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Session 1899-1900

Agricultural and Mechanical College

OF TEXAS.

Railroad Depot and Money Order Office: College Station, Texas.



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CALENDAR 1900.

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JANUARY.	-FEBRUARY.	MARCH.
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MESS HALL ...

CALENDAR 1901.

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COLLEGE CALENDAR.

1900.

Entrance Examinations begin Monday, September 10. Fall Term begins Wednesday, September 12. Aniversary Austin Society, November 15. National Holiday, Thanksgiving Day. Christmas Holiday, December 21 to January 2, 1901.

1901.

Winter Term begins Thursday, January 3, 1901. National Holiday, February 22. Texas Independence Day, March 2. Spring Term begins Monday, March 18. Anniversary Calliopean Society, March 16. San Jacinto Day, April 21. Final Examinations begin June 3. Commencement Sunday, June 9. Exhibition of Departments and of Work of Students, June 10. Commencement Day, June 11.

BOARD OF DIRECTORS.

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HON.	MARION SANSOM, President	. Alvarado.
HON.	F. A. REICHARDT	Houston.
HON.	F. P. HOLLAND	. Dallas.
HON.	D. A. PAULUS	.Hallettsville.
HON.	P. H. TOBIN	.Denison.
HON.	A. P. SMYTH	Mart.
HON.	JOHN W. KOKERNOT	.San Antonio.
HON.	JEFFERSON JOHNSON	Austin.
J. A. 1	BAKER, Secretary	College Station.

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CHARLES PURYEAR, M. A., C. E., Professor of Mathematics.

MARK FRANCIS, D. V. M., Professor of Veterinary Science. (Veterinarian to Experiment Station.)

> F. E. GIESECKE, M. E., Professor of Drawing.

J. C. NAGLE, M. A., C. E., M. C. E., Professor of Civil Engineering and Physics.

R. H. PRICE, B. S., Professor of Horticulture and Mycology. (Horticulturist to Experiment Station.)

> T. C. BITTLE, A. M., PH. D., Professor of Languages.

J. H. CONNELL, M. Sc., Professor of Agriculture. (Director of Experiment Station.)

C. W. HUTSON,, Professor of English and History. FREDERICK W. MALLY, M. Sc., Professor of Entomology.

D. W. SPENCE, B. Sc., C. E.,

Professor of Physics.

H. NESS, M. S., Professor of Botany.

COL. J. C. EDMONDS,

Professor of Military Science, and Commandant of Cadets.

OTHER INSTRUCTORS.

ROBERT F. SMITH, Associate Professor of Mathematics.

W. B. PHILPOTT, M. S., Associate Professor of English and History.

> P. S. TILSON, M. S., Associate Professor of Chemistry. (Associate Chemist to Station.)

A. L. BANKS, A. B., M. S., Associate Professor of Mathematics.

H. W. SOUTH, Assistant Professor of English and History, and Languages.

C. E. BURGOON, M. E., Assistant Professor of Mechanical Engineering.

E. W. KERR, M. E., Assistant Professor of Mechanical Engineering.

> A. C. LOVE, B. S., Assistant Professor of Drawing.

A. M. FERGUSON, M. S., Assistant Professor of Horticulture. (Assistant Horticulturist to Station.)

C. H. ALVORD, B. S., Assistant Professor of Agriculture.

PROFESSOR PURYEAR, Secretary of the Faculty, and Librarian..

> PROFESSOR BITTLE, Chaplain.

1

OTHER OFFICERS.

A. C. GILLESPIE, M. D., Surgeon.

> J. A. BAKER, Secretary.

J. G. HARRISON, A. B., Bookkeeper.

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B. SBISA, Steward.

C. A. LEWIS, Foreman of the Carpenter Shop.

> H. C. KYLE, B. S., Foreman of the Farm.

G. EBERSPACHER, Florist.



ASSEMBLY HALL.

CATALOGUE OF STUDENTS.

EXPLANATION.

1

Degrees: B. S., Bachelor of Science; M. S., Master of Science; M. E., Mechanical Engineer; C. E., Civil Engineer.

Courses: 'Agr., Agriculture; Hort., Horticulture; Mech. Eng., Mechanical Engineering; Civ. Eng., Civil Engineering.

POST GRADUATES.

Name.	Deg	gree.	Residence.
E. H. Astin, B. S	.М.	E	. Mumford.
L. F. Bland, B. S	. М.	S	. College Station.
Frank Dwyer, B. S	. M.	S	. San Marcos.
C. C. Harrison, B. S	. M.	ß	. Bedias.
A. C. Love, B. S	. C.	E	. College Station.
W. C. Martin, B. S.	. М.	S	. College Station.

FIRST CLASS.

Name.	Course.	Residence.
Abrahams, J. E	Mech. Eng	New Braunfels.
Biering, S. R.	. Civ. Eng	Hitchcock.
Bittle, Thos. C., Jr	Civ. Eng	College Station.
Boettcher, R. B.	Mech. Eng	Weimar.
Bryan, W. I	Mech. Eng	Chambersville.
Buhler, W. A	Mech. Eng	Victoria.
Carter, J. D	Civ. Eng	Kingston.
Clement, T. H., Jr	Civ. Eng	Port Lavaca.
Faust, H	Mech. Eng	New Braunfels.
Fitzgerald, Leonard	Mech. Eng.	Houston.
Griffiths, Thos. W., Jr	Mech. Eng	Dallas.
Hutson, Cary	.Civ. Eng	College Station.
Kahn, M. S	.Hort	Hallettsville.
Luhrsen, C. W	Civ. Eng	Stratton.
Monroe, J. S	Civ. Eng	Rio Grande City.
Mosley, Hal	Mech. Eng	Dallas.
Myers, O. W	Mech. Eng	Josephine.
McGinnis, F. Kamp	.Hort	Taylor.
Scherer, B. G	Mech. Eng	Anahuac.
Short, A. Kid	.Agr	Decatur.
Simpson, .0	.Civ. Eng	Jacksboro.
Simpson, S. H	Civ. Eng	Hallettsville.
Thrower, J. D	.Agr	Mayhew, Miss.
Walden, Wm	.Agr	Dickinson.
Winkler, Andrew	.Agr	The Grove.

SECOND CLASS.

	iid office.	
Name.	Course.	Residence.
Armstrong, W. W	Agr	Wharton.
Atlee, T. G	Mech. Eng	Laredo.
Barron, L. W	Mech. Eng.	Battle.
Bolton, J. R.	Civ. Eng	Wharton.
Bryan, C. M	Mech. Eng	Chambersville.
Brown, Reaville M	Civ. Eng	Austin.
Bruce, C. H	.Agr	Mineola.
Buchanan, A. P	Mech. Eng	Harvey.
Bundy, O. T	Hort	Milford.
Burns, D	.Civ. Eng	Colorado.
Burleson, R. C	.Civ. Eng	San Saba.
Cavitt, H. R.	Mech. Eng	Bryan.
Clark, C. S	. Civ. Eng	Eolian.
Clegg, W. 0	. Oiv. Eng	Trinity.
Dross, Ph	. Mech. Eng	Belleville.
Eberspacher, Robt	Mech. Eng	College Station.
Ehrhardt, John	. Oiv. Eng	Westfield.
Eichblatt, O. H	Mech. Eng	Skidmore.
Elrod, H. E	Mech. Eng	Columbus.
Fehrenkamp, E. B	. Oiv. Eng	Frelsburg.
Fountain, S. J	. Oiv. Eng	. Bryan.
Fountain, T. L	.Civ. Eng	.Bryan.
Garbade, W. T	.Agr	Witting.
Garnett, R. M	. Oiv. Eng	Denton.
Garrett, T. H., Jr	Civ. Eng	Cait.
Garth, T. G.	Mech. Eng	. Bryan.
Greeves, W. B	.Mech. Eng	Beaumont.
Haberzettle, F. S	Mech. Eng	Ft. Worth.
Hammond, E. C	.Civ. Eng	Kosse.
Heiermánn, K. E	. Mech. Eng	Austin.
Holcomb, R	.Civ. Eng	Cisco.
Holman, Seth B	Mech. Eng	La Grange.
Holmes, J. R., Jr.	. Civ. Eng	. Galveston.
Holzman, F. R.	. Agr	Industry.
Hooper, J. J	. Agr	Houston.
Hunter, E. P	. Mech. Eng	Huntsville.
Hurst, Guy	.Agr	Hunt.
Hyde, W. W	. Mech. Eng	Taylor.
Jamison, J. U	d'- F	. Whitespore.
Johnson, C. L.	Olv. Eng.	. Kosse.
Jones, G. L	. Olv. Eng	Ob a sub a sub
Kendall, E. L.	Mech. Eng.	Chambersville.
Kaldow, P. G.	. Mecn. Eng	. lowa Park.
Kleinsmith, M. L.	. 01v. Eng	Luling.
Korn, A. L.	. Agr	Dunge
Leckie, Alex K	A am	. Lunge.
Lineberger, W. F	. дуг	Dallas
Moser, A. U	. Agr	. Damas.
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Name.	Course.	Residence.
McConnico, S. F	. Agr	. Bryan.
McNeill, L. J.	. Mech. Eng.	. Brazoria.
Oliphant, L. E	. Civ. Eng	. Austin.
O'Rourke, H. E	. Mech. Eng.	. Smithville.
Pinson, T. J	. Mech. Eng	. Forney.
Raphael, H. R	. Agr	. Houston.
Robinson, A. P	. Mech. Eng	. Austin.
Rust, W. M., Jr	. Mech. Eng.	. Seguin.
Sholars, O. L	. Agr	. Orange.
Simpson, J. H	.Civ. Eng	. Hallettsville.
Smith, T. M	. Agr	. Columbia.
Springstun, C. E	Civ. Eng	. San Angelo.
Storey, A. E	.Hort	. Lockhart.
Tanner, John	. Mech. Eng	. Columbia.
Taylor, H. C	.Civ. Eng	. Haynesville, La.
Taylor, L. N	Agr	. Howard.
Thanheiser, C. A	Civ. Eng	. Fayetteville.
Thomas, M. F	. Mech. Eng	. Clay.
Walker, W. E	Civ. Eng	. Paris.
Whittle, J. L., Jr	. Mech. Eng	. Pueblo, Colo.
Williams, A. C	Mech. Eng	. Harvey.
Winkler, C. H	Agr	. The Grove.
Wyse, Ira O	Agr	. Dallas.
Tarbrough, R. W	Mech. Eng	. Greening, La.

THIRD CLASS.

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Name.	Course.	Residence.
Abney, C. M., Jr	Civ. Eng	Waskom.
Acker, Lamar	Civ. Eng	Lampasas.
Akers, M. E	Civ. Eng	Aurora.
Alexander, R. L	Civ. Eng	Manchaca.
Atkinson, R. N.	Mech. Eng	San Marcos.
Bailey, A. R	Mech. Eng	Colorado.
Bailey, R	Civ. Eng	Coleman.
Barham, Geo, S		Nacogdoches.
Becker, D. C	Agr	Brenham.
Becker, E. S.	Civ. Eng	Brenham.
Becker, H. A.	Civ. Eng	Brenham.
Beeman, T. Rupe	Civ. Eng	Comanche.
Blanchette, H. L	Civ. Eng	Beaumont.
Blankinship, H. A		Cade.
Brazelton, Geo. L	Civ. Eng	Waco.
Brin, Roy	Civ. Eng	Ennis.
Briscoe, Mason	Agr	Foster.
Burch, M. W	Agr	Aurora.
Burkey, Henry	Civ. Eng	Galveston.
Carpenter, M. M	Agr	Sour Lake.
Carswell, R. E	Civ. Eng	Carthage.

Name.	Course.	Residence.
Carswell, Trahune	.Agr	Decatur.
Charske, F. Woody	. Civ. Eng	Houston.
Chesley, A., Jr	.Civ. Eng	Bellville.
Cook, S. H	. Mech. Eng	Marshall.
Crawford, J. A	. Mech. Eng.	Bartlett.
Davis, R. A., Jr.	Mech. Eng	Plano.
Davis, Tom	. Mech. Eng	Iredell.
Dean, Chas F	.Civ. Eng	Durango, Mex.
Dillon, T. H	Mech. Eng	Saltillo, Mex.
Donahue, F. H	Mech. Eng	Bartlett.
Doss, Henry	Mech. Eng	Colorado.
Downing, C. P	. Mech. Eng	Valley Mills.
Dreyer, W. H.	Mech. Eng	Corpus Christi.
Eastland, H. J	. Mech. Eng	Dallas.
Egg, J. A	. Civ. Eng	Edna.
Eppright, Fred	Mech. Eng	Manor.
Flinn, C. N	. Mech. Eng	Dallas.
Foster, H. I.	Mech. Eng	College Station.
Fox, Percy	. Civ. Eng	Monroe, La.
Foy, V. H	. Mech. Eng	Baird.
Frey, Herbert	Mech. Eng	Corsicana.
Gardner, C. E	. Mech. Eng	Bellville.
Gillespie, S. E.	Mech. Eng	Manor.
Girand, A. M	. Mech. Eng	Abilene.
Gleason, Harry	Civ. Eng	Hico.
(Graduate	Hico High School.)	
Godfrey, M. D	.Agr	Bartlett.
Gordon, S	. Civ. Eng	Beaumont.
Greenwood, R. E	. Civ. Eng	Stoneham.
Greenwood, T. B	.Civ. Eng	Stoneham.
Harrington, C. B	.Agr	Oklahoma City, Okla.
Harris, J. H	. Agr	Wills Point.
Harrison, Jerome	Mech. Eng	College Station.
Hawkins, J. M	. Civ. Eng	Courtney.
Hay, Ira B	Mech. Eng	Kyle.
Hayfort, Jesse	.Agr	Houston.
Hebert, E. B.	Mech. Eng	Beaumont.
Helberg, W. T.	Mech. Eng	Houston.
Herrman, E. H	Mech. Eng	Geronimo.
Hoffman, J. H	Mech. Eng	Breslau.
Hollingsworth, H	Mech. Eng	Ellsworth.
Hollingsworth, S	Mech. Eng	Ellsworth.
Hons, J. L.	.Agr	San Marcos.
Hudgins, Joel	.Civ. Eng	Hungerford.
Hudgins, W. J.	.Civ. Eng	Hungerford.
Hyde, A. V	.Civ. Eng	Taylor.
Jeffress, E. C	Mech. Eng	Colorado.
Johnson, Homer	. Mech. Eng	Paris.
Keown, W. L	. Mech. Eng	Waco.
Kerr, Ira J	.Civ. Eng	Corsicana.

Name.	Course.	Residence.
Kerr, Robt. C	Agr	Houston.
Kloss, Emil	Mech. Eng	Millheim.
Kophal, W. H	Civ. Eng	Waco.
Kroschel, F. M	Mech. Eng	Hallettsville.
Kurth, J. H	Mech. Eng.	Keltvs.
Lawley, L. P., Jr.	Agr	Oakville.
LerBlance, Frank	Agr	Chicotah, I. T.
Lewenthal, J. A	.Agr	Palestine.
Lewis, J. A.	. Civ. Eng	Forney.
Lewis, J. M.	Mech. Eng	Calvert.
Manning, L. T.	. Agr	Groveland.
Markham, E. L.	. Civ. Eng	Beeville.
(Graduate B	eeville High School.)	
Mathews, H. B.	Mech. Eng	Webberville.
Meyer, H. J	. Civ. Eng	Ellinger.
Miles, H. A.	. Civ. Eng	Brenham.
Mitchell, F. C.	Mech. Eng	Guion.
Mittman, E. F	. Civ. Eng	San Antonio.
Mittman, R. A	. Mech. Eng	. San Antonio.
Moore, F	. Agr	Edna.
Moore, G. G.	. Civ. Eng	. De Kalb.
Myers, R. L	Mech. Eng	Josephine.
McComb, E. K.	. Civ. Eng	. Marlin.
McDonald, Walter H	. Agr	. Palestine.
McElroy, F. P	. Mech. Eng	. Wied.
McGraw, A. L.	. Mech. Eng	. Dallas.
McKain, E. B	.Civ. Eng	. Wills Point.
Neff, A. J	. Mech. Eng	. Donelton.
Nolen, Burette E	. Mech. Eng	. Palestine.
Olds, T. H	. Civ. Eng	. New Braunfels.
Oliver, A. C., Jr	. Mech. Eng	. Douglasville.
Oxsheer, F. G., Jr	. Mech. Eng	. Ft. Worth.
Perkins, D. P	.Civ. Eng	. Chappell Hill.
Peters, Eber	.Civ. Eng	. Calvert.
Putegnat, F. H	. Agr	. Brownsville.
Radford, J. A.	. Agr	. Quanah.
Ramsey, Stonewall	.Civ. Eng	. Cottonwood.
Rawlins, S. A	. Mech. Eng	. Oak Cliff.
Raynolds, E. P., Jr	. Mech. Eng	. San Marcos.
Raysor, J. L	.Civ. Eng	. Chappell Hill.
Rice, Eugene	. Mech. Eng	. Hulen.
Ridenhower, Ray	.Civ. Eng	. Hico.
· (Graduate	Hico High School.)	
Robinson, W. A	. Mech. Eng	. Marlin.
Ross, Lockwood	. Civ. Eng	. Cooper, La.
Ross, E. M	. Mech. Eng	. Rossville.
Ross, Robt	. Civ. Eng	. Rossville.
Rothe, F. W	. Civ. 'Eng	. D'Hanis.
Rougagnac, J. F	. Mech. Eng	. Houston.
Samusch, Louie	. Civ. Eng	. Hallettsville.

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Name.	Course.	Residence.
Savage, James	.Agr	Dryden.
Schultz, C. E	. Mech. Eng	Trinity.
Schultz, E. C	. Mech. Eng.	Seguin.
Shaw, L. D	. Mech. Eng	Columbus.
Smith, Elijah	.Mech. Eng	San Antonio.
Smith, E. G Smith, P	.Civ. Eng	De Kalb. Jacksonville.
Sneed, H. M	.Agr	Georgetown.
Sneed, W. N	.Agr	Fairfield.
Stafford, W. M	.Agr	Victoria.
Strieber, C. A	. Mech. Eng	Yorktown.
T albot, J. (A	. Mech. Eng	Texarkana.
Thompson, Jas R	.Civ. Eng	Bellville.
(Graduate B	ellville High School.)	
Thompson, T. E	. Mech. Eng	Wills Point.
Tucker, Charles	. Mech. Eng	Vineland.
Vidaurri, A. R	. Mech. Eng	Laredo.
V oiers, L. W	. Mech. Eng	Forney.
Wallace, Chas	. Mech. Eng	Kyle.
(Graduate	Kyle High School.)	
Weinert, A	. Mech. Eng	Seguin.
Williams, J. H	. Civ. Eng	Texarkana.
Williamson, L. B	.Agr	Lockhart.
Wisdom, B. H	. Mech. Eng	Forney.
Wren, M. M	.Agr	San Marcos.
Youngblood, Bonny	.Agr	Milano.
Zeiss, R. C	. Mech. Eng	Waller.

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FOURTH CLASS.

Name.	Residence.
Abbott, C. W	.seguin.
Abrahams, M. L	New Braunfels.
Adcock, G. M	.Terry.
Alexander, A. M	./Temple.
Baugh, Mark	.Sonora.
Baum, John A	. Corsicana.
Bean, H	. Lampasas.
Bean, T	. Lampasas.
Biering, H	.Hitchcock.
Boney, W	.Sulphur Springs.
Branch, E. S	. Temple.
Branson, J. 1A	.Marlin
Browning, J. N., Jr	Amarilla.
Bryan, W. P	. Palestine.
Bushong, G. L.	.Grapevine.
Buster, Fred	. Somerville.
Butler, R. B	. San Angelo.
Caddell, J. R	.McGregor.
Carlock, P. S	.Winnsboro.

Name.	Residence.
Carlton, Marion	Quintana.
Chapman, Aubrev	Ft. Worth.
Chatham, T. B.	Brvan.
Chicken, W	Decatur.
Clements, B. L.	Ft. Worth
Cochran. Jas. S.	Temple.
Crumley, Barton.	Hillshoro
Curry, A. H.	Ingleside.
Daniel, W. F.	Bartlett.
Darlington, B. L	Manor.
Davidson, A. H.	.Ft. Worth.
Dealey Geo W	Galveston
Denny, M. C.	Sulphur Springs.
Doucette A H	Beaumont.
Duncan A	Bartlett
Dovle Earl	Granbury.
Dysart T S	Anna.
Eberspacher Fred	College Station.
Eldridge J. F	Denison.
Eidson J R	Hamilton.
Enders W. H	Eloin.
Fahring, Geo. H.	Gypsum City, Kans.
Fenner, Milton	Austin.
Fields. C. W.	Giddings.
Fortenberry, H. C.	Silsbee.
Fowler, D. T.	Nurserv.
Foster, J. L.	College Station.
Foster, Mack	College Station.
Franks, Jas. F.	Mackinac Island, Mich.
Gillis, F. D.	Del Rio.
Gorzycki, Charlie	College Station.
Groos, F. C	San Antonio.
Harral, A. G.	Dudley.
Hart, John W	Orange.
Hackney, F. G.	Burleson.
Hackney, U. P.	Burleson.
Hawkins, Edgar	Bay City.
Hecht, Leon	Beaumont.
Heidelberg, Harry	Marshall.
Heldenfels, Carl	Beeville.
Herndon, H. A	Marshall.
Hill, C. W., Jr	Waco.
Hill, L. E	New Waverly.
Hill, Martin L	College Station.
Holland, W. C.	Beaumont.
Hurst, A	Hunt.
Insall, R. M	Weimar.
Isbell, Jonas	Pankey.
Jobson, T. S.	New Hope.
Johnston, Harry M	Houston.

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Name.		Residence.
Johnston, T. D.		Seguin.
Jones, A. O		Rice's Crossing.
Jouett, W. H		Royse City.
Kaylor, L. T		Burleson.
Koch, Wm		Seguin.
Korff, W. A. E.		Shelby.
Kosminsky, I. J.		Texarkana.
Kreneck, A		Fayetteville.
Krezdorn, L. W		Seguin.
Kyle, J. I		Nursery.
Langlois, G. C.		Beaumont.
Law, F. F		. Mansfield, La.
Leggett, H		Leggett.
Leversedge, J. H		Ft. Worth.
Ligarde, F. H		Laredo.
Lipscomb, W		Luling.
Lockett, Leon		Galveston.
Luckett, C. P		Bastrop.
Mantius, W. C		Forney.
Martin, Walter		Midland.
Marulanda, P. R		Laredo.
Mathews, H. F		Galveston.
Maymon, Ed L		Palestine.
Miller, Hollis		Weatherford.
Minton, W. D., Jr.		Marshall.
McCall, H. S.		Sabine Pass.
McDonald, R., Jr.		Trinity.
McGhee, E. W		Brownwood.
McKinney, E. T	,	Marlin.
McLavy, R. B.		. Bastrop.
Neuhaus, E. A		Hallettsville.
Noble, Elton		Lampasas.
Ochoa, E. B		Laredo.
Odom, Joe		Bono.
O'Donnell, John O., Jr		Marshall.
Parks, O. M		Ft. Worth.
Payne, Jas. 0		Center.
Perry, M. V		Brenham.
Pickett, Robt		Luling.
Potthast, C. H	:	. Weimar.
Powell, W. B		Hubbard City.
Powers, Vernon B		Kingsbury.
Polasky, Leonard		Corsicana.
Prather, P. T		Dallas.
Preston, J. Lewis		Lockhart.
Reuss, H. E		San Antonio.
Riley, John B		Calvert.
Rochelle, C. R		Gonzales.
Sattler, A. G		Karnes City.
Selmon, C. C		Forney.

Name.	Residence.
Sheppard, Paul	Texarkana.
Simons, E. H	Edna.
Sneed, J. E	Fairfield.
Spear, Warden	/Tyler.
Springs, W. F	College Station.
Stapp, Wm	Conroe.
Swint, E	Douglasville.
Thies, W. E	Manor.
Thompson, Lloyd	Carthage.
Walker, L. E	Denton.
Wallney, Guy	
Wheeler, C. S	Manor.
Whitfield, Bryan F	Detroit.
Williams, I. L	Houston.
Woods, John	Saltillo, Mex.
Worthing, E. E	Rock Island.
Zintgraff, Logan H	Dallas.
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ELECTIVE STUDENTS.

