2 5 th

Quy



÷

Twenty-Fifth

## ANNUAL CATALOGUE

Session 1900-1901

# Agricultural and Mechanical College

## OF TEXAS.

Railroad Depot, Telegraph, Express and Money Order Office:

College Station, Texas.



AUSTIN: VON BOECKMANN, SCHUTZE & CO., STATE PRINTERS. 1901.

## CALENDAR 1901.

.

.

JANUARY.	FEBRUARY.	M ARCH.
S M T W T F S	S M T W T F S	S M T W T F S
12345		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3 4 5 6 7 8 9	3 4 5 6 7 8 9 10111213141516
20212223242526	17181920212223	17181920212223
27 28 29 30 31	$24 25 26 27 28 \dots$	24 25 26 27 28 29 30
··· ··· ··· ··· ··· ··· ··· ···	····	$\underline{31 \dots \dots \dots \dots \dots \dots}$
APRIL.	MAY.	JUNE.
1 2 3 4 5 6		
7 8 910111213	5 6 7 8 91011	2 3 4 5 6 7 8
21222324252627	12 10 14 10 10 11 10 10 11 10 10 11 10 10 10 10	16171819202122
28 29 30	26 27 28 29 30 31	23242526272829
<u>     </u>	···· ··· ··· ··· ··· ··· ···	30
JULY.	AUGUST.	SEPTEMBER.
1 2 3 4 5 6		1 2 3 4 5 6 7
	4 5 6 7 8 910	8 91011121314
21222324252627	11121314131011 18192021222324	22232425262728
28 29 30 31	25 26 27 28 29 30 31	$2930\ldots\ldots\ldots\ldots\ldots$
<u></u>	<u>        </u>	<u>     </u>
OCTOBER.	NOVEMBER.	DECEMBER.
$\overline{1 \ \ 1} \ 2 \ 3 \ 4 \ 5$	$  \dots   \dots   \dots   1   2$	1 2 3 4 5 6 7
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3 4 5 6 7 8 9	
13141516171819	10111213141516 17181920212223	19 10 17 18 19 20 21
2728293031	24252627282930	29 30 31
···· ··· ··· ··· ··· ··· ···		···· ··· ··· ··· ··· ··· ··· ··· ··· ·



MESS HALL.

## CALENDAR 1902

JANUARY.	FEBRUARY.	MARCH.
S M T W T F S	S M T W T F S	S M T W T F S
$\begin{array}{c} \hline & & & & & \\ \hline & & & & & \\ \hline & & & & \\ 5 & 6 & 7 & 8 & 9 & 10 & 11 \\ 12 & 13 & 14 & 15 & 16 & 17 & 18 \\ 19 & 20 & 21 & 22 & 23 & 24 & 25 \\ 26 & 27 & 28 & 29 & 30 & 31 & \\ \hline & & & & & & \\ \hline & & & & & & \\ \hline \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
APRIL.	MAY.	JUNE.
$\begin{matrix} \dots \dots & 1 & 2 & 3 & 4 & 5 \\ \hline 6 & 7 & 8 & 9 & 10 & 11 & 12 \\ 13 & 14 & 15 & 16 & 17 & 18 & 19 \\ 20 & 21 & 22 & 23 & 24 & 25 & 26 \\ 27 & 28 & 29 & 30 & \dots & \dots \\ \hline \begin{matrix} & & & & & & \\ \hline & & & & & & \\ \hline & & & &$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
OCTOBER.	NOVEMBER.	DECEMBER.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

## COLLEGE CALENDAR.

## 1901.

Entrance Examinations begin Monday, September 9. Fall Term begins Wednesday, September 11. Anniversary Austin Society, November 15. National Holiday, Thanksgiving Day. Christmas Holiday, December 20 to January 1, 1902.

#### 1902.

Winter Term begins January 2, 1902. National Holiday, February 22. Texas Independence Day, March 2. Spring Term begins Monday, March 17. Anniversary Calliopean Society, March 16. San Jacinto Day, April 21. Final Examinations begin June 2. Commencement Sunday, June 8. Exhibition of Departments and of Work of Students, June 9. Commencement Day, June 10.

## BOARD OF DIRECTORS.

\_

\_\_\_\_

HON. MARION SANSOM, President A	lvarado.
HON. F. A. REICHARDT	Louston.
HON. A. C. OLIVER D	ouglasville.
HON. WM. MALONE	lunter.
HON. P. H. TOBIND	enison.
HON. A. P. SMYTH	fart.
HON. JOHN W. KOKERNOT	an Antonio.
HON. JEFFERSON JOHNSON A	ustin.

SECRETARY OF THE BOARD.

J.	A.	BAKER	College Stat	ion.
----	----	-------	--------------	------

## FACULTY.

L. L. FOSTER, PRESIDENT.

R. H. WHITLOCK, M. E., Professor of Mechanical Engineering.

H. H. HARRINGTON, M. S., Profesor of Chemistry and Mineralogy. (Chemist to Experiment Station.)

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.

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 History.

FREDERICK W. MALLY, M. Sc., Professor of Entomology.

D. W. SPENCE, B. So., C. E., Professor of Physics.

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

COL. J. C. EDMONDS, Professor of Military Science, and Commandant of Cadets. W. B. PHILPOTT, M. S.,

Associate Professor of English.

## **OTHER INSTRUCTORS.**

ROBERT F. SMITH, Associate Professor of Mathematics.

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, Associate Professor of 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.

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

C. P. FOUNTAIN, A. M., Assistant Professor of English.

E. A. WHITE, B. S., Assistant Professor of Horticulture. (Assistant Horticulturist to Station.)

> S. E. GIDEON, Instructor in Carpentry.

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

> PROFESSOR BITTLE, Chaplain.

## **OTHER OFFICERS.**

A. C. GILLÉSPIE, M. D., Surgeon.

> J. A. BAKER, Secretary.

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

> B. SBISA, Steward.

J. W. CARSON, Superintendent of the Farm.

-----

FELLOW IN CHEMISTRY. WILLIAM WALDEN, B. S.





## CATALOGUE OF STUDENTS.

#### EXPLANATION.

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.

	Na	ime.			$\mathbf{D}$	legree.	Reside	ence.
A.	C. I	love, B.	S		. C.	E	. College	Station.
W	. C. 1	Martin,	в.	S	. M.	S	. College	Station.

#### FIRST CLASS.

Name.	Course.	Residence.
Burleson, Dick	Mech. Eng	. San Saba.
Clark, C. S	Civ. Eng	. Eolian.
Coulter, R. E	Mech. Eng	. Texarkana.
Eberspacher, Robt	Mech. Eng	. Angleton.
Elrod, H. E	Mech. Eng	. Columbus.
Fehrenkamp, E. B	Civ. Eng	. Frelsburg.
Fountain, S. J	Civ. Eng	. Bryan.
Fountain, T. L	Civ. Eng	. Bryan.
Garbade, W. T	Agr	. Witting.
Garrett, T. H., Jr	Civ. Eng	. Coit.
Holcomb, Bob	Civ. Eng	. Cisco.
Kleinsmith, M. L	Civ. Eng	. Luling.
Lineberger, W. F	Agr	. Bartlett.
O'Rourke, H. E	Mech. Eng	. Smithville.
Rhome, R. J	Agr	. Fort Worth.
Rust, W. M., Jr	Mech. Eng	. Seguin.
Simpson, J. H	Civ. Eng	. Hallettsville.
Smith, T. M	Agr	. Columbia.
Thanheiser, C. A	Civ. Eng	. Fayetteville.
Thomas, M. F	Mech. Eng	. Clay.
Yarbrough, R. W	Mech. Eng	. Greening, La.

#### SECOND CLASS.

Name.	Cou	trse.	Residence.
Acker, Lamar	Civ.	Eng	Lampasas.
Akers, M. E	Civ.	Eng	Aurora.
Alexander, R. L	Civ.	Eng	Manchaca.
Bailey, R	Civ.	Eng	Coleman.

Name.	Course.	Residence.
Barham, Geo. S	Mech. Eng	Nacogdoches.
Batte, T. R., Jr	Civ. Eng	Bryan.
Beeman, T. Rupe	Civ. Eng	Comanche.
Becker, E. S.	Civ. Eng	Brenham.
Brin, Roy	Civ. Eng	Ennis.
Briscoe, Mason	Agr	Foster.
Carpenter, M. M.	Agr	Sour Lake.
Carswell, R. E		Carthage.
Charske, F. Woody	Civ. Eng	Houston.
Davis. R. A		Plano.
Dean. Chas.	Civ. Eng	Durango, Mexico.
Downing, C. P	Mech. Eng	Valley Mills.
Egg. J. A	Civ. Eng	Edna.
Eppright, F. G.		Manor.
Fov. V. H		Baird.
Frev. Herbert	Mech. Eng	Corsicana.
Garnett, R. M.		Denton.
Gebhart, P. C.		Dallas.
Gillespie, S. E.	Mech. Eng	Grand Prairie.
Gleason, Harry		Hico.
((	Graduate Hico High School.	)
Greenwood, T. B	Civ. Eng	Stoneham.
Harrington, C. B		West Point, Miss.
Harrison, Jerome	Mech. Eng	College Station.
Hawkins, J. M	Civ. Eng	Courtney.
Hayfort, J. W		Houston.
Hofiman, J. H	Mech. Eng	Breslau.
Hudgins, Joel	Civ. Eng	Hungerford.
Hudgins, W. J	Civ. Eng	Hungerford.
Kerr, Ira J	Civ. Eng	Corsicana.
Klingelhoefer, Aug	Civ. Eng	Fredericksburg.
Kloss, Emil	Mech. Eng	Millheim.
Lawley, Lewis P	Agr	Oakville.
Lewis, J. M		Calvert.
Markham, E. L	Civ. Eng	Beeville.
(Gr	aduate Beeville High Schoo	ol.)
Mittman, E. F	Civ. Eng	Galveston.
Moore, F		Edna.
MoOre, G. G		DeKalb.
McComb, E. K	Giv. Eng	Mariin.
Noff A T	Hort.	Palestine.
Olde T H	Gra Eng	Doneiton.
Parking D D		Channell III
Peters Eher	Cirr Eng	Chappen Hill.
Bawling S A	Mach Eng	Oals Oliff
Rice Eugene	Mach Eng	Hulon Dark
Ridenhower, Ray	Cir Eng	Higo
	Fraduata Higo High School	···· IIIco.
Robertson, D. K	Mech Eng	/ Dallas
,		· · · · ·
		- ·

.

Name.	Course.	Residence.
Ross, E. M	Mech. Eng	Rossville.
Ross, J. L	Civ. Eng	Cooper, La.
Ross, Robt	Civ. Eng	Rossville.
Samusch, L	Civ. Eng	Hallettsville.
Shaw, L. D	Mech. Eng	Columbus.
Smith, E. G	Civ. Eng	DeKalb.
Sneed, H. M	Agr	Georgetown.
Strieber, C. A	Mech. Eng	Yorktown.
Wren, M. M	Agr	San Marcos.
Youngblood, B	Agr	Milano.

## THIRD CLASS.

Name.	Course.	Residence.
Abbott, C. W	Mech. Eng	Seguin.
Abrahams, M. L	Mech. Eng	New Braunfels.
Adkins, Lock M	Mech. Eng	Beeville.
Armstrong, J. B	Civ. Eng	Austin.
Armstrong, J. W	Civ. Eng	Milano.
Barham, R. E	Civ. Eng	Nacogdoches.
Baum, John A	Civ. Eng	Corsicana.
Beilharz, Wm. E	Mech. Eng	Dallas.
Biering, H. J	Civ. Eng	Hitchcock.
Blount, Guy A	Civ. Eng	Nacogdoches.
Branch, E. S	Civ. Eng	Temple.
Branson, J. A	Mech. Eng	Marlin.
Briggs, H. N	Mech. Eng	Cline.
Caddell, J. R	Mech. Eng	McGregor.
Catlin, S. W	Civ. Eng	El Paso.
Chapman, J. Aubrey	Agr	Fort Worth.
Chatham, T. B	Civ. Eng	Bryan.
Chesser, D	Agr	Sonora.
Cogdell, M. D	Agr	Mexia.
Crawford, J. A	Civ. Eng	Bartlett.
Davenport, R. S	Mech. Eng	Dewville.
Davis, J. M., Jr	Civ. Eng	Forney.
(Gra	iduate Lewis Academy	<b>7.</b> )
Dealey, G. W	Agr	Galveston.
Denny, M. C	Civ. Eng	Sulphur Springs.
Devine, D. F	Mech. Eng	Lockhart.
Devine, Fenton	Agr	Lockhart.
Doucette, A. H	Civ. Eng	Beaumont.
Dupree, Wilbur A	Civ. Eng	San Angelo.
Eidson, J. R	Civ. Eng	Hamilton.
Enders, W. H	Civ. Eng	Elgin.
Erhard, E. C	Mech. Eng	, Bastrop.
(Gradua	ite Bastrep Public Sc	hool.)
Fenner, Milton S	$\dots$ Civ. Eng	$\dots$ Austin.
Franks, James	Mech. Eng	Mackinac Island,

