

ANNUAL COMMENCEMENT

CLASS OF 1904



Iowa State College
of Agriculture and Mechanic Arts

College Campus, Ames, Iowa
June 8 :: 10:30 A. M.

1 9 0 4

Program

Music - - - - - College Band

Invocation

Music - - - In charge of Prof. F. J. Resler

Commencement Address—"Our Century of Action"
by David Starr Jordan, Ph. D., LL. D., President
Leland Stanford University, Palo Alto, California.

Music

Promotion of Juniors, by Hon. J. B. Hungerford,
President of the Board of Trustees.

Response in Behalf of the Juniors - N. B. Garver

Music

Conferring of Degrees - President A. B. Storms

Music - - - - - College Band

Eight P. M., Reception at the House of the President, for the
Alumni, Faculty and Friends.

CANDIDATES FOR CERTIFICATES IN TWO-YEAR DOMESTIC SCIENCE COURSE

ANNEGARS, FANNY
PHELPS, VERA

BARTHOLOMEW, JEANETTE
PURMORT, VIRGILIA

VAN ZILE, MRS. MARY.

Candidates for Degrees with Subjects of Theses

DIVISION OF AGRICULTURE

AGRONOMY COURSE.

For the degree of Bachelor of Scientific Agriculture:

ATKINSON, ALFRED—The Improvement of Corn.

PARKS, P. C.—The Evolution of the Negro Farmer.

SAMPSON, HARRY OSCAR, B. S.—Some Soil Properties and Their Relation to Crop Production.

TORRES, GONZALO S.—Irrigation.

ANIMAL HUSBANDRY COURSE.

For the degree of Bachelor of Scientific Agriculture:

CROUSE, FRANK H.—The Value of Forage Crops in the Production of Live Stock.

DANFORTH, HARRY G.—Corn Silage in Beef Production.

DINSMORE, WAYNE; GRAY, CHARLES—The Feeding Value of Corn Fodder and Corn Silage for Beef Production.

EILER, DANIEL W.; TELLIER, HERBERT O.—Comparison of Wholesale and Retail Methods of Cutting and Marketing Beef and Swine Products.

HAVENHILL, MARK—Canadian and American Methods of Pork Production.

LEFFLER, GEORGE V.—Pork Production: Iowa vs. Ontario.

RUBEL, CHESTER W.; SHAFF, J. OSTRANDER—Market Classes and Grades of Cattle and Hogs

ULIBARRI, RICARDO B.—The Evolution of the Plow.

WILLIAMS, HAROLD, R.—Cattle Fattening in Ontario and Iowa.

DAIRY COURSE.

For the degree of Bachelor of Scientific Agriculture:

HANSEN, FRED M.—The Over-run in Buttermaking.

TOURGEE, CARL HERBERT—Brine Salting vs. Dry Salting of Butter and Over-run.

SHELDON, DE LA—Determination of Best Method for Handling Hand Separator Cream.

HORTICULTURAL COURSE.

For the degree of Bachelor of Scientific Agriculture:

DIXON, CLYDE OGDEN—Trees and Shrubs for Iowa Parks.

MILLER, ALBERT ARTHUR—A study of Ornamental Shrubs Adapted to Iowa Conditions.

MERRITT, MELVIN LEROY—A Study of the Leaf Spot Disease of the Cherry, With Methods of Combatting It.

VETERINARY COURSE.

For the degree of Doctor of Veterinary Medicine:

GRAHAM, RALPH.

HURT, LESLIE M.

MATTHEWS, FREDERICK GREENVILLE.

RAPP, CHARLES A.

DIVISION OF ENGINEERING

MECHANICAL ENGINEERING COURSE

For the degree of Bachelor of Mechanical Engineering:

ANDREWS, ED V.; USRY, ELTON L.—Soft Coal Combustion.

BISHOP, HOWARD F.; BISHOP, WALTER C.—Experiments With Hot Air Furnaces.

BORSHEIM, H. THEO. B.; MOODY, LESLIE C.—Pipe Covering Tests.

BURTON, JOSEPH HENRY; MINERT, THEODORE RAY—Locomotive Boiler Practice.

CORLETTE, GLEN H.; PHILLIPS, PAUL D.—Design of a Machine Shop.

DREHER, IRVING A.; TENNEY, EDGAR L.—Heating and Ventilating System of Morrill Hall, Iowa State College, Ames, Iowa.
 HAMERLY, FRED; OTIS, WEBB H.—Design of a Locomotive Testing Plant.
 PEW, GEORGE V.; SIMPSON, C. DEANE—Design of Central Heating Plant.
 POAGE, LUCIEN S.; THOMAS, DEWITT C.—Tests of Hot-Air Blast Coils.
 STARZINGER, OTTO, B. S. in E. E.—Weathering of Soft Coal.