Name.	Residence.
Brown, W. H	Lockhart.
Buhler, Geo. A	Victoria.
Coulter, R. E	Texarkana.
Jacot, Henry	San Antonio.
Japhet, H	Houston.
Lewis, James	McKinney.
Melgaard, B. P	Brazoria.
McCormick, S	Columbus.
Reardon, E. M., Jr	Dallas.
Rhome, R. J	Ft. Worth.
Roeder, B. G	Lockhart.
Rogers, C. P	Kyle.
Talbot, P. T., Jr	San Marcos.
Wittman, J. E	Bryan.
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SUMMARY.

ost Graduates
Yirst Class
econd Class
hird Class
Fourth Class
students in Elective Courses
Total

OBJECTS AND POLICY.

The act of Congress which established the State Agricultural and Mechanical Colleges defines their objects, but under the act there have been founded as many different schools as there are States. These institutions have presented a variety of educational schemes, which have embraced nearly all gradations, from the classical and mathematical college to the manual labor industrial school. In view of this fact, it is proper to state as definitely as possible the interpretation given to the act of Congress by the authorities of this College, and the manner in which they are endeavoring to carry out its provisions.

This College purposes to equip young men for their future career by the development of their powers with reference to the wants of life, and to impress upon them the dignity, the nobility, and the duty of labor.

There is in our State a great field and a growing demand for the services of those fitted for work in every branch of applied science, and we are now compelled to draw upon other States to fill the most lucrative, honorable, and important positions in every industrial enterprise.

It is proposed to meet these conditions by offering our young men the opportunity to obtain that education and training which will fit them to take a leading part in the material development of the State; to become scientific farmers and horticulturists, familiar with the properties and needs of soils, the laws of plant growth, the principles of breeding, and, in general, with rational methods based on the revelations of modern science; to become mechanical engineers, draughtsmen, chemists, civil engineers, competent to fill responsible positions in these callings—men fitted not only to meet demands made upon them, but to create such demand by pointing the way to progress and development.

Care is taken, also, that the student, while engaged in such special studies, shall give a due part of his time to those more general forms of knowledge which are essential to a liberal education and mark the wellinformed citizen in every walk of life.

The military feature is an important adjunct to the other work of the College. It is conducive to health and to bodily grace and strength, and cultivates habits of strict attention and of obedience, punctuality, neatness, regularity.

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". MECHANICAL ENGINEERING BUILDING.

METHOD AND SCOPE OF INSTRUCTION.

The courses of instruction are designed in accordance with the above outline of objects and policy. In all of them the fundamental idea is education in practical science, particularly in agriculture, in horticulture, in mechanical engineering, and in civil engineering. With this idea in view, instruction is given in English and history, physical geography, mathematics, foreign languages, physics, chemistry, and in other studies which lie at the foundation of a sound education and furnish the best preparation for the more technical studies of the several courses. Instruction is given by the use of text-books by lectures and recitations; also, by practice in shop, field, laboratory, and drawing room. These practical exercises have a high educational value, and serve a useful purpose in fixing and rendering clear the ideas presented in the class room; they have also a practical value, for they are, in great measure, examples of just such problems as the scientific agriculturist, or engineer, will encounter in the pursuit of his calling. For convenience of instruction, the classes are subdivided into sections of suitable size. There are written examinations at such intervals as may be deemed best.

INFORMATION CONCERNING ADMISSION.

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REQUIREMENTS FOR ADMISSION.

To enter the College, an applicant must be at least fifteen years old. He must be free from contagious or infectious disease, or any deformity that would unfit him for the performance of his duties as a student of the College. He may be required to furnish evidence that he has not been dismissed from another institution of learning, and that his moral character is good.

Applicants for admission will be examined upon the subjects stated below. The treatment of the several subjects given in the text-books

indicated, or their equivalents, is sufficient for the purpose of these examinations:

Fourth Class:

1. Arithmetic, complete. (Sutton and Kimbrough; higher arithmetic.)

- 2. Elementary English Grammar and Composition. (Patterson.)
- 3. History of Texas. (Mrs. Pennybacker.)
- 4. Geography. (Maury.)

Third Class:

- 1. The subjects stated above for Fourth Class.
- 2. Algebra to quadratic equations. (Wells' Higher Algebra.)
- 3. Advanced Grammar. (Patterson.)
- 4. History of the United States. (Mrs. Lee.)
- 5. Physical Geography. (Davis.)

In addition, book No. 5 of Thompson's Free-hand Drawing must be made up after admission.

Second Class:

Applicants for Second Class will be examined on the subjects gone over by the Fourth Class and those by the Third Class in the course desired; but they may be admitted conditionally if they fail in not more than three subjects, equivalent, together, to eight hours per week for one term.

The above requirements apply to candidates for admission at the opening of the session. Those who come later will be examined, also, upon the work already gone over by the class they propose to enter.

Applicants for admission to the Fourth Class at the beginning of the winter term must, therefore, be prepared for an additional examination, as follows: 'Algebra, through fractions; physical geography; the first half of Patterson's Grammar and of Lee's United States History.

Graduates of schools approved by the Faculty will be admitted on diploma or certificate at the beginning of the session without examination. They must, however, conform to the requirements in regard to age and physical development stated above; and must present their diplomas within fifteen months after they are issued. For a list of affiliated schools see page 72.

Upon consent of the President, young men over eighteen years of age, failing to pass the entrance examinations for the Fourth Class, may be admitted on trial, provided they present themselves during the first week of the session. SPECIMEN ENTRANCE EXAMINATIONS.

(For the beginning of the session.)

Special attention is called to the following specimen entrance examinations. Young men intending to apply for admission are urged to satisfy themselves by actual trial before coming to College that they can answer such questions.

ENTRANCE EXAMINATIONS FOR FOURTH CLASS.

Arithmetic (Sutton and Kimbrough's Higher Book, or the equivalent).

1. Reduce to fractions having the least common denominator, and add $\frac{5}{12}$, $\frac{9}{14}$, $\frac{8}{77}$.

2. Divide $17\frac{1}{3}$ by $2\frac{4}{7}$ and multiply the quotient by $5\frac{2}{3}$.

3. Reduce to a simple fraction $\frac{8\frac{2}{3}-5\frac{7}{8}}{3\frac{3}{4}\times3\frac{1}{3}}$.

4. If $\frac{2}{3}$ of a farm is worth \$7200 what is the whole farm worth?

5. Reduce to decimals and add $\frac{4}{5}$, $\frac{9}{25}$, $\frac{5}{16}$, $\frac{3}{80}$.

6. Multiply 361.24 by 3.256 and divide the product by 81.4.

7. What will 7 bu. 3 pk. 4 qt. nuts cost at \$1.20 per peck?

8. The population of a county grew from 15,800 to 18,012; what was the increase *per cent*?

9. If by selling land at \$36 per acre I lose 25%, at what price should 1 sell it in order to gain 40%?

10. What per cent. on the investment is yielded when 6% bonds are bought at 120?

11. Find the interest at 8% on \$425 for 2 yrs. 5 mos. 18 days.

12. How long must \$450 remain at interest at 6% in order to yield \$94.50 interest?

13. A. B. and C. engage in trade, A. investing \$840, B. \$760, and C. \$1200; the profits amount to \$560; what should be the share of each?

14. What is meant by a centimeter? Express your height and your weight in units of the metric system.

English and History.

1. Spell correctly: yot, hawty, cawt, acheev, seej, hite, plite, ake, pleez, frawt.

2. In what country are: Dresden, Moscow, Teheran, Bogota, Honolulu, Austin, Barcelona, Dieppe, Quebec, Madras, Khartoum, Liverpool?

3. Where are the Alps, the Andes, the Himalayas, the Pyrenees, the Altais, the Carpathians, the Cordilleras, the Rockies, the Urals, the Grampians?

4. Where are the Ladrones, the Philippines, the Azores, the Canaries,

 $\mathbf{22}$ AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS.

the Faroes, the Hebrides, the Cyclades, the Seychelles, the Mascarenes, the Bahamas?

5. What countries own Alaska, Cape Colony, Algeria, Puerto Rico, Java, Jamaica, New Zealand, Curacao, Ceylon, Burmah?

State the causes of the Texan Declaration of Independence.

7. State how and where fell Ben Milam, Travis, Bowie, Crockett, Fannin.

8. What battles of the war between the United States and Mexico were fought on the soil of Texas?

9. Who was Governor of Texas at the time of her secession from the United States?

10. Write the progressive form of walk, indicative past.

Write the emphatic form of walk, indicative present. 11.

Write a sentence containing a participial phrase. 12.

13.Write a sentence containing an adverbial clause.

14. Write a sentence containing an attributive complement, noun.

15. Write a sentence containing an attributive complement, adjective.

16. Write a sentence containing an adjective clause.

- "That the cause is lost cannot be denied," State the subject. 17.
- 18. "That the cause is lost all men know." State the subject.
- "That the cause is lost all men know." State the object. 19.

20. Write a brief composition on "The Resources of Texas."

ENTRANCE EXAMINATIONS FOR THIRD CLASS.

Arithmetic. (Same as for Fourth Class.)

Algebra. (To quadratic equations.)

Find the factors of a^4-16 , a^3+c^3 , $a^2+8a-20$. 1.

Find the highest common factor and the lowest common multiple 2. of $a^3 - x^3$, $5a^3 - 10a^2x + 5ax^2$ and $3a^2 - 3x^2$.

Simplify $\frac{2}{x} - \frac{3}{2x-1} - \frac{2x-3}{4x^2-1}$. 3.

Divide $\frac{x^3-25x}{x^2+x-6}$ by $\frac{x^2-5x}{x^2-4x-28}$, giving the result in its simplest 4. form.

Given $\frac{x-5}{4} = \frac{2x-y-1}{3} = \frac{2y-2}{5}$ and $\frac{2y+x-1}{9} = \frac{x+y}{4}$, find the val-5. ues of x and y.

Find the square root of $10x^2 - 4x^8 + 9 - 12x + x^4$. 6.

Find the values of the following $\left(-\frac{4ax^2}{5a^4}\right)^3$, $3a^3 \times a^{-1}$, $(a^{-3})^3$, $(36)^{\frac{3}{2}}$ 7.

. 8. Solve the equation $\sqrt{x} + \sqrt{x+5} = 5$.

English and History.

1. Name the original thirteen Colonies.

2. In what wars were they engaged as colonies?

3. What were the causes of the Revolutionary war? Name its chief battles.

4. In what wars were the people of the United States engaged between this time and the Civil War?

5. What British general fell at the battle of New Orleans? Who led the Americans?

6. Name the chief battles of the war between the United States and Mexico.

7. In what battle did Stonewall Jackson fall?

8. Who commanded the Alabama?

9. Spell correctly: etherial, insepperubble, nessiserrily, stupify, eksillerate.

10. Write a sentence containing both an adjective and an adverbial clause.

11. Write a sentence containing an adjective clause used as part of the complement.

12. Write a sentence containing an adverbial clause, subordinate to a subordinate clause.

13. Write a sentence containing a subordinate clause, used as object.

14. "Rising from these elevated table-lands, the traveler will see lofty ranges of granite mountains." Correct this.

15. "He likes me better than you." Clear of ambiguity.

16. "The Judge of all the earth will do right." Change to interrogative form.

17. "Soft is the strain when zephyr gently blows." State the logical predicate.

18. "I was grieved when I heard how he had obtained the character that he bore." 'Analyze, stating relation of subordinate clauses.

19. "That the cause is lost cannot be denied." State subject.

20. Write a brief composition on "Home Pleasures."

Physical Geography.

1. What is the Nebular Theory?

2. Mention the evidences of internal heat of the earth.

3. What are the causes of earthquakes? Of volcanoes? Name the volcanic belts.

4. What are the physical properties of water?

5. Give the theory of tides.

6. Explain the laws of storms.

7. How do rivers change the surface of the earth?

8. Name the classes of islands, and explain the formation of each class.

9. Name the leading characteristics of the great divisions of mankind.

10. Draw a physical map of North America, indicating thereon the principal rivers, lakes, and mountains.

MATRICULATION.

Upon arrival at the College, young men intending to enter will report as soon as possible to the President of the College. From him they will go the several professors for examination and enrollment in classes, and to the Commandant for assignment to company and quarters.

Upon matriculation every student shall sign the following pledge: "I promise to obey the constituted authorities of this College, and to support good order and discipline. I certify that I have in my possession no firearms or other deadly weapons."

Firearms or other deadly weapons brought to the College by students shall be deposited with the President.

EXPENSES FOR SESSION OF NINE MONTHS.

Trust fund, payable on entrance\$	5	00
Incidental fee, payable on entrance	5	00
Physician's fee, payable on entrance	5	00
Maintenance, Fall Term, payable September 12	50	00
Maintenance, Winter Term, payable January 3	35	00
Maintenance, Spring Term, payable March 18	40	00

Total......\$140 00

The trust fund is to pay for property damaged or destroyed, and will be refunded if there is no charge of this kind against the student.

Incidental and physician's fees will in no case be refunded.

Maintenance includes board, fuel, washing, lights, room rent, single bedsteads, mattresses, pillows, tables, washstands, chairs, buckets, basins, and slop cans, all of which the College furnishes.

Each student is required to bring with him and keep on hand two pairs of sheets, one pillow, two pillow cases, two blankets, one comfort, one-half dozen towels, and underclothing sufficient for one year's wear. For winter, he should provide himself with an overcoat or mackintosh.

Students are required to take their meals at the Mess Hall.

Payment for each term must be made in advance, but a student entering

during a term will be charged maintenance for the remainder of that term only.

A student once entering for the term, and having paid for that term, or the balance of it, as required by the resolution of the Board of Directors, shall forfeit all claim to said payment in case of voluntary withdrawal from the College before the expiration of said term, except in case of sickness disqualifying him for the discharge of his duties for the rest of the term.

Expenses of a graduate student will be \$15 for material used in laboratories and practical work, and \$5 for physician's fees, with charge for maintenance as above. Day students pay \$15, as trust fund, incidenta! fee, and physician's fee, as above.

If on any account the prompt payment of the dues should be delayed, the President will mail to the parent or guardian of the student the following notice:

NOTICE TO PARENTS AND GUARDIANS.

"Your attention is respectfully directed to the following resolution passed by the Board of Directors of the Agricultural and Mechanical College of Texas:

'Resolved, That it shall be the duty of the Treasurer to notify parents and guardians, ten days after the date upon which a term payment is due, that if same is not paid within twenty days thereafter (thirty days from time the payment was due), the student so in arrears will be dismissed.

"All communications in reference to accounts of students should be addressed to the President of the College."

UNIFORMS AND BOOKS.

A neat uniform of cadet gray, blouse, trousers, and cap, is furnished here, at a cost of from \$15.50 to \$18. Straight white standing collars that lap in front, black ties, white cuffs, and black shoes are a part of the uniform.

For drill during hot weather, a blue flannel shirt, with belt, to be worn instead of blouse, and campaign hat instead of cap will be required.

Each student must also have, for shop and field practice, a working suit of drilling, which costs about \$1.50.

With the exception of the collars, cuffs, ties, and shoes, these uniforms are made by contract, and students are required to purchase from the con-

tract tailor in order that uniformity may be secured in the cut and quality of the clothing and that parents may be protected from imposition by irresponsible persons. The contract suits are carefully inspected by the Commandant of Cadets, and thus the full value of money expended for them is secured.

The College keeps a supply of books, and sells them to students at cost. The approximate cost of text-books for the fourth class is \$9.50; for the third class, \$11.00; for the second class, \$14.50; for the first class, \$17.50.

STUDENT LABOR.

The Legislature has provided a fund by which a limited number of industrious young men may defray a part of their expenses by working for the College at such times as their regular duties will permit.

The rate of pay is made to depend upon the character of the work, and the manner in which it is performed.

Every student, however, should bring with him money enough to defray his expenses for the first three months.

BEGINNING OF THE SESSION.

The twenty-fifth annual session will open Wednesday, September 12, 1900, and will close Tuesday, June 11, 1901.

Students should not arrive at the College earlier than Monday, September 10. Parents are requested to communicate with the President before sending their sons.



FOSTER HALL.

REGULAR COURSES OF INSTRUCTION.

There are four regular courses of study leading to the degree of Bachelor of Science; the particular course pursued being specified in the diploma. For the first year they are identical, thus giving the student the elementary training requisite for a comprehension of the more technical subjects that follow, at the same time affording him opportunity for a more intelligent choice of the course he is to pursue in the higher classes. At the beginning of the "third class," or second year, choice is offered between the Agricultural and Mechanical courses, while at the beginning of the second term of the same year Mechanical students must choose between the course in Mechanical Engineering and that of Civil Engineering. At the beginning of the "second class," or third year, Agricultural students choose between the course in Agriculture and the course in Horticulture.

The languages are optional, except as shown in the curricula and may be studied as subjects outside the regular courses. There is no charge for any optional study.

A condensed statement of the studies and other duties required of the students taking each of these courses can be found on pages 29 to 35. For a full explanation of the work done by departments of instruction, their equipment, and methods of instruction, the reader is referred to 43 to 62.

THE AGRICULTURAL COURSE.

This course provides a thorough scientific knowledge of Agriculture in the Southwest, and supplies a liberal education in English language, history, mathematics, and the sciences of chemistry, physics, botany, animal anatomy, and principles of hygiene. The foreign languages are optional. Class rooms and fully equipped scientific laboratories are provided for instruction in the sciences relating to agriculture, chemistry, botany and physics. The scientific principles are taught in their application to the growth of grain and forage crops, production of pork and beef, feeding and care of milk herd, manufacture of butter and cheese, cultivation of cotton, vegetable gardening, and in the irrigation of field and garden crops. The course offers a general education, and prepares young men for taking charge of farms, engaging in any branch of stockraising or dairying now practiced in the State, or for entrance on an advanced course of study leading to professions in scientific agriculture.

HORTICULTURAL COURSE.

The object of the Horticultural course is to prepare the student to engage in the highest development of the horticultural industry. He is taught how to propagate the various plants; to plan, set, cultivate and manage orchards, vinéyards and gardens to best advantage. How to bring contentment and happiness to the homes of rural lives by the cultivation of trees, shrubbery, flowers, and grass, is considered. The knowledge of botany enables the student to understand the laws of plant growth. The knowledge of entomology enables the student to prevent injury done to plants by injurious insects. In order to give the student a well rounded education, allied sciences, such as mathematics, chemistry, veterinary science, English, physics, and German or Latin, are taught.

MECHANICAL COURSE.

The object of the course in Mechanical Engineering is to educate the student not merely to become a mechanic, but also to enable him to take charge of men and tools, erect machinery, lay out plans, etc., with the minimum amount of further preparation. This necessitates a study not only of engineering problems, but also demands a broad foundation of useful knowledge, and a training which leads as much as possible to originality in thought and quick perception of the objects sought. With this in view, the subjects studied in this course are carefully selected.

CIVIL ENGINEERING COURSE.

This course is intended to prepare young men for entrance upon professional practice and advanced study in some of the many branches included in the scope of Civil Engineering; to enable the graduate to survey and map areas; to locate, construct and maintain highways, railroads, streets, pavements, water-works systems, sewerage systems, canals, dams, irrigation ditches, bridges, and other structures; to become draughtsmen; and, in fact, to enter upon the advanced study necessary for almost any one of the special lines embraced in the work of the Civil Engineer.


GATHRIGHT_HALL.

CURRICULA.

The subjects embraced in these courses are shown in detail on the following pages; the numerals indicate the number of hours per week; practice and work are indicated by *italics*. The numerals in parentheses indicate the totals in recitations, and in practice work.

For list of text-books see page 36.

FOR ALL COURSES, FOURTH CLASS.

FALL TERM.		WINTER TERM.	
Algebra		Algebra5	
English		English5	
History5		History5	
Physical Geography4	-(19)	Physics3	
Practice-		Elementary Botany2	-(20)
<i>Carpentry</i> 4		Practice-	· · /
Physical Geography2		<i>Carpentry</i> 4	
Book-keeping and Penman-		Book-keeping3	
<i>ship</i> 3		Free-hand Drawing $1\frac{1}{2}$	
Infantry Drill3	-(12)	Infantry Drill $1\frac{1}{2}$	-(10)

SPRING TERM.

Algebra5	1	Practice-
English5		$Carpentry \ldots 4$
History		$Elementary A griculture \dots 2$
Physics3	-(18)	Free-hand Drawing1 $\frac{1}{2}$
Practice-		Infantry Drill
Book-keeping		

AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS.

AGRICULTURAL COURSE.	HORTICULTURAL COURSE.
THIRD CLASS.	THIRD CLASS.
FALL TERM.	FALL TERM.
Algebra, Geometry5English and History5Elementary Agriculture2Botany4Physics3 $-(19)$ Practice Soil Physics $2\frac{1}{2}$ Botany $2\frac{1}{2}$ Free-hand Drawing2Physics2Infantry Drill3 $-(11)$	Algebra, Geometry5English and History5Elementary Agriculture2Botany4Physics3 -(19) Practice- Soil Physics21Botany21Free-hand Drawing2Physics2Infantry Drill3 -(11)
WINTER TERM.	WINTER TERM.
Geometry	Geometry
SPRING TERM.	SPRING TERM.
Geometry	Geometry
Infantry Drut3 - (12)	Infantry Drut $\dots 3 - (12)$

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MECHANICAL ENGINEERING CIVIL ENGINEERING COURSE. COURSE. THIRD CLASS. THIRD CLASS. FALL TERM. FALL TERM. Algebra, Geometry.....5 Algebra, Geometry.....5 English and History.....5 English and History.....5 M. E. Lectures.....2 -(17)-(17)Practice-Practice-Free-hand Drawing.....1 Free-hand Drawing.....1 Mechanical Drawing..... $2\frac{1}{2}$ Mechanical Drawing..... $2\frac{1}{2}$ Infantry Drill $\ldots 3 - (11\frac{1}{2})$ Infantry Drill $\ldots 3 - (11\frac{1}{2})$ WINTER TERM. WINTER TERM. Algebra2 Geometry5 English and History.....5 English and History.....5 Physics4 German or French.....2 -(18)-(19)Physics4 **P**ractice-Practice-*Carpentry*5 Free-hand Drawing.....1 Free-hand Drawing....1Mechanical Drawing..... $2\frac{1}{2}$ -($8\frac{1}{2}$) Mechanical Drawing..... $2\frac{1}{2}$ -($8\frac{1}{2}$) SPRING TERM. SPRING TERM. Algebra2 Algebra2 English and History.....5 English and History.....5 Road Making.....2 Steam Engine.....3 Electricity and Magnetism.3 Electricity and Magnetism.3 -(18)German or French......2 -(19)Practice-Practice-Free-hand Drawing.....1 Free-hand Drawing.....1 Mechanical Drawing..... $2\frac{1}{2}$ Mechanical Drawing..... $2\frac{1}{2}$ 2 Agricultural and Mechanical College of Texas.

AGRICULTURAL COURSE.*	HORTICULTURAL COURSE.
Second Class.	SECOND CLASS.
FALL TERM.	FALL TERM.
Geometry and Trigonome-	Geometry and Trigonome-
Principles of Breeding	Botany
Live Stock5 Botany 5	Pomology5 Inorganic Chemistry 4
Inorganic Chemistry4 Veterinary Medicine2 -(19)	Veterinary Medicine2 –(19) Practice – Horticulture
Testing Milk and Making Butter 21	Analytical Chemistry $2\frac{1}{2}$ Botany 41
Botany $4\frac{1}{2}$ Analytical Chemistry $2\frac{1}{2}$	Infantry Drill
Infantry Drill	
WINTER TERM. Trigonometry4 English4 Dairying3 Inorganic Chemistry4 Veterinary Medicine2 Drill Regulations2 -(19) Practice- Cheese Making5 Analytical Chemistry5 -(10)	WINTER TERM. Trigonometry4 English2 Horticulture2 Inorganic Chemistry4 Veterinary Medicine2 German or Latin2 Drill Regulations2 -(20) Practice- Horticulture21 Analytical Chemistry5 -(71)
SPRING TERM.	SPRING TERM.
Algebra4History2Irrigation and Drainage4Organic Chemistry4Entomology3 -(17) Practice -Irrigation $2\frac{1}{2}$ Analytical Chemistry5Entomology2Infantry and ArtilleryDrill $-(12\frac{1}{2})$ *Students in this course may also take	Algebra4History2Irrigation and Drainage4Organic Chemistry4German or Latin2Entomology3 -(19) Practice -Horticulture $2\frac{1}{2}$ Analytical Chemistry5Entomology2Zoology2Infantrya ndArtillery0Drill3 -(12 $\frac{1}{2}$)
German or Latin as in the Horticultural Course, if the schedule permits.	