Michigan,

#### Agricultural and Mechanical College of Texas. 12

Name.	Course.	Residence.
Gary, O. R	Mech. Eng	San Marcos.
Girand, A. M	Civ. Eng	Abilene.
Graves, D. R	Mech. Eng	Rockett.
Groos, F. C	Civ. Eng	San Antonio.
Haberer, Chas. E	Civ. Eng	Brady.
Hackney, F. G.	Mech. Eng	Burleson.
Hackney, U. P	Mech. Eng	Burleson.
Hall, O. W	Mech. Eng	Kyle.
Harral, A. G	Mech. Eng	Dudley.
Hart, John W	Civ. Eng	Orange.
Heidelberg, H.	Mech. Eng	Marshall.
Heldenfels, C. A	Agr	Beeville.
Herndon, H. A	Mech. Eng	Marshall.
Hickman, Chas. M	Civ. Eng	Hico.
(Graduate H	lico High School.)	
Hill, L. E	Agr	New Waverly.
Holland, W. C	Mech. Eng	Beaumont.
Houchins, John F	Civ. Eng	Hallettsville.
Hurst, A	Mech. Eng	Hunt.
Isbell, J. M	Civ. Eng	Pankey.
Jobson, T. S	Mech. Eng	New Hope.
Jones, Olin A	Mech. Eng.	Rice's Crossing
Jouett, W. H	Civ. Eng	Royce.
Kinsloe, R. H	Mech. Eng	Corsicana.
Kirkpatrick, L. R	Mech. Eng	McKinney.
(Graduate McK	inney Public School.)	•
Koch, Wm	Mech. Eng	Seguin.
Kosminsky, I. J	Civ. Eng	Texarkana.
Kreneck, A.	Mech. Eng	Fayetteville.
Krezdorn, L. W	Mech. Eng	Seguin.
Lockett, N., Jr	Civ. Eng	College Station
Luckett, Chas. P	Agr	Bastrop.
Mansfield, Richard H	Civ. Eng	Tyler.
Mantius, W. C	Civ. Eng	Forney.
Martin, Walter	Civ. Eng	Midland.
Markham, J. C	Mech. Eng	Beeville.
Mathews, H. F	Civ. Eng	Galveston.
Maymon, E. L.	Civ. Eng	Palestine.
Miles, E. G.	Civ. Eng	Fairfield.
Minton, W. D., Jr	Mech. Eng	Marshall.
Mobberly, M. B	Mech. Eng	Longview.
McCall, H. S	Civ. Eng	Sabine Pass.
McGhee, E. W	Mech. Eng	Brownwood.
McGraw, A. L.	Mech. Eng	Dallas.
McGregor, Flint	Civ. Eng	Weimar.
McKay, Guy	Mech. Eng	Longview.
McKee, G. A., Jr	Agr	Mt. Selma.
McKnight, Otey	Civ. Eng	Marlin.
McLavy, R. B	Mech. Eng	Eastrop.
McMillan, J. M.:	Civ. Eng	San Antonio.
17 1 73 /	~	TT 11 // *11

Name.	Course.	Residence.
Newberry, Albert S	Agr	Mathis.
Newton, J. D	Agr	Maysfield.
Noble, Elton	Mech. Eng.	Lampasas.
Odom, Joe	Mech. Eng.	
O'Donnell, John, Jr	Mech. Eng.	
Oliphint, John W	Civ. Eng.	Huntsville
(Gradua)	te Huntsville Sci	hool)
Oliver, J. G.	Civ. Eng.	Midlothian
Patterson, Joel	Civ Eng	Rice's Crossing
Payne, Jas. O	Civ Eng	Center
Peckham Geo W	Mech Eng	Fort Worth
Peters H W Jr	Mech Eng	Codig
Pirio Jac E	Civ Fra	Davita
Polosky Teeperd T	Civ. Eng	
Polle Louis C	Arry	Corsicana.
Powerz V P	Cire From	
Deceter T Terrie	Mail Eng	Kingsbury.
Preston, J. Lewis	Mech. Eng	Locknart.
Puckett, J. W	$\ldots$ Civ. Eng	Buda.
Graduat	te Kyle High Sc.	hool.)
Range, J. F	Mech. Eng	Reinhardt.
Riley, John B.	Mech. Eng	Calvert.
Risien, G. W	$\ldots$ Civ. Eng	Oak Cliff.
Rivers, Leon	$\ldots$ Civ. Eng	Elgin.
Rose, Hubert	Civ. Eng	Waco.
Sanders, P. L	Civ. Eng	Nacogdoches.
Sattler, A. G.	Mech. Eng	Karnes City.
Schultz, C. E	Mech. Eng	Trinity.
Schultz, E. C.	Mech. Eng	Seguin.
Shield, L. L., Jr	Civ. Eng	Santa Anna.
(Graduate &	Santa Anna High	School.)
Sneed, J. E	Civ. Eng	Fairfield.
Stapp, Wm.	Civ. Eng	Conroe.
Stockard, R. W	Civ. Eng	Santa Anna.
(Graduate &	Santa Anna High	School.)
Thies, W. E	Civ. Eng	Manor.
Tilson, W. H	Civ. Eng	Merit.
Wallace, L. W	Mech. Eng	Elysium.
(Graduate	Bastrop Public	School.)
Warden, T. B	Civ. Eng	McKinney.
Weinert, Arthur	Mech. Eng	Seguin.
Whitfield, Bryan V	Civ. Eng	Detroit.
Williams, I. L	Mech. Eng	Houston.
Williamson, L. B	Agr	Lockhart.
Worthing, E. E	Civ. Eng	,
Young, J. K	Agr	Bastrop.

## FOURTH CLASS.

Name.	Residence.
Aguayo, A. N.	Parras, Mexico.
Allen, Litton	Flatonia.

14 AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS.
Name. Residence.
Altgelt E S
Barnag Willia W Diskingon
Bauer F Burton
Baumgardnan M.C. Labaran
Daumgaruner, M. C
Deckham, Tracy
Denjamin, Joseph
Bianton, Jim F
Breinan, B. EBartlett.
Briggs, J. H., Jr
Bryant, J. RMoody.
Bryant, O. JAustin.
Burch, H. C
Cade, Alfred George
Carlisle, T. CRoxton.
Carlock, P. SWinsboro.
Carlton, MQuintana.
Carson, E. JBastrop.
Carson, M. JBastrop.
Chinn, HalWeimar.
Clymer, W. EDenison.
Cocke, S. TBuda.
Coleman, C. LColeman.
Cook, Lewis PEolian.
Corley, WillisLone Oak.
Creath, J. D Charco.
Cruse, T. LWoodville.
Dahlgren, Joseph A Welardena, Durango, Mexico
Dahme, A. FYorktown.
Davenport, H. SPalestine.
Davidson, A. HFort Worth.
Day, E. LBrenham.
Dennis, DeforestHouston.
Dibrell, James FennellSeguin.
Dodd, MarvinDetroit.
Doyle, W. E., JrGranbury.
Dubose, ClarencePalestine.
Echols, R. TLongview.
Eidelbach, MarkFlatonia.
Elder, J. MKarnes City.
Ezell, FrankKosse.
Fields, M. PMesquite.
Floyd, A. MLaredo.
Foster, J. L
Foster, MackCollege Station.
Giles, Harry
Glass, W. LHearne.
Gorman, J. EDeLeon.
Graves, FRockett.
Guion, J. I., JrBallinger.
Hailes, JackBuckholts.
Hammersmith, ByronBelton.
•

Name.	Residence.	
Hamner, Stayton	. Colorado City.	
Hampton, B. Wade	Whitney.	
Haner, Ernest, Jr	.San Antonio.	
Harris, J. B	McKinney.	
Harvey, J. O	.Dewville.	
Headen, Carroll L	Center.	
Horton, Chas.	Hamilton.	
Houchins, Warren	Hallettsville.	
Huffman, J. W	Dallas.	
Irwin, W. S	Beeville.	
Isbell, C. A	Pankey.	
Jalonick, Geo. W., Jr	.Dallas.	
Jester, H. W.	Tyler.	
Jones, D. F	Moody.	
Jones, J. M.	Wynnewood, Ind. To	er.
Jordan, R.	.Sayers.	
Knolle, K. C.	Industry.	
Kunitz, R.	. Cuero.	
Langlois, G. C.	.Beaumont.	
Lawther, L. D., Jr.	. Seguin.	
Lewis, H. L.	.Hearne.	
Ligarde, Fred H	. Laredo.	
Lipscomb, W.	. Luling.	
Looney, W. R.	. Branchville.	
Lovejoy, Bonnie Ray	.Galveston.	
Lucy, Cornelius G	. Austin.	
Mallory, Warren A	.Rock Island.	
Martin, Roy H	. Cleburne.	
Marulanda, P. R	. Laredo.	
Masterson, T. S	.Houston.	
Meek, Robt.	.Arcadia.	
Melton, Ben	.Santa Anna.	
Melton, E. T	. Arp.	
Minter, B. H.	. Pine Forest.	
Mobberly, S. E	. Longview.	
Myers, S. A	.Josephine.	•
McKay, Hugh	.O'Daniel.	
McKnight, T. S	.Center.	
Olsen, Ole	. Boyce.	
Pape, G. H	.Marlin.	
Parker, M. L	. Beckville.	
Pickett, Robt., Jr	. Houston.	
Pingenot, J. L	. Cline.	
Pyle, W. S	. Harrold.	
Rascoe, W. P	. Coleman.	
Reiger, Gordon	. Abilene.	
Robinson, Henry C	. Bryan.	
Rogers, Oswald C	. Center.	
Salyer, W. T	.Jonah.	
Sanders, C. F	. Coleman.	
Schroeder, E. F	. industry.	

Name.	Residence.
Scott, John Thompson	Galveston.
Shelly, J. D.	Plainview.
Shelly, Mal	Plainview.
Smith, H. A	Hillsboro.
Smith, T. E	Mineola.
Starcke, M. H	Seguin. ·
Storms, E. W	Victoria, Mexico.
Sullivan, John T	Corsicana.
Swift, Fred C	Longview.
Tapp, J. M	Sulphur Springs.
Thompson, Glenn	Greenville.
Thompson, Lloyd	Carthage.
Trent, H. R	Baird.
Trigg, R. M	Bastrop.
Vernor, James	Lampasas.
Vernor, W. H	Lampasas. 🛛 🖌
Wade, M. A	Oak Forest.
Walker, Homer	Rosedale.
Watson, F. D	Italy.
Weller, Otto	Carmine.
Wende, W. D	Manchaca.
Watley, R. H	.Texarkana.
Wheeler, A. C	. Anchorage.
White, M. P	. Lancaster.
Whiteman, Amos	. Clarksville.
(Graduate Clarksville High School	l.)
Wilhite, W. M.	.Carl.
Witte, K. L	. Shelby.
Wyse, J	.Dallas.
Yager, Robt. W	.Lebanon.
Yocum, J. D	.Denison.
Young, B. T	.Moody.

•

1

## ELECTIVE STUDENTS.

Name.	Residence.
Armstrong, W. W	Wharton.
Atlee, T. G	Laredo.
Blanchette, Hebert	Beaumont.
Brown, Reaville	Austin.
Bryan, C. M	Chambersville.
Burch, M. W	Aurora.
Butler, Jas. E	Waco.
Dross, Ph	Bellville.
Eastland, H. J	Dallas.
Erhardt, J	Westfield.
Flinn, C. N	Dallas.
Foster, Henry	College Station.
Gonsebatt, Luis	Parana, Argentine Republic.
Gordon, S	Beaumont.
Graves, Ireland	Houston.
,	

Gray, FrankDallas.
Green, Hix SHallettsville.
Hons, J. LSan Marcos.
Hooper, J. J
Hyde, W. WTaylor.
Jacot, HenrySan Antonio.
James, I. HSan Marcos.
Jones, G. LDonahoe.
King, J. FKings Farm.
Kirkpatrick, JackDallas.
Moser, A. CDallas.
Mosley, HalDallas.
Meyer, H. JEllinger.
McConnico, S. FBryan.
McKain, E. BWills Point.
Pinson, T. JForney.
Reardon, E. M., JrDallas.
Sneed, W. NFairfield.
Storey, A. ELockhart.
Talbot, Jack ATexarkana.
Taylor, L. NHoward.
Wyse, Ira ODallas.

### SPECIAL STUDENTS.

Coll, Ricardo	Buenos Ayres, Argentine Republic.
Collins, L. N	Corsicana.
McGinnis, F. Kamp	Terrell.
Y'Barbo, John, Jr	Chireno.

## SUMMARY.

Post Graduates	2
First Class	21
Second Class	61
Third Class 1	22
Fourth Class 1	35
Students in Elective Courses	37
Students in Special Courses	4
Total	82

## **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 out 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.



MECHANICAL ENGINEERING BUILDING.

## METHOD AND SCOPE OF INSTRUCTION.

The courses of instruction are designated 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, 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; and 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.

ŧ

#### BEGINNING OF THE SESSION.

The twenty-fifth annual session will open Wednesday, September 11, 1901, and will close Tuesday, June 10, 1902.

Students should not arrive at the College earlier than Monday, September 9. Parents are requested to communicate with the President before sending their sons.

#### 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, all Courses:

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

2. Elementary English Grammar and Composition. (Whitney and Lockwood.)

3. History of Texas. (Mrs. Pennybacker.)

4. History of the United States. (Mrs. Lee.)

5. Geography. (Maury.)

6. Applicants for admission to the Fourth Class, engineering courses, will be examined also in Advanced Grammar, and in Algebra to theory of exponents. (Wells.)

### Third Class:

1. The subjects stated above for Fourth Class.

2. Algebra to quadratic equations. (Wells' Higher Algebra.)

3. Advanced Grammar. (Lockwood's Lessons in English.)

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.

ENTRANCE EXAMINATIONS LATER IN THE SESSION.

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.

### AFFILIATED SCHOOLS.

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 list of affiliated schools see page 79.

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 for trial, provided they present themselvs 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, ALL COURSES.

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

1. Reduce to fractions having the least common denominator, and add 5/12, 9/14, 8/77.

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

$$8\frac{2}{3}-5\frac{7}{8}$$

Reduce to a simple fraction  $\frac{3}{3\frac{3}{4} \times 3\frac{1}{8}}$ . 3.

