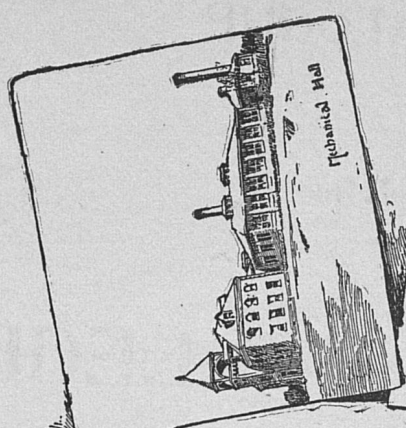
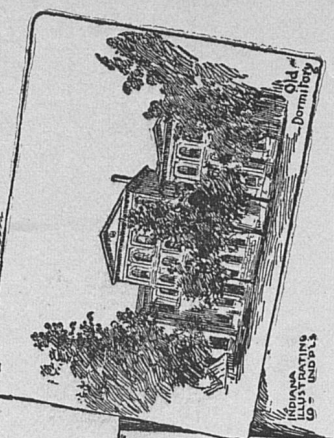


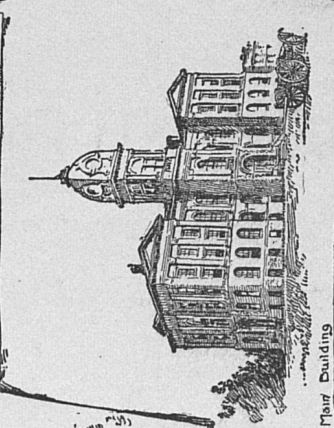
Experiment Station



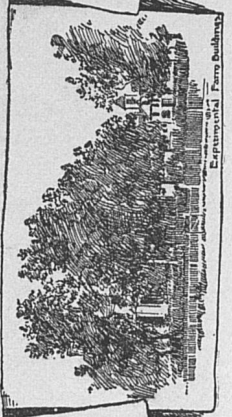
Hydrant Mill



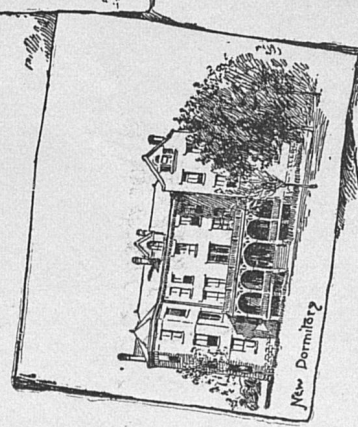
Old Dormitory



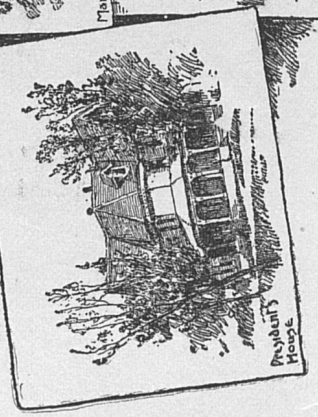
Main Building



Experimental Farm Building



New Dormitory



President's House

INDIANA  
ILLUSTRATING  
G. S. UNOPLS

CATALOGUE

OF THE

STATE COLLEGE

OF KENTUCKY

FOR

1893=1894.

LEXINGTON, KY.:  
PUBLISHED BY THE COLLEGE.  
1894.



—  
PRESS OF THE  
TRANSYLVANIA PRINTING COMPANY,  
LEXINGTON, KY.  
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Principal of the Normal Department and Professor of Pedagogy.

JAMES H. WELLS, B. M. E.,  
Assistant Professor of Mechanical Engineering.

JAMES G. WHITE, A. M.,  
Professor of Mathematics and Astronomy.

---

### Other Officers.

MISS MARY HODGES,  
Stenographer.

J. W. PRYOR, M. D.,  
Surgeon of the Battalion.

RURIC N. ROARK, A. B.,  
Secretary of the Faculty.

JAMES G. WHITE, A. M.,  
Business Agent.



## Experiment Station of the State College.

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### Board of Control.

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R. A. SPURR.

DAVID H. JAMES.

J. K. PATTERSON, President of the College.

M. A. SCOVELL, Director, Secretary.

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M. A. SCOVELL, Director.

A. M. PETER, }  
H. E. CURTIS, } Chemists.

H. GARMAN, Entomologist and Botanist.

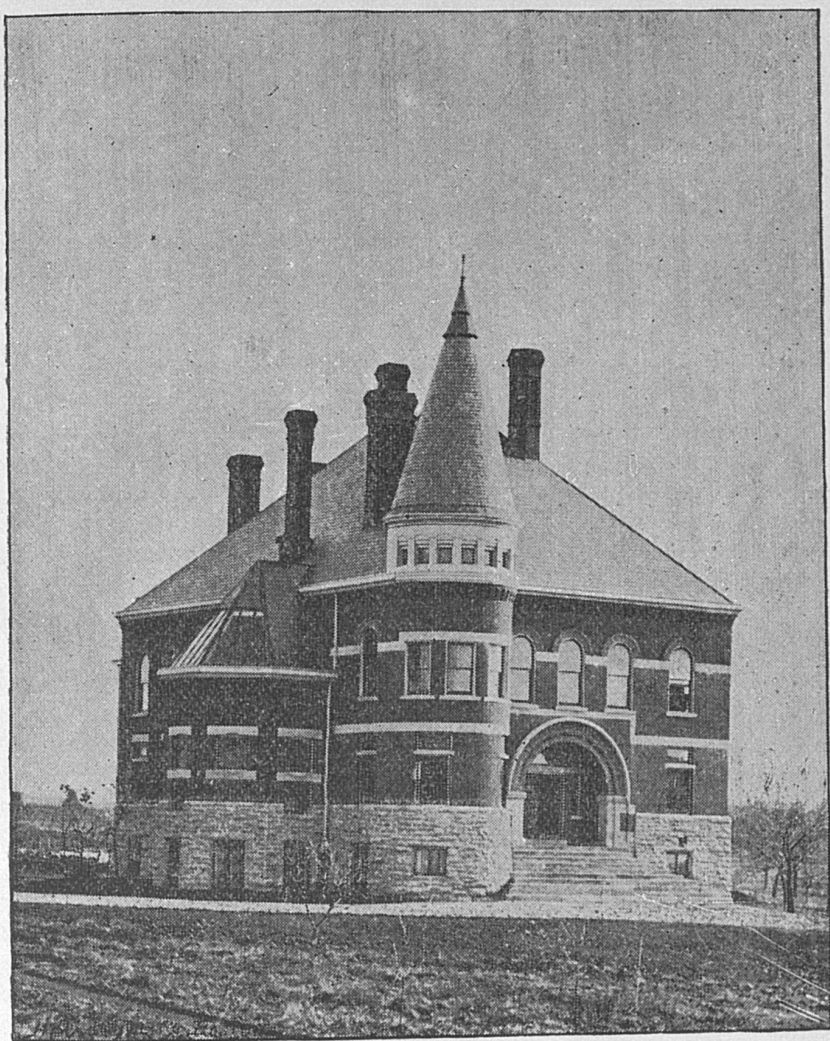
C. W. MATHEWS, Horticulturist.

J. S. TERRILL, Assistant to Entomologist and Botanist.

A. T. JORDAN, Assistant to Horticulturist.

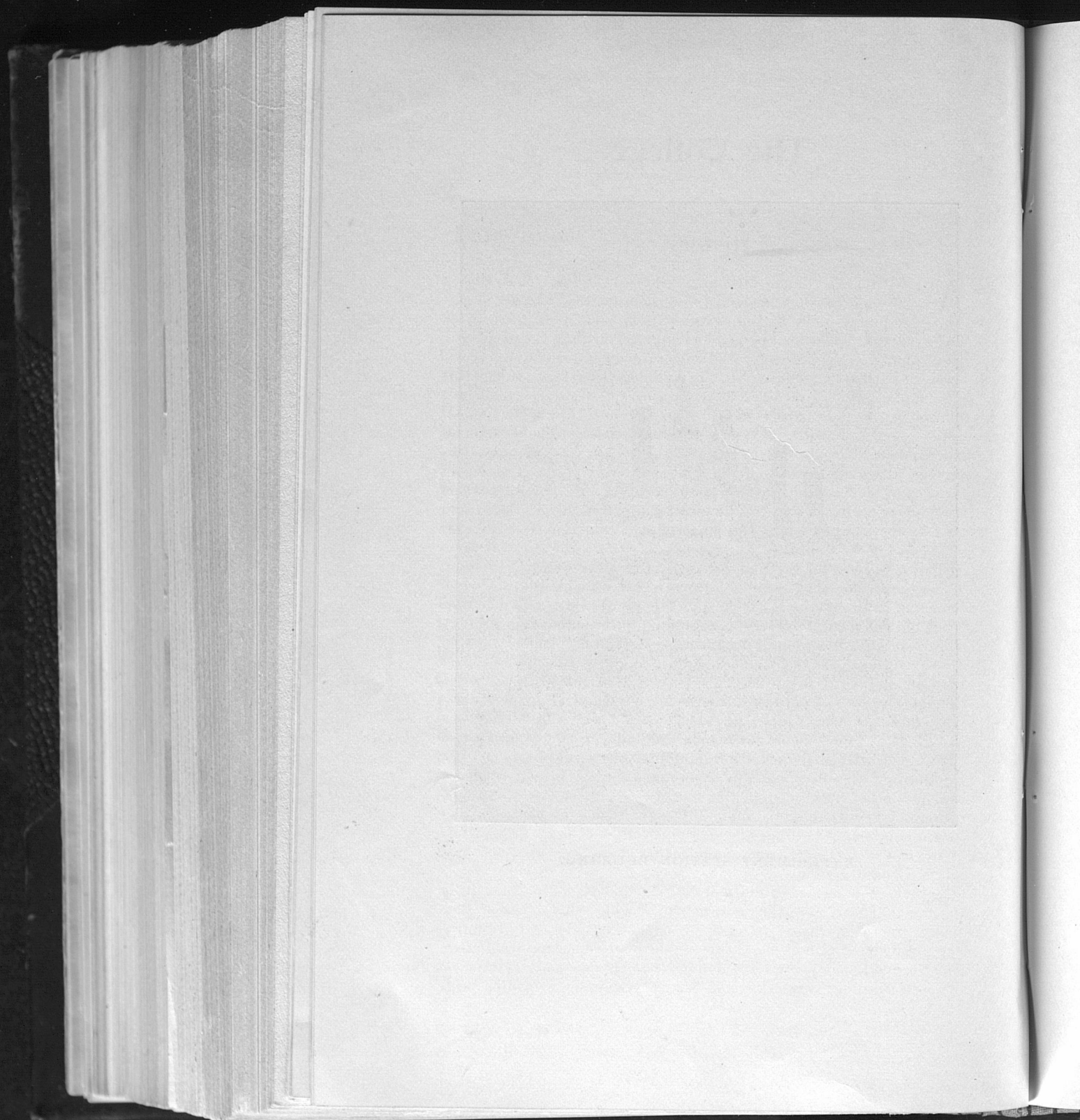
T. S. HAWKINS, Foreman of Farm.

MISS ALICE M. SHELBY, Stenographer.



EXPERIMENT STATION BUILDING.





# The College.

## History.

AGRICULTURAL and Mechanical Colleges in the United States owe their origin to an act of Congress, entitled "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic, arts," approved July 2, 1862. The amount of land donated was 30,000 acres for each Representative in the National Congress. Under this allotment Kentucky received 330,000 acres. Several years elapsed before the Commonwealth established an Agricultural and Mechanical College under the act. When established it was not placed upon an independent basis, but was made one of the Colleges of Kentucky University, to which Institution the annual interest of the proceeds of the Congressional land grant was to be given for the purpose of carrying on its operations. The land-scrip had meanwhile been sold for fifty cents per acre, and the amount received—\$165,000—invested in six per cent. Kentucky State bonds, of which the State became custodian in trust for the College.

The connection with Kentucky University continued till 1878, when the act of 1865, making it one of the Colleges of said University, was repealed, and a Commission was appointed to recommend to the Legislature of 1879-80 a plan of organization for an institution, including an Agricultural and Mechanical College, such as the necessities of the Commonwealth required. The city of Lexington offered to the Commission (which was also authorized to recommend to the General Assembly the place, which, all things considered, offered the best and greatest inducements for the future and permanent location of the College) the City Park, containing fifty-two acres of land, within the limits of the city, and thirty thousand dollars in city bonds for the erection of buildings. This offer the county of Fayette supplemented by twenty thousand dollars in county bonds, to be used either for the erection of buildings or for the purchase of land. The offers of the city of Lexington and of the county of Fayette were accepted by the General Assembly.

By the act of incorporation, and the amendments thereto, constituting the charter of the Agricultural and Mechanical College of Kentucky, liberal provision is made for educating, free of tuition, the energetic young men of the Commonwealth whose means are limited. The Normal Department, for which provision is also made, is intended to aid in building up the Common School system by furnishing prop-



erly qualified teachers. This College, with the associate departments which will, from time to time, be opened as the means placed at the disposal of the Trustees allow, will, it is hoped, in the no distant future do a great work in advancing the educational interests of Kentucky. Being entirely un denominational in its character, it will appeal with confidence to the people of all creeds and of no creed, and will endeavor, in strict conformity with the requirements of its organic law, to afford equal advantages to all, exclusive advantages to none. The liberality of the Commonwealth in supplementing the inadequate annual income arising from the proceeds of the land scrip invested in State bonds, will, it is believed, enable the Trustees to begin and carry on, upon a scale commensurate with the wants of our people, the operations of the institution whose management and oversight have been committed to them by the General Assembly of Kentucky.

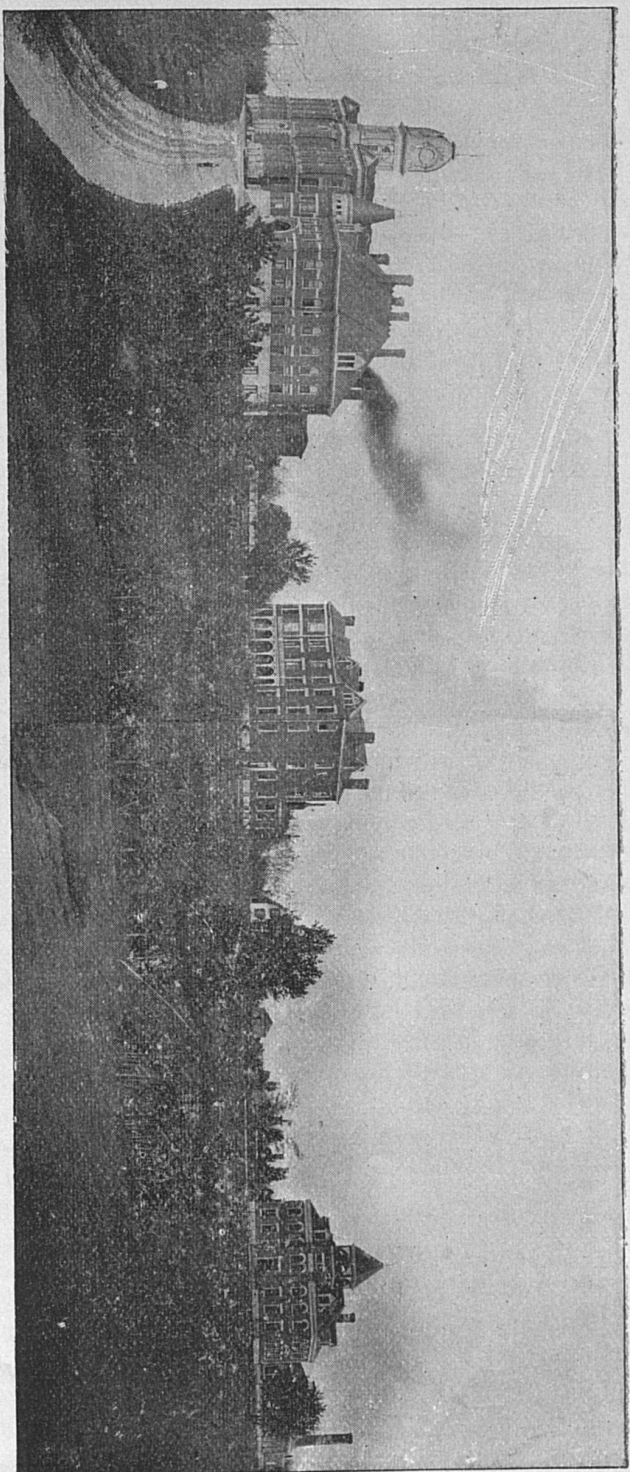
### Location.

The Agricultural and Mechanical College of Kentucky is established in the old City Park grounds of the City of Lexington, given to the Commonwealth for this purpose. The site is elevated, and commands a good view of the city and surrounding country.

Lexington is now the most important railroad center in Kentucky, being in immediate communication with Louisville, Cincinnati, Maysville, Chattanooga, and with more than seventy counties in the Commonwealth. The long established reputation of the city for refinement and culture renders it attractive as a seat of learning, and the large body of fertile country adjacent, known as the "Blue Grass Region," with its splendid stock farms, affords unsurpassed advantages to the student of agriculture who desires to make himself familiar with the best breeds of horses, cattle, sheep and swine in America.

### Grounds.

The campus of the College consists of 52 acres of land, located within the corporate limits of Lexington. The South Limestone street electric car line extends along the greater part of its western border, giving opportunity to reach in a few minutes any part of the city. The campus is laid out in walks, drives and lawns, and is planted with a choice variety of native and exotic trees and shrubs to which additions are constantly being made. A portion of the land has recently been reserved for a botanical garden in which will be grown the more desirable native plants, with a view to testing their adaptability to cultivation, and to give increased facilities to students



MAIN BUILDING.

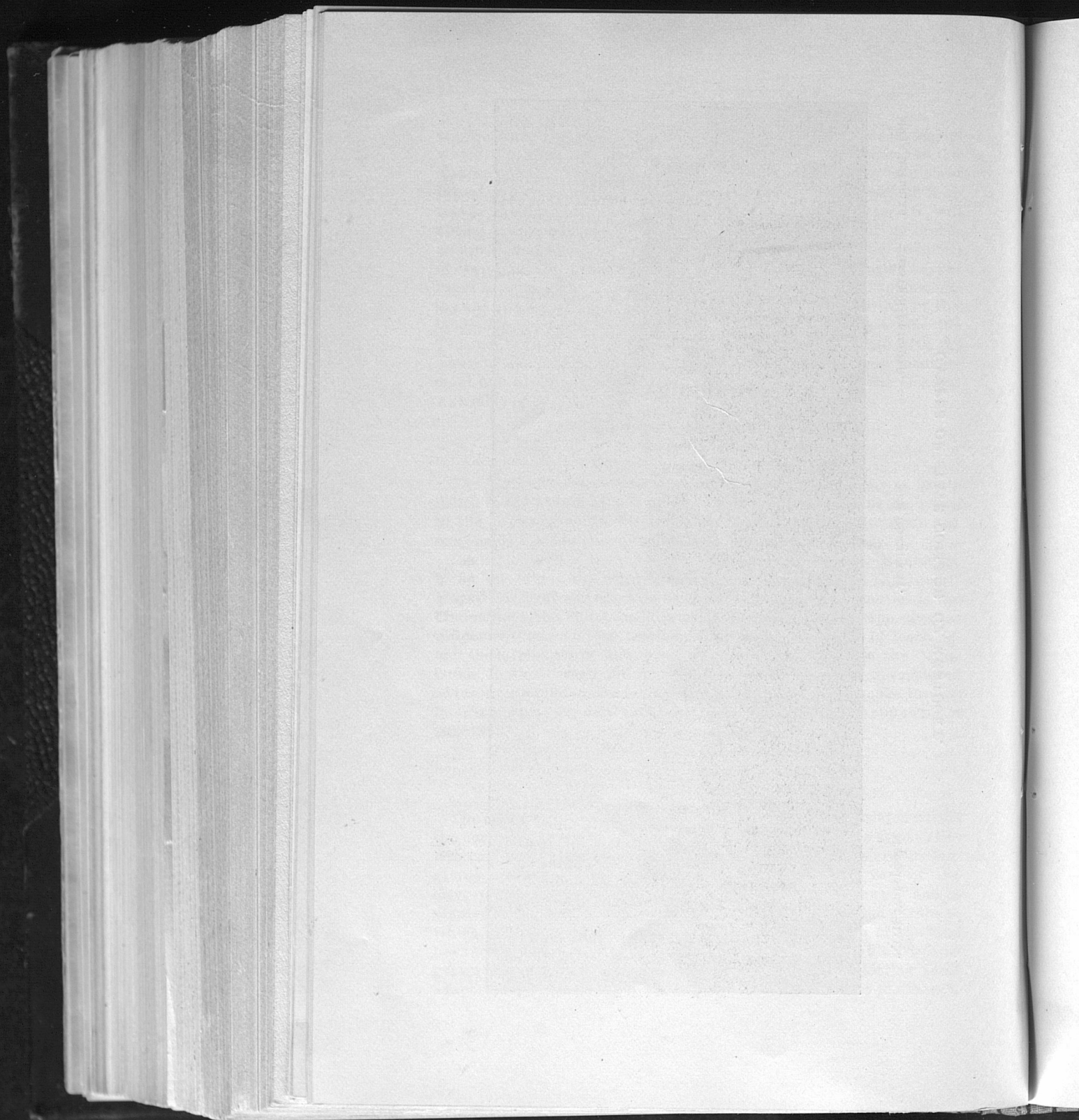
STATION BUILDING.

NEW DORMITORY.

MECHANICAL HALL.

CAMPUS OF STATE COLLEGE OF KENTUCKY.





taking agricultural and biological courses. Two and a half acres forming the north-east portion of the campus, enclosed and provided with a grand stand, is devoted to the field sports of students.

About three-quarters of a mile south of the campus, on the Nicholasville pike, an extension of South Limestone street, is the Experiment Station Farm, consisting of forty-eight and a half acres. Here the field experiments of the Station are conducted, and students have opportunities to witness tests of varieties of field crops, dairy tests, fertilizer tests, fruit spraying tests, in short all of the scientific experimentation of a thoroughly equipped and organized Station. The front of the farm is pasture and orchard. The back portion is divided off into two hundred one-tenth acre plots, for convenience in making crop tests.

### Buildings.

The main college building is a structure of stone and brick, 140 feet long and 68 feet in width. It contains the office of the President and of the Business Agent, and on the third floor, counting the basement floor as one, is the Chapel, in which each day the students and Faculty meet, and in which are held public gatherings and such other meetings as bring together the entire student body. The remaining space in this building is occupied by recitation rooms and by the society rooms of the students.

The Station building is a handsome structure, well planned for the object for which it is made. It is seventy feet in length by fifty-four feet in width, with a tower projection in front, and an octagonal projection eighteen by eighteen on the north side. The building is two stories high, and has a basement eleven feet from floor to ceiling. The main entrance is on the first floor, on the west side of the building, through an archway fifteen feet wide. The basement is occupied in part by the Station and in part by the College. The next floor above is devoted to office and laboratory work of the Station, while the upper floor accommodates the College work in chemistry.

The building devoted to Mechanical Engineering covers altogether an area of about 10,897 square feet, is constructed of stone and pressed brick, and is well furnished with modern conveniences for work in this branch of engineering. It contains rooms as follows: Recitation room, 34'×25'; recitation room, 25'×23'; library and exhibition room, 25'×23'; office 10'×12'; drawing room, 34'×35'; engine room, 20'×30'; tool room, 30'×6'; wash room, 30'×10'; boiler house, 27'×27'; wood shop, 80'×34'; machine shop, 42'×35'; blacksmith shop, 35'×35'; foundry, 35'×37'.

A new brick two-story building has been erected and furnished with modern conveniences for the work in Veterinary Medicine.

Two large brick dormitories on the campus afford boarding con-



veniences for students who wish to lessen expense in this direction. Other buildings on the campus are a brick dwelling for the President, and a frame cottage at present occupied by one the College employes.

At the Experiment Farm is a brick dwelling occupied by the Director of the Station, and the usual farm buildings for the care of tools, the protection of stock, and the like.

### Traveling Expenses of Students.

By the terms of the recent legislation upon the Agricultural and Mechanical College of Kentucky, a county appointee is entitled to have his traveling expenses from home to the College and return paid by the College, on the following conditions:

1st. He must be appointed according to law, a copy of which is in the hands of each County Superintendent of Schools.

2d. He must travel from home to the College by the shortest, least expensive and most expeditious route, and take receipts for all necessary expenses of travel, depositing the same upon arrival with the President of the College.

3d. He must present himself for matriculation within one week after the beginning of the fall term of the collegiate year.

4th. He must bring a certificate of good moral character, signed by two or more well known and responsible citizens of his county.

5th. He must pass creditably the entrance examination required for admission.

6th. He must remain a student of the College for ten consecutive months, or one collegiate year.

7th. He must maintain during the collegiate year such class standing as will enable him to pass the final examinations at the end of the year.

8th. He must maintain a good character and maintain such class standing as the regulations require.

If at the end of the collegiate year the foregoing conditions have been complied with, the President of the College shall certify the fact to the Treasurer of the College, who, upon said certificates as vouchers, shall pay to the appointee the amount shown by the receipts aforesaid, and in addition thereto the sum for discharging the necessary expenses to be incurred in returning home.

## College Expenses.

The necessary expenses of a student while at College need not exceed the following estimates. As a rule the less pocket money allowed by parents or guardians, the better it is for the pupil. When supplies of pocket money are kept short, the opportunity for contracting vicious habits is correspondingly diminished. Students should not be allowed by their parents to create any debts. All moneys intended for the use of the students should be deposited with the Commandant.

For county appointees occupying a room in the dormitory and boarding in the common mess, the necessary expenses are as follows:

|                                          |          |
|------------------------------------------|----------|
| Tuition free.....                        | \$000.00 |
| Matriculation free.....                  | 000.00   |
| Room rent free .....                     | 000.00   |
| Use of furniture in room.....            | 2.50     |
| Washing, about .....                     | 10 00    |
| Uniform .....                            | 19.00    |
| Board, 38 weeks, at \$2.25 per week..... | 85.00    |
| Books, about .....                       | 8.00     |
| Total.....                               | \$125.00 |

Each room must be provided by each occupant thereof, *at his own expense*, with a good mattress, three comforts or blankets, one pillow, three pillow-slips, four sheets, looking-glass, blacking-brush, hair-brush, clothes-broom or brush; some of these articles may be brought from home by the student.

For students who are not supplied with appointments from the Legislative Representative Districts of the Commonwealth, and who board in private families, the necessary expenses will be as follows:

|                                                         |                      |
|---------------------------------------------------------|----------------------|
| Tuition fee .....                                       | \$15.00              |
| Matriculation fee.....                                  | 5.00                 |
| Board and lodging, 38 weeks, at \$3.50 to \$4 per week. | 133 00 to \$152.00   |
| Washing .....                                           | 10.00                |
| Books and stationery.....                               | 10.00                |
| Total .....                                             | \$173.00 to \$182.00 |

Those who occupy rooms in the dormitory pay \$6.50 each (yearly) for the use of a room and its furniture. A standing deposit of \$5 is required from each student, which deposit is refunded when his connection with the College is terminated, less the amount which may be assessed against him for the damages done to the buildings, furniture or premises. All damages, injuries, defacements, etc., which rooms and furniture in the dormitory sustain during occupancy will



be charged to the occupants thereof. All injuries, damages, defacements, etc., which the halls and dining-room sustain will, unless specifically traced, be charged to the occupants of the respective sections collectively.

### Boarding.

For the accomodation of students sent as beneficiaries of Legislative Representative Districts of the State, rooms for one hundred and forty students are provided in the dormitories. To these good substantial board is furnished at \$2.25 per week, payable weekly in advance; but no student under seventeen years of age will be permitted to room in the dormitories, unless all of his classes shall be in the regular collegiate courses. Good boarding, with fuel, lights and furnished room, can be obtained in private families at rates varying from \$3.50 to \$4 per week.

The students who board in the dormitories are, for business purposes, organized at the beginning of the collegiate year under a Chairman and Secretary of their own choice, whose successors are elected on the first Tuesday of each term, and who serve for one term. At the business meeting held on Tuesday night of each week, the weekly dues, \$2.25, are paid. The boarding department is managed by a Board consisting of the President of the College, the Commandant, a Treasurer, who is a member of the Faculty, and into whose hands all the weekly dues are placed when collected, a Steward, a Chairman and a Secretary selected by the students. It will thus be seen that the boarding department has no official connection with the College authorities. The College, as such, does not board the students, and is in no sense responsible for any debts created by the boarding department. Two members of the Faculty, in their individual capacity, assist in the management of its funds.

No dormitory facilities are provided for women.

### Beneficiaries.

Each Legislative Representative District is allowed to send, on competitive examination, *one properly prepared student* each year, to this College, free of tuition charge.

Beneficiaries are appointed on competitive examination. A Board of Examiners is appointed for this purpose by the County Superintendent of common schools. The results of examination are reported to the Superintendent, who, from the data thus furnished, selects the appointee. Examinations are made upon subjects transmitted to the County Superintendent by the Faculty of the College. One appointment is made each year.

Appointments are made by the County Superintendent between the first day of June and the first day of August of each year. Appointments when made should be immediately certified to the President of the College.

Appointments for the College proper, viz: the Agricultural, Mechanical Engineering, Civil Engineering, Scientific, Classical and Veterinary courses are all valid for the term of years necessary to complete the course of study in which the appointee matriculates. This includes the course in the Academy.

It follows from the above that a county which makes its appointments regularly according to law will have for the session of 1893-4 one appointee in the College, for the session of 1894-5 two appointees, for the session of 1895-6 three appointees, for the session of 1896-7 four appointees. When the first appointee completes his course, or ceases to be a student, another appointee takes his place. When the quota of a county is full it will have at least four appointees in regular attendance.

Each appointee is required to pass an entrance examination at the College on the subjects comprising all that is embraced in Arithmetic, English Grammar, Geography and United States' History, in the Common School Course.

All persons are eligible between the ages of fourteen and twenty-four who have completed the Common School Course—preference being given to young men or women whose means are limited, to aid whom the provision is specially intended.

Any person not an appointee may enter the College on payment of fees, but no one who is not an appointee receives traveling expenses or is exempt from payment of fees.

### Appointees to the Normal Course.

The law makes provision for the appointment of four teachers, or persons preparing to teach, each year. Appointments may be made and certified to the President of the College between the first day of July and the thirty-first of December of each year.

Appointments to the Normal School are tenable for one year.