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CIVIL ENGINEERING OOURSE.
Second Class.
FALL TERM.
Geometry and Trigonome- try
Mechanical Drawing4 '-(9)
SPRING TERM. Algebra

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permits.

AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS.

FIRST CLASS. FALL TERM.FIRST CLASS. FALL TERM.English	AGRICUL/TURAL COURSE.*	HORTICULTURAL COURSE.*
FALL TERM.FALL TERM.English4Stock Feeding5Industrial Chemistry4Industrial Chemistry4Veterinary Surgery3Fractice-Analytical Chemistry4Mycology5Analytical Chemistry4Infantry Drill-(112)WINTER TERM.Stock Feeding5Veterinary Drill-(112)WINTER TERM.Stock Feeding5Analytical Chemistry4Veterinary Drill-(112)WINTER TERM.Stock Feeding5Agricultural Chemistry5Agricultural Chemistry5Surveying3Miliary Science Lectures.1-(17)Practice-6Stock Feeding5Military Science Lectures.1-(121)Practice-10Dissecting5Analytical Chemistry21Malaytical Chemistry22SPRING TERM.10Farm Management5Farm Management21Malaytical Chemistry22Joing3German or Latin4Practice-Farm Management21Practice-7Farm Management21Practice-4Veterinary Surgery3German or Latin4Injurious Insects3German or Latin4Practice-Farm Management21Pr	. FIRST CLASS.	FIRST CLASS.
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*Students in this course may also take Mathematics with the Engineering students, if the schedule permits.

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MECHANICAL ENGINEERING.	CIVIL ENGINEERING
COURSE.	COURSE.
FIRST CLASS.	FIRST CLASS.
FALL TERM.	FALL TERM.
Analytical Geometry, Me-	Analytical Geometry, Me-
chanics	chanics
WINTER TERM.	WINTER TERM.
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SPRING TERM.	SPRING TERM.
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TEXT-BOOKS USED IN THE SEVERAL DEPARTMENTS.

FOURTH CLASS.

AGRICULTURE: Physical Geography, Davis. BOTANY:

DRAWING: Bookkeeping, The Ellis System. Drawing, Thompson. ENGLISH AND HISTORY: 'Advanced Grammar, Patterson; Composition, Chittenden; Exercises, Buehler; United States History, Lee; Amer-

ican Literature, Pancoast; Lays of Ancient Rome, Macaulay.

MATHEMATICS: Higher Algebra, Wells.

PHYSICS:

THIRD CLASS.

BOTANY: Text-book of Botany, Strasburger.

CIVIL ENGINEERING: Roads, Streets, and Pavements, Gillmore.

DRAWING: Mechanical Drawing, Anthony; Freehand Drawing, Thompson.

ENGLISH AND HISTORY: Rhetoric, Genung; Rhetoric, Newcomer; General History, Myers.

HORTICULTURE AND MYCOLOGY: Vegetable Gardening South, Green; Principles of Fruit Culture, Bailey; Nursery Book, Bailey.

MATHEMATICS: 'Algebra, Wells; Geometry, Wentworth.

MECHANICAL ENGINEERING: Steam Engine, Kinealy.

PHYSICS: Text-book on Physics, Wentworth and Hill; Electricity, Thompson.

VETERINARY SCIENCE: Comparative Physiology, Mills.

SECOND CLASS.

AGRICULTURE: Milk and Its Products, Wing.

CHEMISTRY: Inorganic Chemistry, Storer-Lindsay; Organic Chemistry, Remsen; Blow Pipe Analysis, Nason; Qualitative Wet Analysis, Miller; Metallurgy, Sexton; Geology, Tarr.

CIVIL ENGINEERING: Surveying, Davies, Raymond; Sewers and Drains, Adams; Sewage Utilization, Baker; Field Manual for Railroad Engineers, Nagle.

DRAWING: Descriptive Geometry, Faunce.

ENGLISH AND HISTORY: English Language, Lounsbury; History of England, Buckley.



PRESIDENT'S RESIDENCE.

Entomology:

LANGUAGES: German Grammar, Thomas, with Stern's Studien und Plaudereien, and Select Literature; Spanish Grammar, De Tornos, Readers, Ramsey, Knapp; French Grammar, Whitney, with Selected Readings; Latin Grammar, Coy, Gildersleeve, with Selected Readers and Literature.

HORTICULTURE AND MYCOLOGY: Pruning Book, Bailey; Bush Fruits, Card; Evolution of Our Native Fruits, Bailey.

MATHEMATICS: Algebra, Wells; Geometry, Wentworth; Trigonometry, Wells.

MECHANICAL ENGINEERING: Graphics, Merriman and Jacoby; Slide Valve, Halsey; Machine Design, Low and Bevis.

MILITARY SCIENCE: Drill Regulations.

VETERINARY SCIENCE: Veterinary Medicine, Robertson.

FIRST CLASS.

AGRICULTURE: Feeds and Feeding, Henry.

CHEMISTRY: Agricultural Chemistry, Storer; Industrial Chemistry, Lectures; Geology, Le Conte.

CIVIL ENGINEERING: Field Manual for Railroad Engineering, Nagle; Mechanics of Materials, Merriman; Hydraulics, Merriman; Roofs and

Bridges, Parts I and II, Merriman and Jacoby; Hand Book, Carnegie.

DRAWING: Strength of Materials, Mather.

ENGLISH AND HISTORY: English Literature, Pancoast; History of England, Buckley.

HORTICULTURE AND MYCOLOGY: Forestry, Hough; Landscape Gardening, Long; Plant Variation and Breeding, Bailey; Spraying of Plants, Lodeman; Moulds, Mildews, and Mushrooms, Underwood.

LANGUAGES: German Grammar, Thomas, with Stern's Studien und Plaudereien and Select Literature; Spanish Grammar, De Tornos, Readers, Ramsey, Knapp; Latin Grammar, Coy, Gildersleeve, with Selected Readings and Literature; French Grammar, Whitney, with Selected Readings.

MATHEMATICS: Analytical Geometry, Nichols; Elementary Mechanics, Wood; Practical Calculus, Peck.

MECHANICAL ENGINEERING: Machine Design, Low and Bevis; Indicator Practice and Steam Engine Economy, Hemenway.

MILITARY SCIENCE: United States Army Regulations.

VETERINARY SCIENCE: Veterinary Surgery, Williams, Liautard; Veterinary Anatomy, Chauveau; Materia Medica, Bartholow, Horse Shoeing, Fleming; Veterinary Obstetrics, Fleming.

AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS.

GRADUATE COURSES.

Graduate studies in the Agricultural or Horticultural Courses lead to the Degree of Master of Science M. S.); in the Mechanical and Civil Engineering Courses to the Degrees of Mechanical Engineer (M. E.) and Civil Engineer (C. E.), respectively.

It is required for admission to study for one of these degrees that the candidate be a graduate of this College, or of some other institution approved by the Faculty. He must select a major subject in the department in which his first degree was taken, and two minor subjects from allied departments, and one foreign language. The course of study will occupy two years, at least one of which must be spent in residence at the College. The student must pass satisfactory examinations upon the subjects of the course, and must submit an approved thesis.

Graduate students are under the general regulations of the College, , but are not subject to military discipline; they may, however, be required to assist in preserving order in the barracks; and must give continued satisfaction in their studies.

The course of study must be selected from the following prescribed subjects. The selection must be submitted to and approved by the Faculty, and no change may be made without their permission.

AGRICULTURE.

Scientific and experimental work is offered graduate students in stock raising, feeding, culture of feed crops, of dairying for the purpose of extending their information and rendering them better capable of superintending these lines of work. The studies embraced are drainage and irrigation, studies in selection and cross-breeding to improve farm crops and forage plants, scientific investigations of milk, and the conduct of feeding and field experiments.

BOTANY.

Besides courses of reading, a thesis is required in one of the following subjects, or in an equivalent subject: Monographic study in Compositæ, Gramineæ, Leguminosæ, or any other family well represented in this vicinity; catalogue of the plants of this vicinity with ecological observations; Morphological study of the development of the floral organs of any suitable family.

CHEMISTRY.

Quantitative analysis, physiological and industrial chemistry; theoretical and organic chemistry; agricultural chemistry; standard reference books; current chemical literature. Final thesis on original work.

CIVIL ENGINEERING.

Advanced work is offered in the following subjects: Hydrographic surveying; hydraulic and water supply engineering; masonry construction; stereotomy; geodesy; least squares; strains in drawbridges and other continuous structures; theory of the strength of materials; experimental work with testing machines; designing; detail and shop drawing; thesis.

DRAWING.

Descriptive Geometry, Watson.

Shades and Shadows, Lawrence.

Such advanced work in drawing as may be needed by the student for his special course.

ENGLISH AND HISTORY.

A. English.

Anglo-Saxon and Norman-French origins of the language. Advanced studies in the literature.

B. History.

The beginnings of civilization and the principles of ethnology. Original investigation in some special line.

HORTICULTURE AND MYCOLOGY.

A. Horticulture.

Graduate studies in Horticulture will include studies of sciences relative to plant production and improvement. Advanced studies are offered in plant breeding, plant ecology, forestry, landscape gardening, botany of fruits and vegetables, and experiment station work in horticulture.

B. Mycology.

Systematic study of economic species of fungi; microscopical laboratory methods; spraying for plant diseases; original biological work, and thesis on some special work.

LANGUAGES.

The course in this department will embrace such studies and exercises as will lead to a thorough and practical knowledge of either the German or French language and literature.

MATHEMATICS.

Advanced Analytic Geometry; Differential and Integral Calculus Analytic Mechanics; Differential Equations; Least Squares.

MECHANICAL ENGINEERING.

Continuation of fourth year's work and Steam Engine Economy and Design, with continuation of practice in the machine shop, and theory of tests.

In the second year special subjects and original designing; engine and boiler tests, with advanced shop practice.

ELECTIVE COURSES.

Elective courses, extending through two years, are offered, subject to the following conditions; the students in these courses to be known as irregular students:

1. To enter upon an elective course the student must be able to comply with the requirements for admission to the Third Class. He must elect, in conformity to the regular schedule, studies for which he is gualified, amounting to at least eighteen hours per week, and practice amounting to at least seven hours per week for each term, besides drill as given to regular students; his selection to be subject to the approval of the Committee on Elective Courses. In his second year all his work must be selected from classes above the third.

2. A student in an elective course, upon the completion of the equivalent of two full years' work, as defined above, shall be entitled to a certificate signed by the President and the heads of the departments in which he studied.

3. A regular student may enter upon an elective course only with the consent of his parent or guardian and of the Faculty, and only at the beginning of a term. He shall receive no credit for work done, during the year in which he makes the change, in any department which he drops on becoming an irregular student.

4. An irregular student shall not be allowed to do more than sixty hours' voluntary work per month under the student labor system.

5. Irregular students shall be subject to military duties and to the Rules and Regulations just as are regular students.



PROFESSORS' RESIDENCES.

SPECIAL COURSES.

Upon correspondence with the President, special industrial courses may be aranged with the professor or professors under whom instruction is desired; such courses, however, will not be encouraged, and a student, after having entered a regular course, will not be allowed to change it without permission of the Faculty.

GRADES, REPORTS, EXAMINATIONS AND ADVANCEMENT.

Records of the standing of each student are kept by the professors of the several departments. This standing is indicated by a system of marks based upon 100 as a maximum, with decimal graduations.

'A monthly report is mailed to the parent or guardian of each student, showing his class standing, conduct and health.

Examinations are held from time to time during the session, as special subjects of study may be completed.

A student's final grade in any subject is determined by averaging his term of grade, if any, with his examination grade, if any. Then, provided the examination grade be not below 55, he will be passed on a final grade of 66 in the Third and Fourth Classes, of 70 in the First and Second.

In subjects where no examination is given, the student, in order to pass, must have a term grade at least as high as the passing grade of his class, and must complete a certain amount of practice or work prescribed by the professor in charge.

A student who has been found deficient on any subject will be given a second examination; but he must make the passing grade of his class thereon, without taking into account his term grade. This second examination will not affect his class standing.

No student will be given more than two examinations on one subject; except as follows:

(1) A student who has failed on a second examination may be examined again at the opening of the next session.

(2) A member of the First Class who has failed on a second examination upon one subject only, but has complied with all the other requirements for graduation, may, by the consent of the Faculty, be given a third examination upon that subject during the week before Commencement.

Advancement from one class to the next higher (except to the First) is governed by the following provisions:

(1) A student who has attained a passing grade upon all his studies

will be reported as "passed," and may enter the next higher class unconditionally.

(2) A student of the Third or Fourth Class who has been found deficient in not more than two subjects will be reported as "passed conditionally," and may enter the next higher class, but must remove his "conditions" by making the required passing grade at some time during the next session, or within a shorter time if prescribed by the Faculty.

(3) A student of the Third or Fourth Class who has been found deficient in more than two subjects shall not be allowed to enter the next higher class except by making the required passing grade, within the *first three days* of the next session, upon all but one of the subjects in which he was deficient.

(4) A student of the Second Class who has been found deficient on any subject shall not be allowed to enter the First Class except by making up all his deficiencies within the *first three days* of the session.

No student will be admitted to the First Class with any conditions still unremoved.

CERTIFICATES.

Every student who completes satisfactorily a special course, or a two years' elective course, or one of the optional studies, will be granted a certificate.

GRADUATION.

A diploma of the College, with the degree corresponding to the course of study pursued, will be granted students who complete one of the prescribed courses and pass satisfactory examinations on all the branches embraced therein. Each candidate for graduation is required to prepare a thesis upon a subject bearing upon his work in some scientific or practical department. The subject must be submitted to the Faculty for approval by March 20.

The thesis must be satisfactory to the head of the department in which it was written.

The diploma fee is five dollars.

HONORS.

The three students of the graduating class who have the best records for scholarship and deportment are known as honor men; but this rule may be modified if the number of students in any class or their scholarship shall not warrant such distinction.

In each of the lower classes the three students having the highest general average in all their studies, and also in each department the three students of the several classes whose final grades are highest, are announced at commencement as "distinguished."

DEPARTMENTS OF INSTRUCTION.

DEPARTMENT OF AGRICULTURE.

PROFESSOR CONNELL.

Assistant Professor Alvord.

This department instructs the students of the Fourth Class of all courses, and three classes taking the Agricultural Course. The studies are systematically arranged for the purpose of applying many of the scientific principles of chemistry, botany, physiology, and physics (which are taught by the other departments of this course) to the practical subjects of "Farm Crops," "Stock Husbandry," and "Dairying." A knowledge of these sciences forms the basis of the instruction given in the class room by the Agricultural Department.

THEORY OF INSTRUCTION.

The study of physics gives accurate information and offers useful explanations of those primary laws of nature that control light, heat, sound, water, the atmosphere, clouds, electricity, etc. A knowledge of this subject is necessary to a clear understanding of changes in atmospheric temperature, rainfall, frost, evaporation, and other physical phenomena of importance to the farmer. The study of botany informs the student of scientific names and classification of plants into natural groups, their habits of growth, and treats of the laws that govern the essential conditions of plant growth. The study of zoology, including the subdivisions, animal anatomy and physiology, proper hygienic conditions, the diagnosis of disease, and a study of the necessary medical or surgical treatment of animals, forms an important division of the student's technical education. The study of chemistry serves to give the student an intimate knowledge of the composition of plants (and plant food), and of animal bodies (and stock food), and of the laws governing the composition of plant and animal nutrients.

"Farm Crops" are studied through the object lessons afforded by a large diversified farm and various experimental crops, which embrace many rare kinds and all of the ordinary crops cultivated in this section, together with lectures upon selection of varieties, culture, economic uses, etc.

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"Stock Husbandry" is taught by use of the College herds of cattle, hogs, and work stock as far as these can be used as illustrations of animal form or type, lessons in breeding, and for feeding trials. Text-books and lectures discuss the principles of breeding, the established breeds, and the results of feeding and management.

"Dairying" is a distinct branch of instruction in agriculture, through which the student becomes familiar with butter making, cheese making, milk testing, and the many improvements in dairy machinery. Practical butter and cheese making by agricultural students acquaints them with the working principles of this industry.

In all this work, theory and practice are united.

CLASS STUDIES.

Fourth Class.—Physical geography is taught to all members of the Fourth Class, giving especial attention to the distribution of various industries as affected by climate and other natural conditions. The student is thus early taught to seek the causes of various conditions and to form the habit of thinking logically. This subject is introductory to all of the industrial courses of study.

Elementary Agriculture is taught this class in the spring term by the use of practice and reference books, limiting the subject during this term to topics relating to "Farm Crops," such as the physical conditions of soils, temperature and moisture conditions, origin and composition of soils, and the principles of cultivation as affecting plant growth.

Third Class.—Elementary Agriculture is continued in the Third Class (fall term), and the subject is further developed to cover soils, crops, and live stock as related to soil fertility and economic production. Practice in soil physics fixes the principles in the mind of the students.

"Grasses and Forage Plants" are considered with reference to habit of growth, methods and cost of seeding, effect upon the soil, adaptability to various portions of the State, feeding value, etc. All field crops, except fibre plants, are included in the study of this subject. It is taught in the spring term in thirty-six lectures, by reference books, and by practice with forage crops.

The various breeds of horses, cattle, swine, and sheep are carefully studied as to origin, history, development, characteristics, and adaptability to the varying conditions of the southwest. Students are also practiced in scoring and judging farm animals, and drilled in their selection, purchase, care, and management by practice in measuring and scoring the live stock. This subject is taught during the winter term. Representative animals of different breeds are kept for the purpose of instruction in this subject.



LECTURES-GRASSES AND CROPS.



PRACTICE-HABITS OF FARM CROPS.



LECTURES-LIVE STOCK AND DAIRYING.



PRACTICE-MAKING CHEESE: SECOND CLASS HANDLING CURD.

Second Class.—The principles of "Stock Breeding" are taught in this class, basing the instruction upon the students' knowledge of animal physiology, with which it is nearly related. Heredity, atavism, variation, selection, and in-breeding, and their practical application to domestic animals, are noted.

By practice work the student becomes familiar with the breeding of noted animals, the best blood lines of the several classes of stock by the use of pedigrees, herd books, etc.

Dairying is given considerable prominence. The Second Class receives thirty-two lectures upon this subject. The properties and composition of milk, the variations due to breed, and feed, and the fermentation of milk; the creaming, churning, cheese-making, testing for fat, and for adulterations; and the subject of bacteriology, are all discussed in order. The proper care of fresh milk, the operation of hand and power separators and churn, the care of creamers, and testing for acidity and for butter fat in milk and cream, can be most thoroughly learned by combining this work with the theory taught in the class room. The aim is thoroughly to fit out students for taking charge of and operating creameries and dairy, farms successfully in any portion of the State.

"Irrigation and Drainage" is studied by lectures given during the spring term. "The advantages of the several methods of irrigation in useare considered, the amount of water necessary for the various crops, theavailable water supply of all parts of the State are studied. Practice isgiven in the construction and location of reservoirs, laying out herd ditches, construction of flumes, irrigation machinery, and the cost of raising and applying water under conditions existing in this State. Methods of securing perfect drainage are discussed, and the methods of protecting lands from washing rains, terracing farm lands, the construction of open and tile ditches are also considered.

FIRST CLASS.—Having studied animal anatomy and physiology and the subjects of chemistry, the students of the first class are prepared to understand the study of scientific or rational feeding of farm animals the study of which is begun in the fall term and pursued for two terms in the first class. The laws of animal nutrition and the composition of animal bodies are briefly considered. The individual food stuffs are then closely studied as to composition, digestibility, market value, etc. The student is then advanced to the selection of feeding rations for the economic support of sheep, milk cattle, beeves, horses, and hogs. In this manner the value of all food stuffs is clearly shown in theory. The practical feeding of farm animals by students serves to more fully acquaint them with this subject. The best results in feeding stock by the various experiment stations of the United States, form a most valuable feature of

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studies devoted to this subject. Students who complete the study are well qualified to care for and manage stock farms and various feeding enterprises.

The study of "Farm Management" and the various systems of organization of farm work practiced in this State completes the study of the Agricultural Department in the fourth year, or graduating class. Comparisons are made of the different branches of agriculture, rotative and successive cropping, management and economy of farm labor, selection and care of machinery, and live stock for certain purposes, and profit and loss in farming.

EQUIPMENT.

The twenty-four hundred acres in the farm, with one hundred and twenty milk cows (consisting of typical Jerseys and Holsteins and grades), the hogs, work stock, the improved tools and machinery for all farm work, the mammoth silos for preserving green stock food, offer illustrations of great practical value to the student.

An irrigation reservoir, watering ten acres, is in use, affording illustrations in the application of water to vegetables and field crops. A large amount of tile drain is in use. The dairy is fitted with milk separator, churns, butterworkers, and milk testing machines run by steam or gasoline power. The cheese making outfit includes milk curd vats, curd milk, gang press, and other equipment used in making cheddar cheese. All of the labor of this large machine dairy is performed by the agricultural students; for this and other voluntary work, faithfully performed, students are paid at a maximum rate of twelve cents per hour.

The new building, provided by the present Legislature, will be occupied by this department during the coming year, and will afford many new appointments for proper instruction of agricultural students. All of the dairy equipment will be located in this building and special rooms have been designed for the study of live stock, field crops, museum library, and for officers of College and Station.

Agricultural Experiment Station.—The permanent location by the General Government of the Agricultural Experiment Station for Texas at this College, under the supervision of a Director (who is also the Professor of Agriculture) makes it possible to give students the benefit of experiments conducted at the College, and permits a careful study of results of valuable tests conducted elsewhere, by frequent reference to bulletins from other Stations, files of which are kept in the Director's office. 'A valuable collection of scientific works bearing on all phases of agriculture constitutes the Station library, and is freely used by students of the College.



STUDENTS'_LABORATORY-CHEMICAL.

TEXTS AND LECTURES.

Physical Geography (Fourth Class), Davis.
Elementary Agriculture (Fourth and Third Classes), Gully.
Breeds of Stock (Third Class), Lectures.
Grasses and Forage Plants (Third Class), Lectures.
Stock Breeding (Second Class), Lectures.
Dairying (Second Class), Wing.
Irrigation and Drainage (Second Class), Lectures.
Stock Feeding (First Class), Henry.
Farm Economy (First Class), Lectures.

DEPARTMENT OF BOTANY.

PROFESSOR NESS.

The study of Botany commences in the winter term of the first year, Fourth Class, with Ecology; that is, the study of the distribution of plants, the causes and manner by which it is effected, the relation of plants to soils, to climates, to each other, and to the animal kingdom. So much of plant physiology is given as is necessary to an elementary understanding of these things.

TEXT-BOOK: Plant Relations, Coulter.

Third Class.—Structural Botany, or the study of the plant organs as well as their functions, is taken up in the fall term. In the laboratory work connected with this study, the students are required to make drawings and descriptions of the various organs of representative plants. Each student is required to provide himself with a cheap set of dissecting instruments.

TEXT-BOOK: Elements of Botany, Bergen.

Systematic Botany is introduced in the spring term of the same year. Lecture hours are consumed in the study of the characters and relationship of representative families of plants; the laboratory hours in collecting, determining and preparing specimens for the herbarium, which each student must submit at the close of this term.

MANUALS: Flora of Western Texas, Coulter; Southern Flora, Chapman.

Second Class.—This class studies the anatomy and physiology of plants in the fall term. The study of the structure and characters of the protoplasm is first taken up. This is followed by the study of the tissues and their arrangement into systems. Finally, under the head of physiology, the functions of these various parts are studied. In the laboratory the students are made familiar with the art of hardening, imbedding, stain-

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ing, and mounting specimens for microscopic examination. The students are required to submit drawings, with notes on the various parts studied.