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

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

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

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

8. The population of a county grew from 15,800 to 18,012; what should I sell it in order to gain 40%?

9. If by selling land at \$36 per acre I lose 25%, at what price was the increase per cent?

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

11. Find the interest at 8% on \$425 for 2 years, 5 months, 18 days.

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

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

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

English.

Name the parts of speech. Write a sentence containing an adverb, an adjective and a pronoun.

What is a preposition?

Write a sentence containing a conjunction and an interjection.

Write the feminine nouns that are formed from the following: tiger, duke, master.

Write the plurals of the following nouns: calf, grass, house, ox, cargo, cliff, money, enemy.

Write a sentence containing the word brother-in-law in the possessive case.

Give the classes of pronouns.

Write a sentence containing a relative pronoun.

Decline, it, he, thou.

In the sentence, "I know which book she will choose," parse which.

Write a sentence containing the demonstrative adjective that.

Compare the following adjectives: sure, little, bad, old, rough, comfortable.

What is the difference between a transitive and an intransitive verb? Inflect the present indicative of smite, spin, fly, sit.

Inflect the past indicative of go, lay, sit, buy.

Give the principal parts of do, see, set, lay. History.

1. Who commanded the English fleet that first sighted the shores of North America?

2. When was the settlement at Jamestown made, and into what colony did it grow?

3. What battle gave General Gates a great reputation?

4. What battle lost him his reputation, and what foreign officer in the Continental service was slain there?

5. What foreigner in the American service fell at the siege of Savannah?

6. What British cavalry leader was defeated and slain at King's Mountain?

7. What battle was fought after the War of 1812 was over? What general won it?

8. What two American generals led armies into Mexico in the war of 1848?

9. Who was John Brown of Ossawatomie, and what did he try to do?

10. Who captured John Brown, and what was done with the prisoner?

11. Who was in command of the Confederates when they fired on Fort Sumter?

12. Who was in command of the Federals at the first battle of Manassas?

13. Why was Gen. Joseph E. Johnston relieved of the command of the army in Virginia?

What Confederate general rode all around McClellan's army in 14. the Peninsula?

What battle did Lee fight in Maryland? Against what general? 15.Who fought Lee at Fredericksburg? What famous heights were 16.assaulted in vain?

22

17. What brilliant exploit did Magruder achieve in Texas?

18. What battle did Lee fight in Pennsylvania? Who led the Federals there?

19. Who surrendered Vicksburg? To whom did he surrender?

20. Where was there a terrible mine explosion during the Civil War?

Algebra to Theory of Exponents (for Engineering Courses only).

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

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

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

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

plest form.

5. 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 values of x and y.

6. Find the square root of  $10x^2 - 4x^3 + 9 - 12x + x^4$ .

Advanced Grammar (for Engineering Courses only).

Mention the four principal uses or constructions of the noun.

In the sentence "We footed it through the woods," explain the use of *it*. In the sentence "Now I lay me down to sleep," explain the use of *me*. In the sentence "I love such as love me," parse *as*.

Write a sentence containing an indirect object.

What is a phrase? What is a participle?.

Write a sentence containing the infinitives and participles of the following verbs: sing, play, shoot, pass, stand.

Write a synopsis of the active forms of the verb do.

Write a synopsis of the passive forms of the verb see.

What is the difference between prepositions and conjunctions?

What is the difference between analysis and parsing?

Write a sentence containing a noun clause.

Write a sentence containing a phrase used as an adverb.

In the following sentences, parse the italicized words:

The pole is ten *feet* long.

Who made him umpire?

He giveth his *beloved* sleep.

Flee from the wrath to come.

The wind goes whistling through the trees.

Analyze the following sentences:

Who steals my purse steals trash.

Winter coming on, the troops were disbanded.

The fact that he said it, needs no proof.

Love thy neighbor as thyself. The sun shines bright. I slept and dreamed that life was Beauty, I woke and found that life was Duty.

#### ENTRANCE EXAMINATIONS FOR THIRD CLASS.

1. Aritmmetic. Same as for Fourth Class.

- 2. Algebra. Same as for Fourth Class, in addition to such questions as the following on theory of exponents, radicals, radical equations:
  - 1. Multiply  $2x^{\frac{2}{3}} 3x^{\frac{1}{3}} 4 + x^{-\frac{1}{8}}$  by  $3x^{\frac{4}{3}} + x 2x^{\frac{2}{3}}$ .
  - 2. Simplify  $\left(c^{-\frac{2}{5}}\right)^{\frac{10}{3}}$ .

3. Find the cube root of  $27 \text{m}^2 \text{n}^{-\frac{2}{7}}$ .

4. Reduce to an equivalent fraction with a rational denominator,  $\frac{2\sqrt{5}+\sqrt{2}}{2}$ .

$$\sqrt{5} - 3\sqrt{2}$$

5. Simplify  $3\sqrt{128} - 2\sqrt{98} + 7\sqrt{50}$ .

6. Solve the equation  $\sqrt{x+1}+\sqrt{x-2}-\sqrt{4x+3}=0$ .

## History.

1. Who began the movement for the expulsion of the Hyksos from Egypt?

2. With what troops did Psammetichus I drive the Assyrians from Egypt?

3. Describe the writing of the Egyptians. Also that of the Chaldeans.

4. What was the value of the Rosetta Stone to students of history? What was that of the Rock of Behistun?

5. Who took Samaria and carried the Ten Tribes of Israel into captivity?

6. Who took Jerusalem and carried the Jews into Babylonia?

7. What two battles did the Greeks win over the Persians the year after Salamis?

8. Who persuaded the Athenians to undertake the Sicilian expedi-. tion?

9. In what battle did Philip of Macedon overthrow the liberties of the Greeks?

10. Where did the Gauls first meet and defeat the Romans?

11. Who came to the aid of the Tarentines against the Romans?

12. Who invented the drawbridge with beak, which enabled the Romans to defeat the Carthaginians at Malæ and Ecnomus?

13. What four battles did Hannibal win in Italy?

14. Who long foiled every effort of Marcellus to take Syracuse?

15. In what battle was Hannibal's brother, Hasdrubal, defeated and slain?

16. What Marian leader long held out in Spain against Rome?

17. What new imperial system did Diocletian establish?

18. What general again and again saved Rome from the Teutonic invaders?

19. What did the Goths do with the body of their leader, Alaric?

20. What caused the settlement of Venice on the eve of the downfall of the Western Empire?

#### 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 to the several professors for examination and enrollment in classes, and to the Commandant for assignment to camp 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\$	<b>5</b>	00
Incidental fee, payable on entrance	<b>5</b>	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
A A A A A A A A A A A A A A A A A A A		

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 beadsteads, 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, onehalf 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, incidental 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 PAREN'TS 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 contract tailor in order that uniformity may be secured in the cut and



FOSTER HALL.
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.

# **REGULAR COURSES OF INSTRUCTION.**

The regular courses of study extend through three years, and lead to the degree of Bachelor of Science, the particular course pursued being specified in the diploma. A tabulated statement of the studies of each course is found under the head "Curricula," beginning on page 29. For a full explanation of the work done in the several departments of instruction, their equipment and methods of instruction, see pages 47-67.

#### THE AGRICULTURAL COURSE.

This course gives a practical and scientific training in agriculture in its various branches. Special reference is made in the application of principles to the soil and climatic conditions peculiar to the Southwest. A liberal education is also given in the English language, history, mathematics, and the sciences of chemistry, physics, botany, and animal anatomy and physiology.

The scientific principles underlying the growth and management of general farm crops, beef and pork, dairy herds, orchards, vineyards, and truck farms, and the application of these principles in this latitude, are thoroughly taught. Stock farming and rearing, the manufacture of butter and cheese, irrigation and drainage of field, garden, and orchard, the effects of forests and windbreaks upon climate, and the art of beautifying our American homes, are taught practically.

While this course provides a well rounded education, a special feature is made of preparing young men for the management of farms, ranches, breeding establishments, dairies, orchards, vineyards, and truck farms of the State. Students are also well prepared for taking advance courses leading to the professions of scientific agriculture and horticulture.

In the First Class (senior year), English and either agriculture or horticulture are required, and all other related studies are left optional with the student, so that he may specialize in that particular line of study in which he is most interested.

#### MECHANICAL ENGINEERING 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



GATHRIGHT HALL.

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.

## COURSE IN GENERAL SCIENCE.

The course in General Science is designed for those who desire a collegiate education having for its leading feature instruction in practical science, supplemented by work in English, foreign languages, history, mathematics. In this course, the entrance requirements and the studies for the Fourth Class are identical with those of the engineering courses. In the Third Class instruction is given in mathematics, history, English, French or German, botany, physiology; with practice in botany, physiology, bookkeeping. In the Second Class, English, French or German, chemistry. Drill regulations are required studies, and the student must elect work amounting to at least five periods per week from the following: mathematics, history, Spanish or Latin, physics, electricity and magnetism, descriptive geometry, botany, entomology, comparative anatomy, surveying; with practice amounting to eight hours per week in subjects conforming to recitation work. In the First Class, chemistry, geology, military science, are required subjects, and the student must elect work amounting to at least fourteen periods per week from the following: mathematics, French or German, Spanish or Latin, English, history, mental science, descriptive astronomy, botany, chemistry, entomology, veterinary science; with practice amounting to eight hours per week in subjects conforming to recitation work. This course will be open next year to none but those entering the Fourth Class; the curriculum is, therefore, not given, except for that class, where it is, as stated above, identical with that of the engineering courses.

# 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 parenthesis indicate the totals in recitations, and in practice work. Elective studies must be chosen in conformity to the regular schedule. Elective work in *practice* must be chosen in conformity to recitation work.

For list of text-books, see page 37.

## AGRICULTURAL COURSE.

# FOURTH CLASS.

WINTER TERM.

FALL TERM.

Algebra	-(18)	Algebra	-(18)
Practice-		Practice—	
<i>Carpentry</i> 4		<i>Carpentry</i> 4	
Breeds of Stock2		Bookkeeping and Penman-	
Bookkeeping and Penman-		ship	
<i>ship</i> 3		Free-hand Drawing 11	$-(8\frac{1}{3})$
Infantry Drill	-(12)		(~2)

SPRING TERM.

Algebra5		Practice-
English5		Bookkeeping and Penman-
History		ship3
Elementary Botany2		Free-hand Drawing $\ldots 1\frac{1}{2}$
Plant Culture	-(18)	Infantry Drill
	( )	<i>Plant Culture</i>

# AGRICULTURAL COURSE.

# THIRD CLASS.

# FALL TERM.

Algebra, Geometry5		Practice-	
English4		Soil Physics $2\frac{1}{2}$	
History		Botany $\ldots 2\frac{1}{2}$	
Botany4		Free-hand Drawing2	
Physics	-(19)	<i>Physics</i> 2	
·	```	Infantry Drill	-(12)

## WINTER TERM.

Geometry		Practice-	
English4		Truck Farming $2\frac{1}{2}$	
History		Free-hand Drawing1 $\frac{1}{2}$	
Physics		Mechanical Drawing2	
Truck Farming4	-(19)	<i>Physics</i> 2	-(8)

#### SPRING TERM.

.

Geometry5		<b>P</b> ractice-
English4		Botany5
History		Free-hand Drawing $\ldots 1\frac{1}{2}$
Botany2		Stock Judging $2\frac{1}{2}$
Stock Judging4		Infantry Drill
Physiology2	-(20)	

## SECOND CLASS.

# FALL TERM.

Geometry and Trigonome-	Drill Regulation1 $-(20)$
try3	Practice-
English2	Dairying $\ldots \ldots 2\frac{1}{2}$
Stock Breeding or Fruit	Botany5
Culture	Analytical Chemistry $2\frac{1}{2}$
Botany5	Infantry Drill
Inorganic Chemistry4	

## WINTER TERM.

Trigonometry	Surveying3	-(18)
English2	Practice-	
Dairying3	Dairying	(10)
Inorganic Chemistry4	21 naty licat Chemistry	-(10)
Veterinary Medicine3		

.

SPRING TERM.

Algebra		Practice—	
English2		Irrigation $\ldots 2\frac{1}{2}$	
Irrigation and Drainage4		Grasses	
Organic Chemistry4		Zoology2	
Veterinary Medicine2		Infantry and Artillery	
Grasses		Drill3	-(10)
Plant Breeding2 -	-(20)		

FIRST CLASS.

FALL TERM.

Required Subjects.

Englis	h		•	•			•		•	•	•	•	•	•	•	•	•	3
Agric	ult	υ	II	e			0	r		]	H	0	r	ti	c	u	l	t-
ure	•••		•		•	•	•	•		•		•		•	•			<b>5</b>

Electives.

Practice-Required. Electives. (Not less than 8 hours.)

•												
A griculture				•	•		•				•	$2\frac{1}{2}$
Horticulture	•••	•	•	•	•	•	•	•		•	•	5
Chemistry		•	•	•	•	•	•				•	5
Drawing	• •		•	•	•	•	•		•	•	•	4
Veterinary &	Sci	e	n	ce	9.	•		•	•	•	•	$2\frac{1}{2}$

WINTER TERM. . .....