Applicants for appointment are examined by a Board of Examiners appointed by the County Superintendent on subjects transmitted by the Faculty, viz: upon Arithmetic, English Grammar, United States' History and Geography. They should not be less than seventeen years of age. They are also required to pass an entrance examination at the College. They must likewise bring certificates of good moral character.

Matriculates in the Normal Department will be required to sign an obligation to teach in the common schools of Kentucky for as many months as they receive free tuition.



### Student Labor.

The work necessary for carrying on the agricultural and horticultural operations of the College is done by the students, and is paid for at rates varying from six to ten cents per hour. Its design is two-fold: to put in practice the instruction received in the class-room, and to assist students who are in need of money. The experience of this College is that of Agricultural Colleges generally—that compensated labor is not remunerative to the College.

*The College holds itself under no obligation to furnish compensated labor to students.*

Students are paid monthly for the services rendered, and apply the money as they see proper.

*No student, however, should come to this College expecting to maintain himself exclusively by compensated labor. At least seventy-five dollars per annum, exclusive of his earnings while here, should be at the command of every student who wishes to avail himself of the advantages of the compensated labor system.*

### Certificates of Character.

All applicants for admission into any class in the College or Academy must bring satisfactory testimonials of good moral character.

### Departments.

(Arranged in alphabetical order).

The instruction work of the College is prosecuted in departments, each in charge of a responsible head, who is a member of the Faculty proper. The seventeen departments at present organized are as follows:

1. Agriculture, Horticulture and Botany.—Prof. Mathews.
2. Anatomy and Physiology.—Dr. Pryor.
3. Chemistry.—Prof. Kastle.
4. Civil Engineering and Physics.—Prof. Nelson.
5. English Language and Literature.—Prof. Shackelford.
6. Geology and Paleontology.—Prof. Miller.
7. German and French.—Prof. Helveti.
8. History and Political Economy.—Pres. Patterson.
9. Latin and Greek.—Prof. Neville.
10. Mathematics and Astronomy.—Prof. White.
11. Mechanical Engineering.—Prof. Anderson.
12. Metaphysics and Moral Philosophy.—Pres. Patterson.
13. Military Science.—Col. Clay.

14. Pedagogy.—Prof. Roark.
15. Preparatory (The Academy).—Prof. W. K. Patterson.
16. Veterinary Science.—Dr. Bennett.
17. Zoology and Entomology.—Prof. Garman.

### **Agriculture, Horticulture and Botany.**

This Department occupies rooms on the lower floor of the Experiment Station Building. The main room is suitably furnished with laboratory tables, water and gas fixtures and other apparatus for class instruction.

#### **Botany.**

In this study the amount of instruction given varies from one to four or more terms in accordance with the requirements of the general course entered by the student. The laboratory method is the form of instruction principally used, and from the very beginning of his work the student is directed to a study of plants themselves, using the text book only in a subordinate manner, to correct his mistakes and to enlarge his field of view. In the course of the year class excursions are arranged to the Kentucky river and other localities of botanical interest for purposes of collecting and studying plants in their native habitat.

Among the facilities for study the Department possesses a greenhouse (20 ft x 50 ft) giving an opportunity for the continuous study of living plants throughout the winter months and for experimental work in plant physiology.

Each student is also supplied, for histological study, with dissecting and compound microscopes, microtomes and other appliances from the best makers.

The herbarium contains a nearly complete representation of the flora of Kentucky, with a considerable number of foreign exchanges. It was primarily due to the efforts of Dr. Robert Peter, who made a quite extensive collection of Kentucky plants about sixty years ago, and also exchanged specimens with the prominent botanists of that day, thus forming the nucleus of the present collection, which therefore possesses considerable historical value. Constant additions are now being made to the herbarium by collecting excursions over the State, and by exchanges with other institutions.

A carefully selected library containing the most important botanical works of reference, is constantly available to the class.

The nucleus of a botanical garden has been commenced upon the College campus, to which additions will be made as rapidly as circumstances will permit.



The text books required in botany during the first year of instruction are Gray's Lessons and Manual of Botany and Bastin's College Botany, while constant reference is made, especially in the latter part of the course, to such standard works as Sach's Physiology of Plants, De Bary's Comparative Anatomy of Phanerogams and Ferns, Strasburger's Practical Botany, Gray's Structural Botany, Goodale's Physiological Botany, Darwin's Works, Beale's Grasses, Bennett and Murray's Cryptogamic Botany, Lesquereux & James' Mosses, Underwood's Ferns, Wolle's Algæ and others.

#### Horticulture and Agriculture.

In these subjects, much of the equipment mentioned under Botany is again utilized. As in Botany, the pupils are at once directed to the study and practical manipulation of plants rather than making any text-book their main dependence.

The greenhouse is used for instruction in seed testing, seed sowing, propagation by cuttings, grafting, etc., during the winter months, while from spring to fall the various operations of open air gardening are studied, especially the less commonly understood practices of transplanting, grafting, budding, pruning, crossing, etc.

The extensive list of varieties of vegetables and fruits growing upon the Experiment Farm gives an opportunity for a comparative study of varieties, rarely if ever found upon the ordinary farm.

The student is taught to perform experiments for himself in the best manner and to test the theories of the books by actual practice.

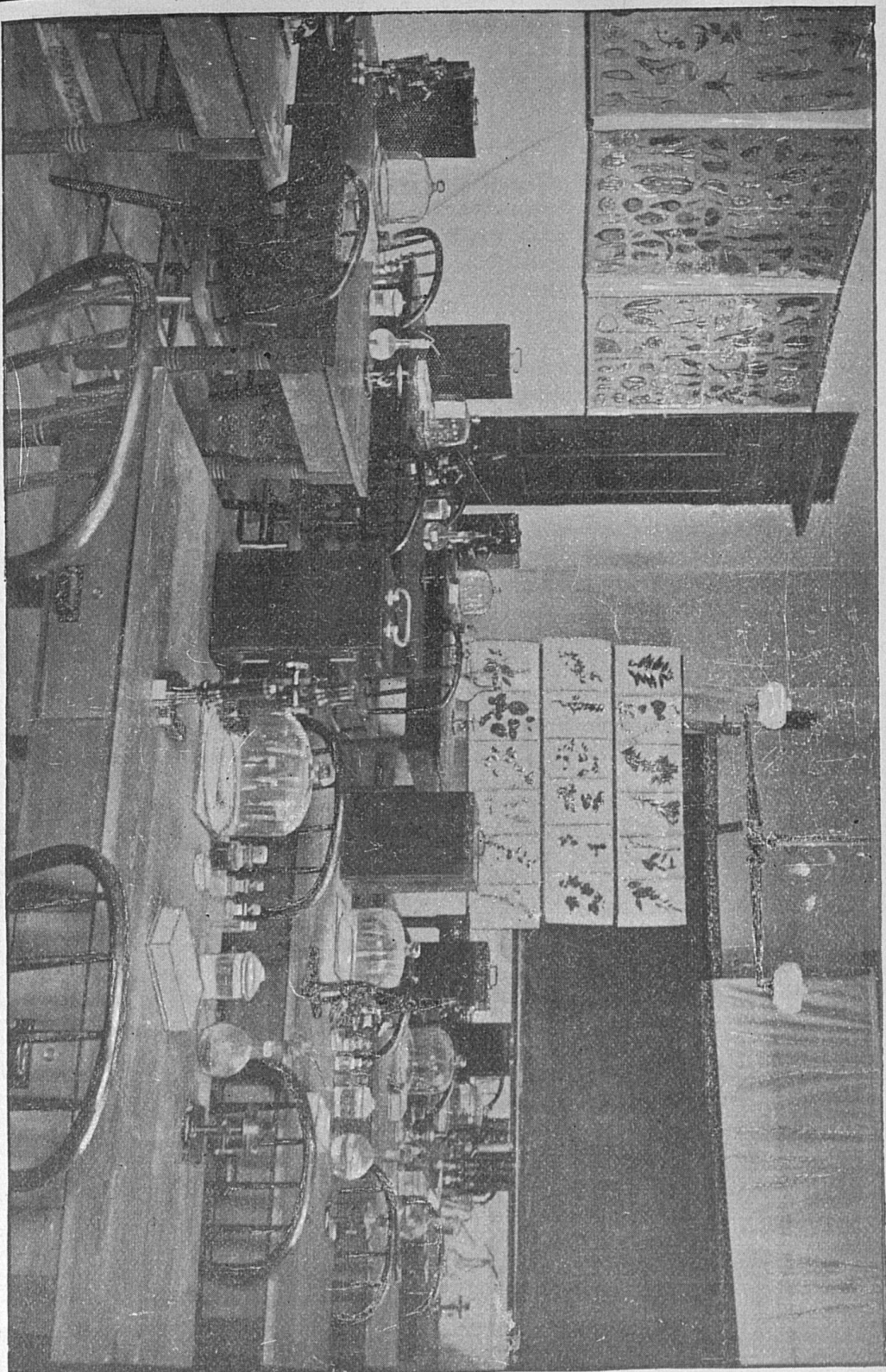
The college campus now contains a large number of ornamental trees and shrubs, and these with numerous varieties of annual and perennial flowering plants give the pupil a good opportunity to study ornamental horticulture.

In the distinctively agricultural studies, the experiments of the farm department of the Experiment Station furnish an excellent opportunity for the study of the effects of various fertilizers, varieties of wheat, corn and other field crops, and the many problems of dairying. The numerous fine herds of cattle and horses in the surrounding country are also freely utilized for purposes of instruction.

The following books are used as works of reference:

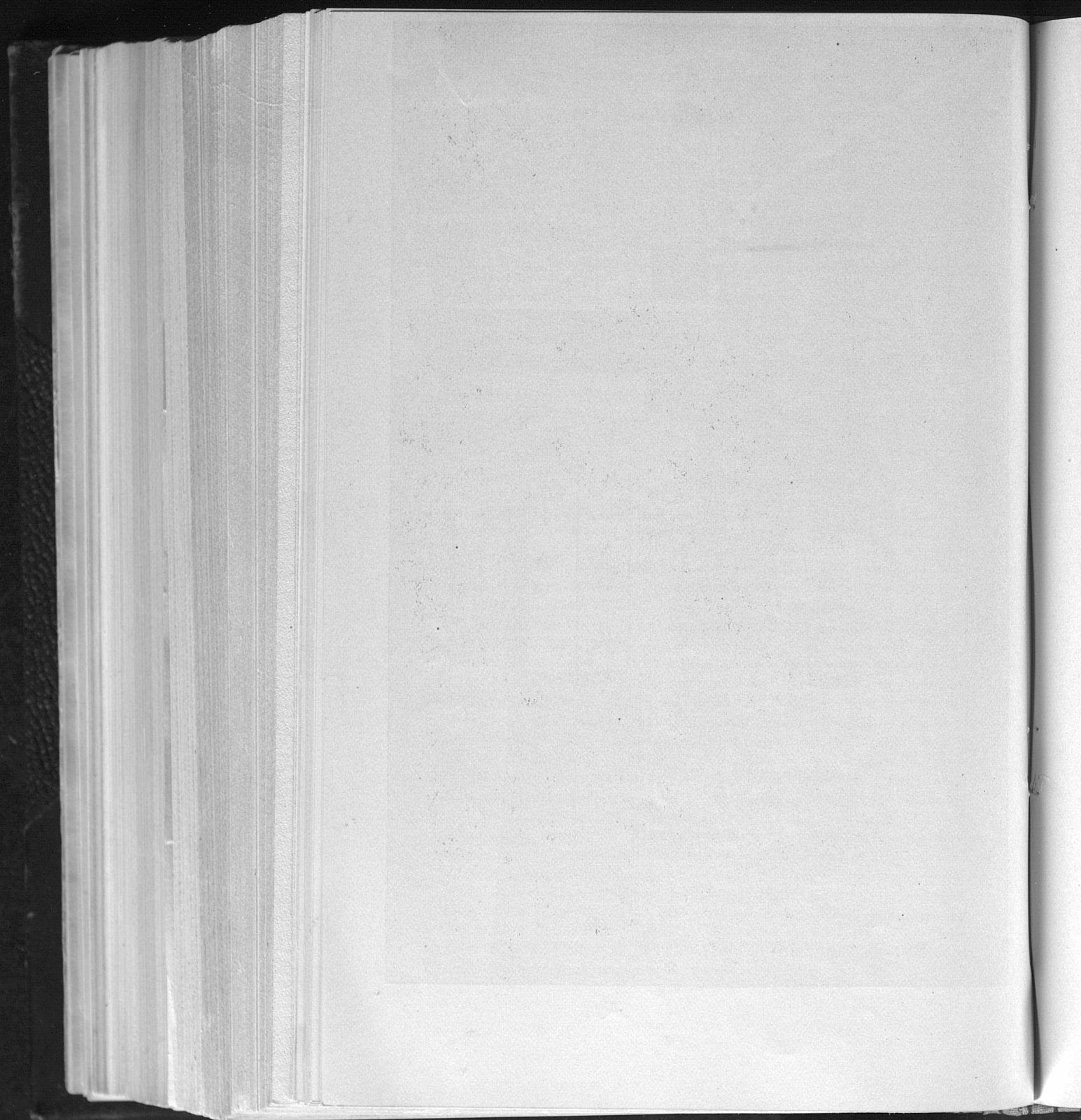
In Horticulture, Henderson's Gardening for Profit, Grewer's How to Make the Garden Pay, Thomas Barry's and Downing's works upon Fruit Culture, Bailey's Nursery Book and Grape Training, together with many other special works upon grapes, peaches, apples, floriculture, landscape gardening and the best horticultural journals.

In Agriculture, Storer's Agriculture, Johnson's How Crops Grow and How Crops Feed, Stewart's and Armsby's Manuals of Dairying and Cattle Feeding, Warfield's Cattle Breeding and other special works upon horses, sheep and swine, together with the current literature upon these subjects.



BOTANICAL LABORATORY.





### **Anatomy and Physiology.**

Anatomy, Physiology and Hygiene are taught to students of the Classical, Scientific, Biological, Veterinary and Normal courses extending throughout both terms of the Freshman year.

At the beginning of the second term a special class is organized for the benefit of Normal students. A thorough working knowledge of these branches is taught by means of lectures, demonstrations and recitations.

This Department is well provided with the apparatus necessary to illustrate the work of the student. The equipment includes papier-mache manikin, and models (Auzoux) of eye, ear, larynx, etc., skeletons, charts, microscopes, etc. Sufficient Histology is given for all practical purposes.

To those who intend to apply themselves hereafter to the study of medicine, this department offers inducements seldom obtained in other educational institutions.

Text-books: Huxley and Youman's, Martin's Human Body, and Martin's Briefer Course.

### **Chemistry.**

The Chemical Department dates from the establishment of the institution. For many years it was under the direction of Dr. Robert Peter, who by his labors in analytical chemistry has done more probably than any other man to develop the abundant mineral resources of the State. The Department remained in the hands of Dr. Peter until 1887, when he resigned. Dr. E. A. Von Schweinitz was then appointed to the vacancy created by the resignation of Dr. Peter. He held the position during the collegiate year 1887-1888, when he also resigned, and then the present incumbent was appointed. For many years the chemical laboratories and lecture room occupied the eastern part of the main College building. In September, 1889, however, the Experiment Station building having been completed, the apparatus and equipment were moved from the laboratories in the main building to more suitable and beautiful rooms on the second floor of the Experiment Station building. The lecture room and the laboratories, qualitative and quantitative of the Chemical Department are exceedingly well adapted to their purpose, and are among the best constructed and most handsomely furnished of any rooms in the College. The qualitative laboratory contains three very large working tables, each of which can easily accomodate ten students. The quantitative laboratory is also well equipped with tables, hoods, water, gas, electricity, etc., and has desk room for at least fourteen students in all. The lecture room is well lighted and heated and beautifully furnished and commodious, having a seating capacity of about seventy-five. Besides the laboratories and lecture room, there



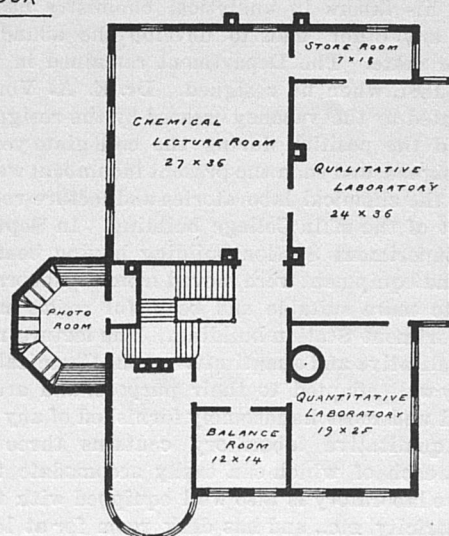
are several other smaller rooms on the same floor set aside for the use of the Chemical Department, an instructor's office, a balance-room and a store-room.

#### Apparatus.

The Department is well equipped with the commoner forms of chemical apparatus and chemicals. In addition to these it owns several of the more expensive pieces of apparatus; such as several exceedingly delicate balances for analytical work, a grand model Bunsen & Kirchhoff spectroscope; platinum apparatus; a complete outfit for electro-plating; vapor density apparatus; a glass model ice machine, etc., etc. This of course will be added to from time to time as the needs of the Department demand and the resources of the institution permit; as it is now, however, the equipment is such as to readily permit the student to obtain, at first hand, a good working knowledge of chemical science.

#### KENTUCKY AGRICULTURAL EXPERIMENT STATION BUILDING

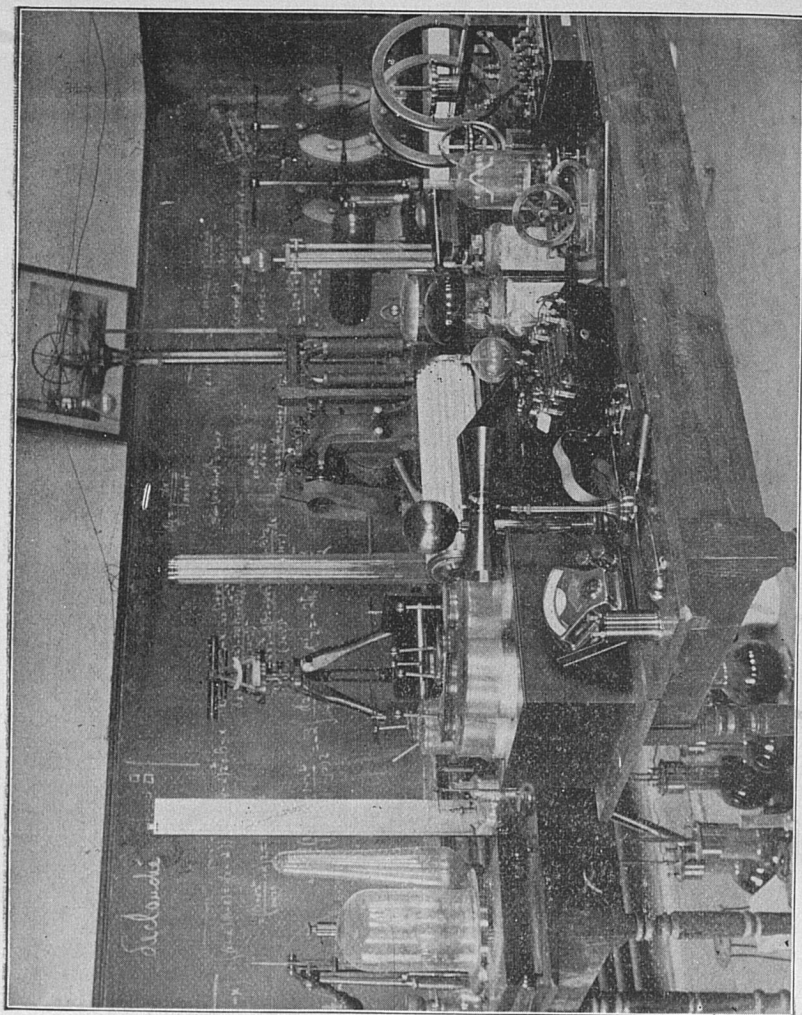
##### SECOND FLOOR



ROOMS OF CHEMICAL DEPARTMENT.







PHYSICS LABORATORY.

**Civil Engineering and Physics.****Civil Engineering.**

This Department comprises the study of the application of Mathematics to mechanical problems.

1. *Mechanics*.—This course includes the study of Analytical Mechanics with especial reference to the problems arising in the design of structures and machines; Applied Mechanics, including the analytical and graphical methods of testing forces in structures of all kinds.

Text-books: Bowser's Analytical Mechanics, Merriman's Applied Mechanics.

2. *Bridges and Structures*.—This course includes the theory of the use of materials in framed structures and in bridges built of masonry.

Text-books: Baker's Masonry Construction, Du Boise's Strains in Framed Structures.

3. *Field Engineering*.—This course includes the study of the handling of all kinds of field instruments which are provided by the College, land and railway surveying, projection of maps, construction of public highways and observations as applicable to geodetic problems.

Text-books: Davies's Surveying, Searles's Field Book, Johnson's Surveying, Streets and Pavements.

4. *Municipal Engineering*.—This course includes the study of the subjects of hydraulic engineering in its several branches, and economic handling of the problem of sewerage of cities and sewage disposal.

Text-books: Fanning's Water Supply, Waring's Sewerage and Land Drainage.

5. *Mining*.—This course includes the study of the methods of prospecting for ore, for its extraction, for the proper location and development of mines and of the machinery used in mining operations.

Text-books: Collin's Lectures on Mining.

6. *Advanced Mechanics*.—To those who desire it and who are properly prepared, opportunity will be given for the study of the higher problems in Applied Mechanics according the methods of the Infinitesimal Analysis

**Physics.**

This school contemplates instruction as laid down in the courses for the several degrees. This requires one year's work. Beyond this, opportunity is offered to those who desire to work in Practical Physics with inducements as to honors for students who work in the Advanced Physics. The instruction in course will include General Physics the laws of physical phenomena as learned from the study of heat, sound, light, electricity and magnetism in the elementary presentation of the subjects. The elementary law of forces, statical and dynamical, will be studied, presuming a knowledge of mathe-



matics through Trigonometry. The effort will be to present the subject of Physics as a branch of all science, keeping in view the intimate relation of all the parts of scientific knowledge and emphasizing the oneness in origin and in development of all the phenomena in the Universe. Encouragement will be given to those who desire to follow this study in its higher phases. Apparatus of costly and modern make enables the student to experiment under the direction of the instructor.

Students in Engineering study Analytical Mechanics, and they can learn the application of higher mathematics to the subject of molecular phenomena. A part of the physical apparatus may be mentioned especially, a large Toepler-Holtz machine, six-inch spark Rhumkroff's coil, grand model Bunsen & Kirchoff spectroscope, with necessary minor pieces.

### English.

#### Preparatory Freshman Class.

First Term.—Rhetoric and Composition; Diction and Sentence Construction; Punctuation; Recitations and exercises on the black-board.

Second Term.—Narrative Composition; Written Essays, read in class and corrected; Synonyms, Prosody.

#### Freshman Class.

First Term.—English Prose and Poetry; Interpretations of Masterpieces of English Prose and Poetry; Written Essays, read in class and corrected.

Second Term.—Studies in English Literature.

Each pupil is required to commit to memory and recite in class, selections from the great English poets and prose writers, including parts of Shakespeare's Julius Cæsar and the Merchant of Venice, Bacon's Essays on Studies and Friendship, Milton's L'Allegro and Il Penseroso and extracts from Areopagitica; Bunyan's Gold in City; Dryden's Alexander's Feast; Gray's Elegy; parts of Goldsmith's Deserted Village; passages from Burke's Speech on the Spirit of Liberty in the American Colonies; Burns' Cotter's Saturday Night; Wordsworth's Intimations of Immortality; Coleridge's Hymn to Mont Blanc; the closing passages of Webster's speech in reply to Hayne; Byron's Prisoner of Chillon; Shelly's Ode to the Skylark; Bryant's Thanatopsis; Emerson's Essay on Compensation; Longfellow's Keramos; Holmes' Deacon's Masterpiece; Tennyson's Ulysses; De Finibus, by Thackeray; The Vision of Sir Launfal, by Lowell.

Text-book: Swinton's Studies in English Literature.

**Sophomore Class.**

First Term.—History of English Literature; Class Reading from Bacon, Burke, Milton, Shakespeare and other great English writers.

Text-books: Shaw's Manual of English Literature and Hudson's Annotated English Classics.

Second Term.—Advanced Rhetoric; Lectures on the Elements of Criticism.

Text-books: Whateley's Rhetoric; Minto's Manual of English Prose Literature.

**Junior Class.**

First Term.—The Science of Logic; Lectures on Pure Logic, in which Stoicheiology and Methodology are explained and illustrated; explanations and illustrations of the Analytics of Aristotle and the New Analytic of Sir Wm. Hamilton; exercises in Figure, Mood and Reduction; Lectures on Fallacies and the Sources of Error; Lectures on Inductive and Analogical Reasoning; Lectures on Evidence.

Text-book: Sir William Hamilton's Lectures on Logic.

Second Term.—Anglo-Saxon and Early English.

Text book: Carson's Anglo-Saxon and Early English.

**Geology and Paleontology.**

The exact time in a student's course at which the different subjects comprehended in this Department are studied varies somewhat for the different courses; but the order of succession is as follows:

(1) Physiography (2) Mineralogy (3) Paleontology (4) Advanced Geology. Besides these, in which what follows is intimately based on that which precedes, are two self-contained studies: (5) A Shorter Course in Geology and (6) Economic Geology.

**Physiography.**

First Term.—Required for Sophomores in the Biological, Seniors in the Scientific and Classical Courses. Normal students have the option between this and (5) the Shorter Course in Geology.

The object of this study is to give the student a somewhat comprehensive view of the earth and its inhabitants. Facts and theories in Physics, Biology, Geography and Astronomy are enlarged upon at greater length than is usual in studies commonly included under the name of Physical Geography. Physiography is especially adapted to those preparing to teach, and to those in the Classical Department, who without wishing to concern themselves much with tech-



nical details, still desire some knowledge of those broad facts and principles of science, which are essential to all who would lay claim to being possessed of a liberal education.

Text-book: Mills' Realm of Nature.

#### **Mineralogy.**

Second Term.—Required for Juniors in the Scientific Course. The object of this study is to render the student familiar with the composition and physical characteristics of those common minerals and rocks likely to come under his notice, as well in the ordinary round of every day observation as in geological pursuits. The instruction involves laboratory and text-book work. Crosby's Tables for Determination and Common Minerals and Rocks are used.

#### **Paleontology.**

First Term.—Required for Seniors in the Biological and Scientific courses. Lectures on the nature and zoological position of different fossil groups are given, and the student is expected to become familiar with the appearance of the fossils themselves by actual examination. Much of the work involves the use of artificial keys for determination, similar to those used in Botany and Zoology.

Special attention is paid to the fossils common in Kentucky. The Department is well equipped in collections for this purpose. The instruction is almost entirely by lectures and laboratory work.

#### **Advanced Geology.**

Second Term.—Required for Senior scientific and biological students and open to others who may have elected to take the Physiography and Paleontology which precedes. It is meant to be the culmination for those who have availed themselves of all the opportunities for the study of Geology offered in this Department. It is to be hoped that some of these may be induced to go farther, and either in their home localities or elsewhere, make a beginning at doing original work. Kentucky with its large areas of practically unexplored territory geologically, offers an especially fine field to young geologists in this respect.

Text-book: LeConte's Compend.

#### **Shorter Course in Geology.**

This has been introduced in response to an especial demand from the Normal Department for a course in Geology that would be at once short and self-contained. Civil Engineering Seniors have the option between this and Economic Geology.

Text-book: LeConte's Compend.

### **Economic Geology.**

Second Term.—Required for Seniors in the Chemical Course and open to Civil Engineers and others who may desire to take it and find no conflict in the schedule.

The characteristics of this study will be the minimum of the organic and the maximum of the inorganic side of Geology. Some of the chief topics treated will be: Common Rock and Vein Forming Minerals; Origin of Ore Deposits; Mining Terms and Methods; Coal, Petroleum, Natural Gas and Asphalts; Building Stone, Cements, Clays and Fertilizers; Relation of Geology to Agriculture; Relation of Geology to Sanitary Engineering.

Text-book: Tarr's Economic Geology of the U. S.

In addition to the above, a course of lectures on the Relation of Geology to Agriculture, is given in the series of Agricultural Lectures, which come during the winter months.

### **German and French.**

In the Department of Modern Languages it will be the chief aim to impart a fair, scientific knowledge of the languages taught, together with such oral practice as to enable the student, at the end of the prescribed time of study, to express himself with some facility, read easy French or German at sight, and at the same time have a sound foundation laid for more thorough study in the future, if his tastes and pursuits lead to it. It will be the aim to insure a correct pronunciation and familiarity with general rather than special rules.

For those who may wish to pursue the study of German or French beyond the prescribed course, classes will be arranged to introduce them to the history of the literatures of these languages, together with selected readings to illustrate the same.

### **History and Political Economy.**

The course of instruction in this Department includes an outline of Ancient, Mediæval and Modern History. Attention is given to the various forms of government, their characteristic features and points of difference, to the progress of civilization, the origin and development of parliamentary government, the rights and duties of citizenship.

In the period covered, Modern History, England and the United States occupy the most prominent place.

Walker's Science of Wealth is made the basis of instruction in Political Economy. Students are, however, made familiar with the principles upon which rest the rival doctrines of Protection and Free-



Trade. The utmost latitude of discussion and investigation is encouraged in order that intelligent opinions may be formed upon the great political issues of the day.

#### **Latin and Greek.**

The distinguishing feature of this Department is the method of teaching Latin and Greek Grammar. The inflections, idioms and the syntax are accurately and firmly impressed on the student's memory by incessant work on the blackboard during the whole of the first session. From the first to the last lesson one or more English sentences are given out daily from the book to each member of the class, and he is required to write his task in Latin or Greek, and then to write out fully all the inflections (in Greek with the accents). All work is then carefully corrected by the teacher and instructions given on the lessons of the day, and often on that of the next.

The course and the amount of reading in Latin and Greek authors varies from year to year, according to the capacity of students, or the pleasure of the Professor.

#### **Mathematics and Astronomy.**

A thorough knowledge of Arithmetic and of Algebra through quadratic equations, as presented in Wentworth's Higher Algebra is required for admission to the Freshman class.

##### **Freshman Year.**

Text-books: Wentworth's Higher Algebra, Wentworth's Plane and Solid Geometry, Wentworth's Trigonometry.

