1898, M. Sc., Mitchell, S. D., University of South Dakota, professor of sciences.

Fullerton, Charles Haywood, 1898, B. Ph., Wheelersburg.

#### G

Gains, Charles E., 1889, B. Ph., London, physician.

Galbraithe, John Howard, 1883, B. Ph., Columbus, journalist, 1087 Oak street. Gale, Cora C., 1893, B. Ph., Columbus, Oak street, near Grant.

Gale, Franklin Henry, 1893, LL. M. (LL. B., University of Michigan), Columbus, 324 Oak street.

Gallen, William Francis, 1897, M. E., Columbus, Jeffrey Manufacturing Co.

Game, Reed Haskell, 1896, B. Ph., 1899, LL. B., Columbus.

Gamper, Hedwig E., 1900, B. Ph., Columbus.

Gamper, Herman, 1899, M. E., Ingersoll-Sargent Drill Co., Easton, Pa. Gayman, Charles W., 1900, B. Ph., Van Wert, Principal of the High School. Garber, Alberta D., 1889, B. Ph., A. M.

Garber, John Murray, 1897, C. E., Columbus, Mt. Vernon Bridge Co.

Garber, Levi L., 1898, B. A., Belleville.

Garst, William Augustus, A. B. (Otterbein University and Harvard University), 1898, LL. B., Westerville.

Gee, Eugene C., 1897, M. E. in EE., Wheeling, W. Va., with Telephone Co. Gehrkens, Edward Frederick, 1894, M. E. in EE., Schenectady, N. Y., with General Electric Co.

Geissinger, James Allen, 1895, B. A., Pastor Centenary M. E. Church, Ripley, Ohio.

Genheimer, Eli Thomas, 1896, B. Ph., Portsmouth, teacher in High School.

Genheimer, William F., 1897, LL. B., Portsmouth, attorney.

Gibbs, George C., 1893, B. A., Columbus, with Green, Joyce & Co.

Given, James Byron, 1896, M. E. in EE., Western Electric Co., Chicago, Ill. Givens, Newton Edgar, A. B., 1896, LL. B., Waverly.

Glover, Sioux, 1882, B. Sc., Mrs. Horton, Errid, Pa.

Goddard, Loring Hapgood, 1892, C. E., farmer. Manora, O.

Good, Paul Revere, 1899, B. A., 1900, M. A., Westerville.

Goodell, Ralph Spencer, 1892, C. E., Mt. Vernon, Mt. Vernon Bridge Co.

Goodman, Joseph Clarence, 1896, LL. M., Columbus, 375 East Town street.

Goodman, Sylvester Jacob, 1896, G. Ph., Philadelphia, Pa., student of Medicine, W. & J., Medical College.

Gordon, Adelaide Cummins, 1896, B. Ph., Columbus.

Graham, Emery Eugene, 1898, M. E. in EE., Alliance, Morgan Engineering Co.

Grandle, Frank Albert, 1891, G. Ph., Centerburg, pharmacist.

Grate, Charles Artemis, 1898, M. E.

Graves, William L., 1893, B. A., 1897, M. A., assistant professor in Rhetoric, State University.

Gray, Genevieve, 1898, B. Ph., Columbus.

Gray, James Collam, 1892, LL. B., 1893, LL. M., Pittsburg, Pa., attorney P. R. Ry.

Graven, D. Homer (A. B., Ohio Normal University), 1900, LL. B., Nashville. Green, Charles C., 1885, B. Sc., M. D., Beaver City, Neb., physician.

Green, Jerome Joseph, 1893, M. E. in EE., Notre Dame, Ind., Notre Dame University, professor of Physics and Elec. Engineering.

Green, Joseph Faust, 1899, M. E. in EE., Moline, Ill., electrical engineer, Moline Electric Elevator Co.

Green, Robert Lee, 1892, G. Ph., Somerset.

Gregg, Frank B., 1889, B. Ph., M. D.

Gregory, Hiram D., 1880, E. M., attorney-at-law, Covington, Ky.

Griffin, Mark H., 1897, M. E. in EE., Xenia, electrical engineer, Soldiers' and Sailors' Orphans' Home.

Griffin, Theodore L., 1889, B. Sc., M. Sc., Columbus, chemist, 760 Mt. Vernon

Griffith, David Mathias, 1896, LL. B., Kecksburg, Pa.

Griffith, Wellington John, 1892, LL. B., Tiffin.

Griffiths, Benjamin Lincoln, 1898, LL. B., Vaughnsville.

Grimsley, George Perry, 1890, B. A., 1891, M. A. (Ph. D., Johns Hopkins University, 1894), Topeka, Kan., professor Natural History, Washburn College, Griswold, Lawrence William, 1892, B. A., New York City, London Assur-

ance Co

Groff, Orsylla Ann, 1894, G. Ph., North High street, Columbus, pharmacist.

Groff, Warren Noble, 1896, B. A., 1899, LL. B., Tiffin.

Groves, John Wesley, 1898, C. E., engineer for Sunday Creek Coal Co., Corning. Gruen, Francis William, 1899, B. Ph., 1899, LL. B.

Guerin, Martha, 1896, B. Ph., Columbus.

Gugle, George Linville, 1896, LL. B., Columbus, attorney.

Gugle, Marie, 1897, B. A., Alexandria, Ind., teacher.

Guittard, Virgil, 1894, B. Sc., New Bedford.

Guitteau, William B., 1897, B. Ph., Toledo, teacher in High School.

Guss, Sherman Hamlin, 1892, B. A., Clarksburg, W. Va., principal of the colored schools.

#### H

Haas, Frank, 1895, C. E., 1896, E. M., Middlesboro, Ky., Virginia Iron, Coal and Coke Co.

Hagler, Howard, 1889, B. Sc., Washington C. H., farmer.

Haigler, Charles Edmund, 1898, B. Sc., Xenia, O.

Hale, Frederick James, 1898, M. E., 1900, M. Sc., Columbus.

Hall, Harry R., 1889, E. M., Middlesboro, Ky., Virginia Coal, Iron and Coke Co.

Halterman, Oscar Elmore, 1895, LL. B., B. S. (National Normal University).

Hamilton, Charles R., 1893, B. A., Zanesville, Dun's Commercial Agency.

Hamilton, Frank Alexander, 1895, D. V. M., Dubois, Pa., veterinary surgeon

Hammond, Bessie B., 1897, B. Ph., Columbus, 443 Mt. Vernon avenue.

Hammond, Harry J., 1900, D. V. M., Sharon Centre.

Hammond, Rose Lyttle, 1896, B. Ph., Columbus, teacher, 90 North Twenty-second street.

Hancock, Winfield Scott (A. B., Marietta), 1900, LL. B., Marietta.

Hancock, David R., 1889, G. Ph., M. D., Columbus, Physician.

Haney, Thomas Carlyle, 1894, G. Ph., Columbus, pharmacist, corner Schiller and Third streets.

Hannum, William Hamilton, 1897, B. A., India, missionary.

Harbage, Arnett, 1893, D. V. M., West Jefferson, farmer.

Harkins, Robert R., 1900, M. E. Columbus.

Harlor, John David, 1895, B. A., Columbus, teacher in Central High School.

Harper, Ellahue A. (B. A., Ohio Wesleyan University), 1900, LL. B., Columbus.

Harris, Charles Pearl, 1899, B. Ph., West Liberty.

Harris, Frank Laverne, 1894, LL. B. (Ph. B., Tri-State Normal University), Payne.

Harris, Walter Conger, 1893, B. Sc., New York, with Art Department of Herald, 104 West 114th St.

Harrison, Warner, 1892, LL. B., East Town street, Columbus, attorney and solicitor C., A. & C. Railway.

Harrison, William Henry, 1885, C. E., Butte, Montana, assistant engineer Butte City Water Works.

Harrold, Ernst Ellwood, 1895, G. Ph., dispenser chemical store-room, State University.

Harrop, Herbert Bailey, 1898, B. Sc., Columbus, 1323 Forsythe avenue.

Hartsough, William H., Jr., 1898, B. Ph., Columbus, 1356 Hunter avenue.

Hartwell, Arthur, 1888, M. E., Chicago, Ill., manager Chicago office Westinghouse E. & M. Co.

Hartwick, Louis M., 1897, M. E., Draftsman in Steel Works, Johnstown, Pa. Harvey, Arlington Corylle, 1896, B. Ph., 1897, M. A., 1899, LL. B., Columbus, 145 King avenue.

Harvey, Emory Wayland, 1896, B. Ph., 11 East Sixteenth street, New York City, Milton Bradley Co.

Harvey, Florence Danford, 1898, B. Ph., Mt. Perry.

Harvey, Sherman Lee, 1896, G. Ph., Harrisburg, Druggist.

Harward, Arthur B., 1900, B. A., Columbus.

Hassler, Robert Hanich, 1892, M. E. in EE., electrical engineer, Indiana Bicycle Co., Indianapolis, Ind.

Hastings, Edwin George, 1898, B. Sc., Austinburg.

Hayes, Seth, 1892, B. Sc., Fremont, principal of High School.

Hayman, William C., 1900, M. E. in EE., Holgate.

