CATALOG

OF

The Georgia School of Technology

ORGANIZED 1888

A School of Mechanical, Electrical, Civil, and Textile Engineering, Engineering Chemistry, Chemistry, Architecture, and Commerce

A Department of the University of Georgia

Atlanta, Georgia

1915-1916

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Published Five Times a Year, in January, April, July, August, October

VOL. XIII **NO. II**

CALENDAR • 1916

JANUARY.

S	M	T	W	T	F	S
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2	3	4	5	6	7	8
9	10	11	12	13	14	15
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FEBRUARY.

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MARCH.

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APRIL.

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MAY.

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JUNE.

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JULY.

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AUGUST.

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SEPTEMBER.

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OCTOBER.

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NOVEMBER.

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DECEMBER.

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CALENDAR • 1917

JANUARY.

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FEBRUARY.

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MARCH.

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MAY.

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JUNE.

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AUGUST.

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SEPTEMBER.

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OCTOBER.

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NOVEMBER.

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DECEMBER.

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LOCAL BOARD OF TRUSTEES

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A. J. Rowe - Athens, Ga.

CALENDAR, 1916-17

First Term.

Begins 8:00 A. M., September 20, 1916; ends 8 A. M., February 5, 1917.

Entrance Examinations and Re-examinations begin September 15, 1916. Schedule of these examinations will be mailed to applicants after August 1, 1916.

Christmas vacation begins at 11 A. M., December 22, 1916; ends 8:00 A. M., January 2, 1917.

Second Term

Begins 8:00 A. M., February 5, 1917; ends June 13, 1917.

Commencement Day, Wednesday, June 13, 1917.

By order of the Board of Trustees, the only Holidays to be observed are Thanksgiving Day and Memorial Day (April 26th.)

OFFICERS OF ADMINISTRATION

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Dean

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Secretary ~~and Registrar~~

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~~Associate~~ Registrar .

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Superintendent of Dormitories

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Dean of the Night School

ALLAN BENTON MORTON, A.M.....300 E. Pine St.
Dean of the Summer School

J. W. Watters

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Dean of the School of Commerce

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Secretary-Treasurer School of Commerce

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Librarian

JULIA HAMMOND .....195 Juniper St.
Assistant Librarian

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General Secretary of the Y. M. C. A.

K.O. Jarboe a.m.

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Assistant Secretary of the Y. M. C. A.

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Secretary to the Registrar

MINNIE LAFEVRE .....93 Peachtree Place
~~Stenographer to the President~~

AUGUSTUS GEORGE ALLEN .....154 Hemphill Ave.
Steward of the Dining Hall

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President

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Professor of Chemistry

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Professor of Mechanical Engineering; Superintendent of Shops

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Professor of Civil Engineering

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Professor of Experimental Engineering

JESSE BOLAND EDWARDS, B.S., E. and M.E.....32 Prospect Place
Professor of Physics

WILLIAM NATHAN RANDLE .....62 Penn Ave.
Graduate of Philadelphia Textile School; Director of A. French Textile School; Professor of Textile Engineering

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Professor of Modern Languages

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Professor of English

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Professor of Mathematics

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WILLIAM GILMER PERRY, A.M.....83 W. North Ave.
Associate Professor of English

WILLIAM VERNON SKILES, A.M.....306 Myrtle St.
Associate Professor of Mathematics

WAYNE SAILLEY KELL, E.M., C.P.A...'.....58 Howell Place
Assistant Professor of Metallurgy and Geology

Caldwell
Dr. Jackson
Comer
Blevins

ALLAN BENTON MORTON, A.M.....300 E. Pine St.
Assistant Professor of Mathematics

EDMOND WEYMON CAMP, B.S. in T.E.....Kirkwood, Ga.
Assistant Professor of Textile Engineering; Assistant Director of Textiles

~~ELMER TAYLOR McCARTHY, M.E.~~.....83 W. North Ave.
Assistant Professor of Experimental Engineering

~~WILLIAM STOCKTON NELMS, A.B., A.M., Ph.D.~~..Swann Dormitory
Assistant Professor of Physics

JAMES HERBERT GAILEY, B.S., M.S., in Arch.....12 E. North Ave.
Assistant Professor of Architecture

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Instructor ~~Assistant Professor~~ of Drawing

HERBERT ALBERT WEISS, M.E.....19 W. Linden St.
Assistant Professor of Drawing

JOHN LAURENCE DANIEL, A.M.....Decatur, Ga.
Assistant Professor of Chemistry

~~HORATIO HUGHES, B.S., A.M., Ph.D.~~.....33 Crescent Ave.
Assistant Professor of Chemistry

DAVID M. SMITH, A.B., A.M., ...Tech Y. M. C. A.
Assistant Professor of Mathematics

RICHARD KIRK, A.B., A.M.....453 Luckie St.
Assistant Professor of English

HENRY LIVINGSTON FREEMAN, B.S., E.E., M.E., M.M.E.
311 E. Fourth St.
Assistant Professor of Electrical Engineering

DANIEL STANLEY ELLIOTT, A.M., Ph.D.....453 Luckie St.
Associate ~~Assistant~~ Professor of Physics

ARTHUR HAMMOND ARMSTRONG, A.B., A.M.....786 Piedmont Ave.
Instructor in English

CHARLES ALFRED JONES, B.S. in T.E.....Vinings, Ga.
Instructor in Textile Engineering and Dyeing

DAVID LESLIE STAMY, A.M.....78 W. North Ave.
Instructor in Mathematics

HARRY HEBDEN .....409-B Spring St.
Instructor in Textile Engineering

PAUL STANLEY WOODWARD, B.S., M.S.....85 Cherry St.
Instructor in Chemistry

WILLIAM ANDERSON ALEXANDER, B.S. in C.E. Tech Y. M. C. A.
Instructor in Mathematics

~~JOHN HENRY SCHROEDER, B.S. in E.E.~~.....Tech Y. M. C. A.
Instructor in Electrical Engineering

ROGER SHEPPARD HOWELL, B.S. in M.E.....Tech Y. M. C. A.
Instructor in Experimental Engineering

LEISTER EARL WILLIAMS, B.S., A. B.....Y. M. C. A.
Instructor in Mathematics

~~FERGUSON REDDIE ORMES, A.B.~~.....453 Luckie St.
Instructor in English

PAUL EMIL HEMKE, A.B.....277 E. Pine St.
Instructor in Mathematics

~~GEORGE DAWSON HALSEY, C.E.~~.....Tech Y. M. C. A.
Co-ordinator, Co-operative Courses and Instructor in Civil Engineering

GEORGE HALLADAY McKEE, B.S., A.B.....19 W. North Ave.
Instructor in Modern Languages

CHARLES CURTIS HOMMON.....City Hall
Chemist and Bacteriologist in Charge of City Sewage Treatment Works.
Instructor in Sanitary Engineering.

ROBERT MORGAN BURROWES, A.B.....453 Luckie St.
Instructor in English

ROBERT ALVA CLAY, B.S. in E.E.....Knowles Dormitory
Instructor in Experimental Engineering.

HOMER WATKINS, LL.B.....Watkins and Lewis
Instructor in Commercial Law

LOUIS DENNIS HICKS.....Southern Ruralist
Instructor in Advertising

J. WHEWELL SPEAS, A.M.....Trust Co. of Georgia
Instructor in Corporation Finance

JOHN RUTHERFORD BYINGTON.....J. P. Allen and Co.
Instructor in Mercantile Credits

ERNEST C. CLAYTON, C.P.A.....Fielder & Allen Co.
Instructor in Auditing

R. H. LINDSAY, LL.B.....Lindsay & Company
Instructor in Commercial Law

FLOYD C. FENN.....Atlantic Ice and Coal Co.
Accounting

THOMAS RANDLE WEEMS .....281 Houston St.
Instructor in Physical Culture

EDWARD BENBOW MARTINDALE .....411 Spring St.
Principal Foreman; Foreman of Machine Shop

HORACE ALONZA THOMPSON .....9 Willard Ave.
Foreman of Smith Shop

WILLIAM VAN HOUTEN .....211 W. Pine St.
Foreman of Foundry

JOHN HENRY HENIKA .....110 Oak St.
Foreman of Wood Shop

WILLIAM FELDER GRIFFIN .....48 Hemphill Ave.
Instructor in Machine Shop; Chief Engineer

HOMER HARLAN NORMAN .....312 W. 4th St.
Instructor in Wood Shop

WILLIAM CLEVELAND ADAMSON .....327 Luckie St.
Instructor in Machine Shop

HENRY PRINTUP .....10 Mell Ave.
Instructor in Wood Shop

DAVID ERNEST PHILPOT .....2 Tifton St.
Instructor in Textile Engineering

JOSEPH WARREN PATILLO .....140 Metropolitan Ave.
Instructor in Wood Shop

AUGUSTUS THEODORE PEACOCK .....49 Pearce St.
Instructor in Machine Shop

~~STEWART BYRD~~ .....Knowles Dormitory
J. H. Sayle — *Student Assistant in Physical Culture*

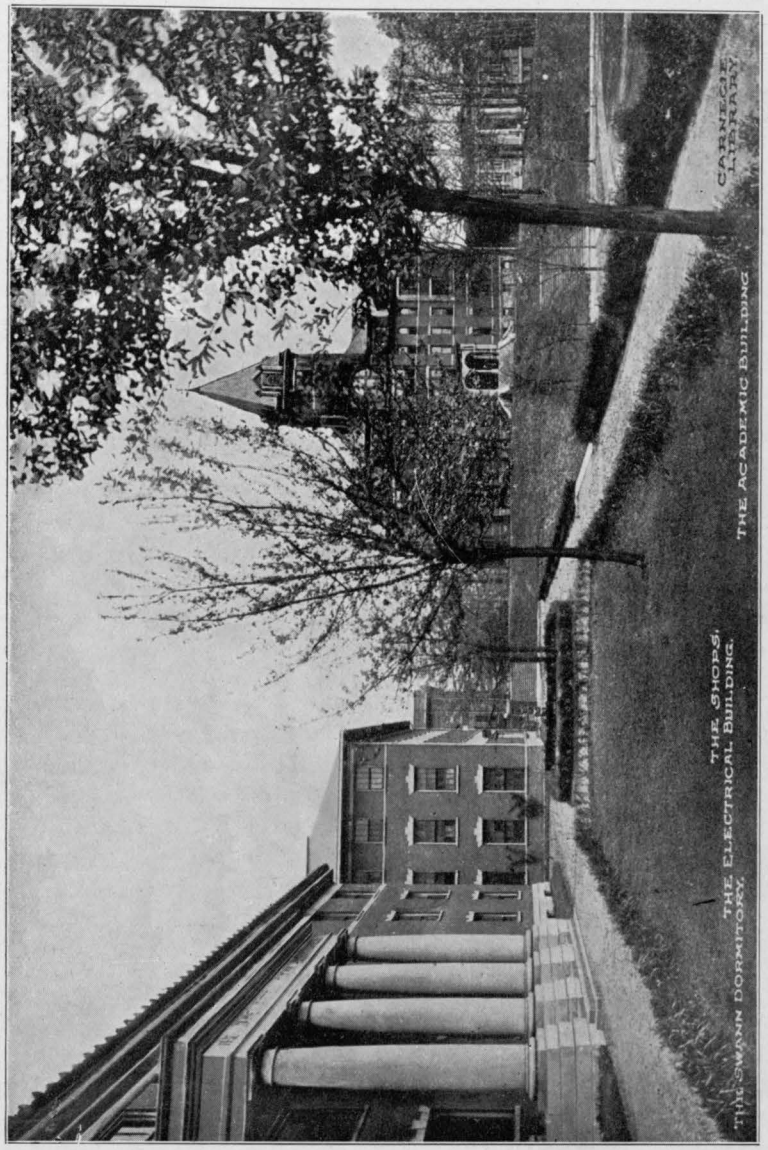
~~CARL PHILIPS DRENNER~~ .....134 Barnett St.
A. A. Robinson *Student Assistant in Chemical Laboratory*

~~ALLEN PHILIP FRANCIS~~ .....315 Gordon St.
W. L. Younger → *Student Assistants in Electrical Engineering*
W. P. Speir

~~MACARTAN CAMPBELL KOLLOCK, JR.~~ .....237 N. Jackson St.
R. A. Preas. *Student Assistant in Architecture*

~~JOHN LAWRENCE METCALF~~ .....9 E. North Ave.
J. J. Wyatt ~~Eckles~~ *Student Assistant in Physics*

~~BILL BOWDEN~~ .....Knowles Dormitory
Student Assistant in Electrical Engineering



WEST SIDE OF CAMPUS.

Standing Committees of the Faculty

The President is *ex-officio* a member of all standing committees.

Absences.—Professors Perry, Crenshaw and Morton.

Accredited Schools.—Professors Branch, Field, Edwards, and Caldwell.

Athletics.—Professors Randle, Nesbit and Dr. Jackson.

Buildings and Grounds.—Professors Coon and Lowndes.

Committee on Standing.—Professors Emerson, Skiles and Boggs.

Courses of Study.—Professors Emerson, Branch and Skiles.

Honor System.—Professors Emerson, Wallace and Crenshaw.

Library.—Professors Boggs, Perry and Wood.

Rules and Regulations.—Professors Emerson, Branch and Randle.

Schedule Committee.—Professors Branch, Randle and Crenshaw.

Commencement Program.—Professors Wallace, Crenshaw, Perry, Skiles, and Morton.

STUDENTS 1915-1916

Note.—The names in heavy type with a * to the left indicate the students who have excelled in scholarship.

Senior Class

Name	County
Aichel, S. L.	S. Carolina
Aiken, M. K.	Glynn
Arnold, J.	Fayette
Battle, R.	Fulton
Beard, P. E.	Muscogee
Blomeyer, H. P.	Texas
Boon, L. L.	Fulton
Bowden, H.	Meriwether
Brantley, E. P.	Pearce
Brenner, C. P.	Fulton
Brown, C. R.	Fulton
Bryan, P. D.	Spalding
Burge, F. D.	Fulton
Calnan, J. J.	Glynn
Cheney, H. W.	Lowndes
Fielder, K. J.	Polk
***Fink, A. B.**	**Rhode Island**
***Flanagan, H. C.**	**Florida**
***Fleet, R. S.**	**Fulton**
Ford, H. C.	Mississippi
Francis, A. P.	Fulton
Gardner, C. S.	Cobb
Gartrell, R. D.	Fulton
Goldman, E. L.	Fulton
Goldman, J. A.	Fulton
Gorce, A. W.	Fulton
Greenfield, J. C. Jr.	Fulton
Grist, A. C.	S. Carolina
Hawkes, W. M.	Sumter
Henderson, T. H. Jr.	Chatham
Herrington, H. L.	Richmond
***Holt, E. Y.**	**Bibb**
Houstoun, C. E.	Richmond
Howard, A. C.	Fulton
Howe, K. J.	Haralson
Huber, C. C.	Colquitt
***Illges, A.**	**Muscogee**
***Jackson, E. M.**	**Richmond**
Johnston, P. N.	Upson
Jones, A. P.	Cobb
Jones, R. A.	Fulton
***Jordan, R. C.**	**Louisiana**
Kirkpatrick, T. P.	DeKalb
Kollock, M. C.	Fulton
Landers, D. W.	Bartow
Lang, R. M.	Camden
Lucas, J. Jr.	Fulton
***Manley, H. P.**	**Whitfield**
Mansfield, L. E.	Fulton
McLemore, W. C.	Montgomery
Mellichamp, J. P.	Fulton
Merrill, K. A.	Florida
Metcalf, J. L.	N. Dakota
Mitchell, E. J.	Alabama
Oehmig, E. W.	Tennessee
***Paden, R. S.**	**Fulton**
Peloubet, W. F.	N. Carolina
Perkins, F. A.	Richmond
Pharr, M. A. Jr.	Wilkes
Ramsey, J. B.	Tennessee
Rountree, A. J.	Brooks
Sellers, P. B. Jr.	Fulton
Senter, J. C.	Fulton
Singleton, P. C.	Florida
Smith, H. G.	Early
Span, I.	Chatham
Sparks, G. H.	Fulton
Stanley, E. A.	Thomas
Street, J. L.	Mississippi
Stumberg, B. G.	Jackson
Sullivan, M. A.	S. Carolina
Summerlin, I. W.	Haralson
Taylor, G. C.	Fulton
Thompson, J. E.	Fulton
Tisinger, T. F.	Carroll
***Walden, C. O.**	**Washington**
Watson, C. M.	Douglas
Whitner, T. C. Jr.	Fulton
Williams, A. L.	Florida
Wolcott, J. W.	Spalding
Woodard, A. P.	Tennessee
Woodruff, L. F. Jr.	Muscogee
Wootton, W. L.	Columbia
Yopp, P. R.	Fulton

Junior Class

Name	County
Andrews, J. F.	Fulton
Aubrey, W. H.	Bartow
Bailey, T. L. Jr.	Pulaski
Barker, G. R.	Fulton
Barnes, R. E.	Tennessee
Bird, S.	Effingham
Bond, B. C.	DeKalb
Carlson, H. F.	Florida
Carpenter, W. G.	Coweta
Casey, W. C.	Fulton
Cates, R. V.	Ben Hill
Chalker, G. A. Jr.	Florida
Chappell, L. N. Jr.	Effingham
Cole, R. T.	Coweta
Conrad, T. W.	Fulton
Cox, C. C.	Fulton
Cox, S. A. Jr.	Fulton
Crawley, E. H.	Ware
Creson, R. F. Jr.	Tennessee
Crosby, W. L.	Florida
Dennis, F. S.	Bibb
***Downing, C. D.**	**DeKalb**
Drake, C. G.	Campbell
Durant, H. H.	Fulton
Ellis, J. L. Jr.	S. Carolina
Farago, J.	Haralson
Flanigen, J. M.	Clarke
Fox, C. F.	Fulton
Francis, R. L. Jr.	N. Carolina
French, J. M. Jr.	Fulton
Gardner, T.	Fulton
Gee, H. W.	Fulton
Girard, M. E.	Louisiana
***Geenslade, Wm.**	**Fulton**
Guthrie, D. B.	Mississippi
Hall, V. H. N.	Fulton
Halliburton, R. A.	N. Carolina
Hammond, S. R.	S. Carolina
Hardy, S. H.	Fulton
Harris, H. H.	Henry
Henderson, U. V.	Dooly
Hoffman, E. P.	Fulton
Holleyman, W. C. Jr.	Fulton
Hopkins, A. S.	Fulton
Howell, W. G.	Floyd
Hucks, W. R.	Fulton
***Jansen, J. Jr.**	**DeKalb**
***Jones, J. C.**	**Fulton**
Kiplinger, C. G.	Fulton
Kunianski, I.	Fulton
Lawwill, J. A.	Fulton
Lowi, A. R.	Mississippi
MacDonald, J. E.	Fulton
Mann, J. T.	Clayton
Martin, R. A.	Fulton
Martin, W. B.	Fulton
Mathes, W. C.	Clayton
Mathis, E. T. Jr.	Sumter
Maupin, R. H.	Fulton
Merriam, F. F.	Fulton
***Miles, E. R. C.**	**Fulton**
Mitchell, J. T.	Fulton
Montague, F. D.	Mississippi
Moore, M. V.	New York
Moore, W. W.	DeKalb
Morrison, D. E.	Dade
Myers, A. R.	Fulton
Nimocks, R. G.	N. Carolina
Palen, W. E.	Floyd
Pharr, R. N.	Gwinnett
***Phillips, E. B.**	**Fulton**
Powell, R.	Dooly
Preas, R. A.	Hall
Puckhaber, E. F.	Florida
Reynolds, W.	Fulton
Riley, J. A.	S. Carolina
Robinson, R. E.	Richmond
Rouse, J. H.	Lowndes
Seawright, P. E.	Fulton
***Shadburn, M. L.**	**Gwinnett**
Sheahan, J. A.	Ben Hill
Simor, C. H.	Fulton
Slaton, J. M. Jr.	Fulton
***Smith, H. Z.**	**Bulloch**
Spengler, R. I.	Fulton
Starr, J. H.	Gordon
Sterne, L. M.	Dougherty
Storz, J. F.	Tennessee
Summers, R. J.	Rockdale
Tappan, G. W. Jr.	Greene
Thompson, L. H.	Gordon
Thornton, J. R.	Greene
Thornton, W. N.	Fulton
Tillman, I. H.	Lowndes
***Tipton, J. H.**	**Tennessee**
Turner, C. W.	Gwinnett
Turner, R. G.	Henry
Tutan, G. W.	Chatham

Name	County	Name	County
Upshaw, E. M.	Bartow	Whitner, J. T.	Fulton
Vandiver, C. W.	Floyd	Woodall, W. C.	Tolbert
***Wallace, R. O.**	**Fulton**	Woodruff, G. W.	Fulton
Warrenfells, F. M.	Walker	Woolley, V. Jr.	Fulton
Wash, W. R.	Fulton	Wren, W. J. Jr.	Jefferson
Werner, W. M.	Louisiana	Wrench, F. A. Jr.	Whitfield
White, F. M.	Richmond		

Co-operatives

Fourth Year

Name	County	Name	County
Jones, F. L.	Troup	Strother, A. C.	Fulton
Levy, S. E.	Fulton	Younger, M. L.	Tennessee

Third Year

Branch, T. P.	Fulton	Ezzard, H. S.	Whitfield
Speir, W. P.	Jefferson		

Sophomore Class

Name	County	Name	County
Alexander, H. Jr.	DeKalb	Brown, E. A.	Mississippi
Alexander, L. G.	Monroe	Brown, R. T.	DeKalb
Allen, M. C. Jr.	Burke	Brownson, W. C.	N. Carolina
Angel, C. M.	Florida	Bryant, W. G.	Fulton
***Arnold, D. J.**	Henry	Budd, J. S.	Bibb
Askew, W. C. Jr.	Chatham	Burghard, F. H.	Florida
Baker, A. W.	Fulton	Byington, E. C.	Wilkinson
Baker, E. B.	Fulton	Byington, F. G.	Wilkinson
Barnett, D. W.	Floyd	Carder, W. W.	Fulton
Barnwell, S. J. M.	S. Carolina	Carlton, T. H.	Florida
Barry, E. J.	DeKalb	Carswell, E. D.	Fulton
Beacham, E. W.	S. Carolina	Carter, J. C.	Hall
Beall, F. R.	Fulton	Cole, E. M. Jr.	Coweta
Beall, R. W.	Richmond	Cole, T. Jr.	Coweta
Beers, C. H.	Pennsylvania	Collins, W. I.	N. Carolina
Blackwell, C. B.	Tennessee	Cooper, F. H.	Cobb
Blackwell, G. W. Jr.	Tennessee	Crawford, E. J.	Louisiana
Bobbitt, R. E.	Louisiana	Curtis, T. R.	Tennessee
Bogman, J. H. B.	Cobb	Cutter, H. D. Jr.	Bibb
Boughton, S. P.	Morgan	Daniel, L. C.	Fulton
Boyer, I. B.	Arkansas	D'Arcy, J.	Floyd
Bradley, F. Jr.	Muscogee	Davis, J. T.	Fulton
Breen, R. E.	Wayne	Dawes, E. E.	Fulton
Brewster, T. D.	Coweta	Dickson, H. G.	Morgan
Brim, S. A.	Terrell	***Dodd, J. A.**	**Bartow**
Brooks, C. A.	Dougherty	Dowe, R. M.	Fulton

Name	County	Name	County
DuBose, S. I.	Fulton	Massee, T. C.	Bibb
Duesler, J. F.	Kentucky	McNeill, R.	Sumter
Dunwody, K. W.	Bibb	McRae, L. J.	Telfair
Durrett, R. E.	Tennessee	***Merry, K. H.**	**Richmond**
Duson, W. W.	Louisiana	Mills, R.	Gordon
Ellis, A. C.	Richmond	Milner, C.	Fulton
Eubanks, J. F.	Fulton	Montag, H.	Fulton
Evans, I. C.	Clayton	Moore, P. J.	Texas
Ferguson, W. P.	Glascock	Moore, P. W.	Tennessee
Ferris, F. C.	Cobb	Nesbit, N. H.	Gwinnett
Fraseur, F. H.	Crisp	O'Kelly R. E. Jr.	Fulton
Funkhouser, J. C.	Fulton	Phillips, C. F.	Fulton
Gartner, E. C.	Sumter	***Pope, M. C. Jr.**	**Habersham**
Giles, J. A.	Texas	Prescott, C. H.	Fulton
Golden, W. S.	Muscogee	Price, H. J.	Texas
Golding, D. S.	Texas	Pund, E. E.	Richmond
Grady. H. W. Jr.	Fulton	Rae, O. O.	Richmond
Granger, G.	Bartow	Rand, D. C.	Fulton
Gross, W. E.	Muscogee	Rathbone, D. P.	Texas
Guill, M. F.	Hancock	Redding, A. H.	Fulton
Hall, T. H.	Bleckly	Reynolds, E. L.	Fulton
Hall, W. H. (III)	Baldwin	Reynolds, H.	Fulton
Hardin, E. E.	Jasper	Robinson, A. A.	N. Carolina
Hardwick, J. G.	Fulton	Robinson, E. H.	Virginia
Harpe, A. S.	Chattahoochee	Rodriguez, B.	Mexico
Harrington, G. M.	Liberty	Ruggles, C. A.	DeKalb
***Hawes, W. L.**	**Fulton**	Rumble, J. E.	Mississippi
Hickman, B. B.	Hall	Salinas, A. J.	Richmond
Hill, A. B.	Wilkes	Sams, L. R.	Fulton
Hinkle, J. B.	Bibb	Sanders, M. R.	Hall
Holcombe, J. B.	Haralson	Scott, F. W.	Fulton
Hoppe, L. D.	Cobb	Scott, W. B.	Texas
Hudson, J. D.	Coweta	Settle, E. C., Jr.	Gwinnett
Humphreys, J. W.	Louisiana	Sharum, J. J.	Tennessee
Hunter, N. H.	Morgan	Shaw, J. W.	Florida
Hyman, T. V.	Crisp	Siegel, M.	Chatham
Irvin, C. W.	Wilkes	Simmons, J. H.	Florida
Johnston, J. T.	Walker	***Smith, C. D.**	**Fulton**
Kelly, E.	Jackson	Smith, C. P.	Newton
Kenemer, H. C.	Whitfield	Smith, R. C.	Muscogee
Kenimer, J. G.	White	Smith, W. H.	Early
King, J. R.	Floyd	Spence, T. L.	Thomas
Kirby, B. T.	Coweta	Steinberg, A. K.	Richmond
Kuniansky, M.	Fulton	Stoffregen, C. W.	Floyd
Lamb, Jno. F.	N. Carolina	Strauss, B.	New York
Lewis, R. M.	Muscogee	Strupper, G. E.	Muscogee
Lindsey, W. C.	Wilkes	Stubbs, S. J. Jr.	Coffee
Livar. A. P.	Mississippi	***Taurman, J. R.**	**Fulton**
Lovell, W. S.	Chatham	Taylor, F. B.	Florida
Manly, W. J.	Whitfield	Taylor, H.	Chatham
***Markert, W. L.**	**Crisp**	Thomas, J. V. Jr.	Morgan
Martin, E. B.	Texas	Tucker, C. A.	N. Carolina

Name	County	Name	County
Turner, H. L.	McDuffie	Watkins, H. E.	Walton
Turner, J. P. Jr.	Muscogee	West C. C.	S. Carolina
***Vaughan, J. W.**	**Bartow**	Whitely, J. C.	Warren
Walker, J. S.	Cobb	Wilcox, W. A.	Ben Hill
Wallis, L. E.	Elbert	***Willett, J. L.**	**Fulton**
Ward, J. A.	Wayne	Williams, B. B.	Jones
Young, W. G.	McIntosh		

Co-operatives

Second Year

Name	County	Name	County
Boswell, B. C.	Greene	Davis, H. C. Jr.	Sumter
Coleman, T. E.	Bibb	Warren, J. C.	Tennessee

Freshman Class

Name	County	Name	County
Abbott, J. W.	Illiniois	***Carreker, J. F.**	**Pike**
Adkins, T. D.	Dooly	Carter, C. F.	Meriwether
Aichel, C. G.	S. Carolina	Champion, E. F.	Elbert
Alden, C. E.	DeKalb	**Chapman, R. L.**	**Fulton**
Almond, G. L.	Elbert	Coleman, J. D.	Florida
Ansley, G. E.	Sumter	Conley, L. O.	New York
Appleby, P. A.	Fulton	Connolly, L. P. M.	Tennessee
Arrington, N. B.	S. Carolina	Courier, E. P.	Glynn
Asbury, J. S.	Elbert	***Cowan, F. A.**	**Fulton**
Bardwell, R.	Fulton	***Crook, L. E. Jr.**	**Mississippi**
Barnett, K.	Jackson	Cumming, A.	Floyd
Bate, W. C.	Pike	Dalton, J. W.	Florida
Battle, W. W.	Muscogee	Dameron, G. H.	Louisiana
Bedell, W. R.	DeKalb	***Dana, G. H.**	**Chatham**
Bell, E. L. Jr.	Sumter	Dey, S. P.	Bibb
Bell, R. S.	Spalding	Dowman, A. E.	DeKalb
Beeland, H. D.	Bibb	Duggan, J. R.	Hancock
Bergen, C. W.	Chatham	Dunlap, W. B. Jr.	Texas
Betterton, P. M.	Tennessee	Dunwody, H. N.	Fulton
Biggers, R. H.	Newton	Dunwody, H. R.	Tennessee
Blasingame, T. T.	Richmond	Edelblut, C. M.	Richmond
Bohannon, J. N.	N. Carolina	Enloe, V. P.	Fulton
Booker, R. T.	Virginia	Erwin, J. C.	N. Carolina
Bradfield, J. R.	Telfair	Evans, J. F. Jr.	Thomas
Bradley, F. B.	Muscogee	Farmer, H. A.	Coweta
Brandes, H. A.	Missouri	Farrar, S. C.	Henry
Brinson, J. I.	Emanuel	Farrar, W. B.	Whitfield
Broach, R. C.	Walton	Ferguson, L. J.	Terrell
Bryan, F. S.	Greene	Fife, C. L.	Fayette
Burks, B. F.	Walker	Fitzgerald, S. O.	Stewart
Burroughs, P. M.	Florida	Flake, H. W.	DeKalb
Bush, J. E.	DeKalb	Fleming, G. B.	Carroll
Byrd, J. C.	S. Carolina		

Name	County	Name	County
Freeman, J. T.	Meriwether	MacReynolds, L.	Florida
Freeman, J. W.	Putnam	Malcolm, H. W.	Oconee
Fuller, L. W.	Monroe	Mallard, J. B.	Chatham
Gorham, J. C.	Greene	Manget, H. F.	Fulton
Graves, R. C.	Floyd	Mangham, J. W.	Fulton
Gray, L. C.	Missouri	Mann, R. A.	Ben Hill
Greene, R. C.	Haralson	Marbury, J. E.	Coweta
Griffin, G. C.	Fulton	Martin, W. M.	Florida
Hall, G. H. Jr.	Fulton	Mason, J. W.	Tennessee
Ham, N. M.	Alabama	Mathias, W. J.	Alabama
Hardin, R. W.	Fulton	Mauck, H.	Fulton
Hargrove, A. M.	Dodge	McCarley, L. H.	Tennessee
Harris, B.	Arkansas	McClure, W. A.	Floyd
Harris, E. G.	Bibb	McCrea, W. W.	Tift
Hatchett, J. B.	Douglas	McCulloch, W. W. Jr.	Cobb
Henderson, R. B.	Jasper	McDaniel, T. W.	Gwinnett
Hendrix, H. D.	Maryland	McEver, W. L.	Florida
Herzog, M. A.	Fulton	McFarland, R. W.	Walker
Hester, W. C.	Walton	McNeel, E. E.	Cobb
***Hickenlooper, H. C.**	**Florida**	McNeel, M. L. Jr.	Cobb
Hightower, J. T.	Upson	McNeill, W. A.	Sumter
Hill, H. D.	Wilkes	McRee, C. A.	Oconee
Hirsch, H. I.	Muscogee	McWhirter, G. H.	Madison
Holliday, F. L.	Wilkes	Minyard, J. P.	Mississippi
Holst, B. B.	Tennessee	Moise, H.	Fulton
House, J. C.	Barrow	Moore, G. C.	Walton
Houser, W. D.	Houston	Moore, V. A. Jr.	Milton
Howard, G. P. Jr.	Fulton	Moore, W. L. Jr.	Fulton
Howell, J. E.	Irwin	Moses, T. A.	Coweta
Hubert, R. E.	Fulton	Mullino, F. M.	Macon
Hunnicutt, J. E. Jr.	Fulton	Myers, J. A.	Tennessee
Hunt, S. S.	Louisiana	Needle, J.	S. Carolina
Jackson, L. C.	Newton	Nesbit, M. M.	Gwinnett
Jewell, R. H.	Walker	Nichols, P. H.	Fulton
Johnson, H. L.	S. Carolina	Nichols, R. L.	Fulton
Johnston, J. H.	Fulton	O'Neal, J. M.	Harris
Jones, C. C.	Sumter	***Paisley, J. K.**	**Fulton**
Jones, G. L.	Kansas	Palmore, C. W.	Alabama
King, G. D.	DeKalb	Parker, W. A. Jr.	Fulton
Kinnebrew, T. N.	Floyd	Parkinson, R. D. Jr.	Chatham
***Knott, J. W.**	**Chatham**	Parrish, G. I.	Bulloch
Kreis, J. W.	Fulton	Pattillo, L. B.	Gwinnett
Lamb, J. Francis Jr.	Thomas	Peniston, E. H.	Coweta
Langley, J. L.	Campbell	Perkins, A. F.	Stewart
Lebey, C. D.	Chatham	Phillips, G. M.	Fulton
Lee, W. P. Jr.	Meriwether	Ponder, B. D.	Fulton
Lemmer, H. A.	Fulton	Powell, H. J.	Jasper
Lewin, H. H.	Florida	***Prather, P.**	**Pickens**
Lewis, A. S.	Fulton	Puckett, R.	Tift
Lutz, C. C.	Mississippi	Pugh, G. W. Jr.	Stewart
Lyndon, W. S.	Wilkes	Raine, G. B.	Fulton
Mack, P.	DeKalb	Ray, H. G.	Texas

Name	County
Read, T. W. Jr.	Cobb
Reynolds, H. M.	Tennessee
Rhorer, H. L.	Fulton
Ribeiro, M. G.	Brazil
Richards, H. L.	Florida
Richardson, R. E.	Brooks
Ritter, C.	Alabama
Roberts, J. T. Jr.	Jefferson
Roberts, M. L.	Emanuel
Robertson, J. S.	Missouri
Robinson, R. K.	N. Carolina
Robinson, R. M.	Fulton
Robinson, W. W.	Alabama
Rodgers, R. M.	Sumter
*Rogers, J. C.	Tennessee
Rosenbrook, J. F. Jr.	Chatham
Roughton, R. P.	Bibb
Russell, H. W.	Macon
Salter, M. T.	Fulton
Sanders, R. G.	Texas
Saunders, W. H.	Thomas
Saye, J. F.	Richmond
Scarbrough, H. E.	Clayton
Scharff, D. L.	Mississippi
Schoen, E. C.	Fulton
Semmes, T. J.	Tennessee
Shackleford, C. B.	Morgan
Shaw, G. N.	Fulton
Shaw, G. S.	Morgan
Shelverton, W. L.	Wilkes
Sims, W. R.	Wilkes
Skeen, J. H.	Tift
Smith, J. F.	Mississippi
Smith, R. H.	Bibb
Snoots, W. F.	Chattooga
Souza, F. X. (III)	Brazil
Stevens, G. C.	Floyd
Stevens, P. S.	Mississippi
Talley, W. F.	DeKalb
Teague, A. D.	Richmond
Terrell, W. B.	Coffee
Thornton, G.	Virginia
Tonkin, C.	Florida
Toole, G. C.	Decatur
Turner, C. T.	Elbert
Valdes, J. S.	Fulton
Vaughan, L. C.	Rockdale
Von Phul, Wm. Jr.	Louisiana
Walker, R.	Fulton
Ward, C. M.	Wayne
Ware, G. W.	Coweta
Warner, S.	Tennessee
Wayt, B. D.	Fulton
Weeks, J. O.	N. Carolina
Wells, W. S.	Walton
Whittenberg, J. W.	DeKalb
Wickenberg, C. H.	S. Carolina
Wiggs, J. W.	Tennessee
*Wikle J. R.	Fulton
Williams, G. R.	Fulton
Williams, T. B.	Sumter
Willingham, T. B.	Stevens
Wilson, C. E.	Campbell
Wise, R. J.	Greene
Wood, T. L.	Washington
Woodward, C. D.	Fulton
Worsham, J. M.	Monroe
Young, H. A.	S. Carolina
Zacharias, E. G.	Decatur
Zerbst, A. E.	Fulton

Co-operatives.

First Year

Name	County
Blalock, E V.	Lowndes
Cole, H. G.	Cobb
Daniel, C. G.	Taylor
Hodges, B. T.	Taylor
Smith, C. V.	Butts
Smith, W. E.	Pike

Special Architects No. 2

Name	County
Fort, F. B.	Mississippi
Green, L. E.	S. Carolina
Nigels, F. E.	S. Carolina
Shelton, J. M.	Fulton

Special Architects No. 1

Name	County
Bauman, A. B. Jr.	Tennessee
Sandiford, R. H.	Burke
Strong, C. D.	Chatham

Special Textile No. 2

Name	County
Alexander, J. C. Jr.	Muscogee
Champion, W. C.	Tennessee
Glover, R. G.	Tift
Moss, J. H.	Clarke
Preas, J. H. Jr.	Fulton
Robinson, W. P.	Barrow
Sharp, D. S.	N. Carolina
Stephens, H. M.	Fulton
Suggs, I. Y.	Haralson

Special Textile No. 1

Name	County
Aiken, E. D.	Glynn
Bernhardt, G. H.	N. Carolina
Betts, J. L.	Turner
Dang, Y. T.	China
Duncan, F. G.	Texas
Fuller, W. G.	Coweta
Hall, M. G.	Tennessee
Hero, G. A. Jr.	Louisiana
Parker, W. M.	Morgan
Ross, C. H.	N. Carolina
Seawell, L. W.	N. Carolina
Smith, J. T.	Gwinnett
Smith McL.	Pike
Trousdale, C. E.	Alabama
West, G. R.	Tennessee

School of Commerce

First Year

Beattie, G. A.	Romm, M.	Freeman, G. T.
Bishop, E. C.	Scobeloff, M.	Donald, R. W.
Coleman, J. M.	Welch, J. M.	George, L. A.
Collins, C. R.	Griffith, L. B.	Kaplan, L. I.
Daniel, H. S.	Saye, W. R.	Kicklighter, R. B.
Faust, C. E.	Thompson, R. S.	Lang, R. S.
Gillespie, E. M.	Allen, W. J.	Langston, L. O.
Hargrave, J. D.	Berry, F. F.	Loeb, A. L.
Love, R.	Carmichael, D. L.	Middleton, B. H.
Parker, W. H.	Courson, J. R.	Myers, J. M.
Rambo, O. O.	Fitzpatrick, W. H.	Tennent, G. B.

Second Year

Gardner, H. H.	McAfee, W. P.	Sibert, E.
Hull, C. R.	Mason, J. R.	Stevens, S. R.
Inglett, R. P.	Pharr, W. E.	Taylor, R. S.
Lane, W. A.	Pritchett, F. H.	Wood, G. H.
Lester, E. D.	Scofield, C.	Cook, S. R.

Cowles, A. C.
Bennett, W. A.
Farmer, R. S.
Feldman, A. L.
Fenn, F. C.
Graves, W. S.
Mauck, H. M.
Lang, R. M.
Witherington, I. F.
Pattillo, R. R.
Smith, W. F.
Stevenson, K. A.
Warner, D. D.

Third Year

Blake, G. J.
Campbell, J. O.
Chalmers, C.
Clower, P. L.
Dunn, S. F.
Goodman, L. B.
Keiser, A. C.
Trussell, W. T.
Byers, R. W.
Byington, F. C.
Robbins, J. F.

Summer School Roll—1915

Alexander, H.
Bardwell, R.
Barnwell, S. J. M.
Barry, E. J.
Battle, W. W.
Bell, R. S.
Bird, S.
Blackwell, C. B.
Blackwell, G. W.
Boughton, S. P.
Bowden, H.
Brown, R. T.
Burroughs, P. M.
Byington, E. C.
Byington, F.
Carswell, E. D.
Casey, W. C.
Cluis, F. V.
Cole, R. T.
Cooper, F. H.
Daniel, L. C.
Dowman, A. E.
Downing, J. F.
Durant, H.
Farago, J.
Farrar, W. B.
Francis, R. L.
Frankum, J. B.
French, J. M.
Gabbet, M.
Guill, M. F.
Guthrie, D. B.
Hall, V. H. N.
Halliburton, R. A.
Hardy, S. H.
Harris, H. H.
Hickman, B. B.
Hill, A. B.
Hoffman, E. P.
Hopkins, A. S.
Houstoun, C. E.
Huber, C. C.
Hunnicutt, J. E.
Hunter, N. H.
Hutchinson, J. B.
Jackson, L. C.
Jones, R. A.
Kenimer, J. G.
Krug, A. P.
Levy, S. E.
Lewis, A. S.
Macdonald, J. E.
Mack, P.
Manly, W. J.
Mann, J. T.
Martin, R. A.
Mather, J. A.
Merriam, F. F.
Montag, H.
McKenzie, W. K.
McNeel, M. L.
O'Kelley, R. E.
Palen, W. E.
Perdue, R.
Pompeo, D.
Ponder, B. D.
Prescott, C. H.
Pund, E. E.
Quevedo, M. G.
Raine, G. B.
Ramsey, J. B.
Rawson, C. A.
Reynolds, W.
Robinson, R. M.
Rodriguez, A.
Scott, F. W.
Seawell, L. W.
Senter, J. C.
Shaw, G. N.
Siegel, M.
Smith, R. C.
Smith, W. H.
Spengler, R. I.
Starr, J. H.
Stoffregen, C. W.
Storz, J. F.
Strickland, C. E.
Taylor, F. B.
Tillman, I. H.
Valdes, J.
Viener, R.
Wash, W. R.
Whitner, J. T.
Williams, G. R.
Wolcott, J. W.
Woodruff, G. W.
Wooten, W. L.
Wren, W. J.
Yopp, P. R.
Young, H. A.

Summary of Registration

Senior Class	84	Night School	380
Junior Class	118	Summer School	100
Sophomore Class	173		
Freshman Class	245		
Special Architects, No. 2	4		1204
Special Architects No. 1	3		
Special T. E. No. 2	9	Deduct names counted twice	87
Special T. E. No. 1	15		
School of Commerce	73		
Total	724	Total enrollment	1117

Occupation or Profession of Parents or Guardians of Regular Students

Merchants	133
Farmers	86
Workmen	50
Salesmen	38
Physicians	31
Manufacturers	29
Engineers	27
State Officers	19
Insurance Agents	19
Bankers	17
Lawyers	16
Real Estate	16
Railway Agents	16
Cotton Merchants	14
Contractors	13
Ministers	11
Teachers	10
Dentists	3
Druggists	2
Miscellaneous	91
Total	651

Graduates by Departments

Graduates in Mechanical Engineering	300
Graduates in Electrical Engineering	249
Graduates in Textile Engineering	95
Graduates in Civil Engineering	72
Graduates in Engineering Chemistry	22
Graduates in Chemistry	7
Graduates in Architecture	22
Total	767

Graduates in Business as Follows:

General Engineering	60
Mechanical Engineering	200
Electrical Engineering	195
Textile Engineering	80
Civil Engineering	75
Engineering Chemistry and Chemistry	26
Architecture	22
Merchandise, Real Estate and Agencies	24
Teachers	32
Physicians	5
Lawyers	1
Army Officers	9
Farmers	10
Ministers	3
Advanced Students in other Institutions	9
Deceased	16
Total	767

The Mechanical Engineering Degree was established when the School began in 1888; the Degree of Electrical and Civil Engineering in 1896; the Degree of Textile Engineering in 1898; the Degrees of *Mining Engineering, Chemical Engineering and Chemistry in 1906; the degree of Architecture in 1908; and the Degree of Commerce in 1914.

*N. B. Mining Engineering discontinued for the present.

GENERAL INFORMATION

Historical Sketch

On November 24, 1882, Hon. N. E. Harris, of Macon, prepared and introduced in the Georgia Legislature a resolution authorizing the creation of a committee to investigate the advisability of establishing a technical school in Georgia. The committee of ten appointed visited the leading engineering institutions of the North, and in the summer session of the Legislature of 1883, presented a bill recommending the establishment of such an institution. The measure was overwhelmingly defeated, receiving only sixty-five votes. The people of the State were appealed to; it was the issue in many counties in the election of members to the next Legislature; the State Agricultural Society and other prominent State organizations pressed the matter upon the attention of the people, and finally, in 1885, fathered by Judge Harris, a bill was passed appropriating $65,000 to found the school.

Early in January, 1886, Governor McDaniel appointed the first Commission, consisting of Messrs. N. E. Harris, of Bibb; S. M. Inman, of Fulton; O. S. Porter, of Newton; E. R. Hodgson, of Clarke, and Columbus Heard, of Greene. This Commission organized by electing Judge Harris chairman, which position he has occupied from that time to the present. Mr. E. R. Hodgson was made secretary, which position he occupied to the time of his resignation, in 1912; and Mr. S. M. Inman was elected treasurer, and held this position until he resigned on account of his removal from the State, in 1897, at which time he was succeeded by Mr. J. S. Akers, who holds the office at the present time.

By Act of the Legislature, December 9, 1890, two other trustees were added to the Local Board, and on January 7, 1891, Messrs. D. N. Speer and W. B. Miles were duly elected. Mr. D. N. Speer resigned in 1893, and was succeeded by Mr. George Winship, of Atlanta. Mr. S. M.

Inman resigned October, 1897, and was succeeded by Mr. George W. Parrott, of Atlanta, who served until June, 1899, and was in turn succeeded by Mr. Walter M. Kelley, of Atlanta. Due to removal from the city, Mr. Kelley resigned March, 1907, and was succeeded by Mr. N. P. Pratt, of Atlanta, who was elected July, 1907. In April, 1911, Col. O. S. Porter resigned, and was succeeded by Mr. Hal G. Nowell, of Monroe, Ga. October 4, 1912, Mr. E. R. Hodgson resigned, and was succeeded by his son, Mr. E. R. Hodgson, Jr., on the same date. Judge Columbus Heard died October 23, 1912, and was succeeded by Mr. George J. Baldwin, of Savannah, who was elected January 10, 1913. Mr. George Winship resigned October 14, 1914, and was succeeded by Mr. J. S. Akers, who was elected on the same date.

By Act of the Legislature, August 5, 1910, the Chairman of the Board of Trustees of the University of Georgia was authorized to appoint biennially not exceeding three members of his Board, to act, ex-officio, as members of the Board of Trustees of each of the branch colleges of the University. In accordance with the provisions of this Act, the following three members of the University Board were duly appointed ex-officio members of the Local Board of Trustees of the Georgia School of Technology: Judge G. F. Gober, Marietta, Ga.; Mr. J. T. Newton, Madison, Ga., and Mr. W. E. Simmons, Lawrenceville, Ga. In September, 1912, Hon. Clark Howell, of Atlanta, was appointed trustee, vice Hon. J. T. Newton.

The Act establishing a technical school in Georgia provided for competitive bids from various sections of the State for the location of the school. The cities of Athens, Atlanta, Macon, Milledgeville and Penfield submitted such bids. That of Atlanta was accepted, this action based upon the following superior inducements offered by Atlanta: $50,000 in cash donated by the city; $2,500 annuity for twenty years; a citizens' subscription of $20,000, headed by Mr. S. M. Inman with a donation of $5,000. A campus of nearly five acres was purchased on North Avenue from the Peters Park Company. The Commission having decided that the campus was too small for the purposes of the school, Mr. Richard Peters, president of the Company, donated four additional adjoining acres. During the sum-

mer of 1888, the buildings and part of the equipment being ready, a faculty and president were elected, and on October 7, the institution was turned over by the Local Commission to the Trustees of the University. The Georgia School of Technology was formally opened.

Dr. Isaac S. Hopkins had been called to serve as first president of the new institution, and occupied this position until 1896. These eight years of beginnings were difficult ones. There was no general understanding or appreciation of the significance of technical education. As a consequence, the school made small progress. During the early morning of April 21, 1891, the school shops were totally destroyed by fire. With the insurance, supplemented by an additional appropriation from the Legislature, the loss was replaced by a building and equipment much superior to the original plant.

During the spring of 1896, Doctor Lyman Hall, a graduate of West Point, and then Professor of Mathematics at the Georgia School of Technology, was elected to succeed Dr. Hopkins, first as chairman of the faculty, and, in June, as president of the institution. The presidency of Dr. Hall, extending from this date until his death, August 16, 1905, was a period of steady expansion. In December, 1896, the Legislature appropriated $20,000; of this amount, $5,000 was for the equipment of a Department of Electrical Science, and $15,000 for building a dormitory. The Knowles Dormitory was duly erected, and was first occupied by students at the opening of the fall session of 1897. The Local Board of Trustees, at its meeting in December, 1896, established the Degrees of Electrical Engineering and Civil Engineering.

In December, 1897, the Legislature appropriated $10,000 for the establishment of a Textile Department, provided that the friends of the school contribute $10,000 additional in money and machinery. During the year 1898 nearly $20,000 worth of machinery and about $13,500 in cash were donated to the school for this purpose. Experienced mill architects were employed to make plans for a Textile building; and, in the fall of 1899, a regular course in Textiles, leading to the Degree of Textile Engineering, was opened to students. The successful creating of this Textile course was largely due to the friendly interest

of Mr. Aaron French, of Pittsburgh, Pa. He became interested in the school during the summer of 1897, and cooperated liberally in enabling the school to meet the conditions imposed by the Legislature in making its appropriation for the course in Textiles. His first donation, of $2,600, was given without condition. A second gift, of $3,000, was made, provided other friends of the school raise an equivalent amount; the city of Atlanta promptly met this condition by appropriating the necessary $3,000 in July, 1898. During the same year Mr. French made a third gift to the Textile Department amounting to $3,000. Besides these donations toward textile engineering, Mr. French showed his warm friendship for the school by gifts for maintenance, in June, 1899, of $3,000, and in January, 1900, of $3,500, and of three self-perpetuating scholarships of $500 each, in July 1898; December, 1899, and in 1901, respectively. In commemoration of his generosity, the Textile Department is known as the A. French Textile School.

The creating of the Departments of Electrical, Civil, and Textile Engineering was the beginning of an era of rapid and steady expansion—in buildings and equipment, in size of faculty and student body, in curriculum and standard of work, and in prestige; the Legislature, also, began gradually to become aware of the needs of the school and of its value as an upbuilding power in the industrial life of the State.

In December, 1900, the Legislature appropriated $10,000 for an Electrical building and $6,000 for additional textile equipment, with the proviso that these amounts should not be available until the friends of the school should furnish $25,000 in cash donations, a condition that was promptly met. In June, 1902, the General Educational Board offered to give the school $5,000 for equipment and $2,500 two successive years for maintenance, provided friends of the school would donate $10,000 additional. These friends responded by giving $12,910 in cash, as listed in the 1903-4 catalogue. In 1903, the will of Mr. James Swann provided that the school should receive $10,000 in cash upon the settlement of his estate. This amount, properly supplemented, was spent in the purchase of nearly two acres of land adjoining the campus and in the erection on a por-

tion thereof of a president's residence. Mr. Swann had previously in 1900, given the school $21,500 for the erection of the Janie Swann Dormitory, a memorial to his wife.

The next considerable addition to the school plant was the Lyman Hall Laboratory of Chemistry. In June, 1904, the Legislature appropriated $10,000 for the erection of a chemical laboratory, provided friends of the school would give an equal amount. The conditional amount was raised by the mid-summer of 1905, and in October of the following year the building, completed and fully equipped, was occupied by the Department of Chemistry. Dr. Hall had been enabled to meet the provision of the Legislature only with heroic sacrifice and at enormous cost to his health; the amount was completed only a few weeks before his death. It was in connection with memorial exercises in his honor that the corner-stone of the Laboratory was laid with imposing ceremony November 25, 1905. It is eminently fitting that his name is perpetuated in the structure. Dr. Hall's connection with the Georgia School of Technology was in every way a notable one. During the nine years of his presidency, he succeeded, largely through his own efficiency and devotion, in raising the school from an insignificant and struggling existence to a position of proud equality with the great engineering institutions of the country.

As successor to Dr. Hall, the Board of Trustees elected Dr. K. G. Matheson, professor of English at the Georgia School of Technology, to the chairmanship of the faculty and installed him as president the following year, 1906. The period since this date has been characterized by an even greater growth. Not merely has the school experienced a remarkable enlargement in its material equipment and its patronage, but its name has yearly become more widely and more favorably known, and its resources have been applied continually toward a more extensive satisfying of the needs of its State and its community.

On January 27, 1906, Mr. T. W. Smith, of Columbus, Ga., gave $600 for a scholarship, self-perpetuating, on the basis of the A. French scholarships. After two years, this scholarship was allowed to lapse. Other scholarships now operative at the school are six presented by Mr. E. P.

McBurney, of Atlanta; three presented by Mrs. Fannie B. Wright, of Atlanta; one presented by Mrs. J. M. High, of Atlanta; one presented by the Georgia Chapter of the American Society of Architects; one presented by a friend in memory of Dr. I. S. Hopkins; one presented by members of the class of 1907 in memory of Clark Thornton; and two presented by the Ad Men's Club of Atlanta.

