EDUCATING THE SONS OF TOIL:

Student Life at the University of Illinois:
The Early Years









ACKNOWLEDGMENTS

My research would not be possible without the generous assistance of the University of Illinois Archives staff.

Their professionalism and untiring support have made possible my ongoing research on University students.

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Others are in the public domain unless specified

They are the preservers of this legacy.

This bill proposes to establish at least one college in every State upon a sure and perpetual foundation, accessible to all, *but especially to the sons of toil*, . . .

Justin Smith Morrill

. . . to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.

EDUCATING THE SONS OF TOIL: THE OPENING ON 2 MARCH 1868 – THE FIRST STUDENTS AT ILLINOIS

FAMILY BACKGROUNDS

- 77 students arrived during the Spring of 1868
- All male cohort
- First generation born in Illinois (48%)
- From homes with a Protestant religious tradition
- Fathers were of a Republican political orientation (4 to 1)

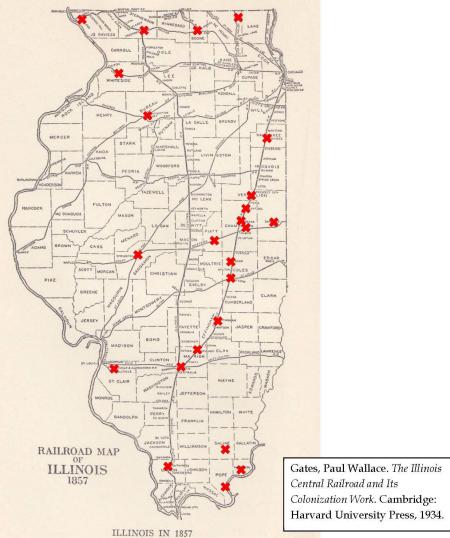
FAMILY BACKGROUNDS

• Students came from medium-size Illinois towns and cities averaging populations of 3,400

Towns were located on important rail corridors

• Illinois Central Railroad key to the early history of the University

Student Residence & Illinois Rail Lines



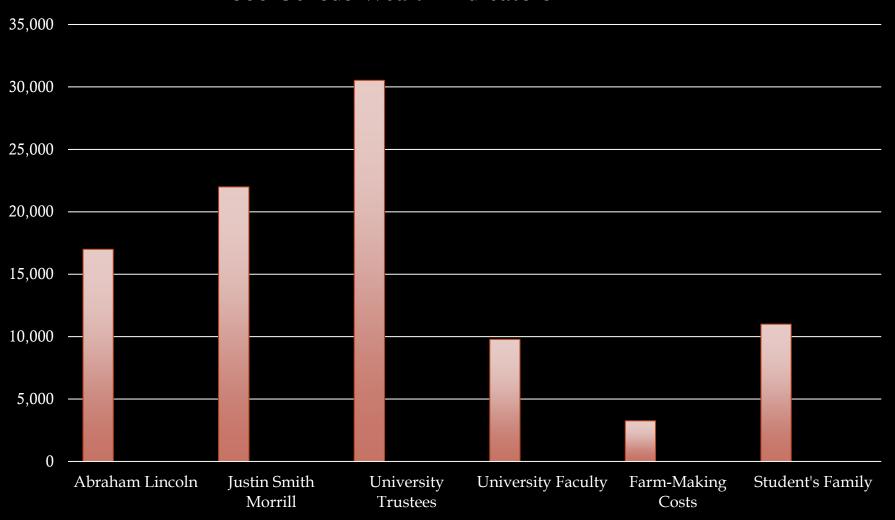
(Prepared from map in Gerhard's *Illinois in 1857* and other contemporary sources by the Illinois Central Railroad)

FAMILY BACKGROUNDS

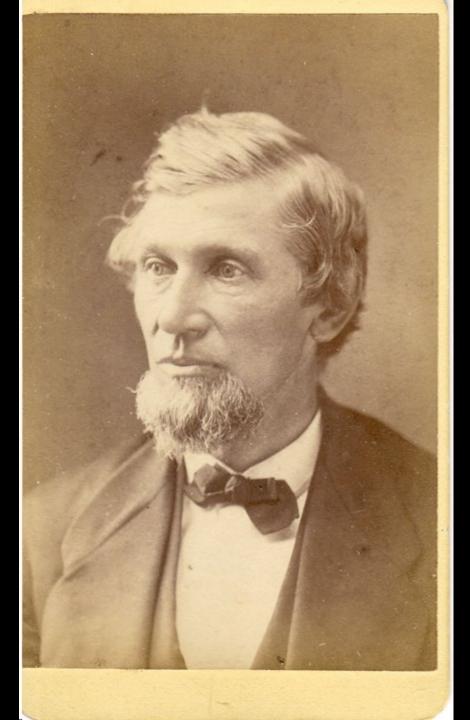
- Age ranged from 14 to 27, average age of 18
- 58% of the entering class were from Champaign County
- Students came from homes on the upper-half of socioeconomic scale

ECONOMIC COMPARISONS

1860 Census Wealth Indicators



EDUCATING THE SONS OF TOIL: STUDENT LIFE AT THE UNIVERSITY OF ILLINOIS

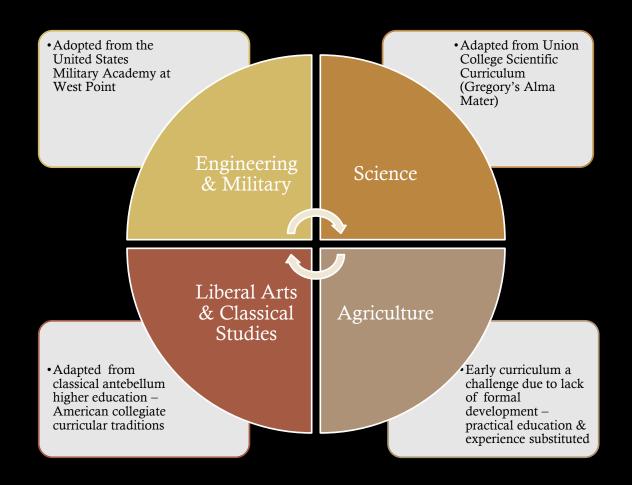


JOHN MILTON GREGORY

First President of the University of Illinois

University of Illinois Archives Photographic Subject File 39/2/20, Box 168

BUILDING AN EARLY LAND-GRANT CURRICULUM: FULFILLING THE MORRILL ACT MANDATE





Competive Examination for Mrize and Aronorary

Illinois Industrial

ALSO OF OTHER CANDIDATES FOR ADMISSION

- 1. No person except an examiner is allowed to see the questions before the examination begins.
- 2. No assistance of any kind is to be rendered candidates, except in explanation of the meaning of a question; in case
- 3. Only the papers of those who intend, if successful, to enter the University, should be forwarded to the Regent. Explain particularly that a failure to obtain a Scholarship need not prevent any one qualified from entering the Uni-
- 4. The questions being on one sheet are to be separated and given to the students in the order of their numbering.
- 5. Candidates should answer correctly 70 per cent. of the

J. M. GREGORY, Rogent.

ORTHOGRAPHY.

1. Define Orthography.

2. How many sounds in the English Language, and how many letters used to express those sounds?

What is a syllable?