TEXT-BOOK: A Text-Book of Botany, by Strasburger, Noll, Schenck, and Schimper.

LABORATORY MANUAL: Practical Botany, Strasburger.

Graduate Work.—To graduates desiring further advancement in Botany, the department offers instruction as outlined under the head of Graduate Courses.

EQUIPMENT.

The Department of Botany is supplied with good compound and dissecting microscopes, a new Reichert's microtome, as well as other necessities for pursuing microscopic investigation; a collection of standard reference books on all branches of Botany, and a small but growing herbarium containing specimens from the various sections of the State, many of which were collected and presented to the department by Mr. J. Reverchon.

DEPARTMENT OF CHEMISTRY AND MINEROLOGY.

PROFESSOR HARRINGTON,

Associate Professor Tilson.

CHEMISTRY.

Second Class.

The subject of chemistry is introduced by the study of inorganic chemistry, which is taught for two terms, to the Second Class. The attention of the student is directed to the historical development of the science, to the phases of chemical theory as at present understood, and especially to the importance of chemistry in the arts and manufactures.

Following the work in inorganic chemistry, the students of the Horticultural and Agricultural Courses pass to a brief course in organic chemistry. 'The object here is to have the student grasp the fundamental principles of the science, and to acquire a foundation for intelligent work in agricultural chemistry the following year.

. Geology is taught in the spring term to the students of the Civil Engineering Course, and

Metallurgy during the same time to the students of the Mechanical Engineering Course.

LABORATORY WORK.

Beginning with the study of inorganic chemistry, the students of the Agricultural and Horticultural Courses supplement their class room instruction with laboratory work. This begins with the use of the blowpipe, simple glass working, and fitting up apparatus; continuing into determinative mineralogy and qualitative analysis.

First Class.

Industrial Chemistry is given in the fall term to students of all classes, except those of the Civil Engineering Course. Various industrial processes are discussed and explained, such as the manufacture of sugar from cane and beets, manufacture of starch, glucose, and vinegar; tanning of hides, and the manufacture of glue. Destructive distillation of wood and coal, and treatment of chemical products derived therefrom. Chemistry of the oils, fats and waxes, their manufacture and purification. Nature of petroleum oil, and method of working up into its various commercial products. The manufacture of paper, gun cotton, and textile fibres.

Agricultural Chemistry is taught to the students of the Agricultural and Horticultural Courses in the winter term. Particular attention is given to the composition of the soil, and its physical characteristics; composition of plants, and movements that take place within them during growth; chemical and physical character of fertilizers, and kinds suited to different crops.

Geology is taught in the spring term to the same students. The student is drilled in the principles of the science, and placed upon a foundation where he may continue the work for himself.

LABORATORY WORK.

Students of the Agricultural and Horticultural Courses, having completed their preparatory work in the Second Class, are given quantitative analysis, both volumetric and gravimetric, supplemented by exercises in manufacturing chemistry.

The students of the Mechanical Engineering Course take up blowpipe analysis, assaying, and qualitative analysis. While the students of the Civil Engineering Course get brief work in blow-pipe analysis, and determinative mineralogy.

The laboratory is fairly well equipped with improved apparatus; has a good library, and current chemical literature, to which the students of the department have access.

DEPARTMENT OF CIVIL ENGINEERING.

PROFESSOR NAGLE.

The class room instruction in this department is given by means of approved text-books, supplemented by explanations and lectures. To emphasize and illustrate the principles there explained a liberal amount of practice in the field with the instruments most often used by the civil engineer is added, and the student is thereby made to apply theory to By this means he is enabled to better appreciate the limitations practice. of each operation and learns to distinguish between the cases where a high degree of precision is required and those in which more approximate methods will answer. He is thus the better prepared to appreciate the fact that will be forced upon him in his professional work, namely, that successful engineering is dependent more upon the exercise of judgment, based upon the experience of himself or others, than upon mere skill in the manipulation of instruments, however much importance the latter may However, the attempt is made to cultivate both in him as fully have. as the limits of time permit.

Throughout the course thoroughness in a few of the more important subjects is sought rather than the superficial covering of a more extensive field. Many problems are assigned and the student's ability for independent reasoning is cultivated as much as possible.

The subjects taught are as follows:

Third Class.—The subject of road construction and maintenance is given in the spring term for two hours per week.

Second Class.—In the fall term the construction of sewers and drains and methods of sewage disposal are studied for two hours per week. In the winter term plane surveying is studied for two hours per week. This subject is continued in the spring term until the subject is completed. Railroad engineering is then taken up and the introductory principles covered by the end of the term. During this term students recite five times per week; they have also five hours per week of field practice, and each one is required to submit a plat and profile compiled from surveys made by himself and his companions.

First Class.—In the fall term Railroad Engineering is completed and Mechanics of Materials begun. In the field the projection, location, and setting of slope stakes on a line is undertaken, and quantities afterward computed. The study of hydraulics is also begun in the fall term and is carried through the winter term.

The mechanics of materials, and the computations of the stresses in roofs and bridges, both analytically and graphically, are studied in the winter term and continued through the spring term.



PRACTICE IN CIVIL ENGINEERING.
In the spring term a short course in experimental engineering is given, as also work in bridge and structural designing. Each student is required to design a simple roof truss or non-continuous bridge truss, and to make detail and shop drawings of the same, showing the dimensions and connections of main members; he must also prepare a stress sheet for the structure.

During the winter term of the First Class Mechanical Engineering students, and also the Agricultural and Horticultural students, are given a course in plane surveying, in which they are taught the use and adjustments of the compass, transit and level, as applied to land surveying and drainage. They have field practice in the use of these instruments.

Text-Books: Roads, Streets and Pavements, Gillmore; Surveying, Davies, Raymond; Field-Manual for Railroad Engineers, Nagle; Sewers and Drains, Adams; Sewage Utilization, Baker; Hydraulics, Merriman; Mechanics of Materials, Merriman; Roofs and Bridges, Parts I and II, Merriman and Jacoby.

GRADUATE WORK.—Young men desiring to become successful professional engineers will find it advisable to continue their studies after receiving their first degree. Under the head of "Graduate Courses" are outlined some of the branches in which advanced work will be given—the work assigned being adapted, in so far as is practicable, to the needs of each student. Designing, preparation of shop drawings for the design, the study of projects and review of existing structures will make a feature of the course. A large part of the time will be devoted to original design and investigation.

EQUIPMENT.

The department is supplied with an excellent assortment of engineering instruments, including the following: One transit with Gurley's solar attachment; one railroad transit; one surveyor's transit; three engineer's Y levels; one drainage level; one terracing level; one Locke's hand level; one solar compass; four other compasses; one plane table; one planimeter; one aneroid barometer; one odometer; one surveyor's cross; one reflecting prism for setting off right angles; one Thatcher calculating instrument; one Colby topographical protractor; one Colby slide rule for stadia reductions; and an abundant supply of tapes, chains, pins, flag poles, leveling rods, stadia rods, etc. 'The department owns two Reihle Bros. testing machines—one of one thousand pounds capacity for cement and mortars, and the other of twenty thousand pounds capacity, arranged for tension, compression and cross-breaking; also several large-sized models of various types of trusses, blue prints of detail and shop drawings, photographs of existing structures, etc.

The department is supplied with a well assorted library of standard works on engineering, to which the students have access.

DEPARTMENT OF DRAWING.

PROFESSOR GIESECKE,

Associate Professor Love.

DRAWING.

All students in the Fourth Class begin the study of drawing in the winter term with Thompson's Free Hand Drawing Book No. 5, which is completed in the spring term.

All students in the Third Class continue free hand drawing, completing Thompson's Model and Object Book Nos. 1 and 2.

'The Agricultural and Horticultural students also make a number of drawings of leaves, flowers, plants and other natural objects; and receive enough instruction in mechanical drawing to enable them to draw the plats necessary in their study of surveying.

The Engineering students begin mechanical drawing in the Third Class. During the first term they draw nine plates of simple exercises, geometrical problems, alphabets and lettering; during the second and third terms they draw fourteen plates of exercises in projection drawing, and make three paper models. Anthony's Mechanical Drawing is used by this class.

During the first term of the Second Class, descriptive geometry is taught by daily recitations and the students are required to draw twenty plates of problems, or applications thereof. Faunce's Descriptive Geometry is used. During the next two terms the students are required to draw sixteen plates of working drawings of parts of machinery, bridges or buildings; three of the above plates are isometric views, and one has to be traced and blue-printed; the students prepare the paper for this purpose; the students in Mechanical Engineering also receive a short course in kinematic drawing.

During the first term of the First Class, tinting and linear perspective are taught; each student makes one finished plate in colors and one perspective drawing; during the remainder of the session each student makes drawings of subjects in mechanical engineering, civil engineering, or architecture, the purpose being to give him more practice in drawing and to acquaint him with the details of construction.

MATERIALS OF CONSTRUCTION.

In the last two terms of the first class the students in the Mechanical Engineering course study Mather's Strength of Materials, and test the strength of different materials of construction on a Riehle testing machine.

WRITING AND BOOKKEEPING.

All students in the Fourth Class take the introductory course of the Ellis System of Practical Bookkeeping and Business Practice, devoting from two to three hours each week to the same. During the fall term they are instructed in vertical writing.

DEPARTMENT OF ENGLISH AND HISTORY.

PROFESSOR HUTSON,

Associate Professor Philpott,

ASSISTANT PROFESSOR SOUTH.

In this department the course extends through the whole college life. Its aim is to make accurate and well-informed scholars. In the lower classes the subjects are taught in parallel lines of progress, and are made to throw light on each other.

I. ENGLISH LANGUAGE AND LITERATURE.

First Year: In the class of this year there is an extended drill in the grammar, in spelling, punctuation, reading, and composition. The class reads from time to time some famous literary work of simple and vivid narration.

Text-Books: Patterson's Advanced Grammar, Chittenden's Elements of English Composition, Buehler's Exercises in English, Macaulay's Lays of Ancient Rome, select poems of Scott.

Second Year: Rhetoric is studied during the whole of this year.

Text-Books: Genung's Rhetoric, Newcomer's Rhetoric, and Essays of Macaulay.

Third Year: The history of the English language and the study of its inner structure and its peculiar idioms constitute the work of this year. Original essays are required.

Text-Books: Lounsbury's English Language, select poems and tales. Fourth Year: In the Fall term English Literature is studied through both text-book and lectures.

Text-Books: *Pancoast's* English Literature, lectures by the professor in charge of the class, select plays of *Shakespeare*.

For reference: The Century Dictionary, Taine's English Literature, Saintsbury's Elizabethan Literature, Morley's English Literature, Mrs. Oliphant's Literature of the Georges, Essays of Macaulay, De Quincey, Hazlitt.

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II. HISTORY.

First Year: The class of this year studies the History of the United States, and the History of American Literature.

Text-Books: Lee's United States, Pancoast's American Literature.

Second Year: The study of general history is the work of this year's class. Debates on historical subjects are from time to time assigned as part of the work. The value of collateral reading is thus impressed upon the student.

Text-Books: *Myers's* General History, with other works for collateral reading.

Third Year: The class this year begins the study of English History, especial stress being laid on the development of the English Constitution, the progress of civilization, and the close connection between the condition of the people and the state of the literature.

Text-Book: Arabella Buckley's History of England.

Fourth Year: The study of the History of England is continued this year by the students of the Mechanical Engineering and Civil Engineering departments.

Text-Book: History of England, Buckley.

For reference: Histories of Green, Gibbon, Hallam, Freeman, Stubbs, Froude, Guizot, Ranke, Rawlinson, Macaulay, Motley, Mommsen, Percy Greg.

The College library is emphatically the tool house of this department. Students are urged and encouraged in every way to make large use of it.

Candidates for admission into the fourth class are examined in spelling, grammar, geography, reading, and the history of Texas. Applicants for admission into the higher classes are examined on the studies already passed over by the classes below. See pages 21, 22, 23, 24.

DEPARTMENT OF ENTOMOLOGY.

PROFESSOR MALLY.

Instruction in this department is directed largely towards training students of the Agricultural and Horticultural courses how to study the habits and life history of insects, and to recognize those that are beneficial as well as those that are injurious. Lectures are prepared with reference to the harmful insect pests of the orchard and garden, as well as of farm crops, especially those of cotton. It is the purpose of this department so to train the students that thereafter they may be able to investigate insect depredations as they occur, and determine what is the best remedy to



PEACH ORCHARD.



HORTICULTURAL LABORATORY PRACTICE.

apply or the best protective measure to provide. The graduating classmen are given a special course of lectures on insecticides, the methods of preparing and applying and the best spraying apparatus for special purposes. Suitable field practice and laboratory exercises form a portion of the course throughout. In short, it is intended to give such training as will be of the greatest practical application to agricultural and horticultural conditions.

DEPARTMENT OF HORTICULTURE AND MYCOLOGY.

PROFESSOR PRICE.

Assistant Professor Ferguson.

The object of the course in this department is to prepare young men for success in the industrial pursuits of orcharding, vineyard culture and truck farming in Texas.

For the first two years, both the courses in Horticulture and in Agriculture are the same.

Throuhout the course in this department, it is made a special object to teach scientific principles rather than to study special rules. Both the text-book method and the lecture method are used whenever they can be to advantage. The practice, or laboratory work, is designed to follow up and illustrate the work in the lecture room. Volunteer-student-work is encouraged along the lines of study in the different classes.

The results obtained by this department in carrying on various experiments with fruits and vegetables are used in the class room.

A graduate in this department receives a good training also in physics, botany, chemistry, surveying, geology, veterinary science, mathematics, English and history, languages and irrigation.

Equipment: Large rooms for recitation and laboratory work will be available for this department on completion of the new Agricultural and Horticultural building. Preparations are being made to place in these rooms a new equipment of modern scientific apparatus.

Copies of all the bulletins issued by the different experiment stations of the United States on Horticulture and Mycology are kept on file in this department, and are conveniently indexed. The department library contains some 200 books, to which the student has free access. Each student of the graduating class has assigned to him a compound microscope with micro-reagents and accessories for scientific investigation. The department owns a considerable collection of the latest improved horticultural tools, spraying apparatus, etc.

The orchards, vineyard and various experimental plats are used freely for illustrative work.

NURSERY PRINCIPLES.—Second Year, Winter Term: Study of the principles of Nursery management, various ways of propagating the different kinds of fruit, such as budding, grafting, layering, etc.

Text-Book: Bailey's Nursery Book.

TRUCK FARMING.—Second Year, Winter Term: Study of the different crops adapted to truck farming in Texas. Construction and management of hot beds and cold frames. Special fertilizers for vegetable crops, packing, shipping, and marketing.

Text-Book: Vegetable Garden, Green.

Reference Books: Truck Farming for the South, Oemler; Sweet Potato Culture for Profit, Price; The Forcing Book, Bailey.

PRINCIPLES OF FRUIT CULTURE.—Second Year, Spring Term: Selection and preparation of land for orchards. Setting, care, and management of trees in the orchard.

Text-Book: Principles of Fruit Culture, Bailey.

Reference Books: Thomas' American Fruit Culturist; Barry's Fruit Garden; Downing's Fruit and Fruit Trees of America.

POMOLOGY.—*Third Year, Fall Term*: Special study of the origin, history, and development of our leading American types of fruit, such as the apple, peach, pear, grape, strawberry, dewberry, blackberry, etc. Study of the best cultivated varieties. The subject is taught both by lecture and by text-book.

The following book is used as a basis of study: Evolution of Our Cultivated Fruits, *Bailey*.

PRINCIPLES OF PRUNING.—*Third Year, Winter Term*: Study of the principles of pruning various trees and vines. Practice is given in the experimental orchards and vineyards.

Text-Book: Principles of Pruning, Bailey.

MYCOLOGY.—Fourth Year, Fall Term: Study of the life history of economic fungi. Study of classification and biology of fungi. Herbarium of twenty-five species of local fungi is required.

Text-Book: Moulds, Mildews and Mushrooms, Underwood.

Reference Books: Diseases of Plants Induced by Cryptogamic Parasites, *Freiherr Von Tubeuf; Plowright's* Monograph of Uredineæ and Ustillagineæ; *Burrill's* Monograph of Uredineæ and Erysipheæ; North American Pyrenomycetes; *Ellis and Everhart*.

FORESTRY.—Fourth Year, Winter Term: Planting and management of woodlands. Consideration of the rôle they play in the economy of nature.

Text-Book: Elements of Forestry, Hough.



VINEYARD.

Reference Book: North American Sylva, Michaux.

LANDSCAPE GARDENING.—Fourth Year, Winter Term: The art of beautifying American homes. Principles of embellishing landscapes.

Text-Book: Ornamental Gardening, Long.

PLANT BREEDING.—Fourth Year, Spring Term: How to cross-fertilize plants and originate new varieties. How to improve old varieties. Darwinism and its relation to horticulture.

Text-Book: Plant Breeding, Bailey.

Reference Books: Origin of Species, *Darwin*; Survival of the Unlike, *Bailey*.

SPRAYING.—Fourth Year, Spring Term: How to prepare fungicides and apply them to plants to prevent injury done by fungi. Spraying machinery.

'Text-Book: 'The Spraying of Plants, Lodeman.

DEPARTMENT OF LANGUAGES.

PROFESSOR BITTLE.

Assistant Professor South.

It is the object of the department to furnish students of the Horticultural and Civil Engineering Courses, and others who may desire it, with a practical knowledge of German, Latin, French, or Spanish, such as will . benefit them in the prosecution of a scientific career.

To this end, the text-books used and the method of imparting instruction are practical. Latin is taught as an essential to a thorough understanding of English; German and French, because neither the specialist nor the general student can afford to be ignorant of those literatures; Spanish, in view of the rapidly growing intercourse between us and the Latin Republics south of us; all of them, because systematology and scientific nomenclature are unintelligble without a knowledge of foreign languages.

Students coming to us, therefore, from the high schools of the State find here the opportunity to continue their linguistic studies by the side of agricultural and mechanical branches, to which those studies lend effective aid.

TEXT-BOOKS.

In Spanish, *De Tornos*' Grammar, with reference to *Knapp*, and selections in reading from various sources.

In German, *Thomas'* Grammar, with selections in reading suited to the student's advancement.

In French, Whitney's Grammar is used, and readings, mainly of a scientific character, are selected.

In Latin, Coy's and Gildersleeve's Grammars, with reference to more systematic courses, and readings from Cæsar, Virgil, Cicero, etc., as the exigencies of the course permit.

DEPARTMENT OF MATHEMATICS.

PROFESSOR PURYEAR.

ASSOCIATE PROFESSOR SMITH.

ASSOCIATE PROFESSOR BANKS.

Instruction in this department is given by the use of approved textbooks, supplemented by oral explanations and lectures. The course is designed to be thorough rather than extensive. The student's knowledge of the subject studied is tested daily at the blackboard, and he will be required to apply the principles taught to the solutions of practical problems. Written solutions of selected problems will be required at statcd intervals. For specimen entrance examinations, see pages 21, 22. 23, 24.

The subjects pursued are as follows:

First Year—Elementary Algebra, to quadratic equations.

Second Year—Algebra, to the Binomial theorem; Plane Geometry, completed, Solid Geometry, begun.

Third Year-Solid Geometry, Trigonometry, Advanced Algebra.

Fourth Year—Analytical Geometry, Elementary Mechanics, Calculus. For instruction in geometry, the department is supplied with a set of Schroeder's models, imported for this institution.

'Text-Books: Higher Algebra, Wells; Geometry, Wentworth; Trigonometry, Wells; Analytic Geometry, Nichols; Mechanics, Wood; Calculus, Peck.

DEPARTMENT OF MECHANICAL ENGINEERING.

PROFESSOR WHITLOCK. Assistant Professor Burgoon. Assistant Professor Kerr. Instructor Lewis.

This department is intended so to combine theory and practice that, after deriving a theoretical knowledge of the subject from the text-books of standard writers, the student may go into the shop and apply that knowledge in a thoroughly practical manner. With this theoretical preparation, the mind grasps the salient points and avoids the difficulties of the more practical part of the work. The work is carried on by aid of practice in the shops and drawing room, and by text-books and lectures.

First, the machinery of transmission is taken up and discussed, and especial attention paid to shafting, belts, speed pulleys, gear wheels, and kindred subjects. These lead the way to the higher forms of mechanism, and later the steam engine in its general principles and various forms is studied and discussed.

As stated above, the work in the class room is supplemented in every possible way by showing the student the practical application of these principles in the machinery used at the College.

SHOPS, AND SHOP WORK.

The Machine Shop is a one-story brick building, 80x35 feet, and is joined at one end by the Blacksmith Shop, which is also brick. At the other end it is in connection with the Carpenter Shop, and above the latter are class rooms, and model room, fitted up for drawing and designing. This two-story building is also of brick, and was planned and built especially for this department. In beginning the practical work the student enters the Carpenter Shop, which is equipped with sixty sets of tools and benches. Here each student has his own set of tools when at work, and is held responsible for their condition. These tools are those which are in common use among carpenters, such as hanimer, cross-cut and panel saws, square, mallet, chisels, gauge, planes, and dividers; and must be kept in order by the student using them. Thus, each student is taught in the beginning of his work not only the use of the tools, but also the importance of keeping them in good order, and in their proper places. The work in this department begins with the simplest exercises, which consist mainly in making those joints which are in common use. Each of these exercises depends more or less on those preceding it, and becomes

more and more difficult as it nears the end, thus carrying the student from "squaring" a piece of wood to the construction of a small bridge truss. The work is carried on from drawings, similar to those found in any of our shops, and thus the student learns not only to read mechanical drawings, but to construct the article wanted with only such drawings for a guide.

Having finished the woodwork, and acquired a knowledge of edged Here he finds tools, the student is transferred to the Blacksmith Shop. the same ideas of responsibility and good order. There are twenty-one forges, supplied with a blast from a power blower, which is run by an engine built and set up by the graduating class of 1888. Here, as in the Carpenter Shop, the first exercises are very simple, becoming more and more difficult as they proceed, until, at the end, the student has made welds of different kinds, a chain with a hook and swivel, and has forged out and tempered several tools, such as engine lathe tools and cold chisels. After this, a move is made into the Machine Shop, where are found sixteen wood-turning lathes. On these he receives instruction in both inside and outside turning, everything being made according to drawings furnished. Then follows instruction in the use of iron-working machinery, for which there is the following equipment: Six engine lathes, planer, drill, shaper, and milling machine. With these machine tools are taught the principles of cutting and shaping wrought and cast iron, steel and brass. Throughout the course the student receives systematic instruction, and the work is so graded as to bring into use as far as possible those principles which have been taught him in the class room. The instruction throughout the course is made as practical as possible, and at the same time is of such a nature as to call for intelligent thought in connection with the manual labor. Special attention is called to the fact that all work is made, as far as possible, from drawings similar to those which the student will be called upon to use in any of our first-class machine shops, thus compelling him to think for himself, and avoid becoming a mere automaton. All tools are furnished by the College, with the exception of a two-foot rule.

DEPARTMENT OF MILITARY SCIENCE AND TACTICS.

PROFESSOR EDMONDS.

The instruction in this department is in conformity with the act of Congress, which, in endowing this and similar institutions, stipulates that military tactics shall be taught.

An officer of the regular army is detailed, by direction of the President

of the United States, to carry out this requirement of the act in question, and the necessary arms, accoutrements, and ammunition, are furnished by the general government without cost to the College.

During the fall and spring terms, practical military instruction is given in infantry and artillery drills, rifle firing, and the duties of guards and sentinels. During the winter term, all military exercises are suspended, except the necessary guard. A course of lectures is delivered to the first class, embracing the duties of guards and sentinels, military signaling and engineering, military law, the preparation of the usual returns and reports pertaining to a company, the organization and administration of the United States Army, and the elements of the art and science of war.

During this term, the second class receives instruction in the section room in infantry tactics.

While the instruction in this department is as thorough as practicable in the limited time allowed, in liberal compliance with the requirements of the act of Congress endowing the College, it is not proposed to graduate soldiers. Practical military exercises are held at such hours as not to conflict with academic duties of students. The physical training of such exercises has the effect of straightening and strengthening the students, giving them an erect carriage and graceful bearing.