Required Subjects.	Veterinary Science3
English3	Entomology5
Military Science1	Botany5
Agriculture or Horticult-	Practice-
$ure \dots 5$	(Not less than 8 hours.)
Electives.	Agriculture5
(Not less than 10 periods.)	Horticulture $\dots 2\frac{1}{2}$
Mathematics5	<i>Chemistry</i> 5
History3	Drawing $\ldots 2\frac{1}{2}$
Language3	Veterinary Science $2\frac{1}{2}$
Chemistry4	Botany
Or Geology3	· · ·

 $\mathbf{32}$ 

## SPRING TERM.

Required Subjects.	Veterinary Science3
English3	Entomology $\dots \dots 5$
Agriculture or Horticult-	Botany
ure	Practice—
Flastings	(Not less than 8 hours.)
Liectives.	$A griculture \dots 23$
(Not less than 10 periods.)	$Horticulture$ $2\frac{1}{2}$
Mathematics5	<i>Chemistry</i> 5
History	$Drawing$ $2\frac{1}{2}$
Language	Veterinary Science $2\frac{1}{2}$
Chemistry4	Botany
<i>Or</i> Geology3	

# MECHANICAL ENGINEERING AND CIVIL ENGINEERING

## COURSES.

# FOURTH CLASS FOR ALL TERMS.\*

Mathematics5		Fractice-
English5		Carpentry4
History		Free-hand Drawing $\ldots 1\frac{1}{2}$
Physics	-(18)	Mechanical Drawing $2\frac{1}{2}$
	~ /	Infantry Drill

# MECHANICAL ENGINEERING COURSE.

# THIRD CLASS.

## FALL TERM.

Algebra, Geometry5	]	Practice-
English		<i>Carpentry</i> 5
History3		$Free-hand Drawing \dots 1$
M. E. Lectures2		Mechanical Drawing $2\frac{1}{2}$
Physics5	-(18)	Infantry Drill

#### WINTER TERM.

Physics4	-(19)
Practice-	
<i>Carpentry</i> 5	
Free-hand Drawing1	
Mechanical Drawing $\dots 2\frac{1}{2}$	$-(8\frac{1}{2})$
	Physics4 Practice- Carpentry5 Free-hand Drawing1 Mechanical Drawing2½

\*Except that there is no drill in the winter term.

## SPRING TERM.

Algebra2		Practice-
Geometry		Shop5
English		Free-hand Drawing1
History2		Mechanical Drawing $2\frac{1}{2}$
Steam Engine3		Infantry Drill
Electricity and Magnetism.3	-(18)	

# SECOND CLASS.

## FALL TERM.

Geometry and Trigonome-	Descriptive Geometry5	-(19)
$\operatorname{try}$ 5	Practice-	
English1	Shop5	
Slide Valve4	Mechanical Drawing4	
Inorganic Chemistry4	Infantry Drill	-(12)

#### WINTER TERM.

Trigonometry4	Drill Regulations2	-(16)
English2	Practice—	
Graphics4	Shop	
Inorganic Chemistry4	Mechanical Drawing 4	-(9)

## SPRING TERM.

Algebra5	Practice—	
English1	$Shop \ldots5$	
History2	Mechanical Drawing4	
Machine Design5	Infantry and Artillery	
Metallurgy5	Drill	-(12)
Kinematic Drawing2 -	-(20)	¥

# FIRST CLASS.

## FALL TERM.

Analytical Geometry, Me-	I	Practice-	
chanics5	S	$hop \ldots \ldots 5$	1
English $\dots 4$		hemistry2	•
Machine Design5	$\Lambda$	Iechanical Drawing4	
Industrial Chemistry4 -	(18) 1	nfantry Drill3	-(14)
	•	· "	

#### WINTER TERM.

Calculus		Practice—	
Mechanical Engineering5		Experimental Work in En-	
Surveying3		gineering $\ldots \ldots 5$	
Strength of Materials4		Assaying2	
Military Science Lectures.1	-(18)	Mechanical Drawing4	-(11)

SPRING TERM.

Calculus5		Practice-
English1		Experimental Work in En-
History2		gineering5
Mechanical Engineering7		<i>Chemistry</i> 2
Strength of Materials3	-(18)	Mechanical Drawing $2\frac{1}{2}$
-	· · ·	Infantry and Artillery
		Drill

# Thesis.

# CIVIL ENGINEERING COURSE.

# THIRD CLASS.

# FALL TERM.

Algebra, Geometry5	•	Practice-
English3		<i>Carpentry</i> 5
History3		$Free-hand Drawing \dots 1$
M. E. Lectures2		Mechanical Drawing $2\frac{1}{2}$
Physics5	-(18)	Infantry Drill

#### WINTER TERM.

Algebra2		Practice-
Geometry5		<i>Carpentry</i> 5
English2		Free-hand Drawing1
History3		Mechanical Drawing $2\frac{1}{2}$ – $(8\frac{1}{2})$
Physics4		
German or French2	-(18)	

#### SPRING TERM.

German or French2 $-(19)$
Practice-
Shop5
Free-hand Drawing1
Mechanical Drawing $2\frac{1}{2}$
Infantry Drill $-(11\frac{1}{2})$

# SECOND CLASS.

.

x

•

FALL TERM.

Geometry and Trigonome-	German or French3	-(20)
try5	Practice-	
English1	Shop5	
Sewers and Drains2	Mechanical Drawing4	
Inorganic Chemistry4	Infantry Drill	-(12)
Descriptive Geometry5		

#### WINTER TERM.

Trigonometry4	Drill Regulations2	-(17)
English2	Practice-	
Surveying2	Shop5	
Inorganic Chemistry4	Mechanical Drawing4	-(9)
German or French3		

SPRING TERM.

Algebra5	German or French3	-(20)
English1	Practice-	
History2	Mechanical Drawing4	
Plane and Railroad Sur-	Surveying5	
veying5	Infantry and Artillery	
Geology4	Drill	-(12)

# FIRST CLASS.

FALL TERM.

Analytical Geometry, Me-	German or French3	-(19)
chanics5	Practice—	
English4	Civil Engineering5	
Railroad Engineering, Me-	Mechanical Drawing5	
chanics of Materials5	Infantry Drill3	-(13)
Hydraulics2	· · · ·	

## WINTER TERM.

Calculus	Military Science Lectures.1	-(18)
Mechanics of Materials,	Practice-	-
Roofs and Bridges5	Analytical Chemistry5	
Hydraulics4	Mechanical Drawing5	-(10)
German or French3		. ,

SPRING TERM.

Calculus		Practice-	
English1		Testing, Designing and	
History2		Field Practice $7\frac{1}{2}$	
Roofs and Bridges6		Mechanical Drawing $2\frac{1}{2}$	
German or French3	-(17)	Infantry and Artillery	
		Drill	-(13)
		Thesis.	

# TEXT-BOOKS USED IN THE SEVERAL DEPARTMENTS.

#### FOURTH CLASS.

AGRICULTURE:

BOTANY: Plant Relations, Coulter; Elements of Botany, Bergen.

DRAWING: Bookkeeping, The Ellis System, Introductory; Free-hand Drawing, Advanced, No. 5, Model and Object, No. 1 and No. 2, Thompson; Mechanical Drawing, Part I, Giesecke.

ENGLISH: Grammar, *Kittredge and Arnold;* Lessons in English, *Lockwood.* 

HISTORY: Ancient History, Myers.

HORTICULTURE: Plant Culture, Goff.

MATHEMATICS: Algebra, Wells; Geometry, Wentworth.

#### THIRD CLASS.

AGRICULTURE:

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

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

DRAWING: Free-hand Drawing, Model and Object No. 1 and No. 2, *Thompson*; Mechanical Drawing, Part I, *Giesecke*.

ENGLISH: Rhetoric, Hill; English Composition, Bancroft.

HISTORY: Mediæval and Modern History, Myers.

HORTICULTURE AND MYCOLOGY: Nursery Book, Bailey; Principles of Vegetable Gardening, Bailey.

MATHEMATICS: Algebra, Wells; Geometry, Wentworth.

MECHANICAL ENGINEERING: Steam Engine, Kinealy.

PHYSICS: A Text-book of Physics, Wentworth and Hill; Electricity and Magnetism, Thompson; Elements of Physics, Crew.

VETERINARY SCIENCE: Comparative Physiology, Mills.

37

#### SECOND CLASS.

AGRICULTURE: Milk and Its Products, Wing.

CHEMISTRY: Inorganic Chemistry, Storer-Lindsay; Organic Chemistry, Remsen; Blow-Pipe 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: English Literature, *Pancoast*; Principles of Argumentation, *Baker*.

HISTORY: History of England, Buckley.

ENTOMOLOGY:

LANGUAGES: German Grammar, Joynes-Meissner, 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: Principles of Fruit Culture, Bailey; Plant Breeding, 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.

Determine Of the CM of the Mathematic Street

DRAWING: Strength of Materials, Mather.

HISTORY: History of England, Buckley.

HORTICULTURE AND MYCOLOGY: Moulds, Mildews and Mushrooms, Underwood; The Spraying of Plants, Lodeman; Elements of Forestry, Hough; Landscape Gardening, Maynard; The Pruning Book, Bailey; Plum Culture, Waugh; Nut Culture, Fuller; Strawberry Culture, Blacknall; Evolution of Our Cultivated Fruits, Bailey.

LANGUAGES: German Grammar, Joynes-Meissner; Select Literature; Spanish Grammar, De Tornos; Readers, Ramsey, Knapp; Latin Gram-



PRESIDENT'S RESIDENCE.

mar, Coy, Gildersleeve, with Selected Readings and Literature; French Grammar, Whilney, 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.

# GRADUATE COURSES.

Graduate studies in the Agricultural Course lead to the Degree of Master of Science (in Agriculture); 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; 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.

Advanced descriptive geometry, stereotomy, and such technical drawing as may be desired.

Shades and Shadows, Lawrence.

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

#### ENGLISH.

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

#### 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 analytical geometry; differential and integral calculus; analytical 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 elective 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 qualified, 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. No student of the Second Class, reported at the end of the session as having failed in more than two subjects, will be allowed to take an elective course.

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

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

# SPECIAL COURSES.

Upon correspondence with the President, new students may arrange with the professor or professors under whom instruction is desired, for *special industrial work* in the Departments of Agriculture, Mechanical Engineering, Horticulture and Mycology, Veterinary Science, Chemistry, and Drawing.

These special courses are open only to young men over eighteen years of age who are anxious to perfect their knowledge of same particular line of practical work, to which the student will be required to devote the major part of entire time. He will be held responsible by the head of the department under whom he takes this work for its satisfactory performance. He will be amenable to the discipline of the College, but will not be subject to military duty, nor required to wear a uniform. He will not be entitled to the privileges of the student labor fund.

The courses are limited to the work of one session, and it is expected that one term (three months) will ordinarily be sufficient for its completion. It is, therefore, especially desirable that the student should arrange for his work as far as possible by correspondence.

## SHORT WINTER COURSES.

# (January 3-March 17, 1902.)

The Agricultural Department offers two special short courses during the winter term of 1902, and the Horticultural Department offers one. No examinations are rquired for entrance upon any of these courses, and \$5 for matriculation is the only fee required. The other expenses, such as board, lights, laundry, and fuel, will amount to \$35 for the term. No military uniform will be required. The cost of necessary books is small. Short course students will not drill or perform other military duties, but they will be responsible to the discipline of the College for good conduct while on the grounds. These courses are designed to give a large amount of practical information during the ten weeks of the winter term to those men who do not desire to obtain a thorough College education. These courses are open only to young men eighteen years of age or over.

# STOCK FARMING COURSE.

# (Ten Weeks.)

The short course in stock farming offers a condensed form of scientific and practical work bearing upon stock breeding, stock feeding, and the cultivation of certain crops. Students taking this course will also study veterinary medicine and farm dairying or horticulture.

No examination is required to begin this course, and no fees are required except the \$5 matriculation fee. The course is intended for those men who cannot afford the time or money necessary for a complete college course, but desire information of practical value upon stock farming.

The best methods of stock feeding, cultivating crops, stock breeding, and the improved methods of farm dairying will be systematically discussed, and the regular College equipment, including library, live stock, improved machinery, experimental crops, etc., will be available for illustration for students taking this course.

# DAIRY COURSE.

## (Ten Weeks.)

The work of this course will consist of class room instruction, in the theory of handling milk, separating cream, curding cream, and making butter and cheese, combined with daily practice work with the separators, churns, milk testers, and other equipment of the dairy department.

Considerable attention will also be given to the proper selection, care, feeding and management of the dairy herd and the judging of dairy animals. Particular stress will be laid upon dairy conditions existing in Texas. Students in this course will also receive instruction in veterinary science.

# HORTICULTURAL COURSE.

# (Ten Weeks.)

The object of this short course in horticulture is to teach some of the fundamental principles underlying successful fruit culture and truck farming in Texas to those who may care to take the work. The lectures will be especially prepared to benefit one actually engaged in this work, or who may contemplate doing so. The more difficult obstacles in the way of success along these lines will be made a special feature of this course. Some instruction in veterinary science will also be given. The students will be advised in the collateral reading course required.

Parties desiring further information concerning these short courses should write to the Secretary of the College for a special circular on "Agricultural Courses."

# GRADES, REPORTS, EXAMINATIONS AND ADVANCE-MENTS.

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



HORTICULTURAL PRACTICE IN PLANT PROPAGATION.

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 of 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.

46

#### 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."



STOCK JUDGING-HEREFORDS.



CREAM SEPARATORS AT WORK.



PRACTICE-MAKING CHEESE: SECOND CLASS HANDLING CURD.

# DEPARTMENTS OF INSTRUCTION.

# DEPARTMENT OF AGRICULTURE.

PROFESSOR CONNELL.

ASSISTANT PROFESSOR ALVORD.

THEORY OF INSTRUCTION.

Farm crops, stock husbandry, and dairying are included in the several subjects taught in this department. The work is both practical and theoretical.

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

"Stock Husbandry" is taught by use of the College herds of cattle, hogs, and work stock, as far as these can be utilized as illustrations of animal form or type, lessons in breeding, and for feeding trials. Textbooks 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 milk cattle, butter making, cheese making, milk testing, and the many improvements in dairy machinery. Practical butter and cheese making by agricultural students acquaints each with the working principles of this industry.

# CLASS STUDIES.

Fourth Class.—Breeds of stock, including horses, cattle, swine, and sheep, are carefully studied as to origin, history, development, characteristics, and adaptability to the varied 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.