- Give us an example of a primitive and also of a 5. In the following sentences capitalize correctly, and
- new york is the Largest of all american Cities and i
- heard, but i Understood not. 6. Spell the present participle of the verb "To beg," and
- give the rule for the spelling.
 7. Spell the plural of "Fly," and give the rule.
- Spell and capitalize correctly the following : a man named john right appared in vac and was seene buy sevral nabors he bore in his rite hand a peace of potery

GRADINAR.

and a pain of glass to which he had no write.

- Decline the pronouns—He, Who, L. Compare the adjectives—Bad, Able, Much, Be-
- 3. Give the Synopsis of the verb Be through the indicative mood with the pronoun She. 4. Write sentences containing That used as an adjective,
- a conjunction, and a relative.
- Define a sentence.
- What are the essential elements of a soutence?
- Define a simple, a complex, and a compound sontonce.
- Parse the italicised words in the following sentence, and give reasons for each step:

Breathes there a man with soul so dead,

Who never to himself bath said.

This is my own, my native land?
9. "I refunded him the money." Change this to the passive construction.

- 10. Correct the following sentences when needed, and give the reasons.
- Which do you like best, bread or fruit?
- It was him who I saw.
- Turn your toes out, like I do.
- He is an uneasy person; he cannot lay still or set still
- 5. The wisdom and justness of his decisions is now apparent.

GEOGRAPHY.

- What does Mathematical Geography embrace? Name the States bordering upon the Gulf of Mexico, with their Capitals.
- Name the mountain ranges of North America, with their respective directions
- 4. Through what waters, and in what direction would a traveler pass in going by water from Pittsburg, Pa., to Con-

- 5. Name and describe three of the largest Rivers of
- Commencing at the mouth of the Mississippi, trace it to its sources, naming the States on each bank, and the principal cities as you pass them.
- In what direction and through what waters will a vessel sail from New York for a cargo of tea?
- 8. Is the climate of England warmer or colder than the climate of the same latitude on this Continent? Why?

9. Define Longitude.

HISTORY OF UNITED STATES.

- 1. Give a brief account of the first settlement of Mas-
- What general war preceded the Revolution?
- What reason led France to assist us in our revolution, and what aid did she afford?
- 4. Give an account of the most noted battles fought in the State of New York during the Revolutionary war.
- 5. Under what form of government was the country after the Revolution? 6. In whose administration did the war of 1812 occur?
- Name two important land, and two important naval battles
- 7. What were our alleged reasons for the war with Mexico, and how, in consequence of this war, did California become a part of the United States?
 - What is meant by the Missouri Compromise?
- What was the first hattle of the war of the Rebellion ? What reasons were alleged by the South in justification of the rebellion?

ARPTHARDTO.

- 1. Define the expression, numeration, notation, unit of a number, abstract number, concrete number
- 2. Give the leading principles of addition, substruction, Multiplication and Division.
- 3. Define the expressions, common multiple, least common multiples, common divisor, greatest common divisor. What is a fraction, the unit of a fraction a fractional
- unit? 5. What are the leading principles of fractions?
- 6. What is a decimal fraction?
- 7. Give the value, with work, of the expression,

[(4+2)+1)]X .125

- S. Give the interest, with work, of \$75 for 16 months at
- 9. What is the square root of 125 69, with work 10. What is the cube root of 1729.10, with work.

ALGEBRA.

- 1. What do you understand by the term Quantity in Algebra
- 2. Give with names the symbols used in Algebra. 3. Define Addition, Subtraction, Multiplication and Divi-
- sion in Algebra. 4. Show that ao is equal to 1.
- a c c h 5. Reduce $\frac{a}{b}$, $\frac{c}{d}$, $\frac{c}{f}$, $\frac{n}{g}$, to equivelent fractions having a common denominator.
- 6. What is an equation, and what operation can you perform upon one without destroying it?
- 7. Find the value of x in the equation

$$\frac{x}{a} + f - cx = hdx$$
.

8. What is the true value of $\frac{a^2-b^2}{a-b}$ when a is equal to b.

- 8. Demonstrate a rule for the extraction of the square root
- 10. Demonstrate rule for the extraction of the cube root of numbers.

Early Admission **Examination Questions**

University of Illinois Archives John Milton Gregory Publications Scrapbook 2-1-11



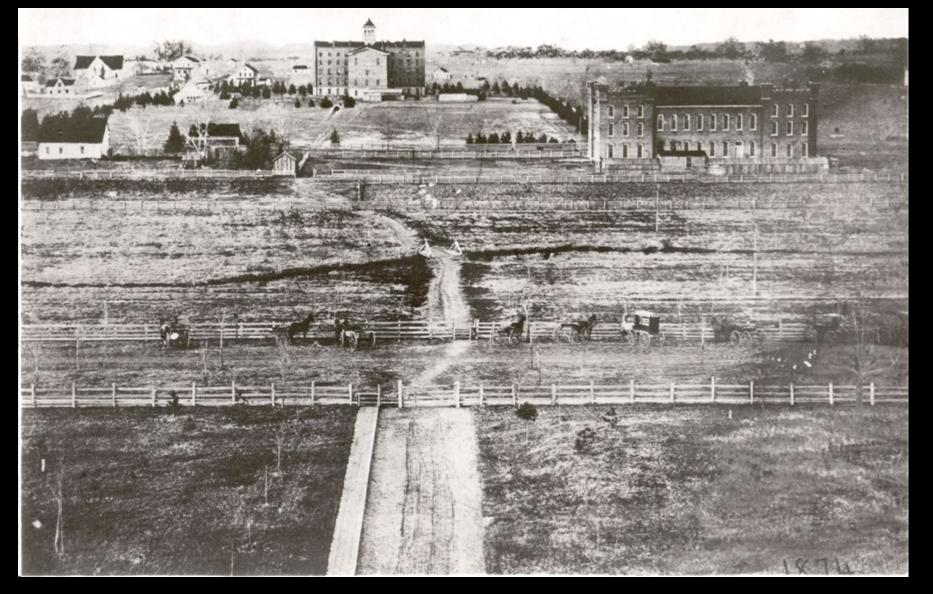
University Main, October 1868 University of Illinois Archives Photographic Subject File 39/2/20



University Main
University of Illinois Archives
Photographic Subject File
39/2/20



University Main after "Cyclone", April 1880 University of Illinois Archives Photographic Subject File 39/2/20



University Campus, ca 1874 University of Illinois Archives Photographic Subject File 39/2/20, Box 77

A Day in the Life of an 1868 Student

6:45 to 7:15 Breakfast

7:15 to 8:15 Recitations

8:15 to 8:30 Chapel

8:30 to 9:30 Lectures & Drill (Alternately)

9:30 to 12:30 Recitations

12:30 to 1:00 Dinner

1:00 to 3:00 Labor

3:00 to 6:00 Access to the Library

6:00 Supper

7:00 to 10:00 Study Hours

University of Illinois Archives 28 March 1868, Faculty Record, 1868-1890 4/1/1

ROOMING ON CAMPUS

- 65 rooms were available– two students per room on a first-come basis
- Many students boarded off-site or lived at home
- Rooms were advertised as 14 x 10 feet (student recollections indicated 12 X 9 was closer to reality)
- Students were required to furnish their own rooms

ROOMING ON CAMPUS

- Students were expected to acquire coal stoves that served to both heat the room and cook meals.
- The university sold coal at cost, but did not provide kindling.
- Students scavenged wood from any source available, including a nearby fence and a dilapidated shack. Early female students became adept at nocturnal expeditions to acquire kindling, impressing their male counterparts.