The military system is the means of enforcing discipline and securing regularity in the performance of academic duties, and tends to inculcate in the students that habit of truthfulness and manliness of character which characterizes young men as gentlemen.

DEPARTMENT OF PHYSICS.

PROFESSOR SPENCE.

The study of the subject of physics is begun in the fourth class with an introductory course, extending through the winter and spring terms, devoted entirely to fundamental principles and elementary theory. The text is fully illustrated by experiments performed before the class. The object of this course is to prepare the students for the more extended work of the third class.

All the students of the third class take the course in general physics, which extends to the middle of the winter term. Students of Agriculture and Horticulture are also given a short course in Electricity and Magnetism. The study of this subject by the Engineering students extends through the spring term.

The method of instruction is the usual one of lectures illustrated by experiment, and of recitations, the aim being to give the student an

analytical knowledge of the subjects taught, and every effort is made to create a distinctly personal interest.

• Text-Books: Introductory Lessons in Physical Sciences, Gage; A Text-Book of Physics, Wentworth and Hill; Elementary Lessons in Electricity and Magnetism, Thompson.

.' 'The department is fairly well equipped with apparatus for performing the experiments described in the text-books studied.

Students who have their own cameras and developing outfits, may use the department dark room.

Students also have access to the department library.

DEPARTMENT OF VETERINARY SCIENCE.

PROFESSOR FRANCIS.

The design in the course of Veterinary Science is two-fold. First, to acquaint the agricultural students with the diseases of our domestic animals; and second, to train their minds in sound and systematic methods of reasoning from cause to effect. To accomplish this, the instruction begins with the study of comparative physiology. This is presented by lectures, recitations, and demonstrations on the living subject. Comparative anatomy is treated in a similar manner. The horse is taken as the type, and dissections are made during the winter months.

This is presented in such a manner as not only to acquaint the student with the structure of the horse, but to teach him *how* to study organic bodies. Veterinary medicine and surgery are presented by systematic lectures on the diseases of animals, and their treatment.

Materia Medica and Therapeutics are given considerable attention.

These lectures are illustrated by a discussion of the drugs used by the Veterinarian, and the methods of compounding and administering the Laboratory work consists in studying the microscopic structure same. of the tissues, the methods of hardening, sectioning, staining, and mounting. Each student is provided with a first-class microscope, ranging from 50 to 400 diameters, and all necessary requisites for prosecuting the work. The department is equipped with Azoux's model of the horse, complete, and several special pieces of the same material. We have, also, the skeleton of man, horse, pig, goat, and various other animals, mounted. There are also a considerable number of skulls and other bones, both healthy and diseased. There is also quite a collection of parasites, tumors, monstrosities, dissected preparations, and surgical instruments belonging to the department. The library of the department is quite respectable, and contains all the standard works in English, and some in other languages. The total value of the equipment is about \$3000.

VETERINARY LABORATORY.



GENERAL INFORMATION.

LOCATION.

The College is situated at College Station, in the county of Brazos, five miles south of Bryan, and ninety-five miles northwest of Houston. The Houston and Texas Central Railroad runs through the grounds, daily trains stopping at the Station, about 650 yards from the main building. Students and visitors are advised to take trains arriving here in the daytime.

POSTOFFICE.

This is College Station, not Bryan. It is important that correspondents should observe this, since letters are often delayed by going to the latter place. College Station is a money order office.

MAIN BUILDING.

The main building, erected in 1876, stands on the highest point of the grounds. It is four stories high, made of brick, with mansard roof and towers. The rooms are all of high pitch, and well ventilated. There are about forty rooms in the building. On the fourth story nearly half the space is occupied by the rooms assigned to the drawing department. The two society halls and the armory, are also on this floor. On the third floor are section rooms of the departments of English, languages, and mathematics, the library and reading room. On the second floor are the President's office, the business office, the book store, the chemical laboratory and section room, the agricultural section rooms, the office of the Director of the Agricultural Experiment Station, and a janitor's room. On the first floor are private chemical laboratory, furnace room; section room and office of the department of horticulture, entomology, and botany; store room; dark room; guard room; mathematical section room; commandant's office; and section room and laboratory of the department of veterinary science. There are broad halls running through each story at right angles to each other, and two sets of stairways, one in the middle, the other at the end of the building.

SHOPS.

North of the main building are found those buildings occupied by the department of mechanical engineering, which consists practically of one building, although made in two distinct parts. First, the one containing the carpenter shop, class rooms and model room; second, that containing the machine and blacksmith shops. The carpenter shop is fitted up with benches and tools for the accommodation of sixty pupils, while above it, on the second floor, are two class rooms and a model and designing room. Back of this are the other shops mentioned, in a building of one story. Power for the machine shop is furnished by an eighteen horse power Straight Line Engine, and that for the blacksmith shop by a five horse power engine, which was built and set up by the graduating class of 1888. The machine shop is equipped with sixteen wood turning lathes, circular, band, and jig saws, emory wheels stand, six engine lathes, planer, shaper, drill, and milling machine. The blacksmith shop has twenty-one forges, with necessary tools, power blast, and exhaust fan.

AGRICULTURAL-HORTICULTURAL BUILDING.

This building, now in course of erection, is planned to accommodate the agricultural and horticultural features of the college and experiment station by furnishing specially designed rooms for class instruction, laboratory investigations, museum purposes, butter and cheese making, pasteurizing milk, canning fruits and vegetables, seed store room, photographic room, and the necessary offices for the accommodation of these departments.

This two-story brick building will be 160 feet long by 77 feet in width, covered with slate. It will contain twenty-seven rooms, fitted with the best apparatus and machinery now in use for the instruction of students in the several branches of agriculture. The live stock room will permit the introduction of animal subjects for the purposes of class instruction. The butter and cheese room will contain the best dairy machinery. The canning and evaporating rooms will be equipped for the practical instruction of students in these lines of work. The building, with its equipment, will largely increase the efficiency of these two departments.

GATHRIGHT HALL.

This building was erected in 1876, and contains dormitories, accommodating ninety-nine students. The section rooms and instrument rooms of the departments of civil engineering and of physics are also in this building. It is named in honor of Thomas L. Gathright, the first President of the College.



AGRICULTURAL AND HORTICULTURAL BUILDING.

PFEUFFER HALL.

This building, erected in 1887, is for a dormitory, and has capacity to accommodate seventy-five students. It is named in honor of Hon. George Pfeuffer, a former President of the Board of Directors.

AUSTIN HALL.

This is a dormitory, erected in 1888, and has capacity to accommodate seventy-five students. It is named in honor of Stephen F. Austin.

ROSS HALL.

This is another and more commodious dormitory, three stories high, with forty-one rooms, erected in 1892, and has accommodations for one hundred and twenty-three students. It is named in honor of the late President L. S. Ross.

FOSTER HALL.

This building was erected in 1899, and is named in honor of President L. L. Foster. It is a dormitory, and consists of three separate parts; the central one is four stories high and contains nineteen rooms; the two ends are three stories high and contain eighteen rooms each; the building has a capacity for one hundred and sixty-five students.

ASSEMBLY HALL.

This is a two-story brick building, erected in 1889, having a main floor and a gallery. In it are held the public exercises of the College, and examinations for large classes.

MESS HALL.

This building was erected in 1897. Its dining hall has capacity for over five hundred students.

INFIRMARY.

This is a two-story building, erected in 1895. It contains four large wards with toilet rooms, and four small rooms for special cases, accommodating thirty-six patients. It contains also the surgeon's offices and nurses' rooms.

The surgeon will give his attention to all students without charge other than the regular medical fee of five dollars, paid by each student upon entrance.

NATATORIUM.

The natatorium, erected in 1894, comprises a system of bath rooms and a swimming pool twenty-five by fifty feet and of varying depth, supplied by deep well with pure white sulphur water. In winter, the water for the bath rooms is heated to any desired degree by appliances for the purpose in the building.

CREAMERY.

The creamery has been in successful operation since 1888. It is supplied with a complete outfit of the latest improved apparatus for making butter. The machinery is driven by a six-horse power steam engine, and by a four-horse power gasoline engine. Practice in both butter and cheese making forms part of the agricultural course.

FARM BUILDINGS.

These are situated several hundred yards in the rear of the main building. They consist of two large barns, a milking shed, and a piggery.

There are connected with one of the barns four large silos owned by the Agricultural Experiment Station, and students will have the advantage of practical instruction in the construction of silos and the best methods of preparing ensilage.

OTHER IMPROVEMENTS.

Other improvements comprise a laundry, with full capacity to meet the demands of the College; an ice plant with a daily capacity of three tons; a complete system of water works, which furnishes ample water for irrigation and fire protection; a sewerage system; an electric light plant, of full capacity for lighting grounds and buildings; a fire-proof artillery shed, for protection of two three-inch breech-loading rifled cannon, manufactured by the United States government for the College.

LANDS.

The county of Brazos donated to the College two thousand four hundred and sixteen acres of land lying on each side of the Houston and Texas Central Railroad, five miles from Bryan and ninety-five from Houston.

GROUNDS, FARM AND GARDEN.

The garden, orchard, barn yards, and campus are included in the enclosure to the east of the Station. 'The campus, which consists of some twenty-five acres of lawn, shrubbery, and flowers, surrounds the College



INFIRMARY.

buildings. Roses bloom in great profusion and variety on the campus nearly every month in the year.

The orchard, vineyard, nursery, and garden are located north and east of main College building. About fifty acres are devoted to this work. The object of this work is two-fold: First, to test the numerous varieties and methods as adapted to this soil and climate; second, to give object lessons to students, and thus serve to illustrate the lecture room work in teaching. The peach orchard of 187 varieties is now in full bearing. The new vineyard of 205 varieties and the blackberry and dewberry garden of twenty-five varieties are bearing. In the nursery the students are taught various methods of propagating different fruits. Peach and pear trees, which the students propagate by budding and grafting, are being set each year in permanent orchards, northwest of main building.

The farm comprises about 250 acres, not including pasture lands owned by the College. This is kept in a high state of cultivation by use of the most improved machinery, crop rotation, and irrigation. On the west side of the railroad two pastures of 800 acres each are under fence. The College owns herds of registered cattle, consisting of Holsteins, Galloways, and Jerseys, besides a number of high grade cows, which supply the College with milk and butter.

LIBRARY AND READING ROOM.

A valuable library and reading room have been provided for the use of the students. The library now comprises standard works of history, biography, agriculture, mechanics, engineering, mathematics, natural science, political economy, mental and moral philosophy, poetry, general literature, and reference.

LIST OF PERIODICALS AND PAPERS.

The following papers have been contributed to the library by the publishers, excepting those marked with an (*), which have been subscribed for:

Agriculture.

Acker's Gartenbau Zeitung, Milwaukee. American Dairyman, New York. *American Gardening, New York. (American Sheep Breeder, Chicago. Bulletin Séances de la Societe de l'Agriculture, Paris. Bulletin Ministère de l'Agriculture, Paris. *Country Gentleman. Farm and Fireside, Springfield, Ohio. Farm and Home, Springfield, Mass. Farm, Field and Fireside, Chicago, Ill.

Farming, Toronto, Canada. Farmer's Call, Quincy, Ill. Farm Journal, Philadelphia. Farmer's Review, Chicago, Ill. Farmer's Voice, Chicago, Ill. Kansas Farmer, Topeka, Kans. Massachusetts Plowman, Boston, Mass. Mirror and Farmer, Manchester, N. H. Metropolitan and Rural Home, New York. Our Grange Homes, Boston, Mass. *Rural New Yorker.

*Southern Cultivator, Atlanta, Ga. Southern Planter, Richmond, Va. Texas Farm and Ranch, Dallas, Texas. Wisconsin Agriculturist, Racine, Wis.

Stock.

American Sheep Breeder, Chicago, Ill. *Breeder's Gazette, Chicago, Ill. Texas Stockman and Farmer, San Antonio, Texas.

Lumber.

Southern Industrial and Lumber Review, Austin, Texas.

Dairy.

Hoard's Dairyman. Jersey Bulletin, Indianapolis, Ind.

Mechanical.

*American Machinist, New York. *Architecture and Building, New York.

*Dixie, Atlanta, Ga.

*Power, New York.

*Railroad Gazette, New York.

Scientific.

*Botanical Gazette, Chicago, Ill. Drainage Journal, Indianapolis, Ind.

*Electrical World, New York.

*Engineering News, New York.

*Engineering Magazine, New York.

*Engineering and Mining Journal, New York.

*Nature, London, Eng.

Physical Review, New York.

*Popular Science Monthly, Boston, Mass.

*Scientific American and Supplement, New York.

Military.

*Journal of the Military Service Institute, New York.

Literary.

*Century, New York.
*Cosmopolitan, New York.
*Fortnightly Review, London.
*Forum, New York.
*Frank Leslie's Monthly.
*Harper's Monthly, New York.
Industrial, Manhattan, Kans.
International Review.
*Literary Digest, New York.
*Littell's Living Age, Boston, Mass.
*Nation, New York.
*North American Review, New York.
*Public Opinion.
*Review of Reviews.
*Scribner's Magazine, New York.

Religious.

Christian Observer, Louisville, Ky. Southwestern Presbyterian, New Orleans. Texas Baptist and Herald, Dallas, Texas. Western Recorder, Louisville, Ky.

Juvenile.

*St. Nicholas, Boston, Mass. Youth's Companion, Boston, Mass.

Illustrated.

*Harper's Weekly, New York.

*Puck, New York.

*Ueber Land und Meer, Berlin, Germany.

Educational.

*Texas School Journal, Austin, Texas.

General News.

Bellville Wochenblatt, Bellville. Brazos Pilot, Bryan. Brazos Blade, Bryan. Bryan Evening Pilot, Bryan. Daily Bryan Eagle, Bryan. Daily Examiner, Navasota, Texas. *Dallas News, Dallas. Denison Herald, Denison. Eagle Pass Guide, Eagle Pass. Floresville Chronicle, Floresville. Franklin Herald, Mount Vernon. Freie Presse fur Texas, San Antonio.

Gainesville Signal, Gainesville, Texas. Georgetown Signal, Georgetown. *Houston Post, Houston. Industrial Press, Rusk, Texas. Jacksboro Gazette, Jacksboro. La Grange Journal, La Grange. *L'Abeille, New Orleans, La. Mason County News, Mason. Midland Gazette, Midland. Navasota Weekly Review, Navasota. New Boston Herald, New Boston, Texas. *New York World (Weekly), New York City. Nord Texas Presse, Dallas. Palestine Semi-Weekly, Palestine. Pearsall News, Pearsall, Texas. *Picayune (Weekly), New Orleans. Seguin Enterprise, Seguin. Semi-Weekly Times, Palestine. Standard-Herald, Rusk. Sunday Gazette, Denison. Svoboda, La Grange, Texas. The Truth, Corsicana, Texas. Traveler's Record, Hartford. Uvalde News, Uvalde. Van Alstyne News, Van Alstyne. Victoria Review, Victoria. Vorwarts, Austin.

LITERARY SOCIETIES.

There are two literary societies at the College—the Austin and the Calliopean. They meet weekly in their respective halls for practice in debate, literary composition, and declamation. Public debates are held frequently during the session, and speakers are invited to deliver addresses.

RELIGIOUS AND MORAL CULTURE.

Every Sunday there will be service in the chapel. The faculty will try by all means within their power to protect and develop good morals in those committed to their charge.

The situation of the College is peculiarly favorable for the preservation of the morals of the students. The nearest town is distant five miles, and it is almost impossible for any student to go to Bryan, even for a short time, without his absence becoming known to the authorities. The temptations that beset young men in cities are entirely absent here.



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NATATORIUM.

YOUNG MEN'S CHRISTIAN ASSOCIATION.

This organization, purely voluntary with the students, has exerted so quiet, yet steady and helpful, an influence upon the morals of the corps that it deserves notice as a recognized part of the College work. Numbering from thirty to fifty young men, it forms a nucleus around which the better elements gather, and a restraint which is felt more or less by any who are ill disposed.

HYGIENE.

The buildings of the College stand upon the crest of a "divide," from which there is sufficient slope to carry off all drainage.

The soil is sandy, and mud and water disappear within a few hours after rain. An extensive open prairie surrounds the College on all sides. There is a constant breeze—usually very strong. The water used by students is obtained from cisterns, supplied from high, clean roofs.

The rooms of the students are inspected at least twice a day, and are required to be kept neat and well ventilated.

There is in the vicinity of the College apparently nothing to produce malarial sickness, and as a matter of fact there is very little of it here. All serious sickness has been in the form of pneumonia and measles, which do not depend on local causes.

The food served in the Mess Hall is abundant, palatable, and wholesome. It is, therefore, very desirable that parents should refrain from sending boxes of delicacies to their sons. The practice of eating from these between meals is undoubtedly very injurious to the health of the young men, and the surgeon has traced more sickness and consequent loss of time to this one cause than to any other.

The drill, farm and shop practice, and athletic sports furnish abundant and wholesome exercise for the students.

SEWERAGE SYSTEM.

The system of sanitary sewers now under construction will still further add to the healthfulness of the College, for all organic wastes will, before being discharged, be carried three-quarters of a mile from the nearest College building, and nine-tenths of a mile from the nearest recitation hall or barrack building.

TO PARENTS AND GUARDIANS.

'The necessity for uninterrupted attention to their studies on the part of students can not be too strongly urged. It is impossible for a young man to become interested in his work here if he is permitted to leave the College whenever any special amusement is advertised in our neighboring towns and cities. It is, therefore, respectfully asked that those who send their sons or wards here do not, except in the most pressing emergencies, request permission for them to leave their studies.

Whenever the parent or guardian shall leave the application for special permits to the discretion of the son or ward, the College authorities will judge of the propriety of granting such permits.

MILITARY ORGANIZATION AND DISCIPLINE.

For the purpose of maintaining good order and discipline, as well as for • the proper execution of the law of Congress requiring military instruction of the students, they are organized into a battalion of four companies and staff. The battalion is under the immediate command of the Commandant. The officers, commissioned and non-commissioned, are students taken for the most part from the first and second class. They are appointed by the President of the College upon the recommendation of the Commandant, and their appointment and rank are made to depend upon the active and soldierly performance of their duties, their sense of duty and responsibility, and their general good conduct and class standing.

All permits for privileges and explanations for delinquencies must be submitted through the Commandant.

GENERAL REGULATIONS.

It is understood that every student upon entering the College pledges himself to an honest effort to observe the regulations and sustain the authorities in the maintenance of discipline.

The strictest attention to study, and the most exact punctuality in attendance on recitations and other duties, will be made the condition of every student's continuance at the College, and any student who without authority absents himself from recitations or any other duty, deserts his class, or refuses to attend when warned, shall be dismissed, or less severely punished, at the discretion of the Faculty.

Students are forbidden to enter into combinations under any pretext whatever. One who shall begin, excite, cause or join in any boisterous or riotous conduct, or become a party to any agreement to avoid or violate any regulation, to hold no intercourse with a comrade, or to do any act to the prejudice of good order and military discipline, shall be dismissed.

If any student shall be guilty of hazing, or of inciting others thereto, he shall be expelled, and it shall be the duty of the President to place opposite his name in the Catalogue the words, "expelled for hazing."

Students are prohibited, under the penalty of dismissal, from having in their possession ammunition, weapons, or arms not issued for the per-
formance of military duty; nor shall these be retained loaded in quarters under any pretext.

A student who shall drink, or bring, or cause to be brought within the cadets' limits, or have in his room, or otherwise in his possession, any fermented or intoxicating liquor, or fruits or viands preserved in intoxicating liquor, shall be dismissed or otherwise punished, at the discretion of the Faculty.

No student shall have in his possession or play at cards or games of chance, engage in a raffle, or in any manner wager money or other things, on penalty of dismissal.

Permission to attend private parties or places of public amusement will . not be granted during the term.

No cadet can be granted a leave of absence during a term without an urgent necessity.

No student is allowed to leave the College during the session without permission of the President of the College, on application through the Commandant.

A student who shall cut, mark, or otherwise injure or deface the buildings, furniture, or appurtenances, the trees, shrubbery, greensward, grounds, fences, stables, or outhouses, or who shall lose, injure, destroy, or improperly dispose of the arms, accoutrements, or other property of the College, shall make good all damage, and be dismissed or otherwise punished according to the nature of the offense.

When the responsibility for the destruction of State property can not be fixed upon any one, the amount of the damage will be assessed against the occupants of a room or division of the entire body of students, as the case may require.

Students receive the admonition and counsel of the President before being subjected to any penalty, except in the case of flagrant offenses. Those who are habitually neglectful of their duties, or who do not regularly attend their classes, will be required to withdraw from the College.

To each recorded delinquency a number of from one to ten, proportional to the degree of the offense, in a moral and military view, is assigned to express demerit.

Any student receiving demerits as follows shall be declared deficient in conduct and subject to dismissal: In the First class: in the fall term 40, winter term 30, spring term 30, in the year 100; in the Second class: in the fall term 60, winter term 50, spring term 40, in the year 150; in the Third class: in the fall term 80, winter term 60, spring term 60, in the year 200; in the Fourth class: in the fall term 100, winter term 75, spring term 75, in the year 250.

AFFILIATED SCHOOLS.

The Faculty desire to bring the College into closer relations with the schools of the State, by providing that graduates of approved schools may be admitted to the College on diploma or certificate at the beginning of the session without examinations. Superintendents who desire to have their schools enrolled among such affiliated schools are invited to examine the requirements of admission to the Fourth and Third classes of the specimen examination questions on pages 21-24.

The offer of affiliation is made upon the following terms: 'The Superintendent of a school desiring affiliation should obtain from the President of the College a form of application to be filled out and returned. If the application should be approved by the Faculty, the Superintendent will be notified and the name of the school and those of the Superintendent and the Principal enrolled in the Catalogue. The privilege of affiliation will be withdrawn from any school whose graduates show a lack of thoroughness in their preparation for the work of the College. Affiliated schools will be divided into two groups: (A) those whose graduates are admitted to the third class; (B) those whose graduates are admitted to the fourth class.

Catalogues of the College will be sent regularly to the Principals of affiliated schools, and they in turn will be expected to send the President copies of their reports or catalogues.

LIST OF AFFILIATED SCHOOLS.

GROUP A.
Albany Public SchoolAlbany.
Supt. Frank B. St. John.
Allen Academy
Principals J. H. and R. O. Allen.
Anson High SchoolAnson.
Supt. Cecil E. Evans.
Atlanta City SchoolAtlanta.
Supt. G. W. Florence.
Austin AcademyAustin.
Principal J. Stanley Ford.
Bastrop Public SchoolBastrop.
Supt. W. A. Palmer.
Beeville High SchoolBeeville.
Supt. T. G. Arnold.
Bellville High SchoolBellville.
Supt. C. W. Feuge.
Bonham High SchoolBonham.
Supt. H. G. Reed. Principal J. L. Hannold.

Bowie High SchoolBowie.
Supt. Jas. T. Johnson, A. B. Principal A. E. Burnett.
Brackett High SchoolBrackettville.
Ex-Officio Supt. R. Stratton. Principal H. W. Goodwin.
Brenham Central SchoolBrenham.
Supt. E. W. Tarrant. Principal Miss Mary Rial.
Brownwood High SchoolBrownwood.
Supt. F. D. Shepard. Principal W. S. Fleming.
Bruce AcademyAthens.
Supt. W. H. Bruce.
Bryan High SchoolBryan.
Supt. T. S. Minter. Principal S. H. Hickman.
Cameron High SchoolCameron.
Supt. A. N. W. Smith. Principal John F. O'Shea.
Clarksville High SchoolClarksville.
Supt. W. C. James. Principal Miss Ella Watson.
Cleburne High School
Sunt. F. M. Fulton, Principal R. G. Hall.
Columbus High School
Principal J. F. Binkley
Comanche High School
Sunt W F Bogers Principal (A W Evans
Conneras Cove High School
Sunt I I. Hicks
Cornus Christi High School Cornus Christi
Supt C W Crossley Principal M Mangar
Convoll City School Convoll City
Sunt A J Same
Gupt. A. M. Sallis.
Supt P. C. Clault
Guero Dublio School
Supt These M Colston - Buincipal I C Cover
Supt. 1 nos. M. Colston. Frincipal L. G. Covey.
Dallas High School
Supt. J. L. Long. Principal wm. Lipscomb.
Del Rio Incorporated School
Supt. A. H. Horn.
Denison High SchoolDenison.
Supt. Wm. Gay. Principal N. N. Marsh.
Dublin High SchoolDublin.
Supt. W. J. Clay. Principal J. C. Harper.
Elgin High SchoolElgin.
Supt. J. M. Hale.
Ennis High SchoolEnnis.
Supt. H. F. Triplett. Principal S. A. Horton.
Evant High SchoolEvant.
Supt. C. C. Hayes.
Fort Worth High SchoolFort Worth.
Supt. M. G. Bates.
Gainesville High SchoolGainesville.
Supt. E. F. Comegys. Principal J. P. Glascow.