Hayward, George E., 1893, C. E., New Philadelphia, surveyor of Tuscarawas county, Ohio.

Hazelton, Bird, 1898, B. Ph., New Straitsville.

Hazlett, Robert, Jr., 1887, C. E., Wheeling, W. Va., engineer for Ohio Company. Heacock, William Preston, 1898, LL. B., Cardington.

Heath, Arthur T., 1887, G. Ph., Oak Harbor, analytic chemist, consulting engineer and contractor.

Hebble, Charles Roy, 1896, M. E. in EE., Cincinnati, electrical engineer.

Hedges, Harry, 1888, B. A.

Heller, Albert Henry, 1890, C. E., Youngstown, Youngstown Bridge Co.

Henderson, Adelbert Andrew, 1898, C. E., Columbus, City Engineer Corps.

Henretta, Charles Michael, 1896, E. M., Buffalo, engineer J. W. Ellsworth Coal Co.

Herbert, Charles T., 1897, LL. B., Columbia, South America.

Herms, Edith S., 1898, B. Ph., Portsmouth.

Herrick, Louise, 1893, B. A. (Mrs. Harry Abbott), Columbus, 1454 Highland St. Hershey, Harry Hartman (A. B., Mt. Union College) 1900, LL. B., East Greenville.

Hertner, John H., 1899, M. E. in EE., Dayton.

Hess, Florence Louise, 1895, B. Ph., Columbus.

Hewitt, Strafford Reaves, 1898, M. E. in EE., Columbus Belting and Packing Co. Hiatt, William Arthur, 1895, B. Ph., New York City, teacher in Stevens School, Hoboken, N. J.

Higbee, Charles E., 1883, B. Sc.

High, Odessa, 1896, B. A., West Jefferson.

Hill, Frank E., 1886, B. Sc., M. D., Muncie, Ind.

Hill, I. T. Reynolds, 1896, B. Sc. (H. & F.), Toledo, O., paymaster for Woolson Spice Co.

Hine, James S., 1893, B. Sc., Columbus, assistant professor of Entomology, State University.

Hine, Lucius A., 1888, E. M., 140 50th street, Chicago, Ill., President and Treasurer Hine-Watt Manufacturing Co.

Hipple, John Merton, 1898, M. E. in EE., Westinghouse E. & M. Co., Wilkinsburg, Pa.

Hirsch, Gustav, 1897, M. E. in EE., Columbus, engineer, Citizen's Telephone Co. Hirst, Anna Brewster, B. A. (Antioch College), 1900, M. A., Yellow Springs.

Hoel, Sarah Elizabeth, 1893, B. Sc. (Mrs. W. M. Mills), North Tonawanda, N. Y.

Hoffman, Arthur Sullivant, 1897, B. A., Troy. Hoffman, Hattie D., 1900, B. Ph., Columbus.

Homan, Frank, 1895, C. E., Cannelton, W. Va., Raven Coal and Coke Co.

Hood, Sherman, 1894, B. Sc., Meander, gardner.

Hoover, Frederic Roland, 1899, B. Ph., Columbus.

Hopkins, Charles Delnow, 1893, LL. B. (B. A., Ohio Wesleyan University), Athens.

Horton, Henry Pomeroy, 1889, B. Ph.

Hough, Benson Walker, 1899, LL. B., Delaware.

Houseman, Ruth U., 1897, B. Ph., Painesville, teacher in High School.

Houston, Anna Christine, 1892, B. Ph., 1895, M. A., Marysville.

Hovey, Clark Samuel, B. A. (Buchtell College), 1898, LL. B.,

Howald, Ferdinand, 1878, B. Sc., Rush Run, W. Va., manager of mining operations.

Howard, A. B., 1883, B. Ph., Jackson, Miss., clergyman.

Howard, Anna F., 1900, B. Ph., Columbus, 307 West Seventh avenue.

Howard, Curtis C., 1878, B. Sc., M. Sc., 115 Jefferson avenue, Columbus, professor of Chemistry in Starling Medical College.

Howard, Fanny Fern, 1896, B. A., Columbus.

Howard, Edward Davenport, 1894, LL. B., 1896, LL. M., Columbus, attorney. Howard, John Wilmot, 1895, B. Sc., Columbus, assistant secretary, Board of Trade.

Howells, E. S., 1884, E. M., Massillon, Howells Mining Company,

Howells, Thomas J., 1897, E. M., Steubenville, O., Mingo Works National Steel Co., Mingo Junction, O.

Hubbard, Ralph Newton, 1891, B. Sc., Columbus, Columbus Machine Co.

Hughes, Raymond Mollyneaux, A. B. (Miami-University), 1897, M. Sc., Miami University, professor of Chemistry.

Huddleson, Don Carlos, 1897, G. Ph., Columbus, assistant in Gymnasium, State University.

Huffman, Lillian Stuart, 1899, B. Ph., Columbus, 389 East Rich St.

Huggins, Burch Delaplaine, 1899 B. Ph., Hillsboro.

Hull, Mary Louise, 1894, B. A. (Mrs. C. H. Farber), Columbus, 392 West Seventh avenue.

Humphrey, J. Scott, 1879, B. Sc., Findlay, civil engineer.

Humphreys, Leona, 1895, B. A., Plain City, teacher in High School.

Hunt, William Franklin, 1887, M. E., attorney-at-law, New York Life Building, St. Paul, Minn.

Hunter, Madone C., 1900, M. E. in EE., Salt Creek.

Huntington, Arthur, 1899, M. E., Turtle Creek, Pa., Westinghouse Electric Manufacturing Co.

Huston, Charles H., 1897, LL. B. (B. S., Tri-State College, Ind.), Mansfield. Hyde, Wilby Grimes, 1887, B. A. (LL. B., Cincinnati), Chillicothe, attorney-at-

law

Hyle, Charles A., 1896, M. E. in EE., U. S. Weather Bureau, Mt. Tamalpais, California.

I

Imes, Marion, 1899, B. Sc. (Agr.), Durham, N. H., New Hampshire State College, student.

Ingram, Imogene, 1897, B. Ph., Columbus.

Innis, Lyman H., 1893, B. A., 1895, LL. B., Columbus, attorney, 323½ South High.

Ireland, Guy Llewellyn, 1895, M. E.

Irvin, Chadwick H., 1897, M. E., Lima, Draftsman, The Solar Refining Co.

#### J

Jackson, Frank Pierce, 1892, LL. B., 1893, LL. M., Columbus, attorney, 82 South Washington avenue.

James, Florence May, 1896, B. A. (Mrs. Oscar R. Flynn), Chicago, Ill.

Jaynes, Allan B., 1900, Washington, D. C., Census Department.

Jeffrey, James Fred, 1900, B. Sc., Columbus.

Jeffrey, Maud Dorothy, 1895, B. Ph., assistant in library, State University.

Jenkins, William B., 1893, C. E., Bellefontaine, District Agent Interstate Savings Investment Co.

Jenkins, Willis H., 1894, C. E., Columbus, Transitman, P., C., C. & St. L. Ry. Jennings, Irvin G., 1899, LL. B., Zanesville.

Jennings, Levi E., 1897, M. E. in EE., Indianapolis, Ind., Central Union Telephone Co.

Johnson, Charles W., 1896, M. E. in EE., Norwood, Cincinnati, chief draughts-man Bullock Electric Mfg. Co.

Johnson, Earle S., 1900,, M. E. in EE., Plants.

Johnson, George Edward, 1892, C. E., L. & N. R. R., Louisville, Ky.

Johnson, Herbert Lincoln R., 1892, M. E. in EE.

Johnston, Frederick Symmes, 1899, B. Sc. (Agr.), Durham, N. H., assistant professor of Agriculture, New Hampshire State College.

\*Jones, A. A., 1886, C. E., died May, 1894.

Jones, Arthur James, 1898, M. E. in EE., Turtle Creek, Pa., Westinghouse Electric and Manufacturing Company.

Jones, Aaron Wesley, 1891, B. Sc., Columbus, Gardner Insurance Agency.

Jones, Alexander Houston, 1895, M. E. in EE.

Jones, Benner, 1897, LL. B., Jackson.

Jones, Daniel D., 1893, G. Ph., Gallipolis, pharmacist, Epileptic Hospital.

Jones, Jesse Lee, 1890, B. A., Philadelphia, Pa., chemist, William Cramp & Sons, Ship Builders.

Jones, Paul, 1880, B. A., Columbus, attorney-at-law.

Jones, Pearl N., 1892, M. E. in EE., Pittsburg, Pa., engineer and salesman, Westinghouse E. & M. Co.

Jones, Richard Thomas, 1900, B. Ph., Columbus.

Jones, Smiley, 1894, E. M., Prescott, A. T.

Jones, William Francis, 1896, D. V. M., Cincinnati, Miami Medical College.

Judd, Horace, 1897, M. E., 1899, M. Sc., Brooklyn, N. Y., Instructor, Pract Institute.

Judkins, Clyde H., 1897, L.L. B. (A. B., Scio College), Flushing.

Junk, Harry Prior, 1895, LL. B., Columbus, attorney-at-law, 387 Oak street.