ROOMING ON CAMPUS

- "... coal, kindling, dishes, kettles, pails, basins, pitchers, tubs, oil cans, lamps, food, clothing, books, etc. [were placed] in the cramped quarters."
- "Beds were elevated with the aforementioned items commonly stowed, with the student's trunk, under the bed hid by a valance."

"Gregory and Early Recollections – Brown, Ralph L., 1918-20" University of Illinois Archives University of Illinois Early History, 1853-1962 35/3/125

STUDENT DIETS

- Utilizing the coal stove in their rooms, students maintained both a griddle and mush pot to make meals of questionable nutritive, but affordable, value.
- Griddle cakes, potatoes, mush, beans, bread and milk were described as staples.
- Describing the diet, a student noted that "one needed four stomachs and a gizzard to cope with grub so prepared with "fat, greasy gravy.""
- Griddle cakes provided a cheap form of entertainment as students mastered the art of flipping them. Student Ralph Brown explained, "With their longhandled skillet, they could flip a pancake to the ceiling and catch it deftly raw side down."
- Commenting on food expenses, one student recalled, "A carefully kept account of food expenses shows an average monthly cost of \$4.10 during one college year. The food was prepared in the dormitory rooms by our own hands . . ."

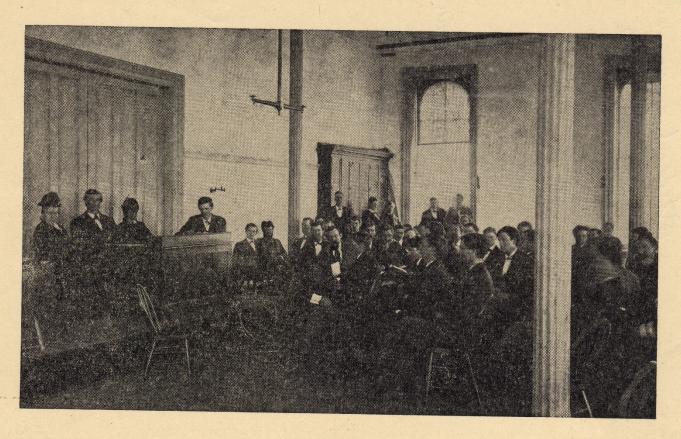
STUDENT GOVERNMENT

ILLINOIS INDUSTRIAL UNIVERSITY.
GENERAL ASSEMBLY,
ILL. INDUSTRIAL UNIVERSITY. The Students of the Ill. Industrial University, to J. Mocaule, greeting:
we command you to appear before the Court of the College Government of the I, I. U., to be held on Weck 6 1875, in Bole / Light Rovin - 1871 of the I. I. U., to testify
in the case now pending between said Government, plaintiff, and Martin 4 Molwer 2/4 Mockay Defendant.
I. I. U., this 4 day of Weh A. D., 187 J
WMI Whan Clerk of Court.

Summons to Appear Student Government 1875

University of Illinois Archives Alumni Class Files 26/4/5

STUDENT GOVERNMENT



A courtroom scene as students tried their hand at self-government

University of Illinois Archives Photographic Subject File 39/2/20

STUDENT EXPENSES

- Advertised expenses were between \$163 to \$195 annually for room, board, tuition and incidentals
- Tuition, room rent, and incidentals (\$34.50 to \$39.50)
- Board in Hall (\$108 to \$126)
- Fuel and Lights (\$10.50 to \$15.50)
- Washing (75 cents per dozen) (\$10 to 15)
- Early *Circulars* estimated that students were providing meals in their rooms between \$1 and \$1.50 a week
- Students were also required to pay a Matriculation Fee (one time) of \$10

STUDENT FINANCES

- Students were encouraged that the expense of a university education should not be an impediment to attendance, noting that, "any young man can pay his way though college who is willing, for the sake of an education, to practice steadily the virtues of industry and economy."
- "You will find fellow students, who are taking care of themselves, who will, with true brotherly feeling advise and assist you. Come on without fear. What man has done, man can do."

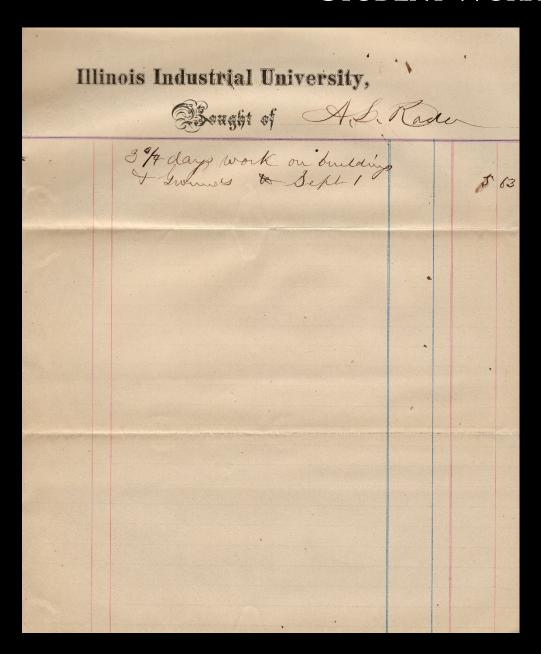
STUDENT FINANCES

Student James Newton Matthews complained to his father that his botany textbook cost \$3.50 but, "it is nice and I think valuable book consisting of 882 pages."

For an Illinois farm laborer, such a text would be worth more than two days' wages.

Correspondence from James N. Matthews to William Matthews
15 September 1868
University of Illinois Archives
James N. Matthews Papers,
41/20/26

STUDENT WORK-STUDY



Student Adolphus L. Rader

\$5.63 for 3 3/4 days work on buildings and grounds

University of Illinois
Archives
Vouchers
6-2-3

STUDENT CHAPELS: THE PLACE OF CHARACTER BUILDING

"He [Gregory] recognized that we were here not only to fit our minds to grapple with the problems of our time, and with the everyday problems of our callings, or professions, but that underneath all lay the demand for solidity of character and uprightness of purpose, and he made a direct appeal for these ends in morning chapel talk and in Sunday afternoon addresses."