Third Class.—"Stock Judging" is taught during the spring term, and great care is taken to learn the ideal or typical forms of the beef and dairy animals, for the purpose of judging the animal's worth from its

exterior parts. This work trains the eye and develops clear conceptions of animal type. Free use is made of the pure bred cattle sent to this place for inoculation by the veterinary department from owners living in all parts of Texas. Many of these cattle are of excellent breeding and character.

"Soil Physics" is studied by use of the appliances in the laboratory provided for this purpose, during the fall term. The power of soils to hold moisture, the penetrative capacity of certain plant roots, effects of cultivation, deep and shallow preparation and the conditions influencing evaporation are studied in the practice work assigned.

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 use are considered, the amount of water necessary for the various crops, the available water supply of all parts of the State are studied. Practice is given in the construction and location of reservoirs, laying out head 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.

"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 thiry-six lectures, by reference books, and by practice with forage crops.

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 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, affords 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 into which the department has recently moved provides many facilities for the better instruction of classes. The live stock

room into which cattle and sheep may be brought for careful inspection, the larger dairy rooms containing much new machinery, together with the rooms for soil physics, laboratory and other class rooms provided with additional equipment, furnish the most useful materials for class instruction.

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.



## 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 of and manner in which it is effected, the relation of plants to soils, to climates, to each other, and 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.

Morphology, or the study of the forms and structure of the organs of plants, is taken up in the spring term of the same year. This subject is pursued especially with the view of becoming proficient in that part of morphology so needful in the systematic work with the flowering plants.

Text-Book: Elements of Botany, Bergen.

Third Class.—Morphology is continued during the first part of 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 and a tripod-lens, obtainable in the College book store.

Systematic botany will be introduced in the latter half of this term, and carried on, so far as the condition of the vegetation will permit at that season.




In the spring term of the same year, systematic botany is continued. The lecture hours are consumed in considering 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 character and structure 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, staining, and mounting the specimens for microscopic examination. The students are required to submit drawings, with notes, on the various parts studied.

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

Laboratory Manual: Practical Botany, Strasburger.

*First Class.*—To the Agricultural students of the First Class, botany is made elective during the winter and spring terms.

Winter Term.—A general view of the main groups of the chryptogams, or flowerless plants, will be given, beginning with the fission fungi and continuing to the fern worths. More special attention will be given to the fungi of economic importance.

Laboratory work will consist in making microscopic mounts, drawings, and descriptions of representative forms.

Text-Book: Systematic Botany, Warming.

Laboratory Manual: Practical Botany, Strasburger.

The spring term will be devoted to advanced systematic botany. The students are by this time able to appreciate the nicety with which all families of plants fall into more or less closely related groups. Each group with some of its components will, as far as the time permits, be considered. Such as the grasses, and other families, being of special economic importance, will receive special attention.

Laboratory hours will be consumed in herbarium work.

Text-Book: Systematic Botany, Warming.

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 neces-

sities 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 MINERALOGY.

### 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 student 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 Cvil 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, guncotton, 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 practice. By this means he is enabled to better appreciate the limitations 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 experienc of himself or others, than upon mere skill in the manipulation of instruments, however much importance the latter may have. However, the attempt is made to cultivate both in him as fully as the limits of time will 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 four 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.

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 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 origianl 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 one Fairbanks cement testing machine, and 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 students have access.

# DEPARTMENT OF DRAWING.

PROFESSOR GIESECKE.

Assistant Professor Love.

Students in the Agricultural Course receive instruction in the following subjects:

Fourth Class: Free-hand drawing and double entry bookkeeping.

Third Class: Free-hand drawing from models and elementary mechanical drawing.

*First Class:* Free-hand drawing from models, casts, and still life, in charcoal, pen and ink, or water color.

Students in the engineering courses receive instruction in the following subjects:

Fourth Class: Elementary mechanical drawing, projections, and freehand drawing from models.

*Third Class:* Elementary mechanical drawing, projections, and freehand drawing from models.

Second Class: Descriptive geometry, shades and shadows, working drawings, tracing and blue printing. Kinematic drawing for the Mechanical Engineering students.

First Class: Linear perspective, tinting, and working drawings. Strength of materials for the mechanical engineering students.

The department is supplied with all necessary tables, boards and instruments for the students' use.

NOTE.—During the session 1901-1902 the instruction in the Fourth Class will be the same as in the Third Class because the course in drawing, for the Engineering students, is to be advanced one year.

DEPARTMENT OF ENGLISH.

Associate Professor Philpott.

Assistant Professor Fountain.

The work of this department is intended to give the student such a thorough, practical knowledge of the language as will enable him to use it correctly, both in writing and in speaking.

Instruction is based on the conviction that theory without practice is comparatively worthless. Frequent exercises in writing are required in order to teach the student to apply the knowledge gained from the study of text-books, and a liberal course of collateral reading is begun in the first year and is continued until graduation.

Special attention is called to the entrance requirements, and to the specimen examination questions on page —.

COURSE I. ENGLISH GRAMMAR AND COMPOSITION.

Five hours a week for the session.

Text-Books: The Mother Tongue, *Kittredge and Arnold*; Lessons in English, *Lockwood*.

Exercises in composition and declamation; supplementary reading.

Recitations in grammar and in reading will be accompanied with exercises in spelling, punctuation, and the use of capitals.

This course is designed to give the student a thorough knowledge of

technical grammar and to prepare him, by frequent written exercises, to apply his knowledge in a practical way.

This work is required of students in the Fourth Class taking the Agricultural Course, and is required for entrance into the other courses.

COURSE II. RHETORIC AND COMPOSITION.

Five hours a week for the session.

Text-Books: Principles of Rhetoric, *Hill;* English Composition, *Bancroft*.

Throughout this course careful attention is given to written exercises. An effort is made to teach the student to think logically and to express himself with clearness, force, and ease. Themes are planned and developed. From time to time declamations and debates are required, and a course of supplementary reading is given.

This work is required of Engineering students of the Fourth Class and of Agricultural students of the Third Class.

COURSE IIIA. ARGUMENTATION.

Four hours a week for one term.

Text-Book: Principles of Argumentation, *Baker*. Monthly exercises in debating.

COURSE IIIB. ENGLISH LITERATURE.

Two hours a week for one session.

Text-Book: Introduction to English Literature, *Pancoast*. Frequent written work based on supplementary reading is required. Courses IIIa and IIIb represent the work of the Second Class.

COURSE IV. CRITICAL STUDY OF MASTERPIECES OF ENGLISH PROSE AND POETRY.

Three hours a week for two terms.

This work is required of Agricultural students only, and is given in the graduating year.

**Optional** Courses.

COURSE V. SHAKESPEARE.

Two hours a week for one session.

Text-Book: Rolfe's edition of the text read and Dowden's Shakespeare.

COURSE VI. LOGIC.

Three hours a week, two terms.

COURSE VII. ENGLISH LITERATURE OF THE EIGHTEENTH CENTURY. Three hours a week, two terms.

COURSE VIII. AMERICAN LITERATURE.

Three hours a week, one term.

COURSE IX. ENGLISH LITERATURE OF THE NINETEENTH CENTURY. Three hours a week for two terms.

DEPARTMENT OF HISTORY.

PROFESSOR HUTSON.

Associate Professor South.

In this department the course extends through the whole college life. Constant endeavor is made to teach the young men that the history of the race is full of social and political problems still applicable to modern life, in spite of many changed conditions; and that the welfare of humanity now and hereafter depends largely upon the proper correlation of the present and the future with the fund of experience won in the past.

#### STUDIES AND TEXT-BOOKS.

First Year: The class of this year studies ancient history.

Text-Book: Myer's Ancient History.

Second Year: The class of this year studies mediæval and modern history.

Text-Book: Myer's Mediæval and Modern History.

Third Year: The class of 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. The rise of popular representative government and of colonial development, and the lessons to be learned from England's commercial prosperity, industrial activity, and mastery of the sea are especially impressed on the attention of students.

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

For Reference: Histories of Gibbon, Merivale, Mommsen, Curtius,





HORTICULTURAL LABORATORY PRACTICE.

Maspero, Green, Knight, Guizot, Hallam, Freeman, Stubbs, Ranke, Rawlinson, Macaulay, Grote, Carlyle, Motley, Hodgkin, Bosworth Smith, and others. These are accessible in the College library, which is emphatically the tool house of this department. Students are urged and encouraged in every way to make use of collateral reading, special references being given on the blackboard at each recitation.

Candidates for admission into the Fourth Class are examined in the history of Texas and that of the United States. Applicants for admission into the higher classes are examined in the studies already passed over by the classes below. See pages ——.

# 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 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 WHITE.

The course in this department is both scientific and practical. The scientific principles underlying horticultural operations are taught in the class room while application of these principles are taught in the vineyard, orchards, nursery, gardens, and laboratory.

Throughout the course in this department, it is made a special object

59

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 to 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, chemistry, botany, surveying, geology, veterinary science, mathematics, English, history, and irrigation.

Equipment: Two large section rooms and two large laboratories . designed especially for this department have been completed and are being fitted up with modern apparatus in the new Agricultural and Horticultural building.

Copies of all the bulletins issued by the various experiment stations of the United States on horticulture and mycology are kept on file, and are conveniently indexed.

The department library contains 225 volumes, to which the student has free access. There are kept on file many of the best horticultural papers published in the United States. Each student of the graduating class has assigned to him a compound microscope, with micro-reagents and accessories for scientific investigation in mycology.

The department owns a considerable collection of the latest improved horticultural tools, spraying apparatus, etc. Hot-beds, cold-frames, and a small greenhouse will be used, as far as practicable., for illustrating the work.

The degree of Bachelor of Science in Agriculture will hereafter be given students graduating in this department, as well as to those in the Agricultural Department. The student has the privilege of choosing between horticultural and agricultural studies in the fall term of the Second Class, and through the entire year of the First Class. English, and either horticulture or agriculture, are all that are required in the scnior year. The other studies are elective.

A ten weeks short course in horticulture will be given during the winter term.

PLANT CULTURE.—First Year, Spring Term: Study of plant growth from seed germination to harvest time. Seed testing. Budding and grafting.

Text-Book: Plant Culture, Goff.

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.





VINEYARD.

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: Principles of Vegetable Gardening, Bailey.

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

PRINCIPLES OF FRUIT CULTURE.—*Third Year, Fall Term*: Selection and preparation of land for orchards. Setting, care, and management of trees in orchards. Vineyard culture. Protection against frosts.

Text-Book: Principles of Fruit Culture, Bailey.

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

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

PLANT DISEASES.—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. Spraying of plants. How to prepare fungicides and apply them to plants to prevent injury done by fungi. Spraying machinery.

Text-Books: Moulds, Mildews and Mushrooms, Underwood; The Spraying of Plants, Lodeman.

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*.

ADVANCED POMOLOGY.—Fourth Year, Winter 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. Study of special fruits. The subject is taught by both lecture and by text-book.

LANDSCAPE GARDENING AND FORESTRY.—Fourth Year, Spring Term: The art of beautifying American homes. Principles of embellishing landscapes. Planting and management of woodlands. Consideration of the rôle they play in the economy of nature. Management of forests in Texas.

Text-Books: Landscape Gardening, *Maynard*; Elements of Forestry, *Hough*.

Reference Book: North American Sylva, Michaux.

# 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 unintelligible 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 argicultural 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, *Joynes-Meissner's* 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 stated intervals. For specimen entrance examinations, see pages 21, 23, 24.

The subjects pursued are as follows:

First Year: Agricultural Course—elementary algebra, to quadratic equations; Engineering Courses—algebra from theory of exponents to binomial theorem; plane geometry.

Second Year: Algebra, geometry.

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 Gideon.

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.

# ' 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 hammer, 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 tools, the student is transferred to the blacksmith shop. Here he finds 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 cold chisels, punches, etc. 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 the metals in common use. 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



VETERINARY LABORATORY.

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.

In this department members of the Third and Fourth Classes study the general properties of matter, mechanics, pneumatics, hydrostatics, acoustatics, heat and optics; the work in the different courses being especially designed to prepare the students for the more technical studies of the advanced classes.

In all cases the text is fully illustrated by experiments performed before the class.

Agricultural students take a short course in electricity and magnetism, while the Engineering students take a more extended course in the same subject.

Text-Books: A Text-Book of Physics, Wentworth and Hill; Elements of Physics, Crew; 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 are allowed to 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



HYDROSTATICS.

WIRELESS TELEGRAPHY-ELECTRIC LIGHT-TELEPHONE, CLARKE'S MACHINE-TELEGRAPH-X-RAY APPARATUS.



same. Laboratory work consists in studying the microscopic structure 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.

## 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 telegraph, express and 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 Languages, History, 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, English section room, and a janitor's room. On the first floor are private chemical laboratory, furnace room, section room and office of the Department of Botany, store 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, althought 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 was 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 necessery offices for the accommodation of these departments.

It is 160 feet long by 77 feet in width, covered with slate. It contains 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 permits the introduction of animal subjects for the purposes of class instruction. The butter and cheese room contains the best dairy machinery. The canning and evaporating rooms are equipped for the practical instruction of students in these lines of work. The building, with its equipment, largely increases 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.

## 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-five students. It is named in honor of the late President L. S. Ross.

### FOSTER HALL.

This building was erected in 1899, and in 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.

## 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.



INFIRMARY.

## 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; 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, furnished 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 railroad station. The campus, which consists of some twenty-five acres of lawn, shrubbery, and flowers, surrounds the College 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 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 the 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, 72 AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS.

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.

1

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

\*Science, New York.

### Military.

\*Journal of the Military Service Institute, New York.

### Literary.

\*Century, New York.

\*Cosmopolitan, New York.