CIVIL ENGINEERING COURSE

For the degree of Bachelor in Civil Engineering:

AUSTIN, ROY G.; BRUNNIER, HENRY J.—Sewage Disposal from Private Residences.
 BROWN, FRANK L.; MORRIS, LESTER—The Ames and College Belt Line.
 BROWN, O. L.; SHIPMAN, CHARLIE E.—A Study of Plumbing Practice and Regulations in Iowa.
 BRUNTLET, E. H.; MARSH, FRED HERBERT—An Investigation of the Flow of Ground Waters.
 COTTON, ERNEST; OKEY, FRANK M.—Experimental Investigation of Concrete.
 GAYLORD, LAWRENCE T.; MACDONALD, THOMAS HARRIS—Iowa Good Roads Investigations.
 GERSBACH, EDWARD C.; O'HEARN, JOHN L.—Design of a Sewerage System for the City of Montezuma, Iowa.
 LOFSTEDT, OTIS, BENJAMIN; WICKHAM, JOHN—Design of a Water-Works System for Roland, Iowa.
 LYFORD, LEROY L.; ROWAT, JAMES A.—Relief Map of College Farm and Campus.
 WILSON, CLINTON BATES—Location of an Electric Railway Line from Cherokee to the State Hospital for the Insane.

ELECTRICAL ENGINEERING COURSE

For the degree of Bachelor of Science in Electrical Engineering:

ALVORD, RAYMOND M.; EVANS, ARTHUR LEE—Design of an Electric Lighting Plant for Nevada, Iowa.
 ANDERSON, ISAAC—Plans and Specifications for a Long Distance Power Transmission Plant.
 AUSTIN, HARRY D.; WAGGONER, C. G.—A Thermal Efficiency Test of the Oskaloosa Light and Power Plant.
 IRELAND, WILLIAM ALFRED; McMILLAN, ROSCOE—A Car Test of the Oskaloosa Street Railway System.
 BROCK, WILLIAM I.; READ, HOMER WEST—A Storage Batter Auxiliary for the Boone Street Railway Power Plant.
 BUCKLEY, ARTHUR R.; SCRANTON, HAROLD L.; SHREVE, EARL O.—The Electric Equipment of the Railway between Ames and the College.
 HAZELTON, PARKER H.; SCOTT ALEXANDER HUGH—Meter Tests.
 HOLDEN, ARTHUR CARYL; PIELSTICKER, FRED ALONZO—Design of an Electric Plant for the Depot and Switchyards of the Illinois Central Ry. at Fort Dodge, Iowa.
 MCKINNEY, ROBERT F.—A System of Electrical Distribution and Illumination for the College Campus.
 MERENESS, GIRIT N.—A Telephone System for the Town of Glidden and Vicinity.
 MUNRO, WILL S.—Test of a 4 K. W. Rotary Converter.

- PETERSON, EMIL C.—An Outline of the Shop Organism of a Western Electric Company—Chicago Works.
- SCHOOLEY, CLAUDE ORION—Plans and Specifications for a Central Energy Multiple Switchboard Telephone Exchange.
- SMITH, ALGY J.; SPAULDING, E. B.—Design of a New System for the Distribution of Current for the Electric Lighting Plant of Ames.
- SPERRY, ARTHUR B.; TIBBITS, CHARLES L.—Design of an Electric Lighting Plant for Webster City, Iowa.
- SUMNER, WILLIAM D.—Plans and Specifications for an Electric Lighting Plant for Menlo, Iowa.

MINING ENGINEERING COURSE

For the degree of Bachelor of Science in Mining Engineering.

- MOFFETT, ROBERT HAWK—The Loss of Silver in Cupellation.
- KNOWLES, HARRY HOLMES; SMITH, CLYDE WILBUR—The Selection and Design of a Haulage System for the Gleason Mine, Webster County, Iowa

DIVISION OF SCIENCES AS RELATED TO THE INDUSTRIES

SCIENCE COURSE

For the degree of Bachelor of Science:

- BARTHOLOMEW, C. Edgar—Classification of Aphididae with Notes on the Iowa Species.
- BEVAN, WILLIAM ALFRED—A Comparison of Photometric Methods.
- BUCHANAN, ROBERT EARLE—A Contribution to our Knowledge of the Development of *Prunus Americana*.
- CAMPBELL, CLAUDE VERNON; LARSON, EMBERT VICTOR—The Size of Story County, Iowa, Farms, Historically Considered
- GARBBERSON, J. H.—Comparative Histology of the Retina.
- JORDAN, JOHN W.—The Labor Organizations of Boone, Iowa.
- KINGKADE, EVA BEATRICE—Co-operative Stores in Iowa.
- MILLER, OLIVER H.—A Study of English Ballads.
- NEWCOM, R. BLANTON—General Inefficiency of the Public Roads of Iowa.
- OVERHOLSER, ALICE C.—The Efficiency of the Davidson System of Water Purification for Boiler Purposes.
- ROSS, ELLISON L.—The Vote of the Socialists.
- ROUP, CLARENCE J.—Labor Unions in Oelwein.