Meanwhile, the Legislature had shown a desire to meet the growing needs of the institution. The first appropriation, made December 26, 1888, was $18,000. The second appropriation, made December 26, 1890, was $22,500. The maintenance fund was continued at this rate until 1898, when it was cut $2,500, making $20,000, while $10,000 was added for two years for the maintenance of the Textile Department, making $30,000 per annum in all. In 1896, the Legislature had made an appropriation of $10,000 for dormitories for each of the two following years. In 1900, the appropriation for maintenance was raised to $40,000; in 1902, to $45,000; in 1906, to $55,000; in 1907, to $60,000; in 1909, to $70,000; in 1911, to $75,000; in 1912, to $80,000; in 1913, to $90,000; and in 1915, to $100,000. The city of Atlanta has shown a like increasing interest in the needs of the school. In June, 1907, the City Council increased its annual appropriation from $2,500 to $3,500, to hold good for one year only; and during January of the following year, appropriated $2,500 per annum for the support of the Night School. In January, 1911, the City Council increased its annual appropriation from $2,500 to $5,000. In February, 1913, this annual appropriation was further increased to $7,000; in 1915, to $8,500; and in 1916, to $9,000. The Night School maintenance was also increased in 1913 to $3,000; and in 1916 to $3,500.

The Class of 1903 was the first to erect a memorial to itself on the campus. A beautiful marble drinking fountain was placed on the campus in March, 1911, and was formally presented to the institution at the following commencement. On the same occasion, the Electrical Seniors of the Class of 1911 presented the school with handsome electric light standards, placed in front of the entrance of the Electrical Building. The Electrical Seniors of the Class of 1912 continued the tradition created by their immediate predecessors by erecting memorial electric light

standards in front of the entrance of the Library. The classes of 1914 and 1915 erected the handsome light standards and concrete steps in front of the main building.

Considerable additions of land have also been made to the eleven acres that the school possessed in 1905. In August, 1906, the Legislature appropriated $17,500 for the purpose of enlarging the campus. Four acres east of the present campus and fronting on North Avenue were purchased for $16,000, and the remaining $1,500, increased by friends to $3,500, was invested in a lot fronting 180 feet on Cherry street and 150 feet on Kimball street. Purchase has also been made of a lot fronting 156 feet on North Avenue and 150 feet on Fowler Street, and of two additional lots on Cherry street. In December, 1911, the school purchased from the Peters Land Company nearly three acres of land adjoining the northern limits of the campus. With characteristic generosity, the Peters Land Company presented to the school an intervening street, 50 feet wide and 500 feet long. The latest addition to the school property, January 29, 1913, is about four acres of land north of and adjoining the present athletic field. The County Commissioners of Fulton County agreed to grade both fields; and the work, now completed, represents an outlay of approximately $30,000, had it been let to private contract. In April, 1913, Mr. John W. Grant, of Atlanta, gave $15,000 for the equipment of the field, and the Board of Trustees, in appreciation of the gift, named the field "The Hugh Inman Grant Field," in memory of Mr. Grant's deceased son. This dual athletic field is unequalled in the South. In 1915, through the further liberality of Mr. Grant and the Board of Trustees, the concrete grand stand was completed at an additional cost of $20,000, making it the largest and most modern of its kind in the South.

The most important additions to the school equipment, however, have been the several handsome buildings that have been added to the plant since 1905.

On March 12, 1906, Mr. Andrew Carnegie donated $20,000 for a Library building, on condition that the school appropriate a minimum of $2,000 annually for the support of the Library. The Board of Trustees accepted the condition, and the building was secured.

In November, 1909, through the initiative of the Wo-

men's Federation of Clubs, Mrs. Joseph B. Whitehead gave $5,000 towards the erection of a Hospital, to be called the Joseph Brown Whitehead Memorial Hospital, in memory of her husband. This donation was increased by various gifts in cash and materials; and the Hospital, costing about $15,000, was erected during the summer of 1910 and the succeeding session.

In February, 1910, Mr. John D. Rockefeller gave $50,000 toward the erection of a Y. M. C. A. building, provided the school would raise $25,000. This pro rata was secured; and the erection of the building was begun in May, 1911, and was completed in the summer of 1912.

In August, 1910, the Legislature appropriated $35,000 to be applied toward the erection of a new Shop building, on condition that friends of the school raise $15,000. Through the agency of the Atlanta Chamber of Commerce, considerably more than this amount—$22,000 in all—was subscribed in November, 1910; the fund was secured in February, 1911, and the erection of the building was begun. Ultimately the building will consist of five units, three of which are now completed and occupied.

On probating the will of the late Mr. Julius L. Brown, who died September 4, 1910, it was found that he had left two-thirds of his valuable estate to the Georgia School of Technology. The school has come into possession of its proportionate share of the estate, and according to the terms of the will, the income from the property will be used to equip and maintain the Departments of Chemistry and Electrical Engineering.

One of the most important movements in the history of the school was inaugurated in the Greater Tech Campaign in the summer of 1914. Prior to this time certain large manufacturers of machinery had been induced, through the efforts of friends of the school, to donate $100,000 worth of power machinery, conditioned on the erection by the school of a suitable building. As a result of the campaign, the Greater Tech Fund was raised, largely by the subscriptions of business men of Atlanta, and the new Power Station is expected to be ready for use in the session 1916-17.

This building is the beginning of a plan to establish complete equipment for all kinds of engineering research

work in the school, and it will open unlimited opportunities for the graduates of the school in original and scientific investigation as well as in the regular field of engineering work.

One of the most significant illustrations of the growth of the school appears in the record of yearly attendance. Keeping pace with the advance in Legislative favor and in material equipment, the school shows a steady increase in the number of the student body. Nor have there been merely numerical additions; the character of the attendance has improved year by year, the class standing has risen, the curriculum has been broadened and elevated, and the finished product has increased in number.

The following list, showing the number of students registered at the school from the opening of the school to the close of session of 1916-17, furnishes an interesting record of these facts:

1888-89	130	1894-95	125	1900-01	463
1889-90	145	1895-96	154	1901-02	431
1890-91	169	1896-97	180	1902-03	483
1891-92	205	1897-98	267	1903-04	510
1892-93	138	1898-99	332	1904-05	511
1893-94	121	1899-90	459	1905-06	501
	908		1,517	1906-07	562
					3,461

	Regular Students	School of Com.	Night School	Summer School	Duplicate	Total
1907-08	562	...	135	...	...	697
1908-09	565	...	72	44	31	650
1909-10	593	....	153	54	45	755
1910-11	667	....	94	141	84	818
1911-12	689	....	154	105	90	858
1912-13	660	....	132	113	100	805
1913-14	712	 44	243	142	139	1,002
1914-15	724	 86	181	110	95	1,006
1915-16	724	.... ..	380	100	87	1,117
Total						7,708

From this it will be seen that a total of 6,026 young men, estimated by yearly enrollment, have enjoyed the benefits of the institution, excluding the night and summer schools. Taking these into consideration, the school shows for the twenty-seven years of its existence a total registration of 7,708. While many of these did not graduate, in almost every instance these young men will be found

engaged in industrial pursuits, using the lessons which they learned at the school, putting into operation in their work the skill derived from contact with the great machines forming part of the equipment of the institution, and adding to the industrial values of the State and of the nation wherever they are found.

Purpose

The chief aim and purpose of the Georgia School of Technology is to give to its students such a combination of general, scientific, and professional training as will fit them for lives of higher usefulness and success, especially as engineers, in the industrial development of the State of Georgia and of the South.

Degrees Conferred

The degrees conferred are as follows: Bachelor of Science in Mechanical Engineering, Bachelor of Science in Electrical Engineering, Bachelor of Science in Civil Engineering, Bachelor of Science in Textile Engineering, Bachelor of Science in Engineering Chemistry, Bachelor of Science in Chemistry, Bachelor of Science in Architecture, and Bachelor of Science in Commerce.

Appropriations

The School receives $100,000 per annum from the State, and $9,000 per annum from the city of Atlanta. In addition, Atlanta appropriates $3,500 annually for the support of the Night School.

Buildings

The School occupies a desirable site in a campus of some twenty-five acres, lying at the junction of North Avenue and Cherry Streets, easily accessible by street-car lines on Marietta, West Peachtree and Luckie Streets. The Academic building is a handsome edifice of brick, trimmed with granite and terra-cotta and roofed with slate. It has one hundred and thirty feet front, is one hundred and twenty feet deep, and four stories above the basement

story. It contains ample accommodations in halls, offices, apparatus-rooms, recitation and lecture-rooms and chapel.

The workshops are also of brick, the main shop building being two hundred and fifty feet long by eighty wide, and two stories, with large basements. It is designed with reference to its use, and affords space for the machine and wood-shops and the foundry. In the basement are complete equipments of lavoratories, and lockers for students' clothes. The smith-shop, boilers and cupolas for foundry, are located outside the main shop building, thus reducing to a minimum all chances of another disaster by fire. Due to the growth of the School, new shop buildings have recently been erected, which rank among the best in the country in appearance, utility and equipment.

The Textile building was completed in 1898, and is 150 by 70 feet, with three floors for the acommodation of machinery, class rooms, etc. It was designed by Lockwood, Greene & Co., of Boston, and fulfills every requirement of a modern cotton mill.

The Dormitory buildings consist of the Janie Austell Swann Dormitory, containing fifty rooms for students; the Knowles Dormitory, containing thirty-six rooms for students, gymnasium, shower-baths, and dining room; and two smaller dormitories of eight rooms each.

The Janie Austell Swann Dormitory accommodates 100 students. It is a handsome structure of three stories, 142 by 54 feet, and is finished in pressed brick and stone, with monumental pillars at the front entrance. It is heated by the radiator system, lighted with electricity, and contains ample halls, reception-rooms, etc. The building is a memorial erected by Mr. James Swann to his wife.

The Electrical building is of brick and limestone trimmings, is three stories in height, 90 by 82 feet in plan, and contains the Mechanical and Experimental Laboratory, the Electrical Laboratory, Drawing-rooms, Blue-print room, and class-rooms.

The Lyman Hall Laboratory of Chemistry, which is in the shape of a T, is of brick and limestone trimmings, and is two stories in height, with a full basement. Each floor has an approximate area of 5,600 square feet. The lecture-rooms, stock-rooms, library, offices, gas analysis

laboratory, photographic and spectroscope rooms occupy the front, and the laboratories the rear wing.

Especial care has been given to lighting and ventilation, the laboratories being lighted on three sides. For the removal of noxious gases, they are amply provided with hoods, each of which has a separate flue leading to a tight wooden fume-box located just under the roof. This box communicates with the outer air, and can be provided with forced draught if necessary.

Each student is allowed at least four feet of desk space, and is provided with gas, water, and a separate locker.

There are three lecture rooms, the largest with a seating capacity of about one hundred.

The laboratory for Elementary Chemistry occupies the entire lower floor of the rear wing, and will accommodate about 299 students. The upper floor of this wing is devoted to the qualitative and quantitative laboratories, having working space for 30 and 60 students, respectively. The remainder of this wing is occupied by a research laboratory and a room is set apart for the use of hydrogen sulphide.

Stock-rooms provided with a freight-lift, are placed conveniently to the laboratories.

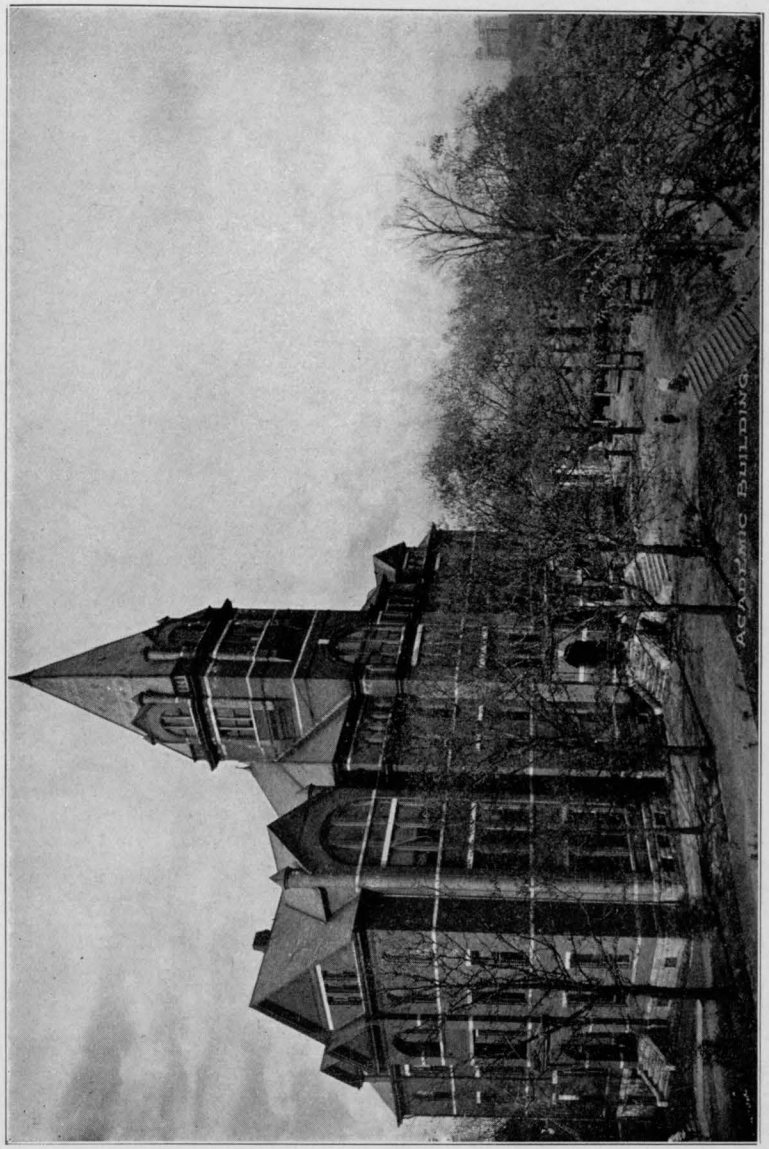
The balance-room is located so as to secure light from the northeast. It is provided with a double-door, to prevent access of laboratory fumes, and a pier of masonry, free of all contact with the building. Upon the pier the most delicate weighings may be carried out without interferences of vibrations.

A reading-room on the second floor contains the leading current journals and reference books relating to Chemistry.

A special room is devoted to organic combustions and gas analysis, and there are dark-rooms for spectroscope work and photography.

The large basement in the rear wing has been completed and allows ample room for an assay plant and additional facilities.

The beautiful new Carnegie Library building has been fully equipped with the most modern library appliances. The building is constructed of pressed brick with ornate limestone trimmings, and is a model of beauty and con-



ADMINISTRATION BUILDING.

THE JOHN D. ROCKEFELLER YOUNG MEN'S CHRISTIAN ASSOCIATION BUILDING.

venience. In the full basement are binding, storage and janitor's rooms, with assembly and club-rooms to be completed later. The first story contains the handsome reading-rooms, librarian's office, stack and seminar rooms. The building is seventy-five and one-half feet front by fifty-eight feet deep.

The new Joseph Brown Whitehead Memorial Hospital, erected during the summer of 1910 and the following session, is a completely equipped modern hospital, devoted to the needs of the student body. It is erected on the east side of Cherry Street, and covers approximately 4,000 square feet, with a capacity of twenty-seven patients. On the first floor is the office and private laboratory of the School Physician, a room for minor surgical operations, sterilizing room, suite of three rooms for the resident nurse, a kitchen, besides a ward to accommodate ten beds, with necessary service and clothes rooms, diet kitchen and solarium. Private rooms for seven patients are located on the second floor, where are also a nurse's room, ward for ten beds, solarium and service room. The building is constructed of brick and marble, is heated with steam from the central heating plant of the School, and is equipped with a special system of ventilation.

Young Men's Christian Association Building

Some three or four years ago Mr. Rockefeller made a very generous proposition to all colleges of the South, in which he agreed to give to any institution two dollars for every one it would raise for the purpose of erecting a Students' Young Men's Christian Association Building. The Georgia School of Technology was among the very first to take advantage of this offer. The sum of $25,000 was raised among other friends of the school; Mr. Rockefeller's $50,000 was added, and as a result a $75,000 structure was erected, which is one of the handsomest student buildings in the country.

The building is complete in every department, and is especially adapted to the needs and uses of the student body. Everything that makes for the betterment of the man physically, socially, mentally and spiritually, and everything that can add to the pleasure and comfort of the

student has found, as far as practicable, a home in the building. Every cent which was invested is being used solely for the benefit of the students.

The building has three stories above the basement and sub-basement. On the top floor there are ten dormitory rooms, arranged in suite fashion, with private baths between each two rooms. The second floor has a literary society hall, Faculty club rooms, Bible class or committee rooms, and a guest room. On the main floor is the large, spacious lobby, comfortably furnished with leather-cushioned settees and arm-chairs. On each side of the lobby is a reading room provided with large tables and stand-lamps. The lobby opens into the Auditorium, which has a regular theatre stage and a seating capacity of 375. The main center of student life and activity is on the next floor below, which is hardly a basement, because it is not below the ground. Here are the athletic headquarters, with the coaches' office, the game room, the offices for student publications, the grill room and lunch counter, locker room, barber shop, and shower baths. In the sub-basement are the heating plant and the bowling alleys. The building has become the headquarters for all the students, and they have come to feel that it is their building, to take care of and to use.

New Power Station and Engineering Laboratory

General Description.

The new Power Station Building is practically completed, and the equipment will be installed as fast as funds become available. The value of this Station and equipment including the accompanying campus improvement will be about $250,000. It has been made possible through the generous co-operation of both Northern and Southern Manufacturers, the alumni, our students, and friends of the School in Georgia. Considered both from a practical and an educational standpoint, it will give to the Georgia School of Technology advantages which are enjoyed by few institutions anywhere.

This plant will supply the entire school with light, power, heat, refrigeration, compressed air, and high-pressure water service for fire and laboratory purposes. It will supply the engineering laboratories and shops with alternat-

ing and direct current, both high and low tension; steam, high and low pressure, both saturated and superheated. The Station and equipment have been designed not only for practical use, but also as a power and research laboratory, and for the purpose of instruction in engineering. The new plant will not only provide many new facilities for instruction and research, but will also materially expand the usefulness and opportunities of all the other departments in the school.

As the Power Plant is designed along the lines of modern central station practice, the School will be unusually well equipped for training engineers who will be thoroughly fitted to undertake large power and industrial plant problems, using steam, oil, gas, or hydro-electric power. The large amount of undeveloped water power in the South, and our vast resources in coal, oil, and natural gas, make it vitally important that engineers receive thorough instruction in a power laboratory of this kind. Students entering Tech will receive their finishing work in engineering in this new Power Laboratory, and it will also afford excellent opportunities for post-graduate work and original investigations by the faculty and students.

Equipment of the New Station.

The major portion of the power equipment has been selected, and consists of the most modern power plant machinery, combining also many features for research and instruction purposes. Additional lists will be published later.

Boiler Room.

4-200 hp. Babcock & Wilcox Boilers with Bayonne Chain grate stokers and superheaters. Boilers are equipped with Consolidated Safety Valves, Ashcroft Gauges and Handcock Valves and Inspirators. Additional space is provided for four additional boilers of the same size.

2-400 hp. B. F. Sturtevant Fuel Economizers, one for each bank of two boilers.

1-B. F. Sturtevant Induced Draft System, so arranged that boilers may be operated with natural or induced draft, either with or without economizers.

1-Enclosed concrete coal storage, 1,600 tons capacity.

2-Ferro-Inclave concrete interior coal bunkers, total 200 tons.

1-Concrete Ash Hopper for gravity discharge.

1-200 ft. Alfons-Custodis Radio Brick Stack, 96 inches Internal Diameter at top. Stack equipped with Arrow 4 point Lightning Arrestor.

4-Sets of Diamond Soot Blowers. One on each boiler.

1-Metering, Automatic Recording Cochrane V-Notch feed water heater. Also Cochrane separators and Multiport Safety Exhaust Valves.

4-Automatic Draft Regulators, Special valves and gauges of the American Steam Gauge and Valve Co.

1 Electric Coal and Ash Car with tunnel and elevated tracks for coal and ash handling. A Suction Ash Conveyor system is also contemplated.

1-Special Weighing Larry and system of gates under interior coal bunkers for weighing coal and feeding same to mechanical stokers.

2-Cameron Boiler Feed Water Pumps.

1-Dual Control Otis Elevator, four landings for passenger and freight service.

The National Tube Company's High Pressure Superheated Steam Steel Piping will be used and covered with H. W. Johns-Mansville pipe covering and Asbestos Insulation.

Engine Room.

2-150 k. w. A. C. Westinghouse Turbo Generators.

1-100 k. w. A. C. Westinghouse Turbo Generator.

1-150 k. w. A. C. Oil Engine Generator Set.

1- 25 k. w. D. C. Westinghouse Turbo Generator Excitor Set.

1- 50 hp. Motor Generator Set for Laboratory and Excitation.

1-Bank 3-50 k. w. Westinghouse Transformers for stand-by service and research.

1-Special High Tension cable testing transformers (Westinghouse.)

1-17 Panel Westinghouse Marble Switchboard, complete

with controlling, distributing, metering and testing equipment.

1-Special Generator Testing Panel (Westinghouse.)

1-50 hp. Ingersoll-Rand Duplex Air Compressor with complete set Ingersoll-Rand compressed air tools, operated by Westinghouse A. C. motor.

1-100 hp. Cameron Pump, 300 lbs. pressure for Hydraulic Laboratory and fire service. Westinghouse motor drive.

1-12 ton electric crane.

Laboratory Floor.

Condensors for steam turbines with circulating and air pumps.

2-Willcox Water Weighers.

Electric Storage Batteries.

Refrigerating Plant.

Cooling Tower Operating Equipment.

Special Apparatus for power testing, including the equipment of the Precision Instrument Company and Eimer & Amend.

Hydraulic Laboratory.

Pressure Tank and Standpipe for orifice discharge.

Weir Tanks, Willcox Water Weighers.

High and Low Head Water Wheels, S. Morgan-Smith Co.

Venturi Meters, Hydraulic Gradents, Nozzles, Hydraulic Rams, Dial and Recording Water Meters and special Research Apparatus.

The Building.

The New Power Station Building is of special construction intended to properly house the splendid Power Plant and Research Laboratory equipment.

The Steel was manufactured by the Carnegie Steel Co., fabricated and erected by the Virginia Bridge & Iron Co.

The Reinforced Concrete has been used extensively, and

the exterior of the Building is finished in tapestry brick and terra cotta of local manufacture. The roof is H. W. Johns-Manville Asbestos Shingles with copper flashing, gutters and cornice.

The Building is not only unusual from an engineering standpoint, but has been treated with great care architecturally so that it will be a model station in every respect.

New Research Bureau

The erection of the new Power Laboratory marks the beginning of a new era in the history of the School. It makes possible the establishing of a State Research Bureau at Georgia Tech which has long been needed in the manufacturing and industrial development of Georgia. Not only the new Power Laboratory equipment, but the major portion of the facilities of the School, will in various ways become available for industrial research and testing. This new system will be developed as rapidly as funds become available, and by means of a general State Campaign and suitable publicity, the manufacturers, engineers and officials throughout the State will be kept informed of this progressive work. The special aim of the Research Bureau will be to afford opportunities for the study and development of the natural resources of Georgia together with by-products, new processes and machinery.

This will include such problems as analysis of coal, oils, and other fuels; Dyestuffs and Paints; Cotton, Cotton Waste, Cottonseed Oil; By-products from Wood Waste, such as Paper Pulp, Wood and Grain Alcohol, Acids, Turpentine, Road Materials and small wooden articles; Fertilizers that can be developed from natural resources; Limestone for fertilizer and building; Alloys, Clay Products and Glass; Soap; Glue; Leather; Ores; Stone; Electrical processes; Chemistry; Food products; Foundry and Steel Working methods and the general design and invention of new machinery as may be required. These are but a few of the many subjects affecting the industrial development of Georgia, the treatment of which will be provided for with the new Research Bureau. This work has received the co-operation of the State Legislature, State, City and County offi-

cials, the Georgia Manufacturers' Association, the Cotton Manufacturers' Association of Georgia, the State Chamber of Commerce, Local Chambers of Commerce, Engineering Societies, prominent Engineers, Manufacturers and business men, and the Technical and Public Press.

Bureau of Standards

It is proposed in connection with the new Power Laboratory and Research Bureau to establish a Bureau of Standards for the benefit of the Government of the State and also that of Cities, Towns and Counties. All materials relating to Sanitation, Sewerage, Ventilation, Heating, Highways, Paving Materials, Chemicals, Machinery and other supplies and equipment used by the above mentioned Government may be purchased and used according to well established standards, and as fast as new materials and equipment are developed, their true value can be ascertained by means of this State Bureau of Standards. This Department will also have represented in it various United States Government Standards.

Research Library

A special department in the new Carnegie Library of the School will be the Research Library, which will be devoted especially to the subjects of industrial research affecting all lines of manufactured products, the design of new machinery, patents, and inventions, old and new processes, standards of all countries in engineering, manufacturing, chemistry and allied industries, and special literature that will be beneficial to engineers and manufacturers in the industrial development of Georgia and the South. This new Library will be developed in connection with the new Power Laboratory and Research Bureau, and special effort will be devoted to making it as efficient as possible.

Equipment of Laboratories and Shops

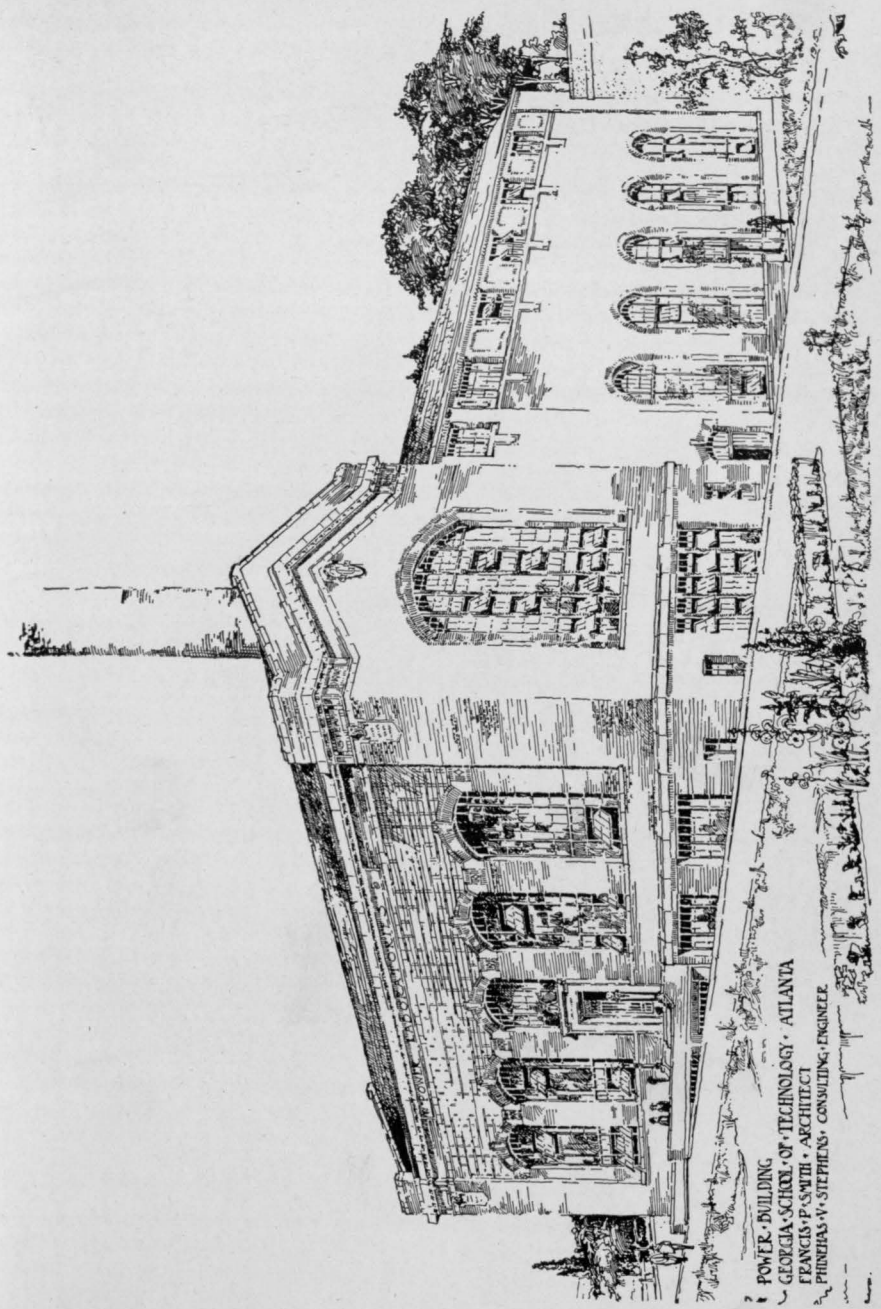
The Mechanical, Electrical, Chemical, Experimental and Physical laboratories have been fitted up with reference to practical work, and such additions will be made from time to time as may be required for experimental research.

The apparatus and appliances are of the newest and best forms, and will be increased as occasion may demand.

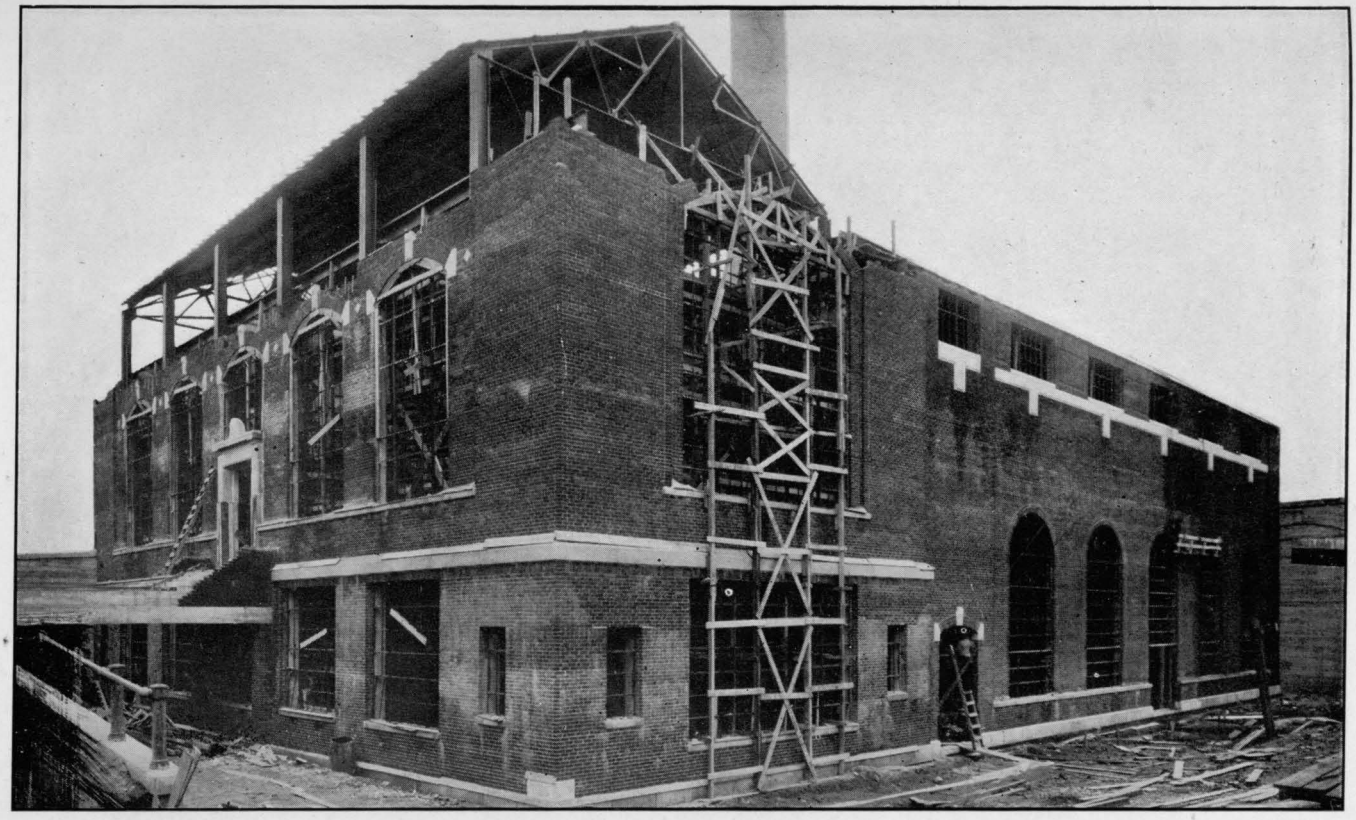
The workshops have been equipped with machinery and tools from the best makers, and of the latest pattern, at a cost of over fifty thousand dollars. In pursuance of the fundamental idea of giving the student access to the best machinery, and experimental knowledge of the best methods of mechanical work, the Trustees have put the Mechanical Department on a footing with the most improved and complete shops in the country, and scarcely any process requiring fine material and accurate workmanship is beyond its capacity.

The Textile building has an unsurpassed equipment of cotton manufacturing machinery, listed elsewhere.

Valuable additions have recently been made to the equipment of the Departments of Architecture, Electrical Engineering, Experimental Engineering and Physics.



NEW POWER LABORATORY AND RESEARCH BUREAU.
Architect's Drawing.



NEW POWER LABORATORY AND RESEARCH BUREAU
Condition of Building March 10, 1916.

DEPARTMENTS

DEPARTMENT OF ARCHITECTURE

PROFESSOR SMITH, PROFESSOR GAILEY AND MR. KOLLOCK.

General Statement

The Course in Architecture was opened to the students in the autumn of 1908 as one of the full professional courses in the Georgia School of Technology. The regular course extends over four years, leading to the degree of Bachelor of Science in Architecture.

It is the purpose of the Department to offer the necessary training in Design, Construction and the allied subjects that will eventually fit the student for the practice of Architecture, and will also enable him upon graduation to be of immediate value as a draughtsman.

With this end in view, the course of study combines with the strictly professional work, the essentials of a liberal education, aiming to give the student as broad a foundation as possible for his future work. The number and scope of the subjects to be covered during the course make it necessary that the student start his architectural work at the beginning of the Freshman year.

Architecture is regarded primarily as a Fine Art and the aesthetic side of the profession is emphasized throughout the course. Design, consequently, with the subjects closely allied to it, is given the most important place in the curriculum.

The work in Design is started after the courses in Descriptive Geometry, Shades and Shadows, Perspective and the Elements of Architecture have given the student a good foundation. During the Sophomore year simple problems in Design are taken, involving the use of the Orders and other elements and training in the sense of correct form and proportion. In the Junior and Senior years plan problems are given and the entire composition of buildings is studied. A series of lectures on the Elements and Theory

of Architecture accompanies this work and frequent sketch problems are given to develop rapidity of thought and presentation. During the second term of the Senior year, Thesis Designs are presented, the subjects for which are selected by the students with the approval of the head of the Department.

Whenever possible, the problems given out by the Society of Beaux Arts Architects are taken. These designs are judged in New York in competition with the work of other Schools of Architecture through the country. Problems that are not sent to New York for judgment are passed upon by a jury of practicing architects in Atlanta, and "Mentions" are awarded to the best designs.

In the study of the History of Architecture, the student is encouraged to regard the buildings not merely as remarkable monuments of great artistic value, but also as links in the chain of architectural development, and as being truly representative of the civilization and epoch to which they belong. The social and political aspects of the various periods and their effects upon the historic styles are studied, as well as the architectural characteristics of the buildings.

Draughtsmanship receives constant attention throughout the four years, not only in the courses in pure Drawing and Water Color, but also in the work in Design and Ornament. The importance of the study of Drawing can scarcely be over-estimated, it being the architect's principal medium of expression.

The nature and use of Building Materials are studied, as well as the principles involved in General Construction and Sanitation, while the studies of Graphic Statics and Structural Mechanics familiarize the student with these branches of Architectural Engineering. Inspection trips are made to buildings in course of erection and to certain manufacturing plants.

Throughout the work the student is urged to make adequate and intelligent use of the Library, a comprehensive knowledge of the best work of all periods being essential to success.

Equipment

The Department of Architecture occupies the entire third floor of the new Engineering Building, there being two large Draughting Rooms, a Free Hand Studio, Lecture Room, Office, etc. All of these rooms are well furnished and have excellent light, both natural and artificial.

The School possesses a good working Library of Architural books and periodicals, to which additions are constantly being made, as well as collections of photographs, drawings, stereopticon slides and plaster casts.

Scholarship

The Georgia Chapter of the American Institute of Architects has established a self-perpetuating scholarship open to students in the two upper classes who may be in need of financial assistance. The beneficiary refunds the money after graduation in payments of small monthly notes without interest.

Two-Year Special Course

A Special Course of two years' duration is also offered to qualified men, who must have had at least six months' experience in the office of a practicing architect. In this course Architectural studies only are pursued. Upon completion of the required work a Certificate of Proficiency is given. The only entrance examinations required are in Plane Geometry, Elementary Physics, and Free-Hand Drawing.

The Regular Course in Architecture

FRESHMAN YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Arch. 1	Architectural Drawing		6	6.
Chem. 1	Inorganic Chemistry	3		7.5
Chem. 5	Chemical Laboratory		2	2.
Draw. 2a	Descriptive Geometry Recitations	3		7.5
Draw. 4a	Descriptive Geometry Drawing		3	3.
Eng. 11	Rhetoric	3		7.5
Eng. 15	Theme Writing and Declamations	1		1.
Math. 11	Algebra	2		5.
Math. 15	Trigonometry	3		7.5
M. E. 3c	Wood Shop		4	4.
Gym. 1	Physical Culture		2	2.
	Total—	15	17	53.

Second Term

Arch. 7a	Elements of Architecture	1	8	11.
Arch. 3a	Shades and Shadows	1	6	7.
Arch. 5a	Perspective			
Arch. 8	Pencil Drawing		2	2.
Chem. 2	Inorganic Chemistry	3		7.5
Chem. 6	Chemical Laboratory		2	2.
Eng. 12	Rhetoric	3		7.5
Eng. 16	Theme Writing	1		1.
Math. 18	Analytic Geometry	5		12.5
Gym. 2	Physical Culture		2	2.
	Total..	14	20	52.5

SOPHOMORE YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Arch. 11	Architectural Design		12	16.
Arch. 15	History of Architecture, Ancient	2		5.
Arch. 19	Charcoal Drawing		2	2.
Eng. 21	American Literature }	3		7.5
Eng. 27	Parallel Reading }			
Math. 21	Analytic Geometry	2		5.
Math. 25	Calculus	3		7.5
Phys. 5	Physics	3		7.5
	Total..	13	14	50.5

Second Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Arch. 11	Architectural Design		12	16.
Arch. 16	History of Architecture, Mediaeval	2		5.
Arch. 20	Charcoal Drawing		2	2.
Eng. 24	Political Economy	3		7.5
Eng. 28	Parallel Reading			
Math. 28	Calculus	5		12.5
Phys. 6	Physics	3		7.5
	Total..	13	14	50.5

JUNIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Arch. 23	Architectural Design		14	16.
Arch. 27	History of Architecture, Modern	2		5.
Arch. 31	Building Construction, Masonry	1	1	3.5
Arch. 35	Sanitation of Buiuings	1		2.5
Arch. 39	Cast Drawing		2	2.
Arch. 43	Pen and Ink Drawing		2	2.
C. E. 13	Graphic Statics	2	3	8.
Eng. 31	English Literature	3		7.5
M. L. 7	French	3		7.5
	Total—	12	22	54.

Second Term

Arch. 24	Architectural Design		16	20.
Arch. 32	Building Construction, Masonry	1	1	3.5
Arch. 40	Cast Drawing		2	2.
Arch. 44	Pen and Ink Drawing		2	2.
Arch. 48	Historic Ornament		4	4.
Arch. 52	Water Color Drawing		3	3.
Eng. 32	English Literature }	3		7.5
Eng. 36	Literary Thesis }			
Exp. E. 11a	Structural Mechanics	2		5.
M. L. 8	French	3		7.5
	Total..	9	28	54.5

SENIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Arch. 55	Architectural Design		18	25.
Arch. 59	Archaeology		4	5.
Arch. 63	Building Construction, Carpentry	1	1	3.5
Arch. 67	Professional Practice	1		2.5
Arch. 71	History of Art	1		2.5
Arch. 75	Antique Drawing		2	2.
Arch. 79	Pen and Pencil Rendering		2	2.
Arch. 83	Water Color Drawing		3	3.
Com. 1	Business Organization & Managem't		1	1.
M. L. 9	French	3		7.5
	Total..	6	31	54.

Second Term

Arch. 56	Architectural Design		20	30.
Arch. 64	Building Construction, Carpentry	1	1	3.5
Arch. 68	Professional Practice	1		2.5
Arch. 72	History of Art	1		2.5
Arch. 76	Antique Drawing		2	2.
Arch. 80	Pen and Pencil Rendering		2	2.
Arch. 84	Water Color Rendering		3	3.
Com. 2	Commercial Law		1	1.
M. L. 10	French	3		7.5
	Total..	6	29	54.

Special Course in Architecture

FIRST YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Arch. 3	Shades and Shadows	1	6	7.
Arch. 5	Perspective	1	8	9.
Arch. 7	Elements of Architecture		6	10.
Arch. 11	Architectural Design	2		5.
Arch. 15	History of Architecture, Ancient		2	2.
Arch. 19	Charcoal Drawing	1		3.5
Arch. 31	Building Construction, Masonry	1		2.5
Arch. 35	Sanitation of Buildings		2	2.
Arch. 43	Pen and Ink Drawing	3		7.5
Phys. 5	Physics			
	Total..	7	27	48.5

Second Term

Arch. 12	Architectural Design		16	25.
Arch. 16	History of Architecture, Mediaeval	2		5.
Arch. 20	Charcoal Drawing		2	2.
Arch. 32	Building Construction, Masonry	1		3.5
Arch. 39a	Cast Drawing		2	2.
Arch. 44	Pen and Ink Drawing		2	2.
Arch. 52	Water Color Drawing		3	3.
	Total..	3	25	42.5

SECOND YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Arch. 23	Architectural Design		14	20.
Arch. 27	History of Architecture, Modern	2		5.
Arch. 40	Cast Drawing		2	2.
Arch. 59	Archaeology		4	5.
Arch. 63	Building Construction, Carpentry	1		3.5
Arch. 67	Professional Practice	1		2.5
Arch. 71	History of Art	1		2.5
Arch. 79	Pen and Pencil Rendering		2	2.
Arch. 83	Water Color Drawing		3	3.
C. E. 13	Graphic Statics	2	3	8.
Com. 1	Business Organization & Managem't			1.
	Total..	8	28	49.

Second Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Arch. 24	Architectural Design		16	25.
Arch. 48	Historic Ornament		4	4.
Arch. 64	Building Construction, Carpentry	1		3.5
Arch. 68	Professional Practice	1		2.5
Arch. 72	History of Art	1		2.5
Arch. 75a	Antique Drawing		2	2.
Arch. 76	Antique Drawing		2	2.
Arch. 80	Pen and Pencil Rendering		2	2.
Arch. 84	Water Color Rendering		3	3.
Com. 2	Com. Law	1		1.
	Total..	4	29	47.5

Courses of Instruction

Arch. 1. Architectural Drawing.

Mr. Kollock.

Freshman, First Term, six hours.

An introductory course in free-hand and mechanical lettering, instrumental drawing of architectural forms, and India ink wash-drawing.

Arch. 3 and 3a. Shades and Shadows.

Professor Gailey and Mr. Kollock.

Arch. 3, First Year Special, first term, seven hours.
Arch. 3a, Freshman, second term, seven hours.

This course is given during the first part of the term and consists of lectures and draughting room work in the theory and methods of determining the shades and shadows on architectural forms.

Text: *McGoodwin,* "Architectural Shades and Shadows."

Arch. 5 and 5a. Perspective.

Professor Gailey and Mr. Kollock.

Arch. 5. First Year Special, first term, seven hours.
Arch. 5a. Freshman, second term, seven hours.

This course follows Arch. 3 and 3a, during the latter part of the term, and consists of lectures and draughting room work in the theory of Perspective, the use of Vanishing Points, the Perspective Plan method, etc.

Text: *Everette and Lawrence,* "Free-Hand and Perspective Drawing."

Arch. 7 and 7a. Elements of Architecture.

Professor Smith and Mr. Kollock.

Arch. 7. First Year Special, first term, nine hours.
Arch. 7a. Freshman, second term, nine hours.

Illustrated lectures on the simple elements of Architectural Design, such as walls, doors, cornices and mouldings. This is followed by a careful consideration of the classical orders and the principles involved in their use. Stress is laid on their character and general proportions rather than upon mathematical rules for drawing them. Carefully rendered drawings of the orders and other simple Elements of Design are made in the draughting room.

Text: *Ware,* "American Vignola," Part I.

Arch. 8. Pencil Drawing.

Professor Gailey.

Freshman, second term, two hours.

Elementary work in free-hand pencil drawing from blocks and simple forms, studying the mass and proportions.

Arch. 11. Architectural Design.

Professor Smith.

Prerequisites, Arch. 3, 5 and 7.
Sophomore, first term, twelve hours.
First Year Special, first term, six hours.

Simple problems in composition and design involving

the Orders, are studied, especial attention being given to the design and drawing of details at a large scale. Individual criticism is given as the work progresses, and at the completion of the problems, the rendered drawings are judged by a jury of practicing architects.

Arch. 12. **Architectural Design.**

Professor Smith.

Prerequisites, Arch. 2 and Arch 11.

Sophomore, second term, twelve hours.

First Year Special, second term, sixteen hours.

A continuation of Arch 2.

Arch. 15. **History of Architecture, Ancient.**

Professor Smith.

Prerequisite, Arch. 2.

Sophomore and First Year Special, first term, two hours.

Two lectures a week are given with the aid of the stereopticon. Architectural development is studied from the dawn of civilization to the fall of Rome. Research work is done in the Library by each student and written quizzes are held.

Arch. 16. **History of Architecture, Mediaeval.**

Professor Smith.

Prerequisite, Arch. 15.

Sophomore and First Year Special, second term, two hours.

A continuation of Arch. 15, in which the various mediaeval styles of European architecture are studied. Individual reports are prepared by the students on special topics.

Arch. 19. **Charcoal Drawing.**

Professor Gailey.

Prerequisite, Arch. 8.

Sophomore and First Year Special, first term, two hours.

Charcoal work from simple plaster casts. Monthly tests without criticism are given.

Arch. 20. **Charcoal Drawing.**

Professor Gailey.

Prerequisite, Arch. 19.

Sophomore and First Year Special, second term, two hours.

A continuation of Arch. 19.

Arch. 22. **Elementary Design.**

Mr. Kollock.

Prerequisites, Drawing 2a and 4a.

Junior, C. E., second term, three hours.

An elementary course in the classical Orders and their application to Doorways, small Power Houses, etc.

Arch. 23. **Architectural Design.**

Professor Gailey.

Prerequisite, Arch. 12.

Junior and Second Year Special, first term, fourteen hours.

This course succeeds Arch. 12. Problems in planning are taken up and buildings are designed in plan, section and elevation. Carefully rendered drawings are made, and short sketch problems are given at stated periods.

Arch. 24. **Architectural Design.**

Professor Gailey.

Prerequisite, Arch. 23.

Junior and second year special, second term, sixteen hours.

A continuation of Arch. 23.

Arch. 27. **History of Architecture, Modern.**

Professor Smith.

Prerequisite, Arch. 16.

Junior and second year special, first term, two hours.

This concluding course in the subject is devoted to a

consideration of Renaissance and Modern Architecture, beginning with the work of Brunelleschi.

Arch. 31. **Building Construction. Masonry.**

Professor Gailey.

Junior and First Year Special, first term, one hour.

Recitations and quizzes in the materials and processes of masonry construction as applied to buildings. Foundations, footings, brick work, stone masonry, systems of reinforced concrete, etc., are studied.

Text: *Kidder*, "Building Construction and Superintendence, Masonry."

Arch. 32. **Building Construction. Masonry.**

Professor Smith.

Prerequisite, Arch. 31.

Junior and First Year Special, second term, one hour.

A continuation of Arch. 31.

Arch. 35. **Sanitation of Buildings.**

Professor Smith.

Prerequisite, Arch. 12.

Junior and Second Year Special, first term, one hour.

A study of the principles of Heating, Ventilating and Plumbing. Lectures and recitations.

Text: *Allen*, "Notes on Heating and Ventilating."

Arch. 39 and 39a. **Cast Drawing.**

Professor Gailey.

Prerequisite, Arch. 20.

Junior, First Term and First Year Special, second term, two hours.

Drawing from casts of architectural features and sculpture.

Arch. 40. **Cast Drawing.**

Professor Gailey.

Prerequisite, Arch. 39.

Junior and Second Year Special, second term, two hours. A continuation of Arch. 39.

Arch. 43. **Pen and Ink Drawing.**

Professor Smith.

Prerequisite, Arch. 20.

Junior and First Year Special, first term, two hours.

The drawing and rendering in pen and ink of architectural subjects. Stress is laid upon the composition of the sketch as well as its presentation. Drawings by recognized masters are studied and copied to familiarize the student with good technique and style.

Arch. 44. **Pen and Ink Drawing.**

Professor Smith.

Prerequisite, Arch. 43.

Junior and First Year Special, second term, two hours.

A continuation of Arch 43, in which the student works from photographs.

Arch. 48. **Historic Ornament.**

Professor Gailey.

Prerequisite, Arch. 39.

Junior and Second Year Special, second term, four hours.

A course in the design of Architectural ornament in various historic styles. The best examples from the period are studied and used as inspiration for the work.

Arch. 52. **Water Color Drawing.**

Professor Gailey.

Prerequisite, Arch. 39.

Junior and First Year Special, second term, three hours.

Wash drawings in Sepia are made from still-life models.

Arch. 55. **Architectural Design.**

Professor Smith.

Prerequisite, Arch. 24.

Senior, first term, eighteen hours.

In the Senior Year, the designing of larger composi-

tions is begun. Group plans are studied and more complicated problems are taken up.

Arch. 56. Architectural Design.

Professor Smith.

Prerequisite, Arch. 55.

Senior, second term, twenty hours.

A continuation of Arch. 55. During the latter part of the term the Thesis designs for the Bachelor's degree are made. Programs requiring original work must be selected.

Arch. 59. Archaeology.

Professor Smith.

Prerequisite, Arch. 24 and 27.

Senior and Second Year Special, first term, four hours.

One or more Design problems in some of the more important historic styles are given. This course offers opportunity to obtain more exact knowledge of certain styles, and supplements the work in Architectural History, upon which it is largely dependent.

Arch. 63. Building Construction. Carpentry.

Professor Gailey.

Senior and Second Year Special, first term, one hour.

Recitations and quizzes on Carpentry Construction as applied to buildings. The construction of the frame house, floors, partitions, roofs, interior finish, etc., are studied.

Text: *Kidder,* "Building Construction and Superintendence, Carpentry."

Arch. 64. Building Construction. Carpentry.

Professor Smith.

Prerequisite, Arch. 63.

Senior and Second Year Special, second term, one hour.

A continuation of Arch. 63.

Arch. 67. Professional Practice.

Professor Smith.

Senior and Second Year Special, first term, one hour.

A course of lectures and discussions on professional ethics, competitions, contracts, specifications, theory of design and the specific requirements of certain classes of buildings such as School Houses, Libraries, Hospitals, and Residences. Papers are prepared and read by the students and discussed in class.

Text: *Van Pelt,* "Essentials of Composition."

Arch. 68. Professional Practice.

Professor Smith.

Prerequisites, Arch. 67.

Senior and Second Term Special, second term, one hour.

A continuation of Arch. 67.

Arch. 71. History of Art.

Professor Gailey.

Prerequisite, Arch. 16.

Senior and Second Year Special, first term, one hour.

Recognizing the often intimate connection of Architecture with the allied Arts of Sculpture and Painting, the history of these subjects is taken up briefly in a course of lectures and recitations, assisted by the stereopticon and by photographs. Egyptian, Assyrian, Greek and Roman work is studied.

Arch. 72. History of Art.

Professor Gailey.

Prerequiste, Arch. 71.

Senior and Second Year Special, second term, one hour.

A continuation of Arch. 71, devoting especial attention to the sculpture and painting of the Italian Renaissance.

Arch. 75 and 75a. **Antique Drawing.**

Professor Gailey.

Prerequisite, Arch. 40.

Arch. 75. Senior, first term, two hours.

Arch. 75a. Second Year Special, second term, two hours.

Drawing from the cast of antique sculpture and the full length figure.

Arch. 76. **Antique Drawing.**

Professor Gailey.

Prerequisite, Arch. 75.

Senior and Second Year Special, second term, two hours.

A continuation of Arch. 75, including also drawing from life.

Arch. 79. **Pen and Pencil Rendering.**

Professor Smith.

Prerequisite, Arch. 44.

Senior and Second Year Special, second term, two hours.

A continuation of Arch. 44, in which sketches are made from nature and more elaborate renderings are made.

Arch. 80. **Pen and Pencil Rendering.**

Professor Smith.

Prerequisite, Arch. 79.

Senior and Second Year Special, second term, two hours.

A continuation of Arch. 79.

Arch. 83. **Water Color Drawing.**

Professor Gailey.

Prerequisite, Arch. 52.

Senior and Second Year Special, first term, three hours.

Water Color drawings and sketches are made from photographs, still-life objects, architectural details, and nature.

Arch. 84. **Water Color Rendering.**

Professor Gailey.

Prerequisite, Arch. 83.

Senior and Second Year Special, second term, three hours.

A continuation of Arch. 83, in which the rendering of Architectural Perspectives in water color, is studied.

DEPARTMENT OF CHEMISTRY

PROFESSOR EMERSON, PROFESSOR BOGGS, PROFESSOR DANIEL, PROFESSOR HUGHES AND MR. WOODWARD.

General Statement

The courses offered by this department are intended, in the first place, to give the student a broad foundation in General and Theoretical Chemistry, so that new problems met in his future work may be solved intelligently; and, in the second place, to give him special training in those branches of Chemistry which have been most generally applied industrially, so that he may be immediately useful.

Two courses leading to degrees are offered; one to the degree Bachelor of Science in Engineering Chemistry, the other to the degree Bachelor of Science in Chemistry.