Henry Mahon Beardsley, Class of 1879

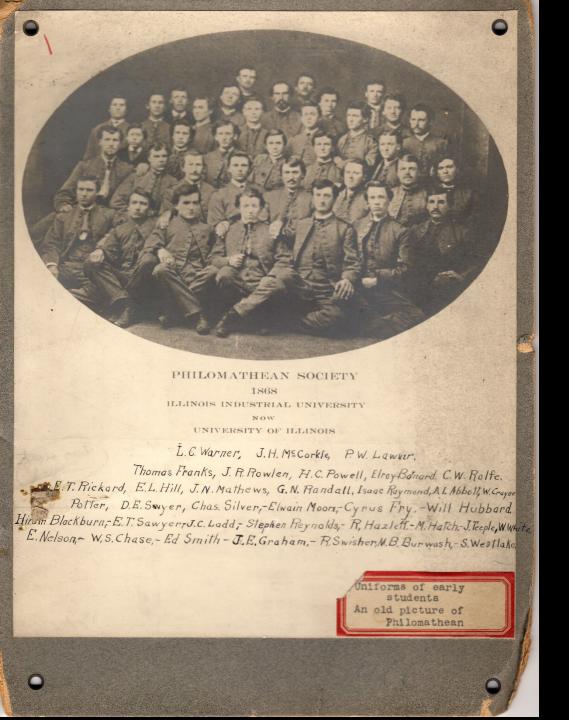
University of Illinois Archives Allene Gregory Research File, 2-1-3

STUDENT CHAPELS: REMINISCENCE

"'Tis the chapel hour again.' The bugles blast sounds through the halls. I hear the hurrying of feet, the roll call and the steady tramp of marching columns. He stands there at the chapel desk. A moment we bow in prayer. Then we listen to the morning talk; some event in the old world, significant of other events to come in the march of civilization. It has its application to ourselves and our life problems. There is an encouragement to manly, courageous living, to doing nobly of our part in the day. The half hour is over, the chapel empty."

Henry Mahon Beardsley, Class of 1879

University of Illinois Archives Allene Gregory Research File, 2-1-3



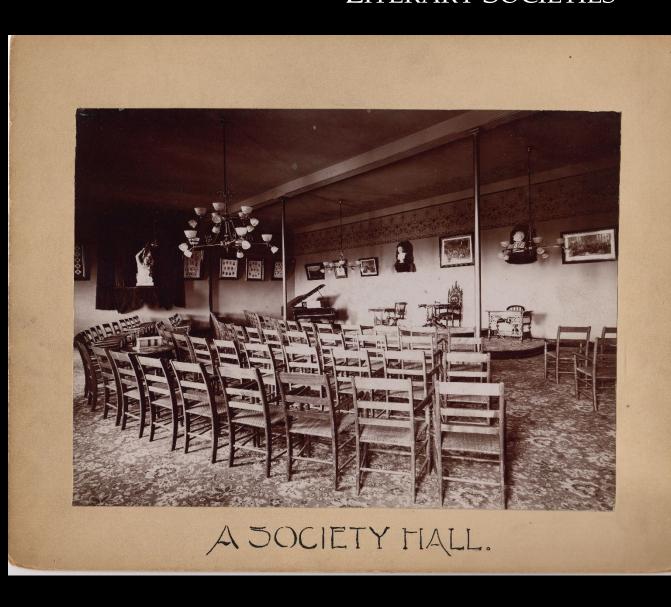
STUDENT ACTIVITIES LITERARY SOCIETIES

Philomathean & Alethenai Societies

Philomathean Society 1868

University of Illinois Archives Photographic Subject File 39/2/20

STUDENT ACTIVITIES LITERARY SOCIETIES



Philomathean & Alethenai Societies

University of Illinois Archives Photographic Subject File 39/2/20

STUDENT ACTIVITIES

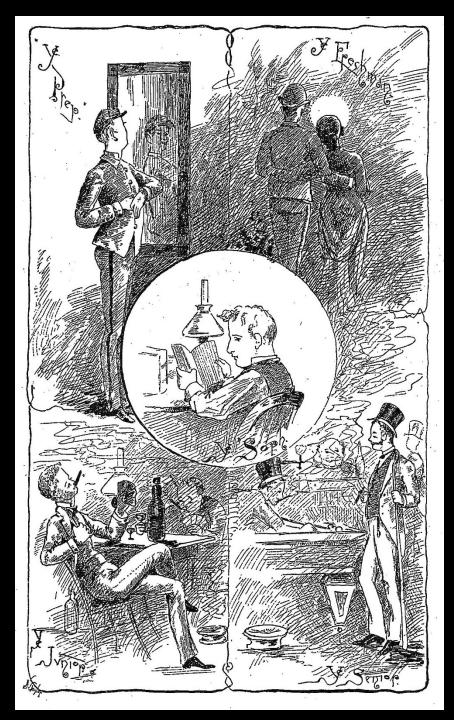
- Whist Parties
- Escaping into Champaign-Urbana (Billiards & Drinking to the consternation of the faculty)

"... the mayors of the cities of Champaign and Urbana be notified that a few of our students have been known to patronize billiard and drinking saloons, and that they be requested that the law is enforced which forbids keepers of saloons to receive the patronage of minors."

> Faculty Minutes, 23 November 1868, University of Illinois Archives Faculty Record, 4/1/1

STUDENT PRANKS

- Usually targeted first-year students or the janitor
- Placing a freshman under a pump (soaking)
- One New Year's reveler discharged a borrowed university musket in the hallway with an overcharge of gunpowder. The concussion blew out the window pane at the end of the corridor.
- Students frequently tossed pails of water and slop on the unsuspecting ascending the building staircase.
- In an adaptation of the tradition of taking the president's horse and leading it up the staircase, Illinois students stole a local dairyman's jersey and took it to the fifth floor. More than a prank the students took care of the animal and utilized the milk until found out.
- Faculty records addressed the problem of students blowing bugles in the hallway at unwelcome hours of the night, another popular nineteenth-century prank.