During the first term Algebra and Geometry are studied simultaneously; the work in Geometry being Books I to V inclusive, that in Algebra chapters XXII to XXXIV inclusive.

The second term is devoted to Plane Trigonometry and to the completion of the Higher Algebra.

##### **Sophomore Year.**

Text-books: Wentworth's Plane and Solid Geometry, Bowser's Analytical Geometry.

The studies of the first term are Solid Geometry, Conic Sections and Sph. Trigonometry, the entire second term being given to Analytical Geometry.

##### **Junior Year.**

Text-book: Bowser's Calculus.

The study of Calculus is optional with all students except in the Mechanical and Civil Engineering Courses.

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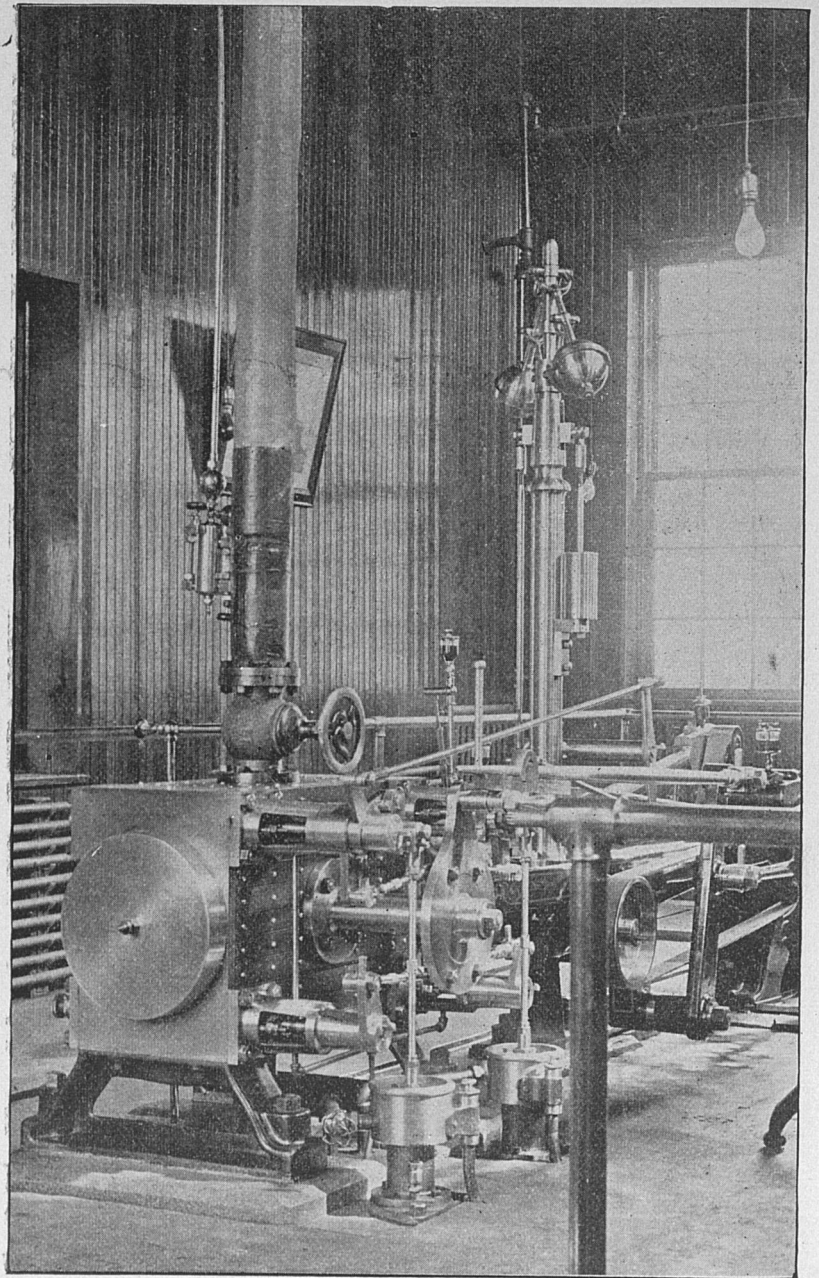
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ENGINE ROOM OF MECHANICAL HALL.

**Senior Year.**

Text-book: Young's Elements of Astronomy. The object of this class is to give to the students a knowledge, as accurate and as extensive as our time will permit, of the phenomena of the heavenly bodies and of their probable condition and history. No efforts will be spared to make the study of this branch of science highly interesting and instructive.

**Mechanical Engineering.**

This Department has recently been reorganized and is now one of the most completely equipped of any in the College. A description of the new building is given under the head of "buildings." The equipment of the different rooms is briefly described below.

The Drawing-room contains drawing-tables, drawing-boards, curves, scales, tee-squares, and other special drawing apparatus to accommodate thirty students.

The Engine-room contains a 10-inch by 24-inch Hamilton-Corliss non-condensing engine and an 8.5 kilowatt Edison compound dynamo with amperemeter, resistance-box and volt-meter so that the dynamo may be used for experimental purposes.

The Wood-shop contains twenty benches, with complete set of wood-working tools, thirteen wood-turning lathes, each with complete set of turning-chisels, band sawing-machine, universal wood-worker, fret-saw, and grindstone.

The Foundry contains a thirty-inch cupola furnace with a capacity of a ton of metal per hour, brass furnace, twelve complete sets of moulder's tools, twelve benches, also ladles, clamps, core-room, core-oven, pattern-rack, and the tools employed in practical foundry.

The Blacksmith-shop contains a ten-inch steel pressure blower, twelve forges, twelve anvils, three blacksmith vises, an emery grinder, and twelve complete sets of blacksmith tools for carrying on all kinds of iron and steel forging.

The Machine-shop contains six lathes, one milling-machine, one self-feed drill, one planer, one sharper, one tool-grinder, one emery grinder, and twelve iron vises, and benches for vise work in metal.

The Testing-laboratory is equipped with a 100,000-pound Riehle testing-machine, a pair of Crosby indicators, a Corliss engine used exclusively for experimental work, a 51-horse power water tube boiler, a Riehle-Yale extensometer and instruments for measurement of all dimensions.

The Tool-room is supplied with a fine assortment of superior tools for work in iron, steel, brass and wood, and contains such stock and supplies as may be used in construction in the Mechanical Laboratories named above.



The Wash-room contains lockers for sixty-five students and is supplied with marble basins and closets.

The Boiler-house contains a fifty-one horse power Babcock and Wilcox water-tube boiler and a Dean Bros'. No. 3, Steam-pump.

The building is heated by steam and lighted by 130 incandescent and 4 arc lamps.

#### **Metaphysics and Moral Philosophy.**

The study of Mental and Moral Philosophy extends through one year. Sir William Hamilton is used as the basis of instruction in Metaphysics, and Janet in Morals. Concurrently with recitations from these authorities, the pupil is made familiar with the principles upon which rival systems of philosophy and morals are based and the arguments by which they are maintained. Ancient and modern systems are thus brought under review, and the necessary data furnished upon which to ground intelligent opinions.

#### **Military Science and Tactics.**

Instruction in this Department is both practical and theoretical.

The practical course embraces the U. S. Drill Regulation for Infantry, including the schools of the soldier, company, and battalion in close and extended order; ceremonies; so much of the Artillery Drill Regulations as pertains to the manual of the piece and mechanical manoeuvres; signalling with flag and heliograph; guard duty, and minor tactics.

Theoretical instruction embraces recitations in U. S. Drill Regulations for Infantry and Artillery; instruction in the preparation of reports and returns pertaining to a company; lectures on organization and administration of the United States Army, and general principles governing in the Art of War.

All students below the grade of senior are required to take this course unless disqualified by reason of physical disability.

#### **Pedagogy (The Normal School).**

Although organized as a Department of the College, co-ordinate with the other departments, yet the Department of Pedagogy is, more properly, a school in itself, made so by the necessities of the Public School system of the State. Therefore, in addition to offering full work in Pedagogy (Educational Psychology and its applications in School Economy and Educational Methods) this Department also provides academic instruction for teachers who desire to fit themselves for higher grades of work. In administering the Depart

ment the real needs and limitations of the average Public School teacher are kept constantly in view, and the elevation of the common schools of the State is the basic principle of the work.

### **The Academy (Preparatory).**

The Academy is under the immediate direction and management of a Principal and four Assistants, all of whom are teachers by profession, and who have had years of experience as successful educators.

The pupils are subject to the same rules and regulations as the students of the College. Their attendance at the College is required only during the hours of recitation and other prescribed College exercises, such as chapel, drill, etc., the preparation of their lessons being made elsewhere.

The courses of instruction in the Academy are provided for those who enter directly from the common schools, and are intended to supply the necessary training intermediate between the course of study prescribed by the State Board of Education for the common schools and the Freshman Class of the College.

Applicants for admission to the Academy, if county appointees must be, at least, fourteen years of age, and must be provided with credentials of scholarship from the County Superintendent. They must also pass a satisfactory examination in spelling, reading, writing, arithmetic, history of the United States, English grammar and geography, in order to be admitted.

Other applicants must be at least fifteen years of age, and must have completed the common school course prescribed by the State Board of Education. They must pass a satisfactory examination in spelling, reading, writing, English grammar through syntax, and geography, in order to be admitted. Applicants from the city will be required to pass an examination on all the subjects embraced in the first year's Scientific course in the Academy. Those who enter at any other time than the beginning of the year will be required to pass a satisfactory examination on the work already gone over by the classes which they propose to enter.

Students matriculated in the Academy will be required to pursue one of its prescribed courses of study and will not be permitted to take any work outside of this course except on the recommendation of the Principal.

### **Entrance Examinations.**

For the benefit of those, other than county appointees, who desire to know the character of the examination which applicants for admission will be required to pass, the following examination papers are submitted as a sample. It is not to be understood that the pupil will be examined on *these questions*, but that they are a specimen



of the minimum attainments necessary to enter the Academy of the College. Those who expect to enter more advanced classes will be required to pass an examination on all that the class which they propose to enter has passed over.

### I. ARITHMETIC.

Find the greatest common divisor and the least common multiple of 899 and 961.

$$\text{Simplify } 2\frac{1}{3} \times \frac{10\frac{3}{4} - 4\frac{1}{2}}{6\frac{3}{10} + 7\frac{2}{3}} \div \frac{3\frac{5}{11}}{1\frac{2}{3} \times 9\frac{1}{11}}$$

Find the number of bushels that will fill a bin 8.5 feet long, 4.5 feet wide, 3.5 deep.

The longitude of Rome is  $12^{\circ} 27' 14''$  east; the longitude of Chicago is  $87^{\circ} 35'$  west; find the difference of time between the two places.

What will be the cost of plastering the walls and ceiling of a room 27 feet 4 inches long, 20 feet wide, and 12 feet 6 inches high, at 27 cents per square yard, if 20 square yards be deducted for doors, windows and base-boards?

If a train, at the rate of  $\frac{5}{13}$  of a mile per minute, takes  $3\frac{1}{2}$  hours to reach a station, how long will it take at the rate of  $\frac{7}{15}$  of a mile per minute?

A and B can do a piece of work in  $2\frac{1}{2}$  days, A and C in  $3\frac{1}{3}$  days, B and C in 44. Required the time in which all these working together can do the work and in which each can do the work alone.

A farmer sowed 5 bushels, 1 peck, 1 quart of seed, and harvested from it 103 bushels, 3 pecks, 5 quarts. How much did he raise from a bushel of seed?

Reduce 9 square chains, 11.25 square rods, to the decimal of an acre.

If a bar of iron  $3\frac{1}{2}$  feet long, 3 inches wide,  $2\frac{1}{4}$  inches thick weighs 93 pounds; what will be the weight of a bar  $3\frac{3}{8}$  feet long, 4 inches wide, and  $2\frac{1}{2}$  inches thick?

### II. ENGLISH GRAMMAR.

Give illustrations of all the parts of speech.

Define pronoun, preposition, adverb, clause and phrase.

How are the possessive cases of nouns and pronouns formed?

Define a simple sentence, a complex sentence, and give examples of each.

Analyze the following sentence and parse in full all the words in it:

"The soldiers of the tenth legion, wearied by their long march, and exhausted from want of food, were unable to resist the onset of the enemy."

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LABORATORY OF ZOOLOGY AND ENTOMOLOGY.

## III. GEOGRAPHY.

What are the circles of the earth?

What are the meridians?

Define latitude and longitude.

What two meridians bound the hemispheres?

Define the two principal forms of government

Bound North America and describe its political divisions.

Why is the climate of Western Europe different from that of America in similar latitudes?

Describe the mountains, principal rivers and lakes of Asia.

Describe the natural routes of commerce.

**Veterinary Science.**

This department is provided with a commodious and well appointed dissecting room, which was but recently completed and is equipped with the best modern apparatus.

**Zoology and Entomology.**

The Department was established on an independent footing with the beginning of the school-year 1890-'91. Since then the larger of the two rooms occupied by it has been furnished as a laboratory in order that a practical knowledge of Zoology and Entomology may be given to students, and that the instruction may be more effective as a training of the powers of observation and reflection. The Laboratory is now provided with tables, each accomodating, if necessary, two persons, and is furnished with reagents for making simple tests, and for staining and otherwise treating tissues to prepare them for study with the microscopes. The equipment and apparatus consist of eighteen microscopes, such as are used in the best laboratories in this country and Europe, two microtomes, a Schanze and a Thoma, both imported from Germany for the Department, of paraffine baths of the Naples Zoological Station pattern, ten dissecting stands made for us by the Bausch & Lomb Optical Co., of Rochester, New York, dissecting trays, bell jars, and a full set of Leuckart and Nitsche's celebrated zoological charts. Much of the illustrative material used by us is collected by us within the State, such material being considered most valuable as serving to familiarize students with objects they are likely to encounter in after life. A good collection of birds is available for analytical work, and students taking the Biological, Scientific and Agricultural courses are required to learn the use of such "keys" as Jordan's Manual of Vertebrate Animals, and to know something of the classification of birds, and of the more common species. A similar collection of fishes is also available for analytical work. For the study of vertebrate anatomy, a small collection of mounted skeletons has recently been secured, including



such types as the gibbon, hyena, porpoise, duckbill, bird, turtle, lizard, fish and frog. It will be added to from time to time, since it is intended to provide for a special course in Osteology. Where it is impossible to provide fresh material, alcoholic types of the different groups of animals are used, so that each student dissects and otherwise examines at least one example of every animal sub-kingdom. Types of every class of each sub-kingdom are examined in this way, where time and available material permit. We now provide examples of all the peculiar groups of salt-water animals, and by means of them are able to give a very good knowledge of the structure and relations of such forms as the squid, star-fish, sea-urchin, sea-anemone, ascidian, and the like.

The entomological work is made a separate feature in this Department, partly because of the great extent of the class Insecta, but chiefly because of its economic importance. If, as is estimated by our best entomologists and statisticians, we annually lose in this country, from the depredations of injurious insects, not less than \$100,000,000 it is highly important that a knowledge of insects and their habits should be disseminated among the people, and it is especially important in a State like Kentucky, where the leading industry is agriculture. It has been urged that the reduction of a crop to the extent of one-fourth or one-half its value by insects, should be regarded as a tax of twenty-five or fifty per cent. on its full value. Such a tax is collected year after year, often without an attempt at resistance. It is the purpose of the entomological work at the College to place in the hands of students, who expect to make farming their occupation, such means of defense against loss as are known to those who have given the matter study. The Department is especially well provided for in this direction, having the benefit of the work done at the Experiment Station, and having access to the collections, apparatus and library accumulated for Station work. The collection now contains examples of most of the injurious insects which occur in the United States and is constantly being enlarged. The Station is well supplied with breeding cages for use in studying the habits and life-histories of insects, so that students who wish to do so have an opportunity to observe for themselves the various stages presented by a developing insect, and may see them, in many cases, actually engaged in their destructive work. An insectary, which we hope soon to add to our facilities, will give us increased opportunity in this field of investigation.

#### Degrees.

The degrees conferred are Bachelor of Agriculture (B. Agr.), Bachelor of Science (B. S.), Bachelor of Arts (B. A.), Bachelor of Pedagogy (Ped. B.), Civil Engineer (C. E.), Bachelor of Mechanical

Engineering (B. M. E.), Master of Agriculture (M. Agr.), Master of Science (M. S.), Master of Arts (M. A.).

The Schedules of subjects presented below embrace the minimum of requirements for a degree in each of the several courses.

Acquirements in Language, in Mathematics, in Natural Science or in the philosophical sciences beyond the limits of the schedules will entitle to the ordinary pass degree with the addition *cum laude*, *magna cum laude*, or *summa cum laude*, according to the extent and variety of the additional subjects presented for examination.

For the degrees of B. Agr., B. S., B. A., Ped. B., B. M. E., and C. E. an actual membership of at least one year in this College is required, and a satisfactory examination on the *entire Course* of study.

For the degrees of M. Agr., M. S., and M. A., a satisfactory examination is required on a course of post-graduate studies prescribed by the Faculty, and covering a period of two years.

To those who do not complete the entire Agricultural, Scientific, Classical or Engineering courses, but only certain parts thereof, certificates of proficiency may be given for those departments of study completed.

No degrees are conferred upon graduates in the Commercial Department; but diplomas are given to those who complete the course of study embraced therein.



The history of the United States is a story of growth and development. It begins with the first settlers who came to the shores of the New World in search of a better life. These pioneers faced many hardships, but they persevered and built a new society. Over the years, the United States has grown from a small colony to a great nation. It has fought wars, experienced economic crises, and made great strides in science and technology. Today, the United States stands as a beacon of freedom and democracy, a country where every citizen has the right to life, liberty, and the pursuit of happiness.

The story of the United States is a story of hope and achievement. It is a story of a people who have overcome adversity and built a great nation. It is a story of a country that has always stood for the principles of freedom and justice. The United States is a land of opportunity, a land where dreams can come true. It is a land where every citizen has the right to a better life. The history of the United States is a story of a great nation that has always stood for the principles of freedom and justice.

The United States is a land of opportunity, a land where dreams can come true. It is a land where every citizen has the right to a better life. The history of the United States is a story of a great nation that has always stood for the principles of freedom and justice.

# Courses

of

# Study.

(Arranged in Alphabetical Order).



# Course in Agriculture.

---

## Faculty of Instruction.

J. K. PATTERSON, PH. D., President,  
Professor of History, Political Economy and Metaphysics.

C. W. MATHEWS, B. S.,  
Professor of Agriculture, Horticulture and Botany.

(Arranged in alphabetical order).

S. E. BENNETT, D. V. M.,  
Professor of Veterinary Science.

C. D. CLAY, 1st. Lieut. U. S. A.,  
Professor of Military Science.

H. GARMAN,  
Professor of Zoology and Entomology.

F. M. HELVETI, A. M.,  
Professor of German and French Languages and Literature.

J. H. KASTLE, PH. D.,  
Professor of Chemistry.

ARTHUR M. MILLER, A. M.,  
Professor of Geology and Paleontology.

J. P. NELSON, C. E., M. E.,  
Professor of Civil Engineering and Physics.

J. W. PRYOR, M. D.,  
Professor of Anatomy and Physiology.

JOHN SHACKLEFORD, A. M.,  
Professor of English Language and Literature.

JAMES G. WHITE, A. M.,  
Professor of Mathematics and Astronomy.

SCHEDULE OF COURSE IN AGRICULTURE.

|                    | First Hour.                 | Second Hour.                      | Third Hour.                             | Fourth Hour.                  | Fifth Hour.                                    | 2 to 4 P. M.                      |
|--------------------|-----------------------------|-----------------------------------|-----------------------------------------|-------------------------------|------------------------------------------------|-----------------------------------|
| FRESHMAN<br>YEAR.  | (a)<br>Military<br>Science. | English<br>Literature.            | Plane Geometry.                         | Algebra.                      | (a)<br>Physiology.                             | (Friday)<br>Drawing.              |
|                    | (a)<br>Military<br>Science. | (a)<br>English<br>Literature.     | Plane<br>Trigonometry.                  | (a)<br>Botany.                | Physiology.                                    | (Friday)<br>Botany.               |
| SOPHOMORE<br>YEAR. | (b)<br>Military<br>Science. | (a)<br>Zoology.                   | (a)<br>Zoology.                         | (b)<br>Botany.                | (b)<br>Botany.                                 | (a)<br>Physiography.              |
|                    | (b)<br>Military<br>Science. | (a)<br>Zoology.                   | (a)<br>Zoology.                         | (b)<br>Logic.                 | (a)<br>Chemistry.                              | (b)<br>Wood Work,<br>Forging, &c. |
| JUNIOR<br>YEAR.    |                             | (b)<br>Agricultural<br>Chemistry. | French.                                 | Botany.                       | Botany.                                        | Chemical<br>Laboratory.           |
|                    |                             | (b)<br>Entomology.                | French.                                 |                               | Stock Breeding,<br>Feeding, Dairy-<br>ing. (b) | (a)<br>Horticulture.              |
| SENIOR<br>YEAR.    |                             | French.                           | (b)<br>Soils, Draining,<br>Fertilizers. | (a)<br>Veterinary<br>Science. | Physics.                                       | (b)<br>Horticulture.              |
|                    |                             | French.                           | (b)<br>Political<br>Economy.            | Veterinary<br>Science.        | Thesis.                                        |                                   |

Students who can not take the regular course are advised to take a two years' course, the studies of the first year being those marked (a) in the above schedule, those of the second year being marked (b).



## **Course in Agriculture.**

The distinctive feature of the Agricultural Course is the instruction in those branches of study which bear the most direct and practical relation to agricultural pursuits. It includes as subjects of primary importance, the study of General and Agricultural Chemistry, General Zoology and Entomology, Botany, Horticulture, Geology, General Agriculture, Veterinary Science, Wood Work, and Forging.

In addition to these subjects the student devotes considerable time to the general work of other departments, including a year each in English and Mathematics, courses in Drawing, French, Physiology, Physics, Political Economy, and Logic.

### **Agriculture.**

The subject is taught by means of text-books and lectures, using as illustration the work of the farm, garden and greenhouse, all of which are fully equipped and in active operation. The first term is devoted to the subject of Soils, their origin, character and cultivation, Draining and Irrigation. Fertilizers, Farm Economy, etc. The second term is occupied with the subject of Breeds of Stock, Principles of Breeding and Feeding, and Milk, including its production and manufacture into the various dairy products.

For the study of Stock Breeding and kindred subjects, the location of the College is exceptionally favorable, being situated in the center of the far-famed Blue Grass region of Kentucky, with its numerous herds of high bred cattle and horses. In the entire work of this course material aid is rendered the student by the important experiments of the State Experiment Station, which are at all times available for observation and study.

### **Horticulture.**

The work in this Department begins in January of the Junior year and extends through two terms or an entire calendar year.

The time allotted to the subject is divided between lectures, recitations and actual practice in horticultural operations, special prominence being given to the latter feature of the course.

In the lectures are discussed the principles underlying horticultural practices; the propagation of plants; the physiological considerations upon which are based the operations of budding, grafting, pruning, training, &c.; greenhouses; their construction, heating and management, and vegetable, fruit and landscape gardening. In connection with the lectures, the work in the greenhouses, and upon

the College and experimental grounds, is freely used for illustrative purposes, and occasional visits are made to the greenhouses, nurseries, market and fruit gardens, and the canning factory, all of which are well represented in or near Lexington.

The Department of Horticulture of the Experiment Station now has a large variety of orchard and small fruits growing upon the College farm, and the new and improved varieties are each year added as they are introduced. An extensive list of vegetables is also grown each year, and these with the experiments constantly in progress are always available for purposes of instruction.

In the practical part of his studies, the pupil is not only taught the best methods of doing his work, but is encouraged to seek for the principles which make such methods best.

He performs for himself the various operations of seed testing and seed sowing; propagating by cutting, layering, division, etc.; budding, grafting, crossing, hybridizing, and other forms of horticultural practice.

In order to make this work of the greatest value to the student, he is required throughout the course to make accurate observations and careful notes upon his progress and results in all these processes.

### Botany.

This subject is studied for three terms of the course, the instruction taking the form mainly of guidance of the student in laboratory and field work, and it is the constant effort of the instructor to make the work as interesting and practical as possible. It begins in January of the Freshman year with a study of the common seeds of the garden. These are sown by the student and the plantlet is carefully studied, and drawings are made in all stages of its development. The work is continued with a study of buds, roots and stems with their modifications, and the structure of all parts of the mature plant. This form of instruction continues until the middle of the term, and the remainder of the time is occupied with analysis of the local flora and other field work. The next term beginning in September, is devoted almost wholly to Economic Botany, including the study of common weeds and grasses; the most important plants used as food, medicine, or in the arts; and forestry.

The third term beginning in September of the Junior year, is occupied with the subjects of Vegetable Histology and Cryptogamic Botany, especially the fungi injurious to field and garden crops. Each student is supplied with a compound microscope and other necessary appliances of histological study. While engaged with fungus diseases of plants, special attention is given to the practical methods of combating them.



### **Zoology.**

Two hours are given each day during the Sophomore year to the study of Zoology; laboratory work, recitation and lecture, alternating according to the requirements of the class. Typical examples of each sub-kingdom of invertebrate animals are studied in the laboratory, practice in dissection, comparison, description and sketching being given, together with a working knowledge of the compound microscope. Systematic Zoology is taught at the close of the year by the use of analytical keys and prepared specimens of birds and fishes.

### **Economic Entomology.**

In entomology the student is required to make careful examination and dissection of examples of the more important orders of insects, his knowledge of structure and classification being made as far as possible practical in character. With this knowledge as a foundation, he is expected to familiarize himself with the stages of the common insects, by a study of living and prepared specimens, until he can recognize them at sight when met in the field or garden. Brief accounts of the life-histories of the more injurious species are supplied each student to be used in connection with laboratory and field work. During the term a small collection of insects is prepared and classified by each pupil. The term's work is completed by instruction in methods of preparing and using insecticides.

### **Chemistry.**

In order to meet the needs of the students in agriculture, the following course in chemistry has been arranged. During the second term of the Sophomore year the course consists of lectures and recitations, five hours weekly, upon the chemistry of the non-metals, together with such portions of chemical theory as are absolutely necessary for a thorough understanding of the work in hand.

The laboratory work during the first term of the Junior year may be regarded as a continuation of the work indicated above, and is intended in the first place, to familiarize the students with the general principles of chemical manipulation, and the use of the simple forms of chemical apparatus; secondly, to give him a fairly accurate knowledge at first hand, of the occurrence, preparation, properties and uses of the more common metallic elements and compounds. In this connection instruction is given in the methods employed in the separation and recognition of such elements and compounds as pertain directly to plant nutrition and growth. The laboratory work is followed by a special course in Agricultural Chemistry proper. This consists of lectures and recitations five hours weekly throughout the second term of the Junior year. Its general aim is to thoroughly acquaint the student with the composition of the soil, the atmosphere and water, and their relations to the plant as sources of plant food.

The chemistry of tillage, irrigation and rotation is fully discussed, together with the methods employed in determining the composition and value of commercial fertilizers and manures.

#### **Veterinary Science.**

Agricultural students are required to take Veterinary Anatomy five hours a week during the Senior year. Students in this Department may attend the Clinic should they desire to do so.

The Department is amply equipped with instruments, apparatus, etc., for the performance of all operations and the treatment of all diseases. The Library also contains a choice collection of Veterinary works, which will be open to Agricultural students at all times.

#### **Wood Working and Forging.**

The course in Shop Work is intended to give young men such a training in the use of carpenter's bench tools, and in iron and steel forging, that they will be able to make any ordinary repairs about a farm, in either iron or wood.

#### **Student Labor.**

Students holding certificates as county appointees have the privilege of working for pay upon the College farm and gardens during the afternoons and Saturdays, when such labor does not interfere with instructions in class room and field. In the opportunities for compensated labor upon the grounds, preference will be given the students of the Agricultural Course, and their hours for study will be so arranged as to aid them as far as practicable in their efforts for self-support. It cannot be expected, however, that the average student, having only unskilled labor to offer, will be able to pay the entire expenses of his college course by this means. The maximum compensation for ordinary labor is eight cents per hour; for skilled labor ten cents may, by special contract, be paid.

#### **Special Course in Agriculture.**

(Two years, not leading to a degree).

It is believed that there are a considerable number of farmers' sons, who, on account of lack of time or means, would hesitate to undertake a full college course of four years, who would yet be glad of an opportunity to gain the benefits of a two-years' course. Candidates for this course must be at least eighteen years of age. While it is believed that an earnest and somewhat mature student can spend two such years very profitably, every young man entering the course is urged to begin the full course of four years if there is any possibility of completing it.

It is often the case that a student earnestly desiring a thorough education will discover some means of finishing a complete course where at first it seemed impracticable.



# Course in Biology.

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## Faculty of Instruction.

JAMES G. WHITE, A. M., Dean,  
Professor of Mathematics and Astronomy.

H. GARMAN,  
Professor of Zoology and Entomology.

(Arranged in alphabetical order).

CHAS. D. CLAY, 1st Lieut. U. S. A.,  
Professor of Military Science.

F. M. HELVETI, A. M.,  
Professor of German and French Languages and Literature.

J. H. KASTLE, PH. D.,  
Professor of Chemistry.

C. W. MATHEWS, B. S.,  
Professor of Agriculture, Horticulture and Botany.

ARTHUR M. MILLER, A. M.,  
Professor of Geology and Paleontology.