#### K

Kanmacher, Samuel H., 1900, M. E. in EE., Columbus, Superintendent Empire Gold Mining and Milling Company.

Karshner, George M., 1900., B. A., Columbus, student, O. S. U. Law College. Keagle, Anna Brown, 1895. B. Ph., Columbus, teacher North High School, 59 West Fourth avenue.

Keating, David Thatcher, 1899, B. Ph., Columbus, 1317 East Broad street.
Keffler, Frederick, 1892, M. E., Anaconda, British Columbia, General Manager the British Columbia Copper Co., Ltd.

Keifer, William White, 1886, B. A. (LL. B., Cincinnati), Springfield, attorneyat-law.

Keiser, Romeo Orpheus, 1892, B. Sc., 1896, G. Ph., '98, M. D., O. M. U., '99
M. D., Cleveland Homeopathic Medical College, physician, Columbus.

Kellerman, Ivy, 1898, B. A., 1899, M. A. (Cornell University), Ithaca, N. Y., student, Cornell University.

Kellicott, William E., 1898, B. Ph., Columbia University, New York.

Kellison, Edward Lafayette, 1897, B. Ph., 1900, LL. B., Quincy.

Kemmler, Edward A., 1888, C. E., 895 S. High street, Columbus, assistant city engineer.

Kerr, Samuel Thompson, 1894, M. E. in E.E., Martins Ferry, superintendent Municipal Electric Light Plant.

Kersey, William Ruius, 1899, M. A. (B. A., Earlham College), Columbus, 433

East Town street.

Kershaw, Francis Stewart, 1891, B. Ph., Boston, Mass.

Kershaw, Samuel Charles, 1892, B. Ph., Columbus, book-keeper, Columbus Bolt Works.

Kester, Fred. Edward, 1895, M. E. in EE., Columbus, assistant in Physics, Ohio State University.

Kiesewetter, Louis Frank, 1891, C. E. (A. B., Harvard, '92, and A. M., '93), Columbus, Cashier Ohio National Bank.

Kiler, Abdel William, 1896, G. Ph., druggist, Columbus, Eighth and High streets.

Kinder, Gordon D., 1900, B. Ph., Ottawa.

Kimberley, Charles H., 1900, B. Sc., Pharmacy, Columbus.

King, Robert James, 1899, B. A., Zanesville.

Kirby, Harriet R., 1898, B. A., Columbus, teacher in North High School.

Kirker, Harry L., 1889, B. Sc., with the Westinghouse Company, Sodelee Boite 56, Havre, France.

Kiser, Katherine Daniel, 1895, B. A., Columbus, teacher in High School.

Klein, David, 1900, B. Ph., Columbus.

Kline, Charles H., 1897, M. E. in EE., Dayton, city engineer and deputy county surveyor.

Knauss, William Henry, 1895, B. Sc., student, Starling Medical College, 1317 Dennison avenue.

Knecht, Arthur Edward, 1898, M. E., Akron, Stirling Company, Barberton, O. Knight, Caroline E., 1900, B. Ph., Columbus.

Knight, Ruby Ray, 1895, B. Sc., Middleport.

Knight, William A., 1900, M. E., Columbus, instructor in shopwork, State University.

Knopf, Eva S., 1895, B. Ph., Columbus, teacher in North High School.

Knopf, George W., 1883, B. Sc., Pittsburg, Pa., bridge builder.

Knox, Frank Stewart, 1900, E. M., Columbus.

Kohr, Donald Alexis, 1898, B. Ph., Westerville.

Krauss, Bertha Katherine, 1892, B. Ph., Ottawa.

Kreiger, Charles Henry, 1887, G. Ph., Columbus, superintendent the Kauffman-Lattimer Co.

Krumm, Charles S. M., 1896, B. Ph., 1898, LL. B., Columbus, attorney, 277 South Eighteenth street.

Krumm, Herbert Zettler, 1898, B. Ph., Columbus, 975 South High street.

Krumm, Lillian Louise, 1895, B. Ph. (Mrs. Harry Rush Wilson), Columbus, 1459 Bryden Road.

Krumm, Louis Ralph, 1898, M. E. in EE., Engineering Department Central Union Telephone Co., Chicago, Ill.

Krupp, William Emil, 1899, LL. B., Urichsville.

Kuhn, Valley Howard, 1896, M. E. in EE., Etna.

Kuhn, Harry Waldo, 1897, B. Sc., graduate student, Cornell University.

#### L

Lamb, Whitney E., 1900, M. E., in EE., Commercial Point,

Lamme, Benjamin G., 1888, M. E., Pittsburg, Pa., engineer, Westinghouse E. & M. Co

Lamme, Bertha A., 1893, M. E. in EE., Pittsburg, Pa., Westinghouse E. & M. Co.

Landacre, Francis Leroy, 1895, B. A., assistant professor of Zoology and Entomology, State University.

Landacre, Walter Alexander, 1891, G. Ph., Columbus, assistant professor of pharmacy.

Landis, Walter Victor Titus, 1895, B. Ph., Dayton.

Lane, Quinton R., 1898, B. Ph., 1900, LL. B., Attorney, Columbus.

Large, Joseph H., 1890, C. E., Whigville, O.

Laughlin, Hugh Clarence, 1890, B. A. (A. M., 1895, University of Nebraska), 1712 Bathgate avenue, New York, teacher in High School for Boys and Girls.

Lavery, William F., 1890, D. V. M., veterinary surgeon, State University.

Lawrence, Arthur K., 1897, G. Ph., Columbus, 69 North Seventeenth street, Pharmacist.

Layton, Roy Everett, 1895, B. A., 1897, LL. B., Wapakoneta, attorney.

Lee, Corless E., 1900, M. E. in EE., Speidel.

Lee, Edwin S., 1893, G. Ph., Columbus, druggist, 144 West Ninth avenue.

Lee, Robert M., 1897, M. E., Columbus.

Leffler, Edward Victor, 1896, G. Ph., Leipsic.

Lehman, John Wesley, 1899, B. Ph., Canal Winchester.

Lemert, Helen Ora, 1894, B. A., Columbus, teacher High School, 81 Twenty-second street.

Lentz, Alice B., 1897, B. Ph., Lloydsville.

Lentz, Theresa, 1893, B. Ph., Bellaire, teacher in High School.

Leonard, James Lincoln, 1893, LL. B. (B. S., Ohio Normal University), Welcome.

Levering, Orpheus D., 1893, M. E.

Lewis, Charles Montgomery, 1881, B. A., Columbus, with Columbus Evening Dispatch.

Lewis, Thomas K., 1894, B. Sc., Columbus, assistant in drawing State University. Lincoln, Paul Martyn, 1892, M. E. in EE., Niagara, N. Y., assistant superintendent Niagara Falls Power Co.

Lindo, William C., 1896, C. E., Port Antonio, Jamaica, W. I., civil engineer. Linebaugh, Jesse J., 1899, M. E. in EE., Schenectady, N. Y., General Electric

Linson, Irvin, 1882, B. A.

Linville, Clarence P., 1900, B. Sc., Chemistry, Columbus, Fellow in Chemistry, Lisle, Charles H., 1900, B. Ph., Pataskala.

Lisle, Dallas Gypsi, 1899, B. Ph., Ashland, Ky.

Lisle, Leslie Mae, 1899, B. Ph., Columbus.

Logan, Lavallette Lasea, 1896, E. M., Scranton, Pa., professor mine surveying.
National Correspondence School.

Logsdon, Carey Lignori, 1899, B. Ph., Columbus.

Logsdon, Clement Jay, 1898, G. Ph., Newark, with Dr. J. H. Beatty.

Loomis, John Cooper, 1898, LL. B., Tiffin.

Lott, Charles Milford, 1895, M. E. in EE., Paulding, Supt. Electric Light Plant. Loveberry, Clarence, 1896, D. V. M.

Lovejoy, Ellis, 1885, E. M., Union Furnace, chemist and superintendent Columbus Brick and Terra Cotta Co.

Lovejoy, Jesse R., 1884, B. Sc., Schenectady, N. Y., with General Electric Light Co.

Luce, George Ernest, 1897, LL. B. (A. B., Ohio Wesleyan University), Columbus, 95 Hamilton avenue.

Luse, Clara E., 1897, B. Ph., Mrs. Herbert Scott, Columbus.

Lusk, William Vinton, 1893, D. V. M., Ft. Wingate, New Mexico, veterinary surgeon, Ind. cavalry.

Lydenberg, Walter B., 1898, B. A., Dayton.

Lynas, Caroline, 1898, B. A., Columbus, 109 West Gay street.

Lynas, Charles E., 1898, B. A., Columbus, 109 West Gay street

Lyon, Arthur H., 1900, M. E., Wauseon.

#### M

Maag, Benjamin Franklin, 1899, M. Sc. (B. Ph., Wooster University), Mt. Eaton. MacGuire, Charles White, 1895, G. Ph., '97, M. D., Toledo Medical College, Toledo, Ohio.

Machwart, Washington J., B. Sc. (Muskingum College), 1900, M. A., Mt. Eaton.

Mackey, Ure LaVerne, 1893, M. E. in EE. (B. A., Wooster University).