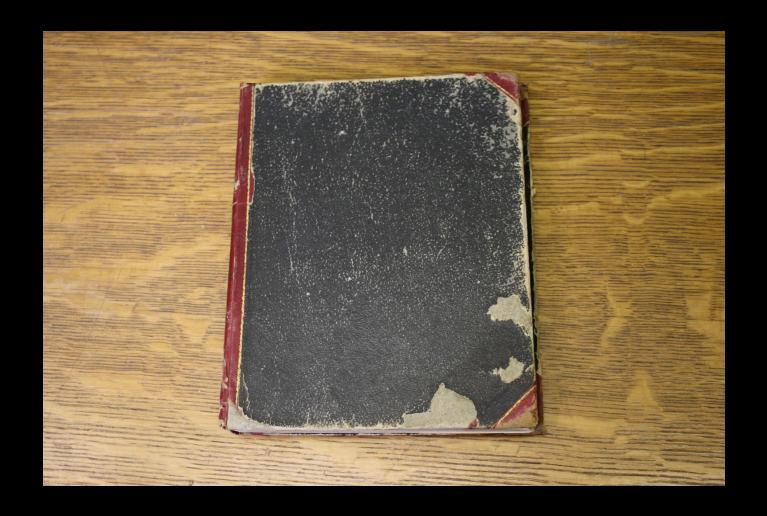


DEPICTED LEVELS OF COLLEGIATE LIFE

Preparatory Year to Senior Year

University of Illinois Archives Otis W. Hoit Papers 1/20/1

TYPICAL STUDENT NOTEBOOK

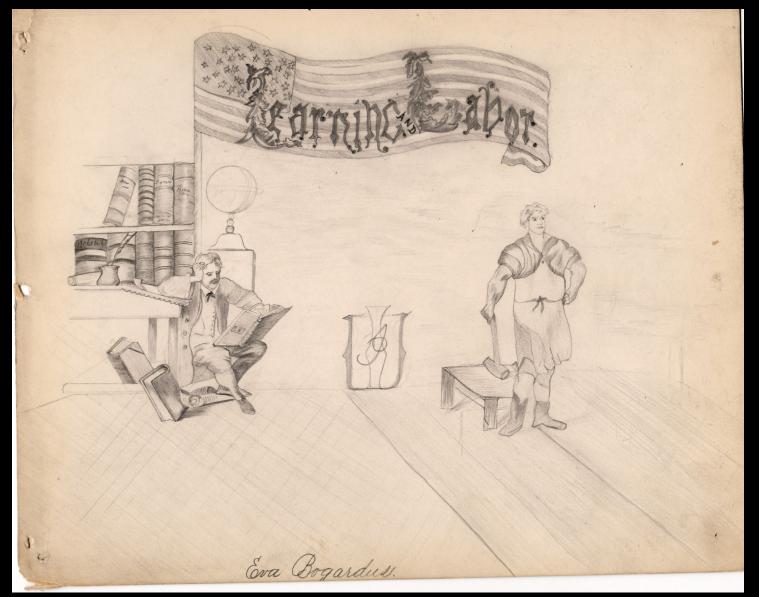


University of Illinois Archives Alice Cheever Notebooks, 1871-1875 41-30-4



"The Students" (College City)

University of Illinois Archives Examination Papers, 1875-1876 41-30-20



"Learning & Labor" Eva Bogardus, Class of 1877

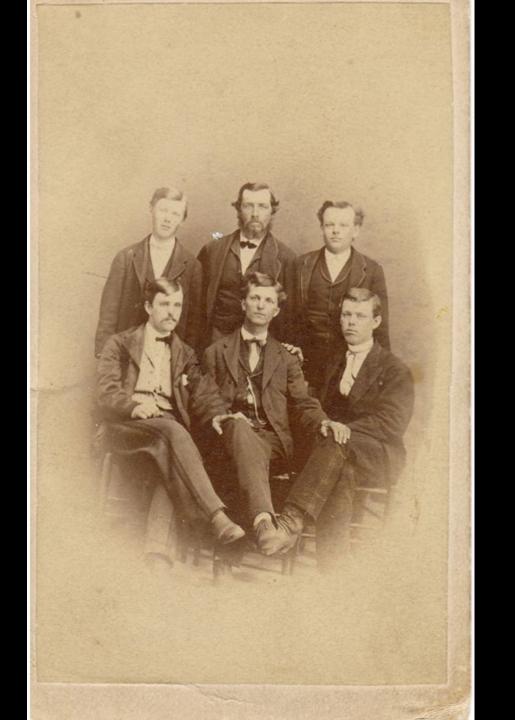
University of Illinois Archives Examination Papers, 1875-1876 41-30-20



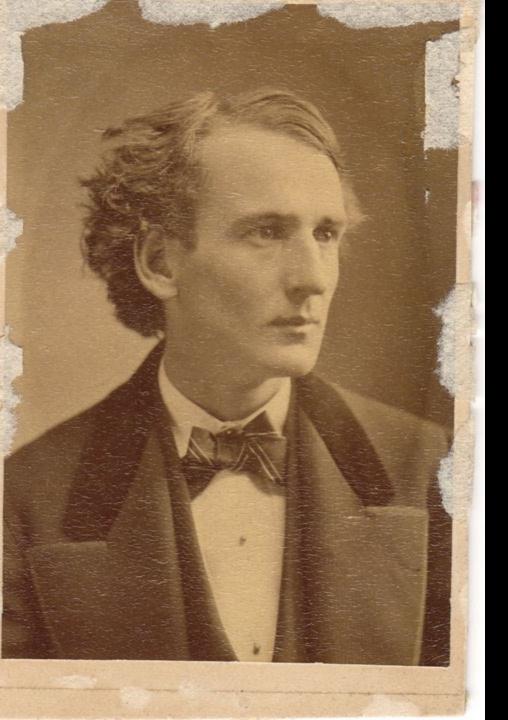
"Enthusiastic Entomologist"

Walter Knibloe, Class of 1876

University of Illinois Archives Examination Papers, 1875-1876 41-30-20



Agricultural Students, 1868 University of Illinois Archives Photographic Subject File 39/2/20



Charles Wallace Silver, 1868 Second Student at the University

University of Illinois Archives Alumni News Morgue File, 1867-1999 26/4/1



Botany Class, Summer 1869 University of Illinois Archives Photographic Subject File 39/2/20, Box 105



Military Drill

"West Point for the Working World"
J.M. Gregory

Arthur Swannell, ca. 1879 I.I.U. Cadet Uniform

University of Illinois Archives Minnie McAllister Album, 1879 41/20/5

Military Drill

"West Point for the Working World"
J.M. Gregory



University of Illinois Archives Photographic Subject File 39/2/20



Students in Military Uniforms, 1872 University of Illinois Archives Photographic Subject File 39/2/20



Store Fronts, north side of Main street and Neil showing muddy streets (Barrett Block) Champaign, ca. 1868

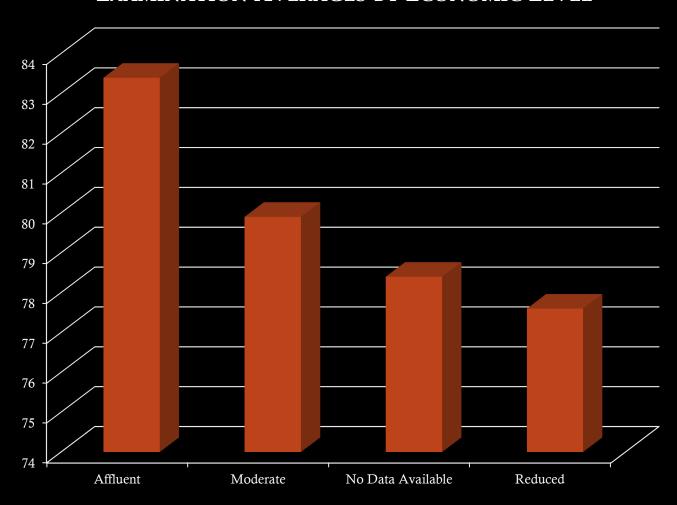
University of Illinois Archives Photographic Subject File 39/2/20, Box 154

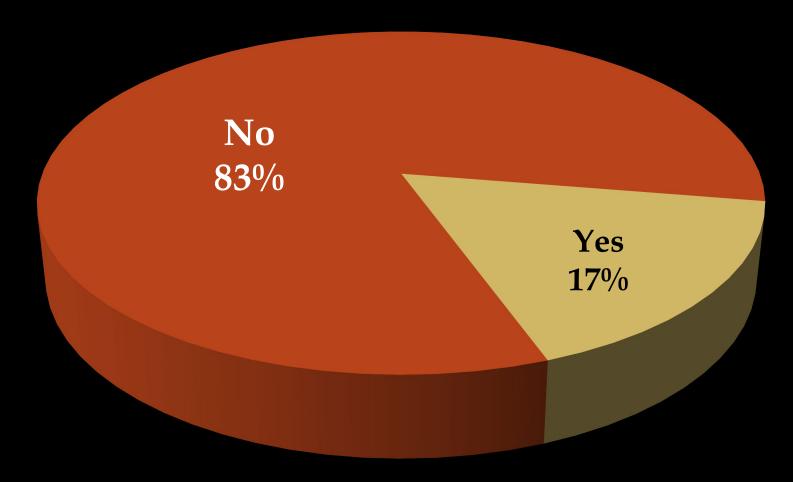
EDUCATING THE SONS OF TOIL: HOW DID THE ORIGINAL 1868 STUDENTS PERFORM AT THE UNIVERSITY?