GENERAL AND DOMESTIC SCIENCE COURSE

For the degree of Bachelor of Science:

- ANDERSON, HARRIETT—Analysis of Deep Well Water With Especial Reference to a Particular Well and a Comparison of Composition of Different Wells for Domestic Purposes.
- BROWN, NELLIE ISABELLE—New England Life as Portrayed by Certain Writers of Fiction.
- CESSNA, ETHEL—Beef Extracts, Their Composition, and Their Comparative Values.
- CORLETTE, BERNICE—The Economic Food Plants, Especially Those Used by the Indians of Iowa.

- CURTISS, GERTRUDE—Methods of Portraying Character; A Comparative Study of Certain Living Authors.
- JOHNSON, PEARLE A.—Child Labor in Wisconsin.
- KING, EDNA—An Investigation of the Dietary Conditions Prevailing at the State Institutions for Young People in Nebraska.
- MOSIER, RACHEL LUCY—The Development of Common Yeast (*Saccharomyces cerevisiae*).
- ROWE, LOUISE—Sanitary Analysis of Some of the Spring Waters of Iowa.
- SLATER, BIRD—A Study of the Difference in Digestibility of the Starch of Raw and Cooked Flour.
- STARR, NETTIE ROSE—Life in the Middle West as Portrayed by Certain Writers in Fiction.
- STEVENS, EDITH—An Analysis of Some of the Clays of Boone County.
- TAGGART, LAURA M.—The Changes in the Starch of Wheat Flour During the Baking of Bread.
- TERRILL, KATHERINE—Early Transportation in Iowa.
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POST GRADUATE COURSES

- BAINER, H. M., B. S. A.—Investigation and Calibration of Corn Planters. M. S. A.
- FRANDSON, J. H., B. S. A.—The Value of Fruit as Food. M. S. A.
- LARSON, C., B. S. A.—Does the Average Quality of Wash Water effect the Quality of Butter, M. S. A.
- WATKINS, H. R., A. B.—The Value of the Determination of Oxygen consumed in Water Analysis. M. S.
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ADVANCED DEGREES IN ENGINEERING

- ARMSTRONG, W. C., B. C. E.—The Chicago & Northwestern Viaduct over the Des Moines River, near Boone. C. E.
- CATT, GEO. W., B. C. E.—Dredging by the Hydraulic Method. C. E.
- HOSFORD, D. M., B. M. E.—Power Plants of Office Buildings. M. E.
- LANPHEAR, B. S., M. M. E.—Dynamo Design Constants. E. E.
- YOUNG, L. E., B. MIN. E.—A Treatise on Mine Surveying. E. M.

*The Trustees and Faculty
of the
Iowa State College of
Agriculture and the Mechanic Arts
invite you to be present at the
Thirty-third Annual Commencement
June 3rd to the 8th, 1904*

PROGRAM
FOR COMMENCEMENT WEEK

THURSDAY, JUNE 2

7:30 P. M. Peace Pipe.

FRIDAY, JUNE 3

3:00 P. M. Base Ball: Ames vs. Grinnell.

8:15 P. M. Society Graduation.

SATURDAY, JUNE 4

7:30 P. M. Senior Breakfast.

3:00 P. M. Base Ball: Professors vs. Seniors.

8:15 P. M. Term Recital.

SUNDAY, JUNE 5

10:30 A. M. Baccalaureate Address.

MONDAY, JUNE 6

9:30 A. M. Band Concert.

10:30 A. M. Exhibition Drill by Special Company.

2:30 P. M. Inauguration of President Storms.

8:15 P. M. "The Merchant of Venice," presented by the
Junior Class.

TUESDAY, JUNE 7—CLASS DAY

- 10:30 A. M. Choosing of Senior Committee.
2:30 P. M. Class Day Program.
7:00 P. M. Alumni Business Meeting.
8:30 P. M. Senior Promenade.

WEDNESDAY, JUNE 8

- 10:30 A. M. Graduation Exercises: Commencement Address
"Our Century of Action," by President David
Starr Jordan, of Leland Stanford Junior Uni-
versity.
1:00 P. M. Alumni Dinner.
8:00 P. M. President's Reception.