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Gatesville Public School......Gatesville. Supt. Dan E. Graves. Supt. J. H. Smith. Glen Rose High School......Glen Rose. Principal W. S. Mayes. Goldthwaite High School......Goldthwaite. Supt. L. F. Cowan. Graham High School.....Graham. Supt. J. N. Johnson. Principal H. Fowler. Granger High School......Granger. Supt. M. M. Wolf. Principal J. M. Maxwell. Greenville High School......Greenville. Supt. C. P. Hudson. Principal R. G. Horseley. Principal J. J. McCullom. Supt. T. R. Day. Hillsboro High School......Hillsboro. Supt. T. S. Uox. Principal Miss Addie Robert. Supt. F. M. Bralley. Principal W. A. Stuckey. Supt. W. H. Kimbrough. Principal S. D. Magers. Jacksboro High School.....Jacksboro. Supt. J. K. Webster. Principal Lewis Johnson. Karnes City High School......Karnes City. Supt. J. F. Carl. Kaufman Public School......Kaufman. Supt. C. J. Maxwell. Kenedy High School......Kenedy. Supt. A. N. McCollum. Kosse High School......Kosse. Supt. S. S. Munroe. Principal W. M. Pendergraft. Kyle High School.....Kyle. Supt. W. A. Laughlin. Lampasas High School.....Lampasas. Principal P. H. McGinnis. Ledbetter Public School.....Ledbetter. Supt. R. M. Gannon. Supt. E. C. Lewis. Liberty Normal and Business College.....Liberty. Supt. D. L. Hamilton. Lindale High School.....Lindale. Supt. O. P. Norman. Marshall High School......Marshall. Supt. W. H. Atteberry. Principal A. L. Plummer. Principal C. C. Hayes.

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McGregor High School
Supt. John S. Abbott. Principal R. Lee Abbott.
McKinney Public School McKinney.
Supt. J. C. Ryan, A. M. Principal S. H. Home.
Navasota High SchoolNavasota.
Supt. B. H. Brown. Principal Miss Elizabeth Blackshear.
New Braunfels Academy
Principal J. G. Neuss.
Orange High SchoolOrange.
Supt. R. R. Sebring, Principal J. W. Mills.
Paris High School
Supt. J. G. Wooten. Principal E. L. Dohoney, Jr.
Peacock's School for Boys
Supt. Wesley Peacock
Plano High School
Supt C P Hudson Principal W E McKnight
Port Lavaca High School
Sunt W T Smith Principal I W Smith
Book Springe High School Book
Principal D. C. Bravilia
Punce High School
Kunge inge School
Supt. F. Z. I. Jackson.
San Antonio Academy
Supt. Win. D. Sealey.
San Saba Public School
Supt. G. H. Hagan.
Sherman High School
Supt. P. W. Horn. Principal B. W. Glasgow.
State Institution for the BlindAustin.
Supt. E. P. Beeton, M. D.
Taylor High School
Supt. A. E. Hill, Principal W. M. Williams.
Temple High School
Supt. J. E. Blair. Principal J. F. Kimball.
Terrell High SchoolTerrell.
Supt. S. W. N. Marrs.
Texarkana High SchoolTexarkana.
Supt. W. Owens. Principal W. S. Staley.
Tivy High SchoolKerrville.
Supt. J. G. Toland. Principal A. C. Johnson.
Valley Mills High SchoolValley Mills.
Principal J. B. Layne.
Waco High SchoolWaco.
Supt. Chas. T. Alexander. Principal Jas. F. Lipscomb.
Waxahachie High SchoolWaxahachie.
Supt. W. S. Acker. Principal C. T. Taylor.
Weatherford High SchoolWeatherford.
Supt H. J. Fry. Principal T. W. Stanley.
Wichita Falls High SchoolWichita Falls.

Wortham High SchoolWortham.
Supt. J. B. Jones.
Yoakum High SchoolYoakum.
Supt. W. T. Brian. Principal J. H. Swann.
GROUP B.
Cooley School
Principal Miss E. Jones.
Gonzales Public SchoolGonzales.
Supt. T. L. Toland.
Hutto Independent SchoolHutto.
Supt. Miss Dora E. Gibson.
Whitewright Public School
Supt. T. E. Goff.
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DEGREES AND HONORS.

Conferred at Commencement, June, 1899.

DEGREE OF M. E.

C. E. Burgoon, E. W. Kerr.

DEGREE OF B. S. (in Agriculture).

S. E. Barnes, L. F. Bland, W. F. Dwyer, A. M. Sloss.

DEGREE OF B. S. (in Civil Engineering).

C. D. Evans, A. C. Love, E. L. Martin.

DEGREE OF B. S. (in Horticulture).

C. C. Harrison, E. J. Kyle, A. J. Poulter, W. H. Whisenant.

DEGREE OF B. S. (in Mechanical Engineering).

E. H. Astin, H. A. Brewer, T. O. Bullard, R. W. Campbell, R. C. Carson, R. W. Cousins, T. L. Horn, M. Lewis, Clayton Soles, C. T. Whittle.

HONOR GRADUATES-SESSION 1898-99.

Whisenant, Martin, Campbell.

DISTINGUISHED STUDENTS BY CLASSES.

First Class—Whisenant, Kyle, Martin. Second Class—Walden, Abrahams, Simpson, O. Third Class—Thomas, M.; Rust, Fountain, T. Fourth Class—Charske, Harrison, J.; Gillespie.

DISTINGUISHED STUDENTS BY DEPARTMENTS.

FIRST CLASS.

Agriculture—Barnes, Dwyer, Bland. Chemistry and Minerology—Whisenant, Kyle, Dwyer. Civil Engineering and Physics—Martin. Drawing—C. E. Course—Love, Evans. Drawing—M. E. Course—Campbell, Cousins. English and History—Martin, Love, Astin. Horticulture, Botany and Entomology—Whisenant, Kyle, Poulter. Mathematics—Martin, Campbell, Soles. Mechanical Engineering—Cousins, Bullard, Campbell. Veterinary Science—Whisenant, Kyle, Bland.

SECOND CLASS.

Agriculture-Winkler, Walden, Short.

Chemistry-Agr. and Hort. Courses-Walden, Kahn-C. E. and M. E. Courses Fitzgerald, Mosley.

Civil Engineering and Physics—Agr., Hort. and M. E. Courses—Abrahams, Bryan—C. E. Course—Simpson, O.; Hutson.

Drawing—C. E. Course—Simpson, O.; Hutson—M. E. Course, Bryan, Abrahams.

English and History-McGinins, Walden, Fitzgerald.

Horticulture, Botany and Entomology-Kahn, McGinnis, Rogers.

Mathematics-Simpson, O.; Kahn, Bryan.

Mechanical Engineering-Bryan, Myers, Faust.

Military Science-Coulter, Abrahams, Fitzgerald.

Veterinary Science-Kahn, Walden, Winkler.

THIRD CLASS.

Agriculture-Winkler, Garbade, Smith, T.

Civil Engineering and Physics-Thomas, M.; Rust, Fountain, T.

Drawing-C. E. and M. E. Courses-Thomas, M.; Leckie.

Drawing-Agr. and Hort. Courses-Smith, T.; Garbade.

English and History-Spiller, Fountain, T.; Thanheiser.

Mathematics-Rust, Spiller, Fountain, T.

Mechanical Engineering-Elrod, Thomas, M.; Atlee.

Veterinary Science-Harrison, W.; Taylor, Hooper.

FOURTH CLASS.

Agriculture-Harrison, J.; Lewis, Olds.

Drawing-Vidaurri, Meusebach-Bookkeeping, Jeffress, Neff.

English and History-Carpenter, Charske, Harris.

Mathematics-Charske, Brezelton, Carpenter.

Mechanical Engineering-Neff, Gillespie, Eastland.



GUARD MOUNTING.

BATTALION ORGANIZATION FOR 1899=1900.

J. C. EDMONDS, Lieut. Col. 4th Tex. Vol. Infantry, Commandant.

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CAPTAINS.

W. I. Bryan.	O. M. Simpson.	C. W. Lubrsen.	317						
			wm. walden.						
FIRST LIEUTENANTS.									
R. B. Boettcher.	H. Faust.	W. Buhler.	S. Simpson.						
	SECOND LI	EUTENANTS.							
O. W. Myers. H. Moseley.	B. G. Scherer. ´ J. D. Thrower.	B. P. Melgaard.	A. Winkler.						
	FIRST S	ERGEANTS.							
T. J. Pinson.	T. M. Smith.	Tom Atlee.	W. T. Garbade.						
	SERG	EANTS.							
R. M. Garnett, 1. C. M. Bryan, 8. John Tanner, 13. A. C. Moser, 18.	F. S. Haberzettle, 5.H. R. Cavitt, 7.L. E. Oliphant, 10.J. H. Simpson, 17.	M. Kleinsmith, 2. F. R. Holzman, 11. W. B. Grewes, 12. A. E. Story, 16.	 E. L. Kendall, 4. L. N. Taylor, 8. A. R. Leckie, 6. M. F. Thomas, 9. C. S. Clark, 14. R. W. Yarbrough, 15. 						
CORPORALS.									
H. Johnson, 5. Tom Davis, 7. J. W. Hayfort, 9. R. C. Kerr, 10. J. A. Radford. B. Youngblood.	 B. E. Nolen, 6. R. C. Zeiss, 8. J. A. Lewis, 11. M. M. Carpenter, 12 E. H. Hermann, 13. E. L. Markham. G. Walkard 	 F. W. Charske, 2. H. J. Meyer, 3. J. H. Hoffman, 4. 2.H. L. Blanchette. J. Hawkins. W. Sneed. M. W. Bausch 	J. H. Harris, 1. V. H. Foy. E. R. Rice. M. M. Wrenn. G. S. Barhaur.						

S. A. Rawlins. R. L. Alexander.

BAND.

F. H. Miller, Director.	H. Japhet, Drum Major.
T H. Clement, First Lieutenant.	R. Holcomb, Sergeant.
M. S. Kahn, Second Lieutenant.	A. J. Neff, Corporal.
T. C. Bittle, Second Lieutenant.	Jerome Harrison, Corporal.
S. R. Biering, Second Lieutenant.	

PRIVATES.

J. S. Monroe.	S. R. McConnico.	R. E. Eberspacher.	C. H. Potthast.
H. R. Raphael.	E. C. Schultz.	W. H. McDonald.	H. E. O'Rourke.

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COMMENCEMENT EXERCISES.

June 11, 12, 13, 1899.

PROGRAMME.

SUNDAY, JUNE 11.

9 a. m.-Inspection of Cadet Quarters by College Officers and visitors.

11 a. m.-Commencement Sermon by Rev. H. M. Whaling, of Austin.

8:30 p. m.-Address before the College Young Men's Christian Association, by Rev. J. M. Alexander, of Beeville.

MONDAY, JUNE 12.

9 to 11 a. m.—Inspection of Departments, including Exhibition of Live Stock, Farm Machinery, Apparatus and Appliances for Instruction; Display of Products of Students' Work; Students at Work in Shops.

10:30 a.m.-Joint Celebration of Literary Societies.

2 p. m.-Executive Meeting of the Alumni Association.

4:30 p. m.—Review of the Battalion by the Governor of the State, followed by Company Competition Drill; Individual Competition for Company Medals.

8:30 p. m.—Public Meeting of the Alumni Association.

COMMENCEMENT DAY.

TUESDAY, JUNE 13.

10 a. m.—Prayer.

Reading of Thesis by First Honor Graduate.

Valedictory Address-E. J. Kyle, of Kyle (elected by the First Class).

Response to the Valedictory-C. P. Rogers, of Kyle (elected by the Second Class).

Delivery of Medals.

Commencement Address by Hon. R. E. Prince, of Corsicana.

Conferring Degrees, by the President of the Board.

Announcement of those Distinguished in the Several Classes and Departments. Benediction.

5 to 5:30 p.m.—Drill by Ross Volunteers.

5:45 p. m.-Graduating Dress Parade.

GRADUATING CLASS.

With Subjects of Their Theses.

AGRICULTURAL COURSE.

S. E. Barnes, Brighton, "Steer Feeding in Texas."

L. F. Bland, College Station, "The Per Cent. of Red Corpuscles in Normal Blood."

W. F. Dwyer, San Marcos, and A. M. Sloss, Taylor, "Blood Supply of Head and Neck."

CIVIL ENGINEERING COURSE.

Chas. D. Evans, Austin, "Use of Cement in Masonry Construction."

A. C. Love, Franklin, and E. L. Martin, Kyle, "Comparative Test of Structural and Paving Brick."

J. B. Sterns, Houston, "The Evolution of the Modern Bridge."

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HORTICULTURAL COURSE.

C. C. Harrison, Bedias, and R. J. Poulter, Howard, "Pruning of the Grape." E. J. Kyle, Kyle, "The Importance of Forestry in Texas."

W. H. Whisenant, Kyle, "Climatic Influence on Growth and Composition of Sugar Beet in the United States.

MECHANICAL ENGINEERING COURSE.

E. H. Astin, Mumford, and C. T. Whittle, Sulphur Springs, "Design for Engine Room, Laundry and Ice Factory.

H. A. Brewer, Lytton Springs, and T. O. Bullard, Britton, "A Plan for Using Corsicana Oil at College Boiler Plant.

R. W. Campbell, Marshall, and R. W. Cousins, Austin, "Injectors."

R. C. Carson, College Station, "Design for Rope Gearing for Electric Light Plant at College Station."

T. L. Horn, Rhea Mills, and M. Lewis, McKinney, "Steam Heating Plant for College Station."

Clayton Soles, College Station, "Steam Boiler Construction."

ALUMNI.

ALUMNI ASSOCIATION.

(Organized 1886.)

ORGANIZATION FOR 1899-1900.

Geo. McCormick, Jr., '91, President	Houston.
W. A. Trenckmann, '78, Vice-President	Bellville.
C. H. Pescay, '85, Vice-President	Houston.
W. Wilson, '93, Vice-President	Port Lavaca.
R. L. Barclay, '98, Vice-President	Barclay.
P. S. Tilson, '88, Secretary and Treasurer	College Station.
B. C. Pittuck, '94, Member Executive Committee	College Station.
TO DE T	D

EXECUTIVE COMMITTEE.

Geo. McCormick, Jr., '91.

B. C. Pittuck, '94.

P. S. Tilson, '88.

On the following pages are given the names of all graduates of the College, with the courses of study pursued and the degrees obtained; their occupations and residences are also given as far as known. The alumni are requested to aid the President in making the roll as accurate as possible.

From the opening of the College in 1876 to its reorganization in 1880, the studies were elective, and led to appropriate degrees. In 1880 two graduates received the degree of Civil Engineer (C. E.).

From 1881 to 1887, there were two prescribed courses, the Agricultural and the Mechanical, but no degrees were given.

From 1888 to 1895, there were four prescribed courses, leading to the degrees of Bachelor of Scientific Agriculture (B. S. A.); Bachelor of Civil Engineering (B. C. E.); Bachelor of Scientific Horticulture (B. S. H.); Bachelor of Mechanical Engineering (B. M. E.).

Since 1895 the four prescribed courses have remained the same, but the degree in each has been Bachelor of Science (B. S.), the particular course being specified in the diploma.

Names of deceased alumni are marked (*).

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BATTALION INSPECTION.

ABBREVIATIONS.

COURSES OF STUDY:-A., Agriculture; M., Mechanical; H., Horticulture; C. E., Civil Engineering.

SUBJECTS:—Ch., Chemistry; E., English; F., French; G., German; Gr., Greek; L., Latin; Math., Mathematics; P., Physics; Philos., Philosophy; S., Spanish.

DEGREES :- B. S. A., Bachelor of Scientific Agriculture.

B. S. H., Bachelor of Scientific Horticulture.

B. M. E., Bachelor of Mechanical Engineering.

B. C. E., Bachelor of Civil Engineering.

B. S., Bachelor of Science.

M. S., Master of Science.

M. E., Mechanical Engineer.

C. E., Civil Engineer.

NAME.	Year	Subject or Course.	Degree.	OCCUPATION.	Residence.
Abbott, E. G Abbott, H. T	1894 1898	C. E H	B. C. E B. S.	lst Lieutenant U. S. V. Horticulturist	Manilla, P. I. Weatherford.
Adams, A. S Adams, F. L	1895 1895 1895	C. E A	B. C. E B. S. A M. S. '90	Ass't Civ. Eng. S. P.R'y Physician	Stafford.
Ahrenbeck, W. T Alexander, D. E	1891 1880	M. E. E.L. Math.	B. M. E	Theological student	Princeton, N. J.
Allen, L. E. Allen, W. H.	1887 1888	M A	B. S. A	Bookkeeper Physician	Marlin. Marlin.
Altgeld, E. J Amsler, L. D	$1892 \\ 1889 \\ 1889$	C. E M. E	B. C. E B. M. E	Bookkeeper Miller	San Antonio. Hempstead.
Anderson, W. D	1895	C. E A M	B. C. E B. S. A	Mng'r Ice Works	Waco. Waxahachie. Valley View
Armstrong, W. F	1882	M M. E	B. S.	Lumber Manufacturer Planter.	Chappel Hill. Mumford.
Backus, U Bailey, C. C	$ 1890 \\ 1892 $	M. E C. E	B. M. E B. C. E	Fuente Coal Co Merchant	Eagle Pass. Salado.
Baker, J. J	1879	F. E Philos. S.		Commercial Traveler	Homer, La.
Banks, A. L	1883	G	B. S. '92 M. S. '91	Assoc. Prof. Math	College Station.
Barclay, R. L Barnes, R. M	1898 1898	M. E M. E	B. S B. S	Supt. stock ranch Merchant	Barclay. Comanche.
Barnes, S. E Beasley, W. S	$1899 \\ 1892$	A C. E	B. S B. C. E	Student Merchant	Ames, Iowa. Lancaster.
Beyer, F. C *Biberstein, F. C Bittle P. P.	1892 1882	M. E M	B. M. E	Ginner	Marion.
Bittle, W. A Black, M.	1890 1894 1879	A Philos, E	B. S. A	Principal Pub. Schools Minister	Washington, La. Sterling City.
*Blakemore, T. E Bland, L. F	1880 1899	E. Math A	B. S	Student	College Station.
Bledsoe, F. F Bloor, A. W	$ 1880 \\ 1895 $	E. Gr A	B. S. A	Teacher	Manor.
Blount, S. L Bocock, J. H	1896 1894 1902	A A M	B. S. A P. M. F	Stock farmer	Crystal, Va.
*Brittingham, W.F., Jr.	1895 1888 1890	M C. E	B. M. E B. C. E.	Teacher	San Antonio.
Bretschneider, W Brewer, H. A	1898 1899	C. E M. E	B. S B. S	TrckDept,G.C.&S.F.Ry Planter	Dallas. Lytton Springs.
Brogdon, S Brown, T. H	$1898 \\ 1879 \\ 1000$	M. E S	B. S	Draughtsman Sugar planter	Beaumont. Houston.
Brown, W. H Bruce, E. L Bryan B F	1880 1894 1897	O. E O. E	C. E B. C. E	Lawyer	Navasota. Mineola. Boulder Cal
Buckman, C. A Buford, F. L	1889 1892	Ċ. E C. E	B. C. E B. C. E	Engineer Ass't Eng. G. B. & K.	Denison. Beaumont.
Buhler, C. M Buhler, C. W	1897 1892	M. E C. E	B. S B. C. E	C. Ry. Aud. Office S. P. Ry Chief Car Dept. S. A.	Victoria. San Antonio.
Bullard, T. O	1899	м Е	B. S	Tract Dept. G. U. & S. F. Rv.	Wolf City.
Burck, L. B	1889	C. E	B. C. E	Broker	Galveston.

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NAME.	Year	Subject or Course.	Degree.	OCCUPATION.	Residence.
					/ .
Burford, J. M	1882	M	•••••	Physician	Independence.
Burckhardt, U. L	1886	M	DMT	Bank cashier	Karnes City.
Burgoon, C. E	1990	м. Е	B. M. E	Ass't Prof. Mech'l Eng.	College Station.
Burleson R W	1805	ME	B M F	Deputy district clark	San Saha
Burney J W	1896	ME	B S.	Stockman	Kerrville
*Caldwell, J. C	1883	M			
Campbell, D	1879	S		Stockman	Sanderson.
Campbell, R. W	1899	M. E	B. S	Pay Master	Fort Worth.
Carson, A. B	1897	O. E	B. S	B. & B. Dept. H. E. &	Lufkin.
Carson I M	1996	A		W. T. Ky.	Fort Worth
Carson J W	1886	A	•••••	Planter	Pitts Bridge
Carson, R. C	1899	M. E	B. S	Carpenter	College Station.
Carter, W. T., Jr	1898	A	B. S	Stockman, La. Exp.Sta	Calhoun, La.
Caruthers, F	1885	A		Cash'r U. S. land office	Oklahoma, O. T.
Caven, G. P.	1897	A	B. S	Real Estate	Dallas.
Chamborg M L	10%0	M. E	в. 5	Caubion	Bryan.
Clark E	1805	A	BSA	Physician	Folian
Clayton, W. D.	1897	A	M. S	Foreman Exp. Farm	New Orleans.
Cobb, S. A	1896	C. E	B. S	Civ. Eng., St. L., Ok. &	Cliff, I. T.
				So. Ry.	
Cochran, E. G	1879	F. Philos	E	Physician	Greenville.
Cohn, S. L.	1897	C. E	B. S	Patent Attorney	Ennis.
Cottingham I A	1892	M. E	Б. М. Е	Div Fng S P By	Rockland
Cottingham W P	1892	CE	BCE	Draughtsman K C &	Kansas City Kan
ooronghung mit innin	1000	0	Di ol Linni	P. G. Ry.	Lunio oroj, Hun
Cotton, H	1897	C. E	B. S	Insurance	Ennis.
Couch, E	1897	M. E	B. S	Surveyor	Forreston.
Coulter, H. T.	1895	H	B. S. H	Physician	Rockdale.
Coursing P W	1890	M. E	B. M. E	Student	Gloveland O
Cox D W S	1802	C E	BCE	Oil mill clerk	Temple
Cravens, J. R.	1882	M	В. О. Д.	State Agt. and adjust-	Dallas.
				er Am. Cent. Ins. Co.	
Crow, W. E	1898	H	B. S	Medical student	New Orleans.
Cunningham, A	1879	L. Gr. G		Route Agt. D. F. W. Ry.	Denver, Colo.
		P math. Oh.			
Cushing, E. B.	1880	M	C. E. '99	General Sunt. H. E. &	Houston.
		•		W. T. Ry.	
Cushing, D	1891	M. E	B. M. E	Pharmacist	Nashville, Tenn.
Dashiell, W. R	1891	C. E	B. C. E	Physician	San Antonio.
Davis, J. N.	1885	M		Supt. Pub. Schools	HICO.
Dayev W L	1804	O E	BOE	Dentist	Hillshoro
Dietert, R. H.	1888	M. E	B. M. E	Supt. Repair Dep. H.	Houston.
				& T. C. Shops.	
Donaldson, C. B., Jr	1898	M. E	B. S		Kyle.
Downs, J. R.	1879	L. G		Lawyer	Waco.
Driedale W F	1879	L. Gr. G	DS	Banker	Flutonia
Dudley, F. E.	1885	M	D. D	1 Hysician	Flatonia.
*Dugan, G. H	1881				
Duggan, A. P	1895	C. E	B. C. E	Teller Col. Abstract'g	Cripple Creek, Col
D	-		7 9	Co.	~ ~
Edward I E	1899	A	в. ѕ	Manahara	San Marcos.
Eberspacher G	1885	ME	BS	Machinist S P By	Houston
zberspacher, d	1000	10. 15	D . D	Shops.	Houston.
Eldridge, H. M	1897	O. E	B. S	Clerk	Brenham.
Ellis, B. V	1892	A	B. S. A	Physician	Paris.
Ellis, Fort O	1894	С. Е	в. с. е	Mn'g'r Com's'y So.	Millview, Fla.
Evans (1 D	1000	D F	DG	States Lumber Co.	Poelcland
Farmer, A. G	1895	ME	BME	Stockman	Junction City
Faust, W	1897	C. E.	B. S.	Asst. cashier bank	New Braunfels.
Fearhake, J. D	1889	C. E	B. C. E	Lawyer	Galveston.
Ferguson, A. M	1894	H	B. S. H	Ass't. Prof. Hort	College Station.
Field II V	1.001		M. S. '96	D	D. 11.
Finney C B	1891	A.F	D. D. A	Uivil engineer	C P Diag May
Fitzgerald, A. H.	189	A	B. S. A.	Druggist	Gonzales.
Fitzhugh, E. E	188	E. L. Math		Insurance	Waco.
Floyd, J. F., Jr	189:	M. E	B. M. E	Merchant	Texarkana, Ark
Flynt, H. C	1890	A	B. S. A	Stockman	Waelder.
Fordtran E	1879	L. Gr. G		Bank cashier	Waco.
Fowler, E. G. R.	180/	C. E	B. C. E	Captain U.S. V	Manilla P T