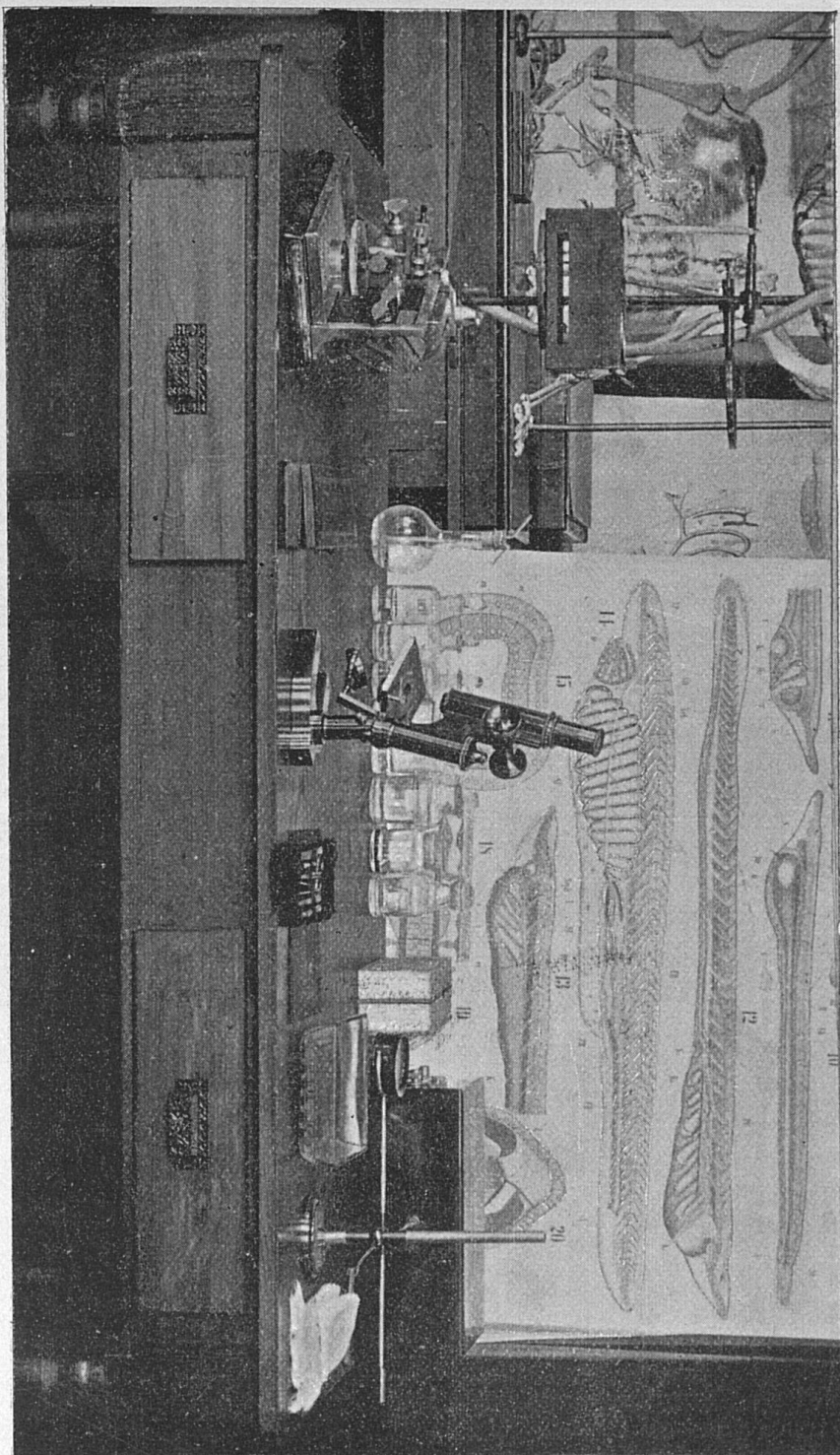
J. P. NELSON, C. E., M. E.,  
Professor of Civil Engineering and Physics.

J. K. PATTERSON, PH. D., President,  
Professor of History, Political Economy and Metaphysics.

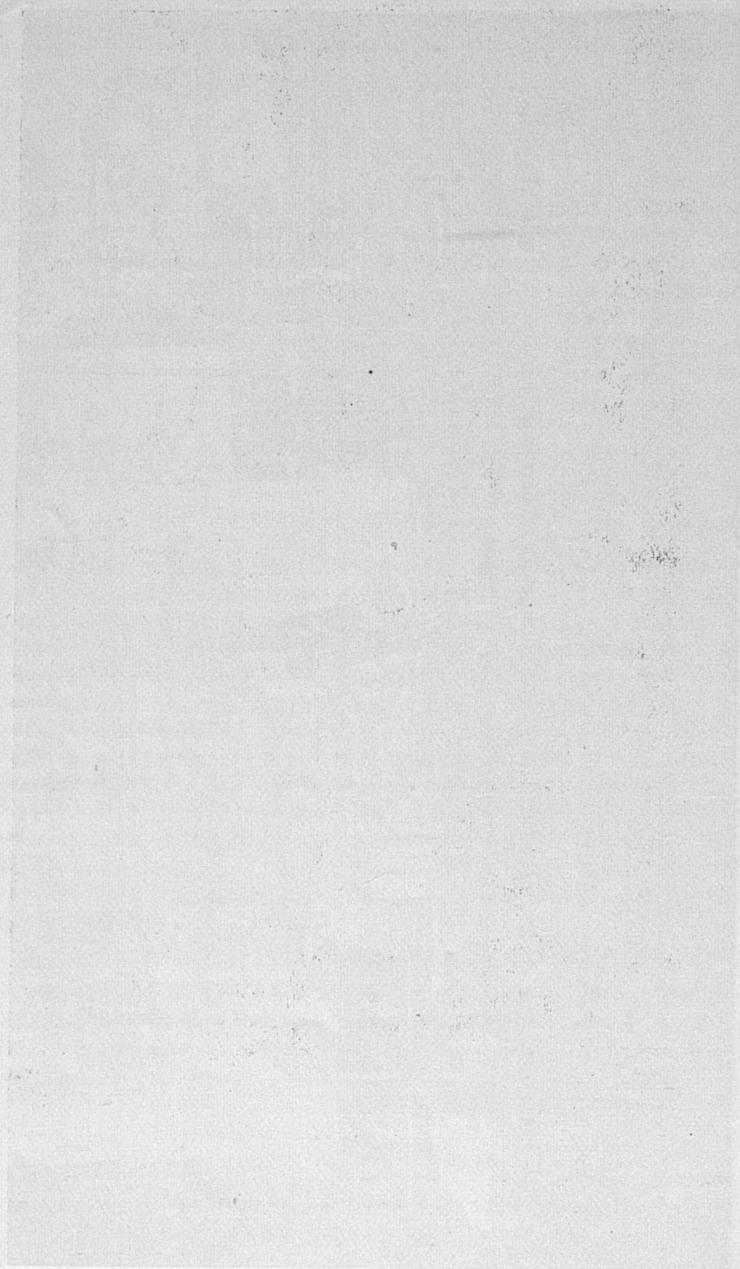
J. W. PRYOR, M. D.,  
Professor of Anatomy and Physiology.

JOHN SHACKLEFORD, A. M.,  
Professor of English Language and Literature.

TABLE FITTED FOR WORK IN ZOOLOGY.







## SCHEDULE OF COURSE IN BIOLOGY.

|                 | First Hour.       | Second Hour.        | Third Hour.             | Fourth Hour.            | Fifth Hour. | Sixth Hour. | 2-4 P. M.                         |
|-----------------|-------------------|---------------------|-------------------------|-------------------------|-------------|-------------|-----------------------------------|
| FRESHMAN YEAR.  | Military Science. | English Literature. | Plane Geometry.         | Algebra                 | Physiology. |             | Drawing.                          |
|                 | Military Science. | English Literature. | Plane Trigonometry.     | Botany.                 | Physiology. |             | (Friday) Botany.                  |
| SOPHOMORE YEAR. | Military Science. | Zoology.            | Zoology.                | Botany.                 | Botany.     |             | Physiography.                     |
|                 | Military Science. | Zoology.            | Zoology.                | Botany.                 | Botany.     |             | Geology.                          |
| JUNIOR YEAR.    |                   | Osteology.          | French.                 | German.                 | Physics.    |             |                                   |
|                 |                   | Botany              | French.                 | German.                 | Chemistry.  | Botany.     |                                   |
| SENIOR YEAR.    |                   | French.             | Comparative Embryology. | Comparative Embryology. | German.     | Astronomy.  | Chemical Laboratory.              |
|                 |                   | Entomology.         | Political Economy.      | Logic.                  | German.     |             | The is work in Botany or Zoology. |



## Course in Biology.

The Course in Biology is designed for those who prefer an education with a foundation in the natural sciences. It is adapted especially to meet the wants of students who are looking toward a career as specialists in Biology, as teachers of natural science, and for those who intend to study medicine after completing college work. Two years of Zoology and Embryology, one term of Entomology, two years of Botany, one year of Anatomy and Physiology, one year of Chemistry, one year of Geology, and one term of Physics, give character to the course. The other branches are offered as in one way or another accessory to the training and knowledge which these studies give. In the sciences of this course laboratory work is made prominent. Field work is done when the nature of the subject permits. Text-book and lecture are employed chiefly to elaborate the subjects and for fixing and explaining facts acquired.

### Zoology.

During the Sophomore year two hours each day are given to the study of this branch. The "type method" is employed, each student being provided with written directions for the examination and dissection of examples of the chief groups of the animal kingdom. The study of these types constitutes the basis of the work in this line. During the year students are expected to acquire also an acquaintance with Systematic Zoology by the use of analytical keys and prepared specimens of birds and fishes. In the first term of the Junior year one hour each day is again given to Zoology, attention being confined to vertebrates. The work of this term serves as a preparation for the Embryology, which is studied during the first term of the Senior year. The Zoological Laboratory is now provided with the best of microscopes, microtomes, paraffine baths, and other appliances for practical work.

### Entomology.

Special work in this branch of Zoology is provided for in the latter part of the Sophomore year. The subject is taught by the use of types, which are dissected and examined with the aid of the microscope.

### Botany.

For two years the student devotes two hours per day to the various divisions of this subject, with the option of an additional term for original investigation as the basis of a graduating thesis.

The work begins in the second term of the Freshman year in January, and is at first almost identical with that assigned to students in other courses; beginning with a study of seeds, their germination

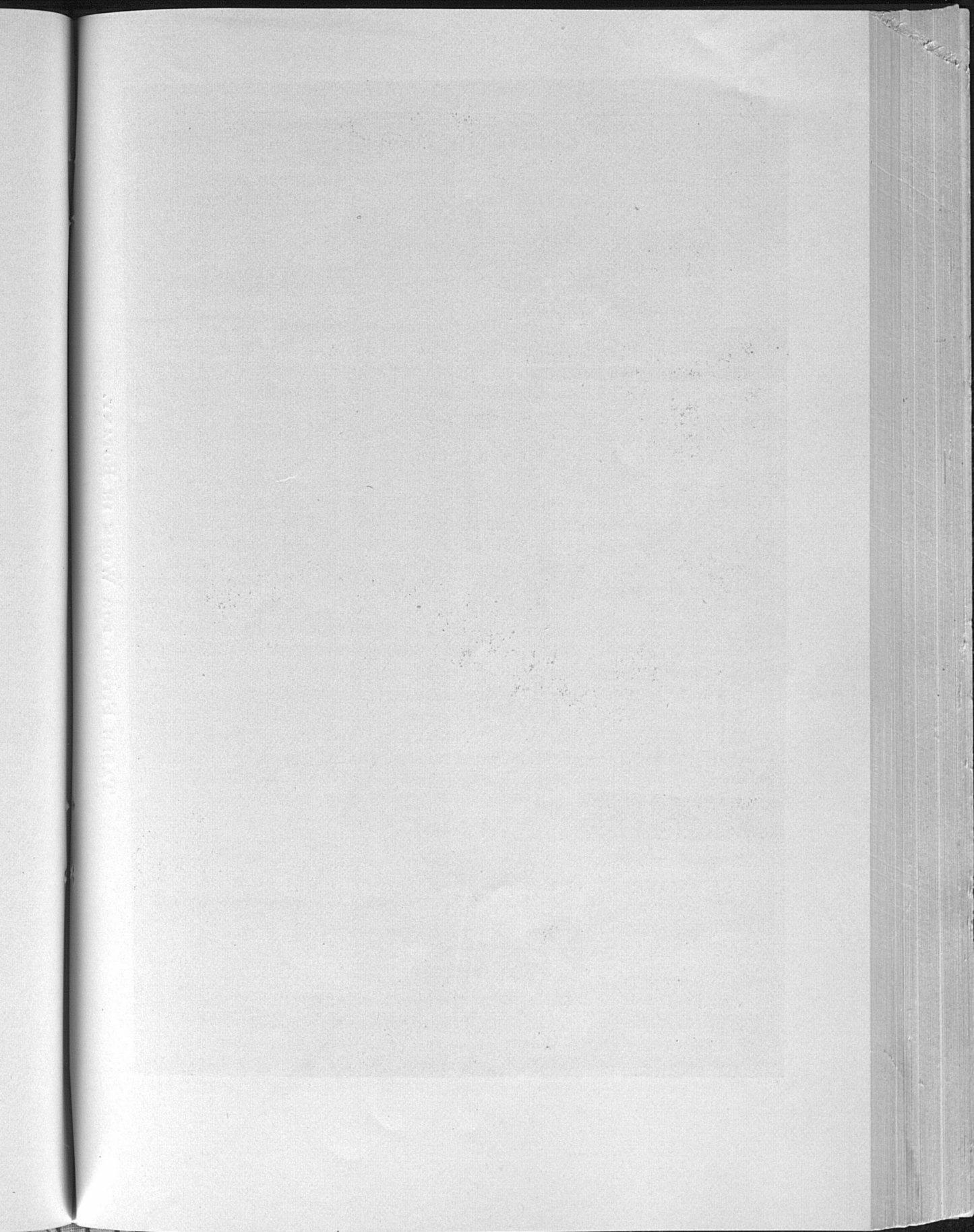




TABLE FITTED FOR WORK IN ENTOMOLOGY.  
TABLE FITTED FOR WORK IN BOTANY.

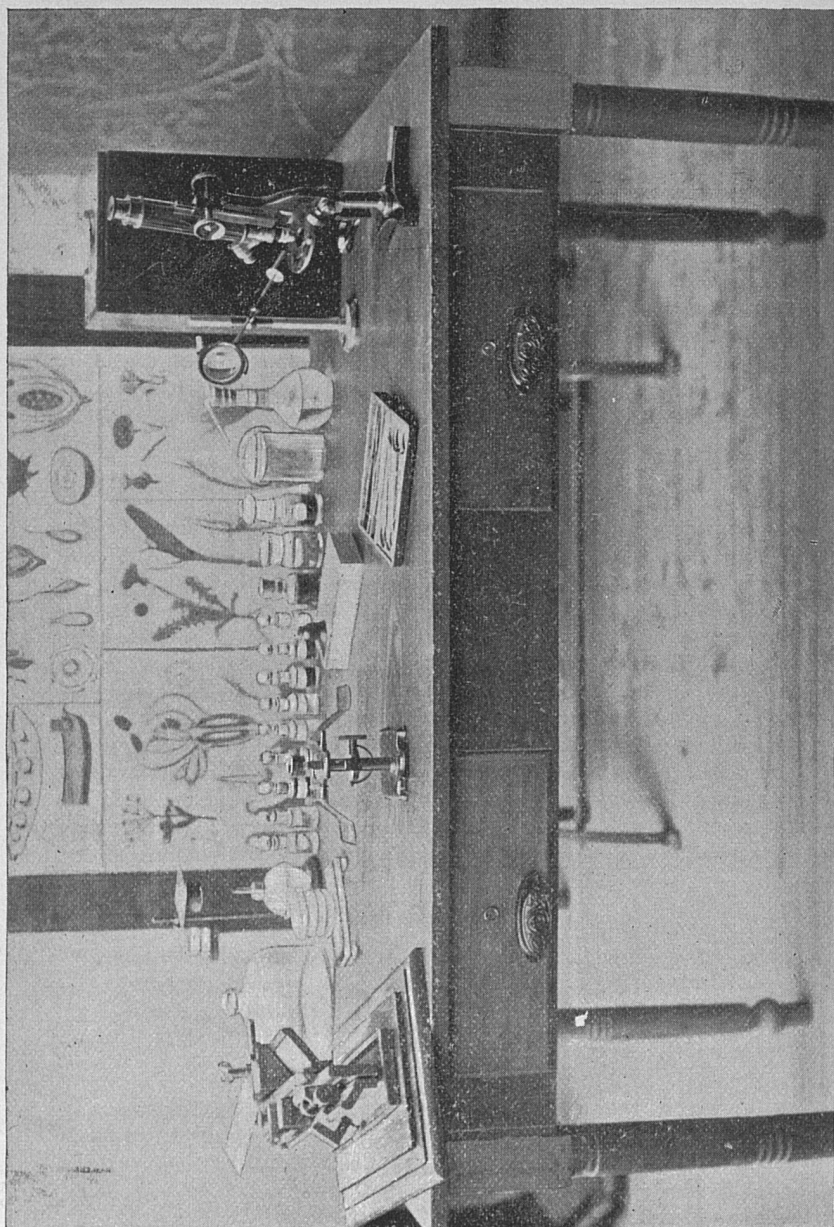
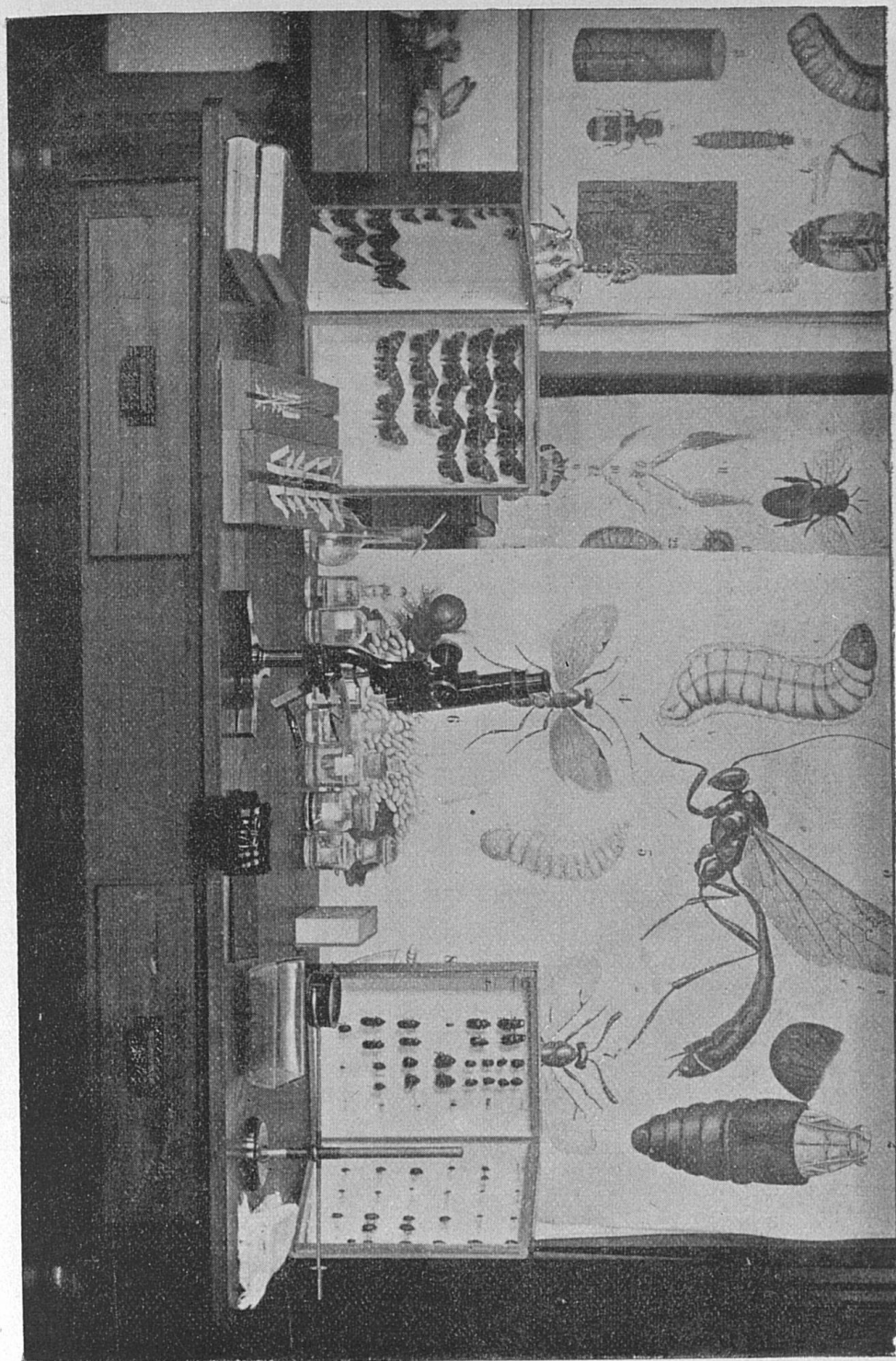
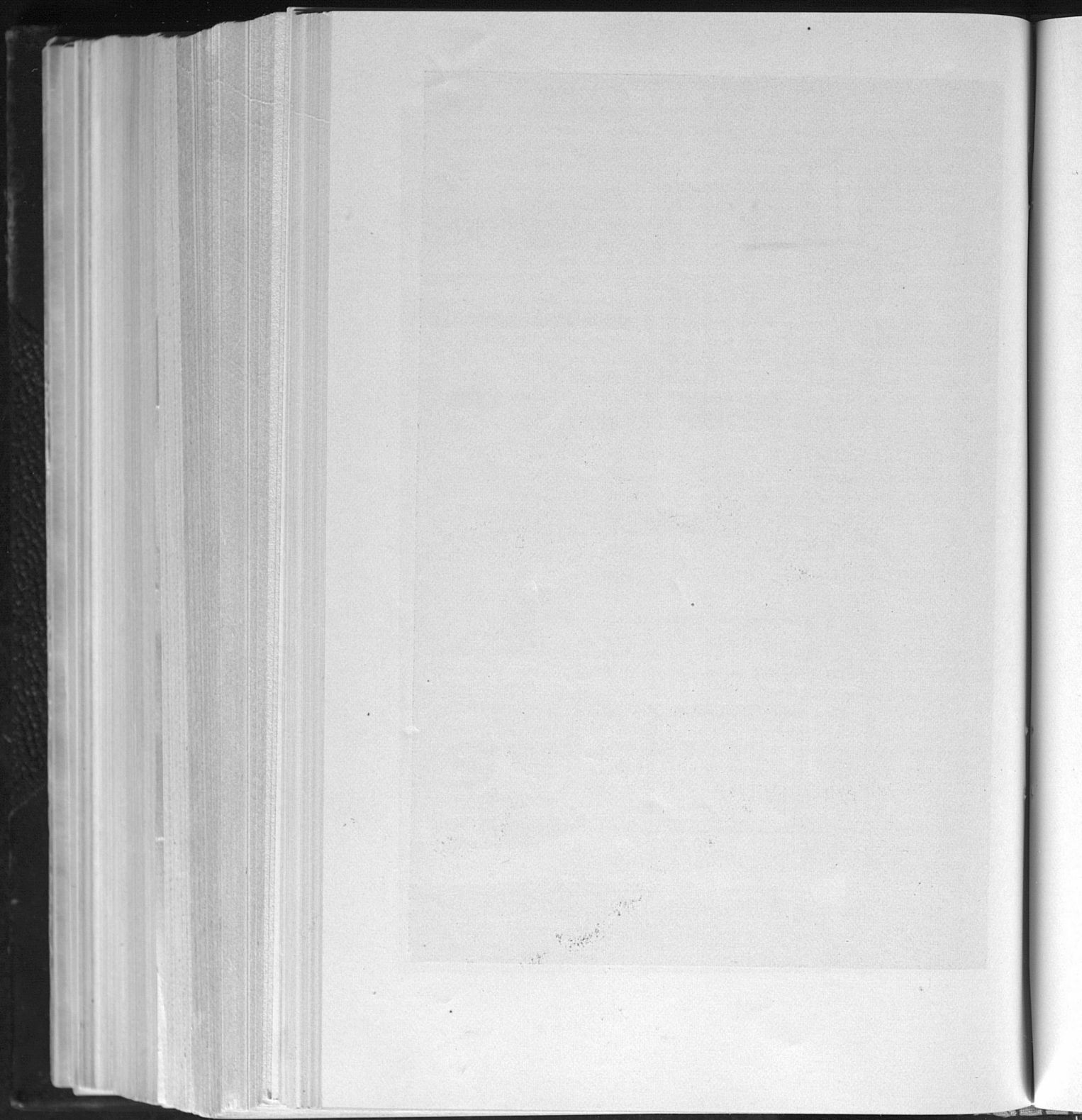


TABLE FITTED FOR WORK IN BOTANY.

TABLE FITTED FOR WORK IN ENTOMOLOGY.







and development, followed by a critical study of the structure of a typical mature plant and its most important modifications. This work is accompanied throughout by drawings and written descriptions of the various forms studied, thus constantly testing and developing the accuracy of the pupil's observative and descriptive powers.

As soon as the out-door plants begin to blossom the work is largely transferred to the field, and the remainder of the term is occupied mainly with the collection and analysis of the local flora.

In the second term, beginning the Sophomore year, the work of collecting is continued and is accompanied by a careful study of the more difficult orders, such as *Compositæ*, *Gramineæ* and *Cyperaceæ*.

During the term topics for special study are assigned to each student, the results being presented to the class in the form of a short paper for criticism and inquiry. These topics include a wide range of subjects, such as a study of some special group of plants, some plants of economic value, subjects in plant physiology, etc.

The third term is occupied mainly with work in microscopy, including Histology and a study of the best known groups of the lower cryptogams.

During the fourth term the work of the student is assigned with reference to his individual tastes and requirements, and is intended to be a continuation of some subjects commenced in the earlier parts of his course, such as Plant Physiology, Systematic Botany, Histology, Official Plants, or Cryptogamic Botany.

### **Anatomy and Physiology.**

The facilities provided for the study of Anatomy and Physiology are excellent. This Department is well supplied with models, charts, skeletons, microscopes, etc.

To those intending upon a professional career, and especially those contemplating the study of medicine and surgery, the instruction received in these branches will be of great value. Taken in connection with the other subjects, which with it make up the Biological course, a good foundation is laid for students intending to devote themselves hereafter to the study of medicine.

Hygiene and preventive medicine are taking such high rank, that it becomes the duty of all to make themselves familiar with physiological anatomy and the essentials of physiology.



## Course in Chemistry.

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### Faculty of Instruction.

JAS. G. WHITE, A. M., Dean,  
Professor of Mathematics and Astronomy.

JOS. H. KASTLE, PH. D.,  
Professor of Chemistry.

(Arranged in alphabetical order).

C. D. CLAY, 1st Lieut., U. S. A.,  
Professor of Military Science.

H. GARMAN,  
Professor of Zoology and Entomology.

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Professor of German and French Languages and Literature.

C. W. MATHEWS, B. S.,  
Professor of Agriculture, Horticulture, and Botany.

ARTHUR M. MILLER, A. M.,  
Professor of Geology and Paleontology.

JAS. K. PATTERSON, PH. D., President,  
Professor of History, Political Economy and Metaphysics

J. W. PRYOR, M. D.,  
Professor of Anatomy and Physiology.

JOHN SHACKLEFORD, A. M.,  
Professor of English Language and Literature.

## SCHEDULE OF COURSE IN CHEMISTRY.

|                    | First Hour.          | Second Hour.            | Third Hour.            | Fourth Hour.             | Fifth Hour.    | 2 to 4 P. M.            |
|--------------------|----------------------|-------------------------|------------------------|--------------------------|----------------|-------------------------|
| FRESHMAN<br>YEAR.  | Military<br>Science. | English.                | Geometry.              | Algebra.                 | Physiology.    |                         |
|                    | Military<br>Science. | English.                | Trigonometry.          | Elementary<br>Chemistry. | Physiology.    |                         |
| SOPHOMORE<br>YEAR. | Military<br>Science. | Solid<br>Geometry.      | French.                | German.                  | Physics.       | Physiography.<br>(a)    |
|                    | Military<br>Science. | Analytical<br>Geometry. | French.                | German.                  | Physics.       |                         |
| JUNIOR<br>YEAR.    |                      | Zoology.                | Zoology.               | Mental<br>Philosophy.    | German.        | Chemical<br>Laboratory. |
|                    |                      | Geology.                | Advanced<br>Chemistry. | Logic.                   | German.        | Chemical<br>Laboratory. |
| SENIOR<br>YEAR.    |                      | Calculus.               | H'istory.              | Botany.                  | Botany.        | Chemical<br>Laboratory. |
|                    |                      | Calculus.               | Political<br>Economy.  | Economic<br>Geology.     | Gen'l Reading. | Thesis.                 |



### Course in Chemistry.

The Chemical Course has lately been established with the view to preparing the student for life work in the Science of Chemistry, and also with the view to fitting him for the study of medicine and kindred professions. To the accomplishment of this purpose the following course of study, extending over four years, has been adopted.

#### Studies Required.

The first year is devoted to the study of English, Mathematics—Algebra, Plane Geometry and Trigonometry; Chemistry—Lectures and laboratory work on the non-metals; and Physiology.

The second to Mathematics; Solid and Analytical Geometry; French, German and Physics.

The third to Zoology, Geology, Metaphysics, Logic, German, Theoretical Chemistry, and laboratory work on the metals.

The fourth to Calculus, History and Political Economy, Botany, Economic Geology, Reading of advanced chemical topics, and Thesis.

#### The Training in Chemistry Proper.

The study in Chemistry proper, as outlined in the above is sufficient in its scope to bring the student in close contact with the great fundamental truths of the Science, and to make him enthusiastic and capable in his profession.

The course in General Chemistry, extending through the second five months of the first year, consists of lectures, laboratory work and recitations five times weekly on the non metals and their compound and the simpler laws of chemical change. The lectures are abundantly illustrated by suitable and instructive experiments; the laboratory work is carefully directed and the student receives every possible encouragement to do excellent work.

During the second year the study of Chemistry is optional, the time of the student being devoted to other studies, all of which are useful and essential not only to the study of Chemistry but to every kind of scientific training.

In the third year the study of Chemistry is resumed with laboratory work and Theoretical Chemistry. The study of Theoretical Chemistry, consisting of lectures, recitations and readings five times weekly during the first half year is intended to acquaint the student with the greatest generalizations and theories of modern chemistry and their historical development. In this connection fifty lectures will be delivered upon the following general topics: Ten upon the Atomic Theory, its development, and the methods at present used in the determination of atomic weights; fifteen upon the Compounds of Carbon, Isomerism and Structural Formulæ; ten upon the History of

Chemistry; five upon the Periodic Law; five upon the Spectroscope, Spectrum Analysis, and the Chemistry of the Heavenly Bodies; five upon the more important, current chemical investigations.

By way of supplementing the work of the lecturer, students pursuing this course will be required to do a certain, rather liberal, amount of general reading upon the matter treated of in the lectures or upon such other topics as may be assigned by the instructor. For this purpose the nucleus of a chemical library has been formed, which may be freely consulted by any or all students in the College, and the leading chemical journals of this and other countries, will there be kept on file. The broadening influences of such a course can scarcely be overestimated, and students who complete it satisfactorily will find themselves, in some measure at least, abreast of the highest and best chemical thought of our time.