Equipment

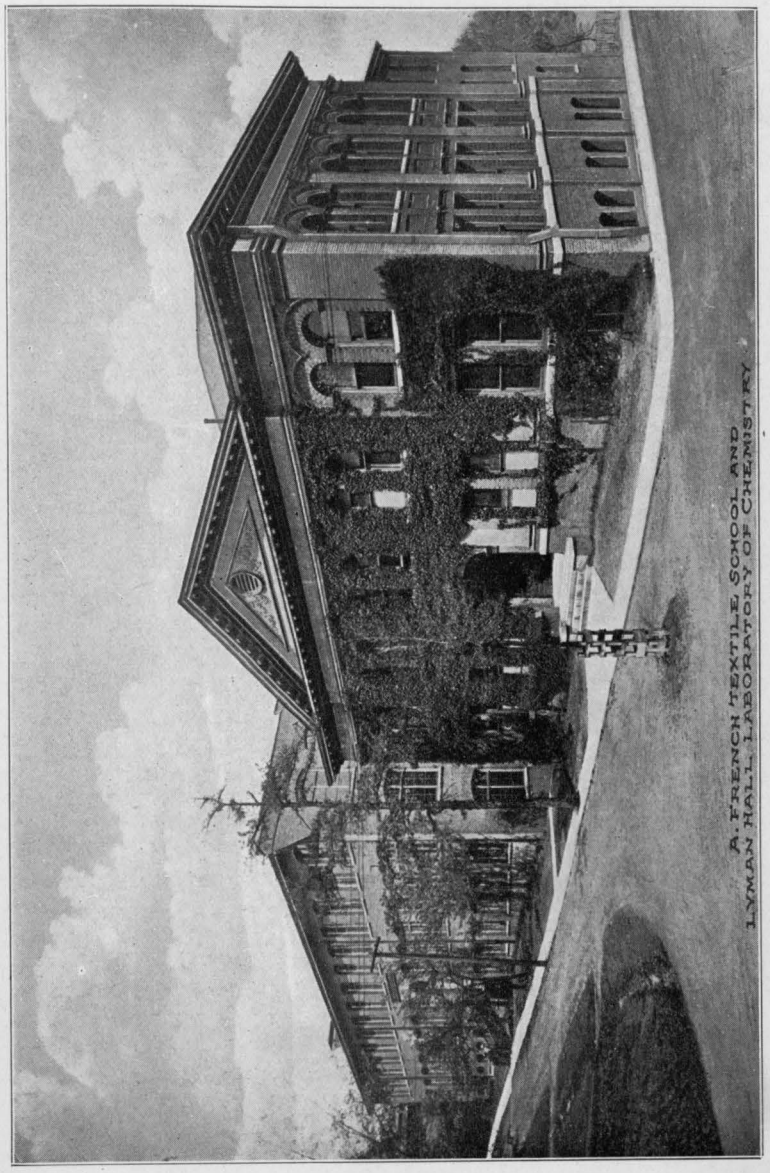
The Lyman Hall Laboratory of Chemistry, thus named in honor of the late Dr. Lyman Hall, second President of the institution, was completed in 1906. It is a T-shaped building of brick, with limestone trimmings, two stories high, with a basement. Each floor has an approximate area of 5,600 square feet. Lecture rooms, reading room, stock rooms, offices, combustion room, and dark rooms occupy the front, and laboratories the rear wing. The basement is fitted up for offices, lecture rooms and laboratories, used at present by the Department of Geology and Metallurgy. The large lecture room on the first floor will accommodate about one hundred students, and there are two

smaller rooms for the use of advanced classes. Especial care has been given to the lighting and ventilation of the laboratories. All of them receive light from three sides, and for the removal of noxious fumes, they are amply provided with hoods, each of which has a separate flue leading to a tight wooden fume-box, located just under the roof. This box communicates with the outer air. The natural draught thus created serves the desired purpose admirably.

Each student is provided with gas, water, sink, and a private locker allowing at least four feet of desk space. The entire first floor of the rear wing is occupied by the laboratory for elementary Chemistry, which will accommodate 242 students. The upper floor of this wing is for the laboratories of qualitative and quantitative analysis, and a small private laboratory for the instructors. Sixty students can be accommodated in the first named and thirty in the second. The hydrogen sulphide gas used is generated in a separate room. The students are served with materials and apparatus from a stock-room on each floor. The amply lighted balance room, which is shut off from the laboratory fumes by means of double doors, is equipped with seven high-grade balances, one of which is mounted on a pier of masonry free from contact with the building, thus eliminating vibrations. On this floor is located a reading room provided with some of the leading journals and reference works devoted to Chemistry.

Course Leading to the Degree Bachelor of Science in Chemistry

This course is designed to meet the demand for skilled chemists and assayers, who are not necessarily engineers. It differs from the other course by the omission of engineering subjects and the substitution therefor of Mineralogy, Crystallography and Geology. Also, the time devoted to chemical subjects is somewhat greater, both in the laboratory and class room. It is expected that this course of study will equip the student with a more thorough and comprehensive knowledge of Chemistry.



THE LYMAN HALL LABORATORY OF CHEMISTRY.
The A. French Textile School in Background.

Tabulation of Subjects Leading to the Degree Bachelor of Science in Chemistry

FRESHMAN YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Rec.	Lab'y	Eqv.
Chem. 1	Inorganic Chemistry	3		7.5
Chem. 5	Chemical Laboratory		2	2.
Draw. 1	Free Hand Drawing		4	4.
Eng. 11	Rhetoric	3		7.5
Eng. 15	Theme Writing and Declamations	1		1.
Math. 11	Algebra	2		5.
Math. 15	Trigonometry	3		7.5
M. E. 3c	Wood Shop		4	4.
M. E. 5	Smithy		4	4.
M. E. 7	Foundry		4	4.
Gym. 1	Physical Culture		2	2.
	Total..	12	20	48.5

Second Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Chem. 2	Inorganic Chemistry	3		7.5
Chem. 6	Chemical Laboratory		2	2.
Draw. 2	Descriptive Geometry	3		7.5
Draw. 4	Descriptive Geometry Drawing		3	3.
Eng. 12	Rhetoric	3		7.5
Eng. 16	Theme Writing and Declamations	1		1.
Math. 18	Analytic Geometry	5		12.5
M. E. 11a	Machine Shop		8	8.
Gym. 2	Physical Culture		2	2.
	Total..	15	15	51.

SOPHOMORE YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Rec.	Lab'y	Eqv.
Chem. 13	Qualitative Analysis		12	13.5
Draw. 14a	Machine Drawing		4	4.
Eng. 21	American Literature	3		7.5
Eng. 27	Parallel Readings			
Geol. 1	Ferrous Metallurgy	2		5.
Math. 21	Analytic Geometry	2		5.
Math. 25	Calculus	3		7.5
Phys. 9	Physics	4		10.
	Total..	14	16	52.5

Second Term

Abbrev.	Subject	Hrs. Per W'k Rec.	Lab'y	Eqv.
Chem. 14	Qualitative Analysis		4	4.
Chem. 16	Quantitative Analysis	1	11	12.5
Eng. 24	Political Economy }	3		7.5
Eng. 28	Parallel Readings }			
Math. 28	Calculus	5		12.5
Phys. 10	Physics	4		10.
Phys. 14	Physics Laboratory		4	5.
Phys. 20	Slide Rule		.5	.5
	Total..	13	19.5	52.0

JUNIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equ'v
Chem. 17	Quantitative Analysis	2	12	16.
Chem. 21	Organic Chemistry	3		7.5
Chem. 23	Organic Laboratory		4	4.
Eng. 31	English Literature }	3		7.5
Eng. 35	Literary Thesis }			
M. L. 1	German	3		7.5
Phys. 11	Physics	3		7.5
Phys. 15	Physical Laboratory		4	5.
	Total..	14	20	55.

Second Term

Chem. 18	Quantitative Analysis		16	16.
Chem. 22	Organic Chemistry	3		7.5
Chem. 24	Organic Laboratory		4	4.
Chem. 26	Advanced Qualitative Analysis	3		7.5
Eng. 32	English Literature[}	3		7.5
Eng. 36	Literary Thesis }			
M. L. 2	German	3		7.5
	Total..	12	20	50.

SENIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Rec.	Lab'y	Eqv.
Chem. 19	Quantitative Analysis		12	12.
Chem. 29	Advanced Inorganic Chemistry	4		10.
Chem. 33	Physical Chemistry	2		5.
Chem. 37	Industrial Chemistry	2		5.
Com. 1	Business Organization & Managem't		1	1.
M. L. 3	German, with Sight Reading	3		6.
Geol. 5	Petrography	3	8	15.5
	Total..	14	21	54.5

Second Term

Chem. 34	Physical Chemistry	3		7.5
Chem. 38	Industrial Chemistry	2		5.
Chem. 42	Thesis		12	12.
Com. 2	Commercial Law		1	1.
Geol. 12	Assaying		4	4.
Geol. 8	Non-Ferrous Metallurgy	4		10.
Geol. 10	General Geology	3		7.5
M. L. 4	German, with Sight Reading	3		6.
	Total..	15	17	53.

Course Leading to the Degree Bachelor of Science in Engineering Chemistry

The graduate in this course will be prepared to pursue the subject either on its manufacturing or analytical side. With respect to his fitness to take up the work in chemical maufacturing, the course offers exceptional opportunities. The work in Mechanical Engineering, embracing consider-

able shop and laboratory practice, elementary mechanics, and the steam engine, will enable him to understand machinery, superintend the running of it, and take charge of various mechanical operations. The course in Drawing will enable him to understand mechanical drawings and express his ideas by means of them. The course in Electricity will enable him to understand electrical appliances and to superintend industrial operations carried on by means of this power. His knowledge of Chemistry will equip him to determine the relative values of the raw materials offered by dealers, and to conduct intelligently operations based on chemical principles, detect imperfections in them and suggest improvements. The work of the course being mainly chemical, the graduate will be prepared to undertake analytical processes of almost any kind, and should be valuable in the laboratory in many ways.

Tabulation of Subjects Leading to the Degree Bachelor of Science in Engineering Chemistry

FRESHMAN YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Rec.	Lab'y	Eqv.
Chem. 1	Inorganic Chemistry	3		7.5
Chem. 5	Chemical Laboratory		2	2.
Draw. 1	Free Hand Drawing		4	4.
Eng. 11	Rhetoric	3		7.5
Eng. 15	Theme Writing and Declamations	1		1.
Math. 11	Algebra	2		5.
Math. 15	Trigonometry	3		7.5
M. E. 3c	Wood Shop		4	4.
M. E. 5	Smithy		4	4.
M. E. 7	Foundry		4	4.
Gym. 1	Physical Culture		2	2.
	Total..	12	20	48.5

Second Term

Chem. 2	Inorganic Chemistry	3		7.5
Chem. 6	Chemical Laboratory		2	2.
Draw. 2	Descriptive Geometry	3		7.5
Draw. 4	Descriptive Geometry Drawing		3	3.
Eng. 12	Rhetoric	3		7.5
Eng. 16	Theme Writing and Declamations	1		1.
Math. 18	Analytic Geometry	5		12.5
M. E. 11a	Machine Shop		8	8.
Gym. 2	Physical Culture		2	2.
	Total..	15	15	51.

SOPHOMORE YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Rec.	Lab'y	Eqv.
Chem. 13	Qualitative Analysis		12	13.5
Draw. 14a	Machine Drawing		4	4.
Eng. 21	American Literature	3		7.5
Eng. 27	Parallel Reading			
Geol. 1	Ferrous Metallurgy	2		5.
Math. 21	Analytic Geometry	2		5.
Math. 25	Calculus	3		7.5
Physics 9	Physics	4		10.
	Total..	14	16	52.5

Second Term

Chem. 14	Qualitative Analysis		4	4.5
Chem. 16	Quantitative Analysis	1	7	8.5
Draw. 21a	Machine Drawing		4	4.
Eng. 24	Political Economy	3		7.5
Eng. 28	Parallel Reading			
Math. 28	Calculus	5		12.5
Phys. 10	Physics	4		10.
Phys. 14	Physical Laboratory		4	5.
Phys. 20	Slide Rule		.5	.5
	Total..	13	19.5	52.5

JUNIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Rec.	Lab'y	Eqv.
Chem. 17	Quantitative Analysis	2	12	16.
Chem. 21	Organic Chemistry	3		7.5
Chem. 23	Organic Laboratory		4	4.
Eng. 31	English Literature	3		7.5
M. L. 1	German	3		7.5
Phys. 11	Physics	3		7.5
Phys. 15	Physics Laboratory		4	5.
	Total..	14	20	55.0

Second Term

Chem. 18	Quantitative Analysis		12	12.
Chem. 22	Organic Chemistry	3		7.5
Chem. 24	Organic Laboratory		4	4.
Eng. 32	English Literature }	3		7.5
Eng. 36	Literary Thesis }			
Exp. E. 1a	Analytic Mechanics	3		7.5
Exp. E. 11	Structural Mechanics	2		5.
Exp. E. 76	Thermodynamics	2		5.
M. L. 2	German	3		7.5
	Total..	16	16	56.

SENIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Rec.	Lab'y	Eqv.
Chem. 19	Quantitative Analysis		16	16.
Chem. 37	Industrial Chemistry	2		5.
Chem. 29	Advanced Inorganic Chemistry	4		10.
Chem. 33	Physical Chemistry	2		5.
Com. 1	Business Organization & Managem't		1	1.
Exp. E. 77	Thermodynamics	3		7.5
Exp. E. 52b	Materials Laboratory (2 mo.)		4	2.
Exp. E. 71	Steam Eng. Laboratory (2 mo.)		4	2.
M. L. 3	German, with Sight Reading	3		6.
	Total..	14	21	54.5

Second Term

Abbrev.	Subject	Hrs. Per W'k Rec.	Lab'y	Eqv.
Chem. 26	Advanced Qualitative Analysis	3		7.5
Chem. 38	Industrial Chemistry	2		5.
Chem. 34	Physical Chemistry	3		7.5
Chem. 42	Thesis		12	12.
Com. 2	Commercial Law		1	1.
E. E. 1a	Dynamos and Motors	2		5.
E. E. 3a	Electrical Laboratory		3	3.
Exp. E. 78	Thermodynamics	2		5.
Exp. E. 71d	Steam Eng. Laboratory (2 mo.)		4	2.
Exp. E. 86a	Gas Engine Laboratory (2 mo.)		4	2.
M. L. 4	German, with Sight Reading	3		6.
	Total..	15	20	56.

Courses of Instruction

Chem. 1. **Elementary Inorganic Chemistry.**

Professor Emerson, Professor Boggs, Professor Daniel, Professor Hughes, and Mr. Woodward.

Freshman, first term, three hours.

This course is required of all Freshmen and is designed to acquaint the student with some of the principles of Chemistry, and also familiarize him with the sources, methods of preparation, properties and uses of a number of important commercial substances. In order to accomplish these ends, considerable time is spent in explanatory and experimental lectures, in which the significance of the theories is dwelt upon, and their applications in a practical way pointed out. Thus the harmony between theory and practice is established. The modern theories of solution, and the "Mass Law," are emphasized. The solution of numerous numerical problems is required.

Text: *McPherson and Henderson's* "General Chemistry." The ground covered during this term includes the first nineteen chapters, with about a month of review.

Chem. 2. **Elementary Inorganic Chemistry.**

Professor Emerson, Professor Boggs, Professor Daniel, Professor Hughes, and Mr. Woodward.

Prerequisite, Chem. 1.

Freshman, second term, three hours.

A continuation of Chem. 1, covering the remainder of text, with about a month of review.

Chem. 5. **Chemical Laboratory.**

Professor Emerson, Professor Boggs, Professor Daniel, Professor Hughes, and Mr. Woodward.

Freshman, first term, one two-hour period.

The Experiment-Observation-Deduction Method is here applied as far as the time permits. The keeping of accurate records of observations is required, as upon these the students must draw, in answering the oral questions following each experiment. These quizzes insure an understanding of the subject and its connection with the instruction given in Chem. 1. While the ground covered is limited, the thoroughness attained by requiring every student to recite on each experiment has amply justified the adoption of this method.

Text: Selected exercises.

Chem. 6. **Chemical Laboratory.**

Professor Emerson, Professor Boggs, Professor Daniel, Professor Hughes, and Mr. Woodward.

Prerequisite, Chem. 1 and 5.

Freshman, second term, one two-hour period.

A continuation of Chem. 5, with special attention to the metals.

Chem. 9. **Qualitative Analysis.**

Professor Emerson and Mr. Woodward.

Prerequisites, Chem. 1, 2, 5, 6.

Sophomore, first term, three hours laboratory, one hour lecture.

This course is required of students in Civil and Textile Engineering, and optional for four hours shop for students in Electrical and Mechanical Engineering. The course is similar to Chem. 13, and is conducted in a like manner. Groups 1 and 2 of the metals are completed during this term.

Text: *A. A. Noyes'* "Qualitative Analysis."

Chem. 10. **Qualitative Analysis.**

Professor Emerson and Mr. Woodward.

Prerequisites, Chem. 9.

Sophomore, second term, time same as Chem. 9.

A continuation of Chem. 9, completing the study of the metallic ions.

Chem. 13. **Qualitative Analysis.**

Professor Boggs.

Prerequisites, Chem. 1, 2, 5 and 6.

Sophomore, first term, eleven hours laboratory; one hour lecture.

This course includes laboratory work, lectures and quizzes, and is required of all students specializing in Chemistry. The lectures deal with the "Mass Law," complexions, solubility product, and other theoretical matters bearing on the work, as well as the methods of procedure, and the precautions necessary to secure good results. Frequent quizzes are given upon these lectures and upon the laboratory work.

Text: *A. A. Noyes'* "Qualitative Analysis."

References: Such texts as *Treadwell, Böttger,* and *Talbot and Blanchard.* The work of this term includes the separation of the metallic elements. Enough mixtures of known and unknown composition are given to ground the students thoroughly in the methods used.

Chem. 14. **Qualitative Analysis.**

Professor Boggs.

Prerequisite, Chem. 13.

Sophomore, second term, three hours laboratory, one hour lecture.

This course is a continuation of Chem. 13, and is conducted in a similar manner. The reactions and identifications of the more common anions are studied, and a number of unknown mixtures and minerals are given for complete analysis.

Chem. 16 and 16a. **Quantitative Analysis.**

Professor Daniel.

Prerequisites, Chem. 13; Chem. 14, completed or parallel.

Chem. 16. Sophomore, second term, Chemists, eleven hours laboratory; one hour lecture.

Chem. 16a. Sophomore, second term, Engineering Chemists, seven hours laboratory; one hour lecture.

These courses are an introduction to the general methods of gravimetric analysis. The work consists chiefly in laboratory practice and includes a thorough drill in stoichiometry. Conferences and oral quizzes are given on each exercise, and supplement the laboratory work. Numerous references to the literature of the processes are assigned and recited on. The standard of accuracy is raised as the student becomes more proficient; duplicate analyses are required throughout, thus inducing the student to test his own work as to accuracy and reliability. The required work includes the estimation of water and chlorine, in pure salts; sulphur in pyrite; and the complete analyses of limestone, brass and solder; and fat in cotton seed meal, and caffeine in tea.

Texts: *Blasdale* and references.

Chem. 17. **Quantitative Analysis.**

Professor Daniel.

Prerequisites, Chem. 16.

Junior, first term, twelve hours laboratory, and two hours lecture.

This course is a continuation of Chem. 16 and 16a. As in all other quantitative work, duplicate analyses are required. Conferences, quizzes and problems are continued. The required work includes the calibration of a set of weights and several pieces of volumetric apparaatus; the principles of acidimetry, alkalimetry, chlorimetry, iodimetry and their practical applications; the determination of the oxidizing power of pyrolusite; volumetric estimation of iron in ores; and the gravimetric estimation of manganese in ores or alloys.

Texts: *Blasdale, Lord,* and references.

Chem. 18 and 18a. **Quantitative Analysis.**

Professor Daniel.

Prerequisite, Chem. 17.

Chem. 18. Junior, second term, Chemists, sixteen hours.

Chem. 18a. Junior, second term, Engineering Chemists, twelve hours.

These courses are continuation of Chem. 17, and are required of all students of Chemistry. The laboratory work includes the complete analysis of a silicate; water analysis; and the qualitative and quantitative analysis of an unknown sample.

Chem. 19 and 19a. **Quantitative Analysis.**

Professor Emerson.

Prerequisite, Chem. 18.

Chem. 19. Senior, first term, Chemists, twelve hours.

Chem. 19a. Senior, first term, Engineering Chemists, sixteen hours.

These courses include the analysis of fertilizers, iron, steel and coal. In the analysis of fertilizers, the methods recommended by the Association of Official Agricultural Chemists are used, and determinations of moisture, phosphoric acid, potash and nitrogen are made. Methods from various sources are used in the analysis of iron and steel, determinations of sulphur, phosphorous, carbon, silicon and manganese being made. The student makes ultimate and proximate analyses of coal, and the heat of combustion is calculated.

Chem. 21. **Organic Chemistry.**

Professor Hughes.

Prerequisites, Chem. 1, 2, 5 and 6.

Parallel, Chem. 23.

Junior, first term, three hours.

The ground covered in this course includes the paraffin hydrocarbons and their derivatives, mixed compounds derived from paraffins, and the carbohydrates.

Text: *Norris'* "Principles of Organic Chemistry."

Chem. 22. **Organic Chemistry.**

Professor Hughes.

Prerequisites, Chem. 21 and 23.

Parallel, Chem. 24.

Junior, second term, three hours.

It includes the mixed compounds containing nitrogen, phosphorus, arsenic and sulphur, the purine groups and the cyclic hydrocarbons and their derivatives.

Text: As for Chem. 21.

Chem. 23. **Organic Laboratory.**

Professor Hughes.

Prerequisites, as for Chem. 21.

Junior, first term, four hours.

In this course the student becomes acquainted with the apparatus used in organic work, and with such operations as fractional distillation, saponification, steam distillation, and the determination of melting and boiling points. Twelve or fifteen typical substances, such as ether, chloroform and iodoform, are prepared.

Text: *Norris'* "Experimental Organic Chemistry."

Chem. 24. **Organic Laboratory.**

Professor Hughes.

Prerequisites, Chem. 21 and 23.

Junior, second term, four hours.

This course is a continuation of Chem. 23. The student carries out such processes as nitration, sulphonation and diazotization, and prepares twelve or fifteen compounds of typical kinds.

Text: Same as for Chem. 23.

Chem. 26. **Advanced Qualitative Analysis.**

Professor Emerson.

Prerequisites, Chem. 13 and 14.

Three hours per week, second term, to Junior Chemists and Senior Engineering Chemists.

Discussions of the theories and practice of Qualitative Analysis, based upon the principles of Physical Chemistry.

Text: *Stieglitz's* Qualitative Analysis.

Chem. 29. **Advanced Inorganic Chemistry.**

Professor Boggs.

Prerequisites, Chem. 1, 2, 5, and 6.

Senior, first term, four hours.

Required of Chemists and Engineering Chemists. This course consists in systematic study of the metals and non-metals, based on Mendeleeff's classification, and includes the chemistry of some of the rarer elements. While the course is largely descriptive, considerable time is devoted to modern theories.

Text: *Smith's* "Inorganic Chemistry."

Chem. 33. **Physical Chemistry.**

Professor Hughes.

Prerequisites, Chem. 1, 2, 5, 6, and Phys. 9, 10, 11.

Senior, first term, two hours.

This subject is given to Seniors in both courses in Chemistry. It includes a study of the modern theories of structure of atom and molecule, the physical states of matter, and solution.

Text: *Morgan's* "Elements of Physical Chemistry."

Chem. 34. **Physical Chemistry.**

Professor Hughes.

Prerequisite, Chem. 33.

Senior, second term, three hours.

A continuation of Chem. 33. Thermochemistry, Chemical Dynamics and Equilibrium, and Electrochemistry are the divisions studied. Some applications of physical chemical data to commercial problems, particularly those of Electrochemistry, are discussed in the latter part of the course.

Text: Same as for Chem. 33.

Chem. 37. **Industrial Chemistry.**

Professor Daniel.

Prerequisites, Chem. 21, 22.

Senior, first term, two hours.

Attention is given to the general operations common

to many industries, such as crushing, grinding, lixiviation, filtration, evaporation, crystallization, and the details of the various types of apparatus for carrying on these processes. The most important manufacturing industries, such as the production of alkali, sulphuric acid, fertilizers, glass pigments, cement, oils, fats, soap, and glycerine, as well as paper and wood distillation are considered in detail. Weekly reports are submitted by members of the class reviewing journal articles pertaining to industrial chemical processes. Monthly and term papers are assigned to each student in which is discussed in some detail a particular process or the utilization of a special material.

Text: *Rogers and Aubert's* "Industrial Chemistry."

Chem. 38. **Industrial Chemistry.**

Professor Daniel.

Prerequisites, Chem. 21, 22, 37.

Senior, second term, two hours.

This course is a continuation of Chem. 37. Other industrial processes are studied and discussed and the reports and papers are continued.

Text: *Rogers and Aubert's* "Industrial Chemistry."

Chem. 42. **Thesis.**

Prerequisites, all courses below the Senior year.

Senior, second term.

In the latter part of the Senior year, the student prepares a thesis requiring original work. The subject for investigation is usually selected by one of the instructors in the department, who also supervises the work.

DEPARTMENT OF CIVIL ENGINEERING

PROFESSOR BRANCH, PROFESSOR KNEALE, PROFESSOR KELL, MR. HALSEY, AND MR. HOMMON.

General Statement

The instruction in the Department of Civil Engineering is by recitation, lecture, drawing room and laboratory work, and field practice, made to conform as nearly as possible to the general routine of work in current engineering practice and still remain general in its scope.

The young graduate in Civil Engineering should have a broad education based upon Mathematics, Mechanics, Chemistry and Physics, the fundamental sciences of Engineering. He is expected to be expert only to the extent that he be a good surveyor, a neat draftsman and an *accurate* and *systematic* computer. These are the agencies through which his knowledge of the sciences is applied, and his success in any one of the specialties of the profession will depend largely upon his ability to make this practical application.

His general training should be such as to enable him to express his thoughts clearly and forcibly in good, concise English.

With this in view, the two courses in Civil Engineering have been outlined. They are identical to the end of the second year, and essentially the same throughout. The study of English is continued through the first three years, and a two-year course in one modern language is required. From the beginning the student is taught thoroughness in all office, laboratory, and field work; and, placed in the proper atmosphere, he is led by recitations, lectures and the use of current engineering literature to discriminate between methods, while the importance of efficiency and results is held constantly before his mind.

The general course is so outlined as to fit the student to be of immediate value in practically all of the subordinate positions of the profession and to bring him to a point where he may be able to continue his studies professionally and develop in any particular field which he may choose. Special

attention is given to Railroad Engineering and the design of structures in steel and concrete.

The demand of recent years for better highways has broadened the field of Municipal or Highway Engineer until it has assumed such proportions that the Highway Engineer has become a paramount public official, with a broad experience in business methods and a thorough training in Civil Engineering. His knowledge of modern road materials must be certain, necessitating a special preparation in Geology, Mineralogy and Chemistry. In the course in Highway Engineering these subjects are given special attention, and ample study of modern methods of highway construction and maintenance is provided for throughout the Junior and Senior years.

There is a great demand on the part of cities for men trained in the handling of water and sewerage purification plants, as well as general municipal work. The preservation of the health of communities is constantly calling for more intense specialization in that branch of civil engineering known as Sanitary Engineering, and to meet this need Georgia Tech has added a newly equipped laboratory for the study of purification methods and bacterial analyses in supplying communities with pure air and water and for disposing of municipal wastes.

Special Highway Course

A three days' course in advanced highway engineering is given during the last week in January. This work is offered for the benefit of practicing engineers and special information will be sent on request.

Equipment

The aim of the Department is to keep up the equipment to meet the needs of the classes, to add such instruments as are required, and to replace the worn-out models by newer ones, rather than to acquire a large and not fully needed equipment. This process has been worked out so completely that our instruments are all new and of the latest models.

The Course in Civil Engineering

FRESHMAN YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Chem. 1	Inorganic Chemistry	3		7.5
Chem. 5	Chemical Laboratory		2	2.
Draw. 1	Free Hand Drawing		4	4.
Eng. 11	Rhetoric	3		7.5
Eng. 15	Theme Writing and Declamations	1		1.
Math. 11	Algebra	2		5.
Math. 15	Trigonometry	3		7.5
M. E. 3b	Wood Shop		4	4.
M. E. 5	Smithy		4	4.
M. E. 7	Foundry		4	4.
Gym. 1	Physical Culture		2	2.
	Total..	12	20	48.5

Second Term

Chem. 2	Inorganic Chemistry	3		7.5
Chem. 6	Chemical Laboratory		2	2.
C. E. 1a	Plane Surveying	1	3	5.5
Draw. 2	Descriptive Geometry	3		7.5
Draw. 4	Descriptive Geometry Drawing		3	3.
Eng. 12	Rhetoric	3		7.5
Eng. 16	Theme Writing and Declamations	1		1.
Math. 18	Analytic Geometry	5		12.5
M. E. 12	Machine Shop		4	4.
Gym. 2	Physical Culture		2	2.
	Total..	16	14	52.5

SOPHOMORE YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Chem. 9	Qualitative Analysis		4	4.5
C. E. 3	Topographical and City Surveying and Mapping	1	6	8.5
Draw. 11	Shades, Shadows and Perspective		4	4.
Eng. 21	American Literature }	3		7.5
Eng. 27	Parallel Reading }			
Geol. 1	Ferrous Metallurgy	2		5.
Math. 21	Analytic Geometry	2		5.
Math. 25	Calculus	3		7.5
Phys. 9	Physics	4		10.
	Total..	15	14	52.

Second Term

Chem. 10	Qualitative Analysis		4	4.5
C. E. 4	Road and Railroad Surveying	1	4	6.5
Eng. 24	Political Economy }	3		7.5
Eng. 28	Parallel Reading }			
Geol. 10	Geology	3		7.5
Math. 26	Calculus	5		12.5
Phys. 10	Physics	4		10.
Phys. 14	Physics Laboratory		4	5.
Phys. 20	Slide Rule		.5	.5
	Total..	16	12.5	54.

Municipal and Highway Engineering

JUNIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
Chem. 21	Organic Chemistry	3		7.5
Chem. 23	Organic Laboratory		4	4.
C. E. 7	Sanitary Engineering	3		7.5
Eng. 31	English Literature }	3		7.5
Eng. 35	Literary Thesis }			
Math. 35	Differential Equations	3		7.5
M. L. 1	German }			
M. L. 7	French } One Required	3		7.5
M. L. 13	Spanish }			
Phys. 11	Physics	3		7.5
Phys. 15	Physics Laboratory		4	5.
	Total..	16	8	54.0

Second Term

Chem. 22	Organic Chemistry	3		7.5
Chem. 24	Organic Laboratory		4	4.
C. E. 8	Sanitary Engineering		4	4.
C. E. 22	Highway Engineering	2	4	9.
Eng. 32	English Literature }	3		7.5
Eng. 36	Literary Thesis }			
Exp. E. 1a	Analytic Mechanics	3		7.5
M. E. 28	Mechanics of Materials	3		7.5
M. L. 2	French }			
M. L. 8	German } One Required	3		7.5
M. L. 14	Spanish }			
	Total..	17	12	54.5

SENIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
C. E. 15	Hydraulics	3		7.5
C. E. 41	Framed Structures	3		7.5
C. E. 45	Sewerage and Water Supply	3		7.5
C. E. 47b	Reinforced Concrete	1	3	5.5
C. E. 41b	Truss Analysis		4	4.
Com. 1	Business Organization & Managem't		1	1.
Exp. E. 76b	Thermodynamics	3		7.5
Exp. E. 71a	Steam Engine Laboratory		4	4.
M. E. 31	Mechanics of Materials	2		5.
M. L. 3	German }			
M. L. 9	French } One Required	3		6.
M. L. 15	Spanish }			
	Total..	18	12	55.5

Second Term

C. E. 42	Framed Structures	3		7.5
C. E. 41a	Design of Highway Bridges		4	4.
C. E. 52	Highway Engineering	2	6	11.0
C. E. 48	Concrete Structures		4	5.
C. E. 20	Masonry Construction	3		7.5
Com. 2	Commercial Law		1	1.
E. E. 1a	Dynamos and Motors	2		5.
E. E. 3a	Electrical Laboratory		3	3.
Exp. E. 52a	Materials and Cement Laboratory		4	4.
M. L. 4	German }			
M. L. 10	French } One Required	3		6.
M. L. 16	Spanish }			
	Thesis			5.
	Total..	13	22	57.

Municipal, Railroad, and Structural Engineering

JUNIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
C. E. 11	Railroad Economics	2	3	8.
C. E. 15	Hydraulics	3		7.5
Eng. 31	English Literature	3		7.5
Eng. 35	Literary Thesis			
Exp. E. 41	Hydraulic Laboratory		4	4.
Math. 35	Differential Equations	3		7.5
M. L. 1	German }			
M. L. 7	French } One Required	3		7.5
M L. 13	Spanish }			
Phys. 11	Physics	3		7.5
Phys. 15	Physics Laboratory		4	5.
	Total..	17	11	54.5

Second Term

Arch. 22	Elementary Design		3	3.
C. E. 20	Masonry Construction	2		5.
C. E. 18	Geodesy	2	3	8.5
Eng. 32	English Literature }	3		7.5
Eng. 36	Literary Thesis }			
Exp. E. 1a	Analytic Mechanics	3		7.5
Exp. E. 52a	Materials and Cement Laboratory		4	4.
M. E. 28	Mechanics of Materials	3		7.5
M. L. 2	German }			
M. L. 8	French } One Required	3		7.5
M. L. 14	Spanish }			
	Total..	16	10	50.5

SENIOR YEAR

First Term

Abbrev	Subject	Hrs. Per W'k Class	Lab'y	Equiv.
C. E. 41	Framed Structures	3		7.5
C. E. 45	Water supply and Sewerage	3		7.5
C. E. 47a	Concrete, Plain and Reinforced	2	6	11.
C. E. 41b	Truss Analysis		4	4.
Com. 1	Business Organization & Managem't		1	1.
Exp. E. 76b	Thermodynamics	3		7.5
Exp. E. 71a	Steam Engine Laboratory		4	4.
M. E. 31	Mechanics of Materials	2		5.
M. L. 3	German }			
M. L. 9	French } One Required	3		6.
M. L. 15	Spanish }			
	Total..	16	15	53.5

Second Term

C. E. 42	Framed Structures	5		12.5
C. E. 48	Design of Higher Structures in Concrete		8	9.
C. E. 42b	Structural Detailing		8	8.
Com. 2	Commercial Law		1	1.
E. E. 1a	Dynamos and Motors	2		5.
E. E. 3a	Electrical Laboratory		3	3.
M. L. 4	German }			
M. L. 10	French } One Required	3		6.
M. L. 16	Spanish }			
	Thesis			8.
	Total..	10	20	52.5

Civil Engineering

C. E. 1 and 1a. **Plane Surveying.**

Professor Kell and Mr. Halsey.

Prerequisites, Math. 11 and 15.

Freshmen C. E. and Sophomore E. E. and M. E., first or second term, one hour lecture and three hours practice.

The construction, care, and adjustment of instruments commonly used in surveying; their use in traversing, land surveying, and differential and profile leveling; computation of areas, parting off land and the reduction and plotting of field notes.

A traverse enclosing about thirty acres is run usually in a semi-developed section of the city, the details tied in and a plot made by each student.

Texts: *Merriam & Brooks'* "Hand Book for Surveyors," and *Breed and Hosmer's* "Principles and Practice of Plane Surveying," Part I, for C. E.

C. E. 3. **Topographic and City Surveying and Mapping.**

Professor Kell and Professor Branch.

Prerequisite, C. E. 1.

Sophomore C. E., first term, one hour recitation and six hours practice.

A continuation of C. E. 1, including the theory of the Stadia and the Plane Table and their application in topographic surveying; city and mine surveying, and the U. S. Government system of laying out public lands; the general system of filing and recording deeds in the State of Georgia; plotting, finishing and filing maps; conventional topographic signs and symbols in ink and water color.

A topographic survey is made of a section of the city—usually a park—selected so as to offer as great diversion as possible and to exemplify all of the various methods of horizontal and vertical control and to afford practice in sketching contours, water lining, etc. The field notes are plotted up and a complete map of the section made by each member of the class.

Text: *Breed and Hosmer's* "Principles and Practice of surveying." Part I.

C. E. 4. **Road and Railroad Surveying.**

Professor Kneale.

Prerequisite, C. E. 3.

Sophomore C. E., second term, one hour recitation and three hours practice.

Reconnaissance and preliminary surveys; simple, compound, and reverse curves; the American Railway Spiral, with a discussion of various other forms of easement curves; right of way description; location earth-work computations, haul and the Mass Diagram.

Problems so designed as to illustrate principles, as well as involve individual thinking in their solution, are given throughout the course. Those involving curves and best adapted for the purpose, are "run in" in the field. Checks on all computations and field work are required. Practice is also obtained in cross sectioning and setting slope-stakes.

Text: *Allen's* "Railroad Curves and Earthwork, with Tables."

C. E. 7. **Sanitary Engineering.**

Mr. Hommon.

Prerequisite, Chem. 2-6 and 10.

Junior C. E., first term, three hours lecture.

Sewerage Treatment and Water Purification with the resume of the most recent work being done along this line; the underlying principles of sewerage treatment; a discussion of the different types of sewerage treatment devices, and the importance of careful and intelligent supervision of sewage treatment and water works.

C. E. 8. **Sanitary Engineering.**

Mr. Hommon.

Prerequisite, C. E. 7.

Junior C. E., second term, four hours laboratory.

A continuation of Sanitary Engineering Course C. E. 7, comprising a thorough Laboratory Course in General Bacteriology and taking up for study the bacteria that are most commonly found in sewage, water and milk.

There are several sewage treatment works and water

purification plants within the immediate vicinity of the school and these will be visited as often as possible for practical demonstrations.

C. E. 11. **Railroad Economics and Construction.**

Professor Branch and Professor Kneale.

Prerequisite, C. E. 4.

Junior C. E., second term, three hours of research work or office work.

Organization, capitalization, stocks and bonds: The duties of the engineer: The permanent way, rails and rail fastenings, cross-ties, ballast and the road-bed, drainage, turnouts, frogs and switches, yard design; signaling: The locomotive and its work; locomotive types, train resistance, train speeds, tractive effort, locomotive and grade problems: Train movement and operating expenses and relation to grades, distance, curvature, etc.

Text: *Raymond's* "Railroad Engineering, Part II."

References to be consulted: *Wellington's* "Economic Theory of Railway Location"; *Tratman's* "Track and Track-work"; *Beahan's* "Field Practice of Railway Location"; *Lavis's* "Railway Location, Surveys and Estimates"; *Goss's* "Locomotive Performance"; *Henderson's* "Locomotive Operation," etc., etc.

C. E. 13. **Graphical Analysis of Roof Trusses.**

Professor Branch.

Prerequisite, Phys. 2.

Junior and Special Arch, first term, four hours, lectures or drawing.

A course in the design of simple roof trusses, including the application of the force and equilibrium polygons and the Maxwell diagrams in the determination of stresses due to dead load, wind and snow loads, etc. The design of a roof truss, wood and steel is given in alternate years.

Text: "Design of Simple Roof-Trusses in Wood and Steel," *Howe.*

C. E. 15 and 15a. **Hydraulics.**

Professor Kneale.

Prerequisites, Phys. 9, 10, 14 and 20, Math. 26.

C. E. 15, Junior C. E., first term, three lectures with problems.

C. E. 15a, Junior M. E. and Senior E. E., second term, three lectures with problems.

Hydrostatics, including a brief review of dimensional equations in effort to show the relation of this subject to mechanics. Application of the principles of hydrostatics to structures commonly met with in design. Theoretical hydraulics; energy, head, *Torcelli's* Theorem, *Bernouli's* Theorem. Discharge through orifices, short and long tubes and pipes. Instruments of measurement; pitot tubes, venturi meter, current meter, etc. Weirs, rational formula and *Francis's* formula, etc. Loss of head or energy in orifices, including co-efficients of discharge, velocity and contraction; loss of head in long and short tubes and pipes; hydraulic gradient. Flow in open channels; *Kutter's* formula, *Cheezy's* and *Bazin's* formulas; cross-sections for maximum efficiency, as used in flumes already constructed. Steam gauging; rainfall, run-off, water-shed, storage and evaporation, float and current meter measurements, velocity and discharge curves, etc. Hydraulic motors, including over-shot, high breast, and low breast wheels; impulse and reaction turbines, inward and outward flow turbines, and mixed flow turbines.

References: *Hughes and Safford's* "Hydraulics," *Merriman's* "Treatise on Hydraulics."

C. E. 18. **Geodesy.**

Professor Branch.

Prerequisite, C. E. 4.

Junior C. E., second term, two lectures and three hours practice.

Theory of errors and methods of Least Squares (brief): Precise plane triangulation, base lines, etc.; Barometric, trigonometric and precise spirit leveling: A study of the Celestial Sphere, and the various systems of co-ordinates; observations for latitude, longitude, time and the meridian by various methods; numerous prob-

lems involving the reduction of the above observations: Hydrographic surveying.

The field practice in plane triangulation is run in connection with C. E. 4.

Text: *Merriman's* "Precise Surveying and Geodesy."

Reference: *Hosmer's* "A Text Book on Practical Astronomy."

C. E. 20. **Masonry Construction, Foundations and Retaining Walls.**

Professor Kneale.

Prerequisites or parellel, M. E. 28.

Junior or Senior C. E., second term, two hours lectures.

A study of the materials commonly used in masonry structures, including the manufacture of brick, lime and cement, the properties of sand, gravel and broken stone. Plain concrete; proportions, strength, elasticity, methods of proportioning, etc. Mixing and placing concrete and the construction and cost of forms. Brick Masonry, cost and data for estimates. Masonry structures: *Rankin's* Theory of Earth Pressure, active and passive stresses in granular masses. Ordinary foundations, pile foundations, foundations under water, including coffer-dam, crib and pneumatic caisson processes: Foundations under eccentric or moving loads. The design of high masonry and hollow dams with special reference to the distribution of pressure on the base; the design of retaining walls, piers and abutments. Vouissoir or masonry arches.

Numerous problems are given in design of structures throughout the course.

Texts: *Baker's* "Masonry Construction" and *Howe's* "Retaining Walls for Earth."

C. E. 22. **Highway Engineering.**

Professor Kneale.

Prerequisite, C. E. 5.

Parallel, Ex. E. 1a.

Junior C. E., second term, two lectures, four hours laboratory.

This course includes the historic, economic, and structural phases of highway engineering. Especial emphasis

is placed on traffic census, traffic development and traffic classification as related to type of highway; to plotting, mapping, paper location, and final field location from reconnaissance and location surveys; to soil classification and use in construction and maintenance; to selection and construction of type of road to give the maximum service at a minimum cost; to effect of traffic on permanence of wearing surface; to preserving surfaces through artificial binders; and to road machinery. The laboratory work will include a study of road materials, with especial emphasis upon the testing of stone, clay, brick, concrete, etc., together with a study of road surfaces and specifications by the aid of the viagraph.

Text: *Blanchard & Drowne's* "A Textbook on Highway Engineering."

C. E. 41. **Framed Structures.**

Professor Branch.

Prerequisites, Ex. E. 1a and M. E. 28.

Parallel, M. E. 31 and C. E. 41b.

Senior C. E., first term, three lecture hours.

A course in which is grouped the analytical and graphical determinations of stresses in framed structures. The subjects studied are girders, roof and bridge trusses of varied types, wood and steel trestles, towers, tanks, etc.

The work includes the use of uniform and concentrated loads, snow and wind loads, and moving loads with their impact contribution to the stresses, maximum and minimum stresses, with their requirements for reversals and counters. Each student computes the stresses from given loadings for a plate girder, roof truss, and a Pratt truss, which are used in C. E. 42.

Text: *Johnson's* "Modern Framed Structures."

C. E. 41b. **Truss Analysis.**

Professor Branch.

Prerequisite, Ex. E 1a.

Parallel, C. E. 41.

Senior C. E., first term.

Four drawing hours per week, mainly devoted to graphic determination of stresses in trusses, etc.

C. E. 42. **Framed Structures.**

Professor Branch.

Prerequisite, C. E. 41.
Parallel, C. E. 42b.
Senior C. E., second term, three lecture hours.

A course consisting of the computations for the design and detailing of a roof truss, a plate girder and a Pratt truss, with determination of pin sizes, pin plates, camber diagrams, etc. Bills of material are made to accompany the shop drawings. Detail plans of similar structures and of tanks, tower, trestle and steel buildings are studied in and out of class. The course closes with a study of structural erection.

C. E. 42b. **Design of Structures.**

Professor Branch and Professor Kneale.

Prerequisite, C. E. 41b.
Parallel, C. E. 42.
Senior C. E. second term, eight hours.

Drawing room work. Library research and visits to existing plants and structures.

C. E. 45. **Sewerage and Water Supply.**

Professor Branch.

Prerequisite, C. E. 15.
Senior C. E., first term, three lecture hours.

A study of the theory of sewerage systems, their construction and maintenance. Sewer out-falls, and methods of disposal and treatment. Dilution, precipitation, irrigation, natural and artificial filter, filtration processes, contact beds, septic tanks and contact and sprinkling filters.

Text: *Folwell's* "Sewerage and Water Supply," and lectures.

C. E. 47. **Reinforced Concrete.**

Professor Kneale.

Prerequisites, C. E. 20, Ex. E. 52a, M. E. 28.
C. E. 47a.

Senior C. E., first term, two hours recitation and six hours office.

Construction of shear and moment diagrams under intricate loading and practical application in reinforced concrete design; *Clapeyron's* Theorem and the continuous girder: vertical and horizontal shear and diagonal tension. The Straight Line flexure formulas with a discussion of the parabolic formula and other formulas. The construction of diagrams and their use in the solution of the formulas. The design of slabs, T-beams, girders and columns. One hour per week for first half term and three hours per week for the term are given to the design of a reinforced concrete arch. Three hours per week for one term are devoted to the design of small T-beam and girder bridges.

C. E. 47b.
Senior C. E., first term, one hour recitation and three hours office.

Same as C. E. 47a, except for the design of elastic arch. Both courses are run as one.

Texts: *Hool's* "Reinforced Concrete Construction," Vol. 1 and 2.

C. E. 48. **Design of Higher Structures in Concrete.**

Professor Branch or Professor Kneale.

Senior C. E., second term, eight hours Structural course, four hours Highway course.

A continuation of C. E. 47, devoted mainly to the design of special structures, high office buildings, etc. The students are divided into groups of two each, and each group given a special problem. While each student is placed very largely on his own resources and given access to the blue print files, etc., he is carefully watched and guided by his instructor to prevent him from arriving at absurdities.

C. E. 52. **Highway Engineering.**

Professor Kneale.

Prerequisite, M. E. 31.
Senior C. E., second term, two lectures and six hours laboratory.

This course is a continuation of C. E. 22. It includes the design of highway structures; the laboratory analysis of artificial road binders; the maintenance of various types of pavements; road law; road specifications, and contracts; bond issues and other methods of financing; also a study of foreign highway practice, and road systems.

Text same as in C. E. 22, together with bulletins of Office of Public Roads, state highway departments, etc., and current road literature.

THE CO-OPERATIVE COURSES

The plan of the co-operative course, as now in successful operation, in the Georgia School of Technology, is briefly as follows:

To enter, the student must have completed his freshman year in the regular course and shown that he is capable of making good both in the shop and in the school work. Those selected for the course are sent out as early as possible in the summer into the shops, foundries, and factories of the city to work as helpers in the various trades.

In the fall the class is divided into two sections. Each man in Section 1 has an alternate in Section 2. Section 1 first reports at school for two weeks instruction, while Section 2 is at work in the shops. At the end of the two weeks Section 1 goes to the shops and Section 2 reports for two weeks of school work. This alternation is continued throughout the last four years of the course. Two weeks of vacation are given each section, each fall, but this does not interfere with the continuity of the shop work, as the vacation time is taken out of the regular school periods. In this way the full engineering course leading to a degree is given. Nothing is omitted, and nothing is abridged.

The student is paid at a rate of from 10c an hour up for his shop work, and, while it is not the chief aim to furnish a means whereby a young man can earn a part of his expenses, yet this is a very valuable feature of the course.

The real aim in having the student do so large an

amount of shop work under commercial conditions is, that he may learn to co-ordinate theory and practice, and, what is even more important, that he may learn to know the working man so that he may later deal with him intelligently and sympathetically. A special department of co-ordination takes care of the outside work and its relation to theory, and every effort is made to encourage the student to get the most possible out of his practical work.

This department also makes a careful study of the student's aptitudes by noting how he "takes to" each part of each job; and, by analyzing his successes and failures, an attempt is made to form a scientific basis for advice given as to the field of endeavor in which the young graduate will most probably meet with success.

The co-operative courses are given at present only in Mechanical and Electrical Engineering. The school work given the "Co-ops" is the same as that given the regular students, omitting, of course, the school shop work. See pages 90 and 118 for outlines of the courses.

DEPARTMENT OF DRAWING

PROFESSOR LOWNDES, PROFESSOR GRUEN, AND PROFESSOR WEISS.

General Statement

The aim of this department is to give the student a thorough grounding in the principles of drawing as used in the engineering world; to teach him the best draughtsman's methods of representing machinery and machine parts, together with the use of the customarily accepted conventions; and also to enable him to acquire that technique which makes possible neatness and accuracy without any sacrifice of time. Neatness in lettering is always stressed. The instruction in this department is by lecture, followed up by individual instruction, the instructors constantly passing from desk to desk and discussing with the students the work in hand.

Equipment

The Drawing Hall occupies the entire top floor of the Electrical Building. On this floor are three class-rooms, a blue print room, the drawing hall, and office. The hall

is a spacious room, being some 60 by 90 feet, with windows on three sides and three skylights above, so that the light is most perfectly distributed. There are at present 124 individual desks, with rooms for some 20 more, which will soon be put in place. There are 11 drawing board cases, holding 40 boards each, a total of 440 boards.

Besides this, there are numbers of minor articles of equipment in daily use, such as special draughting instruments, odontographs, sets of tables, models of machine parts, books, and a cabinet of drawings, obtained from representative manufacturers.

Between each two windows, around three sides of the hall, is placed a glass covered bulletin board. On these boards are mounted such drawing as from time to time serve to illustrate such work as the student may have in hand.

Tabulation of Subjects Taught in Drawing Department

There are no degrees offered in this department. The work here being necessarily subordinate to the Senior work in the different engineering courses, is outlined with special reference to the course the individual student intends to pursue.

FRESHMAN YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Drawing 1	Freehand Drawing (All but Arch.) (Arch. and Co-op.)	3	3	3.
Drawing 2a	Descriptive Geometry Recitations	3		7.5
Drawing 4a	Descriptive Geometry Drawing		3	3.
	Second Term			
	(Chem. E. Ch. C. E., E. E. M. E.)			
Drawing 2	Descriptive Geometry Recitations	3		7.5
Drawing 4	Descriptive Geometry Drawing		3	3.
Drawing 6	Mechanical Drawing (T. E. only)		6	6.

SOPHOMORE YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Drawing 11	(C. E., E. E., M. E., T. E) Shades, Shadows, and Perspective		4	4.
Drawing 14a	Machine Drawing, (Chem. and E. Ch.)		4	4.
	Second Term			
Drawing 14	Machine Drawing (E. E., M. E., T. E.)		4	4.
Draw. 21a	Machine Drawing (E. Ch.)		4	4.

JUNIOR YEAR

(E. E., M. E., T. E.)

First Term

Abbrev.	Subject	Class Hrs.Per W'k	Lab'y	Equ'v
Drawing 21	Machine Drawing		4	4.
Drawing 23	Kinematics or Mechanism	4		10.
	Second Term			
Drawing 22	Elementary Machine Design		4	4.

Courses of Instruction

Drawing 1. **Free Hand Drawing.**

Porfessor Lowndes, Professor Gruen, and Professor Weiss.

Freshman, first term, three hours.

The object of this course is to teach correct forms and give students considerable practice in plain freehand lettering. In addition to the work in lettering a number of plates of geometric figures are drawn. This drawing gives a student skill in the use of a pencil, stimulates his sense of proportion, and teaches him a close observation of detail. All work is strictly freehand, no other instrument than a pencil being used.

Drawing 2a and 2. **Descriptive Geometry.**

Professor Lowndes, Professor Gruen, and Professor Weiss.

Drawing 2a. Freshmen in Arch. and Co-op., first term, three hours.

Drawing 2. Freshmen in Chem., E. Ch., E. E., C. E., and M. E., second term, three hours.

This work is carried on both from a text book and from notes and lectures. The subject is presented in such a way as to enable the student to make use of it in the practical solution of problems in drawing and to give the Architectural students, especially, a familiarity with conventional shades and shadows.

Text: *Faunce's* "Descriptive Geometry."

Drawing 4a and 4. **Descriptive Geometry Drawing.**

Professor Lowndes, Professor Gruen, and Professor Weiss.

Drawing 4a. Freshmen in Arch., first term, three hours.

Drawing 4. Freshmen in Chem., E. Ch., E. E., C. E., and M. E., second term, three hours.

This course is devoted to the solution of problems on the drawing board. The course is so arranged as to be parallel with the recitation work, and the problems are drawn from notes. There are no partly finished drawings furnished the students. Most of the work is done in the first and third angles, and the profile plane is freely used.

Drawing 6. **Elementary Mechanical Drawing.**

Professor Lowndes, Professor Gruen, and Professor Weiss.

Freshmen in T. E., second term, six hours.

In this course practically the same object is attained as in Course D. 4. Here the student is taught the use of the three standard projections, (elevation, plan and profile), together with the use of these in solving graphical problems involving three dimensions. He is also taught the use of the Isometric and other pseudo perspectives; and it is through their medium that he is introduced to the three co-ordinate planes of orthographic projections.

Drawing 11. **Shades, Shadows and Perspective.**

Professor Lowndes, Professor Gruen, and Profesor Weiss.

Sophomores in C. E., E. E., M. E., and T. E., first term, four hours.

To this course are devoted four hours per week of drawing practice. The subject is taught entirely from notes and lectures. The students are required to take their own notes from which their drawings are made and their problems solved.

The intent of the course is to teach the principles of perspective, as well as to give the students this ready means for presenting proposed undertakings.