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NAME.	Year	Subject or Course.	Degree.	OCCUPATION.	Residence.
English T II	1007			T	
Freeman, J. H	1887	M F	BS	Insurance agent	Austin.
Fuller, T. A.	1879	G	D. G	Lawver	San Antonio.
Giesecke, F. E	1886	M	M. E. '92	Prof. Drawing	College Station.
Giesecke, G	1884	M		Prop. flour mills	San Antonio.
Giesecke, W. E	1892	M. E	B. M. E	Civil engineer	Torreon, Mex.
Gilport, J	1894	A M E	B. S. A	Linomon El Light Co	Austin.
Glover W F H	1899	A E	B S	Farmer	Vemussee S C
Goldberg, I. !	1896	Ĥ	B. S	Merchant	Jefferson.
*Graves, C. S	1882	M			
Gray, J. L.	1884	M		Civil engineer	Con Autoute
Greenwood F J	1898	C E	R S	Civ Engineer	Stoneham
Gruene, E	1887	M		Teacher	New Braunfels.
Grupe, G	1892	M. E	B. M. E	Supt. Steam Plant	College Station.
Gurley, D. R., Jr	1892	C. E	B. C. E	Superintendent farm	Waco.
Hanschke, K., Jr	1890	м. Е	в. м. е	Texas	san Antonio.
*Hare, H. C	1887	M		L'ORUS.	
Hare, S. A	1882	M		Lawyer, County Att'y.	Sherman.
Harrison, C. C	1899	<u>H</u>	B. S	Student	College Station.
Harrison, w. A	1898	н	B. S	Fountain Co	Danas.
Hawkins, J. W	1893	A	B. S. A	Lawyer	Hallettsville.
Haden, J. H	1879	S		Merchant	Blooming Grove.
Henderson, H	1891	A	B. S. A	Cotton buyer	Paris.
Hereford, J. B.	1887	M	RCF	Special insurance ag t.	Danas.
Hildebrandt, A. M.	1896	Н.	B. S.	Editor	San Antonio.
211140,7141140,71171111111	2000		M. S. '98.		
Hoffman, F. C	1888	M. E	B. M. E	Jeweler	New Braunfels.
Homan, A. C	1898	M. E	B.S.	Salesman	San Angelo.
Hopkins, S. H	1890	A	B. S. A	Lawyer	Gonzales.
Horn, T. L	1899	M. E	B. S	Tract Dept. G. C. & S.	Wolf City.
T . 1 0	100-			F. Ry.	D. J. C. J
Houston F	1801	C F	BCE	Foreman S P Ry	Houston
Howell, J. W.	1894	A	B. S. A	Merchant	Bryan.
Howell, R. W	1896	A	B. S	Merchant	Bryan.
Hudgins, F. D	1897	C. E	B. S	Civil Engineer A. & C.	Goodland, Ark.
Hutchinson, E. W	1889	OE	BUE	Merchant	Houston.
Hutchinson, O. D	1893	Ă	B. S. A	Merchant	Decatur.
Hutchinson, W. F	1897	U. E	B. S	American Cotton Co	Houston.
Hutson, H. L	1896	м. Е	B. S	Ass't foreman Worth-	Brooklyn, N. Y.
				Works.	
Hutson, W. F	1895	A	B. S. A	Texas Cattle Fever	College Station.
*I D M	1000	T Co	ł	Exp.	
*Jack, D. M	1919	Philos E			
Jahn, F. C	1894	H	B. S. H	Horticulturist	Gonzales.
Japhet, G	1894	M. E	B. M. E	Merchant	Houston.
Jonas, E. C	1894	C. E	в. с. е	Dopt S A & A D By	San Antonio.
Jonas, H. F	1888	C. E	B. C. E	Chief draughtsman S.	Houston.
				P. Ry., B. & B. Div.	
*Jones, W. T	1889	C. E	B. C. E	Lamron	Waaa
Josev. N. L	1888	A	B. S. A	Manager San Luis Po-	San Antonio.
				_tosi Electrical Co.	
Kell, E	1894	M. E	B. M. E	Electrical engineer	New Orleans, La.
Kennedy, U	1806	ME	B S M F	Asst Prof Mch'l Eng	College Station
Kerr, E. W	1000		'99.	nast. e for. men i big	conege station.
Kerr, J. G	1898	A	B. S	Asst. Prof. Agr'l. A. &	Stillwater, Ok. T.
Knolle A P	1990	CE		M. U. Physician	Ellinger
Knolle, B. E.	1884	M		Physician	Industry.
Knolle, E. R	1887	M		Physician	Wesley.
Knolle, O. J	1897	A	B. S	Physician	Industry.
Knolle, W. H.	1888	C. E	B. C. E	Chiof Eng C P - V	New Orleans.
корке, L. J	1880	U. E	U. E	C. Ry.	Sabine rass.
Kuehne, J. F	1889	M. E	B. M. E	Mn'f'g and Com. Agt	Mexico City.
Kyle, A. J	1897	A	B. S	Stockman	Bovina.
Kyle, E. J.	1899	H	B. S	Foreman of farm	College Station
ALVIG. LL. Uninternet	11020	4	1	reoroman or rarm	COLOGO SUGUIOII.

Agricultural and Mechanical College of Texas.

NAME.	Year	Subject or Course.	Degree.	OCCUPATION.	Residence.
Kyle, J. A	1890	A	B. S. A	Physician	Houston.
Kyle, T. M	1893	M. E	B. M. E	Stock farmer	Nursery.
Law, F. M	1895	A	B. S. A	Bank bookkeeper	Bryan.
Leggett, W. K	1889	C. E	B. C. E	Special ag't Fireman's	Columbus, O.
Lewis F	1894	CE	B. C. E.	Civil engineer	Durant I T
Lewis, L. L.	1893	A	B. S. A	Prof. Vet'nary Science,	Stillwater, Ok. T.
	1000		M. S. '94.	A. & M. College.	
Lewis, M	1899	M. E	B. S	Physician	Ames, Iowa.
Littleichn R G	1891	CE	B.C.E	Insurance agent	Fort Worth
Love, A. C.	1899	C. E	B. S	Asst. Prof. Drawing	College Station.
Luckett, W. H	1891	A	B. S. A	Physician	New York.
*Luckett. W. M	1894	M. E	B. M. E	Traveling calesman	Now Verla
Madry, K	1884	O. E	D. U. E	Teacher	San Antonio
Mackenson, L.	1885	M		Teacher	San Antonio.
Martin, E. L	1899	O. E	B. S	Eng. Dep. S. P. Ry	Rockland.
Martin, H. B	1895	M. E	B. M. E	Civil engineer	Marlin.
Martin, W. C	1898	H	B.S.	Civil engineer	College Station.
Mead J	1897	C E	B S	Civil engineer G C &	Milano
220004, 0				S. F. Ry.	
Merrit, W. B.	1889	A	B. S. A		McKinney.
Merriwether, W. T	1891	U. E	B. C E	City engineen	San Antonio.
Middlebrook E S	1889	C E	B C E	Lawyer	Columbus
Middlebrook, R. M	1891	М. Е	B. M. E	Lawyer	Columbus.
Miley, J. H.	1896	C. E	B. S	Lawyer	Bastrop.
Miller, C. S.	1880	E. L		Real estate agent	Ballinger.
Mitchell A	1885	C F	BCE	Prine public school	Bellville.
Mitchell, W. H	1893	0. E	B. C. E	Druggist	Holland.
Montgomery, F. L	1889	A	B. S. A	Lawyer	Sherman.
Moore, R	1892	A	B. S. A		Linden.
Moore, T. E.	1892	A	B. S. A	Civil engineer	San Antonio.
Morrill, C. R.	1891	C. E	B. C. E	Roadmaster, S. P. Ry.	Lafavette La
*Mosely, W. E	1883	M			Laraj ceto, Ha.
Moursund, A. F	1895	Q. E	B. C. E	Ass't Div. Eng. S.P.Ry.	Algiers, La.
Moursund, E. M	1897	C. E	B. S	Physician	Fredericksburg.
Mullins, E. Y.	1879	L. G	D. S. A	President S. B. T. S.	Louisville, Ky.
McCormick, Geo., Jr	1891	M. E	B. M. E	Chief draughtsman,	Houston.
Mannaa	1000			motive dept. S.P. Ry.	
McDonald H F	1880	M	BMF	City Engineer	Warrington, Fla.
McMillan, M.	1895	M	B. M. E	Asst. Surgeon U. S. A.	Puerto Principe.
McNair. H. J	1887	M		Civ. eng. T. N. Ry. Co	Anderson. [Cuba.
McNeill, J. C	1896	O. E	B. S	Surveyor	Brazoria.
McQueen, T. B	1884	M	RSA	Bookkeeper	Marlin.
Ness. H.	1889	Ĥ	B. S	Professor Botany.	College Station.
Newton, G	1898	Â	B. S	Bookkeeper	Milano.
Nichols, J. F	1889	H	B. S	Lawyer	Greenville.
Nichols, J. R.	1889	A	B. S. A	Ass't surg. ins. asylum	Terrell.
Michols, W. D	1001	0. 19	D. O. E	Light and Power Co.	Dallas.
O'Bar, J. H	1893	A	B. S. A	Insurance agent	LaGrange.
Oglesby, G. B	1894	O. E	B. C. E	Teacher	Cedar Mills.
Overshiper E M	1892	C. E	B. C. E	Law student U of T	Laredo.
Park, C. M.	1896	C. E.	B. S	Sec'y and bus man-	Dallas
,	2000		2. 2	ager Southern Merc-	200000
Deserve D. G	1000	**		ury Pub. Co.	••• ·
Parsons, B. C	1893	H: M	в. s. н	Prop. livery stable	Kerrville.
Pearson, H. A.	1893	C. E	B. C. E	Planter.	Trov.
Pennington, R. E	1884	A		Lawyer.	Brenham.
Perlitz, W. E.	1893	O. E	B. C. E	Merchant	Schulenburg.
Peters F	1880	M	BMF	Draughtsman S P By	Houston.
Pfeuffer, F. L	1885	M		DIAUGHISHAL S. F. NY.	New Braunfels
Pfeuffer, W. O. R	1888	A	B. S. A	Physician	New Braunfels.
Pfeuffer, U. S.	1891	0. E	B. C. E	Lumber merchant	New Braunfels.
Pullpott, W. B	1884	м	M. S. '95	Assoc. Prof. Eng. and	College Station.
Pittuck, B. O	1894	Α	B. S. A	Ag'c'l'st Tey Eyn Sta	College Station
Polk, W. A.	1895	C. E	B. C. E	Civ. Eng. Dept. G., C.	Temple.
Doulton A T	1000	т	D G	& S. F. Ry.	-
Radford J S	1899	븝	в. S в s в	Flanter.	Howard.
	11090		D. D. D	Lawy 01	nousion.

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NAME.	Yeàr	Subject or Course.	Degree.	OCCUPATION.	Residence.
Ragsdale, J. W Ratchford, W. P.	1890 1892	A M. E.	B. S. A B. M. E	Lawyer	Halletsville. Fort Stockton
Rawlins, H. E	1898	M. E	B. S	Eng. Dep. U. S. A	Havana, Cuba.
Reichardt, F. A	1879	G		Merchant	Houston.
Rennert, F	1888	A	B. S. A	Bookkeeper	San Antonio.
Rhodes, S. E	1896	M E	B. S	Bookkeeper	Bryan.
Rice, D.	1882	M	0 0 F	Public Weigher	Houston.
Rosch G W	1669	M. E	в. С. Е	Touchor	Fl Paso
Zobson, C. G	1898	H	R S	Custom Office	Galveston
Roderiquez, D	1896	Ũ. E	B. S		C. P. Diaz, Mex.
Rogan, Chas	1879	G. E.Ch. P.		Land Commissioner	Austin.
Rogers, B. F	1889	C. E	B. C. E	Merchant	Jefferson.
Rogers, G. A	1887	M		Merchant	Longview.
Kogers, K. A	1919	Gr. E. Phil '79	••••••	mission merchant.	Garveston.
Rollins, C. W	1893	Ċ, E	B. C. E	Civ. Eng. Dept., T. & N. O. Ry.	Rockland.
Rollins, H. M Rose, W. F.	1897 1894	M. E M. E	B. S B. M. E	Supt. State buildings Draughtsman S. A. & A. P. Ry.	Prairie View. San Antonio.
Rosenberg, F. C	1884	M		Lawyer	Austin.
Rosenthal, H. H	1890	U. E	D. S D. G. A	Manager Brick Plant	Okianoma, U. T.
10035, F. Iu	1094	A	D. D. A	Asylum	1 030111.
Ross, J. G	1894	C. E	B. C. E	Real estate agent	Cold Springs.
Rountree, T. D	1898	C. E	B. S	Med. student, U. of Va.	Charlottsville, V.
Rowell, T. D	1885	A	5 6 5	Lawyer, county judge.	Jefferson.
Rudasili, W. S	1890	С. Е	B. C. E	Stockman	Sherman.
Sauvignet E H	1892	Δ	B S A	Physician	Laredo
Sawver, R.	1882	M	D. C. R	Lumber merchant	Clarendon.
Scherer, C. L	1896	C. E	B. S	Civil Engineer	Anahuac.
Scherer, W. A	1898	H	B. S	Stockman	Anahuac.
Schmidt, C. L	1890	M. E	B. M. E	Machinist M. N. Ry	Laredo.
Schumacher H C	1809	U. E	B. C. E	Bunker	Louisa, La.
Sewell, M. S.	1894	C E	B. C. E.	Clerk	McGregor.
Shires, F. N	1897	M. E	B. S	Civ. eng., bridge const.	Caldwell.
	1007		D (1	G.C. & S. F. Ry.	TTomoto
Shirley A T	1001	M. E	в. s	Eng. C. E. L. & P. Co P. P. Act. and Michint	Houston.
*Shirley M W	1880	ME	BME	K.K. Agt. and M Ch IIt.	Anna.
Shirley, W. M.	1889	C. E	B. C. E	County surveyor	McKinney.
*Shirley. Z. M	1888	M. E	B. M. E		
Short, J. L	1893	A	B. S. A	Physician	Houston.
Sleeper, W. M	1879	L.Gr.G. M.	D G	Lawyer	Waco.
Sloss, A. M	1805	A	B. 5 B M F	Master Mech Gal B'g	Galveston
Smith, n. C.a.	1000	11. <u>1</u>	D. 14. 13	and Twine Fact'y.	Gaiveston.
Smith, E. J Smith, T. L	$1888 \\ 1898$	A C. E	B. S. A B. S	Lawyer. Eng. Dept., G. C. &	Denison. Galveston.
	1001	N T	DWE	S. F. Ry.	11
Smither, K	1894	M. E	В. М. Е	Clerk	Huntsville.
Sneed, G. L	1898	Ă	B. S.	Clerk	McKinney
Soles, C. B	1899	M. E	B. S	Assistant engineer	College Station.
*Spann, E. W	1885	M			
Speer, R. H.	1894	C. E	B. C. E	Stockman	Quanah.
Sternenberg, E. H	1897	U. E	B. S	Ulvil engineer	Industry Stowart's Mill
Swain M S	1988	M. E	B. M. E B. S	Lawyer	Austin
Talbot. A	1882	M	B . 6	Planter	Calvert.
Tilson, M. D	1886	M		Manufacturer and	Texarkana.
Tilson, P. S	1889	A	B. S. A M. S. '94	Assoc.Prof.Chemistry.	College Station.
Todd, A. M	1894	C, E	B. Č. E	U.S. levee inspector	Greenville, Miss.
Todd, C. C	1897	H	B. S	1st Lieut. U. S. A	San Antonio.
Tracy, H. H	1898	C. E	B. S	Printer. Williams-	Dallas.
Tronglyman W A	1979	G		Fditor	Bollvillo
Trenekman, w. A	1010	F. S., Phil.,		Editor	Denvine.
		E., Ch., P.,			
*Tuller W L	1809	79 M			
Ueckert, H. H.	1897	C. E	B S	Draughtsman S. P. Rv.	Houston.
VanZandt, K. M	1879	G		Civil Engineer	City of Mexico.
VanZandt, R. L	1890	C.E	B. C. E	Bank bookkeeper	Fort Worth.
Vinther, F	1897	M. E	B. S	Machinist	Pine Bluff, Ark.
Watkins R C	1890	C E	B. C. E.	Asst Eng S P Rv	Algiers, La.

NAME.	Year	Subject or Course.	Degree.	OCCUPATION.	Residence.
Watkins, W. A	1892	C. E	B. C. E	Lawyer	Kaufman.
Watson, W. D.	1893	M A	B. S. A	Dairyman	Houston.
Wellhausen, C. B	1891	M. E	B. M. E	Bank cashier	Shiner.
*Wesson, J. M	1883	M	D. S. A	Agont & P. P.	Gliddon
Whelan, J. J.	1891	M. E	B. M. E	Machinist, H. & T. C.	Houston.
Wheat, N	1897	C. E	B. S	Civil engineer G., C. & S. F. Ry.	Gainesville.
Whisenant, W. H Whitaker, W	1899 1885	H M	B. S	Student Lumber manufacturer	Chicago, Ill. Texarkana.
White, G. R. Whitener, H. L.	1895 1891	C. E A	B. C. E B. S. A	Stockman Physician	Brady. St. Louis, Mo.
Whitlock, E. H	1886	M	~~~~	Expert mch'l engineer National Carbon Co.	Cleveland, O.
Whittle, O. T Wight, A. T	1899 1895	м. е С. Е	B. S. B. C. E	Assayer Merchant	Roxton.
Wilson W	1897	О. Е	B. S	& T. C. Ry.	Austin.
Wipprecht, W	1893	O. E	B.S.A., '85.	Manager Compress Co,	Bryan.
Wood W M	1890	С. Б	B.C.F.	L. S. W. Ry.	Washington D.C.
Wright E	1809	C E	BOE	Writer Co.	Paris
Wright, H. L	1886	M	D. C. B	Supt. Palestine Sewer	Palestine.
Woodward, W. F Wurzbach, W. A	1886 1888	M. C. E	B. C. E	Stockman Lawyer	Antelope. San Antonio.



BATTALION REVIEW.

This College owes its origin to

An Act Donating Public Lands to the Several States and Territories which may Provide Colleges for the Benefit of Agriculture and the Mechanic Arts.

Section 1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be granted to the several States, for the purpose hereinafter mentioned, an amount of public land, to be apportioned to each State, a quantity equal to thirty thousand acres for each Senator and Representative in Congress to which the State are respectively entitled by the apportionment under the census of eighteen hundred and sixty; provided, that no mineral land shall be selected or purchased under the provisions of this act.

Sec. 2. And be it further enacted, That the land aforesaid, after being surveyed, shall be apportioned to the several States in sections or subdivisions of sections not less than one-quarter of a section; and whenever there are public lands in a State subject to sale at private entry at one dollar and twenty-five cents per acre, the quantity to which said States shall be entitled shall be selected from such lands within the limits of such State; and the Secretary of the Interior is hereby directed to issue to each of the States in which there is not the quantity of public lands subject to sale at private entry at one dollar and twenty-five cents per acre, to which said State may be entitled under the provisions of this act, land scrip, to the amount in acres for the deficiency of its distributive share; said scrip to be sold by said States and the proceeds applied to the uses and purposes prescribed in this act, and for no other use or purpose whatsoever; provided, that in no case shall any State to which land scrip may thus be issued be allowed to locate the same within the limits of any other State, or of any Territory of the United States, but their assignees may thus locate said land scrip upon any of the unappropriated lands of the United States subject to sale at private entry at one dollar and twenty-five cents or less per acre; and, provided further, that no more than one million acres shall be located by such assignees in any one of the States; and, provided further, that no such location shall be made before one year from the passage of this act.

Sec. 3. And be it further enacted, That all the expenses of management, superintendence and taxes from date of selection of said lands previous to their sales, and all expenses incurred in the management and disbursement of the moneys which may be received therefrom, shall be paid by the States to which they may • belong, out of the treasury of said States, so that the entire proceeds of the sale of said lands shall be applied without any diminution whatever to the purposes hereinafter mentioned.

Sec. 4. And be it further enacted, That all moneys derived from the sale of the lands aforesaid, by the States to which the lands are apportioned, and from the sale of land scrip hereinbefore provided for, shall be invested in stocks of the United States, or of the States, or some other safe stocks, yielding not less than 5

per centum upon the par value of said stocks, and that the moneys so invested shall constitute a perpetual fund, the capital of which shall remain forever undiminished (except so far as may be provided in section 5 of this act), and the interest of which shall be inviolably appropriated by each State which may take and claim the benefit of this act, to the endowment, support and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the Legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life.

Sec. 5. And be it further enacted, That the grant of land and land scrip hereby authorized shall be made on the following conditions, to which, as well as to the provisions hereinbefore contained, the previous assent of the several States shall be signified by legislative acts:

First. If any portion of the fund invested, as provided by the foregoing section, or any portion of the interest thereon, shall, by any action or contingency, be diminished or lost, it shall be replaced by the State to which it belongs, so that the capital of the fund may remain undiminished, and the annual increase shall be regularly applied without diminution to the purposes mentioned in the fourth section of this act, except that a sum not exceeding 10 per centum upon the amount received by any State under the provisions of this act may be expended for the purchase of lands for sites or experimental farms, wherever authorized by the respective Legislatures of said States.

Second. No portion of said fund, nor the interest thereon, shall be applied directly or indirectly, under any pretense whatever, to the purchase, erection, preservation or repair of any building or buildings.

Third. Any State which may take and claim the benefit of the provisions of this act shall provide, within five years, at least not less than one college, as described in the fourth section of this act, or the grant to such State shall cease, and said State shall be bound to pay to the United States the amount received of any lands previously sold, and that the title to purchasers under the State shall be valid.

Fourth. An annual report shall be made regarding the progress of each college, recording any improvements and experiments made, with their cost and results, and such other matters, including State industrial and economical statistics, as may be supposed useful, one copy of which shall be transmitted by mail free by each to all the other colleges which may be endowed under the provisions of this act, and also one copy to the Secretary of the Interior.

Fifth. When lands shall be selected from those which have been raised to double the minimum price, in consequence of railroad grants, they shall be computed to the State at the maximum price, and the number of acres proportionately diminished.

• 'Sixth. No State, while in a condition of rebellion or insurrection against the government of the United States shall be entitled to the benefits of this act.

Seventh. No State shall be entitled to the benefits of this act unelss it shall . express its acceptance thereof by its Legislature within two years from the date of its approval by the President.

Sec. 6. And be it further enacted; That land scrip issued under the provisions of this act shall not be subject to location until after the first day of January, one thousand eight hundred and sixty-three. Sec. 7. And be it further enacted, That land officers shall receive the same fees for locating land scrip issued under the provisions of this act as is now allowed for the location of military bounty land warrants under existing laws; provided, their minimum compensation shall not be thereby increased.