The laboratory work, during the first term of the third year, is devoted to the study of the metals, and their more important compounds, and qualitative analysis. This work is intended to supplement the work of the first year upon the non-metals; and also to familiarize the student more fully with the commoner methods of chemical manipulation and practice. The laboratory work of the first term will be followed up during the second with laboratory work in quantitative analysis; by means of which the student learns the value of precise and accurate work, and the constancy and definite character of chemical reactions. The chemical work of the last year will consist of such special work as the student may elect to pursue; together with the preparation of a thesis embodying the results of this special work. The object of such an arrangement is to perfect him in that particular branch of the science for which he shows a liking or a particular talent. In this connection it may be well to state that facilities are offered for special work along the following lines: Pure Chemistry, Organic Chemistry, Agricultural Chemistry, general analytical work, and special analytical work on fertilizers, iron and steel, and fuels.

#### Chemistry Required in Other Courses.

Instruction in chemistry in other courses of study, such as the Scientific, Classical, etc., is designed to meet their special needs in this direction.

In the Classical Course the study of this science extends over five months, five times weekly; and is intended simply to introduce the student to the subject by way of general education.

In the Scientific Course the work extends over fifteen months, a portion of this time is devoted to the study of the metals and qualitative analysis by means of laboratory work; and a third portion to the study of theoretical chemistry. In the course of mechanical



Engineering the instruction is adapted as completely as possible to the need of the students in this department. Instruction in chemistry in this course extends over a period of fifteen months; five of which are devoted to the study of the non-metals and their compounds; five to the chemistry of the metals with special reference to the properties which render them useful to the mechanician; and also with reference to their mode of occurrence to nature and the methods of obtaining them from their ores. The last five months of the course are devoted to the study of quantitative analytical methods with special reference to the quantitative determination of the amounts of different metals in the useful alloys, and of the amounts of carbon and other substances in iron and steel. For students in Civil Engineering a similar course has been provided, extending over ten months. The first five of these are devoted to the study of Elementary Chemistry, and the last five to the study of those substances used as building material: metals, alloys, and mineral substances which are used in construction.

For the benefit of students of Agriculture a special course in Agricultural Chemistry has been arranged, the general aim of which is to acquaint the student with the chemistry of those elements which enter into the composition of plants, and which are essential to their life and growth. A study of the composition of the soil, air and water, and their several relations to the plant as sources of plant-food, forms a large and important part of this work. Also the chemistry of tillage, irrigation and rotation, and the composition and value of commercial fertilizers and manures.

For students in Biology, also, instruction in Chemistry is adapted as fully as possible to their needs. Instruction in this branch extends over ten months, five times weekly. The first half of this time is devoted to the study of Elementary Chemistry: this is followed by laboratory work in the afternoon upon those elements which are regarded as essential to living things, animal and vegetable. Chemistry also forms an important branch of study in the Veterinary Course. It extends over ten months and includes Elementary Chemistry together with such special study as the Director of this course may see fit to assign.

# Course in Civil Engineering.

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## Faculty of Instruction.

J. P. NELSON, C. E., M. E., Dean,  
Professor of Civil Engineering and Physics.

(Arranged in alphabetical order).

F. PAUL ANDERSON, B. M. E.,  
Professor of Mechanical Engineering.

C. D. CLAY, 1st Lieut., U. S. A.,  
Professor of Military Science.

F. M. HELVETI, A. M.,  
Professor of German and French.

J. H. KASTLE, PH. D.,  
Professor of Chemistry.

ARTHUR M. MILLER, A. M.,  
Professor of Geology and Paleontology.

J. K. PATTERSON, PH. D., President,  
Professor of History, Political Economy and Metaphysics.

M. L. PENCE, M. S.,  
Associate Professor of Civil Engineering.

JOHN SHACKLEFORD, A. M.,  
Professor of English Language and Literature.

J. H. WELLS, B. M. E.,  
Assistant Professor of Mechanical Engineering.

JAS. G. WHITE, A. M.,  
Professor of Mathematics and Astronomy.



## SCHEDULE OF COURSE IN CIVIL ENGINEERING.

|                    | First Hour.       | Second Hour.            | Third Hour.              | Fourth Hour.            | Fifth Hour.            | Sixth Hour. | 2-4 P. M.              |
|--------------------|-------------------|-------------------------|--------------------------|-------------------------|------------------------|-------------|------------------------|
| FRESHMAN<br>YEAR.  | Military Science. | English Literature.     | Plane Geometry.          | Algebra.                | Drawing and Wood Work. |             | Shop Work.             |
|                    | Military Science. | English Literature.     | Plane Trigonometry.      | Draughting, Surveying.  | Drawing, Pattern Work. |             | Shop Work.             |
| SOPHOMORE<br>YEAR. | Military Science. | Solid Geometry.         | Surveying and Locations. | German.                 | Physics.               |             | Shop Work, Field Work. |
|                    | Military Science. | Analytical Geometry.    | Descriptive Geometry.    | German.                 | Physics.               |             | Shop Work, Field Work. |
| JUNIOR<br>YEAR.    |                   | Calculus.               | Graphical Statics.       | Draughting.             | German.                |             | Field Work.            |
|                    |                   | Analytical Geometry.    | Applied Mechanics.       | Geodesy.                | Chemistry.             |             | Physical Laboratory.   |
| SENIOR<br>YEAR.    | Stereotomy.       | Bridges and Structures. | History.                 | Draughting.             | Sanitary Engineering.  | Astronomy.  | Chemical Laboratory.   |
|                    |                   | Stereotomy.             | History.                 | Bridges and Structures. | Hydraulic Engineering. |             | Geology.               |

## Course in Civil Engineering.

This course comprises primarily the study of subjects necessary to fit students for the practice of this profession in any of its branches; and, secondarily, the study, so far as is possible, of such other subjects as belong to a liberal education.

Applicants for this Degree are required to pass a satisfactory examination on all the subjects comprised in the course; to attend all of the classes in at least the Junior and Senior years, and to comply with the other rules of the College.

The course of study occupies four years. Students are not admitted to advanced classes unless they show, after proper examination, that they are amply prepared for this privilege.

The theory of Engineering Work is taught by text-books and lectures, and the practical application of the theory is exemplified by work in the field and by the examination of model structures.

The work of a civil engineer may properly be the charge of the building and handling of railways, both steam and electric; highways of all kinds; bridges and all other structures; surveying in the simple branches of land measurement and in the higher work of geodetic and map surveys, including surveys by astronomical observations; Municipal Engineering in all of its important branches, and the location and economic opening of mines. This course of study is designed to prepare its graduates for the proper handling of all such work.

In addition to the purely technical subjects with which a civil engineer must be familiar, the course provides for the study of English Literature and History, Political Economy and German.

The practical knowledge of materials used in structures is provided for by a course of work in the Mechanical Laboratory in connection with the study of the theory of working in wood, iron and steel.

Practical use of the instruments belonging to this profession is taught by work in the field, including land surveying, railway location, triangulation, and observation with the solar transit for latitude, time and true meridian. Methods for finding longitude and latitude are practiced. This practical work includes the use of Compass, Transit, with solar attachment, Level, Plane Table, Aneroid Barometer and other instruments, all of which are furnished by the College.

To those who desire it and who are properly prepared, opportunity will be offered for the study of advanced classes in any of the subjects forming a part of this course. To Post-Graduates such an opportunity offers a means for extended study of the application of the Infinitesimal Analysis to problems in mechanics.



# Course in Ancient Languages

(CLASSICAL).

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## Faculty of Instruction.

JOHN H. NEVILLE, Dean,  
Professor of Latin and Greek Languages and Literature.

(Arranged in alphabetical order).

R. L. BLANTON, M. LIT.,  
Assistant Professor of Ancient and Modern Languages.

C. D. CLAY, 1st Lieut., U. S. A.,  
Professor of Military Science.

F. M. HELVETI, A. M.,  
Professor of German and French Languages and Literature.

J. H. KASTLE, PH. D.,  
Professor of Chemistry.

ARTHUR M. MILLER, A. M.,  
Professor of Geology and Paleontology.

JAS. K. PATTERSON, PH. D., President,  
Professor of History, Political Economy and Metaphysics.

J. W. PRYOR, M. D.,  
Professor of Anatomy and Physiology.

JOHN SHACKLEFORD, A. M.,  
Professor of English Language and Literature.

## SCHEDULE OF COURSE IN ANCIENT LANGUAGES (Classical).

|                    | First Hour.       | Second Hour.         | Third Hour.                 | Fourth Hour.             | Fifth Hour.       | Sixth Hour. | 2 to 4 P. M.  |
|--------------------|-------------------|----------------------|-----------------------------|--------------------------|-------------------|-------------|---------------|
| FRESHMAN<br>YEAR.  | Military Science. | English Literature.  | Plane Geometry              | Algebra.                 | Exercises, Livy.  |             |               |
|                    | Military Science. | English Literature.  | Plane Trigonometry.         | Physiology.              | Cicero.           |             |               |
| SOPHOMORE<br>YEAR. | Military Science. | Solid Geometry.      | English.                    | German.                  | Herodotus, Plato. |             |               |
|                    | Military Science. | Analytical Geometry. | English.                    | German.                  | Thucydides.       |             |               |
| JUNIOR<br>YEAR.    |                   | Exercises, Horace.   | French.                     | Exercises, Greek Grammar | German.           |             |               |
|                    |                   | Tacitus, Juvenal.    | French.                     | Exercises, Greek Drama.  | German.           |             |               |
| SENIOR<br>YEAR.    |                   | French.              | History.                    | Mental Philosophy.       |                   | Astronomy.  | Physiography. |
|                    |                   | French.              | History, Political Economy. | Logic.                   | Chemistry.        |             |               |



# Course in Mechanical Engineering.

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## Faculty of Instruction.

F. PAUL ANDERSON, B. M. E., Dean,  
Professor of Mechanical Engineering.

(Arranged in alphabetical order).

C. D. CLAY, 1st Lieut., U. S. A.,  
Professor of Military Science.

J. R. JOHNSON, B. M. E.,  
Instructor in Shop Work and Drawing.

J. H. KASTLE, PH. D.,  
Professor of Chemistry.

J. P. NELSON, C. E., M. E.,  
Professor of Civil Engineering and Physics.

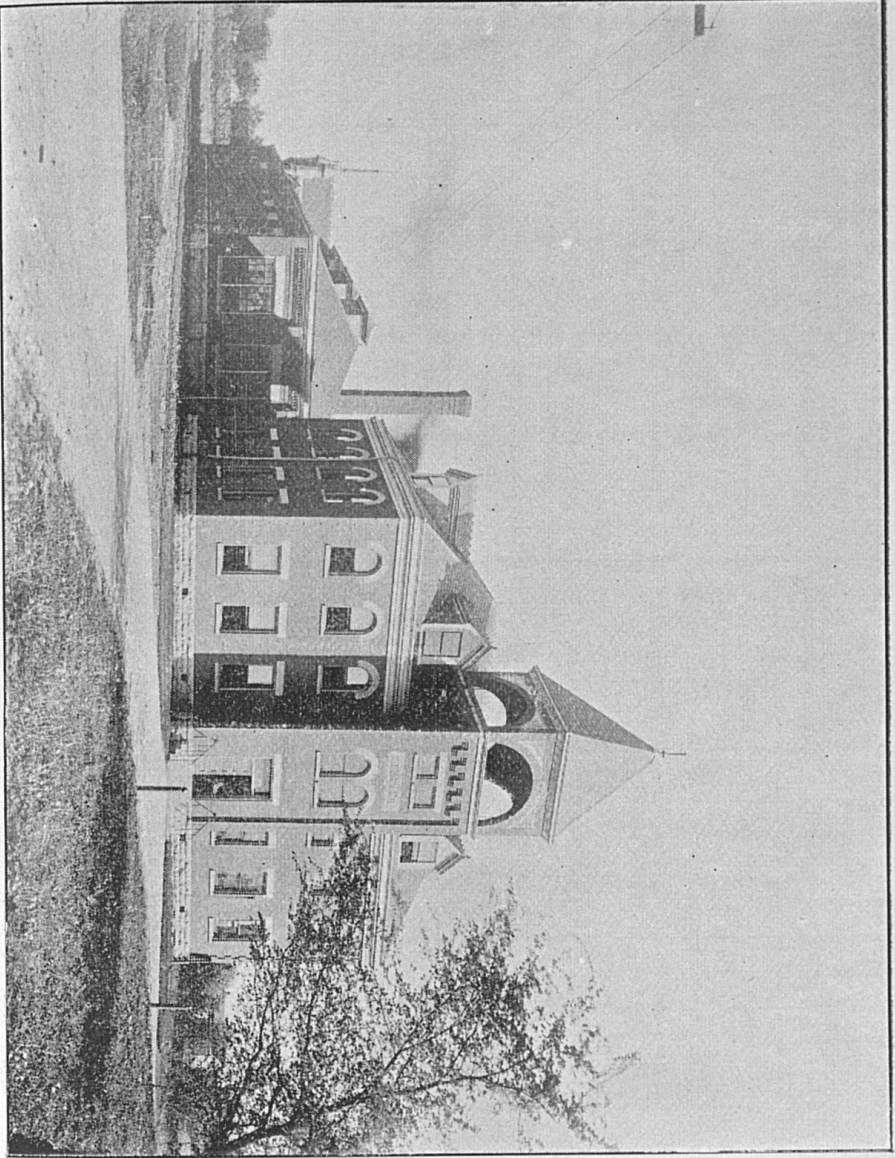
J. K. PATTERSON, PH. D., President,  
Professor of History, Political Economy and Metaphysics.

M. L. PENCE, M. S.,  
Associate Professor of Civil Engineering.

JOHN SHACKLEFORD, A. M.,  
Professor of English Language and Literature.

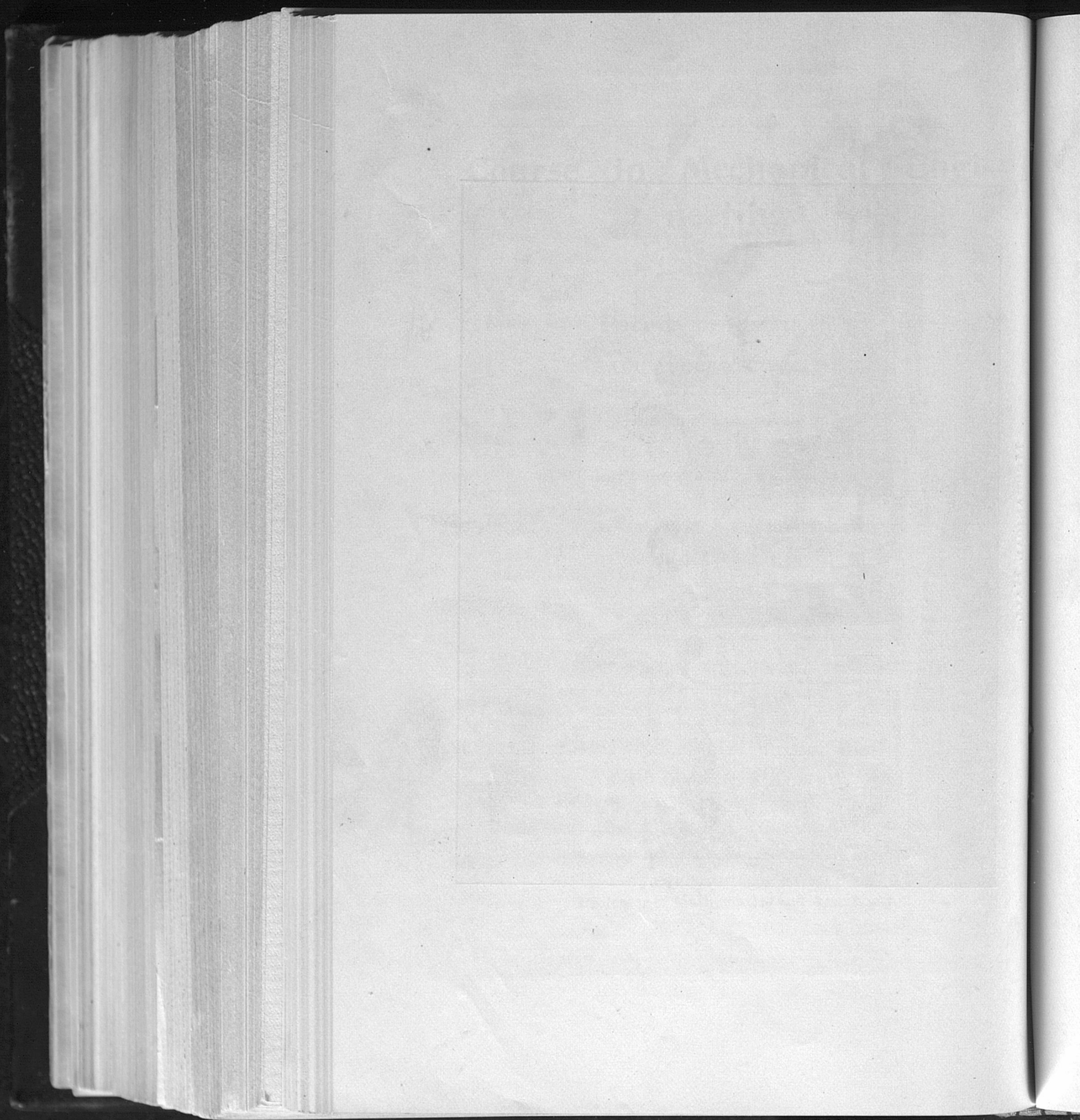
J. H. WELLS, B. M. E.,  
Assistant Professor of Mechanical Engineering.

JAS. G. WHITE, A. M.,  
Professor of Mathematics and Astronomy.



MECHANICAL HALL





## SCHEDULE OF COURSE IN MECHANICAL ENGINEERING.

|                 | First Hour.       | Second Hour.          | Third Hour.                    | Fourth Hour.                           | Fifth Hour.                                                                  | Sixth Hour.                                               | 2:15-4:45 P. M.                      |
|-----------------|-------------------|-----------------------|--------------------------------|----------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------------|
| FRESHMAN YEAR.  | Military Science. | English.              | Plane Geometry.                | Algebra.                               | Wood Working Tools, Mechanical Drawing.                                      |                                                           | Shop Work in Wood, Bench and Lathe.  |
|                 | Military Science. | English.              | Plane Trigonometry             | Mechanical Drawing.                    | Theory of Pattern Making and Foundry Practice.                               |                                                           | Pattern Making. Foundry.             |
| SOPHOMORE YEAR. | Military Science. | Solid Geometry.       | Mechanical Drawing.            | Elementary Designing.                  | Physics.                                                                     |                                                           | Iron and Steel Forging.              |
|                 | Military Science. | Analytical Geometry.  | Descriptive Geometry.          | Elementary Designing.                  | Physics.                                                                     |                                                           | Vise Work in Metal, Machine Work.    |
| JUNIOR YEAR.    |                   | Calculus.             | Kinematics.                    | Heat.                                  | Physical Laboratory.                                                         | Physical Laboratory.                                      | Machine Design.                      |
|                 |                   | Analytical Mechanics. | Strength of Materials.         | Metallurgy.                            | Chemistry.                                                                   | Chemical Laboratory.                                      | Chemical Laboratory, Machine Design. |
| SENIOR YEAR.    |                   | Thermodynamics.       | History.                       | Steam Boilers, Transmission of Power.  | Valve Gearing.                                                               | Theory and Practice of Photography. Experimental Work;    | Valve and Engine Designing.          |
|                 |                   | Engine Design.        | History and Political Economy. | Dynamometers and Measurement of Power. | Experimental Work; Engine, Boiler, Belt and Materials of Construction Tests. | Engine, Boiler, Belt and Materials of Construction Tests. | Thesis Work.                         |



## Course in Mechanical Engineering.

The training given in this course, both practical and theoretical, is intended to prepare young men for positions of responsibility and trust in the Mechanical Engineering world. The practical work extends over a period of two years and includes the most important principles and operations in bench work in wood, wood-turning, pattern-making, foundry work, iron and steel forging, and hand and machine work in metal.

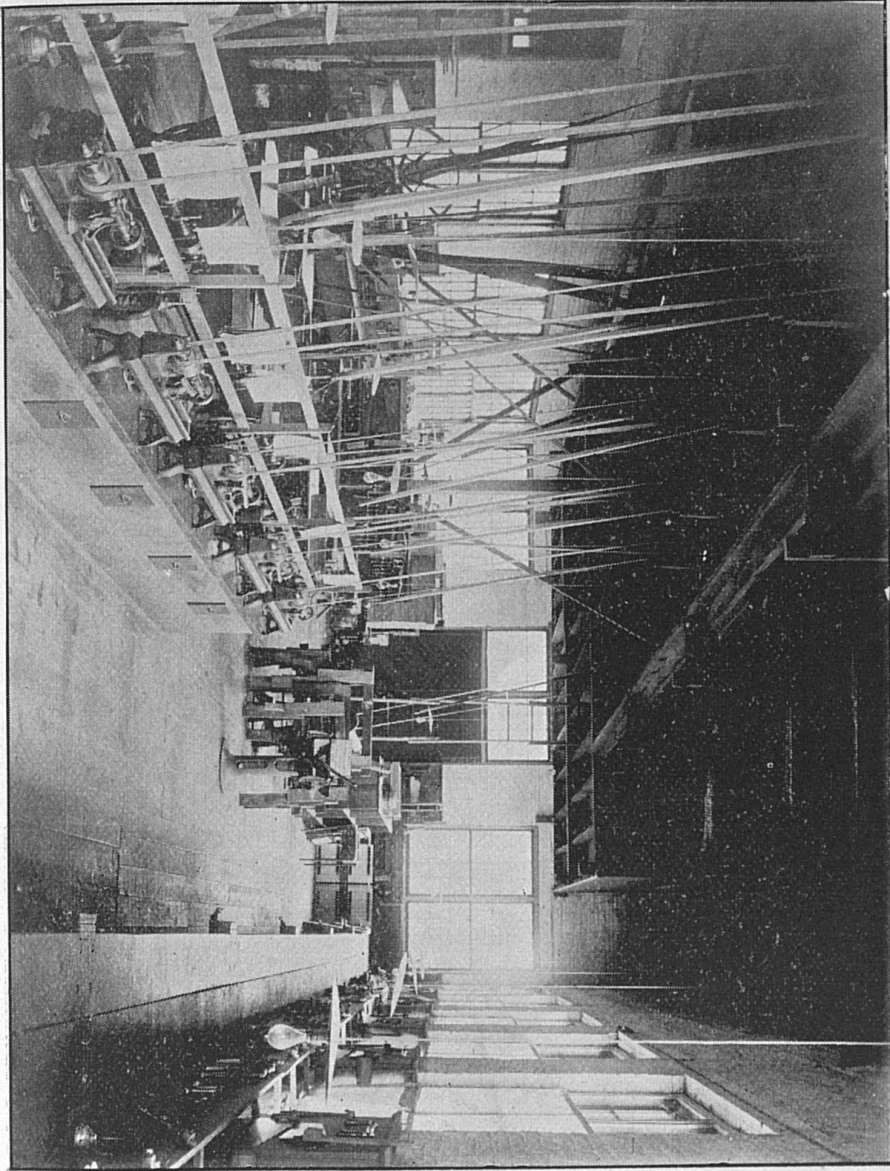
The theoretical work during the first two years consists of a thorough training in English, Chemistry, Mathematics, Physics and Drawing, and during the last two years, the fundamental principles of boiler, machine and engine design are taken up. By a careful solution of practical problems, the student becomes familiar with the process carried on by the operators and designers of successful machine plants.

The course in Mechanical Engineering involves three separate lines of work:

1. *Steam engineering*, the object of which is to give that training necessary to fit men to be operators and designers of steam machinery.
2. *A chemical line* intended especially to give that knowledge requisite for the successful operation of iron and steel plants and the analysis of iron, steel, coals and refractory substances.
3. *An electrical*, in which the theory, design, building and operation of dynamos and motors is predominant.

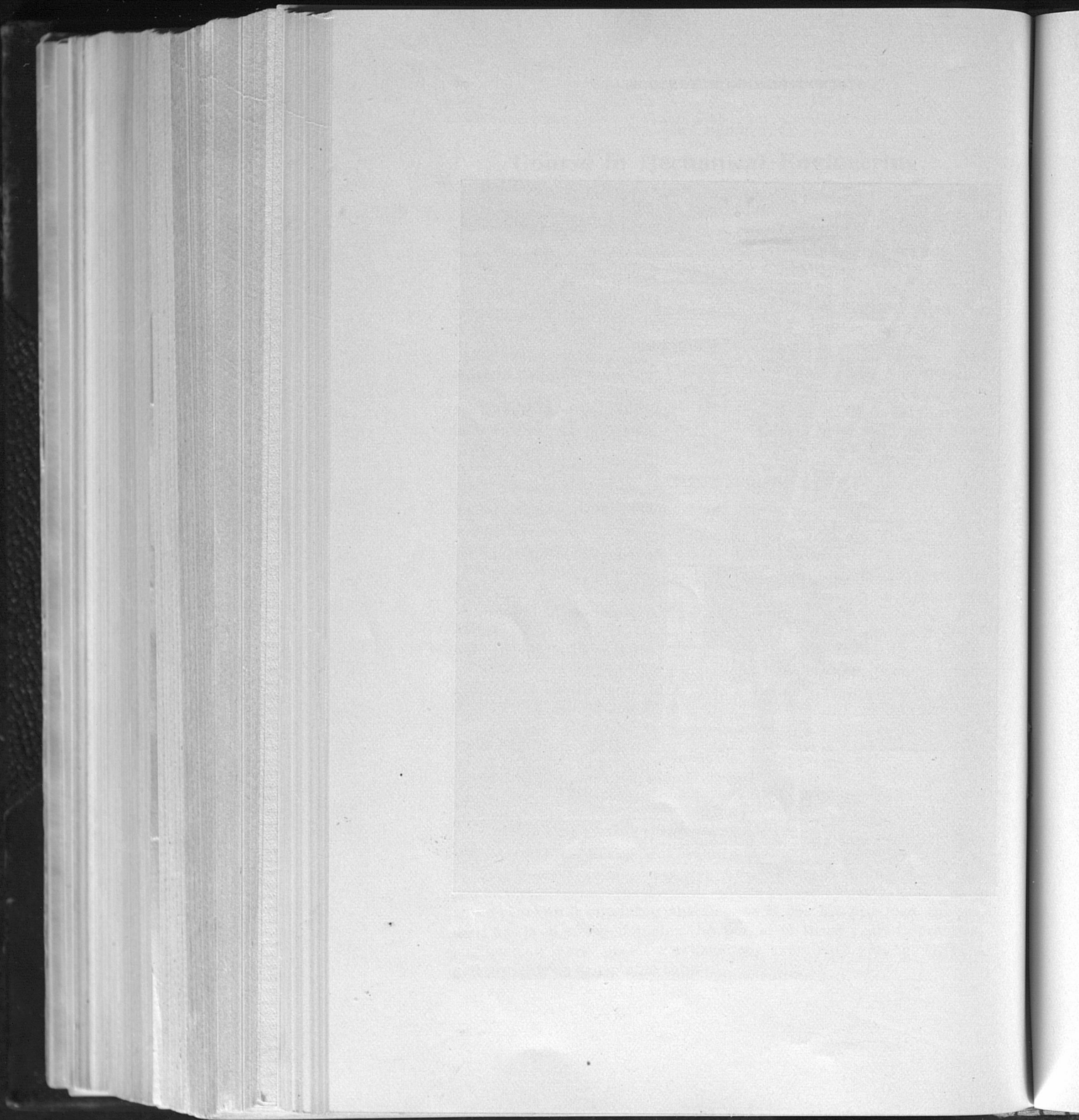
During the Freshman and Sophomore years the work for all students in the Mechanical Engineering Course is identical, but during the Junior and Senior years a student is granted the privilege of electing one of the three lines of work indicated above.

The course of study in Mechanical Engineering extending over a period of four years leads to the Degree B. M. E. (Bachelor of Mechanical Engineering). The advanced Degree of Mechanical Engineer may be obtained by resident students in one year after taking the degree of B. M. E. from the State College of Kentucky or any other institution of equal requirements, having successfully carried on work laid down, passed a satisfactory examination, and presented an acceptable thesis. Advanced degree may also be taken in three years after obtaining the Degree B. M. E., provided the student has been engaged during the period of three years in practical engineering work, passes a satisfactory examination at the College and presents an acceptable thesis.



WOOD SHOP.





**Freshman Year.****TECHNICAL INSTRUCTION.**

Twenty-six weeks, three hours per week.

- (a). Recitations on the forms of wood-working tools, and the cutting and peculiarities of timber.
- (b). Lectures on the operation of the various forms of wood-working machinery.
- (c). Lectures on pattern-making, molding and casting.

**MECHANICAL DRAWING.**

Twenty-six weeks, six hours a week, and ten weeks, ten hours a week.

This drawing includes free-hand sketches, drawing from copies and model, using parts of machines in the Mechanical Laboratories as models.

**SHOP WORK.**

Thirty-six weeks, twelve hours a week.

- (a). Bench work in wood, including exercises in the following operations: planing, sawing, rabbeting, plowing, notching, splicing, mortising, tenoning, dovetailing, framing, paneling, and the general use of carpenter's tools.
- (b). Wood-turning, involving the various principles of lathe-work in wood.
- (c). Pattern-making, which gives the student discipline in the construction of patterns for foundry work.
- (d). Foundry work, including the various operations of molding, core-making, and the melting of iron and brass.

**ENGLISH.**

Thirty-six weeks, five hours per week.

**ALGEBRA.**

Seventeen weeks, five hours per week.

**GEOMETRY.**

Seventeen weeks, five hours per week.

**TRIGONOMETRY.**

Nineteen weeks, five hours per week.



**Sophomore Year.**

## TECHNICAL INSTRUCTION.

Sixteen weeks, one hour per week.

- (a). Lectures on the handling of iron and steel in forging, and the methods of tempering and annealing steel.
- (b). Lectures on modern machine-shop practice.

## MECHANICAL DRAWING.

Sixteen weeks, four hours per week; thirty-six weeks, five hours per week.

- (a). Drawing the parts of machines and complete machines to scale.
- (b). Exercise in tinting and shading.

## SHOP WORK.

Thirty-six weeks, twelve hours per week.

- (a). Exercise in iron and steel forging.
- (b). Exercise in vise-work in metal.
- (c). General machine work, including screw-cutting, drilling, planing, and the milling of iron, brass and steel.

## DESCRIPTIVE GEOMETRY.

Nineteen weeks, five hours per week.

## PHYSICS.

Thirty-six weeks, five hours per week.

## SOLID GEOMETRY.

Seventeen weeks, five hours per week.