Drawing 14a and 14. **Machine Drawing to Scale.**

Professor Lowndes, Professor Gruen, and Professor Weiss.

Drawing 14a. Sophomores in Chem. and E. Ch., first term, four hours.

Drawing 14. Sophomores in E. Ch., E. E., M. E., and T. E., second term, four hours.

In this course the student is taught the correct methods of making working drawings of machinery and machine parts, both assembled and detailed. All dimensions are given and carefully checked over, so that the student is made to appreciate the methods in common practice in the modern manufacturing shops.

In addition to the text book, he uses certain special drawings and notes, and during this course is taught the blue print process.

Text: *Anthony's "Machine Drawing."*

Drawing 21 and 21a. **Machine Drawing to Scale.**

Professor Lowndes, Professor Gruen, and Professor Weiss.

Drawing 21, Juniors in E. E., M. E., and T. E., first term, four hours.

Drawing 21a, Sophomores in E. Ch., second term, four hours.

A continuation of Drawing 14.

Drawing 22. **Elementary Machine Design.**

Profesor Lowndes, Professor Gruen and Professor Weiss. L

Prerequisite, Dr. 23.

Juniors in E. E., M. E., and T. E., second term, four hours.

This course is an application of the principles of mechanism to the laying out of spur and bevel gears of cycloidal and involute types, as well as types of approximate tooth outlines; and the laying out of cams of various kinds and helical gears; and the drawing of velocity acceleration, rotative, effort, defection and other curves.

Drawing 23. **Kinematics or Mechanism.**

Professor Lowndes, Professor Gruen, and Professor Weiss.

Prerequisites, Math. 21 and Math. 25.

Juniors in E. E., M. E., and T. E., first term, four hours.

The principal aim of this study is to teach the student correct methods of analyzing machinery and machine motions, and to give him certain of the well-founded principles upon which certain classes of machinery are constructed. It teaches him the application of mathematics to the solution of machine problems, and gives him a familiarity with pure mechanism. A part of this course is given up to the proper construction of gears, and to the practical methods in common use of approximating gear tooth outlines.

Text: *Sthal and Woods,* "Elementary Mechanism."

DEPARTMENT OF ELECTRICAL ENGINEERING

PROFESSOR WOOD, PROFESSOR FREEMAN AND MR. SCHROEDER.

General Statement

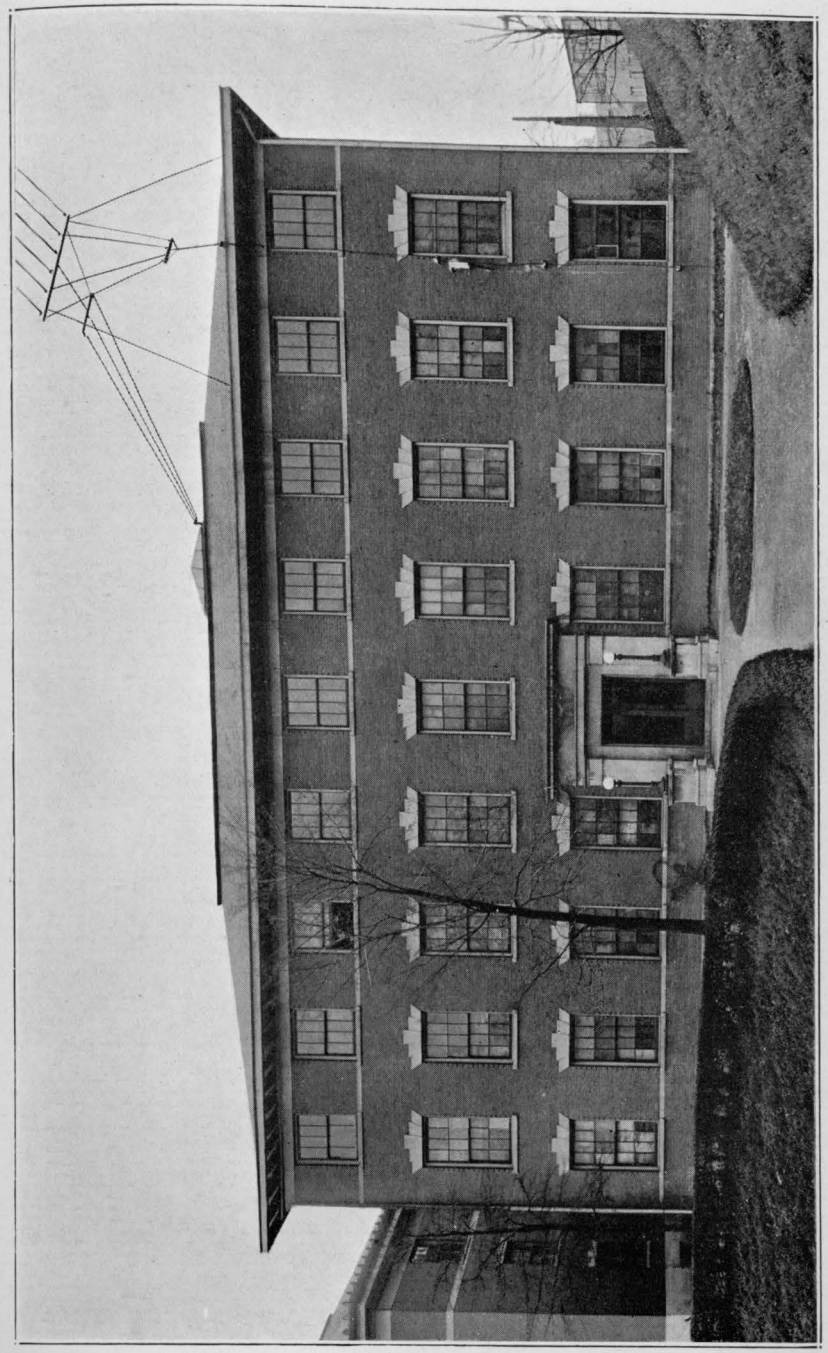
This department has for its object the training of men for positions in engineering where a thorough acquaintance with the processes of applied electricity is required.

The course of study is planned to give a thorough knowledge of the principles of electricity and magnetism as well as the fundamental sciences of Chemistry, Physics, Mathematics and Mechanics. The scientific and applied aspects of the several important branches of engineering, other than applied electricity (including surveying, steam engineering, machinery design, hydraulics, constructive materials), are given adequate attention; and thorough instruction in the essential scientific elements of the branches of applied electricity, which are now of inestimable importance to the Electrical Engineer, are added thereto.

The aim of the course is to produce industrious, clear-thinking young men who are furnished with the scientific and practical equipment necessary for the successful practice of their profession as Electrical Engineers.

Equipment

The lecture and designing rooms and laboratories of the Electrical Engineering Department are on the second floor



THE ELECTRICAL BUILDING.

of the Electrical Building. The laboratories contain the following apparatus: a 25-kilowatt split-pole double-current generator, and a 10-kilowatt double-current generator, both built in the School Shops and capable of supplying continuous or polyphase currents; a number of shunt and compound continuous current generators and motors; two 5-kilowatt three-phase alternators or synchronous motors; two 5-horsepower three-phase induction motors; two single-phase induction motors; a 2-kilowatt booster set for continous currents; a 2-kilowatt induction regulator for alternating currents; a ten light series arc light generator; two 3-kilowatt transformers arranged for phase transformation; two types of constant current transformers; three transformers arranged for star and delta connection on three-phase and six-phase circuits; one 30,000-volt transformer for making puncture tests on insulating material; a mercury arc rectifier; condensers aggregating several hundred microfarads capacity; a storage battery for 130 volts and a battery giving 600 volts for testing purposes; a complete switchboard and necessary instruments for making all kinds of tests rapidly and accurately.

In addition to the above, the laboratories contain complete sending and receiving sets for wireless telegraphy; all of the drops, jacks and signalling apparatus for a modern common battery telephone exchange, arranged on a skeleton switchboard for convenient testing and inspection; a Kelvin hekto-ampere balance and a potentiometer with certified resistance and standard cells for accurately calibrating electrical instruments of any type; vats for electroplating and other apparatus for elementary work in electro-chemistry.

The photometer room is equipped with a Lummer-Brodhun screen; a Sharp-Miller illuminometer for determining the illumination of streets and buildings, and a 72-inch Globe Photometer. The oscillograph, for the determination of the periodic curves of alternating currents, or the phenomena which attend the growth or decay of currents in circuits which are suddenly switched on or off, is a valuable adjunct to the laboratory apparatus. The frequent trips of inspection to neighboring steam, hydraulic and industrial plants in and around Atlanta are of great value, and keep the student in touch with the latest developments in Electrical Engineering.

The Course in Electrical Engineering

FRESHMAN YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Chem. 1	Inorganic Chemistry	3		7.5
Chem. 5	Chemical Laboratory		2	2.
Draw. 1	Free Hand Drawing		4	4.
Eng. 11	Rhetoric	3		7.5
Eng. 15	Theme Writing and Declamation	1		1.
Math. 11	Algebra	2		5.
Math. 15	Trigonometry	3		7.5
M. E. 3a	Wood Shop		8	8.
M. E. 5 or 7	Smithy (or Foundry)		4	4.
Gym. 1	Physical Culture		2	2.
	Total..	12	20	48.5

Second Term

Chem. 2	Inorganic Chemistry	3		7.5
Chem. 6	Chemical Laboratory		2	2.
Draw. 2	Descriptive Geometry	3		7.5
Draw. 4	Descriptive Geometry Drawing		3	3.
Eng. 12	Rhetoric	3		7.5
Eng. 16	Theme Writing and Declamation	1		1.
Math. 18	Analytic Geometry	5		12.5
M. E. 4	Wood Shop		4	4.
M. E. 7a or 5	Foundry (or Smithy)		4	4.
Gym. 2	Physical Culture		2	2.
	Total..	15	15	51.

SOPHOMORE YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Chem. 9	Qualitative Analysis (Elective for 4 hrs. M. E. 11)		4	4.5
Draw. 11	Shades, Shadows, and Perspective		4	4.
Eng. 21	American Literature	3		7.5
Eng. 27	Parallel Reading			
Geol. 1	Ferrous Metallurgy (or C. E. 1)	2		5.
Math. 21	Anaytic Geometry	2		5.
Math. 25	Calculus	3		7.5
M. E. 11	Mach. Sh'p (4 hrs. El'c. for Ch'm. 9)		8	4 or 8
Phys. 9	Physics	4		10.
	Total..	14	16	47.5

Second Term

Chem. 10	Qualitative Analysis (Elective for 4 hours M. E. 12)		4	4.5
C. E. 1a	Plane Surveying (or Geol. 1a)	1	3	5.
Draw. 14	Machine Drawing		4	4.
Eng. 24	Political Economy	3		7.5
Eng. 28	Parallel Reading			
Math. 26	Calculus	5		12.5
M. E. 12	Mach. Sh'p (4 hrs. El'c. for Ch'm. 10)		8	4 or 8
Phys. 10	Physics	4		10.
Phys. 14	Physics Laboratory		4	5.
Phys. 20	Slide Rule		.5	.5
	Total..	13	23.5	53.5

JUNIOR YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Drawing 21	Machine Drawing		4	4.
Drawing 23	Kinematics or Mechanism	4		10.
English 31	English Literature	3		7.5
English 35	Literary Thesis			
Exp. E. 1	Analytic Mechanics	3		7.5
Exp. E. 11	Structural Mechanics	2		5.
M. L. 1	German }			
M. L. 7	French } One required	3		7.5
M. L. 13	Spanish }			
Physics 11	Physics	3		7.5
Physics 15	Physics Laboratory		4	5.
Physics 17	Physics Laboratory		2	2.
	Total..	18	10	56.

Second Term

Drawing 22	Machine Drawing		4	4.
E. E. 8	Electricity and Magnetism	5		12.5
E. E. 16	Electrical Laboratory and Design		6	8.
English 32	English Literature	3		7.5
English 36	Literary Thesis			
Exp. E. 76	Thermodynamics	2		5.
Exp. E. 52a	Materials and Cement Lab.		4	4.
Math. 35a	Differential Equations	3		7.5
M. L. 2	German }			
M. L. 8	French } One required	3		7.5
M. L. 14	Spanish }			
	Total..	16	14	56.

SENIOR YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Com. 1	Business Organization & Manage'mt		1	1.
E. E. 9	Alternating Currents	5		12.5
E. E. 11	Electric Lighting	3		7.5
E. E. .13	Telephony	2		5.
E. E. 15	Electric Signalling (Elective for E. E. 11 and E. E. 13)	5		12.5
E. E. 17	Electrical Laboratory and Design		6	8.
Exp. E. 71a	Steam Engine Laboratory		4	4.
Exp. E. 77	Thermodynamics	3		7.5
M. L. 3	German }			
M. L. 9	French } One required	3		7.5
M. L. 15	Spanish }			
	Total..	21	11	53.5

Seccond Term

C. E. 15a	Hydraulics	3		7.5
Com. 2	Commercial Law		1	1.
E. E. 10	Electrical Engineering	5		12.5
E. E. 14	Applied Electricity	3		7.5
E. E. 18	Electrical Laboratory and Design		6	8.
E. E. 20	Thesis			8.
Exp. E. 78	Thermodynamics	2		5.
Exp. E. 86a	Gas Engine Laboratory		4	2.
Exp. E. 71d	Steam Engine Laboratory		4	2.
M. L. 4	German }			
M. L. 10	French } One required	3		6.
M. L. 16	Spanish }			
	Total..	16	15	59.5

The Course in Electrical Engineering

E. E. 1 and 1a. **Dynamos and Motors.**

Professor Freeman and Mr. Schroeder.

Prerequisite, Physics 11 (Physics 6 for T. E. Seniors).

Parallel, E. E. 3 or 3a.

E. E. 1, Senior, first term, two hours, students in M. E.

E. E. 1a, Senior, second term, two hours, students in C. E., T. E., and E. Ch.

This course covers the elementary principles of the continuous current dynamo and motor, alternating currents, polyphase systems, alternating current generators, synchronous and induction motors, transformers and rotary converters. Some time is given to a study of the proper methods for installing electric lighting and power systems.

E. E. 3 and 3a. **Electrical Laboratory.**

Professor Freeman and Mr. Schroeder.

Parallel, E. E. 1 and 1a.

E. E. 3, Senior, first term, three hours, students in M. E.

E. E. 3a, Senior, second term, three hours, students in C. E., T. E., and E. C.

Laboratory tests upon electrical machinery are made. Results and deductions are carefully compiled in a written report and turned in at the end of the period.

E. E. 8. **Electricity and Magnetism.**

Professor Wood.

Prerequisites, Physics 11, Math. 26. Parallel E. E. 16.

Junior, second term, five hours, students in E. E.

This course includes a study of the laws and properties of electric and magnetic circuits; methods of winding armatures; construction of continuous current machinery; armature reactions and commutation; characteristics of generators and motors; and the industrial applications of motors. In the latter part of the term

some elementary principles of alternating currents are studied.

E. E. 9. **Alternating Currents.**

Professor Wood.

Prerequisite, E. E. 8, Math. 35a.

Parallel, E. E. 17.

Seniors, first term, five hours, students in E. E.

This is a strictly theoretical course comprising a study of harmonic electro-motive forces and currents; the use of vectors and complex quantities in solving problems; polyphase systems; the transformer; derivation of formulas for predetermining the characteristics of alternating current apparatus; and many problems involving reactive loads on alternating current circuits.

Text: *D. C.* and *J. P. Jackson's* "Alternating Currents."

E. E. 10. **Electrical Engineering.**

Professor Wood.

Prerequisite, E. E. 9; Parallel, E. E. 18.

Senior, second term, five hours, students in E. E.

A special study of the characteristics of induction motors, synchronous motors and rotary converters is made. The regulation of high voltage transmission lines is calculated. Some time is devoted to the economic principles involved in the installation and operation of electrical apparatus.

E. E. 11. **Electric Lighting.**

Professor Freeman.

Parallel, E. E. 9.

(E. E. 11 and E. E. 13 are elective for E. E. 15.)

Senior, first term, three hours, students in E. E.

This course covers the subjects of light and color, photometry, standards of illumination, types of electric lights and reflectors, and special attention is given to the calculation of illumination. A study of special equipment for use in electric lighting stations made, and a problem involving the proper layout of a wiring system for some large building is worked out.

Text: *Franklin's* "Electric Lighting."

E. E. 13. **Telephony.**

Mr. Schroeder.

Parallel, E. E. 9.

(E. E. 11 and E. E. 13 are elective for E. E. 15.)

Senior, first term, two hours, students in E. E.

This course covers the principles of telephony and telegraphy. The location of faults, methods of minimizing magnetic and electro-static disturbances, cable layouts and long distance lines are specially treated along with a study of the apparatus used for communication.

E. E. 14. **Electric Railways.**

Professor Freeman.

Parallel, E. E. 10.

Senior, second term, three hours, students in E. E.

A careful study is made of the types of equipment, rolling stock, and power plants for electric railways. Comparative estimates of the costs of different systems are made. The effects of curves and grades are studied and special attention is paid to the problems of steam railroad electrification.

E. E. 15. **Electric Signalling.**

Mr. Schroeder.

Parallel, E. E. 9.

(Elective for E. E. 11 and E. E. 13.)

Senior, first term, five hours, students in E. E.

This course is to be given only if a sufficient number of students elect it. It is intended to be a thorough study of telephony, telegraphy and radio-communication, as well as the principles governing the application of electricity to block signalling on steam and electric railways, and of the use of the telephone for train dispatching. A part of the laboratory work in courses E. E. 17 and E. E. 18 will be devoted to special tests along the lines indicated above.

E. E. 16 **Electrical Laboratory and Design**

Professor Freeman and Mr. Schroeder.

Parallel, E. E. 8.

Junior, second term, six hours, students in E. E.

Standard tests of direct current apparatus are made. Instruments are calibrated as a part of the laboratory work. Clear and concise written reports are required of every experiment performed in the laboratory. The time scheduled to design is devoted to the solution of special problems related to the design of lifting electromagnets, armatures, windings, and the magnetic circuits of dynamos and motors.

E. E. 17. **Electrical Laboratory and Design.**

Professor Wood, Professor Freeman and Mr. Schroeder.

Parallel E. E. 8.

Seniors, first term, six hours, students in E. E.

Experiments are performed in the laboratory on alternating current circuits and machines. The relations of currents and electro-motive forces in reactive circuits are particularly studied and theoretical calculations are verified by measurement. The work in design supplements the laboratory work and consists of calculations on the characteristics of machines and the complete design of an alternating current generator.

E. E. 18. **Electrical Laboratory and Design.**

Professor Wood and Mr. Schroeder.

Parallel E. E. 10.

Seniors, second term, six hours, students in E. E.

The laboratory work is devoted principally to tests upon induction and synchronous motors, rotary converters and polyphase apparatus. Frequent trips of inspection to power plants, manufacturing establishments and telephone exchanges are made, and special tests are made along the line of work that the student wishes to specialize in. Complete calculations are made for a long transmission line and for a polyphase motor.

E. E. 20. **Thesis.**

Professor Wood.

Seniors, second term, students in E. E.

A thesis along some special line of investigation is

required from each student before graduation. The design and construction of some special apparatus, or complete tests of a small power plant or of machinery are usually acceptable. As a general rule the student selects his subject and has it approved before commencing work. Each student in this department has an individual thesis unless the nature of the work is such that the simultaneous efforts of more than one man are required.

WIRELESS TELEGRAPHY.

The Wireless Telegraph Station of the Georgia School of Technology is licensed by the United States Government and the main restriction which is carefully observed is that it shall be operated with the least possible interference with other stations. The call letters assigned to it are 4-X-G. It is open to Seniors and other qualified students under the proper direction at all times. A new aerial is shortly to be erected extending from the top of the 200-foot brick chimney of the New Power Plant to the tower of the Academic Building, about 300 feet distant. The Station will have an operating room at the southwest entrance to the boiler room of the New Power Plant and Laboratory Building, and it is planned to equip it with new and up-to-date apparatus in every respect.

There are a large number of licensed and amateur stations in the State of Georgia, and it is hoped that the station at this School will be so equipped as to be of service to other stations in the state for determining their wave length, range of operation, etc.

Wireless telegraphy and telephony are now established factors in the field of communication, and while it is not our desire to train men to be operators of these systems for a life work, yet many of the positions that our graduates will be called on to fill will be better filled by men who have a good working knowledge of wireless operation in addition to their general engineering training. It is very probable that many of the large hydro-electric companies will connect their generating stations in different parts of the country by a system of wireless stations so as to facilitate the giving of operating orders in cases

of failure of the regular wire lines, such failures occurring when the power transmission lines are defective as well as when the telephone and telegraph lines are down. One of the largest electric power stations in the United States is using the wireless to indicate the approach of thunder storms so as to be able to get up steam in order to carry the sudden lighting loads that come on a system with the darkness of an approaching storm.

It is also thought advisable for a number of young men to fit themselves as expert operators in line with the policy of military preparedness. A Signal Corps is organized among the students of the school which hopes to acquire portable equipment so that in times of local or national emergency it would be prepared to take the field and get in communication from any point.

Participation in any of these things is intended to be purely voluntary on the part of students, but it is expected that all students will receive some little instruction in the principles of the apparatus either in the course in Physics or in the course in Electrical Engineering. Also, while wireless transmission of power is not yet an accomplished fact, it is intended that experimental work toward this end will be followed up by this Station, if not inaugurated.

The Station is in the immediate charge of Mr. E. C. Gruen, Assistant Professor in the Drawing Department, and under the general charge of the teaching staff of the Departments of Physics and of Electrical Engineering.

DEPARTMENT OF ENGLISH

PROFESSOR WALLACE, PROFESSOR PERRY, PROFESSOR KIRK, MR. ARMSTRONG, MR. ORMES, MR. BURROWES.

General Statement

The course in English begins with the Freshman class, and extends through the Junior class, a period of three years.

The work of the department is required of all regular students, and its importance as the avenue of approach to all knowledge is kept constantly in mind. Particularly is its value to technical students recognized and enforced; first, as supplying the engineer with that equipment of di-

rect, accurate, and vigorous expression necessary to his success in life; and second, as co-ordinating with his scientific training the equally important culture development which is justly demanded of the educated man today.

The purposes of the course are utility, which predominates in the first year and half of the second; and culture, which is the chief end sought as the student progresses in his work. It is to be recognized and stressed, however, that both purposes are considered fundamental and correlative, and are earnestly sought from beginning to end of the course.

Courses of Instruction

English 11. **Composition and Rhetoric.**

Professor Wallace, Professor Perry, Professor Kirk, Mr. Armstrong, Mr. Ormes, Mr. Burrowes.

Freshman, first term, three hours.

This course consists, first, of a careful study and application of rhetorical principles, including the structure of the paragraph and the sentence, the correct and effective use of words, punctuation, letter-writing, and the forms of discourse. The subject of composition is considered entirely from the point of view of construction and constant effort is made to bring the student to apply in his own compositions the principles that are studied in the class-room. The work in this course is closely adjusted to that in English 15.

In order that the student may be fully prepared to do work in English Literature, some time, in addition to that devoted to Composition and Rhetoric, is given to a study of the Old Testament and the Classic Myths.

Text-books: *Linn's* "Essentials of English Composition," *Penniman's* "Common Words Difficult to Spell," *Bullfinch's* "Age of Fable," *Scott's* "Selections from the Old Testament," various classics, and an approved dictionary.

English 12. **Composition and Rhetoric.**

Professor Wallace, Professor Perry, Professor Kirk, Mr. Armstrong, Mr. Ormes, Mr. Burrowes.

Freshman, second term, three hours.

This course is in a large measure a continuation of

English 11. However, rhetoric is now approached from the viewpoint of appreciation, and a careful examination is made of simple aesthetic principles, style, figures of speech, versification, and literary forms. The student is made familiar with the fundamental principles of literary criticism, and illustration of these principles is sought in the simpler classics of English prose and poetry.

Text-books: *Painter's* "Elementary Guide to Literary Criticism," various classics, and large reference to books in the library.

English 15. **Theme-Writing and Speaking.**

Mr. Ormes, Mr. Burrowes.

Freshman, first term, one hour.

The aim of this course is to teach correctness and clearness in the expression of thought, and to stimulate the powers of observation, imagination, and reflection in the student. Sixteen themes on assigned topics are required of the student during the term, and attendance upon a consultation with the instructor one hour a week. No theme is accepted which is notably defective in grammar or spelling, and no student will be allowed to pass the course until he has acquired correctness in these particulars and reasonable facility in the application of rhetorical principles.

English 16. **Theme-Writing and Speaking.**

Mr. Ormes, Mr. Burrowes.

Freshman, second term, one hour.

This course is a continuation of English 15. Fewer and longer themes are required. The use of the library, outline making, thought organization, and oral presentation of thought are taught. The weekly consultations are continued.

At the close of the year a contest is held in which a gold medal is offered for excellence in the preparation and delivery of orations. Students will be qualified to enter this contest by the general excellence of their work in this course.

Courses 15 and 16 may be completed in one year; but, if the student fails to pass the work satisfactorily, he may be required to repeat it as often as is necessary until he is able to write correctly. Students in more advanced courses whose work in composition is unsatisfactory will be required to take this course in whole or in part.

English 21. **American Literature.**

Professor Wallace, Professor Perry, Professor Kirk, Mr. Armstrong.

Prerequisite, English 12.

Sophomore, first term, three hours.

This course consists of a brief review of the history of American literature, essays, lectures, and quizzes Representative works of *Irving, Cooper, Longfellow, Lowell, Emerson, Hawthorne, Holmes, Whitman, Poe,* and *Lanier* are subjected to careful analysis and interpretation. The aim of this course is to give the student an appreciation of the meaning and worth of the literature of America; to familiarize him with the masterpieces of American writers; and to cultivate in him a sound critical faculty.

Text-books: *Moody, Lovett* and *Boynton's* "A First View of English and American Literature," *Page's* "Chief American Poets," and various classics.

English 24. **Economics.**

Professor Wallace, Professor Perry, Professor Kirk, Mr. Armstrong.

Sophomore, second term, three hours.

As the School has no department of political or social science, a brief course in Economics is given by the English Department. *Ely's* "Outlines of Economics" is used as a text-book, supplemented by lectures, papers upon various economic subjects, and discussions. The aim of the course is to familiarize the student with economic theories, to indicate the laws underlying the complex fabric of modern commercial and social systems, and

to give him an intelligent apprehension of the nature and meaning of the great economic problems of the age.

Text-book: *Ely's* "Outlines of Economics."

English 27-28. **Parallel Reading.**

Professor Wallace, Professor Perry, Professor Kirk, Mr. Armstrong.

Sophomore, both terms, not scheduled.

During the entire Sophomore year a reading course in American fiction is required as supplementary to English 21. Selections from various authors are read, and examinations, at stated intervals, are held. The books are selected for their interest and worth; and in this way, it is hoped that the student may acquire a taste for good literature.

Text-books: As the books read vary from year to year, they are announced at the beginning of the course. All books necessary for this course are supplied by the school library.

English 31. **English Literature.**

Professor Wallace, Professor Perry, Professor Kirk,

Prerequisite, English 12.

Junior, first term, three hours.

The course in English Literature, given throughout the Junior year, offers a study of literature itself rather than of texts about literature. It recognizes that a literary work is not merely a work of art, but an expression of the personality of its author, and through him, as the voice and exponent of his age, a record of the ideas and ideals of a section of the nation's life. Certain dominant men of letters are chosen as representatives of important literary periods, and, as far as opportunity offers, their work is studied intensively. A simple handbook of literary history is used for reference and occasional reports on the part of the student. The student is also expected to supplement the lectures by reference to the body of criticism which is placed at his disposal in the library and to which he is referred. The course is conducted by lectures, oral and written quizzes, and written reports.

The writers studied during the first term are *Milton* and *Wordsworth.*

Text-books: *Milton's* Poems (complete); *Edward Dowden's* Selections from *Wordsworth's* Poems (Athenaeum Press Series); *Moody, Lovett,* and *Boynton's* "A First View of English and American Literature."

English 32. **English Literature.**

Professor Wallace, Professor Perry, Professor Kirk.

Junior, second term, three hours.

Prerequisites, English 12 and English 31.

This course, which is a continuation of English 31, is similar in aim and scope to the preceding course.

The writers studied during the second term are *Tennyson* and *Shakespeare.*

Text-books: *Henry Van Dyke's* Selections from the Poems of *Tennyson* (Athenaeum Press Series); *Brooke, Cunliffe,* and *MacCracken's* "Shakespeare's Principal Plays;" *Moody, Lovett,* and *Boynton's* "A First View of English and American Literature."

English 35-36. **Literary Theses.**

Profesor Wallace, Professor Perry, Professor Kirk.

Junior, first and second terms, not scheduled.

Each member of the Junior class is required to prepare two critical essays each term, the subjects for treatment being the work of the authors studied in courses 31 and 32. The first essay of each term is due about the middle of the term, the second shortly before the beginning of the examination period. These essays are required to be original in thought and in expression; unsatisfactory essays will be returned for thorough revision; and failure to satisfy the instructor in this respect denies to the writer the privilege of taking the final examination in English Literature or of receiving credit for the course.

Text-books: The school library supplies all material necessary for the course.

DEPARTMENT OF EXPERIMENTAL ENGINEERING

PROFESSOR NESBIT, PROFESSOR MCCARTHY, MR. HOWELL AND MR. CLAY.

General Statement

The object of courses in this department is to enable the Engineering student to recognize and apply such natural forces and materials as are adapted to his uses.

In order that he may be capable of intelligently and skillfully designing, constructing and supervising all kinds of machinery, it is necessary that he should pursue thorough and extensive theoretical courses which are of primary importance in according mental discipline not to be derived from practical research. The latter is made to go hand in hand with the former, for it is believed that, from continued practical applications of theoretical conclusions, a broader and more tangible conception of their truths may be derived. It is not, then, at the expense of the abstract mathematical law that time is given to show how it may be involved in the construction of the simplest machine, for not only is a new and suggestive meaning thereby given to the various contrivances of the mechanism, but an insight into the whole significance of the law itself is gained, which can be acquired only by observing practical applications.

To explain theoretical principles, however, is not the only value of the experimental work of the department. If the student desires to go from college to the manufacturing world, it is essential that he should be familiar with working machines, methods of management, and as much of the every-day detail of engineering work as it is possible for him to acquire as a supplement to his higher training.

Courses in Experimental Engineering

JUNIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equ'v
Exp. E. 1	Analytic Mechanics (E. E.)	3		7.5
Exp. E. 11	Structural Mech. (E. E. and E. Ch.)	2		5.
Exp. E. 21	Analysis Laboratory (M. E.)		3	3.
Exp. E. 41	Hydraulic Laboratory (C. E.)		4	4.
	Second Term			
Exp. E. 1a	Analytic Mech. (C. E., T. E., E. Ch.)	3		7.5
Exp. E. 11a	Structural Mech. (T. E., Arch.)	2		5.
Exp. E. 76	Thermodynamics (E. E., E. Ch.)	2		5.
Exp. E. 52	Testing Materials Labo. (M. E.)		4	4.
Exp. E. 52a	Materials-Cem't Lab. (E. E., C. E.)		4	4.

SENIOR YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Ex. E. 77	Thermodynamics (E. E., E. Ch.)	3		7.5
Exp. E. 76a	Thermodynamics (C. E., T. E.)	3		7.5
Exp. E. 71	Steam Engine Laboratory (M. E.)		4	.4
Exp. E. 71a	Steam Engine Lab. (E. E., C. E.)		4	4.
Exp. E. 71b	Steam Engine Lab. (T. E., E. Ch.)		4	2.
Exp. E. 52b	Materials Lab. (T. E., E Ch.)		4	2.
	Second Term			
Exp. E. 78	Thermodynamics (E., E., E. Ch.)	2		5.
Exp. E. 77a	Thermodynamics (T. E.)	2		5.
Exp. E. 71c	Steam Engine Lab. (M. E.)		4	4.
Exp. E. 71d	Steam Eng. Lab. (E. E., T. E,. E. Ch.)		4	2.
Exp. E. 86	Gas Engine Lab. (M. E.)		4	4.
Exp. E. 86a	Gas Eng. Lab. (E. E., T. E., E. Ch.)		4	2.

Courses of Instruction

Ex. E. 1 and 1a. **Analytic Mechanics.**

Professor Nesbit, Professor McCarthy, Mr. Howell, Mr. Clay.

Prerequisite, Math. 26-28.

Ex. E. 1. Juniors in E. E., first term, three hours.
Ex. E. 1a. Juniors in C. E., E. Ch., and T. E., second term, three hours.

A course in the fundamental principles of mechanics treated with especial reference to engineering problems. The first part of the term is devoted to Statics, developing the algebraic and graphical solutions of problems. In the treatment of the theory of centroids and centers of gravity it is developed both with and without the use of the Calculus.

Under Kinematics, are treated the properties of displacement, velocity and acceleration; rectilinear and cuvilinear motion of a particle, giving the graphical interpretation of position displacement, velocity, acceleration and time relations, and motion of a rigid body in translation and rotation.

Under Kinetics (motion and force) are considered the laws of motion, motion under the action of a variable force or in a resisting medium, constrained motion, impact work, energy, moment of inertia, D'Alembert's principle applied to translatory and rotatory motion, and the motion of the mass center of any system of particles.

Ex. E. 11 and 11a. **Structural Mechanics.**

Professor Nesbit, Professor McCarthy, Mr. Howell.

Prerequisite, Math. 26-28.

Ex. E. 11. Juniors in E. E. and E. Ch., first term, two hours.
Ex. E. 11a. Juniors in Arch. and T. E., seond term. two hours.

Devoted to the strength and resistance of simple beams under tension, flexure, and deflection; deflection of restrained and continuous beams; pieces under tension and compression; columns, posts, and struts; safe-working stresses; rivets, pins, and plate girders.

Ex. E. 21. **Analysis Laboratory.**

Professor Nesbit, Professor McCarthy, Mr. Howell, Mr. Clay.

Juniors in M. E., first term, three hours.
(See Laboratory Experiments.)

Ex. E. 41. **Hydraulic Laboratory.**

Professor Nesbit, Professor McCarthy, Mr. Howell, Mr. Clay.

Juniors in C. E., first term, four hours.
(See Laboratory Experiments.)

Ex. E. 52, 52a and 52b. **Materials Laboratory.**

Professor McCarthy, Mr. Howell, Mr. Clay.

Prerequisite, Ex. E. 11 or 11a.

Ex. E. 52. Testing Materials Lab., Juniors in M. E., second term, four hours.
Ex. E. 52a. Materials and Cement Lab., Juniors in C. E. and E. E., second term, four hours.
Ex. E. 52b. Materials Lab., Seniors in E. Ch. and T. E., first half of first term, four hours.

Ex. E. 76, 76a, 77, 77a, 78. **Thermodynamics.**

Professor Nesbit.

Ex. E. 76. Juniors in E. Ch., and E. E., second term. two hours.

Prerequisites, Math. 26-28, Ex. E. 1 or 1a.

Ex. E. 76a. Seniors in C. E., and T. E., first term, three hours.

Prerequisites, Math. 26-28, Ex. E. 1 or 1a.

Ex. E. 77. Seniors in E. Ch., and E. E., first term, three hours.

Prerequisite, Ex. E. 76.

Ex. E. 77a. Seniors in T. E., second term, two hours.

Prerequisite, Ex. E. 76a.

Ex. E. 78. Seniors in E. Ch., and E. E., second term, two hours.

Prerequisite, Ex. E. 77.

The Thermal Properties of Gases, Expansion of Gases, Thermodynamic Processes and Cycles, The Thermal Properties of Vapors, Wet and Superheated Vapors, Mixtures of Gases and Vapors, The Steam Engine, Steam Cycles, Losses in Steam Engine, Design and Tests of Steam Engines, The Steam Turbine, Condensing Machinery, Combustion, Steam Boilers, Boiler Plant Accessories, Water Cooling Apparatus, Hot Air Engines, The Internal Combustion Engine. Design and performance of Combustion Engines, Gaseous Fuels, Compressed Air, Refrigeration, Heating, Ventilation, Evaporation, and Drying, Entropy Diagrams.

Ex. E. 71, a, b, c, and d. **Steam Engine Laboratory.**

Professor Nesbit, Professor McCarthy, Mr. Howell, Mr. Clay.

Prerequisite, Ex. E. 1 and 1a.

Ex. E. 71. Seniors in M. E., first term, four hours.

Ex. E. 71a. Seniors in C. E. and E. E., first term, four hours.

Ex. E. 71 b. Seniors in E. Ch. and T. E., one-half of first term, four hours.

Ex. E. 72. Seniors in M. E., second term, four hours.

Ex. E. 72a. Seniors in E. E., E. C. and T. E., one-half of second term, four hours.

Ex. E. 86 and 86a. **Gas Engine Laboratory.**

Professor Nesbit, Professor McCarthy, Mr. Howell, Mr. Clay.

Ex. E. 86. Seniors in M. E., second term, four hours.

Ex. E. 86 a. Seniors in E. E., E. Ch., and T. E., last half of second term, four hours.

(See Laboratory Experiments.)

LABORATORY EXPERIMENTS.

Calibration of Gauges, Indicators, Thermometers, Gas and Water Meters, Plainimeters, etc.

Oils and Lubricants: Viscosity, Flash Point, Burning Point, Gumming, Adulteration, Coefficient of Friction, Chill Test and Durability.

Calorimetry: Barrell, Throttling, Separating and Injector.

Condenser Test.

Coal Analysis: Chemical and B. T. U.

Analysis: Gas, Gasoline, Alcohol, Liquid Fuels, Coals, and Flue Gas.

Materials Laboratory: Tension, Compression, Torsion, Cross Bending and Shear.

Cement: Standard Tests of Cement, Brick, Concrete and Stone.

Boiler Test, Test of Pumps, Engine Efficiency, Centrifugal Pumps, Weirs, Nozzles, Air Compressor; Gas, Gasoline and Oil Engines, Valve Setting, Test of Injector, Ice Making and Refrigeration, Pelton Water Wheel, Hydraulic Ram, Pulsometer Steam Pump, Steam Traps, Steam Separator.

GEOLOGY AND METALLURGY

PROFESSOR KELL.

General Statement

The Department of Geology and Metallurgy does not offer a separate degree, but gives courses which are needed for other degrees offered by the school. The aim, therefore, is to give such courses as will emphasize geologic and metallurgic principles in their application to the engineering fields of other departments. Special efforts are made to bring the student in contact with those publications which are vital forces in his chosen field. Topics for special investigation, and articles for special review are assigned to

him, and as many class-room references as possible are made to the literature of this particular field. To impress upon the student the practical side of his work, inspection tours are made, which enable him to see in actual operation the processes discussed in the class room. In every department of the work the aim is to make the student responsible for himself; so that he may learn to attack a piece of work or a problem with the sole purpose of getting out of it, not what this or any other department may require by schedule from him, but what that particular case merits of his best efforts.

Equipment

The equipment consists of the usual office, section room, museum and assay laboratory. The museum has collections as follows,—type collections for Mineralogy, Petrography, and Geology; working collections for Crystallography, Mineralogy, and Petrography, Building Stones Collection; Metallurgical Products Collection. For use in the class room there is a catalog library of 700 bulletins, prints and papers. The assay laboratory is equipped with a gas furnace and has access to a set of analyzed ores to the number of 200. There is also a Saveur Microscope for work in Metallography in this laboratory. Material is being added to the equipment from time to time through regular funds and through the kindness of patrons in the commercial world.

Geology 1 and 1a. **Ferrous Metallurgy.**

Professor Kell.

Prerequisite, Chem. 1, 2, 5, 6.

Geol. 1. Sophomore, first term, students in Chem., E. Ch., C. E., E. E. and M. E., who are not taking C. E. 1.

Geol. 1a. Sophomore, second term, students in Chem., E. Ch., C. E., E. E. and M. E., who have not taken Geol. 1.

A course of recitations and lectures covering four sections as follows,—(a) Fuels. The work in this section consists of a brief study of the various kinds and the uses of fuels, together with their metallurgical applications. (b) Refractory Materials. The various types of crucibles, casting sands, mortars, and different acid and basic

linings for furnaces are studied under this head. (c) Metallurgical Problems relating to Coal, Boilers, Blast Furnaces, etc., are studied. (d) Iron and Steel. No attempt is made to treat this section in detail, but modern steel making practice is taken, with special stress being laid on the Blast Furnace, the Bessemer, Open Hearth and Alloy Steels. Reports on assigned articles in the current magazines in the Library are required and also a written report of a trip to the Atlanta Steel Co., whose works in this city, all are required to visit. Attention is given to the exhibits of the iron and steel products and the catalogs describing the same, all of which have been donated to the School by the interested commercial plants.

Text-books: *Stoughton's* "Iron and Steel." Department's Notes on "Fuels, Combustion, Refractories and Related Problems."

Geology 5. **Petrography.**

Professor Kell.

Prerequisite, Chem. 1, 2, 5, 6.

Seniors in Chem., first term.

A course of three recitations and eight hours laboratory per week covering the following sections: (a) Crystallography. In this section only such parts as are essential to the proper understanding of minerals as seen in the hand specimen are taken. The student is required to study wooden models of perfect crystals and then apply this knowledge to natural crystals. (b) Blowpiping. The student is supposed to be familiar with the mechanical use of the blowpipe from his work in the Chemistry Laboratory, so that but few tests for common minerals are given here. (c) Determinative Mineralogy. The work of this section is to drill the student in the material presented that he may determine the more common mineral species by means of their crystal forms, a few simple blowpipe reactions and in the main, by their physical properties. (d) Petrography. The same method is followed in this section as in Determinative Mineralogy and stress laid only on the hand specimen as the time does not permit the use of a microscope.

Text-book: *Phillips'* "Mineralogy."

Geology 8. **Non-Ferrous Metallurgy.**

Professor Kell.

Prerequisite, Chem. 1, 2, 5, 6.

Seniors in Chem., second term, four hours.

A recitation course, in which the metallurgy of gold, silver, copper and lead is studied, the entire time being put on the modern practice in this country. No attempt is made to grasp the minutiæ of the many processes, but each is studied as closely as is required to bring the student to the position where detailed work can be carried on at his pleasure. Extensive use is made of library assignments, trade catalogues and inspection trips.

Text-book: *Borcher's* "Metallurgy."

Geology 10. **Geology.**

Professor Kell.

Prerequisite, Chem. 1, 2, 5, 6.

Seniors in Chem., and Sophomores in C. E., second term, three hours.

A recitation course, consisting of Dynamical Geology, in which the student studies the forces which are now at work changing the surface of the earth, such as the atmosphoric, aqueous and igneous agencies; Structural Geology, a study of earth materials, their past and present forms; Historical Geology, which treats of the earth's life and history as revealed in the sequence of the rock beds. Use is made of the library and field trips as opportunity offers.

Text-book: *Ries and Watson's* "Engineering Geology."

Geology 12. **Assaying.**

Professor Kell.

Prerequisite, Geology 5, Chem. 13, 14.

Seniors in Chem., second term, four hours.

A laboratory course, including a study of slags; fluxing of a limestone and of a siliceous ore; the assay of lead ores, both sulphide and oxide; and the various methods of assays of gold and silver ores.

Text-book: *Fulton's* "Manual of Assaying."

DEPARTMENT OF MATHEMATICS

PROFESSOR FIELD, PROFESSOR SKILES, PROFESSOR MORTON, PROFESSOR SMITH, MR. ALEXANDER, MR. STAMY, MR. HEMKE, AND MR. WILLIAMS.

General Statement

Great importance is attached to the study of Mathematics. Primarily the aim of the instruction is to supply the student with a working knowledge of those principles which he needs in the study of engineering; but since the acquisition of a ready and logical mind is quite as valuable as the ability to use the subject, it is not the purpose to subordinate altogether the logical development of mathematics to the practical side.

Instruction in this department is given by use of text-books, supplemented by oral explanations and lectures. The student's knowledge of the subject is tested almost daily. It is hoped that the classes may be subdivided into sections numbering from twelve to twenty, thus making possible the individual treatment of students who require it.

Entrance

For entrance to the Freshman Class by examination, it will be necessary to pass the following subjects:

Plane and Solid Geometry: all theorems and one-third of exercises.

Elementary and Advanced Algebra: factors, fractions, involution, evolution, exponents, radicals, solution of quadratic equations by formula and by factoring, simultaneous equations, ratio, proportion, variation, progressions, partial fractions, logarithms, etc.

Do not omit the subject of logarithms, for this is necessary for Freshman Trigonometry.

Courses of Instruction

Math. 3. **Algebra.**

Prerequisite, Elementary Algebra to Simultaneous Quadratics.

Freshman, first term, three hours.

This course is designed for those students who are conditioned in higher Algebra. It covers the subjects of

ratio, proportion, variation, progression, partial fractions, logarithms, etc.
Text: *Ashton and Marsh.*

Math. 7. **Geometry.**

Prerequisite, Plane Geometry.

Freshman, first term, three hours.

This course is for those students who enter, conditioned in Solid Geometry. It is the usual course with propositions and two-thirds of the exercises.
Text: *Wentworth and Smith.*

Math. 11 and 11a. **Freshman Algebra.**

Professor Morton, Professor Smith, Mr. Alexander, Mr. Stamy, Mr. Hemke, and Mr. Williams.

Prerequisite, Entrance Mathematics for Freshman.

Math. 11. Freshman, first term, three hours.

Math. 11a. Freshman, second term, three hours, following Math. 3.

A review of the important topics in the Algebra for entrance to the Freshman Class and advanced work in Theory of Equations.
Text: *Hawkes.*

Math. 15. **Trigonometry.**

Professor Morton, Professor Smith, Mr. Alexander, Mr. Stamy, Mr. Hemke, and Mr. Williams.

Prerequisite, Entrance Mathematics for Freshman.

Freshman, first term, three hours.

The derivation of all formulas of Plane Trigonometry, transformations, solution of trigonometric equations, right and oblique triangles. All exercises worked.
Text: *Rothrock's* "Plane Trigonometry;" *Wentworth's* 5 place tables.

Math. 18. **Analytic Geometry.**

Professor Smith, Mr. Alexander, Mr. Stamy, Mr. Hemke and Mr. Williams.

Prerequisite, Math. 11 and 15.

Freshman, second term, five hours.

Includes points, lines, circles, plots both rectangular and polar, transformation of co-ordinates from rectangular to polar and polar to rectangular, the ellipse, parabola, hyperbola, and loci of second order.
Text: *Smith and Gale,* "New Analytic Geometry."

Math. 21. **Analytic Geometry.**

Professor Field, Professor Skiles, Professor Morton, Professor Smith, and Mr. Stamy.

Prerequisite, Math. 15 and 18.

Sophomore, first term, two hours.

Special work in curve tracing and analytic geometry of three dimensions.
Text: *Tanner and Allen,* "Analytic Geometry."

Math. 25. **Calculus.**

Professor Field, Professor Skiles, Professor Morton, Professor Smith and Mr. Stamy.

Prerequisite, Math. 15 and 18.

Sophomore, first term, three hours.

Introduction to Differential Calculus, including the derivatives of all algebraic and transcendental functions, maximum, minimum and curvature.
Text: *Granville's* "Calculus."

Math. 26. **Calculus.**

Professor Field, Professor Skiles, Professor Morton, Professor Smith, and Mr. Stamy.

Prerequisite, Math. 21 and 25.

Sophomore, second term, five hours.

Complete Differential and Integral Calculus. Many problems of practical application from outside the text.
Text: *Granville's* "Calculus."

Math. 28. **Calculus.**

Professor Skiles.

Prerequisite, Math. 21 and 25.

Sophomore, second term, five hours. Students in Arch., Chem., E. C. and T. E.

Integral Calculus and a short course in Differential

Equations. A great many applications from Geometry, Physics, Chemistry, and Mechanics are given.

Text: *Granville's* "Calculus."

Math. 35 and 35a. **Differential Equations.**

Professor Field, Professor Skiles, Professor Morton,

Prerequisite, Math. 26.

Math. 35. Junior, first term, three hours. Students in M. E. and C. E.

Math. 35a. Junior, second term, three hours. Students in E. E.

Ordinary Differential Equation of first and second orders and special types of higher order. A great many applications from Physics and Mechanics are given.

Text: *Campbell's* "Differential Equations."

DEPARTMENT OF MECHANICAL ENGINEERING

PROFESSOR COON.

General Statement

A mechanical engineer should possess accomplishments in three general particulars: He should be able to grasp and solve mechanical problems; he should be an expert mechanical draftsman in order to be able to design, and he should be thoroughly familiar with shop processes, and shop limitations. The studies in the mechanical course are laid out with these ends in view.

As Mathematics is, to a large extent, the basis of Engineering, the student is given a thorough course in this subject as an important part of his foundation work. Of scarcely less importance is the study of Physics and Chemistry, the former giving the student a knowledge of the laws of Nature, and the latter enabling him to better understand the composition of matter. The course in English is not only general, but practical in its benefits since an essential part of the equipment of every engineer is the ability to express his ideas clearly and concisely either orally or in writing.

With a careful preparation in the foregoing subjects as a groundwork the student is prepared to take up the subjects which are of a technical nature, and peculiar to the course in Mechanical Engineering. It will probably not be questioned that a good designer of machinery must primarily be a good draftsman, and to this end the course in Mechanical Drawing extends throughout the four years, it being recognized that the "only way to learn how to draw is to draw." Supplementing the work in the drafting room a course is given in Machine Design, both by text books and lectures, and in his Senior year the student is thrown largely upon his own resources, with the knowledge that neither here nor elsewhere, is the undergraduate competent to turn out good mechanical designs without assistance from an experienced designer.

As many hours as the time permits are devoted to work in the various shops. The purpose of this practical work is not to teach the student a trade, although it can not be questioned that the more skill a man possesses with his hands, the better off he is, in every way. Except one or two preliminary tasks, all the machine shop work is confined to parts of machines under construction, the student following working drawings prepared under the supervision of an experienced designer. In the limited time he is enabled to devote to this class of work, the student does not ordinarily acquire sufficient skill to readily make the accurate fits required in first class construction, but he unconsciously acquires a knowledge of the manner in which the several members of a machine have to be fabricated, and this knowledge is of inestimable value to him as a designer of machinery. Of a like value is the knowledge gained by his work in the foundry and smith shop. Experience in pattern making and in the foundry enables the student to instinctively avoid designing needlesly difficult or absurd castings.

Studies of a strictly technical character pertaining to this course necessarily are deferred to the later years, as a thorough knowledge of the subject already briefly touched upon is essential to a comprehensive grasp on the student's part, of the basic principles of Mechanical Engineering. Many men have become eminent as engineers who had no training in a technical school. It is no doubt equally true that many men have become of great service in the engineering profession who owe their inspiration, their

initial start, to the training, the mental discipline they received in some technical school. The purpose of a course in engineering is not so much in the line of imparting facts and information, as it is to enable the student to form the habit of logical reasoning, to depend upon his own resources, to draw correct conclusions from given premises,—in short, to *think*.

Engineering courses do not pretend to cover the whole field of technical thought and achievement. At best they can impress upon the student only basic principles. Students who pursue successfully the course in Mechanical Engineering can not hope to be experts in all its varied and useful fields. On joining the great army of workers in the commercial world, they will inevitably drift into some particular line of work in which the productive period of their lives will be passed.

It will be conceded that it is not sufficient for a course in engineering to turn out technical experts, if it can hope to do even this. But it must do much more; it must turn out *men*. While the schedule of subjects in this course does not indicate it, it is the prime object to send out young men to engage in the commercial work of the world with high ideals and a keen sense of moral responsibility. Good character is of more importance to the young engineer than engineering ability. Much has been said about the "commercialism" of our time, but it is probable that no other one cause can have so profound and widespread influence for the uplift of all, as the right kind of manufacture, of trade, of commerce. There can not be too much commerce of the right sort. An earnest effort is made to fit our young men for the responsibilities of citizenship and to impress upon them the fact that the useful life, the life worth living, is a life of service.

Equipment

With the growth of the school, adequate as our shop equipment seemed to be, it has been outgrown, and the year 1912 saw a portion of the shops displaced by new ones of a decidedly better class. The new shops comprise a smith shop, containing space for forty forges,—twice the former equipment,—and a foundry. Both of these shops are strictly up-to-date in plan, and among their most marked characteristics are the flood of light, and the splendid

ventilating systems. Forges of the down-draft system are installed in the smith shop, with also a score of vises for bench work. The foundry is equipped with core oven, brass foundry, overhead traveling crane, and an oil system for starting cupola fires. All roof trusses are of steel, in both shops, with a glass monitor roof. All blowers are electrically driven.

Adjoining the new shops is an administration building of strictly fire-proof construction, having brick walls, reinforced concrete floors and roof,—the latter covered with slate. This building is four stories high. On the basement floor are offices for the smith shop and foundry foremen, with complete lavatory and toilet facilities, and large storage bins for blacksmith's coal, and for other storage purposes. On the next, or ground floor, are a museum, a library, a large locker room with space for seven hundred lockers, and adjoining the latter are ample lavatory and toilet facilities for the students working in the shops. These rooms are fitted up in the style found in strictly first class hotels, and form an object lesson to the students as to the provision which should be made for working men.

On the second floor of the administration building are the offices of the mechanical director, and two large class rooms, and a drawing room, besides janitor's room. On the top floor are two large drawing rooms, and a handsome studio and office, the entire floor being used by the Department of Architecture. The blackboards in the drawing rooms, and the class rooms below, are made of slate.

Later, new wood shops and machine shops will be added, each 40 ft. x 200 ft., with necessary offices, tool rooms, store rooms and lecture rooms.

The machine shop equipment comprises a large assortment of tools incident to the needs of the School. Several of these tools are much larger than are to be found at other technical shops. Among them are an iron planer 36 inch x 40 inch x 10 feet; two lathes having 25 ft. beds, the larger 36-inch swing; five 20 inch x 20 inch x 6 ft. iron planers all of our own design and manufacture complete; six emery wheel stands, and the steam engine which at present drives all the machinery in all the shops. Much of the machine shop equipment is new, including a universal milling machine, a universal grinding machine, shaping ma-

chine, horizontal boring machine and many lathes. The growth of the School will require additions to this equipment when we move into the new shops.