Sec. 8. And be it further enacted, That the governors of the several States to which scrip shall be issued under this act shall be required to report annually to Congress all sales made of such scrip until the whole shall be disposed of, the amount received for the same, and what appropriation has been made of the proceeds.

Approved July 2, 1862.

And to the following amendment:

An Act to amend the fifth section of an act entitled "An Act donating Public Lands to the several States and Territories which may provide Colleges for the benefit of Agriculture and the Mechanic Arts," approved July 2, eighteen hundred and sixty-two, so as to extend the time within which the provisions of said act shall be accepted and such colleges established.

1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the time in which the several States may comply with the provisions of the Act of July 2, eighteen hundred and sixty-two, entitled "An Act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," is hereby extended so that the acceptance of the benefits of the said act may be expressed within three years from the passage of this act, and the colleges required by the said act may be provided within five years from the date of filing of such acceptance with the Commissioner of the General Land Office; provided, that when any Territory shall become a State and be admitted into the Union, such new State shall be entitled to the benefits of said Act of July 2, eighteen hundred and sixty-two, by expressing acceptance therein required within three years from the date of its admission into the Union, and providing the college or colleges within five years of such acceptance, as prescribed in this act; provided further, that any State that has heretofore expressed its acceptance of the act herein referred to shall have the period of five years within which to provide at least one college, as described in the fourth section of this act, after the time for providing said college, according to the Act of July 2, eighteen hundred and sixtytwo, shall have expired.

Approved July 23, 1865.

By joint resolution, approved November 1, 1871, the Legislature of Texas formally accepted the provisions of the congressional acts, and the State received, from the general government, scrip for 180,000 acres of public land. This was sold for \$174,000, which sum was invested in Texas 7 per cent. gold frontier defense bonds. At the time of the opening of the College there was an addition to the fund from accrued interest of \$35,000, which was invested in 6 per cent. State bonds. The income from these sources is \$14,280.

The Legislature fulfilled its obligations by passing "An Act to provide

for the establishment of an Agricultural and Mechanical College of Texas," approved April 17, 1871, and by making liberal successive appropriations (aggregating \$187,000) for the buildings and equipments necessary for putting the institution in operation. And the county of Brazos secured its location within its limits by donating to the State the present College farm, a tract of 2416 acres, five miles south of the town of Bryan.

Finally, the Constitution of 1876, Article VII, provided; "Section 3. The Agricultural and Mechanical College of Texas, established by the act of the Legislature, passed April 17, 1871, located in the county of Brazos, is hereby made and constituted a branch of the University of Texas, for instruction in agriculture, the mechanic arts, and the natural sciences connected therewith."

'The College was formally opened for the reception of students October 4, 1876.

The Constitution of Texas provides that taxes may be raised for the maintenance and support of the College.

The following act of the Legislature of Texas is now the law governing the College:

An Act regulating the government of the Agricultural and Mechanical College of Texas, as approved March 9, 1875, and amended March 30, 1881.

I. The Board of Directors of said College shall consist of five members.

II. The Directors provided for in the preceding article shall be appointed by the Governor, to be selected from the different pontions of the State, and shall hold office for six years or during good behavior, and until their successors are qualified.

III. The Governor shall be authorized to call said Board together after their appointment, and said Board shall at their first meeting elect a president of the Board, who shall thereafter be authorized to call said Board together for the transaction of business whenever he deems it expedient, and a majority of said Board shall constitute a quorum for the transaction of business.

IV. Each of said Directors shall receive their actual expenses incurred in attending the meetings of the Board, to be paid out of the interest of the University fund, on accounts certified by them respectively to be correct, and approved by the Governor.

V. The Secretary of State shall forward a certificate to each Director within ten days after his appointment, notifying him of the fact of such appointment; and should any Director so appointed and notified fail for ten days to give notice to the Governor of his acceptance, his appointment shall be deemed void and his place filled as in case of vacancy.

VI. The Board of Directors shall appoint the President and Professors of the College, and such other officers as they may think proper to put the College into successful operation, and shall make such by-laws, rules and regulations for its government as they deem meet and proper for that purpose, and shall regulate the course of study, rates of tuition, manner of performing labor, and the kind of labor to be performed by the students, together with the course of discipline necessary to enforce the faithful discharge of all the duties of all officers, professors and

students, and shall have same printed and circulated for the benefit of the people of the State and officers and students of the College.

VII. The Board of Directors shall elect a Secretary of the Board, whose duty it shall be to keep in a well-bound book all the proceedings had by this Board, and he shall be allowed by said Board such compensation as they may allow; provided, that the same does not exceed five hundred dollars per annum.

VIII. The interest on the amount of one hundred and seventy-four thousand dollars in 7 per cent. gold interest-bearing frontier bonds of Texas, now in the State treasury to the credit of the College, being set apart for that purpose, shall be drawn by the Board of Directors on vouchers audited by the Board, or approved by the Governor and attested by the Secretary, and on filing such vouchers the Comptroller shall draw his warrant on the State treasury for the same, from time to time, as they may be needed, to pay the directors, officers and professors of the College.

The following joint resolution was passed by the Sixteenth Legislature:

Joint resolution authorizing the State Librarian to turn over to the Agricultural and Mechanical College of Texas specimens of minerals and other geological specimens in the geological department of said library in certain cases, and copies of all public documents of the State, published for distribution, and all apparatus belonging to the old geological survey.

Section 1. Be it resolved by the Legislature of the State of Texas: That the State Librarian be and he is hereby authorized and required to turn over to the Agricultural and Mechanical College of Texas the duplicate specimens in the hands of the agents of the International Railroad Company of all minerals and other geological specimens in the geological department in said library, and copies of all public documents of the State published for distribution, and apparatus belonging to the old geological survey, for the use and benefit of said College.

Sec. 2. That said librarian be required to take an inventory of all specimens thus turned over to said College by him, and file the same in his office.

Sec. 3. The near approach of the close of this session of the Legislature, and the pressing need of geological specimens at said College for the better instruction of its pupils, creates an imperative public necessity for the suspension of the constitutional rule requiring this resolution to be read on three several days; therefore ,be it further resolved, that the constitutional rule be suspended and this resolution take effect and be in force from and after its passage.

Approved July 9, A. D. 1879.

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An Act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts, established under the provisions of an Act of Congress, approved July second, eighteen hundred and sixty-two.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be, and hereby is, annually appropriated out of any money in the treasury not otherwise appropriated, arising from the sale of public lands, to be paid as hereinafter provided, to each State and Territory, for the more complete endowment and maintenance of colleges for the benefit of agriculture and the mechanic arts, now established, or which may be hereafter established, in accordance with an Act of Congress, approved July second, eighteen hundred and sixty-two, the sum of fifteen thousand dollars for

the year ending June thirtieth, eighteen hundred and ninety, and an annual increase of the amount of such appropriation thereafter for ten years, by an additional sum of one thousand dollars over the preceding year; and the annual amount to be paid thereafter to each State and Territory shall be twenty-five thousand dollars, to be applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematics, physical, natural, and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction; provided, that no money shall be paid out under this act to any State or Territory for the support or maintenance of a college where a distinction of race or color is made in the admission of students, but the establishment and maintenance of such colleges separately for white and colored students shall be held to be a compliance with the provisions of this act, if the funds received in such State or Territory be equitably divided, as hereinafter set forth; provided, that in any State in which there has been one college established in pursuance of the Act of July second, eighteen hundred and sixty-two, and also in which an educational institution of like character has been established, or may be hereafter established, and is now aided by such State from its own revenue, for the education of colored students in agriculture and the mechanic arts, however named or styled, or whether or not it has received money heretofore under the act to which this is an amndment, the Legislature of such State may propose and report to the Secretary of the Interior a just and equitable division of the fund to be received under this act, between one college for white students, and one institution for colored students, established as aforesaid, which shall be divided into two parts, and paid accordingly; and thereupon such institution for colored students shall be entitled to the benefits of this act, and subject to its provisions, as much as it would have been if it had been included under the Act of eighteen hundred and sixty-two; and the fulfillment of the foregoing provisions shall be taken as a compliance with the provisions in reference to separate colleges for white and colored students.

Sec. 2. That the sums hereby appropriated to the States and Territories for the further endowment and support of colleges shall be annually paid on or before the thirty-first day of July of each year, by the Secretary of the Treasury, upon the warrant of the Secretary of the Interior, out of the treasury of the United States, to the State or Territorial treasurer, or to such officer as shall be designated by the laws of such State or Territory to receive the same, who shall, upon the order of the trustees of the college, or the institution for colored students, immediately pay over said sums to the treasurers of the respective colleges, or other institutions entitled to receive the same, and such treasurers shall be required to report to the Secretary of Agriculture and to the Secretary of the Interior, on or before the first day of September of each year, a detailed statement of the amount so received, and of its disbursement. The grants of money authorized by this act are made subject to the legislative assent of the several States and Territories to the purpose of said grants; provided, that payments of such installments of the appropriation herein made as shall become due to any State before the adjournment of the regular session of Legislature meeting next after the passage of this act, shall be made upon the assent of the Governor thereof, duly certified to the Secretary of the Treasury.

Sec. 3. That if any portion of the moneys received by the designated officer of the State or Territory for the further and more complete endowment, support and maintenance of colleges, or of institutions for colored students, as provided in this act, shall, by any action or contingency, be diminished or lost, or be misplaced, it shall be replaced by the State or Territory to which it belongs, and until so replaced no subsequent appropriation shall be apportioned or paid to such State or Territory; and no portion of said moneys shall be applied, directly or indirectly, under any pretense whatever, to the purchase, erection, preservation or repair of any building or buildings. An annual report by the president of each of said colleges shall be made to the Secretary of Agriculture, as well as to the Secretary of the Interior, regarding the condition and progress of each college, including statistical information in relation to its receipts and expenditures, its Ibrary, the number of its students and professors, and also as to any improvements and experiments made under the direction of any experiment stations attached to such colleges, with their cost and results, and such other industrial and economical statistics as may be regarded as useful, one copy of which shall be transmitted by mail, free, to all other colleges further endowed under this act.

Sec. 4. That on or before the first day of July in each year after the passage of this act, the Secretary of the Interior shall ascertain and certify to the Secretary of the Treasury as to each State and Territory, whether it is entitled to receive its share of the annual appropriation for colleges, or for institutions for colored students, under this act, and the amount which thereupon each is entitled, respectively, to receive. If the Secretary of the Interior shall withhold a certificate from any State or Territory of its appropriation, the facts and reasons therefor shall be reported to the President, and the amount involved shall be kept separate in the treasury until the close of the next Congress, in order that the State or Territory may, if it should so desire, appeal to Congress from the determination of the Secretary of the Interior. If the next Congress shall not direct such sum to be paid, it shall be covered into the treasury; and the Secretary of the Interior is hereby charged with the proper administration of this law.

Sec. 5. That the Secretary of the Interior shall annually report to Congress the disbursements which have been made in all the States and Territories, and also whether the appropriation of any State or Territory has been withheld, and if so, the reasons therefor.

Sec. 6. Congress may at any time amend, suspend or repeal any or all of the provisions of this act.

Approved August 30, 1890.

OFFENSES RELATING TO PUBLIC BUILDINGS.

Chapter 5 (S. B. No. 41). An Act to amend article 417, chapter 4, title 13, of the Penal Code of the State of Texas.

Whereas, for the purpose of preserving the new State capitol it becomes necessary to better define the offenses set out in the aforesaid act; therefore,

Section 1. Be it enacted by the Legislature of the State of Texas, That article 417, chapter 4, title 13, of the Penal Code of the State of Texas, which took effect July 24th, A. D. 1879, be amended so as to read as follows:

Sec. 2. Article 417. If any person shall wilfully injure or deface any public building or the furniture therein in this State, he shall be fined not less than five nor more than five hundred dollars. The word deface in this act shall be held to apply to writing, carving, or scratching on the walls or plastering or furniture of said building, or staining the same with paint or any article which will produce a discoloration of the same.

Sec. 3. Whereas, the preservation of the State capitol building, together with

other public buildings, creates an imperative public necessity, and an emergency exists requiring the constitutional rule requiring bills to be read on three several days in each house to be suspended, and it is so suspended, and that this act take effect and be in force from and after its passage, and it is so enacted.

[Note.—The foregoing act originated in the Senate, and passed the same by a vote of 27 yeas, no nays; and passed the House by a vote of 76 yeas, 5 nays.]

Approved May 14, 1888.

TEXAS AGRICULTURAL EXPERIMENT STATION.

ORIGIN.

The Agricultural Experiment Station has been established by the Congress of the United States, as shown by the following bill. This will be of great benefit to the agricultural course:

Full Text of the Experiment Station Bill as enacted by Congress and approved by the President.

An Act to establish Agricultural Experiment Stations in connection with the Colleges established in the several States under the provisions of an Act approved July 2, 1862, and of the acts supplementary thereto.

Section 1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science, there shall be established, under direction of the college or colleges, or agricultural department of colleges, in each State or Territory, established, or which may be hereafter established, in accordance with the provisions of an act approved July 2, 1862, entitled "An Act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," or any of the supplements to said act, a department to be known and designated as an "Agricultural Experiment Station;" provided, that in any State or Territory in which two such colleges have been or may be so established, the appropriation hereinafter made to such State or Territory shall be equally divided between such colleges, unless the Legislature of said State or Territory shall otherwise direct.

Sec. 2. That it shall be the object and duty of said experiment stations to conduct original researches to verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analyses of soils and water; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective States and Territories.

Sec. 3. That in order to secure, as far as practicable, uniformity of methods and results in the work of said stations, it shall be the duty of the United States Commissioner of Agriculture to furnish forms, as far as practicable, for the tabulation of results of investigation or experiments; to indicate, from time to time, such lines of inquiry as to him shall seem most important, and in general to furnish such advice and assistance as will best promote the purposes of this act. It shall be the duty of each of said stations, annually, on or before the first day of February, to make to the Governor of the State or Territory in which it is located a full and detailed report of its operations, including a statement of receipts and expenditures, a copy of which report shall be sent to each of the said stations, to the said Commisioner of Agriculture, and to the Secretary of the Treasury of the United States.

Sec. 4. The bulletins or reports of progress shall be published at said stations at least once in three months; one copy of each shall be sent to each newspaper in the States or Territories in which they are respectively located, and to such individuals actually engaged in farming as may request the same, and as far as the means of the station will permit. Such bulletins or reports, and the annual reports of said stations shall be transmitted in the mails of the United States free of charge of postage, under such regulations as the Postmaster-General may from time to time prescribe.

Sec. 5. That for the purpose of paying the necessary expenses of conducting investigations and experiments and printing and distributing the results as hereinbefore prescribed, the sum of \$15,000 is hereby appropriated to each State, to be specially provided for by Congress in the appropriations from year to year, and to each Territory entitled under the provisions of section 2 of this act, out of any money in the treasury proceeding from the sale of public lands, to be paid in equal quarterly payments on the first day of January, April, July and October of each year, to the treasurer or other officer duly appointed by the governing boards of said colleges to receive the same, the first payment to be made on the first day of October, 1887; provided, however, that out of the first annual appropriation so received by any station an amount not exceeding one-fifth may be expended in the erection, enlargement or repair of a building or buildings necessary for carrying on the work of such station; and thereafter an amount not exceeding five (5) per centum of such annual appropriations may be so expended.

Sec. 6. That whenever it shall appear to the Secretary of the Treasury, from the annual statement of receipts and expenditures of any of said stations, that a portion of the preceding annual appropriations remains unexpended, such amount shall be deducted from the next succeeding annual appropriation to such station, in order that the amount of money appropriated to any station shall not exceed the amount actually and necessarily required for its maintenance and support.

Sec. 7. That nothing in this act shall be construed to impair or modify the legal relation existing between any of the said colleges and the governments of the States and Territories in which they are respectively located.

Sec. 8. That in States having colleges entitled under this section to the benefits of this act, and having also Agricultural Experiment Stations established by law separate from said colleges, such States shall be authorized to apply such benefits to experiments at stations so established by such States; and in case any State shall have established, under the provisions of said Act of July 2, aforesaid, an agricultural department or experimental station in connection with any university, college or institution not distinctively an agricultural college or school,



MAIN BUILDING AND ROSS HALL. (WINTER VIEW.)
and such State shall have established, or shall hereafter establish, a separate agricultural school, which shall have connected therewith an experimental farm or station, the Legislature of such State may apply, in whole or in part, the appropriation by this act made to such separate agricultural college or school; and no Legislature shall, by contract, expressed or implied, disable itself from so doing.

Sec. 9. That the grants of moneys authorized by this act are made subject to the legislative assent of the several States and Territories to the purpose of said grants; provided, that payments of such installments of the appropriation herein made as shall become due to any State before the adjournment of the regular session of its Legislature meeting next after the passage of this act shall be made upon the assent of the Governor thereof, duly certified to the Secretary of the Treasury.

Sec. 10. Nothing in this act shall be held or construed as binding the United States to continue any payments from the treasury to any or all of the States or institutions mentioned in this act, but Congress may, at any time, amend, suspend or repeal any or all of the provisions of this act.

In accordance with the Act of Congress, the Board of Directors of the Agricultural and Mechanical College of Texas, at a meeting held January 25, 1888, established the Experiment Station as a department of the College. Provision was made for assigning to the Station department such part of the College farm, buildings and other equipment of the College as would be found necessary to prosecute the work, in addition to the outfit supplied from the funds of the Station.

The Director of the Station will have general supervision of all experimental work, correspondence, and publication of bulletins and reports.

The professors of Agriculture, Chemistry, Horticulture, and Veterinary Science will have charge of Station work in their several departments.

LOCATION AND SUPPORT.

The Main Station, located in 1888 on the grounds of the Agricultural and Mechanical College, is supported entirely by appropriations from the Federal government.

A permanent State station, largely devoted to horticulture and fruit raising, and irrigation, was established in 1895 in Bee county for the purpose of testing new fruits and vegetables, as to their adaptability and plant food requirements in that portion of the State. This station is some two hundred miles south of the main station. It is supported by State appropriations made biennially for this purpose. Other State stations are needed and have been asked for by the people and by the Station officers. Others will probably be provided for in the near future by our Legislature.

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OBJECTS OF THE STATION.

The objects of the Experiment Station and of the sub-station are clearly set forth in section two (2) of the act of Congress to which they owe their establishment, a copy of which law is found on pages 99 to 101 of this Catalogue.

The Governing Board of the Station desire to make this work of as much value to the agricultural and horticultural interests of the State as may be possible. The work will be conducted at all times with special reference to giving information that may be of some practical use to the farmer. To enable them to carry out this policy, all associations having the advancement of agriculture in view—the Grange, Alliance, associations of stock breeders, or fruit growers, or other organizations—will be invited from time to time to appoint delegates to meet with the board of directors and officers of the Station, and consult and advise with them in regard to the work of the Station. Suggestions will be gladly received at all times from any one who is interested in advancing the agricultural interests of the State.

THE FARMERS' CONGRESS.

For the past two years a number of important agricultural organizations of Texas have held joint sessions upon the College grounds during three days of July. These meetings are known as "The Farmers' Congress," and are largely attended by intelligent and successful farmers, stockmen, and horticulturists, who come to learn of each other and to inquire more carefully into the investigations of the Station, while, at the same time, they are made familiar with the equipment and the methods of the College and Station.

A permanent organization was affected July 13, 1898, and the following State organizations were accepted as active charter members: Texas State Horticultural Society, A. F. Ramsey, Austin, President; Texas Jersey Cattle Club, A. F. Platter, Denison, President; Texas Dairymen's Association, J. H. Connell, College Station, President; Texas Cotton Ginners' Association, Chas. D. Hunter, Marlin, President; Texas Live Stock Association, C. B. Lucas, Berclair, President.

The next annual meeting will be held at College July 3rd to 6th, 1900.

ADVANTAGE TO COLLEGE.

Financially, the Station will not be of direct benefit to the College. To compensate the College, however, for the use of property assigned to the work of the Station, such work will add largely to the ability of the College to impart more thorough instruction in scientific and practical agriculture, horticulture, etc. College students will be employed in the work of the Station to as great an extent as may be found practicable, and the plant of the Station and experimental work in progress will increase the means of illustration of the College to the people of Texas and be of special advantage to the students in providing practice and training in Agricultural and Horticultural work under skilled instructors. The Station will not add to the expense of the College in any way, as such time as may be given by professors or other employes in experimental work will be paid for from the Station fund, and the value of the time lost to the College deducted from the salary that would be paid by the College if the entire time was given to College work; and in order not to impair the efficiency of instruction the board has provided for additional instructors to relieve the professors of a portion of their class work.

WORK DONE AND UNDER WAY.

A part of the farm of 2416 acres is devoted to experimental purposes. Experiments to test the feeding value of certain foods for the production of pork and for beef have been recently conducted and are not yet published.

Numerous scientific investigations have been conducted, and some are now under way, including chemical analyses of soils, waters, and paints; stock foods, cotton seed products, animal diseases and parasites, diseases of cotton, varieties of corn and cotton, grasses, fruits, vegetables and manures.

STATION PUBLICATIONS.

Reports of the results of experiments are published once each quarter, or oftener, for free distribution to the people of the State who may be interested in farming. (The following reports have been issued on the work up to date (March 1, 1900):

Bulletins.—No. 1*, Plan of Organization; No. 2 x, Cattle Feeding; No. 3 x, Grasses and Forage Plants; No. 4 x, Cotton Blight; No. 5 x, Creameries for Texas: No. 6 x, Cattle Feeding; No. 7*, Cotton Blight; No. 8*, Diseases of Grapes; No. 9 x, Pear Stocks; No. 10 x, Cattle Feeding; No. 11 x, Effect of Cotton Seed and Cotton Seed Meal on Butter Product; No. 12 x, The Screw Worm; No. 13 x, Sorghum; No. 14 x, Effect of Cotton Seed and Cotton Seed Meal on the Dairy Ration; No. 15 x, Influence of Climate on Composition of Corn; No. 16 x, Drainage Experiments with Cabbage, Irish Potatoes, and Strawberries; No. 17 x, General Information; No. 18 x, Liner Flukes; No. 19 x, Corn Fodder; No. 20 x, Grasses and Forage Plants; No. 21*, Effect of Cotton Seed and Cotton Seed Meal in Feeding Hogs; No. 21 x, Effect of Cotton 23 x, Black Rot of the Grape; No. 24 x, The Cattle Tick; No. 25 x, Texas Soils; No. 26*, Cost of Cotton Production; No. 27 x, Steer Feeding; No. 28 x, Sweet Potatoes; No. 29 x, Effect of Cotton Seed Ration on Butter, Beef, Tallow, Lard and Sheep Suet; No. 30 x, Veterinary Science; No. 31 x, Insects Injurious to Stored Grain; No. 32*, Varieties of Plums, Apricots, and Japan Persimmons: Injurious Fungi and Insects; No. 33*, Feeding Milk Cows; No.

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34 x, Field Experiments at College Station, McKinney, and Wichita Falls Sub-stations; No. 35 x, Miscellaneous Chemical Analyses; No. 36 x, Vegetables. Insecticides; No. 37*, Sundry Brief Articles: No. 38*, Canaigre—The New Tanning Plant; No. 39*, The Peach; No. 40*, Corn, Cotton, and Forage Plants; No. 41*, Steer Feeding; No. 42 x, The Irish Potato; No. 43*, Report from Beeville Station (Soils, Climate, Water Supply, Irrigation Equipment); No. 44*, Paints and Painting Materials, and Miscellaneous Analyses; No. 45*, Cotton Experiments; No. 46*, Grasses and Forage Plants; No. 47*, Effects of Food on the Economy of Milk and Butter Production; No. 48*, The Grape; No. 49*, Corn Experiments at College and Beeville Stations; No. 50*, Cotton Experiments at College and Beeville Stations; No. 50*, Cotton Experiments at College and Cauliflower (Beeville); No. 53, Texas Fever; No. 54, The Irish Potato; No. 55, Feeding Steers: The Value of Cotton Seed and its Products; No. 56, The American Grape and Spray Calendar for 1900.

Annual Reports for 1888, '89, '90, '91, '92, '93, '94, '95, '96, '97, '98 and '99.

x Out of print.

^{*} On hand.

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