## ANALYTICAL GEOMETRY.

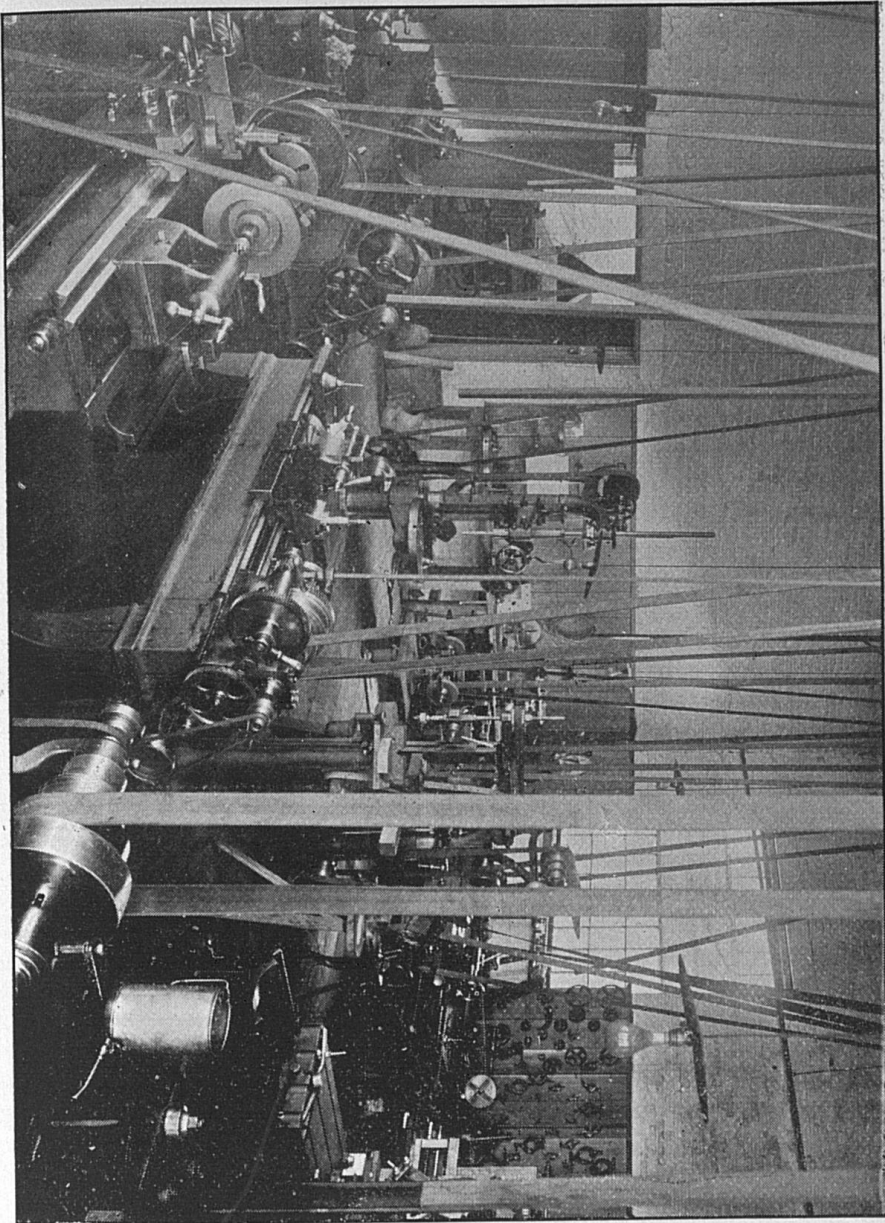
Nineteen weeks, five hours per week.

**Junior Year.**

## KINEMATICS.

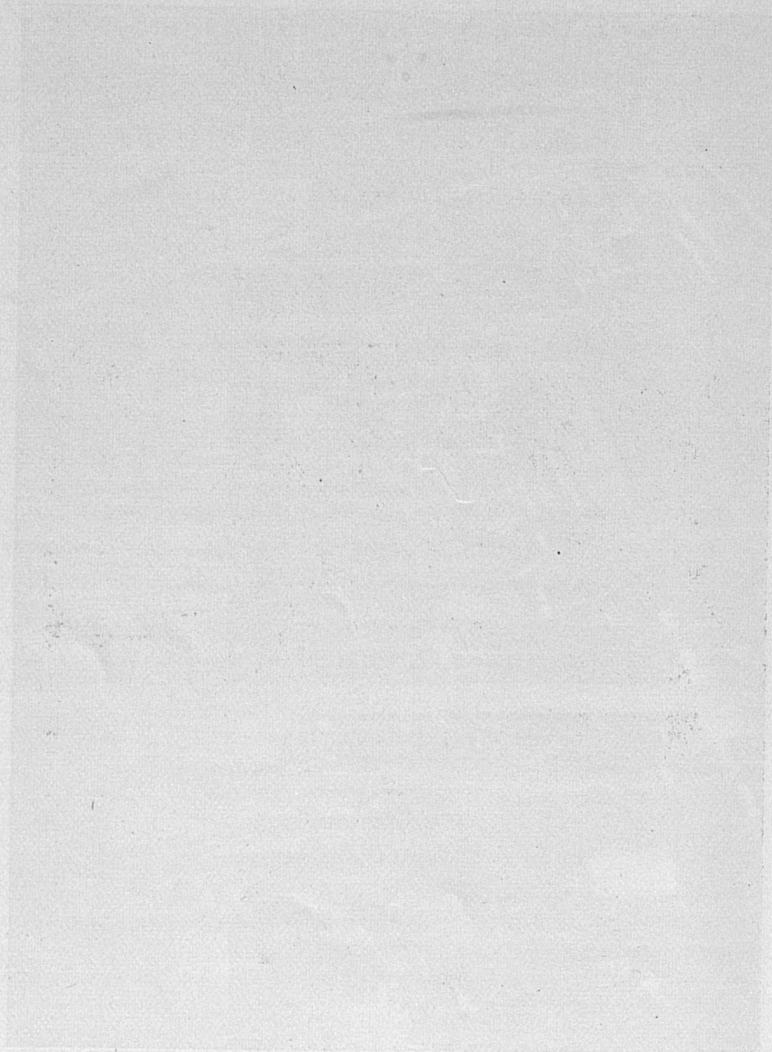
Seventeen weeks, five hours per week.

Under this head are studied the velocity ratios in various motions, construction of gears, cams, quick return motions, straight line motions, epicyclic trains, parallel motions, and the manner of designing trains of mechanism.



MACHINE SHOP.





## MECHANICAL DRAWING.

Thirty-six weeks, ten hours per week.

The work done during the year consists in the design of machines to do certain specific work, and the making of detail drawings of machines used in actual construction in the laboratories.

## METALLURGY.

Nineteen weeks, three hours per week.

The above includes the study of fuels and refractory substances, and the process employed in puddling iron and making steel.

## CHEMICAL LABORATORY

Thirty-six weeks, five hours per week.

## ANALYTICAL MECHANICS.

Nineteen weeks, five hours per week.

## STRENGTHS OF MATERIALS.

Nineteen weeks, five hours per week.

## HEAT.

Seventeen weeks, five hours per week.

## PHYSICAL LABORATORY.

Seventeen weeks, five hours per week.

## CHEMISTRY.

Nineteen weeks, five hours per week.

## CHEMICAL LABORATORY.

Nineteen weeks, five hours per week.

**Senior Year.**

## THERMODYNAMICS.

Twenty-six weeks, six hours per week.

This work consists of a study of the laws of thermodynamics, thermal capacities, and the application of thermodynamics to the steam engine.

## STEAM BOILERS.

Seventeen weeks, five hours per week.

A study of the various commercial steam boilers, consumption of fuel, incrustation, determining the horse power of boilers, boiler tests, the design of boilers for efficiency and economy, and the methods of power transmission.



## VALVE GEARING.

Seventeen weeks, five hours per week.

The study of various forms of standard engine valves and methods of designing.

## MECHANICAL DRAWING.

Seventeen weeks, ten hours per week.

This consists in working out practical designs of boilers and steam engine valves.

## ENGINE AND MACHINE DESIGN.

Fifteen weeks, five hours per week.

A study of the modern methods of designing engines and machines for strength as well as motion.

## EXPERIMENTAL ENGINEERING.

Fifteen weeks, ten hours per week.

Includes a study of the Indicator, making engine, boiler, belt, and materials for construction tests.

## POLITICAL ECONOMY.

Fifteen weeks, five hours per week.

## THEORY AND PRACTICE OF PHOTOGRAPHY.

Seventeen weeks, five hours per week.

## HISTORY.

Twenty weeks, five hours per week.

## DYNAMOMETERS AND MEASUREMENT OF POWER.

Twelve weeks, five hours per week.

## THESIS WORK.

Nineteen weeks, twelve hours per week.

Every student, before he attains the degree of B. M. E., must present a satisfactory thesis on some new design of a machine, or an original investigation.

The greater part of the second term of the Senior Year is given to the preparing of this thesis. The subjects for theses are assigned to students by the Professor of Mechanical Engineering, and the completed theses are kept on file with the college records, that they may serve as a reference for future investigators.

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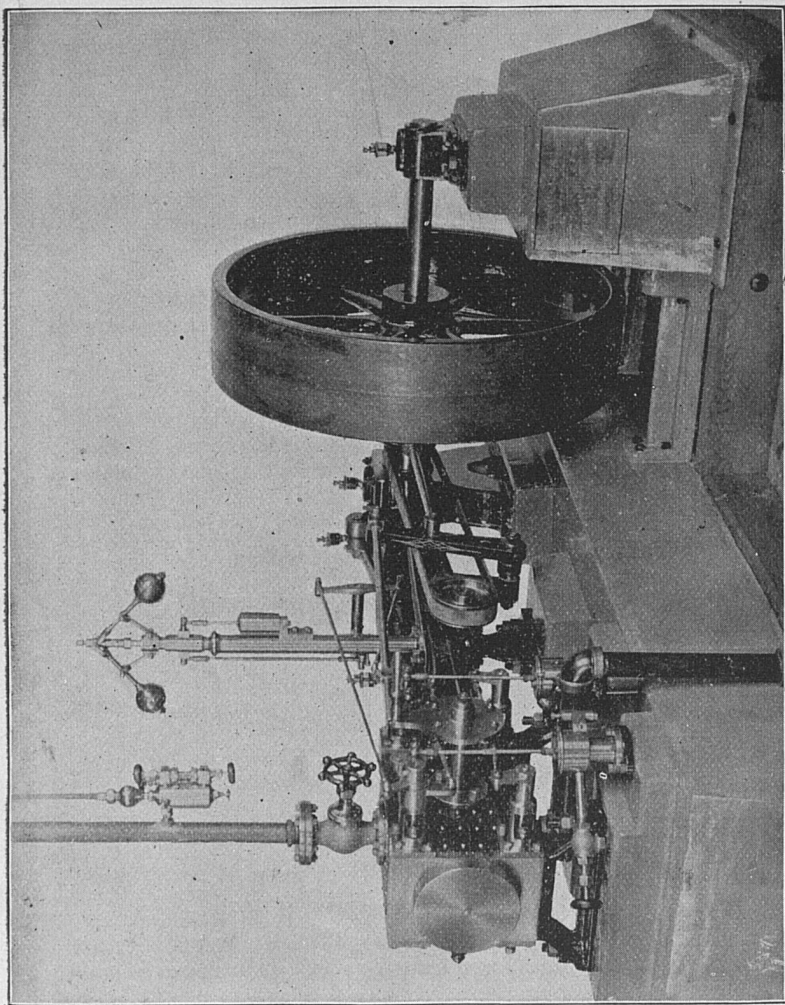
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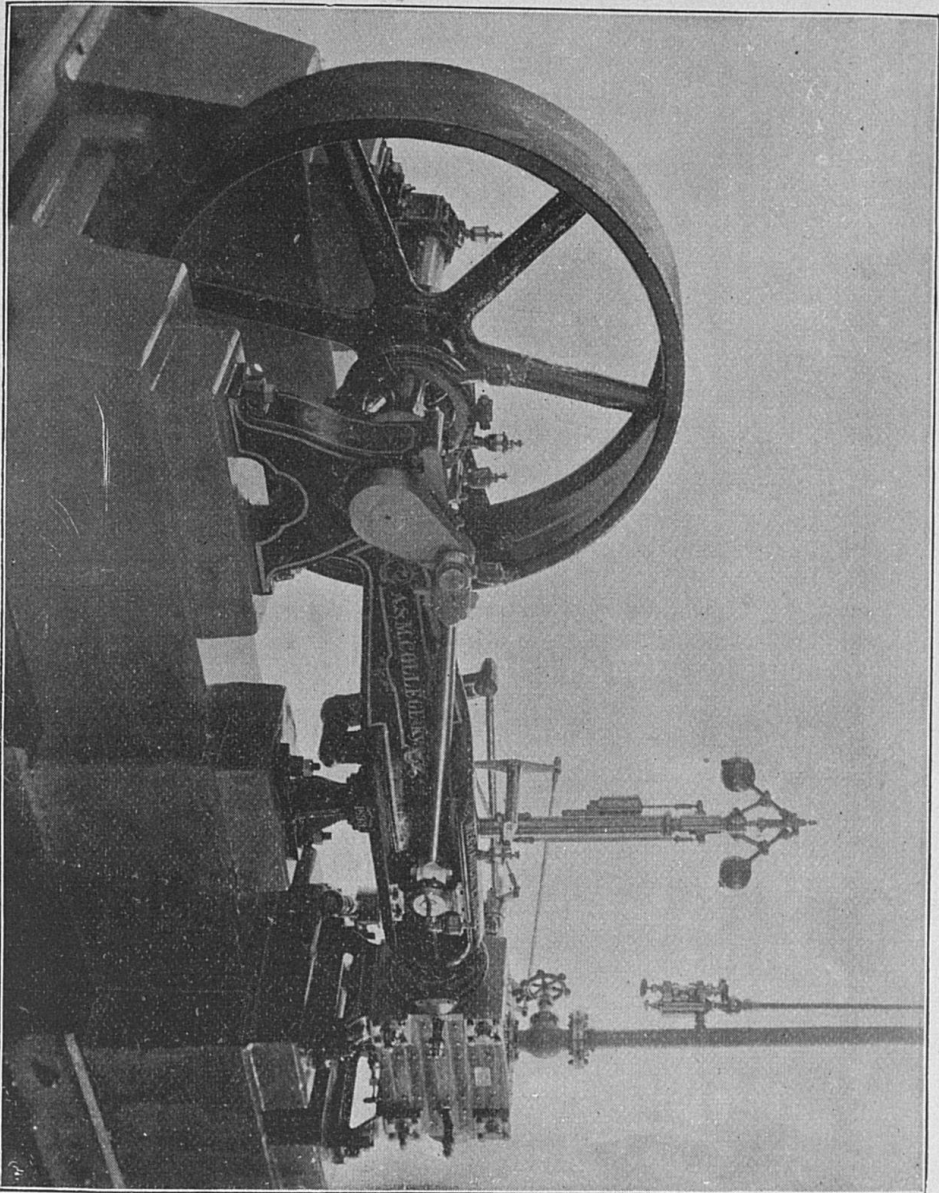
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CORLISS ENGINE BUILT BY STUDENTS OF THE STATE COLLEGE.



CORLISS ENGINE BUILT BY STUDENTS OF THE STATE COLLEGE.







# Courses in Pedagogy.

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## Faculty of Instruction.

RURIC N. ROARK, A. B., Dean.

(Arranged in alphabetical order).

C. D. CLAY, 1st Lieut., U. S. A.,  
Professor of Military Science.

H. GARMAN,  
Professor of Zoology and Entomology.

J. H. KASTLE, PH. D.,  
Professor of Chemistry.

C. W. MATHEWS, B. S.,  
Professor of Botany and Horticulture.

ARTHUR M. MILLER, A. M.,  
Professor of Geology and Paleontology.

J. P. NELSON, C. E., M. E.,  
Professor of Physics.

JOHN H. NEVILLE, A. M.,  
Professor of Latin and Greek.

JOHN W. NEWMAN, B. S.,  
Assistant in Department of Pedagogy.

J. K. PATTERSON, PH. D., President,  
Professor of History, Political Economy and Metaphysics.

J. W. PRYOR, M. D.,  
Professor of Anatomy and Physiology.

JOHN SHACKLEFORD, A. M.,  
Professor of English Language and Literature.

JAS. G. WHITE, A. M.,  
Professor of Mathematics and Astronomy.



## SCHEDULE OF PROFESSIONAL COURSE.

|                    | First Hour.       | Second Hour.         | Third Hour.                    | Fourth Hour.                 | Fifth Hour.                           | Sixth Hour. | 2-4 P. M.            |
|--------------------|-------------------|----------------------|--------------------------------|------------------------------|---------------------------------------|-------------|----------------------|
| FRESHMAN<br>YEAR.  | Military Science. | English Literature.  | Plane Geometry.                | Algebra.                     | Physiology.                           |             | Forensics.           |
|                    | Military Science. | English Literature.  | Plane Trigonometry.            | Botany.                      | Physiology.                           |             | Forensics.           |
| SOPHOMORE<br>YEAR. | Military Science. | Solid Geometry.      | Virgil.                        | Botany.                      | Botany.                               |             | Forensics.           |
|                    | Military Science. | Analytical Geometry. | Cicero.                        | Logic.                       | Chemistry.                            |             | Forensics.           |
| JUNIOR<br>YEAR.    |                   | Zoology.             | Zoology.                       |                              | Physics.                              |             | Chemical Laboratory. |
|                    |                   | Tacitus, Juvenal.    | Mineralogy Paleontology.       | Educational Psychology.      | Physics.                              |             | Zoology.             |
| SENIOR<br>YEAR.    |                   | Horace.              | History.                       | Mental Philosophy.           | School Economy, Methods.              | Astronomy.  | Physiography.        |
|                    |                   | Geology.             | History and Political Economy. | Astronomy, Moral Philosophy. | School Economy, History of Education. |             |                      |

## SCHEDULE OF STATE DIPLOMA COURSE.

|           | First Hour.       | Second Hour.        | Third Hour.                    | Fourth Hour.    | Fifth Hour. | Drills.              |
|-----------|-------------------|---------------------|--------------------------------|-----------------|-------------|----------------------|
| ONE YEAR. | Military Science. | English Literature. | Plane Geometry,                | Algebra (Adv.). | Latin.      | Forensics.           |
|           | Military Science. | Physics.            | Advanced Arithmetic (Revised). | Psychology.     | Latin.      | Forensics, Pedagogy. |

## SCHEDULE OF COUNTY CERTIFICATE COURSE.

|              | First Hour.       | Second Hour.                | Third Hour.                        | Fourth Hour.              | Fifth Hour.    | Drills.              |
|--------------|-------------------|-----------------------------|------------------------------------|---------------------------|----------------|----------------------|
| FIVE MONTHS. | Military Science. | Arithmetic, or Grammar.     | Geography, or Composition.         | Civics, or Orthography.   | U. S. History. | Forensics.           |
|              | Military Science. | Arithmetic, or Composition. | Higher Arithmetic, or Grammar.     | Geography, or Physiology. | Civics.        | Forensics.           |
| TEN WEEKS.   | Military Science. | Ky History, or Grammar.     | Higher Arithmetic, or Composition. | Geography, or Physiology. | U. S. History. | Forensics, Pedagogy. |

## SCHEDULE OF STATE CERTIFICATE COURSE.

|                      | First Hour.       | Second Hour.        | Third Hour.        | Fourth Hour. | Fifth Hour. | Drills.              |
|----------------------|-------------------|---------------------|--------------------|--------------|-------------|----------------------|
| HALF YEAR (2d Term). | Military Science. | English Literature. | Higher Arithmetic. | Psychology.  | Algebra.    | Forensics, Pedagogy. |



### Courses in Pedagogy.

The Teacher must be possessed of three things, in addition to an upright and sterling character, and a healthy body. These three things are: (1) An adequate knowledge of what he proposes to teach; (2) skill in teaching—knowledge of how to teach; (3) some broad and liberal culture, wherewith to illuminate his work and increase its value. These three things it is the business of the Teachers' Training School to give.

1. *An adequate knowledge of the branches to be taught.*—The giving of this knowledge is academic work, primarily. But this academic instruction should be given with the fact constantly in view that "The student will teach as he is taught rather than as he is taught to teach." The instruction in Arithmetic, Physiology, Grammar, etc., is designed to illustrate to the teacher-pupils in the various classes the latest and best methods of teaching these subjects.

2. *Skill in teaching—the knowledge how to teach.*—This can be acquired best by successful practice, but there is a science as well as an art of teaching. Teaching must not be wholly empirical. There are fundamental principles upon which all true teaching rests, and the purpose here is to fix these principles in the minds of the pupils. It is the carrying out of these principles, their successful and practical application, that lifts the work of the teacher to the dignity of a profession. It is the direct inculcation of these principles and the practical drill in their application that distinguish the Teachers' Training School from all other schools. The Teachers' Training School should work in the faith that teaching is the highest profession, and the atmosphere of such a school should be filled with the professional spirit.

Since the principles of the science of education rest on the activities and processes of the growing mind, special attention is given to Educational Psychology. A study of this subject is followed by a thorough drill in School Management and the most rational and effective Educational Methods. The principles of management and methods are constantly presented in their relations to the principles of Psychology. Finally, the student is introduced to the history of his profession abroad and at home. The professional course proper, then, consists of Educational Psychology, Management in Education, Method in Education, and the History of Education.

3. *Some broad and liberal culture.*—He who knows only the subjects he has to teach and something of how to teach them is not yet a teacher. He must know as much more as he can; must have some knowledge of subjects higher than the branches he will be called on to teach, and different from them. Human knowledge is so interrelated that otherwise he cannot have the copiousness of illustration

necessary to make the simplest and commonest facts as clear as they should be. The relations of facts must be taught—hence the growing need of liberal culture, a widened horizon, for the teacher.

The courses offered in this department are believed to be such as will meet the requirements above set forth, and also satisfy the practical needs of the educational system of the State.

The Professional Course leading to the degree of Ped. B. (Bachelor of Pedagogy), is intended to cultivate the professional spirit, to give a general education, and to fully equip those who complete it for teaching successfully in any grade of public school, or in any academy or college.

The Preparatory Course is identical with the work of the Academy and fits the student to enter the full Professional Course of the Normal Department.

The State Diploma Course is arranged to enable those teachers who have the age and experience required by the school law, and who already hold a State certificate, or are otherwise properly qualified for taking the course, to prepare by one year's work to pass successfully the examination for State Diploma.

The State Certificate Course is open to those who have the legal qualifications of age and experience, and who hold first class, or high grade second class, county certificates, or are otherwise prepared to undertake the work of this course. The aim is to fit such students to take successfully the examination for State certificate. The time required is five months, *beginning in mid-winter*.

The County Certificate Course is designed to prepare teachers for the county schools of the State. Preparations for properly passing the county examination may be made in one year or in five months, according to the previous preparation of the matriculate. By far the larger number of those who take this course enter it after the Holidays. The second term is divided into two terms of ten weeks each, and thus teachers can review all the common branches during the second half year.

It will be seen upon reference to the schedules, pp. 94, 95, that Drill work in Forensics, *i. e.*, in essay writing, speaking and debating, is required in all the normal courses. Ability to express fluently and correctly is of the utmost value to the teacher, and can be gained only by constant practice. The Forensic Drills will occur once a week, with special exercises once or twice each term.

The Pedagogy Drill will occur daily during the last quarter of each year, and is intended to give valuable training in the Science of Teaching.



## Course in Science.

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### Faculty of Instruction.

JAMES G. WHITE, A. M., Dean,  
Professor of Mathematics and Astronomy.

(Arranged in alphabetical order).

C. D. CLAY, 1ST. LIEUT., U. S. A.,  
Professor of Military Science.

H. GARMAN,  
Professor of Zoology and Entomology.

F. M. HELVETI, A. M.,  
Professor of German and French Languages and Literature.

J. H. KASTLE, Ph. D.,  
Professor of Chemistry.

C. W. MATHEWS, B. S.,  
Professor of Agriculture, Horticulture and Botany.

ARTHUR M. MILLER, A. M.,  
Professor of Geology and Paleontology.

J. P. NELSON, C. E., M. E.,  
Professor of Civil Engineering and Physics.

J. K. PATTERSON, Ph. D., President,  
Professor of History, Political Economy and Metaphysics.

J. W. PRYOR, M. D.,  
Professor of Anatomy and Physiology.

JOHN SHACKLEFORD, A. M.,  
Professor of English Language and Literature.

---

This is a General Education Course intended for such students as do not care to specialize closely, but desire a liberal education with a foundation in Mathematics and Language. For those whose bent is toward commercial pursuits, also, it is perhaps the best suited of any of the courses offered by this College. Its distinguishing feature is its Mathematics, which branch of science is studied during two and a half of the four years required to complete the course. It offers one year of English, with the option of an additional year. Of German two years are required. In the study of French a year and a half may be spent, if desired. In addition the course offers sufficient History and Natural Science to round out and complete its educational value.

## SCHEDULE OF COURSE IN SCIENCE.

|                 | First Hour.       | Second Hour.         | Third Hour.                    | Fourth Hour.                 | Fifth Hour. | Sixth Hour. | 2-4 P. M.            |
|-----------------|-------------------|----------------------|--------------------------------|------------------------------|-------------|-------------|----------------------|
| FRESHMAN YEAR.  | Military Science. | English Literature.  | Plane Geometry.                | Algebra.                     | Physiology. |             | (Friday) Drawing.    |
|                 | Military Science. | English Literature.  | Plane Trigonometry.            | Botany.                      | Physiology. |             | (Friday) Botany.     |
| SOPHOMORE YEAR. | Military Science. | Solid Geometry.      | English or French.             | Botany.                      | Botany.     |             |                      |
|                 | Military Science. | Analytical Geometry. | English or French.             | Logic.                       | Chemistry.  |             |                      |
| JUNIOR YEAR.    |                   | Zoology.             | Zoology.                       | German.                      | Physics.    |             | Chemical Laboratory. |
|                 |                   | Chemistry.           | Mineralogy. Paleontology.      | German.                      | Physics.    |             | Zoology.             |
| SENIOR YEAR.    |                   | French (Optional).   | History.                       | Mental Philosophy.           | German.     | Astronomy.  | Physiography.        |
|                 |                   | Geology.             | History and Political Economy. | Astronomy, Moral Philosophy. | German.     |             |                      |



# Course in Science.

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## Faculty of Instruction.

JAMES G. WHITE, A. M., Dean,  
Professor of Mathematics and Astronomy.

(Arranged in alphabetical order).

C. D. CLAY, 1ST. LIEUT., U. S. A.,  
Professor of Military Science.

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Professor of Zoology and Entomology.

F. M. HELVETI, A. M.,  
Professor of German and French Languages and Literature.

J. H. KASTLE, Ph. D.,  
Professor of Chemistry.

C. W. MATHEWS, B. S.,  
Professor of Agriculture, Horticulture and Botany.

ARTHUR M. MILLER, A. M.,  
Professor of Geology and Paleontology.

J. P. NELSON, C. E., M. E.,  
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Professor of English Language and Literature.

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## SCHEDULE OF COURSE IN SCIENCE.

|                    | First Hour.       | Second Hour.         | Third Hour.                    | Fourth Hour.                 | Fifth Hour. | Sixth Hour. | 2-4 P. M.            |
|--------------------|-------------------|----------------------|--------------------------------|------------------------------|-------------|-------------|----------------------|
| FRESHMAN<br>YEAR.  | Military Science. | English Literature.  | Plane Geometry.                | Algebra.                     | Physiology. |             | (Friday) Drawing.    |
|                    | Military Science. | English Literature.  | Plane Trigonometry.            | Botany.                      | Physiology. |             | (Friday) Botany.     |
| SOPHOMORE<br>YEAR. | Military Science. | Solid Geometry.      | English or French.             | Botany.                      | Botany.     |             |                      |
|                    | Military Science. | Analytical Geometry. | English or French.             | Logic.                       | Chemistry.  |             |                      |
| JUNIOR<br>YEAR.    |                   | Zoology.             | Zoology.                       | German.                      | Physics.    |             | Chemical Laboratory. |
|                    |                   | Chemistry.           | Mineralogy. Paleontology.      | German.                      | Physics.    |             | Zoology.             |
| SENIOR<br>YEAR.    |                   | French (Optional).   | History.                       | Mental Philosophy.           | German.     | Astronomy.  | Physiography.        |
|                    |                   | Geology.             | History and Political Economy. | Astronomy, Moral Philosophy. | German.     |             |                      |



## Course in Veterinary Science.

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### Faculty of Instruction.

(Arranged in alphabetical order).

S. E. BENNETT, D. V. M.,  
Professor of Veterinary Science.

H. GARMAN,  
Professor of Zoology and Entomology.

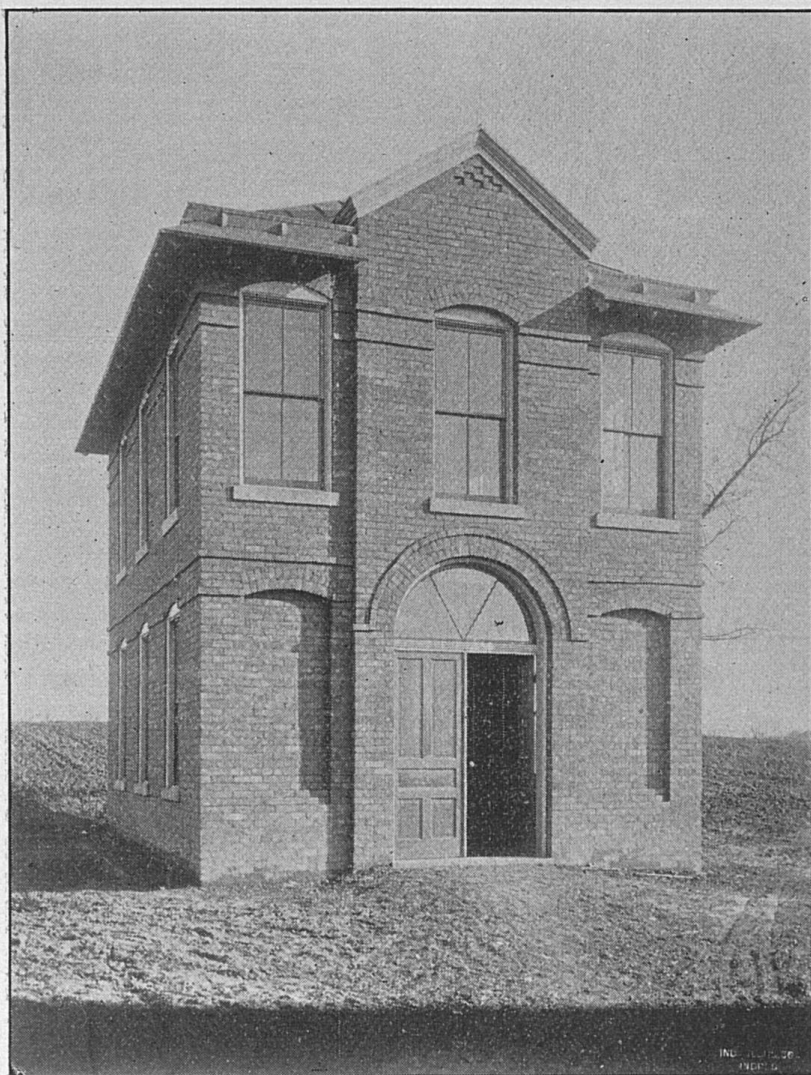
J. H. KASTLE, Ph. D.,  
Professor of Chemistry.