Besides the tools, etc., mentioned above as having been made in our shops, we have also made a 24-inch buzz planer for our own use which has given excellent satisfaction. The shops have also made nineteen high-speed wood lathes, all for our own use. We have also made a hot water boiler feed pump which has been a long time in successful service, scores of shaft hangers and bearings, many electrical machines, including a large rotary converter, many steam traps *which work,* steam and water pressure reducing valves, friction clutches, drawing stands, a great amount of cabinet work of various kinds and many other miscellaneous tools.

The shop management does not think it desirable, and thus far has not found it necessary to put students upon tasks to be cast into the scrap heap, though it would be much easier to run the shop on that plan. Neither does the shop purchase castings and drawings of machinery to be built. All work done in the shops is from our own design from beginning to end, and there has never been any indication that our plan is not successful.

For description of equipment used by students in mechanical engineering during the latter, or advanced part, of the course, see Department of Experimental Engineering and also Electrical Engineering.

All students are given some practical work in concrete construction, which up to the present time has been in the form of outdoor walks, basement floors, flagging or foundations.

Course in Mechanical Engineering

FRESHMAN YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equ'v
Chem. 1	Inorganic Chemistry	3		7.5
Chem. 5	Chemical Laboratory		2	2.
Drawing 1	Freehand Drawing		4	4.
English 11	Rhetoric	3		7.5
English 15	Theme Writing and Declamation	1		1.
Math. 11	Algebra	2		5.
Math. 15	Trigonometry	3		7.5
M. E. 3a	Wood Shop		8	8.
M. E. 5 (or 7)	Smithy (or Foundry)		4	4.
Gym. 1	Physical Culture		2	2.
	Total..	12	20	48.5

FRESHMAN YEAR

Second Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equ'v
Chem. 2	Inorganic Chemistry	3		7.5
Chem. 6	Chemical Laboratory		2	2.
Drawing 2	Descriptive Geometry	3		7.5
Drawing 4	Descriptive Geometry Drawing		3	3.
English 12	Rhetoric	3		7.5
English 16	Theme Writing and Declamation	1		1.
Math. 18.	Analytic Geometry	5		12.5
M. E. 4a	Wood Shop		4	4.
M. E. 7a (or 5)	Foundry (or Smithy)		4	4.
Gym. 2	Physical Culture		2	2.
	Total..	15	15	51.

SOPHOMORE YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equ'v
Chem. 9	Qualitative Analysis (Elective for 4 hours M. E. 11)		4	4.5
Drawing 11	Shades, Shadows and Perspective		4	4.
English 21 / English 27	American Literature / Parallel Reading	3		7.5
Geology 1	Ferrous Metallurgy (or C. E. 1)	2		5.
Math. 21	Analytic Geometry	2		5.
Math. 25	Calculus	3		7.5
M. E. 11	Mach. Shop (4 hrs., Elec. for Chem. 9)		8	8.
Physics 9	Physics	4		10.
	Total..	14	16	47.5

Second Term

Chem. 10	Qualitative Analysis (Elective for 4 hours M. E. 12)		4	4.5
C. E. 1a	Plane Surveying (or Geol. 1a)	1	3	5.5
Drawing 14	Machine Drawing		4	4.
English 24 / English 28	Political Economy / Parallel Reading	3		7.5
Math. 26	Calculus	5		12.5
M. E. 12	Mach. Shop (4 hrs., Elec. for Chem. 10)		8	8.
Physics 10	Physics	4		10.
Physics 14	Physics Laboratory		4	5.
Physics 20	Slide Rule		5	5.
	Total..	13	23.5	53.5

JUNIOR YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equ'v
Draw. 21	Machine Drawing		4	4.
Draw. 23	Kinematics or Mechanism	4		10.
Exp. E. 21	Analysis Laboratory		3	3.
Eng. 31 / Eng. 35	English Literature / Literary Thesis	3		7.5
Math. 35	Differential Equations	3		7.5
M. E. 23	Analytic Mechanics	2		5.
M. L. 1 / M. L. 7 / M. L. 13	German / French / Spanish — One required	3		7.5
Phys. 11	Electricity and Magnetism	3		7.5
Phys. 15	Laboratory, Electricity, Sound, Heat Light		4	5.
	Total..	18	11	57.

JUNIOR YEAR

Second Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equiv
C. E. 16	Hydraulics	3		7.5
Draw. 22	Elementary Mach. Design (Draw.)		4	4.
Eng. 32	English Literature }	3		7.5
Eng. 36	Literary Thesis }			
Exp. E. 52	Testing Materials (Laboratory)		4	4.
M. E. 13	Machine Shop		4	4.
M. E. 24	Analytic Mechanics	5		12.5
M. E. 28	Mechanics of Materials	3		7.5
M. L. 2	German }			
M. L. 8	French } One required	3		7.5
M. L. 14	Spanish }			
	Total..	17	12	54.5

SENIOR YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Com. 1	Business Organization & Managem't		1	1.
E. E. 1	Dynamos and Motors	2		5.
E. E. 3	Electrical Laboratory		3	3.
Exp. E. 71	Steam Engine Laboratory		4	4.
M. L. 3	German }			
M. L. 9	French } One required	3		6.
M. L. 15	Spanish }			
M. E. 31	Mechanics of Materials	2		5.
M. E. 33	Engineering Problems	2		5.
M. E. 35	Steam Engine	4		10.
M. E. 39	Valve Gears	2		5.
M. E. 41	Designing (Drawing)		8	8.
M. E. 51	Shop Methods	1		2.5
	Total..	16	16	54.5

Second Term

Com. 2	Commercial Law		1	1.
Exp. E. 86	Gas Engine Laboratory		4	4.
Exp. E. 71c	Steam Engine Laboratory		4	4.
M. L. 4	German }			
M. L. 10	French } One required	3		6.
M. L. 16	Spanish }			
M. E. 36	Gas Engines	4		10.
M. E. 44	Machine Design	3		7.5
M. E. 42	Machine Design (Drawing)		8	8.
M. E. 46	Graphical Statics	2		5.
M. E. 48	St'm Turbines, Water Turbines, etc.	2		5.
	Thesis			4.
	Total..	14	17	54.5

Courses of Instruction

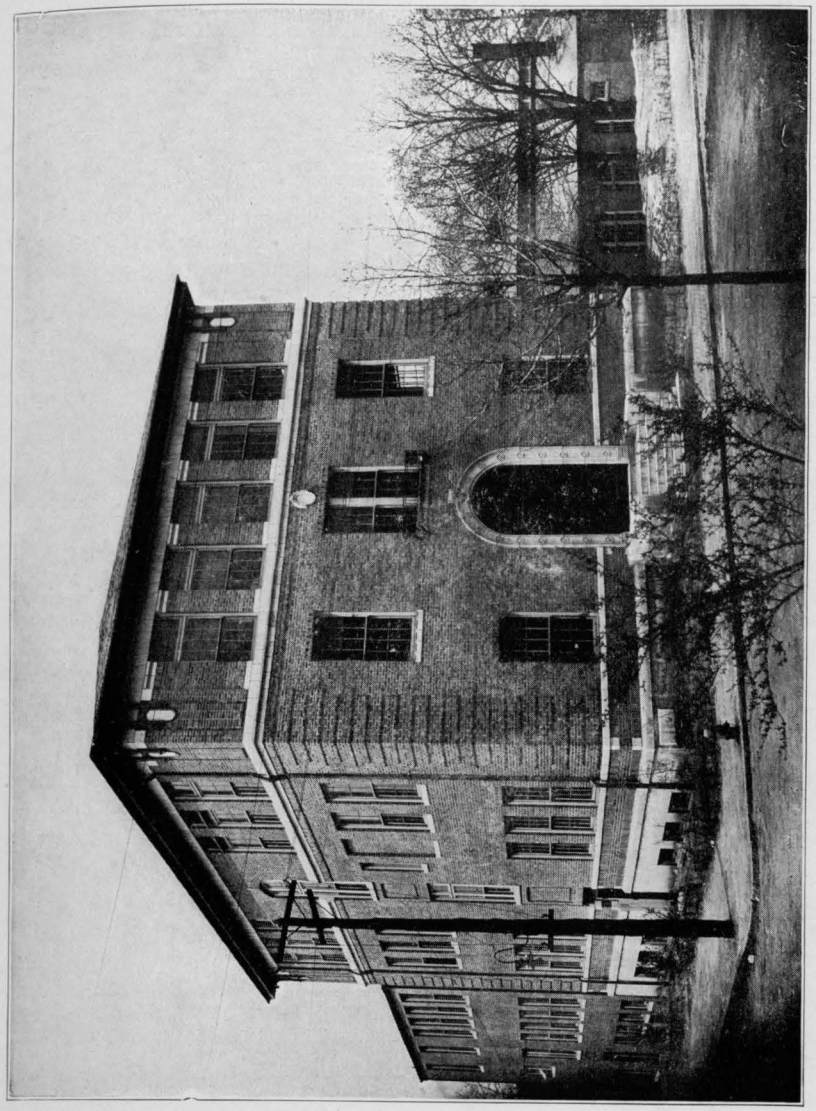
M. E. 3 and 4. **Woodshop.**

Professor Coon, Mr. Henika, Mr. Norman, Mr. Printup and Mr. Patillo.

M. E. 3a and 4a, Freshman E. E. and M. E., first term 120 hours, second term, 60 hours.*

M. E. 3c, Freshman Arch., Chem., C. E., and E. Ch., first term 60 hours.

*In the shop courses the total hours per term is given. In other courses, hours per week.



NEW MECHANICAL ENGINEERING BUILDINGS

Comprising Administration Hall, Smith Shop and Foundry. Later, a Machine Shop, Wood Shop, and Corresponding Administration Hall Will be Added.

M. E. 3c, Freshman T. E. and Sp. T. E., first term, 48 hours.

1st.—To pass Woodshop, students must complete Bench and Lathe work, pass examination in Text Books, and put in 40 hours maximum or 20 hours minimum time, on Cabinet and Pattern Making; as soon as the maximum is completed, they are excused from Woodshop, and they can not graduate until the minimum is completed.

2nd.—Each unexcused absence shall take four points from grade; deficiencies caused by unexcused absences, at the end of the month, will necessitate repeating the subject.

3rd.—No student will be allowed to do more than four hours work for himself until the maximum time has been completed.

As described above, the beginner completes satisfactorily about twelve tasks in joint making in wood. He then takes up wood turning and is kept on this, turning at first mere tasks, but later useful articles, such as file handles, etc., until he has acquired considerable skill at the lathe. After the lathe work the student is put upon cabinet work. It is always upon some useful thing, usually something ordered by some Department of the School. For instance, students have made many hundreds of drawing boards, and scores of cabinets in pine and in plain and quartered oak.

Students who have completed the maximum of 40 hours time are allowed to construct articles for themselves, being charged the bare cost of materials used. Very many of these articles have reflected the highest credit upon the student, and some astonishingly beautiful things have been constructed by boys who had had no prior experience whatever in the use of tools.

Students are required to keep their tools in good order, and only the very best of tools are supplied to them. The student pays for all damaged or missing tools.

All students are required to pass an examination in pattern-making, which is taught by lecture, text book and pattern construction.

Students from accredited schools where wood working

is taught, are given credit for such work, but are required to pass an examination in pattern-making.

M. E. 5, 5a, and 5b. **Smithshop.**

Professor Coon and Mr. Thompson.

M. E. 5 or 5a, Freshman, first or second term, 60 hours.

M. E. 5b, Freshman T. E. and Sp. T. E., second term, 40 hours.

In the smithshop the student at first is given a set of tasks in forging, in order to acquire skill in the handling of a forge fire and in the heating of metals, as well as in the actual work of forging. He is taught the treatment required for different classes of steels, annealing and tempering, case hardening, brazing, tool dressing of lathe tools, etc. Students in this shop make a very great number of useful articles, such as razors, carving sets, drawing knives, andirons, hammers, etc.

This subject is taught by text-books and lectures, as well as by practice, and students are required to pass an examination on these.

M. E. 7, 7a, and 7b. **Foundry.**

Professor Coon and Mr. Van Houten.

M. E. 7 or 7a, Freshman, first or second term, 60 hours.

M. E. 7b, Freshman T. E. and Sp. T. E., first or second term, 40 hours.

Students in the foundry do the various work of the foundryman, making molds for patterns, running heats from the cupola, metal mixing, brass casting, aluminum and alloy making, core making, etc.

Students are required to pass an examination in this subject, which is taught, like the smith shop work, by text book and lectures, as well as by practice.

M. E. 11, 12, and 13. **Machine Shop.**

Professor Coon, Mr. Martindale, Mr. Peacock, Mr. Adamson and Mr. Griffin.

Prerequisite: M. E. 3, 4, 5, 7, and ability to read and understand simple machine drawings.

M. E. 11-12, Sophomore E. E., and M. E., first and second terms, 120 hours each term.

M. E. 11a, Freshman Chem. and E. Ch., second term, 120 hours.

M. E. 11b and 12b, Junior T. E. and Sp. T. E. II first and second terms, 60 hours each term.

M. E. 11c, Freshman C. E., second term, four hours per week.

M. E. 13, Junior M. E., second term, 60 hours.

The work in the machine shop is almost exclusively the construction of useful, workable machinery, as described in the opening announcement of the Department of M. E. All the varied processes carried on in a well equipped machine shop of a manufacturing plant are at the disposal of the student. He is given work in gear cutting, turning, shaping, planing, drilling, grinding, babbiting journal boxes, chipping, filing, scraping not only flat surfaces, but scraping fits, laying out work, assembling, sketching, tool room keeping by check system, keeping machinery in order and making repairs of many kinds, valve fitting, cylinder boring, management of portable forge, keeping engines and dynamos in order, firing and caring for steam boilers. At all times a varied class of work is in process of construction, such as lathes, planers, gas engines, steam traps, grinding machines, friction clutches, electric machines of different kinds, etc., and repairs for the various departments of the school.

Instruction and practical work are given in pipe fitting, both steam and water, plumbing in its various branches, electric wiring, etc., all under instruction of experienced men in the varied classes of work,—men who have had large experience in commercial work. Special emphasis is placed on this last statement. There is not an instructor in the shops anywhere who has not come up through the school of hard knocks, with years of experience in commercial shops.

M. E. 23-24. **Analytic Mechanics.**

Professor Coon.

Prerequisite, Math. 26 and 28, M. E. 11-12.

Junior M. E., first term, two hours; second term, 5 hours.

M. E. 28 and 31. **Mechanics of Materials.**

Professor Coon and Professor McCarthy.

Prerequisites: Math. 25 and 26, and all Physics.

M. E. 28.—Junior, second term, 3 hours.

M. E. 31—Senior, first term, 2 hours.

Analysis of stresses in beams and girders. Analytical determination of formulas, of use of practical constants determined in testing machines. Columns, long and short, of wood, steel, concrete and reinforced concrete. Stresses in thick cylinders and boiler shells, pipe, etc. Girders, floors, roofs, etc., of reinforced concrete. Various stresses in shafting, transmission of power, etc. Centrifugal forces and other forces of acceleration in circular saws, fly wheels, connecting rods, etc. Stresses in tanks, grain bins, crane hooks, stand pipes, smokestacks, etc.

Text: *Merriman,* Mechanics of Materials.

M. E. 33. **Engineering Problems.**

Professor Coon.

Prerequisites: All Math., Physics, Draw, 1, 2, 4, 11, 14, 21, 23.

Senior, first term, 2 hours.

Special problems in Analytical Mechanics, given to M. E. Seniors who have completed Ex. E.-1. Exclusively lectures and problems in accelerated motion, such as centrifugal force, axis of spontaneous rotation, centre of percussion, point of application of resultant force, and its direction. Graphic analysis wherever applicable. Forces applied to bodies free to move, with resultant motion.

M. E. 35. **Steam Engine.**

Professor Coon.

Prerequisites: All Math., Physics, Analytic Mechanics, and Draw., 1, 2, 4, 11, 14, 21, 23.

Senior, first term, 4 hours.

Thermodynamics of steam. Action of the steam engine as a heat engine. Indicator card. Temperature-entropy chart. Analysis of compound and triple ex-

pansion engines, complete. Calorimetry, Condensers, Feed water heaters, Jacketing, Superheating, Injectors, and other boiler feeders. Lubricators, Governors, complete analysis by instant centre method (principle of virtual velocities). Kinematics of the steam engine, rotative effort. Accelerations of piston and forces set up. Graphics wherever applicable. Stresses due to various accelerations in connecting rod. Steam engine details, types of steam engines. Complete analysis of drop cut-off engines, such as Corliss, etc. Locomotive and marine engines. Steam engine design. Steam turbines.

Text: *Ripper.*

M. E. 36. **Gas Engine.**

Professor Coon.

Prerequisites: All Math., Physics, and Draw, 1, 2, 4, 11, 14, 21, 23.

Senior, second term, 4 hours.

Thermodynamics of gas engines, types of gas engines, —explosive engines, combustion engines, gas engine details, marine engines, stationary engines, gas engine fuels, combustion, carburetors, gas production, such as suction producers with "soft" coal, lignite, etc. Analysis of gas engine tests, heat balances, gas turbines.

Text: *Carpenter and Diederichs.*

M. E. 39. **Valve Gears.**

Professor Coon.

Prerequisites: All Math., Physics, and Draw., 1, 2, 4, 11, 14, 21, 23.

Senior, first term, 2 hours.

Complete analysis of plain slide valve gears, fixed and shifting eccentrics, by Bilgram, Zeuner and McCord diagrams. Exclusive graphics. Ryder (Meyer), and Gonzenbach gears. Complete blackboard analysis of link motions. Shifting (Howe-Stephenson) link; stationary (Danl. Gooch) link; straight link (Allan); Egide Walschaerts link; Pilliod link; all both for stationary and locomotive purposes. Buckeye valve gears. Joy, Marshall and Hackworth gears. Cam gears.

Text: *Halsey* and lectures.

M. E. 41. **Drawing.**

Professor Coon.

Prerequisites: All Math., Physics, and Draw. 1, 2, 4, 11, 14, 21, 23.

Senior, first term, 8 hours per week.

The student is given the elements of a machine to design, as nearly as possible as would be done in a commercial drawing office. He is thrown upon his own resources, having access to other machines to aid him in deciding upon sizes, thickness, etc., with expert advice to prevent his drawing absurdities. The designing covers a wide range of subjects, its principal value being to impress upon the student the conventional shop practice, and the proper method of producing working drawings of machinery. All the various machines, etc., manufactured in the shops are from working drawings made by students.

M. E. 42. **Machine Design Drawing.**

Professor Coon.

Prerequisites: All Math., Physics, and Draw, 1, 2, 4, 11, 14, 21, 23.

Senior, second term, 8 hours per week.

As far as possible the drawing of this term is in connection with the M. E. 44. It is also largely the solution of problems involving force, by use of graphical statics. Problems connected with governor design, as shaft governors, inertia governors, spring loaded governors, stresses in framed structures, etc. Laying out of power plants and works. There is also always something to be designed and drawn for our use in the shops.

M. E. 44. **Machine Design.**

Professor Coon.

Prerequisites: All Math., Physics, Analytic Mechanics, and Draw., 1, 2, 4, 11, 14, 21, 23, and M. E. 28 and 31.

Senior, second term, 3 hours. Text and lectures.

Wrought and cast iron pipe and fittings. Cylinders and joints. Boilers, horizontal, tubular, and vertical.

Heating surface and grate area. Boiler and other riveted joints, analysis for maximum efficiency. Stacks and foundations. Clutches and brakes, disc, ring, strap and hydraulic. Belt and rope transmission. Locomotive and engine designs. Shafting hangers and lubrications. Gears, toothed and friction. Aeroplane construction.

Text: *Spooner.*

M. E. 46. **Graphical Statistics.**

Professor Coon.

Prerequisites: All Math., Physics, and Draw. 1, 2, 4, 11, 14, 21, 23.

Senior, second term, 2 hours.

Lectures and problems. Warren, Pratt, Bollman trusses, Fink, "A" roof trusses, etc. Analysis by tabulation and moments, supplemented by graphics in the drawing room. Graphical solution of governor problems.

The construction of mills and factories is not given a separate heading. Modern mill construction, including foundations, is given during the Senior year.

M. E. 48. **Steam and Water Turbines**

Professor Coon.

Prerequisites: All Math., Physics, and Draw. 1, 2, 4, 11, 14, 21, 23.

Senior, second term, 2 hours.

Construction and operation of the various steam turbines so far introduced. Superheated steam, Condensers, Forms of buckets and systems of expansion. Use in connection with compound reciprocating engines.

Water turbines, Pelton Wheels and others. Design, form of guides and buckets, Laws of Velocity, Efficiencies, Distribution of power from water-power sites. Construction of masonry and concrete dams, solid and cellular slip joints (expansion). Proper foundations for dams to secure permanency.

M. E. 51. **Shop Methods.**

Professor Lowndes.

Senior in M. E., first term, one hour.

The object of this course is to familiarize the student with shop processes in such problems as are common in daily practice; to further the knowledge he has gained in the more elementary shop courses; to give him a clear idea of the kind of problems one meets in a modern shop; and to instruct him in the methods of attacking and solving such problelms.

DEPARTMENT OF MODERN LANGUAGES

PROFESSOR CRENSHAW AND MR. MCKEE.

General Statement

The study of modern languages at the School of Technology has a two-fold aim. Primarily, its purpose is to enable students to translate into their own tongue with ease and precision the literature which is constantly appearing in these languages on their professional subjects. Secondarily, its aim is to create in the student a living interest in the literature of these languages—an interest so strong that he will continue to read the great literary masterpieces found in them.

The courses in French, German, and Spanish extend through two years, and candidates for all degrees, except that of Bachelor of Science in Textile Engineering, are required to take a two-year course in one of these languages.

The fall term of the first year is devoted to a thorough grounding in the inflections of the languages. In the winter and spring terms, the forms already learned are fixed by translating and parsing easy prose selections. Correct pronunciation is aimed at from the beginning—a correctness gained, not by rules, but from the teacher. The ear is trained by dictation, and, as far as time will permit, by conversational exercises.

During the second year, works of greater difficulty are translated, the syntax of the language is studied more thoroughly, and the sentence structure is taught by practical work, both in written and oral exercises. In both years a wider field is covered by reading one part of the work assigned, carefully and slowly, another part rapidly. Greater facility in handling the languages is also gained by frequent sight translations.

In order that the students may learn to handle the topics discussed in the current technical magazines, articles from these are assigned to members of the Senior class, and written translations are required to be made in good English, at the same time faithfully reproducing the originals.

To facilitate this work, the Modern Language Department has at its disposal a reading room where magazines and newspapers published abroad and in the United States can be freely used by students.

Courses of Instruction.

M. L. 1. Elementary German.

Dr. Crenshaw.

Junior, first term, three hours.

German grammar, including the declension of nouns, adjectives and pronouns, the conjugation of strong and weak verbs, the use of prepositions, word-order in the independent sentence.

Texts: *Vos,* "Essentials of German;" *Carruth,* "German Reader."

M. L. 2. Elementary German

Dr. Crenshaw.

Junior, second term, three hours.

German grammar, including the use of modal auxiliaries, passive voice, separably and inseparably compounded verbs, word-order in the dependent sentence.

Texts: *Vos,* "Essentials of German;" *Carruth,* "German Reader;" *Truscott and Smith,* "German Composition;" *Hodges,* "Scientific German Reader."

M. L. 3. Advanced German.

Dr. Crenshaw.

Senior, first term, three hours.

Grammar reviewed in connection with translations. Stress laid on the acquisition of a vocabulary for speaking and writing German and for translating German into English. Daily practice in German composition and German conversation.

Texts: *Jagemann,* "German Syntax;" *Truscott and Smith,* "German Composition;" *Freytag,* "Die Journalisten;" *Lessing,* "Minna von Barnhelm;" *Wright,* "German Scientific Reader;" *Storm,* "Immensee."

M. L. 4. **Advanced German.**

Dr. Crenshaw.

Senior, second term, three hours.

German Syntax, with special reference to the structure of the sentence in connected prose. Translation of scientific German works on heat, steam, electricity, magnetism, electric motor and steam engine.

Texts: *Jagemann,* "German Syntax;" *Wright,* "Scientific German;" *Müller,* "Die Elektrischen Maschinen;" Newspaper German; Erfindungen und Erfahrungen; *Truscott and Smith,* "German Composition, Part II;" German poems; Short German comedies.

M. L. 7. **Elementary French.**

Mr. McKee.

Junior, first term, three hours.

French elements, including: forms of nouns and adjectives, regular conjugations, use of the auxiliaries "avoir" and "etre", the position of personal pronoun objects, the use of cardinals and ordinals, the Partitive Noun and Partitive Genitive.

Texts: *Fontaine,* "Nouveau Cours Francais."
Kuhn, "French Reader."

M. L. 8. **Elementary French.**

Mr. McKee.

Junior, second term, three hours.

Grammar reviewed in connection with reading; drill on the forms of the irregular verbs; the use of tenses; passive voice; subjunctive mood; the infinitive; relative and interrogative pronouns; daily practice in French composition, dictation, and conversation.

Texts: *Fontaine,* "Nouveau Cours Francais;" *Kuhn,* "French Reader," completed; *Bruno,* "Le Tour de la France par deux Enfants."

M. L. 9. **Advanced French.**

Dr. Crenshaw.

Senior, first term, three hours.

This course includes the translation of advanced literary and scientific French texts; weekly exercises in connected French prose with special reference to French syntax; daily sight translations; French dictation; French conversation.

Texts: *Maloubier and Moore,* "French Grammar;" *Dike,* "Scientific Reader;" Newspaper French; Selections from "Le Mois;" *Hugo,* "La Chute."

M. L. 10. **Advanced French.**

Dr. Crenshaw and Mr. McKee.

Senior, second term, three hours.

Texts: *Maloubier and Moore,* "French Grammar;" *Dike,* "Scientific French Reader," completed; French composition; *Daudet,* "Morceaux Choisis;" Selections from "Le Mois;" Newspaper and Magazine French, *Courrier* "des Etats Unis," "Bulletin de la Union Pan-Americaine;" *Moliere,* "Le Bourgeois Gentilhomme."

SPANISH

The courses in Spanish are intended to equip the student with a speaking knowledge of the language. Conversation begins practically with the first lesson and extends throughout the course. The daily language of the home, street, newspaper, business, and commerce is taught by the use of commercial readers, Spanish newspapers, Spanish magazines, Spanish composition and Spanish conversation. The whole trend of the work is practical.

M. L. 13. **Elementary Spanish.**

Dr. Crenshaw and Mr. McKee.

Junior, first term, three hours.

Spanish Grammar, including forms of nouns, adjec-

tives, and pronouns; regular conjugations; the idiomatic uses of estar, ser, hacer, and tener.

Texts: *DeVitis,* "Spanish Grammar;" *Harrison,* "Commercial Spanish Reader."

M. L. 14. **Elementary Spanish.**

Dr. Crenshaw and Mr. McKee.

Junior, second term, three hours.

Spanish Grammar, including position of personal pronoun objects, verbs with radical change, use of subjunctive mood, passive voice, irregular verbs. Daily practice in Spanish composition and Spanish conversation; Spanish translation.

Texts: *DeVitis,* "Spanish Grammar;" *Harrison,* "Commercial Spanish Reader;" *Crawford,* "Spanish Composition;" "El Comercio;" Boletin de la Union Panamericana."

M. L. 15. **Advanced Spanish.**

Dr. Crenshaw and Mr. McKee.

Senior, first term, three hours.

This course is devoted to Spanish Composition, Spanish Conversation and to translation of works of greater difficulty in literary and scientific Spanish. Use is made of current Spanish magazines and newspapers.

Texts: *Crawford,* "Spanish Composition;" *Remy,* "Spanish Composition;" *Willcox,* "Scientific and Technical Spanish;" "Boletin, de la Union Panamericana," "El Comercio."

M. L. 16. **Advanced Spanish.**

Dr. Crenshaw and Mr. McKee.

Senior, second term, three hours.

This course is a continuation of M. L. 15, in which the points stressed are: first, the acquisition of the vocabulary of daily life; second, Spanish conversation; third, the ability to write business letters; fourth, fluency in translating commercial, technical and newspaper Spanish.

Texts: *Remy,* "Spanish Composition;" *Willcox,* "Scientific and Technical Spanish;" "El Comercio;" "Boletin de la Union Panamericana;" "Blanco y Negro;" *Moratin.* "El Si de las Ninas;" *Escrich Fortuna,* "Historia de un Perro Agradecido," "El Placer de no Hacer Nada."

DEPARTMENT OF PHYSICAL CULTURE

W. A. JACKSON, M. D., *Director.*
MR. T. R. WEEMS, *Instructor.*

General Statement

This department has for its aim the development of a strong, healthy body for each individual student. A flexible system of physical culture has gradually been developed, which aims at an elective course which we hope will include eventually the entire student body. It also recognizes the fact that the success of each graduate will depend to some extent upon his being able not only to procure efficient employees in the work shop, mill or construction camp, but also to keep these employees efficient. Efficiency is really the true test of the successful man. The question to be answered by the Superintendent of a manufacturing plant is not only how shall I preserve personal health, but also how can I keep my employees in a condition which will enable them to do good work *every* day in the year?

The question of the health of his working community is one which the Superintendent can not afford to ignore, and the sanitary regulations concerning ventilation, drainage, water supply, food supply, disposal of sewage and offals, the control of contagious diseases and the prevention of diseases are all vital questions, and bear directly upon the efficiency of employees. Not only should the Superintendent know how to keep his operatives healthy in body, but he should consider also their contentment, for, with health and contentment secured, there is eliminated, to a great extent, the factors which cause operatives to move from one factory to another.

Gymnastics

Recognizing that the student, entering the Freshman class, is at the period where he is passing from boyhood to

manhood, and that his future success in life is largely dependent upon a strong, healthy body, the School has made a graded course in Gymnastics compulsory for all members of the Freshman class. Each member of this class may report to the Director, who will give him a thorough examination and prescribe the exercise he is able to take.

The Gymnasium is a large, airy hall, 40x74 feet, with high ceiling, permitting the use of flying rings, and other swinging apparatus. New apparatus is constantly being added, thus keeping it abreast of the times.

Each student in the Freshman class is required to supply himself with the regulation gymnasium *uniform*, consisting of *plain*, navy-blue, quarter-sleeve shirt, navy-blue knee-tights, supporter, and white shoes, at a total cost of about two dollars.

N. B.—Special attention is called to the fact that the gymnasium suits *must be uniform*. No striped shirts or tights will be allowed in this class—and the shoes must be clean and white.

Students are advised not to purchase the uniform until they come to Atlanta, thus avoiding mistakes. An examination in light and heavy gymnastics is given at the beginning of the fall term, and each man is advanced as fast as he improves.

Advanced Gymnastics.

Students showing special ability or aptitude for gymnastics are encouraged and given individual instruction.

Baths and Heating

There are adequate bath-rooms on the campus for the use of the student-body, and dressing-rooms in the Gymnasium and training quarters. Special attention is paid to heating the Gymnasium, bath-rooms, and dressing-rooms during cold weather.

Course in Gymnastics

Gymnastics I.

Mr. Weems.

Freshman Class, two hours.

At the beginning of the year the course will consist of

light work, gradually increasing in difficulty, as the student acquires ability to do heavier work. This work will consist of a graded course in light and heavy gymnastics, as outlined below.

Gymnastics II.

Mr. Weems.

Freshman Class, second term, two hours.

The work of the Second Term will be a continuation of the work of the First Term, gradually increasing in the skill and strength required.

Course in Graded Gymnastics

Mr. Weems.

First—Work on pulley-weights and other light apparatus to develop the muscular system, heart and lungs.

Second—Light combinations; e. g., Indian clubs, dumb-bells, etc., to develop grace, co-ordination and self-control.

Third—Work on the heavy apparatus, to develop strength, physical judgment, muscular control, agility and self-control.

Fourth—Competitive exercises, to develop judgment, coolness and self-confidence.

Individual Work.

All students are encouraged to do individual work, and any student of the School can secure a thorough physical examination by making special arrangements with the Director.

Medical Attendance

Dr. W. A. Jackson, Miss Lois Farr, R. N.

The Joseph Brown Whitehead Memorial Hospital has been in operation five years; and the system, instituted at its opening, has been so successful in treating the sick and conserving the health of the student body, that the same system will be in force during the coming year.

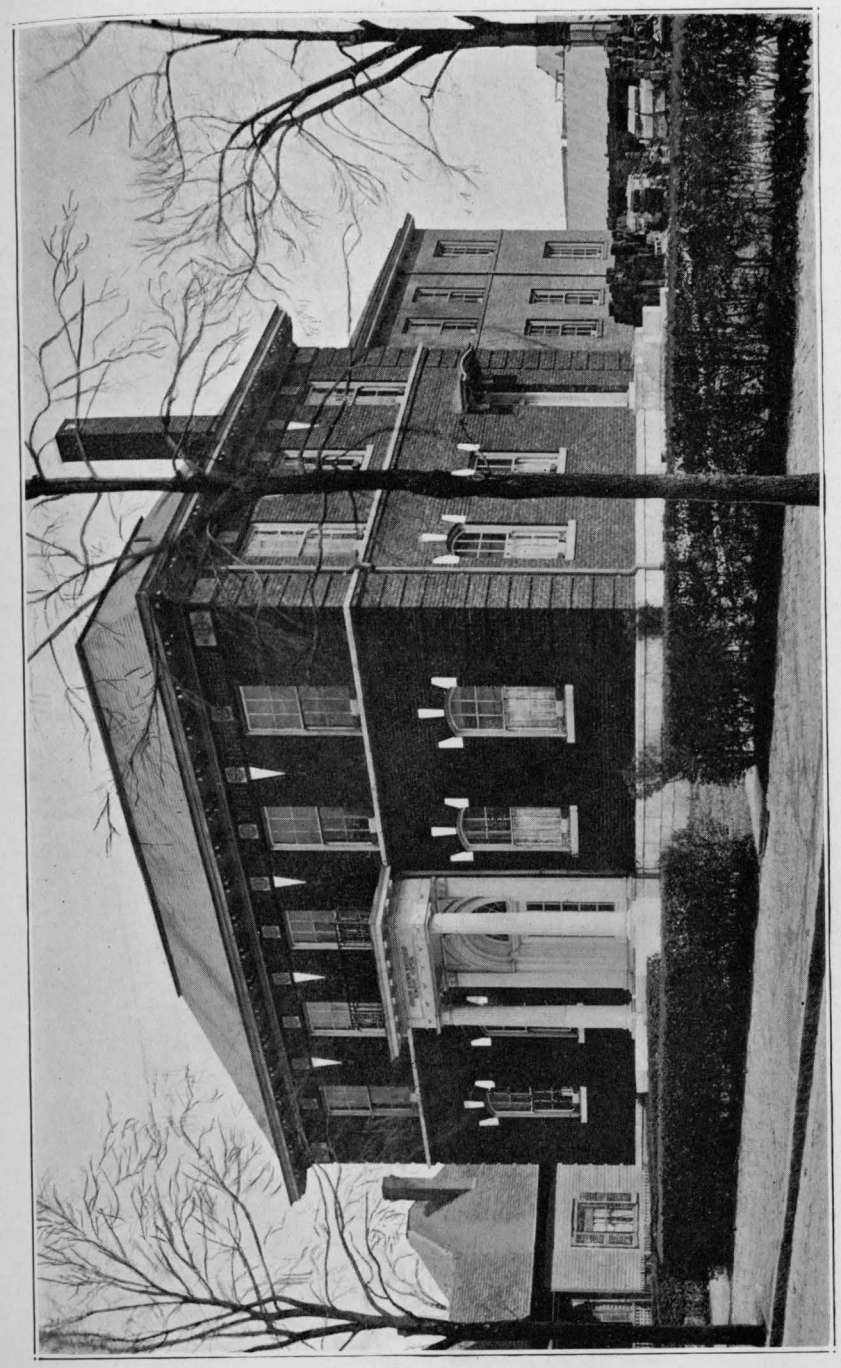
The School Surgeon is in charge of the Hospital and a trained nurse is in residence, thus insuring the very best care of the students in case of sickness. A hospital term fee of $5.00 is charged to all students, who do not reside at home. Payment of the hospital fee entitles any student, who is temporarily ill to all necessary medical and surgical treatment, without charge, by the School Surgeon, and to necessary medicine and skillful nursing by a trained nurse, in residence. This exemption from charges does not apply to chronic cases, to surgical operations, or to constitutional disorders, the cause of which existed prior to the student's enrollment, or to treatment of diseases due to personal misconduct.

Students not residing in the dormitories will be charged twenty-five cents for each meal served in the hospital.

Students sick with diphtheria, scarlet fever, or smallpox, will be sent to the public hospitals provided for those diseases, and will pay their own board while there, but they will be entitled to free medical treatment by the school surgeon, and will be provided with the necessary medicine required for the treatment of their case, without charge.

A "Special Nurse" will be provided in those cases where the same is desired, at an additional fee covering the salary of the nurse and board, at the rate charged above. When consultation is required the student will pay the fee for consultation.

Students residing at home, who desire to avail themselves of the hospital privileges will be allowed to do so by payment of the stated fee. But no student who has been in attendance the first term will be allowed this privilege the second term, except by paying the fee for both terms. A student matriculating for the second term will pay the hospital fee for that term only.



THE JOSEPH BROWN WHITEHEAD MEMORIAL HOSPITAL.

DEPARTMENT OF PHYSICS

PROFESSOR EDWARDS, PROFESSOR NELMS AND DR. ELLIOTT.

General Statement

The aim of this department is to present the fundamental principles of Physics, the experimental basis upon which they rest, and, as far as possible, the mathematical reasoning employed in the deduction of various physical formulas. The student is not only made acquainted with certain physical laws in accordance with which physical events occur, but is taught that all physical quantities can be represented by symbols, and that certain mathematical relations exist between them, in consequence of which logical deductions can be made.

The study of Physics is taken up in a thorough and systematic way. Numerous problems are assigned in recitations, in order to familiarize the student thoroughly with the significance and practical use of the principles which he learns and the physical formulas which he sees deduced.

Equipment

The lecture-room is provided with various facilities for experimental demonstration. By means of shades the room can be darkened when necessary; the lecture-room is provided with a water tank, water, gas, and electricity from dynamo and storage-battery. There is a good double stereopticon with arc-lamps and mechanical dissolver; also a projecting lantern with J. B. Colt automatic feed arc-lamp, supplied with vertical attachment—an accessory to a lecture-room which is indispensable for the presentation, to a large class, of a great variety of physical phenomena. The department is supplied with a polariscope for the projection on the screen of the colors of crystalline plates, and with a large collection of lantern slides for use in lectures. The outfit of apparatus for lecture experiments is large, and additions to it are constantly being made. Among the many pieces of apparatus may be mentioned: a hydraulic press, a large rotary air-pump, a Geryk air-pump, one-half horsepower motor, rotating apparatus with accessories; a mandrel for high-speed rotation, gyroscope, balances, Hero's fountain, barometers, Holtz machine,

eight-inch spark Ruhmkorff induction-coil, Geissler and Crooke tubes, several X-ray tubes and fluoroscope, a battery of Leyden jars, wireless telegraph apparatus, apparatus for the mutual action of currents, tangent galvanometers, resistance boxes, thermo-pile, two large parabolic reflectors, lenses, concave and convex mirrors, apparatus for demonstrating the laws of reflection and refraction of light, revolving mirror and manometric capsule, several color discs, Koenig's apparatus for showing interference of sound waves, organ pipes, tuning forks, electrically driven tuning fork, siren, sonometer, spectrometer, diffraction gratings, prisms, and many other pieces.

The laboratories of the department occupy three rooms in the basement of the Academic building. One of these rooms has a floor space of 40 feet by 50 feet, and is especially well lighted. It is used for general laboratory work. The other rooms are used for experiments in light and electricity. The equipment of these laboratories is very complete, additions having been made during this year, by purchase and by construction in the school shops. For laboratory work in electricity the department is supplied with a sensitive Thompson mirror galvanometer, a Siemens mirror galvanometer, two Queen reflecting galvanometers, Queen tangent galvanometer, Clark's patent tangent galvanometer, Bunnell tangent galvanometer, two very sensitive D'Arsonval galvanometers, three Rowland's patent D'Arsonval galvanometers, a large tangent galvanometer, three small D'Arsonval galvanometers, a magnetometer, a five-dial Wheatstone bridge, two P. O. box bridges, two Weston ammeters, a Weston voltmeter, fifteen resistance boxes of different sizes, a copper voltameter, an earth-coil, a ballistic galvanometer, a standard cell, a micro-farad standard condenser, a one-half micro-farad standard condenser, two 100,000-ohm resistance boxes, Kempe discharge key, Webb discharge key, standard solenoid, a small 5,000-volt transformer, glass-plate condenser, a rotary spark-gap, a small high-frequency transformer.

The course in laboratory includes the experimental verification of physical formulas and the determination of various physical constants, and is designed to give the student practice in the use of instruments of precision and

proficiency in the manipulation of physical apparatus. Among the experiments performed in this laboratory are the following: Determination of the acceleration of gravity by the physical pendulum, of the modulus of torsion of a steel wire, of the modulus of simple rigidity by torsion, of Young's modulus for steel wire, of the co-efficient of friction between two bodies, of the relation between power and load on a wheel and axle; verification of Boyle's law; determination of the radiation constant of a calorimeter, of the heat of fusion of ice, of the heat of vaporization of water, of the specific heat of metals; verification of the laws of vibrating strings by sonometer; determination of the index of refraction of glass and the distance between the lines of a diffraction grating by spectrometer; the measurement of resistance by Wheatstone bridge, of E. M. F., and resistance of batteries, of the magnetic moment of a magnet by magnetometer, of the horizontal intensity of the earth's magnetic field, of the capacity of condensers, of the temperature co-efficient of resistance of copper, of the magnetic properties of iron by ballistic galvanometer method, of resistance by double-method of the slide-wire bridge, and the location of crosses and grounds by the Murray loop method.

Carefully written reports are required on all experiments performed. These reports include the derivation of all formulas used in calculations. The application of the principles of analytical geometry to the solution of practical problems is emphasized in this course.

Courses of Instruction

Phys. 5. **Elementary Mechanics and Sound.**

Professor Edwards and Professor Nelms.

Prerequisite, Math. 15.

Sophomore, T. E., Arch., and Sp. Arch., 1st term, 3 hrs.

This course is elementary and consists of recitations, problems, and lectures. The physical properties of Matter, Mechanics of Solids, Mechanics of Fluids and Sound, are included in this course. A large number of numerical problems are solved.

Text: *Carhart's* "University Physics." Part I.

Phys. 6. **Elementary Light, Heat, and Electricity.**

Professor Nelms.

Prerequisite, Phys. 5.

Sophomore, T. E. and Arch., second term, three hours.

This course is a continuation of Phys. 5, Light, Heat, Electricity, and Magnetism, being treated in an elementary way.

Text: To be supplied.

Phys. 9. **Mechanics and Heat.**

Professor Edwards, Professor Nelms, and Dr. Elliott.

Prerequisite, Math. 18.

Sophomore, M. E., E. E., C. E., Chem., and E. Chem., first term, four hours.

A course in Kinematics, Kinetics, Elasticity, Mechanics of Fluids, and Heat. Most of the time is devoted to Kinemetics and Kinetics. The algebraic method of analysis is emphasized. The solution of a large number of numerical problems is required, involving the use of the English engineers' and metric systems of units.

Text: *Reed and Guthe's* "College Physics."

Phys. 10. **Heat, Sound, and Electricity.**

Professor Edwards, Professor Nelms, and Dr. Elliott.

Prerequisite, Phys. 9.

Sophomore, M. E., E. E., C. E., Chem., and E. Chem., second term, four hours.

This is a continuation of Phys. 9. Heat, Sound, and introductory Electricity and Magnetism are included in this course.

Text: *Reed and Guthe's* "College Physics."

Phys. 11. **Electricity, Magnetism, and Light.**

Professor Edwards and Professor Nelms.

Prerequisite, Phys. 9 and 10, Math. 25 and 26.

Junior, M. E., E. E., C. E., Chem., and E. Chem., first term, three hours.

This course is given by lectures and recitations. The fundamental principles of Electrodynamics, Electromagnetism, and Electromagnetic induction are taken up in a systematic way. The application of these principles to the dynamo and motor are explained by lectures and demonstrations.

The subject of discharge of electricity through gases is given by lectures and a large number of demonstrations.

In the subject of light, special attention is given to optical instruments.

Text: *Reed and Guthe's* "College Physics."

Phys. 14. **Laboratory.**

Professor Edwards, Professor Nelms, and Dr. Elliott.

Prerequisite, Phys. 9.

Sophomore, M. E., E. E., C. E., Chem., and E. Chem., second term, four consecutive hours.

This course consists of experiments, reports and instruction in the laboratory. The application of the principles of analytical geometry is emphasized. The experiments are on specific heat, heat of fusion, heat of vaporization, mechanical equivalent of heat, elasticity, friction, machines, etc.

Reference: *Nichols'* "Laboratory Manual."

Phys. 15. **Laboratory.**

Professor Edwards, Professor Nelms, and Dr. Elliott.

Prerequisite, Phys. 11 and 14.

Junior, M. E., E. E., C. E., Chem., and E. Chem., first term, four consecutive hours.

This course is a continuation of Phys. 14. The experiments are on Light, Electricity, and Magnetism.

Reference: *Nichols'* "Laboratory Manual."

Phys. 17. **Laboratory.**

Professor Edwards, Professor Nelms, and Dr. Elliott.

Prerequisite, Phys. 15.

Junior, E. E., first term, two hours.

This course is similar to Phys. 15, but is designed for students of Electrical Engineering; the magnetic properties of iron, specific resistance, loop tests, etc., are studied.

Phys. 20. **Slide Rule.**

Parallel Course, Phys. 14.

Sophomore, M. E., E. E., C. E., Chem., E. Chem., second term, one half hour.

A thorough drill is given in the theory and use of the Mannheim Slide Rule.

TEXTILE DEPARTMENT

The A. French Textile School

PROFESSOR RANDLE, PROFESSOR CAMP, MR. HEBDEN, MR. JONES AND MR. PHILPOTT.

General Statement

The Textile Department gave the first instruction in textile education south of the Mason and Dixon Line in February, 1899. The end of the first decade found the department well past the experimental stage, proceeding along well tried lines with the various phases of its curricula appreciated and fully recognized by cotton manufacturers and the public in general.

The scope of instruction has been broadened to include the very highest grades of yarn and fabrics in order to exhibit the possibilities of native resources, as well as to give technical training along textile lines.

This department now offers excellent advantages to young men who intend entering the textile industry. The department is equipped for performing every process and operation of cotton manipulation from cotton field to finished fabric, and has admirably arranged class rooms,

laboratories, etc., for giving practical instruction in the sciences and the application of this knowledge along industrial lines.

A large amount of practical work is given, enabling the student to familiarize himself with all details in the design, construction and operation of the various types of the several machines and processes. The yarns required in the weaving rooms are manufactured in the carding and spinning departments, thus affording opportunity for performing the whole of every process and operation on yarn and fabric from the ginning of the seed cotton to the finished fabric.

These products are manufactured by the students, unassisted, except under the direction of skilled instructors, in as nearly mill-like manner and quantity as is consistent with best results. These products are not merely experimental samples, but are made in quantity with the quality fully up to mill standards.

Textile Building

The Textile Building is a splendid example of architectural skill in modern mill construction. Its three floors, 150x75 feet, each, contain ample class rooms, laboratories and halls for textile equipment.

Textile Equipment

Great care was exercised in selecting the textile equipment, which is now the most complete in the world for education in the different branches of cotton manufacture. It will be noticed, in almost every process, different forms of machines, as built by the different makers, have been installed, thus enabling the student to become familiar with the various types, as well as affording a most unusual opportunity for direct comparison.

The power for driving the machines is derived from a Lane and Bodley Corliss steam engine and is transmitted by Jones and Laughlins equipment. The Sturtevant system is used for heating and ventilating, and the humidity is controlled by the American Moistening Company's system. The entire building is provided with Grinnell auto-

matic sprinklers for fire protection and is lighted by electricity.

Carding Department

Ginning.—One Winship Cotton Gin Feeder; one Winship 60-saw Cotton Gin; one Winship Condenser.

Pickers.—One Kitson Automatic Feeder; one Kitson Combination Breaker and Intermediate Lapper; one Atherton Finisher Picker.

Cards.—One Saco-Pettee 40-inch Revolving Flat Card; one Whitin 40-inch Revolving Flat Card; one Lowell 40-inch Revolving Flat Card; one Howard & Bullough 40-inch Revolving Flat Card.

Combing.—One Dobson & Barlow Silver Lap Machine; one Whitin Silver Lap Machine; one Whitin Ribbon Lap Machine; one Dobson & Barlow Comber, 8 heads; one Whitin Comber, 6 heads.

Railway.—One Saco-Pettee Railway Head with evener motion and metallic rolls.

Drawing.—One Saco-Pettee Drawing Frame, 4 deliveries, metallic rolls; one Whitin Drawing Frame, 4 deliveries, metallic rolls.

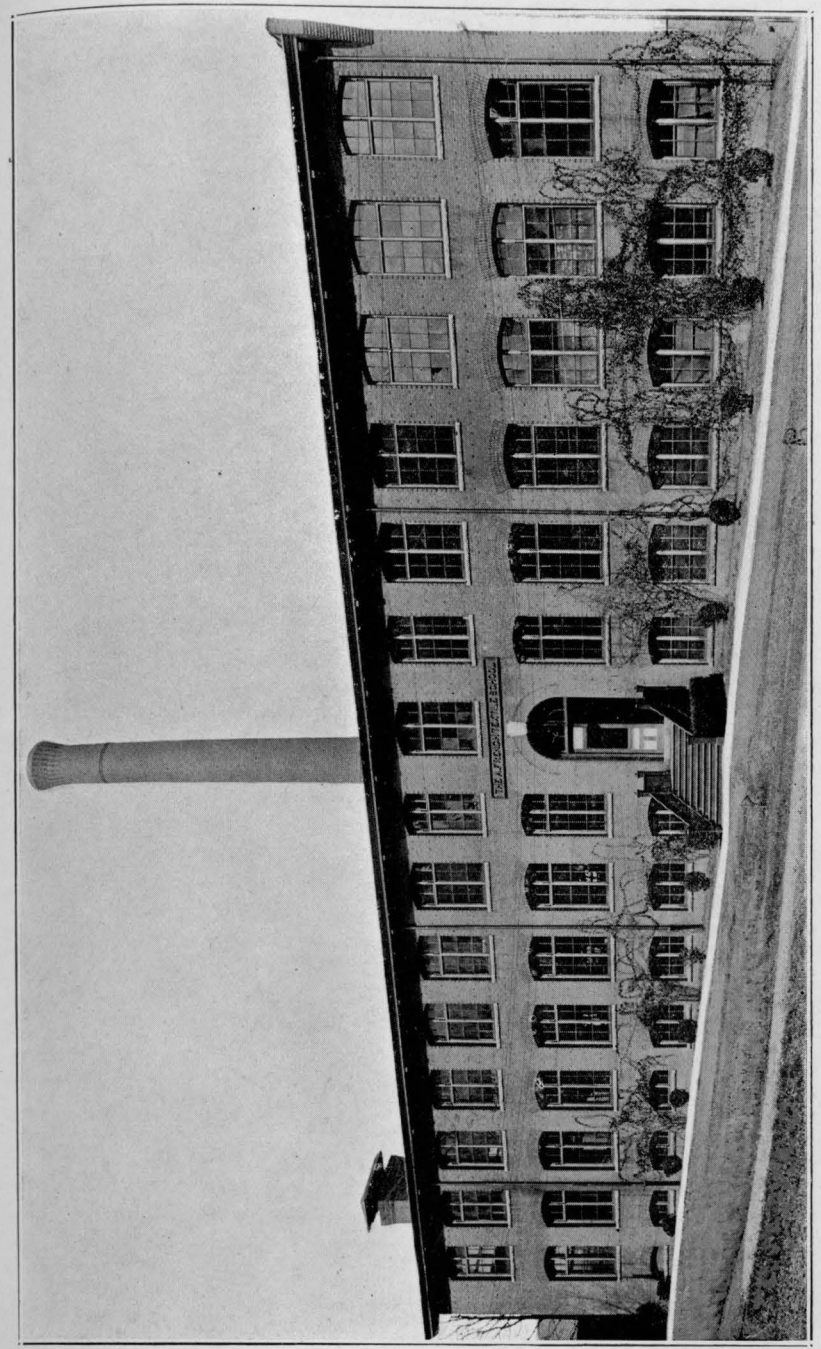
Fly-Frames.—One Woonsocket Slubber, 32 spindles; one Saco-Pettee Intermediate, 42 spindles; one Woonsocket Intermediate, 42 spindles; one Saco-Pettee Fine-frame, 72 spindles; one Woonsocket Fine-frame, 64 spindles; one Providence Fine-frame, 64 spindles, one Saco-Pettee Jack-frame, 96 spindles.

Miscellaneous.—Grinding, stripping and burnishing rolls; percentage, roving and yarn scales; complete set carder's tools, sliver balance, change gears, etc.

Spinning Department

Ring Spinning.—One Fales & Jenks Combination Warp and Filling Frame, 80 spindles; one Fales & Jenks Filling Frame, 80 spindles; one Saco-Pettee Warp Frame, 160 spindles; one Saco-Pettee Combination Warp and Filling Frame, 160 spindles; one Howard & Bullough Combination Warp and Filling Frame, 160 spindles; one Whitin Warp Frame, 80 spindles.

Mule Spinning.—One Mason Spinning Mule, 360 Spindles.



THE A. FRENCH TEXTILE BUILDING.

Twisting.—One Draper Twister, 128 spindles; one Draper Twister, 32 spindles; one Fales & Jenks Twister, 80 spindles; one Howard & Bullough Twister, 128 spindles.

Spooling.—One Easton & Burnham Spooler, 24 spindles; one Draper Spooler, 40 spindles; one Whitin Spooler, 60 one Fairmont Presser Spooler, 12 drums.