Magly, Robert A., 1897, G. Ph., 1896, LL. M., chemist, Bessie Iron Furance, O. Magruder, Leonard Anthony, 1895, B. Ph., 1896, LL. M.

Maier, John Valentine, 1895, LL. B. (B. S., Northern Indiana Normal University).

Malone, William Ruskin, 1885, B. A., Toledo, with New York Life Insurance Co.

Manecke, Gilbert, 1897, LL. B., Fostoria.

Manley, Rush Emmett, 1894, M. E. in EE., manager of Exchange Central Union Telephone Co., Mt. Vernon.

Mann, Wilber Edwin, 1899, B. Ph., 1900, M. A., Columbus.

Marple, Charles Allen, 1885, B. Sc., Louisville, Ky., teacher of Science, Male High School.

Marquard, Frank Fred, B. L., 1896, C. E., Sharon, Pa., chemist, National Co. Marshall, George Sidney, 1894, B. Ph., 1897, LL. B., Columbus, attorney, Second Assistant Director of Law, 1566 Neil avenue.

Marshall, William B., 1900, M. E. in EE., Columbus.

Martell, Leonard Roland, 1898, B. A., Columbus, 1665 South High street.

Martin, Edwin Dunlevy, 1891, B. Ph., Lee Centre, Ill., teacher.

Martin, George, 1897, M. E. in EE., Massillon, Central Union Telephone Co.

Martin, Percy, 1892, M. E. in EE., Milan, Italy, Mediterranean Electric Co.

Marvin, Charles Frederick, 1883, M. E., Washington, D. C., U. S. Weather Bureau.

Mason, George F., 1890, G. Ph., Milwaukee, Wis., student of medicine, Milwaukee Medical College.

Masters, George Albert, 1886, C. E., Chicago, Ill., Western Library Association. Mathers, John Harrison, 1895, B. Ph., Conover.

Mathias, Frederick W., 1893, B. Sc., Toledo, teacher High School.

Matson, George H., 1892, G. Ph., 169 Hamilton avenue, Columbus, professor of Pharmacy, Ohio Medical University.

Matson, William Edgar, 1896, M. E. in EE., Lynn, Mass., with General Electric Co.

Mauer, George Clifford, 1892, D. V. M., Oak Harbor, veterinarian.

Mays, James Wesley, 1897, B. Ph., Columbus, student in College of Law, State University.

McCallen, William Johnson, 1894, C. E., engineer, Chicago, Ill., Illinois Steel Co. McCall, Arthur Gillett, 1900, B. Sc. (Agr.), McGaw.

McCallum, Raymond, 1900, B. Ph., Dayton.

McCarter, Edward Bancroft, 1892, B. A., 1894, LL. B., Columbus, attorney, 737 Bryden Road.

McCarter, Flora, 1897, B. A., Columbus.

McCarter, Robert Dale, Jr., 1895, M. E. in EE., London, England, representing General Electric Co.

McCleary, Clayton A. (Ph. B. Franklin College) 1900, LL. B., Lorain.

McClelland, Chalmer Kirk, 1898, B. Sc. (Agr.), Andover.

McClure, Robert E., 1900, LL. B., Dayton.

McCormick, J. H., 1880, M. E., Dayton, National Cash Register Co.

McCormick, William Francis, 1896, M. E., Columbus, Cleveland avenue.

McCulloch, George Elmer, 1891, B. Sc.

McDowell, John Andrew, 1882, B. Sc., 949 Neil avenue, Columbus, cement engineer.

McFadden, John Franklin, 1878, B. A., Columbus, attorney-at-law, 92 North Twenty-first street.

McGregor, James Howard, 1894, B. Sc., New York, assistant in Zoology, Columbia University.

McGrew, John Alexander, 1895, C. E., M. of W., Pennsylvania Railroad Co., Logansport, Ind. McGuffey, Francis Hoyt, 1894, M. E. in EE., New Lexington, O., U. S. Telephone Co.

McIntire, Alfred Heber, 1898, M. E. in EE., 1900, M. E., Schenectady, N. Y., General Electric Co.

McLaughlin, Annis, 1897, B. Ph., Columbus.

McLaughlin, James Audley, 1895, LL. B. (B. A., Monmouth College).

\*McMakin, Amasa Brown, 1879, B. Sc., died May 22, 1891.

McNary, George Bull, Jr., 1896, M. E. in EE., Toledo, with Bissel & Co.

McPherson, William, 1887, B. Sc., 1891, M. Sc., 1895, D. Sc., 1899, Ph. D., University of Chicago, Columbus, State University, professor of Chemistry.

Mead, Clinton V., 1884, B. Ph., Denver, Col., attorney-at-law.

Mead, Rollo Nooman, 1895, D. V. M., Grand Rapids.

Mebs, George H., 1897, G. Ph.; Columbus, Pharmacist, Columbus State Hospital.

Meek, Charles Wesley, 1894, LL. B., Toledo.

Meek, Edward Duncan, 1896, B. A., 1899, M. A. Glencoe.

Meek, William W., 1899, B. Ph., 121 Fifteenth avenue, Columbus, J. W. Meek & Co.

Mendenhall, Maurice H., 1893, D. V. M., West Elkton.

Menough, Arthur George, 1894, E. M., Apartado 17, Zacatecas, Mexico, assayer and chemist

Mercer, Frank Emmet, 1896, M. E. in EE., Lima, Ohio.

Merrill, Alice Louise, 1893, B. A., 6565 Yale ave., Chicago, Ill., Station O, teacher.

Merrill, Charles Wesley, A. B. (Denison University), 1898, LL. B., 326-330 The Nasby, Toledo, attorney.

Mershon, Ralph D., 1890, M. E., New York office Westinghouse E. & M. Co. Mesloh, Charles W., 1889, B. A., 1895, M. A., assistant professor of German,

State University.

\*Metters, Allen, 1896, B. A., died January 22, 1898.

Metzger, Edward H., 1897, G. Ph., Columbus, assistant pharmacist, State
Epileptic Hospital.

Mickey, Blanche D., 1898, B. Ph., Shelby, teacher. .

Middleswart, Clarence Coulter, A. B. (Marietta College), 1898, LL. B., Constitution.

Middleton, Ambrose, 1895, G. Ph., Malta, pharmacist.

Miller, Carl James, 1898, B. Sc. (Agr.), Franklin.

Miller, Charles C., 1883, B. A., Lima, superintendent schools.

Miller, Daniel Elmer, 1890, G. Ph., Dayton, druggist.

Miller, Frank Case, 1893, C. E., Dwight, Ill., Supervisor, Chicago and Alton R. R.

Miller, Gretchen P., 1900, B. Ph., Columbus.

Miller, Harry Franklin, 1889, M. E., South Bethlehem, Pa.

Miller, Henry P., 1897, D. V. M. Sunbury.

Miller, Merritt Finley, 1900, B. Sc. (Agr.) Ridpath.

Miller, Walter McNab, B. Sc., 1885, Reno, Nev., professor of Anatomy and Physiology, State University.

\*Milligan, James Porter, 1886, B. A., died, February, 1899.

Mills, William C., 1898, B. Sc. (H. & F.), Columbus, curator Archæological collection, State University.

Milne, Alexander, B. D. (Yale University), 1898, M. A., Duluth, Minn., pastor Pilgrim Congregational Church.

Mix, Edward W., 1888, B. Sc., Paris, France, superintendent "Le Societi des Establishments."

Mix, Melvin Noble, 1895, B. Ph., New York, The World, journalist.

Mock, George Herbert, 1891, B. Sc., Ohio State Savings Bank, Columbus.

Montgomery, Howard, 1896, B. Ph.

Moodie, Alice Haynes, 1890, B. A., Mrs. Arthur Hartwell, Chicago, Ill.

Moon, Victor C., 1900, B. Ph., Columbus.

Mooney, Charles Napoleon, 1900, B. Sc. (Agr.) Milan.

Mooney, Daniel Francis, 1894, LL. B., St. Mary's.

Moore, Edgar Howard, 1900, B. Sc., Columbus.

Moore, Henry Curtis, 1897, B. Sc., Washington C. H.

Moore, Virgil Owen, 1895, B. Sc., M. D., Toledo, 710 Starr ave., physician.

Morhart, Katherine Elizabeth, 1893, B. Ph., Pomeroy.

Morrey, Annie Eliza, 1896, B. A., Chester Hill.

Morrey, Charles B., 1890, B. A., 1896, M. D., Columbus, assistant professor Physiology, State University.

Morrey, William T., 1888, B. A.

Morris, Ingle H., 1900, LL. B., Columbus.

Morris, Clyde T., 1898, C. E., Youngstown, Youngstown Bridge Co.

Morrison, M. Frank, 1879, B. A., Mrs. S. H. Short, London, England.

Morrison, Robt. O., 1893, C. E., assistant on engineer corps, Erie and Ashtabula division of Pennsylvania Lines west of Pittsburg.

Morrow, Charles James, 1900, D. V. M., Tiro.

Morton, George L., 1884, M. E. (LL. B., National Law School), chief examiner, patent office, Washington, D. C.