C. W. MATHEWS, B. S.,  
Professor of Horticulture and Botany.

J. P. NELSON, C. E., M. E.,  
Professor of Civil Engineering and Physics.

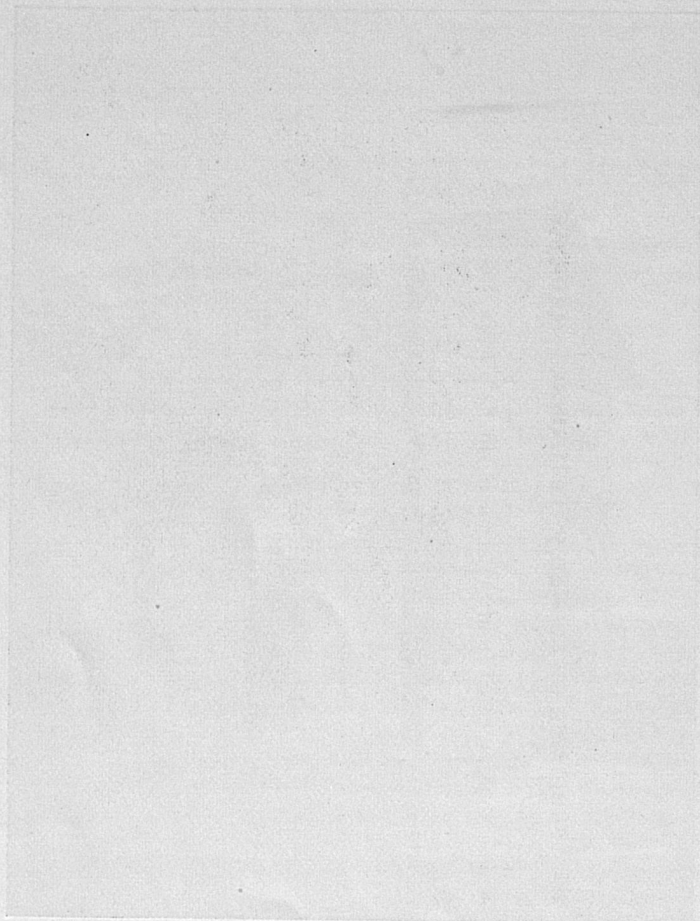
J. K. PATTERSON, Ph. D., President,  
Professor of History, Political Economy and Metaphysics.

J. W. PRYOR, M. D.,  
Professor of Anatomy and Physiology.



VETERINARY DISSECTING BUILDING.





UNIVERSITY OF MICHIGAN LIBRARY

## SCHEDULE OF COURSE IN VETERINARY MEDICINE.

|                 | First Hour.          | Second Hour. | Third Hour.                          | Fourth Hour. | Fifth Hour. | 2-4 P. M. |
|-----------------|----------------------|--------------|--------------------------------------|--------------|-------------|-----------|
| FIRST<br>YEAR.  | Military<br>Science. | Anatomy.     | Materia<br>Medica.                   | Chemistry.   | Physiology. |           |
|                 | Military<br>Science. | Anatomy.     | Physics.                             | Botany.      | Physiology. |           |
| SECOND<br>YEAR. | Military<br>Science. | Zoology.     | Surgery,<br>Horseshoeing             | Clinic.      | Pathology.  |           |
|                 | Military<br>Science. | Zoology.     | Exterior of<br>Horse,<br>Obstetrics. | Clinic.      | Pathology.  |           |



### Course in Veterinary Science.

The course in Veterinary Medicine has been arranged to extend through two years, during which time thorough instruction is given in all the more important branches of this science. During the first year students take up the study of anatomy and physiology of the domesticated animals. Instruction in these branches is given by means of lectures, recitations and laboratory work. In the laboratory students are required to spend as much time as possible, preparing specimens and dissecting. First year students are also required to take Chemistry, Botany, and Histology. The first of these three being taught by means of lectures, recitations and laboratory work, special attention being given to chemistry in its relations to medicine. Botany is taught during the second term of the first year. Histology is taught throughout the course by means of lectures and laboratory work. Students are required to work with the microscope and become thoroughly familiar with the structure of the various tissues and organs found in the animal body. During the second year the student takes up the more advanced branches relating to Veterinary Science, such as Pathology, Therapeutics, Obstetrics, Horse-shoeing, Surgical diseases and operations, Materia Medica, Stock Breeding, the care of animals, etc. The first two branches are taught by means of lectures. Pathological specimens are shown as the occasion demands. Obstetrics is taught by means of lectures, recitations and demonstrations. Horse shoeing is taught by means of lectures and practical work. The various diseases of the feet are discussed, also faulty formations, and the best form of shoe and treatment to remedy these defects. Surgical diseases and operations, as a branch of veterinary medicine, is taught by means of lectures and illustrations. Instruction is given in preparing and securing of animals for operations, the use of instruments, the treatment of wounds, fractures, luxations, etc. Materia Medica is taught by lectures. During the course of instruction, the various articles of Materia Medica are shown and their actions and uses fully discussed. Stock Breeding is taught by means of lectures, students having unsurpassed advantages in this branch owing to the great number of famous stock farms in the immediate vicinity of the school. During the course of study, lectures are also given upon the diseases of the dog, their causes, prevention and treatment. Throughout the entire Course in Veterinary Medicine, students are required to attend the clinic which is held daily. Students who complete this course satisfactorily receive the degree V. S. (Veterinary Surgeon).

**Text-Books.**

- Anatomy.—Chauveau's, Strangeway, Leisering's Anatomical Plates.  
Practice.—Robertson, Williams, Steele, Gresswell, Friedberger and Froehner.  
Surgery.—Williams, Fleming.  
Shoeing.—Fleming, Hartmann.  
Obstetrics.—Fleming, Harms.  
Bacteriology.—Fraenkel.  
Materia Medica.—Dun, Froehner.  
Histology.—Schaefer.  
Exterior of Horse.—Gunther, Goubaux and Barrier.
- 

**A Special Course of Agricultural Lectures.**

All male students are required to attend during part of one school year a course of lectures upon subjects bearing upon Agriculture. The course is intended as a means of disseminating a knowledge of and arousing an interest in Agriculture as an art, and is also designed to meet the wants of students who can remain at the College but a short time, and wish while here to get as much instruction in the line of Agriculture as possible. The course begins in January and terminates in March, a lecture being delivered on Monday, Wednesday and Friday of each week. During the past year the course consisted of thirty lectures on the following subjects: Agricultural Chemistry, Dairying, Economic Entomology, Farm Animals, Fertilizers, Horticulture, Geology as related to Agriculture, Plant Life on the Farm.



# Academy (Preparatory).

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## Faculty of Instruction.

W. K. PATTERSON, Principal.

(Arranged in alphabetical order).

Mrs. LUCY B. BLACKBURN, Assistant.

J. MORTON DAVIS, A. B., B. S., Assistant.

J. LEWIS LOGAN, A. B., Assistant.

V. E. MUNCY, B. S., Assistant.

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### I. Scientific, Agricultural and Engineering Course.

FIRST YEAR.—Arithmetic through percentage, Robinson's Higher; Algebra, Wentworth's Higher to chapter XI; Political and Descriptive Geography, New Complete; History of the United States, Eggleston; English Grammar, Patterson's advanced.

SECOND YEAR.—Arithmetic Completed, Robinson's Higher; Algebra, Wentworth's Higher to chapter XXII; Elementary Physics, Gage; Physical Geography, Maury; History, Anderson's General; Analysis and Composition; Rhetoric.

### II. Classical and Normal Course.

FIRST YEAR.—Latin Grammar, McCabe's Bingham, Scudder's Gradum; White's Beginner's Greek Book; Arithmetic through percentage, Robinson's Higher; Algebra, Wentworth's Higher to chapter XI; Political and Descriptive Geography, Butler's Complete; English Grammar, Patterson's Advanced.

SECOND YEAR.—Latin Grammar continued, Cæsar (Kelsey), Virgil and Latin Exercises; Greek Grammar continued, Xenophon's Anabasis (Kelsey), Homer's Iliad; Arithmetic completed, Robinson's Higher; Algebra, Wentworth's Higher to chapter XXII; Analysis and Composition; Elementary Physics, Gage; Rhetoric.

**SCHEDULE OF ACADEMY (Preparatory) COURSES.**  
Scientific, Agricultural and Engineering.

|              | First Hour.       | Second Hour. | Third Hour. | Fourth Hour.        | Fifth Hour.               | 2:30 to 3:30 P. M |
|--------------|-------------------|--------------|-------------|---------------------|---------------------------|-------------------|
| FIRST YEAR.  | Military Science. | Algebra.     | Geography.  | Arithmetic.         | English Grammar.          |                   |
|              | Military Science. | Algebra.     | History.    | Arithmetic.         | English Grammar.          |                   |
| SECOND YEAR. | Military Science. | Arithmetic.  | Algebra.    | Physical Geography. | Analysis and Composition. | *Shop Work.       |
|              | Military Science. | Physics.     | Algebra.    | History.            | Rhetoric.                 | *Shop Work.       |

**Classical and Normal.**

|              |                   |             |                |             |                                           |  |
|--------------|-------------------|-------------|----------------|-------------|-------------------------------------------|--|
| FIRST YEAR.  | Military Science. | Algebra.    | Latin Grammar. | Arithmetic. | English Grammar.                          |  |
|              | Military Science. | Algebra.    | Latin Grammar. | Arithmetic. | English Grammar.                          |  |
| SECOND YEAR. | Military Science. | Arithmetic. | Algebra.       | Cæsar.      | †Greek Grammar, Analysis and Composition. |  |
|              | Military Science. | Physics.    | Algebra.       | Virgil.     | †Greek Grammar, Rhetoric.                 |  |

\*For Mechanical Engineering students only.

†For Classical students only.



# Commercial, Telegraphic and Phonographic Department

(LEXINGTON BUSINESS COLLEGE).

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## Faculty of Instruction.

C. C. CALHOUN, Principal.

(Arranged in alphabetical order).

E. F. CLARK,  
Assistant in Telegraphy.

SHERMAN W. FERRIS,  
Assistant in Book-Keeping.

ALBERT McMICHAEL,  
Assistant in Penmanship.

M. E. MILLIKEN,  
Assistant in Phonography.

W. J. ROSS,  
Assistant in Telegraphy.

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B. B. JONES,  
Traveling Agent.

## Courses in Commercial Department.

This Department is self-sustaining, depending upon its tuition fees for its maintenance; but the College has made arrangements with Prof. Calhoun to give instruction without extra charge to all matriculates of the State College who desire to add Book-keeping to the other courses of study provided by the College.

Those students who matriculate in the Commercial, Short-hand and Telegraphy Department will pay the fees charged by that Department for its several courses of study. All such students may have access to any of the classes in any of the other Departments of the College upon payment of two-thirds of the fees charged by the College, and conversely, all matriculates of the College may have access to the classes of Phonography, Type-writing, Telegraphy and Penmanship in the Commercial, Short-hand and Telegraphy Department upon payment of two-thirds of the regular fees charged by that Department.

All the matriculates of this Department are subject to the regulations of the College.

Prof. Calhoun, with his corps of efficient teachers, who have had practical experience in their lines of work, is able to give the very best training in theory and practice.

A very handsome building has recently been completed for this Department, in which the student has facilities for theory and practice second to none.

The importance of a thorough course of training for those who intend to apply themselves to business pursuits can not be over-estimated. Practice alone does not suffice. The physician who betakes himself to the healing art without a previous knowledge of anatomy and physiology, and the surveyor who attempts to compute areas and determine boundaries without a knowledge of trigonometry, are on a par with the merely practical book-keeper. A rational art of book-keeping must be based upon a knowledge of the principles which make book-keeping possible. To provide the pupil with an adequate knowledge of scientific principles as well as their application to the keeping of accounts, the Department, whose announcement is now made, desires to address itself.

Phonography and Type-writing are included in this Department. The constantly increasing demand for short-hand in reporting speeches, sermons and the proceedings of public deliberative bodies, in recording evidence given in court, and in the correspondence of business firms, is one of the most marked characteristics of the day. The effectiveness of Phonography has been largely increased by the type-writer, which greatly lessens the labor of transcribing the short-hand notes of the reporter. For these indispensable auxiliaries of a good commercial education, this Department is prepared to provide every facility required.



The numerous demands for telegraph operators has rendered it necessary that telegraphy should be added to this Department, and accordingly it has been well equipped with all modern telegraph instruments of the best make. The students are drilled in handling telegraph business, both railroad and commercial. We have all the standard forms in use on all the best railroads, and the students' daily practice is such as to familiarize them with all the duties of a telegraph operator or agent.

This Department is also provided with a main line of nearly two miles in length, over which considerable practical work is done. The Department has every facility necessary for giving a thorough and practical training.

#### **Lectures on Commercial Law.**

A special course on commercial law has been arranged for, and will be delivered on Saturdays. This course of lectures alone is worth the price of a scholarship to any young man or woman. The lectures are free to students of all departments of the State College who pursue the studies recommended by the lecturer. Others, not pupils of the State College, can have the benefit of them by the payment of five dollars for the entire course.

#### **Diplomas.**

All graduates in the entire course of study are entitled to and receive a full course diploma, signed by the President of the State College and the Governor of the Commonwealth.

#### **Fees.**

A complete course involving actual practice and embracing Commercial Law, Penmanship and Book-keeping (merchant's, partnership, compound company, commission, joint stock, banking, lumber, cotton and mining), \$55.

A complete course in Short-hand, Spelling, Penmanship and Punctuation, \$45.

A course in Type-writing, \$10.

A complete course in Penmanship, \$4 per month.

A complete course in Telegraphy, Commercial and Railroad Book-keeping, Penmanship, Spelling, Arithmetic and Commercial Law, \$55.

For further information in regard to this Department send for special catalogue, or address: C. C. Calhoun, Box 810.

**Students in Attendance**

**During**

**1893=1894.**



### Graduates of 1893=94.

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- ✓ AULICK, EDWIN CHESTERFIELD, B. A.
- ✓ BRADSHAW, GEORGE DICKIE, B. Ped.
- ✓ BRAND, EDWARD, B. A.
- ✓ CURTIS, CARLTON COLEMAN, B. S.
- ✓ FAIG, JOHN THEODORE, B. M. E.
- ✓ GARRED, ULYSSES ANDERSON, B. M. E.
- ✓ GRIFFING, EMMA ROSETTA, B. S.
- ✓ HAYS, JAMES MORRISON, B. A.
- ✓ HUGHES, LEONARD SAMUEL, B. S.
- ✓ JONES, MATTISON BOYD, B. A.
- ✓ KEISER, BENJAMIN CHRISTOPHER, B. S.
- ✓ KROESING, LILLIE, B. S.
- ✓ LAND, LEROY, Vet. Sci.
- ✓ NEWTON, NATHAN ALEXANDER, B. M. E.
- ✓ NORMAN, ALBERT CLIFT, B. M. E.
- ✓ SHELBY, KATHERINE, B. S.
- ✓ SLEDD, DORA, B. Ped.
- ✓ TRIGG, WILLIAM CLAY, C. E.
- ✓ WARNER, HATTIE HOCKER, B. S.

## Collegiate.

(The numbers indicate the positions of students in their courses).

|                             |                    |                  |
|-----------------------------|--------------------|------------------|
| Allen, William Raymond      | Class 2            | Lexington.       |
| Alford, Smith Edison        | Sci. 2             | Lexington.       |
| Akers, Thomas Peter         | Civ. Eng. 1        | Lexington.       |
| Anderson, Henry Clay        | Sci. 1             | Morganfield.     |
| Appel, J. Charles Beurle    | Mech. Eng. Special | London, Eng.     |
| Armstrong, Murty Belle      | Ped. 1             | Lexington.       |
| Asher, George Matt          | Sci. 1             | Wasioto.         |
| Atkins, Antoinette Thornton | Sci. 1             | Lexington.       |
| Atkins, Bertie Allene       | Sci. 2             | Lexington.       |
| Atkins, Mary Lyons          | Sci. 3             | Lexington.       |
| Aulick, Edwin Chesterfield  | Class. 4           | Morgan.          |
| Bannister, John Kirtley     | Sci. 1             | Sherman.         |
| Barber, Lanus Spurgeon      | Sci. 3             | Ocala, Fla.      |
| Beardsley, Henry Shedd      | Sci. 1             | Kansas City, Mo. |
| Bell, Emma Scott            | Sci. 1             | Lexington.       |
| Bledsoe, Mary Sue           | Class. 2           | LaFayette, Ala.  |
| Blessing, George Frederick  | Mech. Eng. 1       | Carrollton.      |
| Bowman, Virginia            | Special            | Lexington.       |
| Bradshaw, George Dickie     | Ped. 4             | Franklin.        |
| Brand, Edward               | Class. 4           | Broadwell        |
| Brock, George Green         | Sci. 1             | Bush's Store.    |
| Brown, Margaret Wickliff    | Special            | Lexington.       |
| Bryan, John Irvin           | Mech. Eng. 3       | Lexington.       |
| Bush, Henry Skillman        | Sci. 3             | Lexington.       |
| Caden, Alice Beatrice       | Special            | Lexington.       |
| Calvert, William Jephtha    | Special            | Lexington.       |
| Carroll, Mary Joseph        | Ped. 1             | Lexington.       |
| Cary, George Burgess        | Mech. Eng. 1       | Louisa.          |
| Carnahan, James William     | Class. 2           | Manchester.      |
| Carrier, Fannie Bruce       | Special            | Lexington.       |
| Carter, Clinton Carroll     | Sci. 2             | Avon.            |
| Case, Daniel Morris         | Mech. Eng. 2       | Lexington.       |
| Cassidy, Elizabeth          | Sci. 1             | Lexington.       |
| Clarke, Mary Eva            | Sci. 1             | Lexington.       |
| Cowherd, Robert Lee         | Mech. Eng. 3       | Campbellsville.  |
| Cox, William Montgomery     | Class. 2           | Boxville.        |
| Curtis, Carlton Coleman     | Sci. 4             | Greendale.       |
| Davidson, Marion Wallace    | Ped. 1             | Springfield, La. |
| Davis, Horace Newton        | Sci. 1             | Lexington.       |
| Dean, Thomas Roland         | Class. 2           | Little Hickman.  |
| DeBow, Samuel Carruthers    | Mech. Eng. 1       | Hickman.         |



|                                    |                    |                  |
|------------------------------------|--------------------|------------------|
| Didlake, Mary LeGrande.....        | Sci. 3.....        | Lexington.       |
| Donaldson, Oscar.....              | Civ. Eng 1.....    | Sharpsburg.      |
| Downing, Joseph Milton .....       | Mech. Eng. 3 ..... | Lexington.       |
| Duck, Berkley Wilson.....          | Sci. 1.....        | Lexington.       |
| Duck, Alice.....                   | Sci. 2.....        | Lexington.       |
| Dudley, Clara Miller.....          | Special .....      | Lexington.       |
| Duncan, William Adolphus.....      | Mech. Eng. 1 ..... | Franklin.        |
| Dunlap, Fannie Pendleton.....      | Ped. 1.....        | Independence.    |
| Dunlap, John Jennings.....         | Class. 2 .....     | Independence.    |
| Eubank, Leroy.....                 | Agr. 1 .....       | Shawhan.         |
| Faig, John Theodore .....          | Mech. Eng. 4 ..... | Lexington.       |
| Falconer, John Rutherford.....     | Class. 2.....      | Pisgah.          |
| Faris, Samuel Reed.....            | Mech. Eng. 1 ..... | Lexington.       |
| Faulkner, John Vick.....           | Civ. Eng. 2 .....  | Hampton.         |
| Fossitt, George Lewis.....         | Class. 1 .....     | Carntown.        |
| Foster, Nettie Belle.....          | Sci. 3.....        | Lexington.       |
| Frazer, Jos. Whitney Christie..... | Sci. 2.....        | Lexington.       |
| Garred, Ulysses Anderson.....      | Mech. Eng. 4 ..... | Louisa.          |
| Geary, John Thomas.....            | Sci. 1.....        | Lexington.       |
| Greer, Clarence Worth.....         | Ped. 1.....        | Glasgow.         |
| Griffing, Emma Rosetta .....       | Sci. 4 .....       | Lexington.       |
| Gunn, Thomas .....                 | Special .....      | Lexington.       |
| Gunn, Clara Brook.....             | Sci. 1.....        | Lexington.       |
| Haley, John Thomas .....           | Sci. 1.....        | Lexington.       |
| Hammock, William David.....        | Sci. 1.....        | Cane Creek.      |
| Harrison, Winn Gunn.....           | Sci. 1.....        | Lexington.       |
| Hays, James Morrison .....         | Class. 4 .....     | Barboursville.   |
| Henry, Guy Ernest.....             | Civ. Eng. 2 .....  | Slaughtersville. |
| Henry, Jack Jackson.....           | Civ. Eng. 2 .....  | Slaughtersville. |
| Hicks, Arthur Lee .....            | Ped. 1.....        | Danleyton.       |
| Hill, Herbert Hudson .....         | Special .....      | Andover, Mass.   |
| Hobdy, Edgar Jones.....            | Sci. 2.....        | Franklin.        |
| Hogan, Overton Smith .....         | Sci. 1.....        | Dry Ridge.       |
| Hughes, Leonard Samuel.....        | Sci. 4.....        | Frankfort.       |
| Humphreys, Ambrose Wesley.....     | Sci. 1.....        | Middleburgh.     |
| Hunter, William Mason.....         | Special .....      | Clay City.       |
| Huston, Mark Elliott.....          | Class. 2 .....     | Taylorsville.    |
| Jolly, James Brady.....            | Ped. 1.....        | Germantown.      |
| Jones, Mattison Boyd .....         | Class. 4 .....     | Tuttle.          |
| Keiser, Benj. Christopher .....    | Sci. 4.....        | Lexington.       |
| Kelly, Thomas Conway.....          | Mech. Eng. 1 ..... | Georgetown.      |
| Kerrick, Felix.....                | Class. 2 .....     | Calhoun.         |
| King, Elizabeth Whittington.....   | Class. 2 .....     | Lexington.       |
| Knapp, Clinton Beacham.....        | Class. 1.....      | Lexington.       |
| Kroesing, Lillie.....              | Sci. 4.....        | Lexington.       |
| Land, Leroy.....                   | Vet. 4.....        | Lexington.       |

|                             |              |                |
|-----------------------------|--------------|----------------|
| Lew's, Thomas Stone         | Class. 2     | Taylorsville.  |
| Lyle, Robert Taylor         | Mech. Eng. 2 | Lexington.     |
| Lyle, Joel Irvin            | Mech. Eng. 2 | Lexington.     |
| May, Anna Shawhan           | Special      | Lexington.     |
| Millard, Richard Montgomery | Ped. 4       | Salversville.  |
| Mills, Edward Orson         | Ped. Special | Kenton.        |
| Moore, Robert Leland        | Agr. 1       | Lexington.     |
| Moore, Joseph Warnock       | Civ. Eng. 1  | Lexington.     |
| Morgan, Frederick Dexter    | Vet. 3       | Walnut Hills.  |
| Morgan, George Matt         | Sci. 1       | Lexington.     |
| Morris, Fay Crawford        | Class. 1     | Lexington.     |
| Murrill, Paul Ingold        | Sci. 3       | Hickory, N. C. |
| McCann, Mary Eliza          | Special      | Muir.          |
| McCauliffe, Mary Catherine  | Sci. 3       | Lexington.     |
| McClure, Albert             | Civ. Eng. 1  | Humphrey.      |
| McConathy, James Asa        | Sci. 2       | Lexington.     |
| McDowell, Madeline          | Special      | Lexington.     |
| McElroy, Courtney Watts     | Ped. 1       | Morgansfield.  |
| McHargue, Barbara Sue       | Sci. 2       | Boreing.       |
| Newman, Roberta             | Ped. 2       | Muir.          |
| Newton, Nathan Alexander    | Mech. Eng. 4 | Lexington.     |
| Noon, Nellie                | Ped. 1       | Lexington.     |
| Norman, Albert Clift        | Mech. Eng. 4 | Uniontown.     |
| Oots, Nina Pearl            | Sci. 4       | Lexington.     |
| Orman, Henry                | Mech. Eng. 2 | Stanford.      |
| Powell, Luke                | Agr. 2       | Ashland.       |
| Reynolds, Nellie Anna       | Sci. 3       | Lexington.     |
| Roberts, Hillery Bryan      | Sci. 2       | Lexington.     |
| Scott, William Campbell     | Sci. 2       | Lexington.     |
| Scott, John                 | Class. 1     | Lexington.     |
| Searcy, Lula                | Ped. 1       | Lexington.     |
| Shaw, Clara                 | Sci. 2       | Lexington.     |
| Shelby, Thomas Hart         | Class. 2     | Lexington.     |
| Shelby, Katherine           | Sci. 4       | Lexington.     |
| Simrall, Sara Graham        | Special      | Lexington.     |
| Sledd, Dora                 | Ped. 4       | Lexington.     |
| Smedley, Albert             | Class. 1     | Fort Spring.   |
| Speyer, Clarence            | Sci. 1       | Lexington.     |
| Stoll, Richard Charles      | Class. 3     | Lexington.     |
| Swango, John Morton         |              | Frankfort.     |
| Trigg, John Henry           | Sci. 2       | New Columbus.  |
| Trigg, William Clay         | Civ. Eng. 4  | New Columbus.  |
| Troupe, Emma Blanche        | Ped. 1       | Lexington.     |
| Turner, Job Darben          | Ped. Special | Minnie.        |
| VanMeter, Benj. Franklin    | Sci. 2       | Lexington.     |



|                               |                   |                |
|-------------------------------|-------------------|----------------|
| Walter, Luther Mason.....     | Ped. 1.....       | Blaine.        |
| Ward, Paul Shipman.....       | Civ. Eng. 3.....  | Cynthiana.     |
| Ward, Edward Henry.....       | Special.....      | Lexington.     |
| Warner, Hattie Hocker.....    | Sci. 4.....       | Lexington.     |
| Warner, Logan Hocker.....     | Sci. 1.....       | Lexington.     |
| Warren, Marcia Callie.....    | Sci. 1.....       | Lexington.     |
| Warren, Elizabeth Martha..... | Sci. 1.....       | Lexington.     |
| Warren, Henry Thompson.....   | Sci. 2.....       | Donerail.      |
| Watts, Julia Zura.....        | Ped. Special..... | Walnut Hills.  |
| Weaver, Rufus Lee.....        | Sci. 3.....       | Frazer.        |
| White, Martha Ripperdan.....  | Sci. 1.....       | Lexington.     |
| Williams, Winton.....         | Ped. 1.....       | Black's Ferry. |
| Wilmott, John Webb.....       | Class. 3.....     | Lexington.     |
| Wilson, Ida Granger.....      | Ped. 1.....       | Lexington.     |
| Withers, Raymond.....         | Sci. 1.....       | Sylvan Dale.   |
| Woods, John Joseph.....       | Class. 1.....     | Cynthiana.     |
| Woods, John Wesley.....       | Class. 1.....     | Olioville.     |

### Pedagogy.

(The studies of the following matriculates of the Department of Pedagogy were limited to subjects required for obtaining certificates to teach in the common schools).