Winding and Reeling.—One single spindle Universal Winding Machine; one Universal Winding Gang, 6 spindles; one Fairmount Bobbin Winder, 12 spindles; one Tompkins Reel, 50 spindles.

Miscellaneous.—One Week's Banding Machine; one power yarn testing machine; two Barber knotters; one twist counter; spindle sets, change gears, etc.

Weaving Department

Warping.—One Entwistle Beam Warper; one Entwistle Beamer; one Draper Beam Warper; one Draper Ball Warper; one Cole Beaming Machine.

Slashing.—One Lowell Single Cylinder Slasher; one Lowell Size Kettle; one Lowell Size Pump.

Hand Looms.—Hand-weaving room, with thorough equipment of hand bobbin winders, warping pins, hecks, drawing-in frames, and 22 hand looms with 20-harness dobbies, 4 shuttles, 4 beams complete.

Power Looms.—One Colvin Plain Loom; six Draper Northrop Looms; one Lewiston Pillow Case Loom; one Lewiston Plain Loom; three Whitin Plain Looms; nine Mason Plain Looms; one Lowell Print Cloth Loom; two Kilburn-Lincoln Looms; four Lowell Plain Looms; one Mutual Turkish Towel Loom; one Mason Gingham Loom; one Crompton Gingham Loom; one Mason Dobby Loom; three Crompton Dobby Looms; two Knowles "Gem" Looms; Crompton-Thayer Dobby Loom; one Fairmount Dobby Loom; one Fairmount Loom, 600 Jacquard; one Crompton Knowles Upholstery Loom, 400 Jacquard; one Kilburn-Lincoln Dress Goods Loom, 400 Schaum & Uhlinger Jacquard; one Stafford Plain Loom, 200 Halton Jacquard; one Lewiston Wide Loom, 1,200 Halton Jacquard; one Crompton Damask Loom, 600 Jacquard.

Knitting.—One Branson 7-8 Automatic; one Scott & Williams Automatic Shirt Body Machine; one Scott & Williams Sleever; one Scott & Williams Welter.

Finishing.—One Curtis & Marble Railway Sewing Machine; one Curtis & Marble Brushing and Calendaring Machine; one Ellott & Hall Cloth Folder; one Windle Doubling and Winding Machine; one Parks & Woolson French Napper; one American Napping Machine Co.'s French Napper.

Dyeing Department

One Klauder-Weldon Raw Stock Dyeing Machine; one Klauder-Weldon Skein Dyeing Machine; one Textile Finishing Machinery Co.'s Chain Warp Dyeing Machine; two Chain Dyeing Machines, built in our own shops; one Draper Winding-on Machine; one Draper Winding-off Machine; one Textile Finishing Machinery Co.'s Can Chain Warp and Drying Machine; one Schaum & Uhlinger Engine-driven Hydro-extractor; one Berry Ventilating Wheel; one Granger Jigg Dyer; one Phillips Steam Chest; one Butterworth Steam Cylinder; one Dry Room; two Cypress Dye Vats, regulation depth; one set Phillips' Copper Measures; twelve small Cypress Dye Vats, fitted with steam and water for experimental dyeing.

The Dyeing Laboratory is fitted up complete for experimental dyeing, color matching, testing, and analysis. Students have access to our splendid collection of dyestuffs, dyed specimens, etc., which we believe to be as complete as any in the United States.

Course Leading to the Degree of B. S. in Textile Engineering

The four years course in Textile Engineering was established in response to the demand for instruction in the arts and sciences directly applicable to the cotton manufacturing industry.

The course includes a sound foundation in engineering subjects, in addition to the purely textile branches. Lecture room theory is combined with laboratory practice in a very comprehensive manner.

The practical results of this well rounded course are well illustrated in the positions of trust and responsibility occupied by the alumni, by the numerous requests for their

services and in the increasing number of matriculates attracted by the successful careers of former students.

It will be noticed that the course includes Mathematics, English, Chemistry, Physics, Mechanism, Mechanics, Steam Engines and Boilers, Power Transmission, Lubricants, Strength of Materials, and Shop Work; in addition to Carding, Spinning, Weaving, Bleaching, Dyeing, Finishing, Mill Construction and Equipment, Mill Economy and Practice, Drawing, and Machine Design.

Department of Textile Engineering

FRESHMAN YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Chem. 1	Inorganic Chemistry	3		7.5
Chem. 5	Chemical Laboratory		2	2.
Draw. 1	Free Hand Drawing		4	4.
Eng. 11	Rhetoric	3		7.5
Eng. 15	Theme Writing and Declamation	1		1.
Math. 11	Algebra	2		5.
Math. 15	Trigonometry	3		7.5
M. E. 3d M. E. 5b or 7b	Wood Shop Smith or Foundry		4	4.
Gym. 1	Physical Culture		2	2.
T. E. 7	Carding Mill		4	4.
T. E. 47	Weaving Mill		4	4.
	Total..	12	20	48.5

Second Term

Chem. 2	Inorganic Chemistry	3		7.5
Chem. 6	Chemical Laboratory		2	2.
Draw. 6	Mechanical Drawing		7	7.
Eng. 12	Rhetoric	3		7.5
Eng. 16	Theme Writing and Declamation	1		1.
Math. 18	Analytical Geometry	5		12.5
M. E. 5b M. E. 7b	Smithy Foundry		4	4.
Gym. 2	Physical Culture		2	2.
T. E. 8	Carding Mill		4	4.
T. E. 48	Weaving Mill		4	4.
	Total..	12	23	51.5

SOPHOMORE YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Chem. 9	Qualitative Analysis		4	4.5
Draw. 11	Shades, Shadows, and Perspective		4	4.
Eng. 21 Eng. 27	American Literature Parallel Reading	3		7.5
Math. 21	Analytical Geometry	2		5.
Math. 25	Calculus	3		7.5
Phys. 5	Physics	3		7.5
T. E. 9	Carding Mill		4	4.
T. E. 31	Fabric Design		3	4.
T. E. 49	Weaving Mill		4	4.
	Total..	11	19	48.

SOPHOMORE YEAR

Second Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Chem. 10	Qualitative Analysis		4	4.5
Draw. 14	Machine Drawing		4	4.
Eng. 24	Political Economy }	3		7.5
Eng. 28	Parallel Reading }			
Math. 28	Calculus	5		12.5
Phys. 6	Physics	3		7.5
T. E. 10	Carding Mill		4	4.
T. E. 32	Fabric Design		3	4.
T. E. 50	Weaving Mill		4	4.
	Total..	11	19	48.

JUNIOR YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Draw 21	Machine Drawing		4	4.
Draw. 23	Mechanism	4		10.
Eng. 31	English Literature }	3		7.5
Eng. 35	Literary Thesis }			
M. E. 11b	Machine Shop		4	4.
T. E. 1	Carding	3		7.5
T. E. 11	Carding Mill		4	4.
T. E. 33	Fabric Design		6	8.
T. E. 41	Weaving	2		5.
T. E. 51	Weaving Mill		4	4.
	Total..	12	22	54.

Second Term

Draw. 22	Machine Drawing		4	4.
Eng. 32	English Literature }	3		7.5
Eng. 36	Literary Thesis }			
Exp. E. 1a	Analytic Mechanics	2		7.5
Exp. E. 11a	Structural Mechanics	2		5.
M. E. 12b	Machine Shop		4	4.
T. E. 2	Carding	3		7.5
T. E. 12	Carding Mill		4	4.
T. E. 22	Dyeing Laboratory		4	4.
T. E. 28	Fabric Analysis		3	4.
T. E. 42	Weaving	2		5.
T. E. 52	Weaving Mill		4	4.
	Total..	13	23	56.5

SENIOR YEAR

First Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Com. 1	Business Organization & Managem't		1	1.
Exp. E. 76a	Thermodynamics	3		7.5
Exp. E. 71b	Steam Engine Laboratory		4	2.
Exp. E. 52b	Materials Laboratory		4	2.
T. E. 3	Carding	3		7.5
T. E. 13	Carding Mill		4	4.
T. E. 17	Dyeing	2		5.
T. E. 23	Dyeing Laboratory		4	4.
T. E. 37	Jacquard Design	2	4	8.
T. E. 53	Weaving	2		5.
T. E. 53	Weaving Mill		4	4.
	Total..	12	25	50.

SENIOR YEAR

Second Term

Abbrev.	Subject	Hrs.Per W'k Class	Lab'y	Equ'v
Com. 2	Commercial Law		1	1.
E. E. 2	Dynamos and Motors	2		5.
E. E. 4	Electrical Laboratory		3	3.
Exp. E. 71d	Steam Laboratory		4	2.
Exp. E. 77a	Thermodynamics	2		5.
Exp. E. 86a	Gas Engine Laboratory		4	2.
T. E. 4	Carding	3		7.5
T. E. 14	Carding Mill		4	4.
T. E. 18	Dyeing	2		5.
T. E. 24	Dyeing Laboratory		4	4.
T. E. 38	Jacquard Design		4	4.
T. E. 54	Weaving Mill		4	4.
	Thesis			
	Total..	9	28	46.5

SPECIAL TEXTILE COURSE

General Statement

The two-year special Textile Course is offered for the accommodation of students desiring instruction in textiles, but not having the necessary time or means to pursue the regular four years' course leading to the degree of B. S. in Textile Engineering.

Fourteen (14) units are required for entrance, except in cases where the applicant has had one or more years of practical mill experience.

The number of students in this course is limited to twenty-four, as a larger number would interfere with the work done in the regular course.

The course includes instruction in carding, spinning, weaving, dyeing, fabric structure, fabric analysis, Jacquard design, wood shop, smithy, foundry, machine shop, Chemistry, and English.

This course is not recommended to any student who can possibly arrange to pursue the regular course, but it is meeting the demand for a brief course, largely practical, and many former students of this course are now holding remunerative and responsible positions in textile mills.

Special Textile Course

FIRST YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Rec.	Lab'y	Equ'v
Chem. 1	Inorganic Chemistry	3		7.5
Chem. 5	Chemical Laboratory		2	2.
Eng. 11	Rhetoric	3		7.5
Eng. 15	Theme Writing and Declamation	1		1.
M. E. 3d	Wood Shop }		4	4.
M. E. 5b or 7b	Smith or Foundry }			
T. E. 1	Carding	3		7.5
T. E. 7-8	Carding Mill		8	8.
T. E. 31	Fabric Design		3	4.
T. E. 41	Weaving	2		5.
T. E. 47-48	Weaving Mill		8	8.
	Total..	12	25	54.5

Second Term

Chem. 2	Inorganic Chemistry	3		7.5
Chem. 6	Chemical Laboratory		2	2.
Eng. 12	Rhetoric	3		7.5
Eng. 16	Theme Writing and Declamation	1		1.
M. E. 5b	Smithy }		4	4.
M. E. 7b	Foundry }			
T. E. 2	Carding	3		7.5
T. E. 9-10	Carding Mill		8	8.
T. E. 22	Dyeing Laboratory		4	4.
T E. 32	Fabric Design		3	4.
T. E. 42	Weaving	2		5.
T. E. 49-50	Weaving Mill		4	4.
	Total..	12	29	58.5

SECOND YEAR

First Term

Abbrev.	Subject	Hrs. Per W'k Class	Lab'y	Equ'v
Com. 1	Business Organization & Managem't		1	1.
M. E. 11b	Machine Shop		4	4.
T. E. 3	Carding	3		7.5
T. E. 11-12	Carding Mill		4	4.
T. E. 17	Dyeing	2		5.
T. E. 23	Dyeing Laboratory		4	4.
T. E. 33	Fabric Design		6	8.
T. E. 37	Jacquard Design	2	4	8.
T. E. 43	Weaving	2		5.
T. E. 51-52	Weaving Mill		8	8.
	Total..	9	31	54.5

Second Term

Com. 2	Commercial Law		1	1.
M. E. 12b	Machine Shop		4	4.
T. E. 4	Carding	3		7.5
T. E. 13-14	Carding Mill		8	8.
T. E. 18	Dyeing	2		5.
T. E. 24	Dyeing Laboratory		4	4.
T. E. 28	Fabric Analysis		3	4.
T E. 38	Jacquard Design		4	4.
T. E. 53-54	Weaving Mill		8	8.
	Total..	5	32	45.5

T. E. 1, 2, 3, 4. **Carding.**

Professor Camp.

T. E. 1, Junior and Special I, first term, 3 hours.
T. E. 2, Junior and Special I, second term, 3 hours.
T. E. 3, Senior and Special II, first term, 3 hours.
T. E. 4, Senior and Special II, second term, 3 hours.

The course in Carding and Spinning consists of illustrated lectures, recitations from technical text-books and machine demonstration.

The first year's work includes the study of the cotton fibre, its ginning, packing, sampling, grading and commercial handling. This is followed by an exhaustive study of the various machines used in cotton yarn manufacture, such as bale breakers, mixers, pickers, cards, drawing and fly frames, and ring spinning.

In the second year the work is extended to include combing, mule spinning, spooling, twisting, reeling, cone-winding, gassing, packing, etc. The latter part of the second year is devoted to mill planning, costs, humidity, and other special problems and commercial features of the spinning trade.

T. E. 7, 8, 9, 10, 11, 12, 13, 14. **Carding (Mill).**

Professor Camp and Mr. Philpott.

T. E. 7 and 8, Freshman, first and second terms, 4 hours, Special I, first term, 8 hours.

T. E. 9 and 10, Sophomore, first and second terms, 4 hours, Special I, second term, 8 hours.

T. E. 11 and 12, Junior, first and second terms, 4 hours, Special II, first term, 8 hours.

T. E. 13 and 14, Senior, first and second terms, 4 hours, Special II, second term, 8 hours.

Practical work in Carding and Spinning begins with the Freshman year and extends throughout the course. Experience has demonstrated the wisdom of first acquainting the students with the mechanical operation of the machines in order that the lectures pertaining to them may be more readily understood.

The mechanical equipment of this department is second to none. The student is led by nicely graduated steps through the various processes and is required to

become proficient in the operation of all machines which are, for the greater part, full mill size.

Special attention is devoted to card grinding and setting, roller setting, comber settings, leveling, erecting, etc.

T. E. 17, 18. **Dyeing.**

Mr. Jones.

Prerequisite, Chem. 1, 2, 5, 6, T. E. 22.

Parallel, T. E. 23, 24.

T. E. 17. Senior and Special II, first term, 2 hours.

T. E. 18. Senior and Special II, second term, 2 hours.

Bleaching and Dyeing are taught by means of recitations from text books in conjunction with laboratory work and lectures covering such details as the physical and chemical properties of cotton, wool, silk, and jute fibres; cotton bleaching and Mercerizing artificial silks; carbonizing; history and theories of dyeing; water impurities and their purification; natural and artificial dyestuffs; mordants; color mixing; color matching; diazotizing and developing; drying, etc. The object of the course is to give to the student a clear idea of the fundamental principles which underlie the arts of bleaching and dyeing.

T. E. 22, 23, 24. **Dyeing Laboratory.**

Mr. Jones.

Prerequisite, Chem. 1, 2, 5, 6.

Parallel, T. E. 17, 18.

T. E. 22, Junior and Special I, second term, 4 hours.

T. E. 23, Senior and Special II, first term, 4 hours.

T. E. 24, Senior and Special II, second term, 4 hours.

Experimental dyeing begins in the second half of the Junior and extends through the Senior year. The Junior work (T. E. 22) is in preparation for T. E. 17, 18, 23, 24, and is intended to acquaint the student with the fundamentals of dyeing practice before taking up the theory and practice in more advanced work.

The student bleaches and dyes the several different kinds of textile materials first on a small scale, and

later in quantities for use in the manufacturing departments of the school.

The work includes such details as operations preliminary to bleaching and dyeing, mordants, fixing agents, levelers, assistants, natural and artificial coloring matters, compound shades, matching, testing for fastness and for money value, analysis of dyes and mordants, etc. Research and original experiment are encouraged.

T. E. 28. **Fabric Analysis.**

Professor Randle.

Prerequisites, T. E. 31, 32, 33.

Junior and Special II, second term, three hours.

Instruction is first given in the various yarn standards and calculations leading to analysis. The student is provided with specimens of yarns for determination of breaking strength, count, twist, material, and cost of spinning. Specimens of fabrics are then dissected for determination of weave, color arrangement, texture, quality and percentage of materials, counts of warp and filling, analysis of finish, and other technical consideration.

The more advanced work in the analysis of cloths of different character renders the student familiar with modern systems of ascertaining the exact construction of existing fabrics and compiling the data in suitable form for guidance in the reproduction of the fabrics.

T. E. 31, 32, 33. **Fabric Design.**

Professor Randle, Mr. Jones.

T. E. 31, Sophomore and Special I, first term, three hours.

T. E. 32, Sophomore and Special I, second term, three hours.

T. E. 33, Junior and Special II, first term, six hours.

The work begins with the fundamental of fabric formation, methods of weave representation, and the building of color schemes. This is followed by practice in planning and designing the foundation weaves and their derivatives. The making of drawing-in-drafts and harness chains forms an important part of the course, this

being the connecting link between the theory of designing and its practical application in the production of woven fabrics.

In the second year the work is extended to include the more advanced and complex structures. The course is very complete and in conjunction with T. E. 28, 37, 38, covers the entire field of fabric designing in a very satisfactory manner.

T. E. 37. 38. **Jacquard Design.**

Professor Randle.

Prerequisite or Parallel, T. E. 28, 31, 32, 33.

T. E. 37, Senior and Special II, first term, six hours.

T. E. 38, Senior and Special II, second term, four hours.

The course begins with a study of the history and development of the Jacquard machine from the crude earlier forms as assembled by Jacquard to the highly improved modern types. Drawings are made of the different forms of machines and ties in general use. Lectures are devoted to the construction and operation of such types as single acting, double lift, rise and fall, cross border, twilling, open shed, fine index; and to the planning and building of such ties as the straight, point, combination, sectional, journal, split, and pressure harness.

The course covers the entire range of Jacquard work and is made as practical as seems consistent with best results. After first understanding the principles and limitations of the several machines and forms of harness the student is taught the selection of figures, the making of cloth sketches, and the symmetrical distribution after stripe, diagonal or motive arrangement. The course also covers such technicalities as the proper selection of design papers, the development of the ground and figure with the various weaves, figure shading, card stamping and lacing, casting-out, etc.

Parallel with this work the course in Mill Weaving includes the weaving of Jacquard effects, practice in tying the various knots, threading comber-boards, preparation of mails couplings, lingoes, etc., and in the complete building of the Jacquard harness.

T. E. 41, 42, 43. **Weaving.**

Mr. Hebden.

T. E. 41, Junior and Special I, first term, two hours.

T. E. 42, Junior and Special I, second term, two hours.

T. E. 43, Senior and Special II, first term, two hours.

This course of lectures and recitations begins with the Junior year. The first term is devoted to the study of the construction, operation and fixing plain power looms. The student makes drawings of the principal motions, illustrates their use and prepares notes on the causes of and remedies for looms producing fabrics of faulty construction. Special attention is paid to the study of warping, slashing and the mixing of adhesives, softeners, antiseptics, and weight giving elements into sizes to yield certain characteristic results.

In the second term Junior the work is extended to automatic looms. Let-off and take-up motions, warp and filling stop motions, feeler motions, protectors, bobbin and shuttle changing mechanisms, thin place preventors, etc., are studied in detail. The recitation work includes all the latest methods in yarn, fabric and loom calculation.

In the Senior year fancy box looms, single and double index dobbies, head motions, and Jacquards are studied. Especial attention is directed to advanced loom fixing, pattern weaving and calculations.

T. E. 47, 48, 49, 50, 51, 52, 53, 54. **Weaving (Mill.)**

Mr. Hebden, Mr. Jones.

T. E. 47 and 48, Freshman, first and second terms, four hours, Special I, first term, eight hours.

T. E. 49 and 50, Sophomore, first and second terms, four hours, Special I, second term, eight hours.

T. E. 51 and 52, Junior, first and second terms, four hours, Special II, first term, eight hours.

T. E. 53 and 54, Senior, first and second terms, four hours, Special II, second term, eight hours.

Practice in weaving begins with the Freshman year and extends four hours per week throughout the course. The student is required to become proficient in plain

power weaving before taking up advanced work. This is followed by practical work in warping, slashing, drawing-in, reeding, and starting up warps on plain looms.

The first half of the Sophomore year is devoted largely to weaving on automatic looms and on such colored fabrics as stripes, outings, tickings, awnings, etc. During the latter part of this year hand looms are used to demonstrate the parallel work in designing. The work is valuable as it impresses the student with the sequence of movement of loom parts and giving a clear insight into the influence of counts, twists, colorings, textures, and weaves upon the woven fabric.

The Junior year is devoted largely to chain warp beaming, drawing-in and reeding fancy drafts, dobby and fancy box weaving, and plain loom fixing.

The Senior work includes advanced loom fixing, fancy dobby and Jacquard weaving, finishing and packing.

This course includes the entire range of weaving from common brown goods to the most intricate effects in woven ornament. The splendid equipment in the weaving department is not approached by that of any similar institution giving instruction exclusively on cotton goods, and is receiving such additions as appear helpful from time to time.

SPECIAL DEPARTMENTS

THE SCHOOL OF COMMERCE

Faculty of School of Commerce

KENNETH GORDON MATHESON, A.M., LL.D.,
President of the School of Technology

WILLIAM HENRY EMERSON, Ph.D., Sc.D.,
Dean of the School of Technology

WAYNE SAILLEY KELL, C. P. A.
Director of School of Commerce
Accounting-Finance

EDWARD CHARLES GRUEN, M.E., *Sec.-Treas. School of Commerce*
Accounting-Banking

HOMER WATKINS.....*Watkins & Lewis*
Commercial Law

L. D. HICKS .....*Southern Ruralist Co.*
Advertising

J. W. SPEAS.....*Trust Company of Georgia*
Corporation Finance

G. D. HALSEY .....*Georgia School of Technology*
Vocational Employment

J. R. BYINGTON .....*J. P. Allen & Company*
Mercantile Credits

E. C. CLAYTON, C. P. A.....*Fielder & Allen Company*
Auditing

R. H. LINDSAY .....*Lindsay & Company*
Commercial Law

F. C. FENN .....*Atlantic Ice & Coal Corp.*
Assistant in Accounting

Advisory Board

JOEL HUNTER, C. P. A.....*Head of firm of Joel Hunter & Co.*
EDGAR WATKINS .....*Senior member Watkins & Latimer*
W. M. FAMBROUGH .....*Vice-President J. B. McCrary & Co.*
L. D. HICKS .....*Southern Ruralist Company*

History and General Information

During the early part of 1911, Mr. W. M. Fambrough, a prominent Alumnus of Georgia Tech, sent two letters to the Alumni, inquiring as to their need of business training, especially during the first few years after gradua-

tion. The returns from these letters showed that all felt the vital need of adding such training to the Engineering courses. As an outcome of this work, Mr. Fambrough, in an address during Commencement Week, 1911, stated that he hoped the Alumni would in the near future establish a chair of Business Science at the Georgia School of Technology.

Early in 1912, a campaign was instituted among the Seniors and Juniors to arouse an appreciation of their need along such lines. A lecture Committee was appointed by the Faculty and a course of weekly lectures was arranged for the spring term of 1911-1912. These were given both by the Alumni and by Atlanta business men. Attendance was not compulsory, but Juniors and Seniors were excused from any conflicting duties if they wished to take this work. The attendance justified the opinion that the men were sufficiently interested, and at the end of the spring term in 1912, the Faculty placed a business lecture on the regular schedule of the Senior class.

At that same time, the School received offers from two of the speakers on that first program to treat their subjects more fully during the next session, 1912-1913. These speakers, Mr. Joel Hunter and Mr. Edgar Watkins, assisted by other business men of Atlanta, made it possible to give four series of lectures, which were "Accounting," by Mr. Hunter; "Commercial Law," by Mr. Watkins; "Buying," and "Selling," by others in the city.

This work resulted in the establishment during the year 1913-14 of a new department of the Georgia School of Technology, the School of Commerce.

The Scope of the School of Commerce

The School of Commerce Aims to meet the present demand of the business man, for a wider knowledge and a more accurate understanding of all important business facts and principles. To accomplish this aim the work is to be organized in two distinct divisions. The first of these is to give the *Business Man* a college training, and the second is to give the *Engineering Student* a business training. The work of the first is carried on during the early hours of the evening (6 to 8 P. M.) by the Commercial Division. The second is carried on dur-

ing the regular hours of the engineering courses by the Engineering Division.

There is an urgent need for training the engineering student in the elements of business principles and the same need for giving the business man collegiate work in the engineering principles of commerce.

Organization and Administration

The School of Commerce is an integral part of the Georgia School of Technololgy, and as such is under the control of the Board of Trustees, through the supervision of President Matheson.

The work is in the immediate charge of the Director and Secretary-Treasurer of the school, and the number of instructors depends upon the registration, which is increasing rapidly.

Mr. W. M. Fambrough, of the Alumni Association, is acting as general counsel to the department. Mr. Joel Hunter, C. P. A., of the firm of Joel Hunter & Co., acts as counsel for the instructors in Commerce, Accounts and Finance. Mr. Edgar Watkins, senior member of the firm of Watkins & Latimer, is counsel for the instructors in Commercial law. These advisors are also special lecturers of the school.

It is the policy of the School of Commerce to select its instructors from men who are either actively engaged in commercial work, or who have had considerable experience in this line.

Although authorized by the Board of Trustees of the Georgia School of Technology as a department of that School, the financing of the School of Commerce is entirely independent. This is due partly to the difference in the nature of the work, and also to the fact that it was founded after the granting of the maintenance fund to the School of Technology by the State. It is expected that this department will be taken over entirely by the School of Technology at an early date.

Expenses

The schedule of fees for the year 1916-17 has been altered so as to include all text book expenses.

Tuition for full year, $65.00, payable $35.00 for first term, $30.00 second term.

Tuition for one term, $35.00, payable at beginning of term.

For separate courses, tuition is $10.00 per course, payable in advance. Text-book cost is not included in this. The cost of texts will vary with the courses taken.

Students who are self-supporting may arrange to carry part of the tuition charge on a divided payment plan. Such arrangement is to be made with the Director or the Secretary-Treasurer.

Entrance Regulations

Regular Students.

Candidates for a degree in the School of Commerce must be of good moral character and not less than eighteen years of age upon entering the first-year class. Graduates from a University, College, or High School having a full four years' course of approved standing, or regular matriculates of a college or university, are admitted without examination. Of all others, the usual examinations for admission to the freshman class will be required, or its equivalent under the rules as prescribed by the Entrance Examination Committee.

Applicants may be admitted to the School conditionally, if, in the judgment of the Instructors, their deficiencies do not disqualify them for doing the work of the first year. But all such deficiencies must be made up before the end of the second year.

No student will be admitted to the first year class who has not, in addition to the above mentioned requirements, a practical knowledge of the elementary principles of accounting.

Special Students.

Students who cannot meet the entrance requirements for regular students, or who do not desire to take the entire course, may be admitted as special students to pursue such courses as they may desire, provided the Instructors believe that their previous training fits them to pursue such courses with profit. Upon the passing of the regu-

lar examinations in any course so taken, special students will receive certificates of proficiency.

Degrees Offered

To those regular students successfully completing the prescribed course, the School of Commerce has been authorized to offer the degree of Bachelor of Commercial Science (B. C. S.) and to give certificates of proficiency to irregular students, and those completing but a part of the work.

It is expected that all students in the regular courses will be engaged in some form of active commercial work during the day hours, and this is taken as the equivalent of the laboratory work required in other courses. Reports will be required on the work performed, and if theses are required, they will be based on this line.

Courses for Engineering Students

The purpose of the Engineering Division is to give the undergraduate Engineer a few fundamental ideas with regard to the subjects of Business Economics, Commercial Law and Commercial Science. Before he enters the commercial field, his engineering training should be supplemented with a knowledge of general business principles, conditions, usages, financial matters, and the ethics that should prevail in business relationships.

At the present time, the courses given Engineering Students are an outgrowth of the old Business Lecture courses and are required of all Seniors. An elective course in Commercial Law has been authorized, and will be given as soon as arrangements for carrying it on are completed. This course will be open to all members of the Junoir class. Other courses will be added from time to time as the demand appears, and the time is available.

The students are required to take full notes in these courses, and to stand examination in the work.

Description of Courses Given Engineering Students

Com. 1. **Business Organization and Management.**

Professor Gruen.

Senior, first term, one hour.

This course comprises a series of lectures covering the

fundamental principles of Business and Manufacturing. The subjects covered are: Industrial History, Factory Systems and Organizations, Scientific Management Principles, Wages and Wage Systems, Depreciation, Insurance and Transportation.

Com. 2. **Commercial Law.**

Professor Watkins.

Senior, second term, one hour.

This is a continuation of the work of the first term, the lectures being on the basic principles of Commercial Law. In conjunction with the law work, special lectures on important current topics are included at convenient times.

OUTLINE OF COURSE IN COMMERCIAL SCIENCE

FIRST YEAR

First Term	Second Term
Economics of Business	Economics of Efficiency
Business Psychology	Principles of Accounting
Principles of Accounting	Banking Practice
Commercial Law	Commercial Law

SECOND YEAR

First Term	Second Term
Advertising and Selling	Advertising and Selling
Practical Accounting	Corporation Finance and Organization.
Auditing	Cost Accounting
Corporation Finance and Organization.	Commercial Law

THIRD YEAR

First Term	Second Term
Vocational Employment	Administration and Management
Practical Accounting	Advanced Auditing
Administration and Management	Labor Problems
Commercial Law	Credit and Collections

NIGHT SCHOOL

Atlanta as a manufacturing center, has a large population of operatives, most of whom have been denied vocational training above the average standard imposed by faculty apprenticeship and financial necessity.

In addition, the expanding manufacturing interests of the city offer constantly increasing inducements to the young men who will prepare themselves for skilled labor. To meet both of above conditions, a Night School was inaugurated in the Institution March 2, 1908, and is now in successful operation.

The Night School is supported by appropriations from the City Council of Atlanta, supplemented by a small contingent fee charged each student.

It is purposed to re-open the Night Classes on September 18, 1916, and to continue in session until May 25, 1917, dividing the sessions into three equal terms of three months each. The contingent fee for each term will be $5.00.

At present, training in twenty-four trades is offered; also instruction in Elementary English and Mathematics. It will be the effort of the authorities to institute such further courses as may be justified by demand. During the year 1915-16, 380 students were enrolled in this department.

For Bulletin and full information concerning the Night School, address J. N. G. Nesbit, Dean.

THE SUMMER SCHOOL

The eighteenth annual session of the Summer School will begin July 24, 1916, and continue for eight weeks. As in former years the Faculty will be chosen from members of the Faculty of the Georgia School of Technology.

The School is designed primarily to give a thorough training in some of the subjects required for examination by applicants for admission to the Freshman class of the Georgia School of Technology; and, secondly, to enable such students of the Georgia School of Technology as have acquired deficiencies in their work to remove these deficiencies and continue with their respective classes.

The instructors, by reason of their connection with the School of Technology, are particularly well fitted to know the needs of the student and to direct his work. Knowing, moreover, the demands which will be made upon him after he enters the School of Technology, they will advise him as to the class which he should prepare to enter.

Emphasis is laid on those studies which a student finds most difficult, the instructor pointing out and laying stress upon the important principles which occur in each lesson. In this way a student's mind is filled with the principles he is to use and not crowded with useless materials. Success, being largely dependent upon the individual and his fitness for and application to his work, can not be guaranteed, but is expected in the case of those who will work earnestly for it.

It must be borne in mind, however, that the Summer School is essentially a school of review, and that, as the time spent here during the summer is short at most, it is essential to success that students enter at the opening of the session.

For the subjects upon which students who wish to enter the Freshman class must pass an examination the reader is referred to the subject entitled "Admission" in this catalogue. The curriculum of the Summer School includes courses in Elementary Algebra, Plane Geometry, the classroom and laboratory work in Freshman Chemistry, Sophomore and Junior, Physics, and all courses in Mathematics offered in the Freshman, Sophomore and Junior classes, and the English courses in the Sophomore and Junior classes of the Georgia School of Technology.

Students who attend the Summer School will be given examinations immediately at its close, thus lifting anxiety from their minds and giving them an opportunity for rest before the regular session begins.

Students of the Georgia School of Technology who have deficiencies in their college work will find the Summer School an excellent place for review. The Board of Trustees, at a recent meeting, has granted the Summer School the right to give credit to students who satisfactorily review subjects in which they are deficient, or to students who wish to study with a view to advanced standing.

Such credit is given as follows: A student who is deficient shall be allowed to take in review the equivalent of three three-hour courses for one-half year. Students taking such courses will be regarded in exactly the same light as those who repeat a subject during the regular session.

A deficiency in a five-hour subject can be removed by a double assignment of duty each day the Summer School is in session. Students who wish to take advanced standing will be allowed credit in the equivalent of two three-hour half-year courses, or one five-hour half-year course, by double assignment.

All examinations for advanced standing, or for the removal of deficiencies will occur at the close of the Summer School. By a three-hour, half-year course is meant a course which has three recitations per week for one-half the school year.

The college courses offered in the Summer School are identical in character and scope, and approximately the same in time with those offered during the regular session of the Georgia School of Technology.

The Dean of the Summer School will be glad to furnish a list of boarding places to prospective students.

Further information regarding courses and entrance requirements will be found in this catalogue, or may be had by addressing the Dean.

Information regarding rates of tuition, length of session, and benefits of the Summer School, will be furnished upon application to Prof. A. B. Morton, Georgia School of Technology, Atlanta, Ga.

COLLEGE ATHLETICS

PROF. W. N. RANDLE, *Director.*
MR. J. W. HEISMAN, *Coach.*

The aim of the school authorities is the development of a system of gymnastics and athletic work which will provide for *every* student some form of exercise which will enable him to develop a strong, healthy body. In accomplishing this essential result, the attempt is made to eliminate perfunctory exercise and to instill in the student an enthusiasm for the work which is to develop him mentally and physically for the highest efficiency in future service.

All forms of intercollegiate games, such as football, basketball, tennis and track and field sports are encouraged within proper bounds by the Faculty, but are not allowed to interfere with the fundamental duties of students.

We would call special attention to the great number of men who take part in the various forms of outdoor sports (over fifty per cent.) and we hope to see the day when all students will participate in some form of exercise.

All athletics are under the control of the Faculty.

Hugh Inman Grant Field

Due to the liberality of Mr. John W. Grant, of Atlanta, the new Athletic Field, named "The Hugh Inman Grant Field," in honor of his deceased son, is now finished and in constant use.

This gives us the finest Athletic Field in the South and the completion of the new concrete grand stand furnishes accommodation for seating over 6,000 spectators. The field has a quarter-mile running track, room for a 220 yard straight away track, for sprints, two baseball diamonds, two football fields, tennis court, pole vaulting and jumping paths and accommodations for all other forms of field sports.

The plans of the Field are shown in the campus view frontispiece. Grant Field, with the Gymnasium and Basket-Ball Court furnish facilities for any athletic or gymnastic work which may appeal to the individual need or desire of each student.

Students' Advisor System

At the beginning of the school year each student in the College will be assigned to some member of the Faculty, who will act as his advisor during the year. Each advisor will have regular hours when the student can consult with him relative to any phase of the student life, whether in regard to his studies, his finances, his social life, his association, or any other matter which concerns him. It is contemplated that the number of students assigned to each advisor will not be so large as to prevent his advising frequently and fully with each one.

In case any individual member of the Faculty is desired to serve as the advisor of some particular student, this desire may be made known to the President, and, if practicable, arrangements will be made to comply with the desire thus expressed.

THE LIBRARY

A $20,000 library building, gift of Mr. Andrew Carnegie, occupies a central location on the Campus. The building has been occupied eight years, and during that time the number of volumes has increased from about 3,000 to over 10,000. It is now a well equipped Library in every way, being strongest in its scientific side, but also containing many other valuable books, especially in literature and art. Each year valuable acquisitions are made, with a view to strengthening the work of the college in each department. The Library also contains many rare books, among them a number of early 16th and 17th century volumes, the gift of ex-Governor Joseph M. Brown.

A most important feature is its number of scientific periodicals. The Library is now supplied with over one hundred of the leading papers and periodicals of this country and Europe. Each year has shown a marvelous growth over the preceding year in every way, and the entire outlook promises well for future expansion.

The Library is in the charge of a competent and thoroughly trained Librarian and her assistants. All books and pamphlets, as soon as received, are classified and cat-

alogued in accordance with the most approved library system.

Library hours are from 8 A. M. to 6 P. M. daily, and Friday and Saturday evenings from 7 to 10.

Atlanta Carnegie Library

In addition to the School library, students have free use of the Atlanta Carnegie Library, where they are always welcome. This library contains over 40,000 volumes. A great many books of reference have been added within the past year, among them a number of very valuable technical works which have been made available to students.

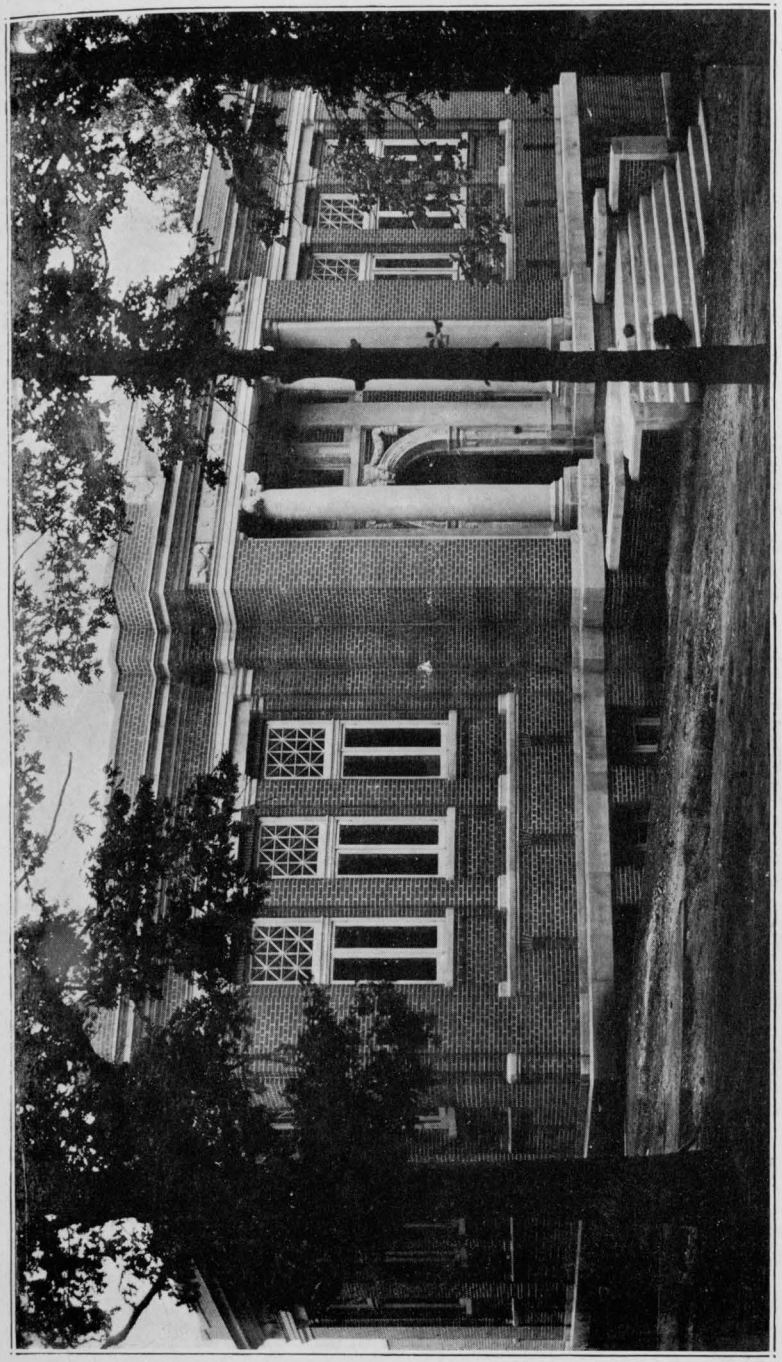
SOCIETIES AND STUDENT ORGANIZATIONS

Young Men's Christian Association

The Young Men's Christian Association is the largest student organization in college. During the past year practically every student availed himself of the opportunities it offers. The Association is the only religious organization among the students, and ministers in various ways to their character and to the spiritual side of their lives.

It conducts weekly devotional and special Sunday evening meetings for the students, attempts to keep them in touch with the happenings of the missionary world, conducts studies and investigations on the social problems of the times, and attempts in an effective way to supplement training afforded by the class-room curriculum. It brings prominent religious, social, and lay workers to address the student body from time to time. It is in no sense a church, nor does it attempt in any way to take the place of the church, but it does aid the various churches of the city in their attempt to reach the students here and to supplement the work they do among the students.

The most important feature of its work is the organization and conduct each year of groups for Bible study. The plan is to organize the students into congenial groups for daily and systematic study of the Bible. The leaders of



THE CARNEGIE LIBRARY.

THE SWANN DORMITORY.

these groups are students who have been coached each week before they meet their group, by a member of the Faculty or one of the Secretaries. For the past six years from two to three hundred students have thus been engaged in the study of the Bible, and the place of such work is recognized by them as necessary to their best development.

The Association, with its splendid equipment, constitutes the real center of the student life. Its splendid new home offers a wholesome atmosphere and adequate amusement, making it unnecessary for a boy to go to the city to spend his idle hours.

The work of the Association is under the direction of Mr. H. F. Comer, B. S., of Vanderbilt University, and associate, Mr. C. E. Blevins, of Kentucky State University. Both men have had special training for work among college men, and stand in advisory and friendly relation to the students here.

A Word to the Parents

If a special word may be said to the parents, we would beg that they urge their sons to enter heartily into the activities of the Association.

Nothing will mean more to them while they are here than the fellowship and training of a Bible Study Group.

They will find friends in the two Secretaries, and in the Association men generally.

The Association stands for clean, manly Christianity and the development of the highest type of character and unselfishness.

The New Student Activities fee of $6.50 per term includes membership in the Association. There will be reasonable charges for the use of the games, but, otherwise, the membership admits one to all privileges of the Association and its handsome new building.

THE HONOR COURT

Declaration of Principles

"We, the students of the Georgia School of Technology, hold that the heart of education is morality, and the essence of achievement in character. We would place honor above credits and base attainment upon desert. We believe there is no enduring reputation which is not rooted in worth and no real success which has not its foundation in manhood; that every honorable man would rather suffer failure than stoop to fraud; and that trustworthiness is the superlative asset of the engineer.

As a concrete expression of this belief, we hereby pledge ourselves:

FIRST. Neither to give nor to receive assistance during examinations, recitations or any work upon which we are graded.

SECOND. To report to the proper authorities any one who we have good reason to believe is guilty of giving or receiving unauthorized assistance."

The Honor System has been in successful operation at the Georgia School of Technology for several years. An Honor Court is elected from the student-body to develop and foster the right spirit in regard to the Honor System, and to conduct the trial of persons accused of violating it. The following are the members of the Honor Court:

K. J. FIELDER, *President.*

SENIORS

R. S. Fleet, K. A. Merrill, A. J. Rountree.

JUNIORS

W. R. Wash, W. W. Moore, J. C. Lucas,

SOPHOMORES

W. I. Collins, J. S. Budd,

FRESHMEN

George Griffin.

Literary Societies

The Henry W. Grady Literary Society, organized to promote among its members experience in debating, extemporaneous speaking, and essay writing, has been in operation a number of years. The society meets weekly, and the exercises are both interesting and instructive.

The Delphian Literary Society was organized during the scolastic year 1914-15. It is similar in aims and scope to the Grady Society, and its presence as a rival society has given new life to work in this field.

Publications

The Yellow Jacket is a monthly magazine, edited and managed by a duly elected student staff. It deals with school affairs, and also contains articles upon scientific and engineering topics, contributed by the students, alumni, and members of the Faculty.

The Blue Print, the College Year Book, is published annually by the students, and contains the usual matters of interest relative to student life.

The Technique is the college newspaper. It is published weekly by the students. Its purpose is to give the college news, discuss student enterprises, and to promote the general welfare of the school; to serve the institution, in short, along the same lines as the daily newspaper serves the community.

The Students' Hand-Book is published annually under the auspices of the School Y. M. C. A., contains information referring to student organizations, college customs, etc., intended primarily for new students.

The School publishes five bulletins annually, in January, April, July, August and October.

Civil Engineering Society

Only C. E. Seniors and certain elected C. E. Juniors are eligible to membership in this society. The meetings are held bi-monthly, and are often addressed by resident or visiting engineers of well-established reputation.

Architectural Society

All Architectural students who have completed the first term of the Sophomore year are eligible for membership. Prominent local architects frequently address the monthly meetings. Prizes are offered for the best work in Design,

and a creditable library of drawings from architectural books has been formed.

Society of Mechanical Engineers

The society is for Seniors, with a few elected Juniors to form a nucleus for the following year. The plan is to meet bi-monthly, at which meetings engineering subjects are discussed by the members, and also frequently by Engineers of experience. Special trips and outside investigations by the members are a feature of the proceedings. The Society has recently become a branch of the American Society of Mechanical Engineers.

Emerson Chemical Society

The membership consists of the Senior, Junior and Sophomore Classes in the two Chemical Courses. The Faculty of the Chemical and Geological Departments of the School and all graduates of the Department of Chemistry are honorary members. At the weekly meetings, papers are presented by the students. Once a month the Society is addressed by members of the Faculty and by Professional Chemists.

Senior Electrical Society

This Society is a branch of the American Institute of Electrical Engineers.

Membership is taken from the Senior and Junior students in the Electrical Engineering Course. Original papers are presented and articles from current electrical literature are abstracted and discussed. Lectures are given the Society by practicing engineers.

Textile Engineering Society

Senior and Junior Textile students are eligible to membership. Other students in the textile department may be elected to membership. Regular meetings are held on the first and third Wednesdays of each month at which papers are read by members. Lectures by visitors prominent in the textile industry are arranged from time to time.

SCHOLARSHIPS AND PRIZES

The A. French Scholarships

Mr. Aaron French, of Pittsburgh, Pa., gave three scholarships to the Georgia School of Technology, which are self-perpetuating, in that the beneficiary refunds the money after graduation in payments of small monthly notes without interest.

The conditions under which the scholarships are awarded are as follows:

1. The applicant must be at least sixteen years of age.
2. No one is eligible whose family pays taxes on more than $3,000 worth of property. (Affidavits from city and county tax collectors to this effect are required.)
3. The scholarships are to be awarded by competitive examinations in the subjects for entrance to the Freshman Class.

Scholarship No. 1

The competitive examination for scholarship No. 1 was held at the School in the fall of 1898, and was won by Mr. W. E. Klein, of Atlanta, who graduated in 1902. The scholarship has since been held by Mr. W. C. Appleby, of Winder, Ga., who graduated in 1906, by Mr. W. M. Fellers, of Jacksonville, Fla., who graduated in 1910, by Mr. R. S. Howell, of White Plains, Ga., who graduated in 1914, and by Mr. G. H. Sparkes, who graduated in 1915, and by Mr. H. C. Kenemer, the present incumbent.

Scholarship No. 2

The competitive examination for scholarship number two was held at the school Wednesday, September 26, 1900, under the conditions named above and was won by Mr. G. A. Harbour, of Atlanta, who graduated in 1904. It has since been held by G. W. Gibbs, of St. Augustine, Fla., who graduated in 1908, by Mr. D. S. McLaurin, of Jacksonville, Fla., who graduated in 1912, and by Mr. A. C. Strother, the present incumbent.

Scholarship No. 3

The competitive examination for scholarship number 3, was held at the School September 24, 1902, and was won

by Mr. Arnold Wells, of Belton, Texas, who graduated in 1906. It has since been held successively by Mr. A. J. Phillips, of McRae, Ga., who resigned before graduation, Mr. A. E. Kunze, of Newnan, Ga., who graduated in 1912, and by Mr. J. E. Thompson, the present incumbent.

Scholarships Are Limited to no State or Section of the Country.

The winner of these scholarships will be furnished funds at such time as the President may think necessary for expenses, books, fees, etc., but not over $125.00 will be furnished each year.

No formal application for entrance to the competitive examination is necessary. The presence of the applicant at the School at 9 a. m., on the opening day of the fall term, will entitle him to admission to the examinations.

T. W. Smith Scholarship

On January 27, 1906, Mr. T. W. Smith gave a scholarship to the School, self-perpetuating on the basis of the French scholarships, and allowing the successful candidate $150 per annum for a period of four years. In the competitive examination held September 20, 1906, Mr. M. C. Meadows, of Carrollton, Ga., won the scholarship, but left before graduation, since which time the scholarship has been allowed to lapse. The amount paid on the scholarship, however, is used as a loan fund to deserving students of limited means.

The E. P. McBurney Scholarships

In March, 1909, Mr. E. P. McBurney, of Atlanta, established three scholarships, also self-perpetuating, on the basis of the French scholarships; beneficiaries to be appointed by the donor and president, and each scholarship to pay $200 per year for four years.

In March, 1909, Mr. T. D. Guinn, of Cuthbert, Ga., was awarded Scholarship No. 1. He was succeeded by Mr. R. A. Clark in September, 1912, and by Mr. J. T. Mitchell in September, 1915.

In September, 1909, Mr. W. D. Evans, of Fort Screven, Ga., was awarded Scholarship No. 2. He was succeeded in September, 1913, by Mr. L. C. Evans, of Jonesboro, Ga., who held the scholarship one year, being succeeded in September, 1914, by Mr. J. C. Jones, of Corinth, Miss.

In September, 1909, Mr. H. J. Crider, of St. Simon's Island, Ga., was awarded Scholarship No. 3. On his withdrawal from school June 8, 1911, Mr. W. P. Hammond, of Atlanta, was awarded the scholarship. In September, 1913, this scholarship was awarded to Mr. W. M. Hawkes, of Americus, Ga. Hawkes grad., A. D. Whittaker, Jr. appointed Sept. 1916

In July, 1913, Mr. McBurney decided to establish three additional scholarships, similar in amount and operation to the three already established by him. In September, 1913, the following beneficiaries of the new scholarships were appointed: No. 4, Mr. Rex Powell, Vienna, Ga.; No. 5, Mr. L. C. Evans, Jonesboro, Ga.; No. 6, Mr. G. W. Tutan, Savannah, Ga.

On the withdrawal of Mr. Evans in 1915, scholarship No. 5 was awarded to Mr. F. L. Jones, of LaGrange, Ga.

The Joseph Madison High Scholarship

In October, 1910, Mrs. J. M. High, of Atlanta, established a scholarship, to be known as the Joseph Madison High Scholarship, to carry $200 per year for four years, and to be self-perpetuating on the basis of the McBurney Scholarships. When possible, the beneficiary is to come from Morgan County, Ga., the former home of Mr. High.

On October 25, 1910, Mr. J. O. Clarke, of Atlanta, Ga., was awarded the scholarship. It has since been held by Mr. H. L. Henry, of Atlanta, and by Mr. C. W. Shackleford, of Rutledge, Ga., the present incumbent.

The M. R. Berry Scholarships

In July, 1913, Mrs. Fannie B. Wright, of Atlanta, established three scholarships, self-perpetuating, on the basis of the E. P. McBurney Scholarships, and named them The M. R. Berry Scholarships, in memory of her father, who for many years was an honored, influential and beloved citizen of Atlanta. In September, 1913, the following beneficiaries were appointed: No. 1, Mr. E. M. Upshaw, Rydal, Ga.; No. 2, Mr. E. E. Hardin, Monticello, Ga.; No. 3, Mr. J. M. Battson, Mt. Berry, Ga. No. 2 is now held by Mr. C. C. Jones, and No. 3 by Mr. H. M. Flanagan.

The I. S. Hopkins or First President's Scholarship

In July, 1914, a friend of the school established what is to be known as The I. S. Hopkins, or First President's Scholarship. The beneficiary of this scholarship, which is established on the same basis as the E. P. McBurney scholarships, receives $100 annually. Mr. J. M. Slaton, of Atlanta is the present incumbent.

The Architectural Scholarship.

The Georgia Chapter of the American Institute of Architects has established a self-perpetuating scholarship open to students in the two upper classes who may be in need of financial assistance. The beneficiary refunds the money after graduation in payments of small monthly notes without interest. This scholarship is held at present by Mr. I. Span.

The Ad Men's Scholarships.

In February, 1915, the Ad Men's Club of Atlanta established two scholarships, one by the organization and one by personal subscriptions of certain members. These are loan scholarships, similar in operation to those described above. They will go into effect in September, 1916.

The Clark Thornton Scholarship

In September, 1914, Mr. R. M. Angas, Mr. J. J. Apple, Mr. B. S. Brown, Mr. H. M. Corse, Mr. W. H. Cowan, Mr. F. C. Davies, Mr. J. G. Holtzclaw, Mr. H. H. Leech, Mr. O. H. Longino, Mr. L. B. Mann, Mr. G. T. Marchmont, Mr. C. W. Pittard and other members of the class of 1907 established a scholarship to be called the Clark Thornton Scholarship in memory of a former member of their class. The beneficiary of this scholarship, which is established on the basis of the E. P. McBurney scholarships, is to receive $150 annually.

This scholarship was awarded in September, 1914, to Mr. W. T. McCullough, Jr., of Atlanta, and in 1915 to Mr. H. W. Cheney.

W. L. Peel Prizes

Each year there are awarded as prizes to the ten men of the Junior Class who have attained the highest academic

average for the past two and one-half years, a gold "T." These are given through the generosity of Mr. W. L. Peel, of Atlanta, and are named in his honor.

Andrews Oratorical Medal

Through the generosity of Mr. Walter P. Andrews, a public spirited citizen and a friend of the School, a handsome gold medal will be awarded each year to that member of the Freshman Class who shall deliver in public contest, during the period of Commencement, the best original oration upon some subject approved by the English department. The winner of this medal will be announced on the evening of the contest, but the presentation of it will be made at the regular Commencement Exercises.

GENERAL REGULATIONS

Sessions and Terms

The session begins next to the last Wednesday in September and ends the second Wednesday in June. It will be divided into two nearly equal terms. There will be an intermission at Christmas, as indicated in the Calendar.