ORIGINAL STUDENT PERFORMANCE

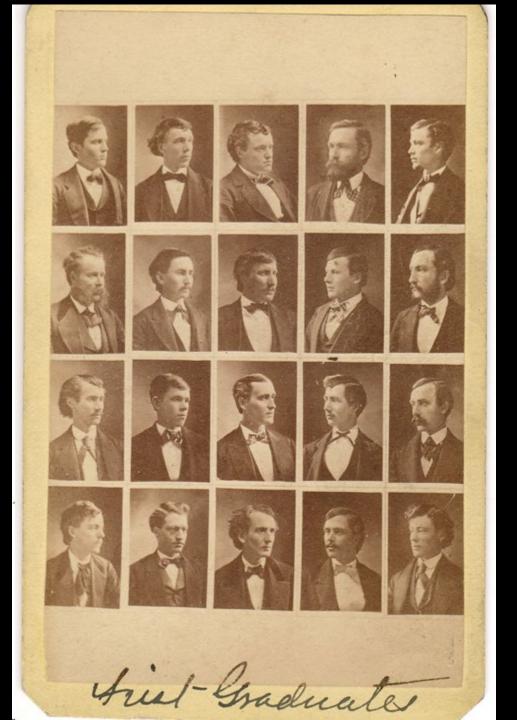
- 22 of the 77 enrollees listed no classes or exam scores on university records; early Faculty Records indicate concern that students were not completing examinations
- The typical student attended for 1.6 years, averaging four terms
- Student averaged eleven courses, completed nine, and averaged 80.5% on exam scores

EXAMINATION AVERAGES BY ECONOMIC LEVEL





GRADUATES OF ILLINOIS INDUSTRIAL UNIVERSITY
1868 ENTERING CLASS



First Graduating Class, 1872 University of Illinois Archives Photographic Subject File 39/2/20

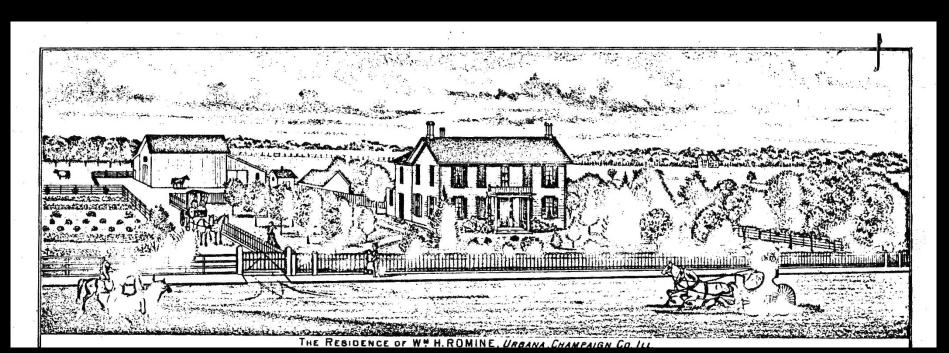
EDUCATING THE SONS OF TOIL: UNIVERSITY OF ILLINOIS STUDENT FIRSTS DIVERSIFICATION OF THE STUDENT BODY



MARY FRANCES ROMINE

Student Number 251, Entered 1870 First Women Enrolled at the University Course of Study – "Elective"

Daughter of a Prominent Champaign County Farmer Married fellow Illini, Hiram Powell Blackburn (Entered 1869)





GABRIEL GREGORY DABRASKIAN

Student Number 392, Entered 1871
First International Student
Enrolled at the University

Course of Study - Agriculture

ARMENIA

University of Illinois Archives John L Pierce Memory Book 26-30-4

TUNETARO YAMAOU
Student Number 677, Entered 1872
First Asian Student
Enrolled at the University

Course of Study – Not Specified

International student from JAPAN





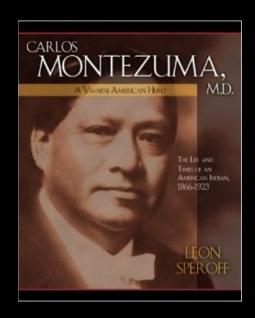
CARLOS "WASSAJA"

MONTEZUMA

Student Number 1580, Entered 1882
First Native American Student

Course of Study - Chemistry

Enrolled at the University



Rodrigo AGUILERA

Student Number 1977, Entered 1885 First Latino Student Enrolled at the University

Course of Study – Civil Engineering

Parral, Chihuahua, MEXICO

Jonathan A. Rogan
Student Number 2189, Entered 1887
First African American Student
Enrolled at the University

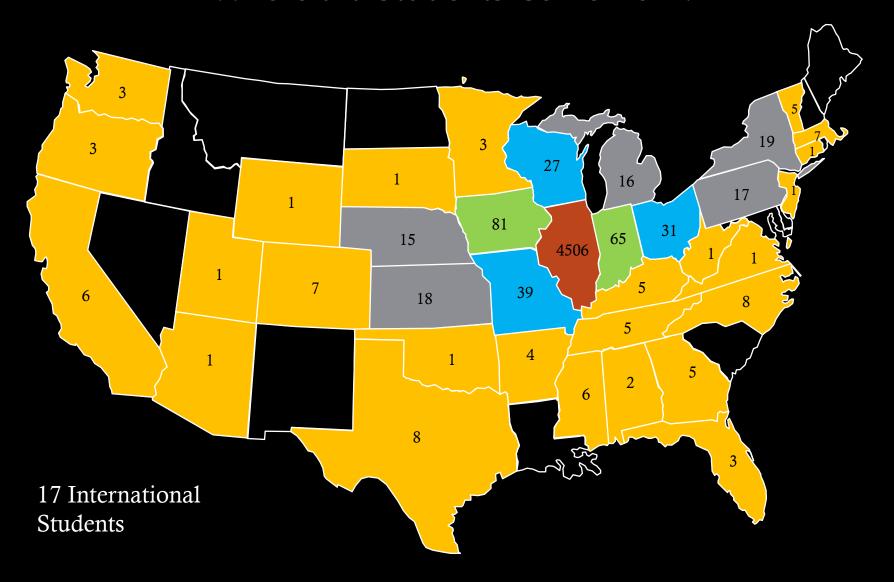
Course of Study – Civil Engineering

By comparison, Henry Ossian Flipper was the first African American student at USMA – West Point, graduating a decade before Rogan's attendance.