|                                    |               |
|------------------------------------|---------------|
| Adams, Dewitt.....                 | Shermanville. |
| Akers, James William.....          | Louisa.       |
| Allen, Nellie.....                 | Lexington.    |
| Anderson, Mattie.....              | Mt. Sterling. |
| Barnette, Thomas.....              | Chaplin.      |
| Bennett, Nora.....                 | Sacramento.   |
| Bennett, Charles Wesley.....       | Sacramento.   |
| Burch, Guy Earls court.....        | Derby, Ind.   |
| Boyd, Edward Claiborne.....        | Spring Hill.  |
| Bishop, Ulysses Simpson Grant..... | Teges.        |
| Butner, Ellen.....                 | Wildie.       |
| Boston, Bessie.....                | Louisville.   |
| Bush, Eliza.....                   | Elkin.        |
| Bush, Carrie Lee.....              | Waco.         |
| Christian, Mattie Jane.....        | Lexington.    |
| Chambers, Ida May.....             | Beelerton.    |
| Chappell, James Keene.....         | Center Point. |
| Curtis, Seth Thomas.....           | Piqua.        |
| Cole, Lewis Francis.....           | Eversole.     |
| Combs, Mary Hattie.....            | Pebworth.     |
| Curtis, George Washington.....     | McKinney.     |
| Davis, John Wilson.....            | Marrowbone.   |

|                                   |                |
|-----------------------------------|----------------|
| David, Clara..                    | Lexington.     |
| Diamond, Edgar Bascom...          | Madge.         |
| Dossett, Rupert Osmond. ....      | Kansas.        |
| Dye, Henry Clay.....              | Ansel.         |
| Evans, Jennie Belle.....          | Panola.        |
| Fain, Larkin.....                 | Mt. Lebanon.   |
| Farmer, Leander.....              | Elihu.         |
| Farris, Lelia McCann .....        | Nealton.       |
| Finney, Beatrice.....             | Buchanan.      |
| Fitzhugh, Lucy Stuart .....       | Lexington.     |
| Gaines, Walter Boyd.....          | Rockdale.      |
| Glenn, Anna Corinne.....          | Georgetown.    |
| Goggin, Mary Lewis. ....          | Somerset.      |
| Hancock, Mabel.....               | Elmville.      |
| Hancock, Gustavus Adolphus .....  | Elmville.      |
| Harrison, Katie Alice.....        | Lexington.     |
| Henderson, Willie.....            | Zion           |
| Hicks, Alta Zera.....             | Waynesburgh.   |
| Huff, Henry Frank Findley.....    | Confluence.    |
| Hutsell, Helen Resor.....         | Lexington.     |
| Jackson, John Hunt.....           | New Columbus.  |
| Jones, Thomas Martin.....         | Mullis.        |
| Kincheloe Thurman Thomas .....    | Sacramento.    |
| Knox, Melven Lawrence .....       | See.           |
| Lawhorn, Jesse Sherman .....      | Yosemite.      |
| Lassiter, William Albert.....     | Hico.          |
| Lewis, Ethel.....                 | Muldraugh.     |
| Lochrey, Fountain Albert.....     | Sacramento.    |
| Literal, James Milton.....        | Russell.       |
| Lowrey, Janie.....                | Troy.          |
| Marlow, Kittie Jane .....         | Plains.        |
| Metcalf, Lettie Pickett .....     | Brooksville.   |
| Mayfield, Mary .....              | Pulaski.       |
| Mayfield, Ella.....               | Pulaski.       |
| Marshall, Martin Luther.....      | New Columbus.  |
| Mitchell, Maggie Adell .....      | Richmond.      |
| Minter, Fannie Jane.....          | Greenhall.     |
| Morrow, Joseph .....              | Rankin.        |
| Moberly, Etta Broadus.....        | Frankfort.     |
| Muncy, Willie Davis.....          | Louisa.        |
| Nelson, Albert Ross.....          | Williamsburg.  |
| Nichols, Ellis William .....      | Load.          |
| Nichols, Washington Fletcher..... | Clarkson.      |
| Owens, Luther Ellen.....          | Somerset.      |
| Peterson, Charles Everett.....    | Morning Glory. |



|                                     |                |
|-------------------------------------|----------------|
| Phelps, Commodore Vanderbilt.....   | Stowers.       |
| Price Mona Belle.....               | Brandenburgh.  |
| Profitt, Ira. ....                  | Patsey.        |
| Ray, Samuel Bransford Douglas.....  | Tompkinsville. |
| Reganstone, Ellsworth.....          | McKenzie.      |
| Reid, Ethel .....                   | Lexington.     |
| Reid, Maud Bell.....                | Lewisburg.     |
| Rouse, Hettie.....                  | Lexington.     |
| See, Pearl.....                     | See.           |
| Shacklett, Warner John.....         | Ekron.         |
| Smither, Lula .....                 | Monterey.      |
| Snodgress, Frederick Augustus ..... | Uniontown.     |
| Stamper, Minnie.....                | Lusby's Mills. |
| Stivers, Lena Rivers.....           | Waco.          |
| Stevinson, Mary Jane.....           | Hedges.        |
| Stevinson, Nancy.....               | Hedges.        |
| Steely, John Sherman.....           | Williamsburg.  |
| Struve, Maggie .....                | Mt. Olivet.    |
| Taggart, David Poole.....           | Greenville.    |
| Todd, Luther .....                  | Speedville.    |
| Truesdell, Aureana.....             | Covedale.      |
| Vaughan, William Jamison .....      | Louisa.        |
| Walker, Hallie. ....                | Richmond.      |
| Waltrip, Powhatan Mallory.....      | Beech Grove.   |
| Watkins, John Jefferson.....        | Morganfield.   |
| Waugh, John Milton.....             | Olioville.     |
| Ware, Lena.....                     | Levee.         |
| Webb, Sophronia.....                | Glenwood.      |
| Wesley, Virgil Jasper .....         | Bethel Ridge.  |
| Wilson, Aquilla Paine.....          | St. Helens.    |
| Wilson, James Harvey.....           | Cubbage.       |

### Academy (Preparatory).

(The numbers indicate the positions of students in their courses).

|                                 |               |
|---------------------------------|---------------|
| Anderson, William Wyatt 1.....  | Manchester.   |
| Ballard, Richard Huston 1 ..... | Bryantsville. |
| Bascom, Charles Albert 2.....   | Sharpsburg.   |
| Beazley, Luther Branhan 1.....  | Hyattsville.  |
| Blackford, Matta 2 .....        | Lexington.    |
| Bonnyman, James Joseph 2.....   | Lexington.    |
| Booth, Anna Cornelia 1.....     | Taylorsville. |
| Boswell, Malcolm Temple 1.....  | Leesburg.     |

|                                      |               |
|--------------------------------------|---------------|
| Brock, LaFayette Breckinridge 2..... | Lexington.    |
| Bronaugh, William Logan 2.....       | Lexington.    |
| Brooks, Elibabeth Lee 2.....         | Lexington.    |
| Bryan, Volney Hewitt 2.....          | Lexington.    |
| Bullock, Frederick Dabney 2.....     | Lexington.    |
| Burton, Thomas Creed 2.....          | Whalen.       |
| Bush, George Lewis 2.....            | Lexington.    |
| Cahill, William James David 2.....   | Lexington.    |
| Cassell, Anna Bell 1.....            | Lexington.    |
| Clarke, Asahel Rawlings 2.....       | Falmouth.     |
| Cleveland, Ernest Raymond 1.....     | Keene.        |
| Colbert, John 2.....                 | Lexington.    |
| Collier, William Henry 1.....        | Hooktown.     |
| Combs, Davelle 2.....                | Lexington.    |
| Cooley, Frank 2.....                 | Williamsburg. |
| Cooper, Joseph Evans 1.....          | Greendale.    |
| Copeland, Alexander Chisholm 2.....  | Clay City.    |
| Copeland, George Forbes 2.....       | Clay City.    |
| Coyle, John Caldwell 2.....          | Canton.       |
| Cunningham, Alfred 2.....            | Cadiz         |
| Curtis, Clintie 2.....               | Greendale.    |
| Curtis, Corinne Lyon 1.....          | Greendale.    |
| Darnell, Caleb 1.....                | Long Lick.    |
| Davis, Forrest William 1.....        | Lexington.    |
| Davis, John Thomas 2.....            | Shelbyville.  |
| Davis, Walter Hendricks 2.....       | Jacksonville. |
| Davis, William Tilden 2.....         | Jacksonville. |
| Denny, Van Hamilton 2.....           | Lexington.    |
| Dudley, Benjamin William 1.....      | Lexington.    |
| Douglas, Frankie Belle 2.....        | Lexington.    |
| Duke, Mattie Eva 2.....              | Beelerton.    |
| Downing, Kittie 2.....               | Lexington.    |
| Durham, John Hayes 2.....            | Artemus.      |
| Elwell, John William 1.....          | Lexington.    |
| Fairchild, Jackson Dillion 1.....    | Lexington.    |
| Fairchild, Margaret 1.....           | Lexington.    |
| Farley, Frank Hopkins 2.....         | Flat Lick.    |
| Foley, John Jerome 1.....            | Hanley.       |
| Gaitskill, John William 1.....       | Lexington.    |
| Gardner, Harvey Showers 2.....       | Leitchfield.  |
| Gardner, John Abraham 1.....         | Leitchfield.  |
| Garnet, William Wilson 2.....        | Cave City.    |
| Gilbert, James Samuel 2.....         | Mt. Eden.     |
| Gist, Marium Stirman 2.....          | New Castle.   |
| Gooch John Latton 1.....             | Versailles.   |
| Gunn, Lucien Brook 2.....            | Lexington.    |



|                                  |               |
|----------------------------------|---------------|
| Halcomb, George William 2.....   | Franklin.     |
| Halcomb, Thomas Allen 1.....     | Franklin.     |
| Hallam, Mortimer 2.....          | Paris.        |
| Hamilton, Robert Browning 2..... | Lexington.    |
| Hamilton, Thomas Smith 2.....    | Lexington.    |
| Hannibal, Michael Andrew 1.....  | Lexington.    |
| Haydon, Alexander Gunn 1.....    | Keene.        |
| Haynes, Claude 1.....            | Lexington.    |
| Hill, Mathew Edgar 1.....        | Lexington.    |
| Hilliard, Hercules Clay 1.....   | Clinton.      |
| Hostetter, Jacob Henry 1.....    | Lexington.    |
| Jochum, Robert Henry 1.....      | Lexington.    |
| Johnson, John Bockover 2.....    | Lexington.    |
| Johnson, Joseph 1.....           | Chavies.      |
| Johnson, John Pelham 1.....      | Lexington.    |
| Kirk, Edward Walden 1.....       | Inez.         |
| Kelly, William Smith 2.....      | Georgetown.   |
| King, Margaret Isadora 2.....    | Lexington.    |
| Kirk, Millard Tivis 2.....       | Inez.         |
| Knapp, Mattie Winifred 2.....    | Lexington.    |
| Lancaster, William Kinzea 1..... | Lexington.    |
| Lane, Frank William 1.....       | Lexington.    |
| Lavin, Sallie Ambrosia 1.....    | Walnut Hills. |
| Lievitz, Herman Bernard 1.....   | Lexington.    |
| Llewellyn, Mary Hitchman 2.....  | Lexington.    |
| Lucas, Ida West 2.....           | Lexington.    |
| Lyne, Frank Farra 2.....         | Brannon.      |
| McCain, Linn Hemingway 1.....    | Bedford.      |
| McCawley, James Taylor 1.....    | Morganfield.  |
| McConnell, John 2.....           | Versailles.   |
| McDaniel, James Mott 2.....      | State Line.   |
| McElroy, Paul Isaac 1.....       | Lexington.    |
| McKenna, Charles William 2.....  | Lexington.    |
| Martin, Thomas Ellis 2.....      | Minnie.       |
| Miller, Minnie Blades 1.....     | Lexington.    |
| Mitchell, Lawrence Jasper 1..... | East Hickman. |
| Muir, George Wallace 2.....      | Lexington.    |
| Muir, Nellie Hawkins 2.....      | Lexington.    |
| Mulligan, James Jackson 1.....   | Lexington.    |
| Nelson, Robert 2.....            | Lexington.    |
| Nichols, Marylark 2.....         | Lexington.    |
| Northcut, Elgin 1.....           | Judy.         |
| Nunley, William Daniel 2.....    | Cannonsburgh. |
| Oldham, Marie Chenault 1.....    | Lexington.    |
| Oliver, Mathew Rabbath 1.....    | Lexington.    |

|                                       |                 |
|---------------------------------------|-----------------|
| Overton, William Dabney 1.....        | Frankfort.      |
| Pope, Edward Lee 2.....               | Barboursville.  |
| Rankin, Adam Isaac 1.....             | Rankin.         |
| Reisch, Charles 1.....                | Louisville.     |
| Rice, Halleck 1.....                  | Salversville.   |
| Richmond, Carrie Francis 2.....       | Lexington.      |
| Risk, William Theodore 1.....         | Midway.         |
| Roberts, William Rankin 1.....        | Brannon.        |
| Rogers, Clarence 1.....               | Leitchfield.    |
| Scherffus, William Henry 1.....       | Linnville.      |
| Scholtz, Theodore Walter 1.....       | Louisville.     |
| Scott, Henry Martin Skillman 2.....   | Lexington.      |
| Shelbourne, Arthur Lee 2.....         | Bardwell.       |
| Simpson, Eugene Erwin 1.....          | Lexington.      |
| Simpson, John Morrison Clay 1.....    | Lexington.      |
| Smith, Etta 2.....                    | Warnock.        |
| Smith, Louis Ripple 1.....            | Hickory, N. C.  |
| Spears, Robert Cave 2.....            | Spears.         |
| Spencer, Margaret Cassell 1.....      | Lexington.      |
| Stephens, Benjamin Franklin 1.....    | Martinsburg.    |
| Stevens, Edna Earl 2.....             | Walnut Hills.   |
| Stephens, Edgar 1.....                | Martinsburg.    |
| Stevens, Jessie 2.....                | Walnut Hills.   |
| Stoll, John George 2.....             | Lexington.      |
| Tarr, James Bennett 1.....            | Paris.          |
| Terry, Lila Beatrice 2.....           | Paris.          |
| Truesdell, Herbert Hoffman 1.....     | Alexandria.     |
| Turner, Charles Foushee 1.....        | Lexington.      |
| Vandever, John Green 1.....           | Rankin.         |
| VanMeter, Benjamin Stonestreet 2..... | Christiansburg. |
| Viley, Willa 2.....                   | Lexington.      |
| Vinson, John Robert 1.....            | Cadiz.          |
| Walker, Edward Craig 1.....           | Anthoston.      |
| Walsh, Robert Christie 1.....         | Lexington.      |
| Warner, Evan Taylor 1.....            | Lexington.      |
| Warnock, Ernest Edward 1.....         | Warnock.        |
| Warren, Richard Evans 1.....          | Donerail.       |
| Wickliffe, Charles Henry 2.....       | Lexington.      |
| Woods, William Martin 1.....          | Cynthiana.      |
| Woolley, Charles Wickliffe 1.....     | Lexington.      |
| Wootton, William Beverly 1.....       | Oak Grove.      |
| Young, Lucien Frank 1.....            | Liberty.        |



### Business College.

|                                   |                    |
|-----------------------------------|--------------------|
| Allen, S. H.                      | Lexington.         |
| Allen, W. H.                      | Lexington.         |
| Anderson, William B.              | Scottville.        |
| Armstrong, Julia.                 | Lexington.         |
| Ashurst, Lula.                    | Paris.             |
| Axline, Herbert.                  | Nicholasville.     |
| Bacon, Franklin                   | Lexington.         |
| Ballard, Elijah Franklin          | Ballardsville.     |
| Bales, Charles Clinton.           | Rose Hill, Va.     |
| Baker, Kate M.                    | Lexington.         |
| Barlow, Henry Z.                  | Barlow, Miss.      |
| Barr, Robt. M.                    | Lexington.         |
| Bates, Mary                       | Richmond.          |
| Bell, Lawrence E.                 | Lexington.         |
| Bell, John Lambert.               | Lexington.         |
| Beckner, Lucien M.                | Winchester.        |
| Beverly, Frank Camilus.           | Big Stone Gap.     |
| Boone, Robert E.                  | Hedges.            |
| Bogges, E. H.                     | Greenville.        |
| Bomer, Ote G.                     | Brownsville, Tenn. |
| Bourne, M. H.                     | Owenton.           |
| Breckinridge, Sophonisba Preston. | Lexington.         |
| Bradley, Samuel J.                | Winchester.        |
| Brown, M. H.                      | Lexington.         |
| Brown, J. W.                      | Liberty.           |
| Brown, Frank Human.               | Hamilton, N. C.    |
| Bullock, Sallie O.                | Lexington.         |
| Burke, Dorothy W.                 | Versailles.        |
| Caden, Andrew B.                  | Lexington.         |
| Calhoun, Lelia Zerilda            | Owensboro.         |
| Cardwell, John Cornelius.         | Earls.             |
| Cassell, W. H. Jr.                | Lexington.         |
| Cavens, Sallie.                   | Lexington.         |
| Clark, Katy                       | Lexington.         |
| Clugston, Leslie.                 | Lexington.         |
| Cockrill, C. J.                   | Jetts Creek.       |
| Congleton, Robert F.              | Dundee.            |
| Coons, Annie.                     | Lexington.         |
| Coons, Emma.                      | Lexington.         |
| Cooper, James Clay                | Mt. Sterling.      |
| Cox, Walter Chilton.              | West Liberty.      |
| Crabtree, Robert Rowan            | Lexington.         |
| Crawford, Arthur.                 | Louisiana, La.     |
| Crawford, Frank.                  | Rob Ray, Ind.      |

|                                   |                   |
|-----------------------------------|-------------------|
| > Croxton, R. H.....              | Lexington.        |
| > Crow, George .....              | Nicholasville.    |
| > Crudup, Thomas H.....           | Kittrell, N. C.   |
| > Curran, Thomas B.....           | Lexington.        |
| > Day, G. B.....                  | Dundee.           |
| > Delaney, Olie B.....            | Hedges.           |
| > Demaree, William Yocum.....     | Louisville.       |
| > Dickson, Charles B.....         | Richmond.         |
| > Donlan, Maggie Cecilia.....     | Lexington.        |
| > Douthat, Henry Gilman.....      | Wilton, Va.       |
| > Easley, Gilbert H.....          | Shelbyville.      |
| > Embry, Jerry R.....             | Lexington.        |
| > Erion, Ida.....                 | Germantown.       |
| > Ervin, D. M.....                | Gainesville.      |
| > Farra, O. H.....                | Lexington.        |
| > Ferney, Katie M.....            | Lexington.        |
| > Farrel, H. F.....               | Lexington.        |
| > Fizer, H. S.....                | Lexington.        |
| > Fitzgerald, Josie.....          | Lexington.        |
| > Foster, Fred Dolan.....         | Lexington.        |
| > Frost, W. S.....                | Lexington.        |
| > Gay, Lizzie G.....              | Lexington.        |
| > Gaines, Foster B.....           | Stamping Ground.  |
| > Gibson, P. B.....               | Ironton, Ohio.    |
| > Golden Mildred.....             | Winchester.       |
| > Goodwin, Thomas.....            | Chilesburg.       |
| > Greenwood, Harry M.....         | Lexington.        |
| > Goode, Alvin C.....             | Lexington.        |
| > Groselose, George Grose.....    | Marion, Va.       |
| > Groselose, Frank Alexander..... | Burks Garden, Va. |
| > Gunn, Thomas.....               | Lexington.        |
| > Hair, Sallie R.....             | Lexington.        |
| > Hall, William M.....            | Bowen.            |
| > Hampton, Tyler.....             | Russell Cave.     |
| > Hays, F. M.....                 | Lexington.        |
| > Hibbitts, John C.....           | Bethel, Ohio.     |
| > Hisle, Lee.....                 | Lexington.        |
| > Hisle, Edward.....              | Lexington.        |
| > Hisle, Clay.....                | Lexington.        |
| > Hostetter, Whitney M.....       | Lexington.        |
| > Hudson, Ernest.....             | Lexington.        |
| > Hudson, Silas J.....            | New Columbus.     |
| > Hughes, Elsie.....              | New Columbus.     |
| > Hukle, Jessie.....              | Lexington.        |
| > Hunt, Frank F.....              | Lexington.        |
| > Hutchinson, Mattie D.....       | Lexington.        |



|                               |                  |
|-------------------------------|------------------|
| Hutchinson, Hattie.....       | Lexington.       |
| Irvine, Abram Lisle.....      | Richmond.        |
| Jameson, Ora B.....           | Stamping Ground. |
| Jones, Hattie D.....          | Lexington.       |
| Juett, Carl Hendrix .....     | Georgetown.      |
| Kays, Wallace Granville.....  | Lexington.       |
| Keller, Thekla.....           | Lexington.       |
| Kenney, Frank P.....          | Paris.           |
| Kidd, Sallie M.....           | Lexington.       |
| King, B. E.....               | Frost.           |
| King, J. V.....               | Frost.           |
| Klein, R.....                 | Lexington.       |
| Klein, L. A.....              | Lexington.       |
| Klein, A. F.....              | Lexington.       |
| Klein, J. M.....              | Lexington.       |
| Lambert, Len.....             | Lexington.       |
| Lancaster, Albert C .....     | Lexington.       |
| Lancaster, James.....         | Corinth.         |
| Latham, Charles Francis.....  | Donerail.        |
| Lewis, Samuel Higgins.....    | Lexington.       |
| Logan, Charles Alexander..... | Shelbyville.     |
| Lucas, Mary E.....            | Lexington.       |
| Lyttle, Mamie.....            | Lexington.       |
| Locke, A. F.....              | Charlotte, Mich. |
| Mack, John.....               | Dundee.          |
| Martin, Eugene Dennis.....    | Earles.          |
| Matthews, Robert.....         | Lexington.       |
| Maupin, Herman Harp.....      | Lexington.       |
| Maxwell, Mamie.....           | Lexington.       |
| McCauliffe, Mary C.....       | Lexington.       |
| McClanahan, George.....       | Berlin.          |
| McCormick, Joseph .....       | Lexington.       |
| McFarlin, John William.....   | Franklin.        |
| McKenney, Annie.....          | Lexington.       |
| McLanshen, George Wiley.....  | Berlin.          |
| McNamara, John Richard.....   | Torrent.         |
| McVey, Horace C.....          | Lexington        |
| Melton, Elijah Spencer.....   | Pool's Mill.     |
| Miller, Annie.....            | Lexington.       |
| Moffitt, William A.....       | Sedalia.         |
| Minor, Hugh.....              | Eastham, Va.     |
| Moore, William D.....         | Mt. Vernon, Ind. |
| Moore, Elijah Coffey.....     | Liberty.         |
| Moore, Bennett Franklin.....  | Wilson, N. C.    |
| Moore, Clarence David .....   | Kittrell, N. C.  |
| Moore, D. B.....              | Harrodsburg.     |

|                                |                 |
|--------------------------------|-----------------|
| Morrow, Wilson Boyd.....       | Somerset.       |
| Morton, Bettie Frederic.....   | Lexington.      |
| Mullen, Edwin Ernest.....      | Lexington.      |
| Murphy, Lizzie.....            | Lexington.      |
| Murphy, Phillip H.....         | Newtown.        |
| Montgomery, Ida.....           | Lexington.      |
| Nelson, Thomas R.....          | Lexington.      |
| Nichols, Daniel A.....         | Lexington.      |
| Northcutt, R. L.....           | Williamstown.   |
| Northcutt, W. A.....           | Williamstown.   |
| Nightingale, Samuel W.....     | Doylestown, Pa. |
| O'Kelly, John Graham.....      | Ashwood, La.    |
| O'Toole, Katy.....             | Lexington.      |
| O'Toole, Mary.....             | Lexington.      |
| Overton, William Dabney.....   | Frankfort.      |
| Page, William Seabury.....     | Lexington.      |
| Parks, Samuel.....             | Walnut Hill.    |
| Parks, J. M.....               | Lexington.      |
| Payne, Margaret Howard.....    | Lexington.      |
| Patterson, Samuel.....         | Ft. Springs.    |
| Patterson, Thomas C.....       | Ft. Springs.    |
| Price, William.....            | Winchester.     |
| Proctor, William G.....        | Quail.          |
| Proctor, W.....                | Lexington.      |
| Pythian, Lucy Catharine.....   | Frankfort.      |
| Prows, J.....                  | Lexington.      |
| Ramsey, Harry Porter.....      | Stanford.       |
| Raborn, R. L.....              | Kidville.       |
| Ready, John.....               | Lexington.      |
| Reader, Gertrude.....          | Georgetown.     |
| Redd, Margaret Warren.....     | Lexington.      |
| Redmon, Harry.....             | Millersburg.    |
| Riley, Dexter W.....           | Berlin.         |
| Riley, Samuel Gayle.....       | Georgetown.     |
| Ripy, Oliver P.....            | Denton, Tex.    |
| Rogers, Charles LaFayette..... | London.         |
| Rupard, Rosa.....              | Winchester.     |
| Saddler, Francis Everet.....   | Hawsville.      |
| Safforans, Elizabeth.....      | Lexington.      |
| Seaman, A. M.....              | Lexington.      |
| Sebree, Owen C.....            | New Columbus.   |
| Schooler, Jones.....           | Pleasant Home.  |
| Sickles, W. L.....             | Lexington.      |
| Skidmore, Daniel.....          | Bowen.          |
| Sloan, Isaac Guthrie.....      | Lexington.      |
| Smith, Mattie Lee.....         | Lexington.      |



|                                 |                |
|---------------------------------|----------------|
| Sousley, Edwin.....             | Lexington.     |
| Sprague, Ross.....              | Grants Lick.   |
| Staples, Charles R.....         | Lexington.     |
| Stivers, Jerome Ernest.....     | Walnut Hill.   |
| Stanley, Charley.....           | Lexington.     |
| Shropshire, Rosseau.....        | Georgetown.    |
| Thomasson, Lina.....            | Lexington.     |
| Thompson, George Edward.....    | Columbia, Mo.  |
| Thornton, Mattie Davidson.....  | Lexington.     |
| Thurman, Alma.....              | Lexington.     |
| Tully, Stockton B.....          | Springdale.    |
| Turner, John W.....             | New Columbus.  |
| Umstead, Charles Admiral.....   | Lexington.     |
| Vicroy, Charles.....            | Maysville.     |
| Vicroy, William.....            | Maysville.     |
| Ward, Sallie J.....             | Richmond.      |
| Ward, Charles F.....            | Lexington.     |
| Walker, Robert B.....           | Lexington.     |
| Walker, Samuel Pearce.....      | Lexington.     |
| Warren, George Walter.....      | Lexington.     |
| Warren Gillois.....             | Mills.         |
| Watson, James.....              | Lexington.     |
| Wells, Ollie.....               | Richmond.      |
| Wells, Jeanette.....            | Lexington.     |
| West, Georgie B.....            | Lexington.     |
| Welsh, W. S.....                | Lexington.     |
| Wheeler, Inez.....              | Lexington.     |
| White, William.....             | Athens.        |
| Wiggins, C. P.....              | Piqua.         |
| Williamson, Raymond.....        | Georgetown.    |
| Wilson, James Alexander.....    | Hickory, N. C. |
| Wilson, Fred L.....             | Lexington.     |
| Wilson, Arthur.....             | Lexington.     |
| Williams, Calvert.....          | Lexington.     |
| Wilson, Isaac M.....            | Winchester.    |
| Woodard, William Thos. Jr.....  | Lexington.     |
| Woodward, Charles Harrison..... | Jessamine.     |
| Yeager, Churchill Fred.....     | Marksberry.    |
| Young, Len.....                 | South Elkhorn. |
| Youngling, Hubert.....          | Lexington.     |
| Ziegler, Charles E.....         | Winchester.    |
| Zimmerman, Daniel Leonard.....  | Lexington.     |

### Calendar for 1894=95.

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|--------------------------------------------|---------------------------|
| Entrance Examinations begin .....          | Monday, Sep. 10, 1894.    |
| First Term begins.....                     | Wednesday, Sep. 12, 1894. |
| Thanksgiving.....                          | Thursday, Nov. 22, 1894.  |
| Board of Trustees meets .....              | Tuesday, Dec. 11, 1894.   |
| Christmas Holidays begin.....              | Thursday, Dec. 20, 1894.  |
| College Duties resumed.....                | Wednesday, Jan. 2, 1895.  |
| Celebration of Washington's Birthday....   | Friday, Feb. 22, 1895.    |
| Patterson Society Oratorical Contest ..... | Tuesday, March 26, 1895.  |
| Final Examinations begin.....              | Wednesday, May 15, 1895.  |
| Union Literary Society Exhibition.....     | Friday, May 24, 1895.     |
| Patterson Society Exhibition.....          | Friday, May 31, 1895.     |
| Board of Trustees meet .....               | Tuesday, June 4, 1895.    |
| Class Day .....                            | Wednesday, June 5, 1895.  |
| Alumni meet .....                          | Wednesday, June 5, 1895.  |
| Alumni Banquet.....                        | Wednesday, June 5, 1895.  |
| Commencement .....                         | Thursday, June 6, 1895.   |



## College Directory.

|                           | RESIDENCE.             | COLLEGE QUARTERS.                   |
|---------------------------|------------------------|-------------------------------------|
| Anderson, F. Paul.        | 125 S. Limestone St.   | 1st Floor Mechanical Hall.          |
| Aubrey, Thomas.           | 246 S. Limestone St.   | College Boiler Room.                |
| Bennett, S. E.            | 125 S. Limestone St.   | Veterinary Clinic Building.         |
| Blackburn, Mrs. Lucy B.   | 30 Woodland Ave.       | No. 14, 1st Floor Main Building.    |
| Blanton, R. L.            | 64 Market St.          | No. 13, 1st Floor Main Building.    |
| Clay, C. D.               | 83 N. Mill St.         | New Dormitory.                      |
| Curtis, H. E.             | 126 S. Upper St.       | Chem. Lab., 1st Fl. Sta. Bld'g.     |
| Davis, J. M.              | 140 E. Maxwell St.     | No. 1, Basement Main Building       |
| Garman, H.                | 424 S. Limestone St.   | 1st Fl. and Basement Sta. Bld'g.    |
| Hawkins, T. S.            | 55 Winnie St.          | Experiment Farm.                    |
| Hodges, Miss Mary.        | 231 E. High St.        | No. 10, 1st Floor Main Building.    |
| Johnson, J. R.            | Old Dormitory.         | Mechanical Hall.                    |
| Jordan, A. T.             | 172 W. Maxwell St.     | Basement Station Building.          |
| Kastle, J. H.             | 1 W. High St.          | 2d Floor Station Building.          |
| Logan, J. L.              | 217 N. Broadway.       | No. 2, Basement Main Building.      |
| Mathews, C. W.            | 410 S. Limestone St.   | Basement Station Building.          |
| Miller, A. M.             | 107 E. Maxwell St.     | No. 16, 2d Floor Main Building.     |
| Milligan, R. A.           | 492 S. Limestone St.   | Mechanical Hall.                    |
| Muncy, V. E.              | 409 S. Limestone St.   | No. 10, 1st Floor Main Building.    |
| Murray, James.            | 428 S. Limestone St.   | College Conservatory.               |
| Neville, J. H.            | 218 W. Main St.        | No. 21, 2d Floor Main Building.     |
| Nelson, J. P.             | 407 S. Limestone St.   | 2d Floor Mechanical Hall.           |
| Newman, J. W.             | 114 S. Limestone St.   | No. 8, 1st Floor Main Building.     |
| Patterson, J. K., Pres't. | Brick Dwlg. on Campus. | No. 12, 1st Floor Main Building.    |
| Patterson, W. K.          | Brick Dwlg. on Campus. | No. 17, 2d Floor Main Building.     |
| Pence, M. L.              | 106 S. Spring St.      | 1st Floor Mechanical Hall.          |
| Peter, A. M.              | 171 Rose St.           | Chemical Lab., 1st Fl. Sta. Bldg.   |
| Pryor, J. W.              | 203 N. Broadway.       | No. 9 1st Floor Main Building.      |
| Roark, R. N.              | 420 S. Limestone St.   | No. 11, 1st Floor Main Building.    |
| Scovell, M. A.            | Experiment Farm.       | Office, 1st Fl. Station Building.   |
| Shackleford, John.        | 71 Woodland Ave.       | No. 19, 2d Floor Main Building.     |
| Shelby, Miss A. M.        | 71 Ashland Ave.        | Office, 1st Floor Station Building. |
| Terrill, J. S.            | 172 W. Maxwell St.     | 1st Floor Station Building.         |
| Wells, J. H.              | 107 E. Maxwell St.     | 2d Floor Mechanical Hall.           |
| White, J. G.              | 110 E. Fourth St.      | No. 15, 1st Floor Main Building.    |