All students are required, and all applicants are requested to be present at the opening hour of each session, as punctuality operates to their advantage in many ways.

Examinations

Final examinations are held at the end of each term. Students are liable to be dropped from the roll of their classes at any examination, when they do not meet the requirements, as well as at any time when they neglect their studies and fall hopelessly behind their classes. No tuition or fees are refunded under such circumstances. All examinations are written. See page 179 for re-examination fees.

Reports

Reports of the standing of students are issued at the close of each term.

Bulletin boards are placed in the halls of the Academic Building, and upon these are posted each month the grading of students as ascertained by the monthly records.

Whenever a student is deficient in any study or department at the close of any month, a report of such fact is sent to his parents.

Tuition and Fees

Each county in the State of Georgia is entitled to fifteen free scholarships. When there are over fifteen students from any county, the fifteen who shall be exempt from tuition are determined as follows: 1st. Those who have been registered longest. 2nd. From a group who have been registered an equal time, those who are in the highest class. 3rd. Class-standing shall determine the preference among those who have been here the same period of time and who are in same class.

The amount of tuition charged to the excess of fifteen from a county in this State is $25.00 per annual session.

Residents of other States pay a tuition fee of $100.00 per year in addition to the fees of $25.00, $6.50 and $5.00 mentioned below.

Every student, of whatever place of residence, pays an annual fee of $25.00 to cover contingent expenses. Half of this amount is payable on entrance, and the remainder on or before February 5, 1917, 8 A. M.

A contingent fee of $5.00 will be required to be deposited with the treasurer on entrance, to cover injury done College buildings or furniture, which sum will be returned to the student on leaving, if not forfeited.

At the request of the Student Body and Alumni, there has been added, as a matter of economy, a regular fee of $6.50 per term, known as the Student Activities Fee, which covers membership in the Y. M. C. A., subscription to The Technique, The Blue Print, and The Yellow Jacket and membership in the Athletic Association with a pass to all of the games.

All students not residing at home will pay a medical fee of $5.00 per term, which will entitle them to the benefits of the new hospital.

All Georgia students will be required to pay at the beginning of the fall term:

$12.50 of the annual fee.
$12.50 of the tuition fee, if subject to tuition.

$6.50 student activities fee.
$5.00 medical fee, except students residing at home.
$5.00 damage fee, unless already deposited.

And on or before February 5, 1917, 8 A. M.

$12.50 of the annual fee.
$12.50 of the tuition fee, if subject to tuition.
$6.50 student activities fee.
$5.00 medical fee, except as above.

Residents of other States are subject to the above requirements, substituting $50.00 for the amount of the tuition fee per half year.

Each member of the Senior Class must pay a diploma fee of $5.00 before graduating.

"Examinations at other than the regular examination times will be granted in exceptional cases only and by Faculty action. A fee of $2.00 will be charged in all such cases."

A fee of $2.00 will be charged to old students reporting late for registration or payment of fees, without a valid excuse.

Until the above requirements are complied with, no student will be allowed to participate in the duties and recitations of his class.

The student is advised to defer the purchase of drawing instruments and materials until he can have the direction of the professors in their selection. The prices range from $8.00 to $15.00.

Text books and stationery can be purchased from the School Quartermaster at reasonable rates. The student is advised, however, to bring such scientific books as he may possess.

No fees are refunded to students who are required to leave for deficiency in conduct, in shop or mill work, or in studies, or who may withdraw for any reason, except for disabling sickness, properly certified to by a reputable physician. In the latter event, an equitably prorated amount will be refunded, provided the student is not able to return to the School before the end of the term in which he withdraws.

Contingent fees are not returned to any student unless he presents an order for the same from parent or guardian, saying he is to leave the School permanently.

Dormitories

All students in the Freshman Class who do not reside with their parents, near relatives, or *bona fide* guardians legally appointed, are required to board in the School Dormitories.

This regulation was passed by the Board of Trustees, after a careful examination of the advantages and protection afforded by the dormitories to students of the Freshman class, and all such students as are physically or otherwise unable to comply with the law, will not be retained in the School.

Only two men will be assigned to a room, and students of the higher classes will not be accommodated in the dormitories until all eligible lower classmen have been assigned rooms. Students to the number of sixty, living in the vicinity of the School, however, will be accommodated with table board in the dining hall at the rate of $12.00 each per month—the privilege to be accorded in the order of application.

Living Expenses

The School is provided with dormitory accommodations for two hundred students. The rooms are well lighted and ventilated. Hot and cold shower baths are accessible to all students, in new and well-heated bath rooms.

The price of board, including laundry, fuel, and lights, is $17.00 per month, payable in advance. As the dormitories are conducted on a strictly mutual plan and without financial profit to the School, the right is reserved to increase above charge should it prove insufficient to meet operating expenses. As stated elsewhere, table board at the rate of $12.00 per month, in advance, will be allowed sixty students not living in the dormitories.

Board is not refunded to students unless they have been absent over fourteen consecutive days on account of sickness properly certified to; or unless they withdraw from School. This law is necessary on account of the dormitories being conducted under a system of fixed charges.

All students who desire rooms in the dormitories must write and secure them before reporting for duty, as the dormitories accommodate scarcely one-third of the students who are in the institution. In order to secure a

room, each student must deposit $17.00, one month's board, with the President not later than September 1st. In case the student finds it impossible to enroll, the fee will be refunded provided notice is given the President not later than September 17th.

Students who board in the dormitories are required to furnish the following articles: One pillow, three pillow cases, four sheets, blankets or comforts, six towels, and other small and portable articles needed about their rooms. The articles named should be brought from home. The school furnishes with each room: Beds (single three-quarter width), mattresses, springs, wardrobe or closet washstand, bureau, and table.

Each member of the Freshman Class must provide himself with gymnasium uniform and shoes, the total cost of which is about $2.00.

Each student should have two suits of overalls, costing about $1.00 each.

The cost of equipment in the Freshman year, is relatively large on account of the purchase of drawing instruments.

Discipline and Dormitory Regulations

The students of the School have a record for good conduct unsurpassed by any corps in the country.

They are required to obey but few regulations, the authorities bearing in mind the development and best interest of the student body.

Every man is expected to conduct himself in a gentlemanly manner. When he fails in this and convinces the authorities that he has not come to work, his parents are requested to withdraw him.

Special Textile students and students having but few lessons to prepare will not be admitted to the dormitories.

Patrons or prospective patrons will be furnished upon application with the printed Rules and Regulations of the School.

Entrance Requirements

The requirements for admission to the Georgia School of Technology are as follows:

The applicant shall be not less than 16 years of age, and shall present a certificate from the last school attended,

showing his scholastic record, and that he is of good moral character.

For entrance to the Freshman Class *without condition*, every applicant shall present 14 or more units.

At least twelve units must be offered at entrance. Units due in Mathematics and Physics shall be made up before entering the Sophomore Class. All other units due shall be made up before entering the Junior Class.

A. Required units: (It is urged that all these be presented at entrance.)

Elementary and Advanced Algebra, (Including Logarithms, Binomial Theorem, Partial Fractions. Progressions, Ratio and Proportions .....2 units
Plane and Solid Geometry .....1½ units
English, English Grammar, College Entrance Requirements in Classics, Elementary Rhetoric .3 units
History (General, Ancient, Modern, English)...2 units
El. Physics or Chemistry, with Individual Lab..1 unit
or, with Lecture Demonstration, only ..... ½ unit

In addition to the required units offered, the applicant must present enough of the Optional Units in the following list to complete his fourteen entrance units:

B. Optional or Elective Units.

1. History, ½ to 2 units.
2. Civics, ½ to 2 units.
3. Latin, 2 to 3 units.
4. Greek, 2 to 3 units.
5. German, 1 to 2 units.
6. French, 1 to 2 units.
7. Spanish, 1 to 2 units.
8. Botany, ½ to 1 unit.
9. Physical Geography, ½ to 1 unit.
10. Physiology, ½ to 1 unit.
11. Biology, 1 unit.
12. Zoology, ½ to 1 unit.
13. Free hand drawing.
14. Manual Training.
15. Elementary Chemistry or Physics, ½ to 1 unit.

Not more than 4 units can be selected from the Languages.

We wish to urge that a student shall have a good com-

mand of the Mathematics which he presents for admission, as we use discretion in all cases where it is thought to the best interest of the student to take work over; as when it develops that he can not carry the work to which he has been assigned.

There are two ways of presenting the units required for admission to the Georgia School of Technology.

1. *By Examinations.*

While students may enter at any time and be examined on entrance, two general entrance examinations will be held: One at the time of the final examination for the school session, and the other at the opening of the fall term. Applicants for admissions to Freshman and higher classes will be admitted to either or both of these examinations.

Candidates for Freshman Class not graduates of accredited High Schools, may stand entrance examinations at their homes about June 1st. For full particulars address the Registrar, Georgia School of Technology.

Subjects passed satisfactorily in May-June Examinations will be credited on the admission in September.

2. *By Certificate.*

The Faculty of the Georgia School of Technology desires to bring the school into closer relations with the High Schools of the state, hoping thereby to make the transition from the latter to the former easier for the student. Therefore, the privilege of becoming accredited, by which graduates of schools can enter without examinations, is extended to those High Schools on the accredited list of the University of Georgia.

Definition of Unit

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work. This statement is designed to afford a standard of measurement for work done in secondary schools. It takes the four-year high school course as a basis and assumes that the length of the school year will be approximately thirty-six weeks, that a period is at least forty minutes, and that the study is pursued for four or

five periods a week; but, under ordinary circumstances, a satisfactory year's work in any subject can not be accomplished in less than one hundred and twenty sixty-minute hours, or their equivalent. Schools organized on a different basis can, nevertheless, estimate their work in terms of this unit. Less than forty minutes for recitation will reduce the unit value. The subject may cover more than one year, according to the pleasure of the teacher arranging courses. The time element counts on the certificate as well as the quantity of work. As a general rule, four units a year is as much as the average pupil can prepare adequately at one time.

Principals or superintendents will send to the Registrar of the Georgia School of Technology the certificate of such students in their schools as desire to enter. This should be done in June. Blank certificates may be obtained from the Registrar. The student must present himself for admission within one year after leaving the high school.

The work done by its graduates is ultimately the genuine test of the character of the preparation given by a high school. If, therefore, the students accepted from an accredited school shall be found deficient in preparation, that school must expect to be dropped from the list.

LIST OF ACCREDITED SECONDARY SCHOOLS OF GEORGIA AS REPORTED MARCH 15, 1916.

Application for accredited relations should be addressed to Professor of Secondary Education, University of Georgia.

Schools are listed under the following groups:

Group I. Fully Accredited: Graduation on 15 accepted units as previously defined; four-year high school; three or more teachers of academic subjects; not exceeding twenty-five hours of work per pupil; not exceeding average of thirty pupils per teacher; not exceeding six classes to the teacher; laboratory and library facilities sufficient to meet the needs of instruction in the subjects offered; spirit of school intellectual, wholesome; three-fourths of teachers college graduates; buildings, sanitary conditions satisfactory.

Group II. Accredited: Graduation on at least 14 accepted units as previously defined; four-year high school; 2.5 teachers of academic subjects; not exceeding seven classes to the teacher; laboratory for demonstration in the sciences taught; library; other conditions as in Group I.

Group III. Partially Accredited: Graduation on at least 12 accepted units as previously defined; a three or four-year high school; with at least two teachers of academic subjects; other conditions as in Group II.

Group IV. Recognized: Graduation on at least 10 units as previously defined; a three-year high school; one and a half teachers for academic subjects, one of whom shall be college trained; other conditions as in Group III.

FOUR-YEAR HIGH SCHOOLS.

(Schools for Girls only are omitted from this list.)

Acworth High School, III ..... Wilber Colvin
*Albany High School, I..... W. H. Hitechew
Americus High School, I..... J. E. Mathis
Ashburn High School II..... A. G. Cleveland
*Athens High School, I..... E. B. Mell
Atlanta.
*Boys' High School I..... Eugene Ragland
*Marist College I (Private)..... Peter McOscar
*Peacock School I (Private)..... D. C. Peacock
Technological High School I..... C. S. Culver
Augusta:
*Richmond Academy, I..... Geo. P. Butler

*On the Southern Accredited List.

Summerville Academy, II (Private)..... J. B. Lockhart
St. Joseph's Academy, I (Private)..... Sisters Sacred Heart
*Barnesville, Gordon Institute, I..... E. T. Holmes
Bainbridge High School, I..... J. F. Thomason
Baxley High School, II..... A. H. Moon
Blackshear: Pierce Collegiate Institute, II.... J. C. Sirmans
Blakely High School, II..... P. R. Anderson
Boston High School, I..... W. E. Nichols
Bowdon High School, II..... J. L. Robb
*Brunswick: Glynn Academy I..... N. H. Ballard
Buena Vista High School, II..... W. E. Drane
Calhoun High School, II..... C. C. Wills
Camilla High School, II..... E. L. Tappan
Canton High School, II..... W. C. Carlton
Carrollton High School, I..... H. B. Adams
*Cartersville High School, I..... H. L. Sewell
Cave Springs: Hearn Academy, II (Private).. W. H. McDaniel
*Cedartown High School, I..... J. E. Purks
Cochran High School, II..... R. M. Monts
College Park:
*Georgia Military Academy, I (Private).. J. C. Woodward
Columbus:
*High School, I..... T. C. Kendrick
Secondary Industrial School, I..... C. A. Maupin
Commerce High School, II..... H. B. Carreker
Cordele High School, II..... A. L. Brewer
Cuthbert High School, II..... Homer Hamby
Dalton High School, I..... C. D. Meadows
Darien High School, III..... H. D. Cummins
Dawson High School, II..... J. C. Dukes
Decatur High School, I..... E. E. Treadwell
Demorest: Piedmont Academy, I (Private).. J. C. Rogers
Donaldsonville High School, III..... B. L. Jordan
Douglasville High School III..... W. H. Butler
*Dublin High School, I..... W. T. Garrett
Eastman High School II..... N. W. Hurst
*Elberton High School I..... C. S. Dryden
*Fitzgerald High School, I..... A. S. Ford
Forsyth High School, I..... Mrs. T. H. Phinazee
*Fort Valley High School, I..... Ralph Newton
Gainesville:
High School, II..... J. A. Mershon
*Riverside Academy, I (Private)..... Sandy Beaver
Girard High School, III..... W. B. Lovett
Graymont High School, II..... F. A. Brinson
*Greensboro High School, I..... A. B. Waggoner
Griffin High School, I..... J. A. Jones
Harlem High School, II..... J. H. Griffin
Hartwell High School, I..... C. G. Power
Hephzibah High School III..... H. W. Sewell

*On the Southern Accredited List.

Jackson High School I..... W. P. Martin
Jonesboro High School, II..... R. D. Eadie
LaGrange High School, I..... C. L. Smith
Lawrenceville High School, II..... Van Fletcher
*Locust Grove Institute, I (Private)..... Claud Gray
Logansville High School, III..... M. D. Collins
Louisville High School, III..... Chas. H. Peay
*Macon: Lanier High School, I..... R. W. Edenfield
*Madison High School, I..... J. H. Purks
*Marietta High School, I..... W. T. Dumas
McRae South Ga. College, I (Private)..... F. G. Branch
McDonough High School, II..... E. D. Gunby
Menlo High School III..... W. M. Ransom
*Milledgeville: Georgia Military College I.... O. R. Horton
Monroe High School, II..... W. E. Dendy
Montezuma High School, II..... A. M. Stephens
Mount Berry:
The Berry School for Boys, I (Private)... Martha Berry
Moultrie High School, I..... L. H. Browning
*Newnan High School, I..... E. A. Armistead
Norman Park Institute, II (Private)..... J. A. Scoggins
Ocilla High School, III..... A. H. Stephens
Pavo High School, II..... N. R. Blackman
*Quitman High School, I..... H. D. Knowles
Reynolds High School, II..... Melissa Ogburn
Richland High School, II..... G. G. Mangham
Rome:
*High School I ..... W. P. Jones
*Darlington Academy, I (Private)..... Geo. I. Briggs
Savannah:
*Chatham Academy, I..... B. F. Pickett
*Benedictine College, I (Private)..... F. Bernard
Sandersville High School, I..... C. B. Quillian
Senoia High School, II..... J. B. Sullivan
Sparks Collegiate Institute, II (Private).... A. W. Rees
Sparta High School, II..... J. N. Haddock
Social Circle High School, II.....
Tallapoosa High School, II..... J. T. Roberts
Tennille High School, II..... W. S. Sewell
Thomson High School, II..... N. E. Ware
*Thomasville High School I..... J. A. Duncan
*Thomaston: R. E. Lee Institute I..... F. F. Rowe
Tifton High School, I..... J. C. Scarboro
Toccoa High School, I..... J. I. Allman
*Valdosta High School, I..... W. O. Roberts
Vidalia High School, II..... T. J. Ainsworth
Warrenton High School, I..... H. M. Woods Jr.
Washington High School, I..... J. W. Moseley
Waycross:
*High School, I..... Q. L. Garrett
Piedmont Institute, II ..... M. O. Carpenter

*On the Southern Accredited List.

West Point High School, II.....W. P. Thomas
Wrens High School, II.....C. C. McCollum
Winder High School, II.....J. P. Cash
Woodbury High School II.....W. W. Linton

THREE-YEAR HIGH SCHOOLS, GROUP III.

Americus: Third District Agricultural School.J. M. Collum
Bartow High School .....J. K. Callahan Jr.
Barnesville: Sixth Dist. Agricultural School..W. H. Maxwell
Bremen High School .....R. E. Grier
Buford High School .....W. M. Nunn
Cairo High School .....W. L. Bryan
Clarkesville, Ninth Dist. Agricultural School. J. H. Melson
Chipley High School .....R. L. Buxton
Clarkesville. Ninth Dist. Agricultural School.M. C. Gay
Claxton High School .....J. L. Yaden
Conyers High School .....L. O. Freeman
Cornelia High School .....J. E. Ellis
Covington High School .....H. B. Robertson
Douglas: Eleventh Dist. Agricultural School..J. W. Powell
Eatonton High School .....G. W. Matthews
Fairburn High School .....J. M. Cannon
Granite Hill: Tenth Dist. Agricultural School.J. T. McGee
Greenville High School .....C. O. Stubbs
Hawkinsville High School .....J. F. Lambert
Hazlehurst High School .....B. H. Johnson
Hogansville High School .....O. H. Hixon
Jefferson: Martin Institute .....W. T. Foster
Jesup High School .....H. W. Keith
Lavonia High School .....Geo. H. Coleman
Lithonia High School .....W. M. Rainey
Lyons High School .....A. W. Strozier
Madison: Eighth Dist. Agricultural School....W. G. Acree
Manchester High School .....L. F. Herring
Marshalville High School .....M. O. McCord
Maysville High School .....H. T. Sargent
Metter High School .....T. M. Purcell
Millen High School .....F. D. Seckinger
Monroe: Fifth Dist. Agricultural School.....J. H. Walker
Monticello High School .....Jas. B. Duke
Nashville High School .....F. M. Hunter
Pelham High School .....T. H. Wilkinson
Perry High School .....C. E. Crook
Powder Springs: Seventh Dist. Agri. School..H. R. Hunt
Reidsville High School .....G. R. Wheeler
Rochelle High School .....J. J. Gainey
Royston High School .....G. H. Mingledorff
Rutledge High School .....G. P. Hunt
Shellman High School .....J. W. Davis

Statesboro:
High School .....B. B. Earle
First Dist. Agricultural School.....F. M. Rowan
Swainsboro High School .....A. C. Keith
Stone Mountain High School.....C. T. Sawyer
Sylvania High School .....W. H. Sasser
Sylvester High School ..... J. M. Richardson
Tifton: Second Dist. Agricultural School.....J. H. Lewis
Union Point High School .....H. R. McLarty
Villa Rica High School .....J. B. Parham
Vienna High School .....R. J. Strozier
Watkinsville High School .....C. W. Peacock
Waynesboro High School .....M. C. Allen

THREE-YEAR HIGH SCHOOLS IN GROUP IV. RECOGNIZED.

Canon High School .....J. S. Byrne
Carnesville High School .....J. W. Smith
Dallas High School .....M. K. Johnson
Ft. Gaines High School .....C. L. Kemper
LaFayette High School .....Z. W. Jones
Palmetto High School .....W. F. Burford
Unadilla High School .....B. E. Donahoo
Wadley High School .....F. W. Freyman

STATEMENT REGARDING ADVANCED CREDITS

Credits for Advanced Standing

Students from recognized colleges or Junior colleges, who desire advanced credits in any of the following subjects should see that their certificates and other evidences of work done, are such that the information required below can be obtained from them. By doing so, inconvenience and delay in entering will be avoided.

In all cases the grade made by the applicant and the required passing grade should be given. The various departments will expect detailed information as outlined below:

Chemistry*

Class Room Work:

(a) Text books used, and portions omitted, if any.
(b) The total number of hours given to recitations.

Laboratory Work:

(a) The manual used.
(b) The total number of hours given to laboratory work.
(c) The number of experiments performed (required).
(d) The note book, *approved by the teacher*, should be submitted.

**Special Note regarding Chemistry Credits.* Applicants will not be granted credit for Chem. 1, 2, 5 and 6 for work done in High Schools and Preparatory Schools, on certificates. Those wishing such credit may secure it by passing a satisfactory examination.

Drawing

Freehand Drawing:

(a) The total number of hours.
(b) The drawings should be submitted, each endorsed by the Instructor.

Descriptive Geometry:

(a) The Text book used.
(b) The total number of hours given to recitations.
(c) The total number of hours given to drawing.
(d) The drawings should be submitted, each approved by the Instructor.

English

(a) The text books used, and portions omitted, if any.
(b) The total number of hours given to recitations.
(c) The classics that have been required for *careful* study.
(d) The names of books used constituting the parallel reading course.
(e) The number of themes and longer essays.

Mathematics

Higher Algebra, Analytic Geometry, Trigonometry, and Calculus:

(a) The text book used, and portions omitted, if any.
(b) The proportion of examples worked.
(c) The total number of hours given to recitations.

Modern Languages

(a) The text books used, and portions omitted, if any.
(b) The amount of composition work.
(c) The total number of hours given to recitations.
(d) Number of pages of literary prose translated.
(d) Number of pages of scientific prose translated.

Physics

Class Room Work:

(a) Text book used, and portions omitted, if any.
(b) Total number of hours given each, to recitations, and to lectures.

Laboratory Work:

(a) Total number of hours given to laboratory work, or, (if laboratory work is not given), to experimental lectures.
(b) The student's reports on experimental work, *approved by the teacher*, should be submitted.

Shop

Wood Shop:

(a) The total number of hours given to bench work.
(b) The total number of hours given to lathe work.
(c) The number and kind of pieces of work completed. An examination in pattern making will be given here.

THE UNIVERSITY OF GEORGIA

The complete organization of the University of Georgia is as follows:

THE UNIVERSITY AT ATHENS

I. Franklin College.

(THE COLLEGE OF ARTS)

Established in 1881, offering the Degree of Bachelor of Arts, and including: (1) General Courses in the Liberal Arts; (2) Special Courses.

II. The State College of Agriculture and the Mechanic Arts.

The College of Science.

Established in 1872, offering the Degree of Bachelor of Science, and including the following courses: (1) General Science Course; (2) Civil Engineering Course; (3) The Electrical Engineering Course; (4) The Agricultural Course; (5) The One-Year Agricultural Course; (6) The Winter Course in Agriculture; (7) The Experiment Station (at Experiment); (8) The Farmers' Institutes.

III. The Graduate School.

Offering the following Degrees: (1) Master of Arts; (2) Master of Science; (3) Civil and Mining Engineering.

IV. The Law Department.

Offering the Degree of Bachelor of Laws: Two-Years' Course.

V. The University Summer School.

Founded in 1903. Five Weeks' Session, offering courses in: (1) Common School Branches; (2) Pedagogy and Related Subjects; (3) High School Studies; (4) Selected College Studies.

VI. The School of Pharmacy.

Offering the Degree of Graduate of Pharmacy. A Two-Years' Course.

For catalogue of any of the above, write to

DAVID C. BARROW, Chancellor.
Athens, Ga.

The North Georgia Agricultural College, Dahlonega, Ga.

Established 1871, offering the Degrees of Bachelor of Arts, Bachelor of Science, Bachelor of Instruction, Bachelor of Business Science, having the following schools: Philosophy, Pedagogy, Courses in Science (including Agriculture), French, Department of Business, Military Department. For catalogue, apply to

GUSTAVUS R. GLENN, President,
Dahlonega, Ga.

The Medical College, Augusta, Ga.

Established 1829. A Full Four Years' Course in Medicine.

For catalogue apply to

JOSEPH EVE ALLEN, M. D., Dean,
Augusta, Ga.

Georgia School of Technology, Atlanta, Ga.

Established 1888, offering the Degrees of Bachelor of Science in Mechanical Engineering, in Civil Engineering, in Electrical Engineering, in Textile Engineering, in Engineering Chemistry and Chemistry, in Architecture, and in Commerce, and having the following departments: Mathematics, Engineering Chemistry, Chemistry, Mechanical Engineering, Experimental Engineering, English, Physics, Drawing, Civil Engineering, Electrical Engineering, Modern Languages, Textile Engineering, Geology, Mineralogy, Physical Culture, Architecture, and Commerce.

For catalogue apply to K. G. MATHESON, President,
Atlanta, Ga.

Georgia Normal and Industrial College, Milledgeville, Ga.

(For Girls)

Established in 1889, offering the following diplomas: Normal Diplomas, Collegiate Diplomas, and the following Certificates of Proficiency: In Bookkeeping, Stenography, Dressmaking, Freehand Drawing; organized in the following departments: Normal Department, Normal and Industrial Arts, Collegiate Department, Physical Training Industrial Department, Department of Domestic Science, Department of Music and Fine Art.

For catalogue apply to MARVIN M. PARKS, President,
Milledgeville, Ga.

State Normal School, Athens, Ga.

(Co-Educational)

Established 1891, having the following courses: Common School Course, one year; Graduate School, three years; including the following schools: Literature, English, Elementary Science, Mathematics, History, Geography, Latin, Art, Educational and Manual Training, Penmanship, Psychology, Pedagogy, Domestic Science.

JERE M. POUND, President,
Athens, Ga.

The South Georgia State Normal College, Valdosta, Ga.

(For Girls)

Established 1906. An institution of collegiate rank, providing both general and special training. The courses are designed primarily to meet the needs of those who expect to fill positions as teachers in the public schools of the state.

R. H. POWELL, President,
Valdosta, Ga.

Georgia Industrial College for Colored Youths, at College, Near Savannah, Ga.

Established 1890, and organized in the following schools: English, Pedagogy, Mathematics, Science, Agriculture, Manual Training, including Mechanical Drawing, Wood Working, and Iron Working Department of Trades, Carpentry, Blacksmithing, Masonry, Painting, Tailoring, Shoemaking, Sewing.

R. R. WRIGHT, President,
College, Ga.

For catalogues of the several institutions mentioned, address the presidents, whose names are given above; for catalogues of the entire university organization, address

DAVID C. BARROW, Chancellor,
Athens, Ga.

REGISTER OF GRADUATES

Name and County from which appointed	Deg. B.S.in	Occupation
Class of 1890		
Geo. G. Crawford.... Wilkinson	M.E.	President Tennessee Coal, Iron and Railroad Co., Birmingham, Ala.
Henry L. Smith..... Rockdale	M.E.	M. D. & H. L. Smith Co., Atlanta.
Class of 1891		
Percy C. Brooks..... DeKalb	M.E.	Vice-President Fairbanks-Morse Co., Ltd., Toronto, Canada.
Julius L. DeGive..... Fulton	M.E.	Manager of Advertising and Operation of Theatres, Atlanta, Ga.
W. H. Glenn ..... Fulton	M.E.	Vice-President and Operating Manager Georgia Railway & Power Co., Atlanta, Ga.
J. D. Goldsmith..... Fulton	M.E.	With Southern Railway Shops, Atlanta, Ga.
J H. Jones..... Fulton	M.E.	Coal Mining, Chattanooga, Tenn.
J. B. McCrary ..... Coweta	M.E.	J. B. McCrary & Co., Consulting Engineers, Water, Lights, Sewerage, 3d Nat'l Bank Building, Atlanta, Ga.
J. S. Moore ..... Thomas	M.E.	Mechanical Engineer, Greensboro, North Carolina.
C. M. Pritchett ..... Bartow	M.E.	Supt. of Construction, Treasury Department, Washington, D. C.
Class of 1892		
C. E. Ard ..... Stewart	M.E.	Contracting Engineer, Birmingham, Ala.
J. W. Bridge ..... Fulton	M.E.	Deceased.
A. R. Colcord ..... Dodge	M.E.	President Colcord Lumber Co., Atlanta, Ga.
E. W. Collins ..... Cobb	M.E.	Superintendent American Chemical & Mining Co., Atlanta, Ga

Name and County from which appointed	Deg. B.S.in	Occupation
E. H. Davis ..... Putnam	M.E.	City Engineer, Griffin, Ga.
C. E. Fairbanks ..... DeKalb	M.E.	~~Works Manager of Gilbert & Barker, Springfield, Mass.~~ Genl Manager Edison Phonograph Works, Orange, N. J. [illegible] Man. Thomas a. Edison, Inc Bates Man. Division.
George Freeman .... Chatham	M.E.	Deceased.
Wm. A. Hansell, Jr. .. Fulton	M.E.	Superintendent Public Works, Fulton County, Atlanta, Ga.
N. B. Hudson ..... Rockdale	M.E.	Traveling Salesman R. D. Cole Mfg. Co., Newnan, Ga.
Mark W. Johnson, Jr. Fulton	M.E.	Engineer Pratt Engineering & Machine Co., Atlanta, Ga.
C. B. Little ..... Putnam	M.E.	Brownell Mfg. Co., Engines and Boilers, Dayton, O.
M. M. Pearson ..... Tattnall	M.E.	Draughtsman, General Electric Co., Schenectady, N. Y.
Jas. Gardner Rossman Greene	M.E.	Public Utilities, 60 Wall St., New York, N. Y.
T. F. Scully ..... Fulton	M.E.	Deceased.
J. B. Sherard..... Jackson	M.E.	Deceased.
W. P. Walthall ..... Campbell	M.E.	Real Estate Salesman with Forrest and George Adair, Atlanta.
Z. Whitehurst ..... Wilkinson	M.E.	Supt. of Schools, Laurens Co., Dublin, Ga.
F E. Whitney..... Richmond	M.E.	General Manager, Commercial Truck Co., of America, Philadelphia, Pa., 27th and Brown Streets.
Class of 1893		
A. D. Black ..... Floyd	M.E.	Asst. Engineer, Dist. Engineer Corps, District of Columbia, Washington, D. C.
E. E. Davis..... Chatham	M.E.	Deceased.

Name and County from which appointed	Deg. B.S.in	Occupation
R. W. Davis..... Newton	M.E.	So. Agent, Saco-Lowell Shops Realty Bldg., Charlotte, N. C.
Joe W. Little ..... Fulton	M.E.	Estimator, Russell Electric Co., N. Broad St., Atlanta, Ga.
S. F. Jeter ..... Fulton	M.E.	Chief Engineer, Hartford Steam Boiler Inspection and Insurance Co., Hartford, Conn.
H. L. Long, Jr..... Lee	M.E.	Doctor of Medicine, Leesburg, Ga.
M. W. McRae..... Bibb	M.E.	Reclamation Service, Miami, Fla.
H. H. Miles..... Fulton	M.E.	2nd Vice-Pres. Blue Ridge Marble Co., Marietta, Ga.; Eastern Representative of the Ga. Marble Co. and Blue Ridge Marble Co., 1328. Broadway, New York, N. Y.
A. R. Murray ..... Cobb	M.E.	Chief Draughtsman, The Cincinnati Shaper Co., Designer for the Cincinnati Gear Cutting Machine Co., Cincinati, O.
W. J. Nally..... Douglas	M.E.	Consulting, Mechanical and Civil Engineer, 317 Austell Building, Atlanta, Ga.
H. G. Nowell ..... Walton	M.E.	Attorney-at-Law, Local Counsel Georgia Railroad, Solicitor City Court, Trustee Georgia School of Technology, Monroe, Ga.
H. T. Phillips ..... Fulton	M.E.	Phillips & Crew Co., 82 N. Pryor St., Atlanta, Ga.
W. H. Pritchett..... Bartow	M.E.	Marine Corps, U. S. A.
Arthur Wells ..... Chatham	M.E.	Chief Engineer, Central of Georgia Ry., Savannah, Ga.
Class of 1894		
W. O. Connor, Jr..... Floyd	M.E.	Superintendent, New Mexico School for the Deaf, Sante Fe, New Mexico.
D. E. Duggan..... Hancock	M.E.	Manager of the Henry Cotton Mills, Hawkinsville, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
G. F. Forrest..... Thomas	M.E.	Deceased.
E. A. Greene..... Clay	M.E.	Captain U. S. Marine Corps, Norfolk, Va.
T. Holmes ..... McIntosh	M.E.	Lumber Manufacturer, Lawley, Ala.
W. W. Hunter..... Wilkes	M.E.	Engineer, River and Canal Commission, Augusta, Ga.
E. B. Merry ..... Columbia	M.E.	Vice-Pres. Merry Bros., Inc. President Merry Steel Truck Co., Augusta Ga.
P. Ogletree ..... Meriwether	M.E.	Fruit Growing, Cornelia, Ga.
E. R. Whitney..... Richmond	M.E.	Chief Engineer Commercial Truck Co., of America, 27th and Brown Streets, Philadelphia, Pa.
Class of 1895		
S. W. Allen..... Elbert	M.E.	Superintendent of Water and Light Plant, Elberton, Ga.
J. A. Almand..... Elbert	M.E.	Deceased.
H. W. Clark..... Richmond	M.E.	Secretary and Treasurer Sutherland Mfg. Co., Augusta, Ga.
J. M. Goldsmith, Jr... Fulton	M.E.	Inspector Hartford Steam Boiler & Ins. Inspection Co., Atlanta, Ga.
G. H. Harrison..... DeKalb	M.E.	Southern Cotton Oil Co., Atlanta, Ga.
Wm. Jessup ..... Fulton	M.E.	Vice-President Bradbury Marble Co., St. Louis, Mo.
J. F. Lovett..... Fulton	M.E.	A., B. & A. R. R. Co., Atlanta, Ga.
C. W. McCall..... Chatham	M.E.	Cashier, Pierce & Battey, Cotton and Naval Stores, Savannah, Ga.
W. B. Nunnally..... Fulton	M.E.	Farming, R. F. D. No. 2, Monroe, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
T. F. Oetjen..... Richmond	M.E.	Civil Engineer in charge of the Cardenas Division, United Railways of Havana, Cardenas, Cuba.
J. E. Smith..... Fulton	M.E.	Pres. and Treas. John M. Smith Co., Automobiles, Atlanta, Ga.
R. N Towers ..... Floyd	M.E.	President, Rome Machine and Foundry Co., Rome, Ga.
Class of 1896		
Geo. Z. Eckels..... DeKalb	M.E.	Quartermaster Corps, U. S. Army, West Point, N. Y.
J. F. Gibbons..... Floyd	M.E.	Superintendent Bauxite Mining and Milling, Norton Co., Bauxite, Ark.
H. R. Hart..... Fulton	M.E.	Deceased.
Chas. W. Hill..... Floyd	M.E.	President and Treasurer, Billings Process Co., Woodward Bldg., Birmingham, Ala.
H. C. Reynolds..... Hancock	M.E.	Electrician and Inspector, South-Eastern Underwriters' Association, also Satsuma Orange Grower, Box 124, Mobile, Ala.
Thos. P. Thompson... Fulton	M.E.	Partner Neff & Thompson, Architects and Engineers, Norfolk, Va.
R. B. Tufts..... Glynn	M.E.	Tufts & Lowe, Engineers and Contractors, Norfolk, Va., Anderson, S. C.
A. B. Whitney..... Richmond	M.E.	Deceased.
J. T. Wikle..... Fulton	M.E.	Mechanical Engineer and Purchasing Agent, Fulton Bag & Cotton Mills, Atlanta, Ga.
B. N. Wilson..... Fulton	M.E.	Professor Mechanical Engineering and Superintendent of Mechanic Arts, University of Arkansas, Fayetteville, Ark.
Class of 1897		
Rex Van Den Corput DeKalb	M.E.	Captain Coast Artillery Corps, U. S. Army, Ft. Pickens, Fla.

Name and County from which appointed	Deg. B.S.in	Occupation
R. M. Crumley..... Fulton	M.E.	Vice-President Crumley-Sharp Hardware Co., Atlanta, Ga.
F. C. Furlow ..... Fulton	M.E.	Vice-President Otis Elevator Co., 17 Battery Place, New York.
E. F. Huff..... Bibb	M.E.	Public Accountant with Alonzo Richardson & Co., Atlanta, Ga.
Walter D. Nash..... Fulton	M.E.	President Atlanta Utility Works, East Point, Ga.
J. F. Ogletree, Jr..... Meriwether	M.E.	Farming, Durand, Ga.
A. L. Reynolds..... Hancock	M.E.	President A. L. & C. F. Reynolds Mercantile Corporation, Mayfield, Ga., President Ogeechee Fertilizer Co., Mayfield, Ga.; President Sparta Lumber Co., Sparta, Ga.
E. L. Wight, Jr..... Dougherty	M.E.	Sales Agent, The Pope Manufacturing Co., Atlanta, Ga.
Class of 1898		
S. A. Bulloch..... Thomas	E.E.	Vice-Pres. Eufaula Hardware Co., Eufaula, Ala.
J. C. Crawford..... Whitfield	E.E.	Deceased.
W. B. Everett..... Polk	E.E.	Deceased.
J. O. Hall..... Warren	E.E.	Electrician, Western Electric Co., Atlanta, Ga.
R. H. Hart..... DeKalb	E.E.	Asst Consulting Engineer, Switchboard Dept., General Electric Co., Schenectady, N. Y.
C. D. Honiker..... Bibb	E.E.	Chief Cost Accountant, Fulton Bag and Cotton Mills, Atlanta, Ga.
J. C. Garlington..... Gordon	M.E.	Farming, Calhoun, Ga.
H. H. Peek ..... Rockdale	M.E.	President and Treasurer of Lookout Boiler and Manufacturing Co., Chattanooga, Tenn.

Name and County from which appointed	Deg. B.S.in	Occupation
B. W. Seawell..... Fulton	M.E.	Safety Engineer Dept. State Ins. Fund Workman's Compensation Commission, New York City. Address, 186 State St., Brooklyn, N. Y.
P. G. Wales..... Army	M.E.	Major, U. S. Army, Retired, Menlo Park, Cal.
Class of 1899		
C. M. Binford..... Decatur	E.E.	Asst. Mgr. and Engineer Piney Mining Co., Stanford, W. Va.
L. R. Camp..... Coweta	M.E.	District Engineer, Southern Cotton Oil Co., Montgomery, Ala.
T. M. Gibbes..... Cobb	E.E.	Manager New Business Dept., Appalachian Power Co., Bluefield, W. Va.
J. M. Harby ..... Sumter, S. C.	M.E.	General Contractor, Sumter, S. C.
P. Jackson ..... Monroe	M.E.	With Southern Brick Co., Athens, Ga.
W. Leigh ..... Coweta	M.E.	Structural Engineer for Robins Conveying Belt Co., 87 Madison Ave., New York, N. Y.
J. H. Lowe..... Fulton	M.E.	Tufts & Lowe, Engineers and Contractors, Anderson, S. C.
P. Moses, Jr..... Sumter, S. C.	M.E.	General Agent Penn Mutual Life Ins. Co., Sumter, S. C.
C. L. Ruse ..... Fulton	M.E.	Special Agent Aetna Fire Insurance Co., Box 886, Atlanta, Ga.
C. D. Terrell ..... Newton	E.E.	General Manager Newton County Oil Mills, Covington, Ga.
Class of 1900		
Frank C. Turner..... Troup	M.E.	Salesman, Southern Wheel Co., Birmingham, Ala.
R. J. Binford..... Decatur	E.E.	Commercial Dept., General Electric Co., Witherspoon Bldg., Philadelphia, Pa.
H. L. Freeman..... Richmond	E.E.	Asst. Prof. Electrical Engineering Georgia School of Technology, Atlanta, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
C. S. Jones..... Chatham	M.E.	Professional Bldg., 131 Allen St., Buffalo, N. Y.
P. R. Lamar..... Richmond	M.E.	Dist. Manager Southern Cotton Oil Co., Empire Bldg., Atlanta, Ga.
S. L. Rich..... Fulton	M.E.	Great Western Mail Order Co., 224 W. Huron St., Chicago, Ill.
A. Skalowski ..... Richmond	M.E.	Gen. Mgr. Santa Monica Bay Home Telephone Co. Santa Monica, Cal.
E. P. Williams..... White	E.E.	Deceased.
C. S. Wright..... Gordon	M.E.	Gen. Mgr. French Broad Manufacturing Co.; President So. States Warehouse Co., Asheville, N. C.
W. R. Wynne..... Floyd	M.E.	Sec.-Treas. F. A. Wynne Adv. Co.; Sec.-Treas. Dallas Hupmobile Co., Box 89, Dallas, Texas.
Class of 1901		
J. P. Benjamin..... Fulton	M.E.	Manager J. S. Pinkussohn Cigar Co., Jacksonville, Fla.
E. W. Camp..... Coweta	E.E.	Asst. Professor of Textile Engineering, Ga. School of Technology, Atlanta, Ga.
D. O. Dougherty..... Fulton	T.E.	Loans and Insurance, Empire Bldg., Atlanta, Ga.
Ewell Gay ..... Fulton	M.E.	Asst. Mgr. So. Department Insurance Co. of North America, Philadelphia Underwriters' and Alliance Insurance Co., Philadelphia, Atlanta, Ga.
W. J. Holman..... Tennessee	E.E.	Manager, Sec. and Treas. Princeton Electric Light & Power Co., Princeton, Ky.
B. W. Holtzclaw..... Houston	M.E.	Chief Engineer, J. S. Scofield's Sons Co., Macon, Ga.
W. D. Hughes..... Wilkinson	T.E.	Adjuster, Southern Adjusting Bureau, Atlanta, Ga.
Wade Langston ..... Fulton	T.E.	American Car & Foundry Co., St. Louis, Mo.

Name and County from which appointed	Deg. B.S.in	Occupation
A. S. Mead ..... DeKalb	T.E.	Real Estate, Riverside, Cal.
G J Merritt..... Bibb	M.E.	Sales Engineer, Westinghouse Electric & Mfg. Co., 165 Broadway, New York.
J. Wayne Moore..... Fulton	M.E.	Vice President, Atlanta Utility Works, East Point, Ga.
Willard Newsom .... Troup	M.E.	Secretary and Manager Union Iron Works, Selma, Ala.
W. P. Sullivan ..... Chatham	M.E.	Manager, Machinery Dept. Henry Walke Co., Norfolk, Va.
L. C. Swords..... Morgan	T.E.	Cashier, J. B. Swords Bank and Sec. and Treas. J. B. Swords Supply Co., and Farming, Swords, Ga.
J. F. Towers..... Floyd	M.E.	With Indiana Steel Co., Gary, Ind.
J. S. Waterman..... Bibb	M.E.	Works Manager, Anniston Ordnance Co., Anniston, Ala.
J. Howard Williams... Henry	M.E.	Mechanical Engineer, Board of Water Supply of City of New York, Municipal Bldg.
Class of 1902		
J. T. Anthony..... Chatham	T.E.	Manager Service Dept. American Arch. Co., 30 Church St., New York, N. Y.
E. H. Bacon..... Dodge	T.E.	Superintendent of Installation Barbour-Coleman Co., Boston, Mass.
M. R. Berry..... Fulton	M.E.	President Electric Products Co., 1067 E. 152d St., Cleveland, Ohio.
I. Hardeman ..... Bibb	T.E.	Sales Engineer, Buffalo Forge Co., Buffalo Steam Pump Co., Buffalo, N. Y., the W. K. Mitchell & Co., Providence Eng. Wks., Providence, R. I., Charlotte, N. C.
R. L. Hicks..... Bartow	M.E.	Birmingham Representative Revere Rubber Co., Ensley, Ala.
M. T. Hochstrasser... Fulton	M.E.	Draftsman, Office of Chief of Ordnance, Washington, D. C.

Name and County from which appointed	Deg. B.S.in	Occupation
Folger Johnson ..... Bibb	T.E.	Architect, Commercial Club Bldg., Portland, Ore.
A. A. Jones..... Chattooga	T.E.	With Decatur Fertilizer Co., Decatur, Ala.
C. H. Kicklighter..... Fulton	M.E.	Teacher of Manual Training, Lanier High School, Macon, Ga.
E. W. Klein ..... Fulton	M.E.	Draftsman Pratt Eng. & Mach. Co., Atlanta, Ga.
McDonald Lawrence .. Cobb	C.E.	Office of Chief of Construction, Atlanta, Ga.
P. K. McKenney..... Lee	T.E.	Treasurer and General Manager Texas Cotton Mills Co. McKinney, Texas.
R. G. Merry ..... Columbia	M.E.	Gen. Manager and Sec.-Treas. Merry Steel Truck Co., Augusta, Ga.
A. H. Morton..... Penn.	M.E.	Civil Engineer with Interstate Commerce Commission, Chattanooga, Tenn.
P. H. Norcross..... Fulton	T.E.	Consulting Engineer, Solomon-Norcross Co., Atlanta, Ga.
J. H. Paulsen..... Chatham	M.E.	Asst. Mgr. Propeller Tow Boat Co., Savannah, Ga.
J. Prioleau ..... Fulton	T.E.	Special Agt. Ga. Home Insurance Co., Jackson, Miss.
C. W. Rainey..... Cobb	T.E.	Engineer-Contractor, Dothan, Ala.
M. G. Smith..... Fulton	M.E.	Sales Engineer for Jones & Laughlin Steel Co., Greenville, S. C.
H. L. Strickland..... Gwinnett	M.E.	Engineer and Salesman, The Geo. L. Squier Mfg. Co., Buffalo, N. Y.
T. M. Thompson..... Jasper	M.E.	Southern Representative Triumph Ice Machine Co., Rhodes Bldg., Atlanta, Ga.
D. D. Towers ..... Cobb	T.E.	Superintendent of Canton Cotton Mills, Canton, Ga.
J. G. West, Jr..... Fulton	T.E.	Jones & Laughlin Steel Co., Pittsburg, Pa. Address, Woodlawn, Pa.

Name and County from which appointed	Deg. B.S.in	Occupation
H. B. Wey ..... Fulton	M.E.	Engineer on Fundamental Plans, Southern Pell T. & T. Co., and Cumberland T. & T. Co., Inc., Atlanta, Ga.
L. G. Yankey..... Dougherty	T.E.	Pres. & Mgr. Electric Drug Co., Webb City, Mo.
Class of 1903		
H. W. Atkinson..... Fulton	T.E.	With Profile Cotton Mills, Jacksonville, Ala.
H. O. Ball..... Butts	T.E.	Superintendent Pepperton Cotton Mills, Jackson, Ga.
F. G. Bell, Jr.... ..... Chatham	T.E.	Engineer Salesman, Dodge Mfg. Co., Mishawaka, Ind., Atlanta Branch.
P. E. Cannon ..... Franklin	T.E.	Abbeville, Ga.
B. W. Cochran..... Campbell	E.E.	Proprietor Electric Light Plant, Palmetto, Ga.
J. C. Cook..... Chattahoochee	E.E.	Vice-President and Chief Engineer, The J. B. McCrary Co., Atlanta, Ga., Third National Bank Bldg.
A. O. Dayton..... Florida	E.E.	Electrician St. Petersburg Lighting Co., St. Petersburg, Fla.
H. O. Evans ..... Texas	T.E.	Salesman Republic Rubber Co., 2014 Commerce St. Dallas, Texas.
W. M. Fambrough.... Thomas	E.E.	Vice-President and General Manager, J. B. McCrary & Co., Municipal Improvements, Atlanta, Ga.
M. L. Freeman..... Richmond	T.E.	Associate Professor of Drawing, Mississippi A. & M. College, Miss.
Felder Furlow ..... Fulton	C.E.	Acting Prin. Assistant Engineer Construction Dept. Southern Railway Co., 1219 Amer. Trust Bldg., Birmingham, Ala.
Guy Garrard ..... Muscogee	T.E.	Manager Hamburger Cotton Mills, Columbus, Ga.
G. W. Hamilton..... Whitfield	T.E.	Superintendent Crown Cotton Mills, Dalton, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
J. D. Hodnett ..... Massachusetts	T.E.	Massachusetts Bridge Construction, Somerset, near Fall River, Mass.
A. R. Howard..... DeKalb	T.E.	With Cannon Mills, 53, 55 Worth St., New York City.
C. C. Huff..... Fulton	M.E.	U. S. Engineer, Office, 723 Central Bldg., Los Angeles, Cal.
C. J. Kamper, Jr..... Fulton	C.E.	With C. J. Kamper Grocery Co., Atlanta, Ga.
A. D. Kennedy..... S. C.	E.E.	Manager American Machine and Mfg. Co., Mgr. and V.-Pres. Greenville Iron Works, Greenville, S. C.
J. A. Kinnard..... Coweta	M.E.	Engineer, W. J. Oliver Mfg. Co., Knoxville, Tenn.
R. H. Lowndes..... S. C.	M.E.	Professor Mechanical Drawing, Georgia School of Technology, Atlanta, Ga.
B. F. Markert..... Pulaski	M.E.	Engineer, 713 Grant Bldg., Atlanta, Ga.
E. C. Patterson ..... Fulton	M.E.	Secretary and General Manager, Chattanooga Boiler and Tank Co., Chattanooga, Tenn.
P. M. Pruett ..... Morgan	T.E.	Western Electric Co., Atlanta, Ga.
W. S. Rankin..... Chatham	M.E.	Gen. Mgr., The Appraisal Co. of the South, Savannah, Ga.
J. E. Roberts..... Tenn.	E.C.	Jno. E. Roberts & Co., Cotton Buyers, Sec.-Treas. Roberts Cotton Oil Co., Memphis, Tenn.
E. A. J. Seddon..... Fulton	E.E.	Plant Dept. Tri-State Telephone Co., El Paso, Texas.
F. W. Shackleford.... Muscogee	E.E.	Asst. Dist. Mgr. Supply Dept., General Electric Co., Philadelphia, Pa.
L. M. Solomon..... Bibb	T.E.	Poultry Breeder, Macon, Ga.
S. L. Snowden..... Bibb	M.E.	Broker, 34 Pine St., New York City.