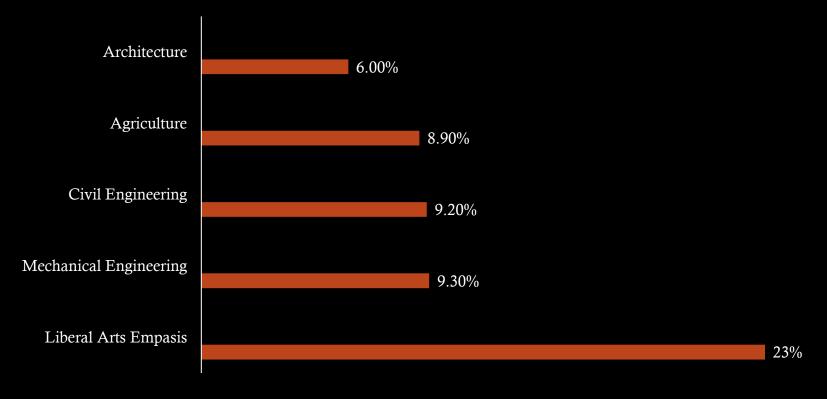
FROM 1868 TO 1894 STUDENT DEMOGRAPHICS

- From 1868 to 1894 approximately 4,975 students enrolled; 81.6% male, 18.3% female
- The University steadily grew from 77 students in the spring of 1868, to 130 new students with the inclusion of women in 1870, to 416 new students in 1894.
- In the 1890s enrollment expanded substantially
- 68.8% of students were born in Illinois
- Average age at admission was 19.4 years
- 25% of attendees graduated from the University

Admission Residences, 1868 – 1894 Where did Students Come from?

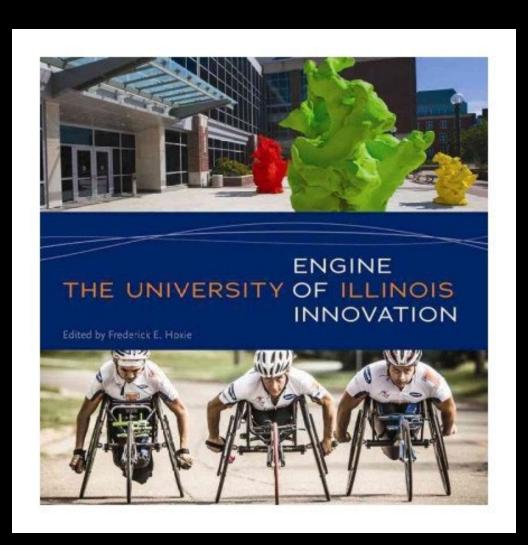


Courses of Study – 1868 to 1894



Other popular courses were Natural History/Science; Chemistry; Commercial; English & Modern Languages

EARLY STUDENTS – MAKING AN IMPACT



Sesquicentennial reflections on 150 years of innovation and contribution by the University of Illinois

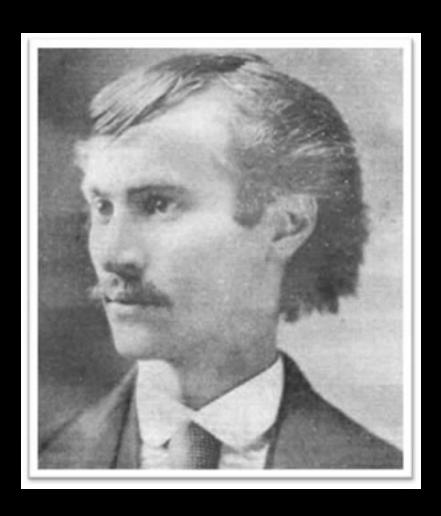
Frederick E. Hoxie (ed.) *University of Illinois : Engine of Innovation*. Urbana, IL: University of Illinois Press, 2017.

NOTABLE STUDENTS

Professors & Physicians

JAMES NEWTON MATTHEWS

Student Number 1, Entered 1868 Course of Study - Agriculture

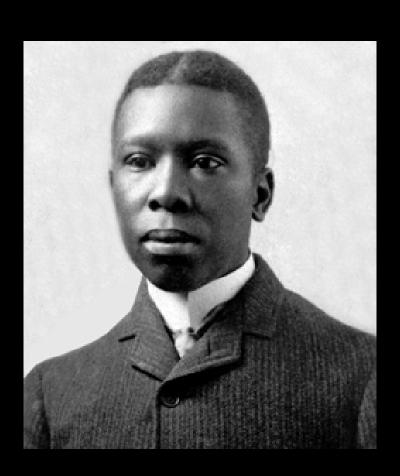


Encouraged & inspired a young African American poet - Paul Laurence Dunbar - who gained national reputation



EARLY STUDENTS – MAKING AN IMPACT

Paul Laurence Dunbar (1872 – 1906)



Dunbar would later thank Matthew's for his encouragement by dedicating a poem to his mentor.

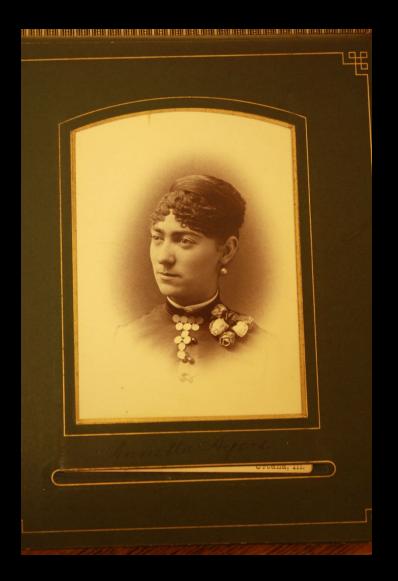
To James Newton Matthews,

All round about, the clouds encompassed me;
On every side I looked, my weary sight
Was met by terrors of Plutonian night;
And chilling surges of a cruel sea
That beat against my stronghold ceaselessly,
Roared rude derision at my hapless plight;
And hope, which I had thought to hold so tight,
Slipped from my weak'ning grasp and floated free.

But when I thought to flee the unequal strife,
As wearied out I could not bear it more,
Fate gave the choicest gem of all her store, -And noble Matthews came into my life.
He warmed my being like a virile flame,
And with his coming, light and courage came!

ANNETTA AYERS

Student Number 1556, Entered 1880 Course of Study – Literature & Science



Professor & Physician

Professor of Physiology and Obstetrics at the Women's Medical College in Chicago and the first woman on the medical staff at Cook County Medical Hospital

> University of Illinois Archives Annetta A Saunders Class Album 41/20/10

FREDA DETMERS Student Number 1794, Entered 1883 Course of Study – Natural History

Professor & American Botanist

- First woman to hold a research position for the Ohio Agricultural Experiment Station (Ohio State University)
- Her research focused on plant pathology problems, weed naturalization and control.
- Became Curator of the USC Herbarium in California

POLITICIANS



JAMES HENDERSON KYLE

Student Number 442, Entered 1871 Course of Study – Literature & Science

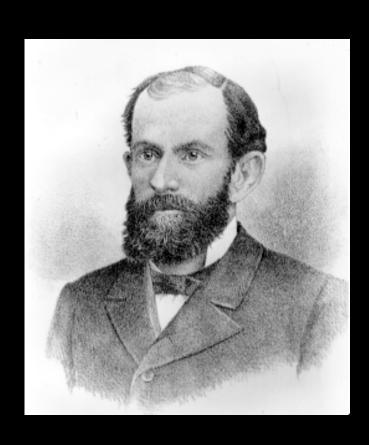


United States Senator

South Dakota 1891 - 1901



JAMES BENTON GRANT Student Number 721, Entered 1872 Course of Study – Civil Engineering