\*Cumulative Index, Cleveland, Ohio.

\*Fortnightly Review, London.

\*Forum, New York.

.

\*Frank Leslie's Monthly.

\*Harper's Monthly, New York.

\*Literary Digest, New York.

\*Littell's Living Age, Boston, Mass.

\*Nation, New York.

\*North American Review, New York.

\*Public Libraries, Chicago.

\*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 für 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. \*Saturday Evening Post, New York. 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. Vorwärts, 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.

## 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. The practice of eating between meals is undoubtedly very injurious to health. It is, therefore, very desirable that parents should refrain from sending boxes of delicacies to their sons.

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

### SEWERAGE SYSTEM.

The College is now provided with an efficient system of sewers to which are connected the various Barracks, the Main Building, the Agricultural and Horticultural Hall, the Steam Plant, the Infirmary, the Mess Hall and several of the residences. The outfall of the system is three-fourths 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 Classes. 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 performance 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 visit the houses of private parties, beyond the limit of the College campus, or to attend places of public amusement, will not be granted during the term, except from Friday afternoon to Sunday afternoon, at the discretion of the President.

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,

# 78 AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS.

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. A. Cochran.
Allen AcademyBryan.
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.
Beaumont High SchoolBeaumont.
Supt. F. A. Parker.
Beeville High SchoolBeeville.
Supt. T. G. Arnold.

Bellville High School......Bellville. Supt. C. W. Feuge. Bonham High School.....Bonham. City Supt. Sumner B. Foster. Bowie High School.....Bowie. Supt. Thomas W. Platt. Brackett High School.....Brackettville. Ex-Officio Supt. R. Stratton. Principal H. W. Goodwin. Brenham Central School.....Brenham. Supt. E. W. Tarrant. Principal Miss Mary Rial. Brownwood High School.....Brownwood. Supt. F. D. Shepard. Principal W. S. Fleming. Bruce Acadamy ......Athens. Supt. W. H. Bruce. Bryan High School.....Bryan. Supt. T. S. Minter. Principal S. H. Hickman. Calvert Public School......Calvert. Supt. D. F. Eagleton. Cameron High School.....Cameron. Supt. A. N. W. Smith. Principal John F. O'Shea. Clarksville High School.....Clarksville. Supt. W. C. James. Principal Miss Ella Watson. Cleburne Acadamy ......Cleburne. Supt. K. A. Berry. Cleburne High School.....Cleburne. Supt. V. M. F. Fulton. Principal R. G. Hall. Columbus High School......Columbus. Principal J. E. Binkley, Comanche High School.....Comanche. Supt. W. F. Rogers. Principal A. W. Evans. Copperas Cove High School.....Copperas Cove. Supt. J. L. Hicks. Corpus Christi High School......Corpus Christi. Supt. C. W. Crossley. Principal M. Menger. Coryell City School.....Coryell City. Supt. A. M. Sams. Crawford High School.....Crawford. Supt. J. F. Ellis. Cuero Public School.....Cuero. Supt. Thos. M. Colston. Principal L. G. Covey. Dallas High School......Dallas. Supt. J. L. Long. Del Rio Incorporated School.....Del Rio. Supt. A. H. Horn. Denison High School......Denison. Supt. J. E. Blair. Principal N. N. Marsh. Devine High School......Devine. Supt. and Principal C. C. Harris. Dublin High School......Dublin. Supt. W. J. Clay. Principal J. C. Harper. Elgin High School.....Elgin. Supt. R. R. Eason.

Ennis High SchoolEnnis.
Supt. H. F. Triplett. Principal S. A. Horton.
Supt. R. L. Bewley.
Fort Worth High SchoolFort Worth.
Supt. M. G. Bates. Gainesville High School Gainesville
Supt. E. F. Comegys. Principal J. P. Glascow.
Gatesville Public SchoolGatesville.
Supt. Dan E. Graves. Georgetown High School Georgetown
Supt. D. L. Hamilton. Principal W. N. Bird.
Gladewater High SchoolGladewater.
Glen Rose High SchoolGlen Rose.
Principal J. M. Templeton.
Goldthwaite High SchoolGoldthwaite.
Gonzales Public SchoolGonzales.
Supt. T. L. Toland.
Graham High SchoolGraham.
Granger High SchoolGranger.
City Supt. J. H. Vanambargh. Principal R. H. Long.
Greenville High SchoolGreenville.
Principal J. J. McCullom.
Henderson High School
Supt. T. R. Day.
Supt. J. N. Davis.
Hillsboro High School
Supt. T. S. Cox. Principal Miss Addie Robert.
Supt. F. M. Bralley. Principal W. A. Stuckey.
Houston High SchoolHouston.
Supt. W. W. Barnett. Huntsville Public School
Principal J. W. Clark.
Jacksboro High SchoolJacksboro. Jacksboro.
Karnes City High School
Principal A. S. J. Steele.
Kaufman Public SchoolKaufman.
Kenedy High SchoolKenedy.
Supt. A. N. McCollum.
Kosse High SchoolKosse.
Kyle High School
Supt. W. A. Laughlin.

•

Lampasas High SchoolLampasas.
- Supt. J. W. Brooks.
Ledbetter Public SchoolLedbetter.
Supt. R. M. Gannon.
Lewis AcademyForney.
Supt. E. C. Lewis.
Liberty Normal and Business CollegeLiberty.
. Supt. D. L. Hamilton.
Lindale High SchoolLindale.
Supt. O. P. Norman.
Marshall High SchoolMarshall.
Supt. W. H. Atteberry. Principal A. L. Plummer.
Madison AcademyMadisonville.
City Supt. J. J. Jopling. Principal C. C. Hayes.
McGregor High SchoolMcGregor.
Supt. R. Lee Abbott.
McKinney Public SchoolMcKinney.
Supt. J. C. Ryan, A. M. Principal S. H. Home.
Navasota High SchoolNavasota.
Supt. B. H. Brown. Principal Miss Elizabeth Blackshear.
New Braunfels AcademyNew Braunfels.
Principal J. G. Neuss.
Orange High SchoolOrange.
Supt. R. R. Sebring. Principal J. W. Mills.
Paris High SchoolParis.
Supt. J. G. Wooten. Principal E. L. Dohoney, Jr.
Peacock's School for BoysSan Antonio.
Supt. Wesley Peacock.
Plano High SchoolPlano.
Supt. C. P. Hudson. Principal W. E. McKnight.
Port Lavaca High SchoolPort Lavaca.
Supt. W. T. Smith. Principal J. W. Smith.
Quanah High SchoolQuanah.
Supt. C. W. Howard. Principal W. B. Quighley.
Richland Grammar SchoolRichland.
Supt. J. W. Miller.
Rock Island High SchoolRock Island.
Supt. and Principal C. D. Jessup.
Rock Springs High School
Principal D. C. Bravlis.
Runge High SchoolRunge.
Supt. F. Z. T. Jackson.
San Antonio Academy
Supt. Wm. B. Sealev.
San Saba Public SchoolSan Saba.
Supt. G. H. Hagan.
San Antonio High School
Principal W. Z. Champion.
Sherman High SchoolSherman.
Supt. P. W. Horn. Principal B. W. Glasgow.
State Institution for the BlindAustin.
Supt. H. L. Piner.

Taylor High School
Supt. W. M. Williams.
Temple High SchoolTemple.
Supt. J. F. Kimball.
Terrell High SchoolTerrell.
Supt. S. W. N. Marrs.
Texarkana High SchoolTexarkana.
Supt. W. Owens. Principal W. S. Staley.
Tivy High School
Supt. J. G. Toland. Principal A. C. Johnson.
Tyler High SchoolTyler.
Supt. J. L. Henderson. Principal W. T. Adams.
Valley Mills High SchoolValley Mills.
Principal W. J. Hixson.
Waco High School
Supt. J. C. Lattimore.
Waxahachie High SchoolWaxahachie.
Supt. W. S. Acker. Principal C. T. Taylor.
Weatherford High School
Supt. J. B. Rogers, Principal T. W. Stanley.
West Paris High School Paris
Supt and Principal I W Cunningham
Wishits Falls Wishits Falls
wienita Fails film School Diadad W. J. Semier
Supt. W. F. Jordan. Principal W. J. Sowder.
Wortham High School
Supt. S. W. Pettus.
Yoakum High SchoolYoakum.
Supt. J J. Kilpatrick.

GROUP B.

Cooley School	ghts.
Principal Miss E. Jones.	
Hutto Independent School	utto.
Supt. E. McMullen.	
Whitewright Public SchoolWhitewr	ight.
Supt. T. E. Goff.	

## AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS.

## **DEGREES AND HONORS.**

Conferred at Commencement, June, 1900.

DEGREE OF B. S. (in Agriculture).

Jas. Lewis, A. K. Short, J. D. Thrower, Wm. J. Walden, A. Winkler.

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

S. R. Biering, T. C. Bittle, Jr., J. D. Carter, T. H. Clement, Jr., Carey Hutson,

C. W. Luhrsen, J. S. Monroe, O. M. Simpson, S. H. Simpson.

DEGREE OF B. S. (in Horticulture).

M. S. Kahn, F. K. McGinnis, C. P. Rogers.

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

J. E. Abrahams, R. B. Boettcher, W. I. Bryan, W. A. Buhler, H. Faust, Leonard Fitzgerald, T. W. Griffiths, Jr., O. W. Myers.

HONOR GRADUATES-SESSION 1899-1900.

Walden, Abrahams, Simpson, O.

### DISTINGUISHED STUDENTS BY CLASSES.

First Class—Walden, Hutson, Simpson, O. Second Class—Fountain, T.; Thomas, Garbade. Third Class—Moore, F.; Harrington, Foy. Fourth Class—Jouett, Odom, Worthing.

## DISTINGUISHED STUDENTS BY DEPARTMENTS.

### FIRST CLASS.

Agriculture-Winkler, Walden, Short.

Chemistry—Agricultural and Horticultural Courses: Walden, Kahn. Mechanical Engineering Course: Abrahams, Fitzgerald.

Civil Engineering—Simpson, O.; Hutson, Carter. Drawing—Civil Engineering Course: Luhrsen, Monroe. Drawing—Mechanical Engineering Course: Abrahams, Bryan. English and History—Hutson, Fitzgerald, Abrahams. Entomology—Walden, McGinnis, Kahn. Horticulture and Mycology—Kahn, McGinnis, Rogers. Languages—Bittle, Luhrsen, Simpson, O. Mathematics—Simpson, O.; Hutson, Bittle. Mechanical Engineering—Abrahams, Bryan, Griffiths.

Veterinary Science-Kahn, Walden, Winkler.

#### SECOND CLASS.

Agriculture-Taylor, Garbade, Lineberger.

Chemistry—Agricultural and Horticultural Course: Garbade, Lineberger. Mechanical Engineering and Civil Engineering Courses: Fountain, T.; Thanheiser.

Civil Engineering-Fountain, T.; Thanheiser, Fehrenkamp.

Drawing-Mechanical Engineering Course: Thomas, Hughes.

Drawing-Civil Engineering Course: Fountain, T.; Simpson.

English and History-Holman, Thanheiser, Fountain, T.

Entomology-Garbade, Raphael, Hurst.

Language-Fehrenkamp, Fountain, T.

Mathematics-Garbade, Eberspacher, Thomas.

Mechanical Engineering-Thomas, Bryan, Eberspacher.

Military Science-Kleinsmith, Bryan, Taylor, L N.

Veterinary Science-Garbade, Rhome, Hooper.

#### THIRD CLASS.

Agriculture-Moore, F.; Harrington, Carpenter.

Botany-Moore, F.; Carpenter, Harrington.

Civil Engineering-Markham, Kerr, I. J.; Beeman.

Drawing-Mechanical Engineering Course: Frye, H.; Neff.

Drawing-Agricultural Course: Stafford, Hayfort.

English and History-Carpenter, Harrington, Foy.

Horticulture and Mycology-Moore, F.; Harrington, Carpenter.

Languages-Moore, F.; Barham, Talbot, P. T.

Mathematics-Fox, Charske.

Mechanical Engineering-Neff, Foy, Shaw.

Physics-Agricultural and Horticultural Course: Moore, F.; Harrington.

Physics — Civil Engineering and Mechanical Engineering Courses: Foy, Strieber.

Veterinary Science-Harrington, Moore, F.; Wren.

#### FOURTH CLASS.

Agriculture-Worthing, Mathews.

Drawing-Doucette, Herndon, Leversedge.

English and History-Mathews, McCall, Kosminsky.

Mathematics-McCall, Worthing, Baum.

Mechanical Engineering-Herndon, Doucette, Odom, Worthing.

Physics-Jouett, McCall, Herndon.

# BATTALION ORGANIZATION FOR 1900-1901.

J. C. EDMONDS, Ex-Colonel 4th Texas U. S. V., Commandant.

{ R. E. Coulter, First Lieutenant and Adjutant.H. E. Elrod, First Lieutenant and Quartermaster.S. J. Fountain, First Lieutenant and Private Secretary.{ B. Youngblood, Sergeant-Major.A. J. Neff, Quartermaster-Sergeant.R. L. Alexander, Battalion Clerk.Phil. Dross, Postmaster.

#### CAPTAINS.

.