Name and County from which appointed	Deg. B.S.in	Occupation
F. C. Swain..... Gordon	T.E.	Merchandising, Reeves, Ga.
J. G. Swanson..... Alabama	T.E.	Cotton Buyer, Montgomery, Ala.
J. L. Thrash..... Meriwether	E.E. M.E.	Engineer, Tiftor Ga.
R. B. VanWormer.... Fulton	M.E.	General Foreman A. C. L. Shops, Waycross, Ga.
C. F. Wagner ..... Butts	M.E.	Mechanical Engineer, with J. B. McCrary & Co., Atlanta, Ga.
J. A. Whitner, Jr..... Fulton	M.E.	Special Agent Liverpool, London & Globe Insurance Co., Jacksonville, Fla.
A. C. Wilson..... Fulton	E.E.	Engineer Design and Construction, Georgia Railway & Power Co., Atlanta, Ga.
S H. Wilson.. ..... Campbell	E.C.	Assistant State Chemist, Atlanta, Ga.
Paul Wright ..... Spalding	M.E.	Sales Engr., American Cast Iron Pipe Co., Birmingham, Ala.
Class of 1904		
W. H. Acker..... Fulton	E.E.	Electrical Engr., Railway & Industrial Eng. Co., Transmission Engineering Co., 2 Rector St., New York City.
U. E. Albury..... Florida	E.E.	Deceased.
B. M. Blackburn..... Fulton	M.E.	Engineer, R. D. Cole Manufacturing Co., Newnan, Ga.
W. W. Brandon..... Thomas	M.E.	Hardware, Dublin, Ga.
W. C. Campbell..... Muscogee	E.E.	Superintendent Public Works, Columbus, Ga.
W. M. Davis..... Bibb	T.E.	Stocks & Bond Business, W. M. Davis Co. Macon, Ga.
F. B. Davenport..... Fulton	E.E.	Elect. Engr. Dept. Ga. Ry. & Power Co., Atlanta, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
Z. T. Dobbs..... Fulton	T.E.	Deceased.
C. H. Edmondson..... Chattoogn	T.E.	With Massachusetts Mills in Georgia, Lindale, Ga.
A. R. Emery..... Fulton	E.E.	First Lieutenant, U. S. Army, Washington, D. C.
J. W. Estes..... Clayton	E.E.	Manager Estes Mfg. Co., Rex, Ga.
S. D. Furlow..... Sumter	T.E.	Traveling Salesman, Americus, Ga.
G. R. Glenn, Jr..... Fulton	E.C.	With South-Eastern Underwriters' Association, 529 Equitable Bldg., Atlanta, Ga.
J. A. Hall, Jr..... DeKalb	E.C.	Chief Chemist Estacion Experimental Agricola, Tucuman, Argentina, S. A.
G. A. Harbour..... Fulton	T.E.	Merchant, 41 N. Pryor St., Atlanta, Ga.
C. M. Hilliard..... Hart	E.C.	Chemist, Hodgson Oil Refining Co., Athens, Ga.
R. C. Holtzclaw..... Houston	E.C.	Assistant State Chemist, Atlanta, Ga.
L. Hunnicutt ..... Fulton	M.E. E.E.	Assistant Secretary, South-Eastern Underwriters' Association, 527 Equitable Bldg., Atlanta, Ga.
C. A. Jones..... Cobb	T.E.	In charge of Bleaching and Dyeing Department, Georgia School of Technology, Atlanta, Ga.
R. K. Jordan..... Jackson	E.C.	With Chief Engineer, Southern Bell Tel. Co., Atlanta, Ga.
F. R. Maddox..... Floyd	T.E.	Chemist, Manager Rome Testing Laboratory, Rome, Ga.
C. W. Mathews..... Talbot	T.E.	Farming, Woodland, Ga.
S. B. Mathewson ..... Richmond	M.E.	Manager Southern Bell Tel. & Tel. Co., Atlanta, Ga.
C. C. McCamy..... Whitfield	E.E.	Manager of Public Utilities, Dalton, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
A. R Monsalvatge.... Fulton	E.E.	Manager Southern Cotton Oil Co., Dothan, Ala., Blakeley, Ala.
Berrien Moore ..... Clayton	M.E.	Sales Engineer, Allis-Chalmers Co., Milwaukee, Wis., Atlanta, Ga.
J. E. Moore..... Sumter	T.E.	With Barber-Coleman Co., Rockford, Ill.
F. H. Neeley..... Burke	E.E.	Industrial Engineer, Fulton Bag & Cotton Mills, Atlanta, Ga. Address, 633 Piedmont, Ave.
D. R. Pringle..... Thomas	M.E.	Superintendent City Water and Light Plants, Thomasville, Ga.
L. S. Redwine..... Coweta	E.E.	Draughtsman, Miami Copper Co., Miami, Ariz.
I. H. Ried..... Taliaferro	T.E.	Druggist, Athens, Ga.
M. T. Sanders..... Greene	E.E.	Furniture and Undertaker, Commerce, Ga.
H. J. Scales..... Fulton	T.E. M.E.	Deceased.
H. M. Strauss..... Fulton	T.E.	President Roper & Strauss Co., (Clay Products), Atlanta, Ga.
T. E. Stribling..... Cobb	E.E.	Resident Superintendent Habersham Mills, Habersham, Ga.
N. H. Strickland..... Gwinnett	M.E.	With Gray Electric Co., 75 Fulton St., New York, N. Y.
C. H. Strong..... Chatham	E.C.	Roadmaster, Ga. Ry. & Power Co., Atlanta, Ga.
S. Sutker ..... Chatham	C.E.	Engineering Chemist and Metallurgist, 12 Wilcox St., Dorchester, Mass.
J. H. Vaughn..... Fulton	E.E.	U. S. Army, Washington, D. C.
H. F. Whitner..... Fulton	M.E.	Special Agt. North British and Mercantile Insurance Co., Trust Company of Georgia Bldg., Atlanta, Ga.
A. H. Wright..... Gordon	M.E.	Stock raising and farming, Calhoun, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
Class of 1905		
E. B. Basch..... Chatham	T.E.	Auditor, Central of Georgia Railway, Savannah, Ga.
J. S. Brogdon..... Gwinnett	E.C.	Analytical Chemist, Atlanta, Ga.
W. C. Burns..... Banks	T.E.	Contractor, Griffin, Ga.
E. H. Bussey..... Randolph	T.E.	Telephone Sales Manager, Western Electric Co., Atlanta, Ga.
L. S. Collier..... Fulton	M.E.	Adjuster, care Southern Adjustment Bureau, Atlanta, Ga.
J. D. Collins..... Fulton	M.E.	Sales Engineer, Atlanta, Ga.
L. C. Daniels..... Fulton	E.C.	Asst. Prof. of Chem., Univ. of Kentucky, Lexington, Ky.
H. E. Eagan..... Fulton	M.E.	Local Manager Atlantic Ice & Coal Corp., Dublin, Ga.
R. Gregg ..... Fulton	M.E.	Secretary and Treasurer Atlantic Steel Co., Atlanta, Ga.
W. B. Hodgson..... Clarke	M.E.	Secretary and Treasurer Hodgson Oil Refining Co., Athens, Ga.
J. W. Houseal..... Polk	C.E.	Operator Iron Ore Mines, Cedartown, Ga., and Oremont, Ga.
J. H. Howard..... Florida	M.E.	Vice-President and Gen. Mgr. The Howard Transportation Co., Jacksonville, Fla.
F. A. Kroner..... Clarke	E.E.	Electrical Engineer, General Electric Co., Research Lab., West Lynn, Mass.
Thos. A. Lambert..... Fulton	E.E.	Mgr. Atlanta Stone Co., 35 Bellwood Ave., Atlanta, Ga.
J. C. Loyd ..... Troup	M.E.	Superintendent Southern Cotton Oil Co., Ft. Gaines, Ga.
W. F. Montgomery.... Floyd	C.E.	Mining, Rockrun, Ala.
F. C. Morton..... Fulton	E.E.	Manager Machinery Dept. Salt Lake Hardware Co., Salt Lake City, Utah.

Name and County from which appointed	Deg. B.S.in	Occupation
T. W. Morton..... Clarke	E.E.	Farmer, R. F. D. No. 1, Athens, Ga.
J. H. McConnell..... Bartow	E.E.	Telephone Engineer, Pacific Tel. & Tel. Co., Los Angeles, Cal.
E. Pierce McGhee..... Floyd	M.E.	With Cary J. King & Co., Insurance and Brokerage, Rome, Ga.
W. A. Pringle, Jr..... Thomas	C.E.	Cashier First National Bank, Thomasville, Ga.
S. K. Smith..... Turner	E.E.	City Lighting and Water Plants, Ashburn, Ga.
J. R. Spence ..... Mitchell	E.E.	Camilla, Ga.
T. D. Stanton..... Irwin	T.E.	With Social Circle Cotton Mills, Social Circle, Ga.
Phinehas V. Stephens. Glynn	E.E.	Consulting Engineer, 1258 Morris Ave., New York, N. Y.
C. S. Tatum..... Dade	T.E.	Asst. Professor Textile Engineering, Agricultural and Mechanical College of Texas, College Station, Tex.
P. W. Thompson..... Fulton	M.E.	Chief Draftsman, Central Oolitic Stone Co., Chicago, Ill. Address, 2126 S. Kedzie Ave.
J. E. Weeks..... Chatham	M.E.	Funeral Director, 112 Liberty St., W. Savannah, Ga.
Class of 1906		
R. A. Anderson..... Cobb	M.E.	Sales Engineer, Krojevski-Pesant Corp., Carcel No. 2, Havana, Cuba.
W. C. Appleby..... Jackson	M.E.	With Anniston Ordnance Co., Anniston, Ala.
W. N. Bagwell..... Gwinnett	T.E.	Prof. Math. 6th Dist. A. & M., Barnesville, Ga.
J. S. Beane..... Habersham	E.E.	Asst. Manager Finance & Realty Co., Treas. Geo. B. Jurgens Co., 410 Camp St., New Orleans, La.
L. H. Beck ..... Spalding	T.E.	Superintendent and Gen. Mgr. Georgia Cotton Mills, Griffin, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
E. B. Bromhead..... Fulton	C.E.	Sales Engr. The B. F. Goodrich Co., Akron, Ohio.
J. Z. Collier..... Fulton	M.E.	Chief Engineer Atlanta Steel Co., Atlanta, Ga.
P. H. Connally..... Paulding	E.E.	City Electrician, Dallas, Ga.
G. Davis ..... Newton	M.E.	Principal High School, Brinson, Ga.
C. C. Day..... Pickens	M.E.	President Parker-Day Marble & Tile Co., 620 American Trust Bldg., Birmingham, Ala.
Clarke Donaldson .... Fulton	E.C.	Asst. Engineer on Sewers, Office of Chief of Construction, Atlanta, Ga.
W. C. Dumas..... Hancock	E.C.	Chemist and Member of firm A. M. Lloyd Laboratory, 10 1-2 Auburn Ave. Atlanta, Ga.
F. J. Fagan..... Fulton	C.E.	City Engineer, Manatee, Fla.
E. Fowler ..... Spalding	M.E.	Dept. Math., Tech High School, City.
H. G. Greene..... Fulton	M.E.	Prof. Mech. Arts, A. & M. School, Monroe, Ga.
M. T. Glenn..... Rockdale	M.E.	Inspector Hartford Steam Boiler Insp., & Ins. Co., 40 Broad St., Charleston, S. C.
V. P. Holt..... Gilmer	E.E.	With American T. & T. Co., 1422 Hurt Bldg., Atlanta, Ga.
C. A. Hoyt..... Florida	E.E.	Manager Atlantic National Bank Bldg., Jacksonvillle, Fla.
R. A. Hunt..... Polk	M.E.	Deceased.
J P. Ingle..... Fulton	C.E.	Manager, Keokuk Electric Co., Keokuk, Ia.
Grover O. Lowe..... Fulton	M.E.	President Central Lumber Co., Atlanta, Ga.
I. N. Lozier..... Washington	E.E.	Manufacturing and Contracting, LaGrange, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
Malcolm R. Maclean... Chatham	M.E.	With American Steel Foundries, Pittsburg, Pa.
D. S. Marshall..... Putnam	E.E.	Electrical Engineer, Charlotte Harbor & Northern Ry., Boca Grande, Fla.
S. Warren Mays..... Fulton	M.E.	Asst. General Mgr. American Cyanamid Co., 200 Fifth Ave., New York City.
A. W. Meckel..... Fulton	E.E.	Chief Switchman, Home Telephone & Telegraph Co., Los Angeles, Cal. 1349 S. Flower St.
C. M. McCord..... Fulton	E.E.	Wagner Electric Co., St. Louis, Mo.
E. P. Noyes..... Camden	E.E.	First Lieutenant, C. A. C., Mine Planter, "Frank," care War Dept. Washington, D. C.
S. M. Orr, Jr..... Fulton	E.E.	Superintendent Abbeville Water and Electric Plant, Abbeville, S. C.
J. C. Platt..... Richmond	T.E.	Overseer Carding, Sibley Mfg. Co., Augusta, Ga.
E. E. G. Roberts..... DeKalb	E.E.	With Anniston Ordnance Co., Anniston, Ala.
S. N. Roberts..... DeKalb	E.E.	Chief Electrician, Atlantic Steel Co., Atlanta, Ga.
F. M. Rowan..... Bartow	T.E.	Principal First District Agricultural and Mechanical School, Statesboro, Ga.
H. H. Sims..... Wilkes	C.E.	Manager Capital Refining Co., Washington, D. C.
Chas. H. Smith..... Bibb	E.C.	Clerk City Court of Macon, Ga.
C. H. Tigner..... Meriwether	M.E.	Engineering Dept., Lummus Cotton Gin Co., Columbus, Ga.
F. J. Walden..... Jefferson	M.E.	Engineer, Erie, Penn.
Wayne Warfield ..... Chatham	E.E.	Chief Electrician, Prairie Pebble Phosphate Co., Mulberry, Fla.
Arnold Wells ..... Fulton	E.E.	District Traffic Chief Southern Bell Tel. & Tel. Co., Albany, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
T. L. Wolfe.....	C.E.	Construction Supt. and Engineer, J. B. McCrary Co., Atlanta, Ga.
Class of 1907		
R. M. Angas ..... Florida	M.E.	Engineer in Charge of Construction for Indian River Association, Ltd., Hobe Sound, Fla.
J. J. Apple..... Chatham	E.E.	Insurance Agent, 24 E. Bryan St., Savannah, Ga.
B. S. Brown..... Pulaski	E.C.	Instructor Savannah High School, Savannah, Ga.
C. Corley..... Bartow	T.E.	Vice-Pres. & Gen. Mgr. Necronsett Mill Co., Cumberland, N. C.
H. M. Corse..... Florida	E.E.	With M. Corse, Building Materials, Jacksonville, Fla.
W. H. Cowan..... Newton	E.E.	Deceased.
F. C. Davies ..... Fulton	M.E.	~~Edgar Thompson Works, Carnegie Steel Co., Braddock~~, Pa.
W. E. DuPre..... Fulton	E.E.	Secretary DuPre Mfg. Co., Atlanta, Ga.
L. A. Emerson..... S. C.	C.E.	Sec. & Treas. Cementile Roofing Co., Columbia, S. C. Address, Chandon Terrace.
Garrard Haines ..... Chatham	M.E.	Member of firm, Geo. S. Haines & Son, General Insurance, Savannah, Ga.
G. O. Hodgson..... Florida	E.E.	1215 N. Nevada Ave., Colorado Springs, Col.; Vice-President Dozier-Hodgson Co., Real Estate, Jacksonville, Fla.
J. G. Holtclaw..... Houston	E.E.	Superintendent Pensacola Electric Co., Pensacola, Fla.
L. R. Jackson ..... Monroe	M.E.	Engineer, J. S. Schofield's Sons Co., Macon, Ga.
W. H. Johnson..... Chattahoochee	M.E.	Toll Traffic Chief, Southwestern Tel. & Tel. Co., Dallas, Texas.
E. R. Kenner..... Murray	M.E.	Sales Engineer, Allis-Chalmers Mfg. Co., 1121 Schofield Bldg., Cleveland, O.

Name and County from which appointed	Deg. B.S.in	Occupation
A. C. Knight..... Bartow	C.E.	Contracting Engr., Albany, Ga.
H. H. Leech..... Fulton	M.E.	With Elyea-Austell Co., Atlanta, Ga.
B. T. Longino..... Campbell	E.E.	With Jacksonville Traction Co., Jacksonville, Fla.
Olin H. Longino..... Fulton	E.E.	First Lieutenant, C. A. C., Fort Moultrie, S. C.
L. B. Mann..... Telfair	C.E.	Third Assistant Examiner, U. S. Patent Office, Washington, D. C.
G. T. Marchmont..... Fulton	E.E.	Asst. Sales Manager Western Electric Co., Richmond, Va.
E. F. Murray..... Muscogee	M.E.	Engineer, Lummus Cotton Gin Sales Co., Dallas, Texas.
J. W. McLarty..... Carroll	E.E.	Manager Commercial Dept. Macon Railway & Light Co., Macon, Ga.
Emory L. Pierce..... Florida	E.E.	City Engineer, Key West, Fla.
C. W. Pittard..... Clarke	E.E.	Merchant, Winterville, Ga.
T. E. Raht..... Fulton	T.E.	Asst. General Superintendent, Bibb Mills, Macon, Ga.
R. A. Riley..... Fulton	E.E.	With General Electric Co., Birmingham, Ala.
J. E. Sims..... DeKalb	E.E.	Sales Agent, General Electric Co., New Orleans, La.
A. H. Sparks..... Washington	E.E.	Superintendent Jasper Water, Light, & Power Co., Jasper, Ala.
G. M. Stout..... Fulton	E.E.	Dist. Manager, National Metal Molding Co., of Pittsburg, Pa., 1517 Healey Bldg., Atlanta, Ga.
J. M. Trapnell..... Bulloch	M.E.	With the Walsh & Weidener Boiler Co., Chattanooga, Tenn.
A. F. Willat..... Fulton	E.E.	With Great Western Power Co., San Francisco, Cal.

Name and County from which appointed	Deg. B.S.in	Occupation
W. E. Wood..... S. C.	E.E.	Supt. Jacksonville Traction Co., Jacksonville, Fla.
Class of 1908		
M. C. Adair..... Oconee	E.E.	Plant Department, Am. Tel. & Tel. Co., Atlanta, Ga.
C. Adamson, Jr..... Carroll	T.E.	Carrollton, Ga.
J. R. Baldwin..... Floyd	E.E.	Foreman, Testing Department, Ga. Ry. & Power Co., Atlanta, Ga.
G. W. H. Cheney..... Quitman	M.E.	Student Univ. of Va., Charlottesville, Va.
J. J. Crumbly..... Quitman	E.E.	Physician and Surgeon, Georgetown, Ga.
J E. Davenport..... Virginia	M.E. E.E.	Dynamometer Engineer, N. Y. Central Lines, 1012 Grand Central Terminal, New York.
C. L. Emerson..... Fulton	M.E. E.E.	Commercial Engineer, Southern Power Co., Charlotte, N. C.
H. B Evans..... Hall	E.E.	General Manager Eastern Printing Co. (Railroad Printers exclusively), 150 Lafayette St., New York City.
C. W. Fosterling..... Chatham	M.E.	Steam Turbine, Designing Engineer, General Electric Co., Schenectady, N. Y. Mailing address: Box. 421 Schenectady.
G. W. Gibbs, Jr..... Fulton	M.E.	The Gibbs Gas Engine Co., Jacksonville, Fla.
L. E. Goodier, Jr.	E.C.	Lieutenant U. S. Army, care Adj. Gen'l, Washington, D. C.
F. H. Hardin..... Fulton	M.E.	Special Engr. Office, Asst. to President N. Y. C. Lines, 1012 Grand Central Terminal, New York City.
S. J. Hargrove..... Dodge	C.E.	Contractor, Eastman, Ga.
C. H. Henderson..... Houston	E.E.	With Waycross Light & Power Co., Waycross, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
G. A. Hendrie..... Fulton	M.E.	With Ammo-Phos. Corporation, 200 Fifth Ave., New York.
T. F. Johnson, Jr..... Chatham	M.E. E.E.	Supt. Transmission Georgia Railway & Power Co., Atlanta, Ga.
E. C Kollock..... Fulton	M.E.	Supt. Gas Dept. Charleston Consolidated Ry. & Lighting Co., Charleston, S. C.
D. I. MacIntyre, Jr... Fulton	M.E.	Insurance, Haas & MacIntyre, Atlanta, Ga., Empire Bldg.
G. W. McCarty, Jr..... Fulton	M.E.	Broker, Asst. Sec., Ashcraft-Wilkinson Co., Candler Bldg., Atlanta, Ga.
H. McClure ..... Floyd	C.E.	Interstate Commerce Commission, Arizona Eastern Ry., Tucson, Ariz.
H. D. Pope..... Coweta	C.E.	Asst. Engineer, Bureau of Lands, Manila, P. I.
W. O. Pritchard..... Fulton	M.E.	Deceased.
P B. Rice..... Camden	E.E.	Dublin, Ga.
L. W. Robert, Jr..... Jasper	C.E.	Mill Architect and Engineer, Dallis-Robert Co., Candler Bldg., Atlanta, Ga.
N. H. Slaughter..... Virginia	E.E.	Wireless Engineer, Honolulu, Hawaii.
W. R. Snyder..... Fulton	M.E.	30 E. 42nd St., New York City ~~Fulton Bag & Cotton Mills, Atlanta, Ga.~~
W. T. Spivey..... Meriwether	C.E.	Builder, Palmer-Spivey Construction Co., Charleston, S. C.
E. S. Summer..... S. C.	T.E.	Superintendent Mollohon Mfg. Co., Newberry, S. C.
C. A. Sweet, Jr..... Fulton	T.E.	Superintendent Swift Mfg. Co., Columbus, Ga.
E. D. Treanor, Jr..... Baldwin	E.E.	Engineer with General Electric Co., Pittsfield, Mass.
H. R. Vaughn..... Fulton	E.C.	First Lieutenant, Coast Artillery Corps, Ft. Rodman, Mass.

Name and County from which appointed	Deg. B.S.in	Occupation
R. C. Werner ..... Fulton	E.C.	Chemist Georgia State Board of Health, Atlanta, Ga.
R. B. Wilby..... Alabama	E.E.	Manager Academy of Music Theater, Selma, Ala.
J. H. Woodall ..... Talbot	M.E.	Proprietor Woodland Excelsior Works, Woodland, Ga.
A. R. Woolfolk, Jr..... Fulton	E.E.	Fourth Asst. Examiner, Patent Office, Washington, D. C.
H. A. Young..... Putnam	E.E.	Superintendent Waterworks, Eatonton, Ga.
Class of 1909		
N. E. Adamson..... Floyd	M.E.	Asst. Superintendent of Shops, U. S. Navy, Norfolk, Va.
W. L. Adamson..... Clayton	M.E.	United Fruit Co., Panama City, C. Z.
J. W. Barkdull, Jr..... Louisiana	M.E.	With H. & B. Beer, Cotton Brokers, 325 Baronne St., New Orleans, La.
G. W. Barnwell ..... Fulton	E.E.	With D. C. & W. B. Jackson, Consulting Engineers, Boston, Mass.
C. E. Bostwick, Jr.. Ware	E.E.	With Savannah Electric Co., Savannah, Ga.
J. G. Chapman..... Bibb	T.E.	Agent of Sycamore Mills, Sycamore, Ala.
W. C. Clark..... Newton	T.E.	Director Manual Training and Drawing, Savannah High School, Savannah, Ga.
J. R. Cook..... Newton	E.E.	Westinghouse Electric Co., Small Motor Section, East Pittsburg, Pa.
A. B. Cundell..... Floyd	E.E.	General Electric Co., Lynn, Mass., at Nashville, Tenn.
J. G. Cureton..... Dade	E.E.	Electrical Engineer, Western Electric Co. Address, 4738 Van Buren St., Chicago, Ill.
H. N. Dumas..... Cobb	E.C.	Chemist, N. P. Pratt Laboratory, Atlanta, Ga.
R. Fernandez ..... Fulton	C.E.	First Asst. to Chief Engineer, Havana Paving Works, Havana, Cuba.

Name and County from which appointed	Deg. B.S.in	Occupation
F. H. Gardner..... Elbert	M.E.	Chief Engineer, Pratt Engineering & Machine Co., Atlanta, Ga.
F P. Gary..... Richmond	M.E.	District Engineer, Southern Cotton Oil Co., Charlotte, N. C.
F. R. Gable..... Fulton	C.E.	With Chief of Construction, City Hall, Atlanta, Ga.
O. L. Harrison..... DeKalb	M.E.	Special Agent, Cotton Insurance Asso., Dallas, Texas.
W. H. Hightower..... Upson	T.E.	Treasurer Thomaston Cotton Mills, Thomaston, Ga.
E. S. Horsley..... Terrell	C.E.	Dawson, Ga.
P. H. Myers..... Walker	C.E.	First Asst. Engr. and R. R. Supt., Cuyamel Fruit Co., Cuyamel, Honduras, Cen. Am. Address, New Orleans, La.
Z. V. Myers..... Walker	C.E.	Superintendent Durham Coal & Iron Co., Soddy, Tenn.
E. H. Rogers..... Milton	T.E.	Superintendent Fulton Bag & Cotton Mills, Atlanta, Ga.
Gordon Simmons .... Chatham	E.E.	Electrical Engineer Third National Bank Bldg., Atlanta, Ga.
W. Lucas Simons..... S. C.	E.C.	Sales Agent, with R. O. Campbell Coal Co., Box. 436, Louisville, Ky.
E. W. Smith ..... Bibb	E.E.	Dept. of Apparatus Sales, General Electric Co., 5879 Cabanne Ave., St. Louis, Mo.
R. E. Trippe..... Taliaferro	C.E.	Asst. Engineer, with Dallis-Robert Co., 1023 Candler Bldg., Atlanta, Ga.
W. L. Williams, Jr.... Bibb	M.E.	With H. Koppers Co., 511 Wood St., Pittsburg, Pa.
J. Wright ..... Brooks	M.E.	Grantville, Ga.
Class of 1910		
L. Arrington ..... Mississippi	E.E.	Machinist Arrington Foundry and Machine Co., Brookhaven, Miss.

Name and County from which appointed	Deg. B.S.in	Occupation
C. O. Berry ..... Whitfield	C.E.	Asst. Valuation Dept. A. & W. P. Ry. of A., Montgomery, Ala.
A. G. R. Crawford.. Fulton	E.E.	Corpus Christi, Tex.
C. R. Clarke..... Fulton	E.C.	Asst. State Chemist, Atlanta, Ga.
D. H. Cronheim..... Fulton	E.E.	Power Salesman, Alabama Power Co., Birmingham, Ala.
A. H. Davis ..... Fulton	E.E.	Consulting Engineer, Dept. General Electric Co., Schenectady, N. Y.
G. W. Duncan ..... Bibb	T.E.	General Manager Greenville Loom, Reed and Harness Co., Greenville, S. C.
W. M. Fellers..... Richmond	M.E.	Chief Draftsman, Aeronautic Division, U. S. Navy, Aeronautic Station, Pensacola, Fla.
H. W. Ferst..... Chatham	T.E.	Aaron Ferst & Son, Insurance, 409 National Bank Bldg., Savannah, Ga.
Y. F. Freeman, Jr.... Meriwether	E.E.	Paramount Pictures Co., Atlanta, Ga.
F. W. Hausman..... Florida	E.E.	Electrician, Panama Canal, Carozal, Canal Zone.
H. W. Hesterly..... Carroll	C.E.	Manager Turner Marble and Granite Works, Tampa, Fla.
M. W. Halliday, Jr.... Stewart	E.E.	Asst. Fuel Engineer, Clinchfield Fuel Co., Spartanburg, S. C.
M. W. Howard, Jr..... Muscogee	T.E.	Lockwood, Greene & Co., City.
J. W. Ivy..... Thomas	C.E.	Western Sales Manager American Cast Iron Pipe Co., 716 Scarrett Bldg., Kansas City, Mo.
C. E. Jones ..... Fulton	E.E.	Manager Live Oak Lumber Co., Live Oak, Fla., Agent The Texas Co.
O. H. Lang..... Camden	C.E.	Consulting Engineer, Moultrie, Ga.
M. F. Legg..... Fulton	M.E.	Dist. Manager North and South Carolina Republic Motor Truck Co. Address, Henderson, N. C.

Name and County from which appointed	Deg. B.S.in	Occupation
T. L. Lewis, Jr. Fulton	T.E.	Teacher of Mathematics, Savannah High School, Savannah, Ga.
W. B. Marshall Putnam	C.E.	Maintenance of Way Dept., Southern Ry., Washington, D. C., care of F. H. Gatlin.
J. H. Pappa Fulton	T.E.	Newnan Cotton Mills, Newnan, Ga.
Jack Pappenheimer Fulton	M.E.	Secretary Southern Spring Bed Co., Atlanta, Ga.
C. W. Reid Cobb	M.E.	Principal R. E. Lee Institute, Thomasville, Ga.
A. C. Rountree Brooks	C.E.	Instructor in Drawing, Tech High School, Atlanta, Ga.
G. W. Semmes Missouri	M.E.	Asst. Chem. Engineer, Standard Gas Power Corp., 17 Battery Pl., New York, N. Y.
S. C. Simmons Clayton	T.E.	Supt. Paulding County Cotton Mfg. Co., Dallas, Ga.
R. Sims Wilkes	E.E.	Engr. Dept. Southern Cotton Oil Co., Atlanta, Ga.
B. F. Summer ur Milton	M.E.	Mechanical Engineering, care Southern Cotton Oil Co., New Orleans, La.
R. J. Thiesen Fulton	E.E.	Contractor in Reinforced Concrete Construction, Atlanta, Ga.
W. S. Tutwiler Chatham	E.E.	Vice-President Savannah Eng. & Construction Co., and Sec. Appraisal Co. of the South, Savannah, Ga.
N. B. Ware DeKalb	M.E.	With C. W. Ashcraft Milling Co., Florence, Ala.
H. A. Warner Fulton	E.E.	Investigator, Georgia Ry. & Power Co., Atlanta, Ga.
H. J. Woods Florida	E.E.	Secty. & Asst. Treas. "The Home Telephone Co.," Jacksonville, Fla.
Class of 1911		
F. S. Adkins Oglethorpe	E.E.	Salesman Westinghouse Electric & Mfg. Co. Address, 11 King Edward Apts. Pittsburg, Pa.

Name and County from which appointed	Deg. B.S.in	Occupation
C. E. Anderson Banks	E.E.	With General Electric Co., 602 Campbell Ave., Schenectady, N. Y.
I. M. Auld Clay	Arch.	Architect with Dallis-Robert Co., Candler Bldg., Atlanta, Ga.
W. Pope Barney Decatur	Arch.	Architect and Instructor in Design, Carnegie Institute of Tech., Pittsburg, Pa.
H. B. Beckwith Newton	E.E.	With Cement Phosphate Co., Plant City, Fla.
L. C. Benson Haralson	E.E.	Southern Bell Tel. & Tel. Co., 57½ S. Pryor St., Atlanta, Ga.
E. A. Bleakley Richmond	E.E.	Resident Engineer, S. & A. Ry., Spread, Ga.
A. M. Burt Bibb	T.E.	Salesman, Berlin Aniline Works, Charlotte, N. C.
J. P. Burruss Morgan	E.E.	Madison, Ga.
R. A. Burroughs Chatham	Arch.	Hentz & Reid, Architects, Atlanta, Ga.
E. F. Chandler Coweta	T.E.	Murray Co., Atlanta, Ga.; 54 W. 5th St.
J. T. Clarke Sumter	Arch.	Supt. of Construction under Treas. Dept. At present in charge of U. S., P. O. and C. H. Bldgs., Jackson, Ky.
P. M. Coleman Fulton	C.E.	Fed. Val., Dept. Interstate Com. Commission, Chattanooga, Tenn.
D. C. Collier Pike	T.E.	Gen. Mgr. Collier Mfg. Co., Barnesville, Ga.
C. A. Cowles, Jr. Fulton	M.E.	Chief Draftsman, Atlantic Steel Works, Atlanta, Ga.
J E Crane DeKalb	Arch.	Architect, Grubb Bldg., Salisbury, N. C.
D. C. Dawkins Florida	E.E.	Salesman, Westinghouse Elec. & Mfg. Co., E. Pittsburg, Pa.
V. S. Dawson Texas	M.E.	Supt. Fidelity Cotton Oil Co., Houston, Texas.

Name and County from which appointed	Deg. B.S.in	Occupation
M. L. Dona'dson..... Fulton	E.E.	Traveling Salesman, Westinghouse Elec. & Mfg. Co., St. Louis, Mo.
E. Faillaize ..... Fulton	T.E.	Secretary, J. B. Fallaize Co., Broad and Alabama, Atlanta, Ga.
M. A. Ferst..... Chatham	M.E.	Secretary Roper & Strauss, Fireproof Building Materials, Forsyth Bldg., Atlanta, Ga.
W. P. Fleming, Jr.... Bibb	M.E.	Engineering Dept. J. S. Schofield's Sons Co., Macon, Ga.
J A. Gantt..... Bibb	E.E.	Supt. of Traffic Office Southern Bell Tel. & Tel. Co., Charlotte, N. C.
C. V. C. Glover ..... DeKalb	E.E.	Sales Agent, General Supply Dept. General Electric Co., Columbia, S. C.; Atlanta, Ga.
R. F. Golden..... Muscogee	M.E.	Cambridge Co., Riverside, N. J.
W. Hopson Goodloe... Bibb	C.E.	Consulting Engineer, American National Bank Bldg., Macon, Ga.
B. E. Goodman ..... Harris	E.E.	Engineering Dept. Sou. Bell Telephone Co., Atlanta, Ga.
L. F. Green..... Burke	E.E.	Southern Bell Tel. & Tel. Co., Atlanta, Ga.
J. G. Hazlehurst..... Fulton	C.E.	Engr. Dept., Savannah, Ga.
W. L. Heinz..... Fulton	M.E.	Office of Chief Mechanical Engineer, N. Y. C. & H. R. Ry., 1939 Grand Central Terminal, New York.
P. C. Herault..... Florida	E.E.	Supt. Marietta-Tenn. Dist., Ga. Railway & Power Co., Lindale, Ga.
E. D. Hill..... Wilkes	E.E.	District Traffic Chief, Cumberland Tel. & Tel. Co., Louisville, Ky.
M. S. Hill..... Wilkes	E.E.	District Traffic Chief, Cumberland Tel. & Tel. Co., Memphis, Tenn.
F. W. Holt..... Putnam	C.E.	Asst. in Math. and Shop, Atlanta Tech High School, Atlanta, Ga.
W. F. Howe ..... Bibb	C.E.	Valuation Dept., Ga. R. R. Address, 307 Adams St., Macon, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
W. D. Kellogg..... Fulton	E.E.	Sales Engineer, Consolidated Gas, Electric Light & Power Co., Baltimore, Md.
G. J. Kollock..... Fulton	E.E.	Electrical Engineer, Ga. Ry. & Power Co., Atlanta, Ga.
H. A. Kroner ..... Fulton	C.E.	U. S. Army, 1150 Presidio, San Francisco, Cal.
M. H. Levy ..... Chatham	Arch.	Levy & Clarke, Architects, Germania Bldg., Savannah, Ga.
H. W. Loving..... N. C.	M.E.	Engineering Dept., J. B. McCrary Co., Atlanta, Ga.
E. H. Lyon..... Fulton	E.E.	American Tel. & Tel. Co., Atlanta; 78 So. Pryor St.
W. A. Markley..... Fulton	Arch.	With Shaw Kiln Co., Atlanta, Ga.
K. C. McRae..... Fulton	C.E.	Dist. Engineer, Corrugated Bar Co., Atlanta, Ga.
R. W. Neel..... Bartow	M.E.	Engineer, Illinois Steel Co., So. Chicago, Illinois.
G. Novoa ..... Mexico	E.E.	Gen. Mgr. Oriente Coca-Cola Bottling Co., Santiago, Cuba.
S. M. Oliver ..... Elbert	M.E.	Farming, Elberton, Ga.
Wm. Robinson, Jr..... Richmond	C.E.	Special Engineer, Valuation Dept., Ga. Ry., Augusta, Ga.
C. I. Rodriguez..... Cuba	M.E.	Asst. Chief Engineer, Moron Sugar Co., Pina Comaguay, Cuba.
H. R. Smith ..... Emanuel	T.E.	Vice-Pres. & Mgr. Chero-Cola Bottling Co., Hattiesburg, Miss.
H. C. Stakely ..... Fulton	E.E.	With Southern Power Co., Charlotte, N. C.
J. T. Starke ..... Muscogee	T.E.	Purchasing Agent, Southern Cotton Oil Co., 150 Lee St., Atlanta, Ga.
J. J. Spalding, Jr.... Fulton	M.E.	Dist. Sales Mgr. R. C. Hoffman & Co., Atlanta, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
L. H. Tippins ..... Tattnall	E.E.	Duquesne Light & Power Co., Pittsburg, Pa.
E. Walton ..... Fulton	M.E.	Turbine Engineering Dept., Westinghouse Elec. & Mfg. Co., Boston Office. 37 Wormwood Ave., Boston, Mass.
J. Walton ..... Fulton	E.E.	Superintendent Belton Power Co., Belton, S. C.
H. G. Weaver..... Putnam	M.E.	Sales Mgr. Newell Motor Car Co., 308 North 12th St., St. Louis, Mo.
D. H. Woodward..... Fulton	E.E.	Dist. Plant Engineer, Am. Tel. & Tel. Co., 78 So. Pryor St., Atlanta, Ga.
W. C. Wright..... Floyd	T.E.	~~Representing Pennsylvania Steel Co., 280 Rockefeller Bldg., Cleveland, O.~~ Bethlehem Steel Co., Cleveland, Ohio
Class of 1912		
W. A. Aichel ..... S. C.	C.E.	With Trussed Concrete Steel Co., Forsyth Bldg., Atlanta, Ga.
W. A. Alexander..... Clarke	C.E.	Instructor, Georgia School of Technology, Atlanta, Ga.
O. A. Barge ..... Fulton	M.E.	Supt. for Albert Kahn, Architect, Detroit, Mich.
M. H. Barnett..... Wilkes	T.E.	Asst. Cashier, Citizens National Bank of Washington, Ga.
T. B. Bethel ..... Upson	M.E.	Empire Cotton Oil Co., Cordele, Ga.
R. L. Bidez ..... Polk	T.E.	With Lummus Cotton Gin Co., Columbus, Ga.
D. C. Black, Jr..... Fulton	M.E.	Automobiles, Atlanta, Ga.
L. E. Bleckley, Jr..... Fulton	M.E.	Engineering Department, Atlantic Steel Co., Atlanta, Ga.
C. B. Branan ..... DeKalb	C.E.	Kirkwood, Ga.
E. A. Brooks ..... Fulton	M.E.	With Combustion Appliances Co., Rogers Park, Chicago, Ill.
L. J. Bussey ..... Turner	C.E.	With American Cyanamid Co., Niagara Falls, Canada.

Name and County from which appointed	Deg. B.S.in	Occupation
C. A. Byrd ..... Florida	E.E.	Mgr. Ice & Elec. Plant., Arcadia, Fla.
C. C. Carson..... Texas	M.E.	Inspector Dallas Consolidated El. St. Ry. Co., Dallas, Tex.; 2315 Ross Ave., Dallas, Texas.
W. B. Coleman ..... Bibb	M.E.	With Packard Motor Car Co., Atlanta, Ga.; 541 Peachtree St.
C. I. Collins ..... N. C.	M.E.	With U. S. Cartridge Co., New York. Address, Maurer, N. J.
R. D. Conacher ..... Richmond	E.E.	Deceased.
E. D. Drummond..... Chatham	E.E	Secty. & Treas. Harris Tire Co., Savannah, Ga.
W. A. Emerson ..... Fulton	M.E. E.E.	Sales Engineer, Westinghouse Elec. & Mfg. Co., Charlotte, N. C.
D. A. Finlayson ..... Brooks	Arch.	With Swift & Co., General Offices, Chicago, Ill.
F. H. Goette ..... Glynn	C.E.	With Dysard Construction Co., General Contractors, 400 Austell Bldg., Atlanta, Ga.
C. P. Goree..... Fulton	M.E.	With Frick Co. of Waynesboro, Pa., 312 K St., South, Boston, Mass.
B. M. Hall, Jr..... Fulton	M.E.	Member firm Hall Bros., Civil and Mining Engineers, Peters Bldg., Atlanta, Ga.
D. W. Harris ..... Bibb	E.E.	With Doherty Operating Co., 60 Wall St., New York.
R. M. Harris ..... Henry	E.E. M.E.	Asst. Supt. Hampton Cotton Mills; Mgr. Harris Milling Co., Hampton, Ga.
W. S. Hazzard ..... Fulton	M.E.	Student Cornell Univ. Address, 112 Highland Pl., Ithaca, N. Y.
J. F. Heard ..... Bibb	E.E.	Irrigated Farming, Macon, Ga.
A. W. Hill ..... Fulton	E.E.	Sales Engineer, Electric Storage Battery Co., Atlanta, Ga.
G. M. Hope, Jr..... Fulton	M.E. E.E.	With G. M. Hope & Co., Insurance, 215 Grant Bldg., Atlanta, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
E. H. Hubert ..... Fulton	E.E.	With Ga. Ry. & Power Co., 24 E. Alabama St., Atlanta, Ga.
G. S. Jones, Jr..... Bibb	E.E.	Cost Engineer, General Electric Co., Lynn, Mass.
C. L. Kimbell..... Newton	E.E.	Construction Dept. Phila. Elec. Co., 157 W. 20th St., Philadelphia, Pa.
C. T. King, Jr..... Bibb	C.E.	Manager Chehaw Gravel & Sand Co., Tuskegee, Ala.
A. E. Kunze ..... Florida	E.C.	Asst. Testing Engineer, Chemical Lab. Tennessee Coal, Iron & Ry Co., Ensley, Ala. Box 445 Birmingham, Ala.
W. H. Lamar ..... Florida	E.E.	Commercial Engineer, Westinghouse Electric & Mach. Co., Cleveland, O.
A. L. Lemon ..... Cobb	E.E.	Industrial Control, Engineering Dept., General Electric Co., Schenecatdy, N. Y.
W. A. Linton ..... Thomas	E.E.	Teacher and Missionary, Presbyterian Mission, Kunsan, Korea.
G. F. Luck ..... Clayton	T.E.	Asst. Principal, Farragut High School, Concord, Tenn.
R. E. Mell ..... DeKalb	M.E.	Secretary Y. M. C. A., Tupelo, Miss.
H. H. Miller..... Ware	E.E.	Engineering Dept., Southern Bell Tel. & Tel. Co., Savannah. Address Y. M. C. A.
J. A. Milligan ..... Thomas	M.E.	U. S. Civil Service, Boston, Ga.
J. N. Moore, Jr..... Fulton	E.E.	With Mackle-Crawford Construction Co., Atlanta, Ga.
J. F. Myrick ..... Baldwin	E.E.	Commercial Engineer, Power & Mining Dept., General Electric Co., Schenectady, N. Y.
J. D. McCarthy, Jr... Fulton	M.E.	Salesman, with A. D. Adair & McCarty Bros., Inc., Atlanta, Ga.
F. B. McDonald..... Lee	T.E.	With Dixie Cotton Mills, LaGrange, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
R. D. McGaughey..... Fulton	M.E.	Engineering Dept., Atlantic Steel Co., Atlanta, Ga.
D. S. McLaurin..... Florida	E.E.	Fire Protection Engr., Improved Risk Dept., Ark. Actuarial Bureau, Little Rock, Ark.
F. H. Ogletree ..... Fulton	Arch.	Chief Draftsman, Phoenix Planing Mills, Atlanta, Ga.
W. F. Osborne..... Ben Hill	M.E.	Asst. Master Mechanic, By-Product Coke Ovens, Youngstown Sheet & Tube Co., Youngstown, Ohio.
H. W. Patterson..... Massachusetts	M.E.	Asst. to Supt. of Power, The Columbus Power Co., Columbus, Ga.
J. T. Peacock ..... Morgan	E.E.	Professor Mathematics and Shop Work, Agr. and Mech. College, Madison, Ga.
H. N. Pye ..... Talbot	E.E.	Inspector & Electrician, So. Eastern Underwriters' Asso., Equitable Bldg., Atlanta, Ga.
F. W. Quarles ..... Floyd	E.E.	Consolidated Gas & Elec. Co., Baltimore, Md. Address, Central Y. M. C. A., Baltimore, M. D.
H. T. Ross..... Glynn	E.E.	Cumberland Tel. & Tel. Co., Paducah, Ky.
P. T. Shutze..... Fulton	Arch.	Holder of Fellowship in Architecture, American Academy, Rome, Italy.
C. M. Simmons ..... Floyd	C.E.	Maintenance of Way Dept., Southern Ry. Co., Rome, Ga.
W. B. Simmons ..... Florida	M.E.	With Jacksonville Traction Co., Jacksonville, Fla., 2803 Riverside Ave.
C. C. Sloan ..... Henry	E.E.	With Cumberland Tel. & Tel. Co., Louisville, Ky.; address, 1115 4th Ave.
A. Q. Smith ..... Fulton	E.E.	Miss. Power Co., Keokuk, Iowa.
G. A. Smith ..... Houston	M.E.	With J. B. McCrary Co., of Atlanta, Ga.
P. Smith ..... Newton	E.C.	Chemist, Armour Fertilizer Co., Atlanta, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
W. Austin Smith ..... Fulton	E.E.	Elec. Engineer Dunnellon Phosphate Co., Dunnellon, Fla.
J. W. Spears..... Glynn	E.E.	With National Tube Co., Candler Bldg., Atlanta, Ga.
F. A. Stivers..... Tennessee	M.E.	American Tar Products Co., 2023 Wayne St., Toledo, Ohio.
N. N. Teague..... Richmond	M.E.	Electrical Dept., Augusta-Aiken Railway & Electric Co., Augusta, Ga.
H. T. Thompson..... Tennessee	E.E.	Salesman, Robins Elec. Co., Pittsburg, Pa. Address, 11 King Edward Apts.
P. Thompson ..... Clayton	C.E.	Asst. Superintendent Construction, Albertham Construction Co., 23d and Arch St., Philadelphia, Pa.
C. Wallace ..... Fulton	C.E.	Topographer, Southern Railway, Box 569, Knoxville, Tenn.
A. O. Williams ..... Thomas	M.E.	With American Cyanamid Co., Niagara Falls, Canada.
Class of 1913		
D. C. Ashley..... New York	C.E.	Vice-Pres. and Gen. Mgr. Kones Falls Electric Co., Glenns Falls, N. Y.
A. U. Avera..... Arkansas	E.E.	Cashier Columbus Natural Gas Co., Granville, O.
J. H. Berry..... Mississippi	E.E.	Efficiency Engineer, Newport News & Hampton Ry., G. & E. Co., Newport News, Va. Address, 818 26th St.
W. R. Boyd..... Chatham	M.E.	International Steam Pump Co., Buffalo, N. Y.
J. C. Brooks..... Harris	M.E.	Lummus Cotton Gin Co., Columbus, Ga.
J. T. L. Brown..... Houston	M.E.	Statesboro, Ga.
Lewellyn L. Brown.... Fulton	T.E.	Superintendent, Swift Spinning Mill, Columbus, Ga.
V. C. Brownson..... N. C.	M.E.	Civil Engineer, Public Service Commission, 66 W. 68th St., New York City.

Name and County from which appointed	Deg. B.S.in	Occupation
M. M. Bryan ..... Clarke	T.E.	Secretary Columbia Fire Ins. Co., Athens, Ga.
G. F. Bunn ..... Polk	E.E.	Y. M. C. A., Erie, Pa.
H. E. Carr..... Tennessee	E.E.	Engineer, Construction Dept., Southern Ry. Co., Washington, D. C.
J. C. Chalmers..... N. C.	M.E.	Combustion Engineering, Wichita Natural Gas Co., Wichita, Kans.
J. O. Clarke..... Fulton	E.C.	Asst. State Chemist, State Capitol, Atlanta, Ga.
P. H. Clarke ..... Troup	Arch.	With H. W. Whitecover, Savannah, Ga.
H. Cook ..... Newton	C.E.	Local Mgr. Ladd Lime & Stone Co., Cartersville, Ga.
C. L. Crumley..... Fulton	T.E.	Johnson & Crumley, Atlanta, Ga.
T. W. Davis ..... Coweta	M.E.	With Swift-Davis Leaf Tobacco Co., Atlanta, Ga.
J. C. Dennis ..... Bibb	Arch.	Draftsman, P. E. Dennis, Architect, Macon, Ga.
J. R. DuBose ..... Fulton	M.E.	Turn Foreman, Benzol Plant, Tenn. Coal, Iron & R. R. Co., Box 482, Fairfield, Ala.
C. C. Ely, Jr..... Chatham	E.E.	Vice-Pres. Ely Dredging & Const. Co., Savannah, Ga.
M. S. Estes..... Tennessee	E.E.	Testing Dept., Western Elec. Co., New York City.
L. B. Evans, Jr..... Richmond	M.E.	Buckeye Steel Castings Co., Columbus, Ohio.
J. W. Feldman..... Fulton	E.E.	Atl. Clay Products Co. Address, 225 Erwin St., Atlanta, Ga.
S. A. Flemister ..... Newton	E.E.	Eng. Dept., Sou. Bell T. & T. Co., Atlanta, Ga.
S. D. Frankle..... Fulton	E.C.	Law School, Univ. of Michigan, 325 E. Jefferson St., Ann Arbor, Mich.

Milwaukee Elect. Railway & Light Co., 687 - 9th St., Milwaukee.

So. Division St.

Name and County from which appointed	Deg. B.S.in	Occupation
T. H. Galphin..... Richmond	E.E.	A. T. & T. Co., 1422 Hurt Bldg., Atlanta, Ga.
A. S. Goebel..... Chatham	M.E.	Engineering Dept., City, Savannah, Ga.
H. J. Hall ..... Fulton	M.E.	Resident Eng., Lockwood, Green & Co., Healey Bldg., Atlanta, Ga.
C. S. Hammond..... Sumter	M.E.	Savannah & Statesboro Ry. Co., Statesboro, Ga.
W. P. Hammond..... Fulton	M.E.	Asst. Supt. Records and Drafting, Ga. Ry. & Power Co., 233 Gas Bldg., Atlanta, Ga.
A. P. Hill..... Telfair	E.E.	With Sou. Bell. Tel. & Tel. Co., Denmark, S. C.
I. B. Hirsch..... Fulton	E.E.	Lichtenstein & Hirsch, Savannah, Ga.
S. N. Hodges..... Houston	C.E.	Supt. of Works, Chattanooga Gas Co., Chattanooga, Tenn.
W. C. Holmes..... N. C.	E.E.	Turbine Sales Dept., General Elec. Co., 24 Baker St., Lynn, Mass.
R. L. Hughes..... Fulton	E.E.	Commercial Engineer, Power & Mining Dept., Gen. Elec. Co., Schenectady, N. Y.
M. A. Jamison..... Fulton	M.E.	Supt. Jamison & Hollowell, Contractors, Montgomery, Ala.
G. B. Jewett, Jr..... Bibb	M.E.	Apprentice Instructor at the Central of Ga. R. R. Shops, Macon, Ga.
G. W. Laine, Jr..... Fulton	E.E.	Traffic supervising Asst., Am. Tel. & Tel. Co., 15 Dey St., New York.
F. H. Lanham..... Floyd	M.E.	Draftsman, R. D. Cole Mfg. Co., Newnan, Ga.
J. B. Law, Jr..... Stewart	E.E.	Sales Dept., Westinghouse Elec. & Mfg. Co., Candler Bldg., Atlanta, Ga.
A. L. Loeb..... Fulton	M.E.	Engr. Atlanta Utility Wks., E. Point, Ga.; 92 Windsor St., Atlanta, Ga.
H. Luehrman ..... Fulton	T.E.	With Babcock & Wilcox Co., 404 Traction Bldg., Cincinnati Ohio.

Name and County from which appointed	Deg. B.S.in	Occupation
H. S. McCrary ..... Glynn	Arch.	Instructor of Drawing, John Marshall High School, Richmond, Va.
G. L. Maddox ..... Spalding	T.E.	Director Textile Dept., Columbus Industrial High School, Columbus, Ga.
A. C. Matthews, Jr... Spalding	C.E.	Levelman Double Track Construction, Sou Ry., Box 271, Orange, Va.
W. G. Miller ..... Fulton	C.E.	Inspector, Western Electric Co., Atlanta, Ga.
R. F. Monsalvatge.... Fulton	E.C.	Chemist, Southern Cotton Oil Co., New Orleans, La.
G. H. Northcutt..... Cobb	T.E.	Superintendent, Marietta Knitting Co., Marietta, Ga.
A. J. Phillips..... Fulton	M.E.	Teacher of Science and Manual Training, So. Ga. College, McRae, Ga.
J. Phinizy .... Richmond	M.E.	Asst. Supt. Ford Motor Co., Atlanta, Ga.
M. L. Rahner ..... Fulton	M.E. E.E.	Atlantic Steel Co., Atlanta, Ga.; also 306 Grand Opera Bldg., Atlanta, Ga.
R. W. Reynolds..... Hancock	E.E.	Draughtsman, South-Eastern Underwriters' Assn., Trust Co. of Ga. Bldg., Atlanta, Ga.
J A. Roby..... Jasper	C.E.	Civil Engineer with U. S. I. C. Com., Chattanooga, Tenn.
J. K. Rockey..... Fulton	E.E.	Engineering Dept. A. T. & T. Co., 15 Dey St., New York.
R. F. Sams, Jr. ..... Fulton	E.C.	Farmer, Clarkston, Ga.
J. H. Schroeder ..... Chatham	E.E.	Instructor, Elec. Eng. Dept., Ga. School of Technology, Atlanta, Ga.
H. Segel ..... S. C.	E.E.	Student Engineer, General Electric Co., Schnectady, N. Y.
A. L. Stribling ..... DeKalb	M.E.	Foreman of Blooming Mill, Atlantic Steel Co., Atlanta, Ga. Address, Y. M. C. A
E. K. Thomason..... Fulton	M.E.	Draftsman, Atlanta Utility Works, East Point, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
G. D. VanEpps ..... Fulton	Chem	Post-Graduate Student, Johns Hopkins Univ., Box 642, Baltimore, Md.
A. M. Wynne..... Dodd	E.E.	With Otis Elevator Co., New York, N. Y.
Class of 1914		
Adams, A. D. ..... Newton	M.E.	Superheated Steam Engine Power Specialty Co., Dansville, N. Y.
Adams, W. S. Jr..... Tennessee	Arch.	With W. H. Sears, Archt., Chattanooga, Tenn.
Andrews, F. S..... S. C.	Eng. Ch.,	Chemist with Tenn. Coal, Iron & Ry. Co., Benzol Dept., Fairfield, Ala.
Anthony, R. T. ..... Florida	C.E.	Asst. Cashier Bank of Palm Beach, Fla. West Palm Beach, Fla.
Armstrong, W. R. .. Fulton	M.E.	With R. S. Armstrong & Bro., Atlanta, Ga.
Arrington, E. H..... Richmond	E.E.	Salesman, 312 Broad St., Augusta, Ga.
Barron, H. T..... DeKalb	E.E.	Traffic Dept., Cumberland Tel. & Tel. Co., New Orleans, La.
Bauer, R. L..... Fulton	M.E.	Salesman, U. S. Bedding Co., Memphis, Tenn.
Boland, L. C. M..... Fulton	Arch.	With Cothran & Cothran, Architects and Engineers. Greenwood, S. C. Address, care Mr. Thos. W. Cothran.
Brooks, F. P. ..... Chatham	T.E.	With Unity Spinning Mills, South LaGrange, Ga.
Brooks, O. L..... DeKalb	M.E.	With So. Eastern Underwriters' Assn., Atlanta, Ga.
Brown, M. L. Jr..... DeKalb	M.E.	Asst. Supt. Open Hearth, Atlantic Steel Co., Atlanta, Ga. Address, Box 276, Decatur, Ga.
Chapman, E. L..... Bibb	C.E.	With Dallis-Robert Co., Candler Bldg., Atlanta, Ga.
Claxton, W. L. ..... Macon	E.E.	Supt. Credille-Fowler Power & Mfg. Co., Ft. Gaines, Ga.

Name and County from which appointed	Deg. B.S.in	Occupation
Clayton, M. M..... Fulton	C.E.	With Geo. A. Clayton, Contractor, Atlanta, Ga.
Cone, M. S..... Baldwin	E.E.	Engineering Dept. Westinghouse Elec. & Mfg. Co., E. Pittsburg, Pa. Address, 500 Todd St., Wilkinsburg, Pa.
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Crofoot, C. S..... Fulton	E.E.	Traffic Supt., Cumberland Tel. & Tel. Co., New Orleans, La.
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Wood, C. M. ..... Fulton	C.E.	Automatic Sprinkler Co., of America, Underwriters' Bldg., New York.

ADVANCED DEGREES

Bryan Martin Blackburn	B. S. M. E., G. S. T., '04; M. E., '14. Design of a 225-Hp. Boiler.
John Gresham Chapman	B. S. in T. E., '09; T. E. '15. The Management of a Knitting Yarn Mill.
Eugene Clifford Patterson	B. S. M. E., G. S. T., '03; M. E. '14. Estimate, Design and Construction of 19 Sulphuric Acid Tanks. '05.
Phinehas Varnum Stephens	B. S. E. E., G. S. T., '03; M. E., '14. An Original Test on the 14-inch Main Steam Headers of the Waterside Station No. 1, of the New York Edison Co., involving the invention of the Flexometograph.

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GENERAL INDEX