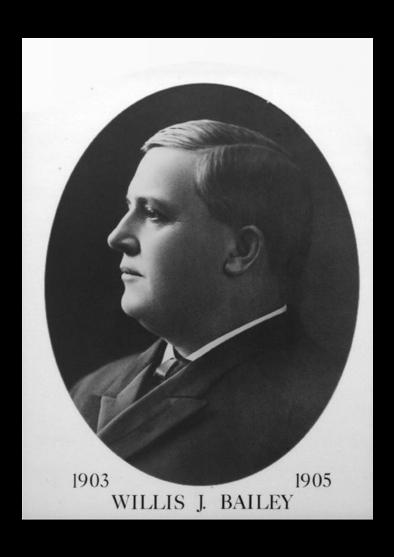


Governor of Colorado 1883 - 1885



WILLIS JOSHUA BAILEY

Student Number 708, Entered 1872 Course of Study – Agriculture



U.S. Congressman

Governor of Kansas 1901-1905

FRANK CHARLES WHITE

Student Number 1146, Entered 1876 Course of Study – Civil Engineering



Governor of North Dakota 1901-1905

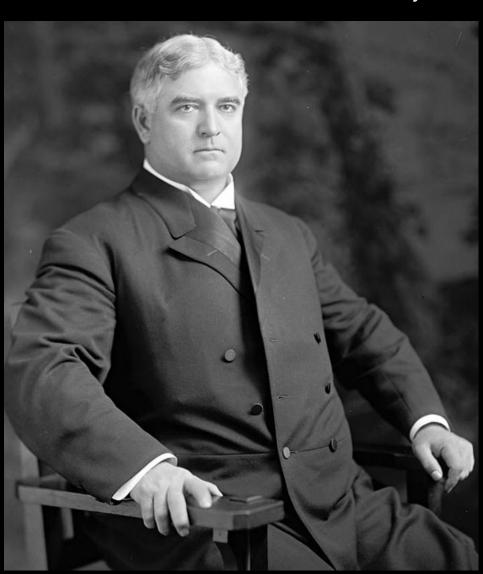
Treasurer of the United States 1921-1928

University of Illinois Archives Corda Lucas Album 41/20/6



ASHTON COKAYNE SHALLENBERGER

Student Number 1403, Entered 1879 Course of Study – Literature & Science



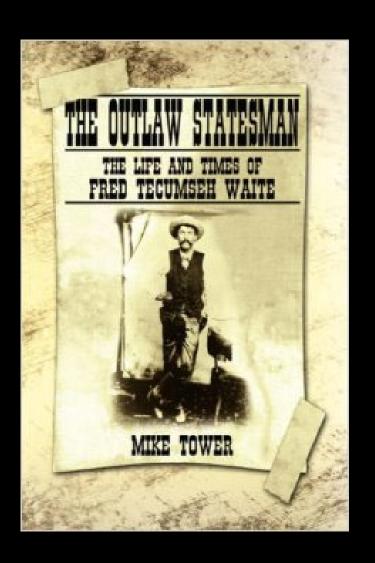
U.S. Congressman

Governor of Nebraska 1909-1911

OUTLAWS

FREDERICK TECUMSEH WAITE

Student Number 756, Entered 1873 Course of Study – Literature & Science



Called the "Outlaw Statesman"

Rode with Billy the Kid's gang, eventually leaving to serve the Chickasaw nation in Oklahoma

Tower, Mike. *The Outlaw Statesman: The Life and Times of Fred Tecumseh Waite*. Bloomington, IN: AuthorHouse, 2007.

DESIGNERS & DREAMERS



WILLIAM ALCIPHRON BORING

Student Number 1669, Entered 1881 Course of Study - Architecture



Co-Architect of the Second Ellis Island Immigration Station in New York



JOHN BUCK LEONARD Student Number 1802, Entered 1883 Course of Study – Civil Engineering



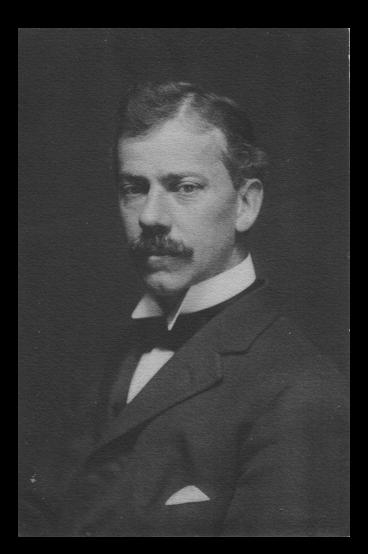
Bridge Designer & Engineer

Early Advocate of Reinforced Concrete Structures after 1906 San Francisco Earthquake

Fernbridge, CA (Built 1911) – only bridge in 190 miles of the Eel river that has never been destroyed by floods – and it is the last bridge before the Pacific Ocean – taking the full force of the river at flood stage



HENRY BACON Student Number 1934, Entered 1885 Course of Study - Architecture



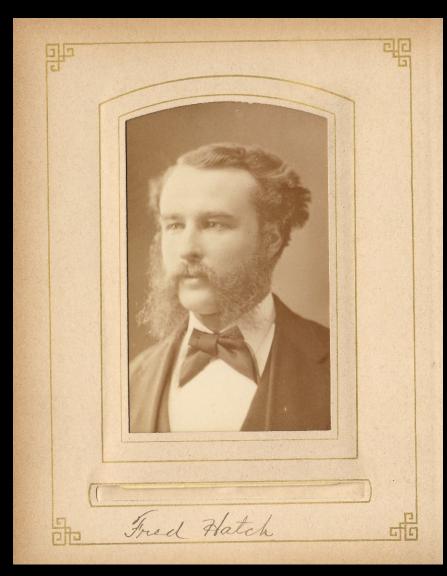
Architect Lincoln Memorial Washington DC



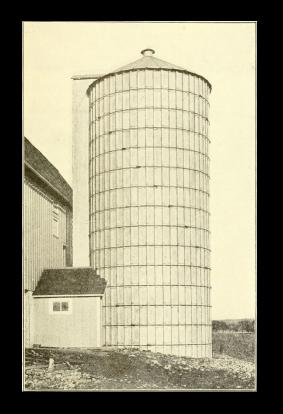
Inventors & Industrialists



FREDERICK LEWIS HATCH Student Number 181, Entered 1869 Course of Study - Agriculture



Credited with building first Grain Silo in America – a mainstay of the American Agricultural Landscape





LOUIS LATZER Student Number 664, Entered 1872 Course of Study - Agriculture



Source: Highland Historical Society, Highland, IL

President of PET Milk Company – Credited with developing methods to eliminate spoilage & enhance product





CHARLES WILLIAM POST

Student Number 200, Entered 1869 Course of Study – Military & Commercial



Founder C.W. Post Cereal Company A mainstay of American culture