Co. A.	Co. B.	Co. C.	Co. D.
W. T. Garbade.	T. M. Smith.	M. F. Thomas.	R. W. Yarbrough.
	FIRST LIF	EUTENANTS.	
R. J. Rhome.	J. H. Simpson.	M. L. Kleinsmith.	C. S. Clark.
	SECOND L	IEUTENANTS.	,
T. H. Garrett.	A. C. Moser.	E. B. Fehrenkamp.	C. A. Thanheiser.
	FIRST SI	ERGEANTS.	
Harry Gleason.	S. A. Rawlins.	E. L. Markham.	V. H. Foy.
	. SERG	EANTS.	
Ray Ridenhower. E. Ross. E. Kloss. L. P. Lowley. M. E. Akers.	G. W. Barham. M. M. Carpenter. J. A. Egg. Lamar Acker.	E. R. Rice. C. B. Harrington. W. N. Sneed. S. E. Gillespie.	I. Kerr. C. A. Strieber. R. Ross. J. Ross.
	CORP	ORALS.	
F. G. Hackney. A. G. Sattler. J. R. Eidson. I. Williams. H. N. Briggs.	M. L. Abrahams. H. Heidelberg. J. W. Hart. A. H. Doucette. J. N. Sneed. W. Beilharz.	<ul> <li>R. B. McLevy.</li> <li>H. F. Matthews.</li> <li>W. H. Jewett.</li> <li>V. P. Powers.</li> <li>G. W. Dealey.</li> <li>J. A. Baum.</li> </ul>	J. Odom. E. Worthing. W. E. Thies. O. Jones. A. Harral. E. Erhard. P. Sanders.



GUARD MOUNTING.

## COMMENCEMENT EXERCISES.

June 10, 11 and 12, 1900.

### PROGRAMME.

### SUNDAY, JUNE 10.

9 a. m.—Inspection of Cadet Quarters by College Officers and Visitors.
11 a. m.—Commencement Sermon by Rev. Geo. W. Truit of Dallas.
8:30 p. m.—Address before the College Young Men's Christian Association.

#### MONDAY, JUNE 11.

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.

11 a.m.—Joint Celebration of Literary Societies.

4 p. m.—Individual Competition Drill for Company Medals—Individual Competition Drill for Battalion Medal—Sham Battle.

8:30 p. m.—Public Meeting Alumni Association—Alumni Address by E. L. Bruce, Mineola—Oration by Hon. Rufus Hardy, Corsicana.

### COMMENCEMENT DAY.

### TUESDAY, JUNE 12.

10 a. m.—Prayer.

Reading of Thesis by First Honor Graduate (best three years' grade, all courses).

Valedictory Address-C. P. Rogers, of Kyle (elected by the First Class).

Response to the Valedictory—A. E. Story, Lockhart (elected by the Second Class.

Commencement Address by Hon. J. W. Blake, of Sherman.

Conferring Degrees, by the President of the Board of Directors.

Announcement of those distinguished in the several classes and departments. Benediction.

4 to 4:30 p. m.-Drill by Foster Guards.

4:45 p. m.—Battalion Drill, followed by Review of the Battalion by the Governor of the State.

Graduating Dress Parade.

#### GRADUATING CLASS.

### With Subjects of their Theses.

### AGRICULTURAL COURSE.

J. Lewis, McKinney, and J. D. Thrower, Mayhew, Miss., "The Study of the Posterior Aorta."

A. K. Short, Decatur, and Wm. Walden, Dickinson, "The Relative Feeding Values of Some Common Grains for Calves."

A. Winkler, The Grove, "Feeding Values of Some Texas Hays for Work Stock."

### CIVIL ENGINEERING COURSE.

S. R. Biering, Hitchcock, "The Design of a Six Panel through Railroad Bridge."

T. C. Bittle, Jr., College Station, "Plans for Improving the Compus Roads and Walks."

J. D. Carter, Kingston, and S. H. Simpson, Hallettsville, "The Relative Strength of Concretes Made With Broken Stone and Rounded Pebbles."

T. H. Clement, Jr., Port Lavaca, and Cary Hutson, College Station, "Effect of Fineness of Sand Grains upon the Strength of Cement Mortars."

C. W. Luhrsen, Stratton, and J. S. Monroe, Rio Grande City, "A Spur Track to Connect the Agricultural and Mechanical College with the Houston & Texas Central Railway."

O. M. Simpson, Jacksboro, "The Preservation of Building Materials."

### HORTICULTURAL COURSE.

M. S. Kahn, Hallettsville, and C. P. Rogers, Kyle, "The Sugar Cane Industry."

F. K. McGinnis, Terrell, "Poleenization of the Peach."

### MECHANICAL ENGINEERING COURSE.

J. E. Abrahams, New Braunfels, and H. Faust, New Braunfels, "The Westinghouse Air Brake."

W. I. Bryan, Chambersville, "The Indicator."

W. A. Buhler, Victoria, "Lubricants."

R. B. Boettcher, Weimar, and O. W. Myers, Josephine, "The Design of a Gymnasium and Natatorium for the Agricultural and Mechanical College."

Leonard Fitzgerald, Houston, "The Manufacture and Distribution of Illuminating Gas."

T. W. Griffiths, Jr., Dallas, "Evolution of the Modern Planer and Sizer."



BATTALION INSPECTION-A. AND M. COLLEGE OF TEXAS.

## ALUMNI.

### ALUMNI ASSOCIATION.

(Organized 1886.)

### ORGANIZATION FOR 1900-1901.

E.	. Cushing, '80, President	ouston.
F.	[. Law, '95, Vice-President	Bryan.
C.	. Pescay, '85. Vice-President	Dallas.
J.	. Kyle, '90, Vice-President	ouston.
E.	Fitzhugh, '80, Vice-President	.Waco.
Ρ.	. Tilson, '88, Secretary and TreasurerCollege S	Station.
E.	7. Kerr, '96, Member Executive Committee	Station.

### EXECUTIVE COMMITTEE.

E. B. Cushing, '80.

E. W. Kerr, '96.

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 (\*).

### ABBREVIATIONS.

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

SUBJECTS:---Ch., Chenistry; 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	1894 1898	С. Е Н	B. C. E B. S.	1st Lieutenant U. S. V. Horticulturist	Manila, P. I. Weatherford
Abrahams, J. E.	1900	M. E	B. S	F'r'm'n Landa C.O. Co.	New Braunfels.
Adams, A. S	1895	C. E	B. O. E	Asst. Eng.H. & T.C. R'y	Houston.
Adams, F. L	1892	A	B. S. A	Physician	Stafford.
*Adriance, D	1860	A	M. S. '90		Bryan.
Ahrenbeck, W. T	1891	M. E.	B. M. E	Minister	Cuero.
Alexander, D. E	1000	E.L. Math.	•••••	Depleteenus	N
Allen W H	1888	Δ		Bookkeeper	Marlin.
Altrolt E I	1892	C E	B O E	M'n'g'r Den't Store	Sun Antonio
Amsler, L. D.	1889	M. E	B. M. E	C'h'r Farm's Nat. Bnk.	Hempstead
Amthor, W.	1895	O. E	B. C. E	Civ. Eng. & Co. Surv'r.	Waco.
Anderson, W. D	1890	A	B. S. A	Mng'r Ice Works	Waxahachia.
Andrews, V	1884	M		Physician	Valley View.
Armstrong, M. F	1882	M		Farmer and Merchant.	Chappel Hill.
Astin, E. H	1999	M. E	B. S	Planter	Mumford.
Backus, U. J.	1800	M. E	B. M. E	B'RK'T KIO Bravo C.Co.	Eagle Pass.
Balley, U. U.	1879	F E	D. U. E	Morehont	Bartlett.
Daker, J.J	1010	Philos S.	•••••	merchant	Homer, La.
Baker, Searcy	1882	M		M'n'g'r Pen't'y Store	Huntsville
Banks, A. L.	1879	G	B. S. '92.	Assoc. Prof. Math	College Station
			M. S. '94.		conceso button.
Barclay, R. L	1898	M. E	B. S	Merchant	Crenshaw.
Barnes, R. M	1898	M. E	B. S	Merchant	Comanche.
Barnes, S. E.	1899	A	B. S	Student	Ames, Iowa.
Beesley, W. S.	1809	U. E	B. U. E	Salesman	Lancaster.
*Riberstein F R	1882	M	D. M. L	Ginner	Marion.
Biering S R	1900	C. E	RS	Clerk G O & S F R'v	Gulveston
Bittle, T. C., Jr.	1900	Č. E	B. S	Draftsman S. P. R'v	New Orleans
Bittle, P. B.	1896	A	B. S	Bookkeeper	College Station.
Bittle, W. A	1894	A	B. S. A	Teacher	Washington, La.
Black, M	1879	Philos. E		Minister	Sterling City.
*Blakemore, T. E	1880	E. Math			
Bland, L. F.	1000	A.	B. S	Ass't. Pharmacist	Willis.
Blease, F. F	1895	L. Gr	DGA	Teacher	Mabank.
Blount S L	1896	A	B S A	Vot Sur	Manor.
Bocock, J. H.	1894	A	B. S. A	Stock farmer	Crystal Va
Boettcher, R. B	1900	M. E	B. S	Stockman and farmer.	Weimer.
Boykin, R. E	1892	M	B. M. E	Teacher	Mt. Calm.
*Braun, P	1888	M	B. M. E		San Antonio.
*Brittingham, W.F., Jr.	1890	O. E	B. O. E		
Bretschneider, W	1600	O. E	B. S	Civil Engineer	Eagle Lake.
Brewer, H. A.	1808	M E	B. S	Planter	Lytton Springs.
Brown TH	1879	9	D. O	Architect I draitsman.	Beaumont.
Brown W H	1880	C. E.	CE.	Planter	Novesoto
Bruce, E. L.	1894	Ö. E	B. C. E	Lawyer	Mineoly
Bryan, B. F	1897	A	B. S	Student	Boulder, Colo
Bryan, W. I	1900	M. E	B. S	Farmer	Chambersville.
Buckman, C. A	1889	O. E	B. C. E	Olerk	Denison.
Buford, F. L.	1892	O. E	B. C. E	Ass'tEng.G.C.& S.F.Ry	Silsbee.
Bunler, U. M.	1000	M. E	B.S	Gen. Office S. P. R'y	Washington, D.C.
bumer, U. W	1092	U. E	в. U. E	& A. P. Ry.	san Antonio.

				·····	·····
Name.	Year	Subject or Course.	Degree.	Occupation.	Residence.
Buhler, W. A.	1900	M. E	B. S	Draftsm, S.A.& A.P.Rv	San Antonio.
Bullard T O	1800	ME	RS	Foreman G C & S F By	Wannewood I T
Bungly T D	1000	0 5	DOF	Fore and Trong So	Colmoster
Burck, L. B	TCON	U. E	B. U. E	secy, and Treas. So.	Galveston.
		1000		Coffee Co.	
Burford, J. M	1882	M		Physician & Surgeon	Independence.
Burghard C. L.	1886	М		Cashier Karnes Coun-	Karnes (lity
Durgharu, O. D	10.0	IG		ta Nutional Dank	traines only.
	4.000			ty National Bank.	
Burgoon, C. E	1895	M. E	B. M. E.,	Ass't Prof. Mech'l Eng.	College Station.
		0	M. E. '99.		
Burleson, R. W.	1895	M. E	B. M. E	Deputy district clerk	San Saha
Burney I W	1896	ME	BS	Stockman	Kornwillo
*Coldwall T C	1883	MI. La.	D. D	Stockman	ixori vinc.
Caldwell. J. C	1000	M	••••••	Sec. 1	
Campbell, D	1918	S		Stockman	Sanderson.
Campbell, R. W	1899	M. E	B. S	Bookkeeper R.R. Con-	Marshall.
	1			struction Co.	
Carson, A. B.	1897	C. F	B. S	Teacher	College Station.
Carcon I M	1886	Δ	2. 2.	Bookkan	Fort Worth
Carson, J. M.	1000	A		Down cuponinton dont	Collogo Station
Carson, J. W	1000	Δ		rarm superintendent.	conege station.
Carson, R. C	1899	M. E	в. 5	rarmer	Bryan.
Carter, J. D	1900	C. E	в. S	C.E.Dep't St.L.S.W.Ry.	Pine Bluff, Ark.
Carter, W. T., Jr	1898	Δ	B. S	Fellow A'gr'l Chem-	State College, Pa.
				istry.	
Camithers E	1885	Δ		Cash'r IIS land offen	Oklahoma O T
Carumers, P	1.07	A	DS	Dool Fetoto	Dollag
Uaven, G. P	1001	A	D. D	neal Estate	Danas.
Cavitt, W. H	1897	M. E	в. S	BOOKKeeper	Beaumont.
Chambers, M. L	1879	G		Real Estate & Loans	Fort Worth.
Clark, H	1895	A	B. S. A	Physician	Eolian.
Clayton W.D	1897	A	M. S.	Foreman Exp Farm	New Orleans La
Clomont T U In	1000	O F	RS	Draftman	Beaumont
Ulement, 1. n., Jr	1000	0. E	D. G	Day from a H C Comment	Muslando
Cobb, S. A	1890	O. E	B. S	DraitsmanU.S. Survey	Muskogee.
Cochran, E. G	1879	F. Philos	E	Physician and surgeon	Greenville.
Cohn, S. L	1897	C. E	B. S	Attorney	Ennis.
Cook E A	1892	M. E	B. M. E		Cleburne.
Cottingham I A	1886	M		Div Eng S P Rv	Del Rio
Cottinghum W D	1509	OF	DUE	Draughtsman K (1 S	Kansas City Mo
Cottingnam, w. r	109%	U. E	<b>D</b> . U. <b>D</b>	Draughtsman R. O. S.	Lausas Only, MO.
		~		_ Kanway.	
Cotton, H	1897	C. E	B. S	Insurance	Dallas.
Couch, E	1897	M. E	B. S	Machinist	Pine Bluff, Ark.
Coulter H T	1895	Η	B. S. H	Physician	Rockdale.
Coulton W I	1905	MF	BME	Morchant	Bryan
Courter, W. J	1000	31 1	D. C. D	Student	(llowoland O
Cousins, R. W	1699	M. E	D. C	Student	Clevelanu, O.
Cox, D. W. S	1892	O. E	B. C. E	Clerk U. S. Oll Mill	Temple.
Cravens, J. R	1882	M		Gen. Ag't Fire In	Dallas.
Crow W E	11898	Η	B. S	Physician	Dallas.
Cunningham A	1970	L Gr G		R'y Postal Clerk	Denver Col.
Culluluguam, A	10.0	Math Ch		Li j i obtui oformitin	Don on our
		main. on.	1		1
	1.0.00	P.		all an ann	11
Cushing, E. B	1850	M	O. E. '99	Chief Eng. S. P. R. R.	Houston.
Cushing, D	1891	M. E	B. M. E	Pharmacist	Columbus, Miss.
Dashiell, W. R.	1891	C. E	B. C. E	Physician	Orizaba, Mex.
Davis J N	1885	M		Supt. Pub. Schools	Hico.
Dawgon N A	1884	M		Lawver	Austin.
Dawson, N. A	1004	C E	DOF	Dontiet	Hillshore
Dazey, w. L	11094	U. E	D. U. H	Deficist	IT maton
Dietert. R. H	1888	м. Е	в. м. Е	r m'n Car Repairs and	nousion.
	1 -			Inspt. H. & T. C. Ry.	
Donalson, C. B., Jr.	1898	M. E	B. S	Farmer	Kyle.
Downs I R	1870	L. G.		Lawver	Waco.
Downs D T	11970	L Gr G		Cash'r 1st Nat'l Bank	Temple.
Lowns, F. L	11000	. ur. u	DE	Dhycician	Trinidad Col
Drisdale, W. E	11009	<b></b>	D. 5	Ctoolman	Danning Cul
Dudley, F. E	1885	W		Stockman	Dalling, Cal.
*Dugan, G. H	1881			<u>.</u>	
Duggan A P	1895	C. E	B. C. E	Attorney at Law	Stamford.
Durver W F	11860	A	B. S.		San Marcos.
Edwards TE	1999	M		Merchant	Denton.
Euwarus, J. F	1000	M T	DE	Machinist	Port Corinto Nic
Eberspacher, G	1990	M. E	D. 2	Machinist.	Montgonory
Eldridge, H. M	.[1897	O. E	B. S	County Surveyor	Dania
Ellis, B. V	1892	A	B. S. A	Physician	Paris.
Ellis Fort O	1894	C. E	B. C. E	Manager Com's'y So.	Millview, Fla.
1010 C.	1-00-	1		States Lumber Co	
Emana (I D	1000	CE	BS	M of W. Den't S.P. Rv	Houston.
Evans, U. D	1093	M 17	DME	Stockman	Roosevelt
Farmer, A. G	1895	M. E	D. M. E	Stuck man	Anotin
Faust, H	. 1900	M. E	B. S	student U. of T	Austin.
Faust W	1897	O. E	B. S	Assistant Cashier 1st	new Braunteis.
cuust, 11	1-00.	1		National Bank.	
Ecombolic T D	1880	CE	BCE	Attorney & Counselor	New York.
rearnake, J. D	1005	0	D. C. B	of Law	1
	100		DOT	Tratmaton Dotone II	Austin
Ferguson, A. M	. 1894	H	B. S. H	Instructor Botany U.	Austin.
		1	M. S. '96.	01 1.	D.11.
Field, H. Y.	. 1891	A	B. S. A	Ulerk Justice Court	Dallas.
Finney C B	11896	S.C. E	B. S	Oiv. Eng. & Mining	O. P. Diaz, Mex.
Fitzgeruld A H	180	A	B. S. A.	Pharmacist	Gonzales.
Fitzgeralu, A. H.	1000	NE	BS	Shons H. & T. C. R.R.	'Houston.
ruzgeraia, L		. BL. 19			