Moses, Martha Allston, 1891, B. Ph., 1111 Hinman ave., Evanston, Ill., book-keeper.

Moss, Blanche, 1898, B. A., Columbus.

Moss, William, 1898, G. Ph., Cambridge, O., Pharmacist.

Moyer, Henry E., 1893, B. Sc., Youngstown, chemist, Youngstown Steel Co.

Mull, Bert LaForrest, 1898, LL. B., Columbus, 114 Herman street.

Mullay, Annie, 1887, B. Ph., Chicago, teacher.

Mundhenk, Fred., 1896, B. Ph., Columbus, life insurance agent, 233 North Eleventh avenue.

Mundhenk, Herbert C., 1889, B. Ph., Brookville.

Mundhenk, Ruth, 1899, B. Ph., Dayton,

Munn, Mortimer Adam, 1894, C. E., Cleveland, Cleveland & Eastern Ry. Co.

Munson, Theodore, 1898, B. Sc., Zanesville.

Murray, Claude R., 1895, B. A., Middleport, principal of High School.

Murray, Frank Erskine, 1892, D. V. M., Greenfield, veterinary surgeon.

Myers, Albert B., 1900, E. M., Columbus.

Myers, Joseph Simmons, 1887, B. A., Pittsburg, editor Pittsburg Post.

Myers, Ord, 1895, M. E. in EE., inspector Metropolitan St. Ry. Co., New York.

Myers, Roy V., 1893, C. E., Dayton, Tenn., Dayton Coal and Iron Co., Ltd.

Myers, Uriah H., 1887, E. M., Pittsburg, Pa., Myers, Shinkle & Co.

#### N

Nagel, William G., 1895, M. E. in EE., Toledo, W. G. Nagel & Co., electrical supplies.

Needham, Harry J., 1900, M. E., Columbus.

Needles, Mana R., 1890, B. Ph. (Mrs. Kilpatrick), Owosso, Mich.

Nettleton, Arthur Warren, 1898, B. Sc. (Agr.), Medina.

Newton, Henry S., 1889, B. Sc., Syracuse, N. Y., general manager Syracuse, Lakeside and Baldwinsville Ry.

Newton, Samuel Donald, 1895, C. E., engineer on Southern R. R., Knoxville, Tenn.

Nichol, Gertrude Belle, 1899, B. Ph., Columbus.

Nicholson, Charles M., 1900, M. E. in EE., Columbus.

Nicola, Benjamin Di, 1900, LL. B., Barnhill.

Niewvahner, John Henry, 1891, B. A., Jackson, assistant cashier, First National Bank.

Noble, W. F., 1879, B. A., Tiffin, attorney-at-law.

Nold, John H., 1900, E. M., Columbus.

Nurian, Kerson, 1899, M. E., Turtle Creek, Pa., Westinghouse E. & M. Co. Nutt, Arthur Chase, 1897, B. Ph., Worcester, Mass., instructor in English and German, Worcester Polytechnic Institute.

#### 0

Obetz, Francis Henry, 1896, G. Ph., '99, M. D., Starling Medical College, Columbus, physician.

O'Brine, David, 1881, B. Sc., M. Sc., E. M., D. Sc., M. D., Urbana, physician.

Odebrecht, August, 1895, G. Ph., Columbus, with H. Braun & Sons.

O'Kane, Sarah Eliza, 1891, B. Ph. (Mrs. F. M. Raymond), 215 West Tenth ave., Columbus.

O'Kane, Walter Collins, 1897, B. O., Troy, journalist.

Orton, Clara Gregory, 1897, B. Ph., Columbus, 100 North Twentieth street.

Orton, Edward Jr., 1894, E. M., Columbus, director of the department of Clayworking and Ceramics, State University.

Orton, Walter Edwin, 1899, LL. B., Williamstown, Mass.

Osborn, Abner A., 1900, B. Sc., Columbus.

Osborn, Samuel Galloway, 1897, LL. B., Columbus, attorney, 275 East State street.

Osborn, Raymond Carroll, 1898, B. Sc., 1900, M. Sc., Columbus.

Ozias, Albert N., 1889, M. Sc., Principal High School, Minneapolis, Minn.

#### P

Pabodie, Robert Jewett, 1899, M. E., Watertown, N. Y., Watertown Steam Engine Company.

Page, William Herbert, 1892, LL. B., 1894, LL. M. (B. A., Yale), Columbus, professor of Elementary Law, State University.

Palmer, Walter K., 1893, M. E., State University, Lawrence, Kan., associate professor, Department of Mechanical Engineering, University of Kansas.

Parker, John Bernard, 1898, B. A., 1900, M. A., Danville.

Parmenter, William W., 1900, B. A., Mt. Vernon.

Patch, Homer Austin, 1896, C. E., Minneapolis, Minn., Draftsman, Gillette-Herzog Manufacturing Co.

Patchell, Owen P., 1889, B. Ph., Paul's Valley, Indian Ter., attorney-at-law.

Patchin, Rufus Harry, 1898, LL. B., Chardon, attorney-at-law.

Payne, Halbert Edwin, 1887, M. E., 256 Broadway, New York City, American Typewriter Co.

Peal, Allen Saunders, 1895, B. A., Chicago, Ill.

Pearce, George Downer, 1892, G. Ph., Pharmacist, South Charleston.

Pearl, Allen Sexton, 1894, M. E. in EE., Columbus, O., representative of Central Electric Company.

Pease, Edward Livingstone, 1895, B. A., 1899, LL. B., Columbus, 30 Monroe avenue.

Pedlow, Edward Benjamin, 1893, C. E., New Straitsville, superintendent Columbus and Hocking Coal and Iron Co.

Peppel, Samuel Vernon, 1899, B. Sc. (Chem.), Madison, Wis., Wisconsin Geological Survey, assistant in Ceramics, State University, Columbus.

Pence, David Arrel 1894, M. E., Lowellville.

Perkins, Earl Harley, 1893, LL. B., Wellington.

Peters, William Lincoln, 1885, M. E., Riverside, Cal., merchant.

Pfarr, Philip Lewis, 1896, B. Sc. (Agr.), Dennison, Iowa.

Phelps, Cyrus Alba, 1892, B. Sc., Sombereto, Jacataccas, Mexico, with Sombereto Mining and Milling Co.

Pierce, John Mattison, 1895, M. E. in EE., South Charleston.

Pilcher, Hastings Moore, 1895, M. E. in EE., Athens, telegraph operator and billing clerk.

Pitts, Grace Lenore, 1900, B. Ph., Columbus, graduate student, State University. Plantz, Wyatt Garfield, 1894, B. A., Pomeroy.

Pleukharp, Chas. V., 1885, M. E., Lacanada, California.

Plimmer, Gertrude Alice, 1896, B. Ph., Columbus, 1188 Oak street.

Polk, Walter C., 1895, C. E., Indianapolis, Ind., assistant general foreman, Central Union Telephone Co.

Pomerene, Frank Etherington, 1891, B. Ph., 1895, LL. B., Coshocton, attorney-at-law.

Pool, Harwood Redington, 1881, B. Ph., LL. B., 62 Cedar street, New York City.

Porter, Mary Baxter, 1897, B. Ph.

Postle, Herman R., 1894, C. E., Joplin, Mo., civil engineer.

Postle, Kenneth F., 1894, B. A., Lancaster, Ky., teacher.

Powell, Chas. S., 1893, M. E. in EE., Cleveland, representing Westinghouse E. & M. Co.

Powell, Edward Thompson, 1896, LL. B., Columbus, attorney, 518 East Broad street.

Powell, Norman Clemson, 1895, D. V. M., Damascus.

Prall, Anna Dickson, 1898, B. A., Columbus.

Pratt, Fred K., 1900, C. E., New Philadelphia.

Price, Homer Charles, 1897, B. Sc. (Agr.), assistant horticulturist, O. S. U.

Priest, Frederick, 1895, D. V. M., Newark, veterinary surgeon.

Pryor, Charles Foster, 1898, LL. B., Columbus.

Pugh, Lawrence Randolph Whetzel, 1893, B. Ph., 1895, LL. B., Columbus, attorney-at- law, 18 Board of Trade.

Pulling, Margaret G., 1900, B. Ph., Columbus. Pumphrey, John Homer, 1898, B. Sc., Clayton.

Putnam, Abbey Slocum, 1897, B. Ph., Fisher, Ill.

#### R

Radcliff, Charles Anson, 1895, B. Ph., attorney, Jackson.

Randall, Emilius Oviatt, 1892, LL. M. (B. Ph., Cornell University), Columbus, attorney-at-lew, professor in Law School, State University.

Randolph, Edward S., 1897, LL. B. (A. B., Ohio Wesleyan University), Somerset.

Rane, Frank William, 1891, B. Agr. (1892, M. Sc., Cornell), Durham, N. H., professor of Horticulture, New Hampshire College.

Rarick, Murray M., 1896, B. Sc. (Agr.), Jacksontown, physician.

Rasor, Samuel Eugene, 1898, B. Sc., College Springs, Iowa, Professor of Mathematics, Amity College.

Rawson, Levi, 1899, C. E., Sistersville, W. Va., Carter Oil Co.

Ray, Frank A., 1887, E. M., Columbus, professor of mine engineering, State University. Ray, William M., 1893, C. E., room 825, Hickox Building, Cleveland, C. L. & W. R. R.

Raymond, Coles Abel, 1894, C. E., Wauseon, bridge draughtsman.

Raymond, Frank M., 1888, B. A., Columbus, attorney-at-law, 215 West Tenth avenue.

Raymond, Maud, 1899, B. Ph., Columbus, 558 Rich St.

Redick, Mary Glisson, 1898, B. Ph., Findlay.

Redrow, Walter L., 1900, B. Sc., Columbus.

Reed, Robert Browning, 1896, M. E. in EE., Zanesville, electrical contractor.

Reed, William Allen, 1897, E. M., Querida, Colorado, assayer and surveyor, Bassick G. M. Co.

Reese, William Daniel, 1891, B. A.

Reese, William Henry, 1896, G. Ph., Glen Roy, Pharmacist.

Reeves, Archibald C., 1887, C. E., 153 Superior avenue, Dayton, civil engineer.

Resler, Edwin D. (B. A., Otterbein), 1897, M. A. Westerville.

Rice, Herbert A., 1897, C. E., Jackson, teacher.

Rice, Mabel Elise, 1898, B. A., Columbus, student, Hubbard avenue.

Rice, Mary Washington, 1900, B. A., Columbus, Fellow in Economics, Ohio State University.

Rice, Susan Esther, 1899, B. A., Columbus, 111 West Fifth avenue.

Richardson, Hamilton Hutchinson, 1892, B. Agr., Brooklyn, gardner.

Richardson, William Waddle, 1899, B. Ph., Washington, D. C.

Richey, Luzerne A., 1897, B. Ph., Denver, Col., attorney.

Rickey, Alla B., 1889, B. Ph. (Mrs. Geo. H. Cless), Broad street, Columbus.

Rickey, Tallmadge A., 1900, B. Ph., Columbus.

Riddle, Howard Sterling, 1897, M. E. in EE., Akron, Diamond Rubber Co.

Riddle, Lumina C., 1897, B. Sc., 1898, M. Sc., Grand Haven, Mich., teacher in Science and Mathematics in the Akeley Institute.

Rietz, Henry Lewis, 1899, B. Ph., Gilmore.

Riggs, Ernest Jacob, 1895, B. Sc. (Agr.), M. Sc. (H. & F.), Raccoon Island, O.

Rightmire, George Washington, 1895, B. Ph., 1898, M. A., Columbus, teacher in High School and fellow and assistant in American History, State University.

Ritchey, Joseph C., 1890, B. Sc., Mingo Junction, with Junction Iron and Steel

Roach, Simeon Andrew, 1899, B. Ph., Cleveland, New York Life Insurance Co. Robbins, George A., 1899, B. Ph., Columbus, Lexington avenue.

Roberts, Cyrus Swan, 1898, E. M., San Lui Potosi, Mexico, with the Cia Metaturica Mexicana.

Robinson, Eckla Mazola, 1892, B. Sc. (Mrs. George Rowe).

Robinson, Erdis Geroska, 1893, C. E., Mexico, D. F., Mexico, Engineering Department of Mexican Central Railway.

Robinson, Zella Vina, 1898, B. Ph., 4900, M. A., Columbus, Highland street.

Rockwell, Mary Fannie, 1899, B. Ph., Columbus.

Roebuck, Carl Fletcher, 1900, B. Ph., Columbus, student State University Law College.

Rogers, Andrews, 1896, B. Ph., New York City, student, College of Physicians and Surgeons.

Rogers, Frank Persons, 1899, B. A., Columbus, 140 Warren street.

Rogers, James Bertrand, 1896, E. M., Steubenville, National Steel Co., Mingo Junction.

Root, Willis J., 1885, E. M., Columbus, chemist, National Steel Co.

Rowlee, Henry A., 1897, M. E., Columbus, inspector Ordnance Department U. S. A., The Rarig Eng. Co.

Ruhlen, Carl Marble, 1898, M. E., Honolulu, H. I., assistant inspector construction department, U. S. Army.

Ruhlen, Frank, 1896, B. Sc. (Agr.), Columbus, assistant in Agriculture, State University.

Rule, Ralph R., 1897, LL. B. (B. S., Tri-State College, Ind.), Greenspring.

Ruppersburg, Emma Anna, 1891, B. Sc., 1896, M. Sc., Columbus, teacher in High School, 842 South High street

Russell, Ralston, 1896, B. Ph., Pomeroy.

#### S

Sabine, Annie Ware, 1884, B. A., 1886, A. M., (1888, B. Sc., Mass. Institute Technology), (Mrs. W. H. Siebert), Columbus

Sabine, Wallace Clement, 1886, B. A. (M. A., Harvard), 53 Trowbridge street, Cambridge, Mass., assistant professor in Physics, Harvard University.

Safford, Robert Edwin, 1894, B. Sc., New York City, Mexican Metallurgico Co. Sandoe, Lydora Olivia, 1893, LL. B., Mrs. Bachman, 1425 Bryden Road, Columbus.

Sater, Lowry Francis, 1895, B. Ph., 1897, LL. B., Columbus, attorney, 114 Buttles avenue.

Sayre, Charles B., 1900, B. A., Columbus.

Schaff, Mae B., 1900, B. Ph., Columbus.

Schaub, Edward Louis Tascher, 1885, M. E., Columbus, assistant superintendent Associated Charities.

Schaub, Charles E., 1897, E. M., Phillippi, W. Va.

Scheibell, William O., 1888, E. M., Columbus, secretary and general manager, The American Art Tile Co.

Schlesinger, Hugo Nathan, 1899, LL. B., Xenia.

Schreiber, George E., 1900, M. E. in EE., Ironton.

Schreiber, John Martin, 1899, M. E. in EE., Cleveland, Cleveland Electric Street Railway.

Schroll, Otto, 1886, C. E., Wheeling, W. Va., civil engineer, M. of W., W. B. & T. Ry. Co.

Schueller, Erwin Waldemar, 1892, B. A., M. D., 1894, Columbus, physician, 439 South High street.

Schwier, Minona, 1897, B. A., Columbus, 212 East Mound street.

Scott, Anna Neill, 1886, B. A., 1274 Summit street, Columbus.

Scott, Bertha, 1890, B. Ph., Indianola Place, Columbus.

Scott, Herbert, 1893, B. Sc., Columbus, pastor North M. E. Church, 2533 East avenue.

Scott, Charles Felton, 1885, B. A., Pittsburg, Pa., chief electrician Westinghouse E. & M. C., 6214 Sellers street.

Scott, Daisy Medill, 1887, B. A., Columbus, teacher in High School.

Scott, Dudley, 1900, B. Ph., Columbus.

Scott, Emma, 1888, B. Sc., Brindiban, India Missionary.

Scott, Ernest, 1897, B. Sc. (Agr.), Columbus, student, Ohio Medical University, 131 East Fifteenth avenue.

Scott, Mary Odella, 1885, B. A., Columbus, teacher in High School, 87 West Fourth avenue.

Scott, Mary Mermon, 1887, B. A., 1274 Summit street, Columbus.

Scott, Mary Bole, 1896, B. A., Columbus, teacher, 926 Oak street.

Sears, Walter James, 1894, B. Ph., Chillicothe, with Sears and Nichols Co. Sedgwick, Edward Crayton, 1895, M. E. in EE., Columbus, Case Mfg. Co.

Selby, Augustine D., 1893, B. Sc., Wooster, botanist and chemist, Ohio Experiment Station.

Sellenings, Albert Eugene, 1896, B. Ph., M. D., Bellevue Interne, New York.

Seney, Allen J. (B. Ph., University of Michigan), 1899, LL. B., North Baltimore. Serva, Adam A., 1893, M. E. in EE., Ft. Wayne, Ind., Fort Wayne Electric

Works.

Seymour, Raymond J., 1900, B. Sc., Fellow in Natural History, Tuit's College. Shark, Robert J., 1897, LL. B., Hamilton.

Sharp, Charles C., 1888, C. E., Corning, superintendent Mining Department Sunday Creek Coal Co.

Sharp, David Barton, 1893, LL. B., Columbus, 335 West Fourth avenue.

Shellabarger, Marley Rolin, 1897, B. Sc. (Agr.), Garland, Ohio.

\*Shepard, Frank Reed., 1893, B. A., died August, 1893.

Shepherd, Charles W., 1900, C. E., Huron.

Sherman, Christopher Elias, 1894, C. E., Columbus, assistant professor in Civil Engineering, State University.

Shield, Wallace B., 1898, B. A., Kansas City, Mo., Manual Training High School.

Short, Sidney H., 1880, B. Sc., London, England.

Shuck, Carey Lucas, 1898, B. Ph., Columbus, "Columbus Evening Dispatch."

Shurtz, Olive L., 1898, B. Ph., Columbus, 26 King avenue.

Siebert, Wilbur H., 1888, B. A. (M. A., Harvard), Columbus, associate professor History, State University.

Sigerfoos, Charles Peter, 1889, B. Sc., 1897, Ph. D. (Johns Hopkins University), Minneapolis, Minn., professor of Zoology, University of Minnesota. Sigerfoos, Edward, 1891, B. Ph., Fort Sharidan, 1st Lieut. Eith Infantry, U. S.

Vigan, Allows Ser. 8. &

Simonton, Mark, 1895, M. E. in EE., Columbus, Electric Supply and Construction Co.

Simpson, Abigail Ellen, 1895, B. A., London, teacher in High School.

Singleton, Charles Tod, 1900, B. Ph., student State University Law College.

Sinks, Frederick Nicholas, Ph. L. (Yale University), 1898, LL. B., Columbus, 714 East Broad street.

Skinner, Chas. E., 1890, M. E., box 435, Pittsburg, Pa., Westinghouse E. & M. Co.

Slater, Burr Homer, 1895, G. Ph., Chesterville, Pharmacist.

Slyh, Emma Almeida, 1892, B. Sc., Marble Cliff.

Smith, Albertine, 1900, B. Ph., Columbus.

Smith, Alice May, 1897, B. Ph.

Smith, Burton Griffin, 1895, G. Ph., Detroit, Mich., chemist for the Ray Chem-

Smith, Carl Clyde, 1890, B. Ph., Marietta.

Smith, Clarence Elmer, 1898, G. Ph., Columbus, student O. M. U.

Smith, David William, 1899, C. E., Columbus, Hocking Valley Ry. Co.

Smith, Edward E., 1897, G. Ph., Indian Territory.

Smith, Edward Trevett, 1898, LL. B., Holden, Mo.

Smith, Florizel, 1880, B. A., Spahr Building, Columbus, attorney-at-law, 970 Bryden Road.

Smith, Horace Prescott, 1886, B. Sc.

Smith, Maud Virginia, 1894, B. A. (Mrs. Thomas Chalmers), Port Huron, Mich. Smith, Myron Alphonso, 1892, B. Ph., Columbus, with Keyes & Thomas, real estate agents.

Smith, Nathaniel B., 1893, D. V. M.

Smith, Philo Christopher, 1885, B. Sc., Middlebranch, farmer.

Smith, Virginia Roletta, 1900, B. Ph., Columbus.

Smith, Warren Lee, 1899, LL. B., Columbus, 29 East Dodridge street.

Snider, Charles M., 1897, B. Sc. (Ind. Arts), Columbus, 162 West Mound St.

Snider, Jesse Worthington, 1893, LL. B., LL. M., Columbus, 340 Denmead ave. Snively, Harry H., 1895, B. A., Columbus, teacher in High School, 1332 Highland street.

Snow, Walter A., 1897. B. Ph., Park Place, Minneapolis, Minn., Pastor Congregational Church.

\*Snyder, Henry, 1879, B. Sc., 1892, M. Sc. Died September, 1898.

Snyder, James Edward, 1892, LL. B. (B. A., Wooster University).

Snyder, Walter S., 1897, LL. B., Columbus, Attorney, 69 North Fourth street. Somermeir, Edward Everett, 1898, G. Ph., Columbus, assistant in Mining and Metallurgy, State University.

Southard, Eustace Elden, 1895, G. Ph., Columbus, pharmacist, 470 Oak street. Southard, Thomas Campbell, 1896, B. A., Columbus, 470 Oak street.

Sparks, Edwin Earle, 1884, B. A., 1892, M. A., Chicago University, assistant professor, Chicago, Ill.

Spencer, William Henry, 1891, G. Ph., Sandusky, with Strong and Spencer.

Spencer, Ralph Oliver, 1899, B. A., Columbus.

Sperr, Frederick W., 1883, E. M., Houghton, Mich., professor of Civil and Mining Engineering, Michigan School of Mines.

Sprague, Charles Franklin, 1896, B. A., 1899, LL. B., Wapakoneta.

Sprague, Clarence Milton, 1899, C. E., Columbus, Room 2, Union Station, Assistant on Engineers' Corps, P., C., C. & St. L., Indianapolis Div.

Sprague, William Ralph, 1899, B. Ph., Columbus, 71 West Tenth avenue

Spurrier, John Randolph, 1896, M. E. in EE., Wilkinsburg, Pa., Westinghouse E. & M. Co.

Staley, Marcellus, 1899, M. E. in E.E., U. S. Transport Meade, chief electrician. Stanberry, Charles L., 1892, G. Ph., Pharmacist, McConnellsville.

Starbuck, Daniel Carl, 1899, M. E. in EE., Care U. S. Despatch Agent, N. Y., U. S. S. Chicago.

Steeb, Carl Eckert, 1899, B. Ph., Columbus, accountant, O. S. U.

Stephenson, Henry Thew, 1894, B. Sc., Bloomington, Ind., instructor in English, University of Indiana.

Stevens, Frank M., 1897, LL. B., Elyria.

Stevenson, Amos Claude (A. B., Oberlin College), 1900, LL. B., Fostoria.

Steward, Charles Benjamin, 1900, B. Sc. (Agr.), Marcy.

Stewart, Edwin Earle, 1895, LL. B. (M. A., Antioch College), attorney, Springfield.

Stewart, Lee Raymond, 1896, C. E., Philadelphia, Pa., N. Y. Ship Building Co. Stewart, Harford Toland, 1896, M. E. in EE., Agent General Electric Co., Columbus.

Stiger, Thomas A., 1899, LL. B., Bucyrus.

Stimson, Charles Leslie, 1899, B. A., Columbus, 737 Bryden Road.

Stimson, George, 1900, B. A., Columbus, 737 Bryden Road.

Stinebaugh, Isaac Long, 1892, C. E., Port Clinton, deputy to county surveyor Stone, Carlton Elijah, 1899, C. E., Gallipolis, civil engineer.

Storer Norman Wilson 1801 M F in FF Pittsburg Po We

Storer, Norman Wilson, 1891, M. E. in EE., Pittsburg, Pa., Westinghouse E. & M. Co.

Storer, Simon B., 1893, M. E. in EE., Syracuse, N. Y., engineering and salesman, Westinghouse E. & M. Co.

Stouffer, Charles Irwin, 1893, LL. B., Columbus, 387 Oak street. Stoughton, George L., 1895, LL. B. (B. A., Otterbein University).

Stull, Emmett Willet, 1894, M. E. in EE., Johnstown, Pa., draughtsman Motor Department The Lorain Steel Co.

Stump, Franklin Pierce, 1892, B. Agr., Convoy, farmer.

Stump, John William, 1895, C. E., county engineer, Fairfield, Co., Ohio.

Stump, William Lisle, 1897, G. Ph., 1898, M. Ph., Columbus, Pharmacist.

Surface, Harvey Adam, 1891, B. Sc., 1892, M. Sc.

Sutherland, Margaret, 1898, B. Ph., (Mrs. Benj. Flynn), Columbus, Neil ave. Sutphen, James Leonard, 1897, G. Ph., Columbus, 673 Livingston avenue.

\*Swartzel, Earl Glenn, 1895, B. Sc., died March, 1899.

Swartzel, Karl Dale, 1893, B. Sc., 1894, M. Sc., Columbus, assistant professor of Mathematics, State University.

Swisher, William Henry, 1896, G. Ph., M. D., Eaton, Physician.

Sykes, William Edgar, 1898, LL. B., Marietta.

Sylvester, John E., Jr., 1898, B. Ph., Wellston, editor "Wellston Telegram."

#### T

Talbot, Ellen B., 1890, B. A., Troy, N. Y.

Talbot, Herbert Swan, 1898, B. Ph., Columbus, clerk Columbus Board of Trade, 640 Franklin avenue.

Talbot, Mignon, 1892, B. A., 640 Franklin ave., Columbus, teacher in High School.

Travis, Fred Lant, 1900, B. A., Pana, Ill., teacher.

Travis, John F., 1900, B. A., Columbus, Fellow in Mathematics, Ohio State University.

Taylor, Arthur W., 1894, E. M., Cleveland, chemist for Otis Steel Co., Ltd.

\*Taylor, Francis Asbury, 1885, B. A., died July 25, 1891.

Taylor, Alexander R., 1895, B. Sc.

Taylor, Fredric Wellington, 1900, B. Sc. (Agr.), Wooster.

Taylor, Ralph Buren, 1895, B. A.

Taylor, Joseph Russell, 1887, B. A., M. A. (Columbia University), Columbus, assistant professor English Literature, State University.

Taylor, Pearl V., 1897, B. A., Columbus, 46 West Noble.

Teter, Anstie Welsh, 1896, G. Ph., Bainbridge, Pharmacist.

Thomas, James O., 1897, C. E., Columbus, 404 West Goodale

Thomas, Lawrence David, 1900, B. Ph., Lancaster.

Thompson, Carmi A., B. Ph., 1895, LL. B., Ironton, city solicitor.

Thompson, Howard N., 1888, B. Ph., Washington, D. C., correspondent Associated Press.

Tomlinson, James Rowe, 1892, C. E., Cleveland, Forest City Iron Works.

Towne, Robert S., 1879, B. Sc., E. M., New York, N. Y., president Mexican Northern Railway.

Townshend, Alice Margaret, 1880. B. A. (Mrs. Charles Wing), Columbus.

Townshend, Arthur Bailey, 1878, B. Sc., M. D., 22 West 32d street, New York, New York, N. Y., physician.

Tufts, Charles Hill, 1899, E. M., Cleveland, assistant chemist Otis Steel Co., Ltd. Tupper, Eugene L., 1893, G. Ph., Ottawa, physician.

Turner, Arthur M., 1893, M. E. in EE., 281 Oak street, Chicago, Ill.

Turner, Frederick Lewis, 1897, B. A., 1898, M. A., Oak Park Hills, teacher in High School.

Twiss, George R., 1885, B. Sc., Cleveland, teacher of Physics in High School.

Twiss, Edith Minot, 1895, B. A., Mt. Vernon, teacher in High School

Twiss, Marion Evans, 1897, B. A., Columbus, State Library.

Tyler, Frederic Jared, 1900, B. Sc. (H. & F.), Perry.

#### U

Uncles, Margaret Anna, 1897, B. A., Columbus, Gill street. Underwood, Ella, 1898, B. A., Mrs. O. A. Davis, Alliance. Urban, Harry Marshall, 1898, C. E., Pittsburg, Pa., "Pan Handle" R. R., assistant engineer corps.

Vance, Mary Grace, 1898, B. A., Danville, Ky., Caldwell College. Vandervoort, William P., 1886, E. M., Morrow, superintendent of schools. Van Harlingen, Edward M., B. Sc., 1883, M. Sc., 1897, Columbus. Viets, Willis B., 1886, E. M., Parryville, Pa., chemist, Carbon Coal and Iron Co. Voke, Lewis F., 1893, G. Ph., Columbus, M. D., Starling Medical College, physician, France Medical Institute. Voorhees, Burt Fisk, 1894, LL. B., Coshocton. \*Voorhees, Charles W., 1892, LL. M. (B. Sc., Scio College), died 1898. Voorhees, Isaac M., 1894, B. Ph., Cadiz, journalist, editor of "Harrison News."

#### W

Wadsworth, F. L. Olcutt, 1888, B. Sc., E. M., M. E., Director of Allegheny Observatory, Allegheny, Pa.

Wagstaff, Edward A., 1893, G. Ph., Niles, pharmacist, Jones and Wagstaff. Waid, Clarence William, 1898, B. Sc. (H. & F.), Durham, N. H., Assistant in Horticulture.

Walker, Frederick William, 1896, B. A., Columbus, 46 North Lazelle St. Walker, James Madison, 1896, C. E., Chicago Junction, Assistant Res. Eng. B. & O. R. R. Co.

Walsh, Annetta Curtis, 1897, B. A., Columbus, 148 Buttles avenue. Walsh, Mary Helen, 1896, B. Ph., Columbus, 148 Buttles avenue. Ward, J. C., 1880, B. A., Painesville, engineer and surveyor.

Vornholt, Julius Franklin, 1898, B. A., New Bremen. Vosskuehler, Joseph H., 1900, M. E., Dayton.

Ward, Philip Emerson, 1899, B. Ph., Willoughby.

Warden, Leonard C., 1899, B. Sc. (H. & F.), 42 Jackson Boulevard, Atlantic Building, Chicago, Ill.

Warner, Cora, 1882, B. Ph., corner Hubbard and Dennison aves., Columbus.

Warren, Arthur Robert, 1893, LL. B., Columbus.

Warren, Grant Alexander, 1894, LL. B.

Watson, Bensen Gruber, 1896, B. Ph., Columbus, attorney, The Garland. Watson, Edward T., 1897, B. Sc., Chillicothe, teacher in High School.

Watt, Sern P., 1886, M. E., Chicago, Ill., Vice President and Mechanical Expert, Hine-Watt Mfg. Co.

Weaver, Mary Luretta, 1891, B. Ph., 231 Church street, Urbana.

Weaver, Harry Bright, 1894, LL. B. (B. A., Ohio Wesleyan University). Circleville, attorney.

Webb, Scott Anderson, 1888, B. Ph., Columbus, attorney-at-law, 222 King

Webber, Karl T., 1897, LL. B., Columbus, attorney, 2585 West Broad.

Weick, Charles William, 1898, B. Sc. (Ind. Arts), New York, Professor Manual Training, Columbia University.

Weidner, George F., 1887, G. Ph., Columbus, Kauffman-Latimer Co.

Weinland, Edgar Lynn, 1893, LL. B. (B. Ph., Otterbein University), Columbus, attorney, 1256 Neil avenue.

Weisman, Laura A., B. Sc. (Dom. Sci.), Columbus.

Welch, Clark J., 1888, C. E., Pittsburg, Pa., assistant engineer, Keystone Bridge Works.

Welch, Oliver Bartlet, 1895, M. E. in EE., Dennison, electrician, United Electric Co.

Weld, Harry P., 1900, B. Ph., Marysville.

Wendt, William Carl, 1889, G. Ph., 901 South High street, Columbus, Heer's Pharmacy.

Wertz, Edwin Slusser, 1899, B. Ph., 1900, LL. B., Dalton.

West, Earle Downs, 1900, B. A., Columbus.

Whitacre, Horace J., 1891, B. Sc., 1895, M. D., Columbia University, Cincinnati (Mt. Auburn), physician.

Whitacre, Marion, 1894, B. Sc., 1899, M. D., Columbia University, Cincinnati, physician.

White, David S., 1890, D. V. M., Columbus, professor in Veterinary Medicine, State University.

Wiggins, Sherman Tecumseh, 1894, LL. M. (LL. B., University of Michigan), 1897, B. Ph., Coffeyville, Kan.

Wikoff, John Burkett, 1884, B. Ph., Cambridge, assistant to general manager Cleveland & Marietta Railway Co.

Wilcox, Alvah Newton, 1895, M. E., Dayton.

Wilcox, Edwin Mead, 1896, B. Sc., Harvard University.

Wilcox, McAllister, 1898, LL. B., Sunbury.

Wildermuth, Andrew Lee Roy, 1899, LL. B., Columbus.

Wilgus, Horace Lafayette, 1882, B. Sc., 1884, M. Sc., Ann Arbor, Mich., professor of Law, University of Michigan.

Wilgus, James A., 1888, B. Ph., M. A., Plattville, Wis., professor of History and Economics in the State Normal School.

Williams, Anna Ernestine, 1899, B. Ph., Jackson, teacher in High School.

Williams, Clara M., 1900, B. Ph., Columbus.

Williams, Herbert Oswald, 1894, B. A., 1900, M. A., Columbus, teacher in High School, 190 East Long street.

Williams, Guy Rulon, 1895, LL. B., Columbus, attorney-at-law.

Williams, Lloyd Thomas, 1896, B. Ph., 1900, LL. B., Toledo, attorney.

Williamson, Edward Bruce, 1898, B. Sc., Bluffton, Ind.

Wilson, Harry Rush, 1895, LL. B. (B. A., Mt. Union College), 1896, LL. M., Columbus, attorney, 1459 Bryden Road.

Wilson, Frank (B. S., Scio College), 1900, LL. B., Jolly.

Winter, Nevin Otto, 1897, LL. B. (A. B., Ohio Wesleyan University), Spitzer Bldg., Toledo.

Wirth, Ida M., 1895, B. Ph., Columbus, South High street.

Wirthwein, Louis Philip, 1899, C. E., Columbus, 677 South High street.

Wise, Albert Joseph, 1898, C. E., Anderson, Ind., assistant engineer, Big Four, Cleveland and Indianapolis Div.

Wolcott, Roy C., 1895, B. Ph., 1896, M. D., Columbus, physician.

Wolf, Herman Howard, 1895, C. E., Lieut, U. S. Revenue Cutter Service.

Wood, Francis Carter, 1891, B. Sc., 8 East 49th street, New York City, Pathologist to St. Luke Hospital.

Wood. Kenneth Dodge, 1881, B. A., Columbus, secretary of the Central Ohio Paper Company.

Wood, Willard B., 1893, B. Sc., Columbus, in Columbus Postoffice.

Woods, Charles H., 1900, LL. B., Chillicothe.

Woodworth, Henry Julian, 1887, B. Sc., Logan.

Worcester, Wood Frank, 1899, B. Ph., Columbus, O. S. U. Dormitory.

Workman, Charles, 1896, B. A., Columbus, 135 East Eighth avenue.

Wright, Burr Roscoe, 1897, B. Ph., Columbus, 765 North Park street. Wright, Carrie, 1892, B. Ph., Chicago, Ill., teacher in the Armour Institute. Wright, William Van Horn, 1893, LL. B., 1896, LL. M., Columbus Postoffice.

# Y

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Young, Harry Nelson, 1895, G. Ph., Flint, Michigan, Pharmacist.

Young, John Wesley, 1899, B. Ph., Ithaca, N. Y., Fellow in Mathematics, Cornell University.

Young, Mary Grace, 1900, B. Ph., Mt. Vernon.

#### Z

Zaumseil, Oscar C., 1887, Webb City, Mo.
Zurfluh, William Nicholas, 1894, M. E. in EE., Springfield, The Robbins and Myers Company.