Name.	Year	Subject or Course.	Degree.	Occupation.	Residence.
Fitzhugh, E. E Floyd, J. F., Jr	1880 1892	E. L. Math M. E	B. M. E	Fire Insurance	Waco. Texarkana. Waalder
Fort. F. W	1879	L. Gr. G	D. 5. A	Wholesale Grain	Waco.
Fordtran, F. L	1887	A		Physician	Witting.
Fowler, E. G. R	1894	C. E	в. с. е	Laptain U.S.V	Manila, P. I.
Foutrel G F	1898	M. E	B. S	Machinist	San Antonio.
Fuller, T. A	1879	G		Lawyer	San Antonio.
Giesecke, F. E	1886	M	M. E. '92	Prof. Drawing	College Station.
G1050Ck0, G	1884	M		Go Guenther Milling	San Antonio.
Giesecke, W. E	1892	M. E	B. M. E	Cons't Eng. Torreon Met. Co.	Torreon, Mex.
Gilbert, J	1894	A M E	B. S. A B S	Electrician	Houston
Glover, W. F. H.	1898	A	B. S	Planter	Yemassee, S. C.
Goldberg, I. L	1896	н	B. S	Merchant	Jefferson.
*Graves, C. S	1882	M	••••••	Civil Engineer	
Green, R. B.	1884	M		Lawyer & Co. Judge	San Antonio.
*Greenwood, F. J	1898	O. E	B. S		Stoneham.
Griffiths, T. W., Jr	1900	M. E	B. S	Lumber Dealer	Dallas.
Grupe G	1892	M. E.	B. M. E	Supt. Steam Plant	College Station.
Gurley, D. R., Jr	1892	C. E	B. O. E	Farmer	Waco.
Hanschke, R., Jr	1890	M. E M	B. M. E	Sec'y Freie Presse fuer Texas Publ. Co.	San Antonio.
Hare S A	1882	M		Lawver	Sherman.
Harrison, C. C	1899	Н.,	B. S	Sci.Aid U.S. Dept. Agr.	Washington, D.O.
Harrison, W. A	1898	H	B. S	Chief Clerk Coal Co	Dallas.
Hawkins, J. W	1893	A	B. S. A	Agent	Lockhart.
Haden, J. H	1879	s		Farmer	Blooming Grove.
Henderson, H	1891	A	B. S. A	Lumber Exporter	Gulf Port, Miss.
Hereford, J. B	1887	м		and Adjuster	Dallas.
Hernstadt, S. J	1890	C. E	B. C. E	Stockman	Groesbeck.
Hildebrandt, A. M	1896	н	B. S	Editor	San Antonio.
Hoffman F (	1888	ME	B.M.E.	Jeweler	New Braunfels
Homann, A. C	1898	M. E	B. S	Bookkeeper	Yukon, O. T.
Holman, J. R.	1895	O. E	B. C. E	Ass't Civ. Eng. S.P.Ry.	Athens.
Hopkins, S. H	1890	A	B. S. A	at Law	Gonzales.
Horn, T. L	1899	M. E	B. S	Track Dept. G. C. & S. F. Ry.	Fort Worth.
Hough, S. A	1885	M	BOF	Lawyer and Co. Judge.	Rock Springs.
Howell J W	1894	A	B. C. E	Merchant	Bryan
Howell, R. W	1896	A	B. S	Merchant	Bryan.
Hudgins, F. D	1897	0. <u>E</u>	B. S	Ass't Civ. Eng. E.T.Ry.	Marshall.
Hutchinson, O. D	1893	A	B. S. A	Farmer and Stockman.	Waldron, I. T.
Hutchinson, W. F	1897	C. E	B. S	M'g'r Long Hardw. &	Denton.
Hutson, A. C	1900	C. Ė	B. S	Imp. Co. Civ. Eng. Dept. G. C. &	Dallas.
Hutson, H. L	1896	M. E	B. S.	Draughtsman	Brooklyn N V
Hutson, W. F	1895	A	B. S. A	Texas Cattle Fever	College Station.
	1000			Exp.	
*Jack, D. M	1879	L. Gr Philos F		••••••	
Jahn, F. C	1894	Н	B. S. H	Horticulturist	Gonzales.
Japhet, G	1894	M. E	B. M. E	Produce, Fruit & Com-	Houston.
Jonas, E. C.	1894	C. E	B. C. E.	Journal Clerk And	San Antonio
-			21 01 23.	Dept. S.A.& A. P. Ry.	Sud III Johno.
Jonas, H. F	1888	0. E	B. C. E	Chief Draughtsman S.	Houston.
*Jones, W. T.	1889	C. E	B. C. E.	г. ку., в. & в. Div.	
Jordan, H. P	1895	0. E	B. Ö. E	Att'y & Counselor at	Waco.
Topor N. T	1000		<b>D G A</b>	Law & Ass't Co. Att'y	<b>a</b>
Kahn, M. S	1588	A	в. S. A В S	Med Student Tulana	San Antonio.
	1900			University.	new orieans, La.
Kell, E	1894	M. E	B. M. E	Electrical Engineer	New Orleans, La.
Kerr E W	1883 180e	M	RSME	Attorney at Law	Greoesbeck.
2.011, 12. If	1030		'99.	The section with the section of the	Conege station.
Kerr, J. G	1898	A	B. S	Farmer	Vineland.

Name.	Year	Subject or Course.	Degree.	Occupation.	Residence.
Knolle, A. P	1888	C. E		Physician	Ellinger.
Knolle, B. E	1884	М		Physician	Industry.
Knolle, E. K	1887	M		Physician	wesley.
Knolle, O.J.	1897	A	B. S	Physician	Industry.
Knolle, W. H.	1888	O. E	B. C. E	Physician & Surgeon.	New Orleans, La.
корке, ц. Ј	1000	U. E	U. E	Civ. Engineer and Real	Beaumont.
Kuohno I F	1990	ME	BME	Mp'f'g and Com Agt	Mexico Pity
	1807	Δ	B S	Stockman	Portules N M
Kyle, E.J.	1899	Ĥ	BS	Student	Ithaca N Y
Kyle, H. C	1896	Ā	B. S	Stock Farmer	Nursery.
Kyle, J. A.	1890	A	B. S. A	Physician & Surgeon	Houston.
*Kyle, T. M	1893	M. E	B. M. E		Nursery.
Law, F. M	1895	A	B. S. A	Bank Bookkeeper	Bryan.
Leggett, W. K	1889	C. E	B. C. E	Infantry, U.S. Army	Manila, P. I
Lewis, F	1894	C. E	B. C. E	U. S. Surveyor	Muskogee, I. T.
Lewis, J	1900	A	B. S	Farmer	Foot.
Lewis, L. L.	1893	A	B. S. A	Prof. of Zoology and	Stillwater, O. T.
Tamia M	1000	M F	M. 5. '94.	vet. Science.	Ct David Minn
Lewis, M	1949	M. F	в. 5	W D.	st. Paul, Minn.
Liuscomb R S	188.	N	1	Physician	Granevine
Littlejohn R G	1891	C.E.	B. C. E	Fire In. Special Agent	Fort Worth
Love. A. C.	1899	Č. E	B. S.	Ass't Prof. Drawing	College Station
Luckett, W. H.	1891	A	B. S. A	Physician & Surgeon	New York.
*Luckett, W. M	1894	M. E	B. M. E		Bastrop.
*Luhrsen, C. W	1900	C. E	B. S		Stratton.
Mabry, R	1889	C. E	B. C. E	Traveling Salesman,	Des Moines, Iowa.
	1			ChamberlainMed.Co.	
Mackensen, B. C	1884	M		Teacher	San Antonio.
Mackensen, L	1885	M	T. 0	Poultry Breeder	Houston.
Martin, E. L	1899	C. E	B. S	Civ. Eng. Dep't H., E.	Houston.
Mantin II D	1005	M T	DMD	& W. T. Ry.	Drool fold Mo
Martin, <b>H</b> . <b>D</b>	1030	M. E	D. H. E	lington Pouto	Brook neid, MO.
Martin W (	1898	ਸ	BS	Ass't Prof Chemistry	College Station
Massenberg W G	1894	CE	BCE	Civ Eng Dent G C &	Lomb.
musselberg, in. c	1001	0	. c. b	S. F. Ry.	Domo.
Mead. J	1897	C. E	B. S	Civ. Eng. Dept. I. & G.	Brenham.
				N. Ry.	
*Merrit, W. B	1889	A	B. S. A		McKinney.
Merriwether, W. T	1891	C. E	B. C. E	Civil Engineer	Eagle Lake.
Middlebrook, E. S	1889	C. E	B. C. E	Lawyer	Columbus.
Middlebrook, R. M	1891	M. E	B. M. E	Attorney at Law	Columbus.
Miley, J. H.	1896	Q. E	B. S	Attorney at Law	Smithville.
Miller, C. S.	1000	E. L		Lawyer and Land Agt.	Ballwillo
Mitchell A	1804	C F	BOF	Prine Public School	Cumby
Mitchell W H	1893	C E	BCE	Druggist	Holland.
Monroe, J. S.	1900	Č. E	B. S.	Civ. Eng. Dep't B. & Q.	Rio Grande.
1101100,012	1	0.2		S. Ry.	
Montgomery, F. L	1889	A	B. S. A	Lawyer	Sherman.
Moore, R	1892	A	B. S. A	Druggist	Tilden.
Moore, T. E	1892	A	B. S. A	Physician	San Antonio.
Moore, W. M	1895	O. E	B. C. E	Cotton Factor	McKinney.
Morrill, C. R	1891	O. E	B. C. E	Roadmaster S. P. Ry	Layiayette, La.
*Mosely, W. E	1000	C F	PCF	Pondmustor S P Br	Algiers La
Moursund F M	1897	C E	B.S.	noaumasier 5. r. Ky	Frederickshurg
Mouser E B	1895	Ă	B. S. A.	Physician	Duncanville.
Mullins, E. Y.	1879	L. G		President S. B. T. S	Louisville, Ky.
Myers, O. W	1900	M. E	B. S	Mechanical Engineer	Josephine.
Myers, W. G	1894	M. E	B. M. E	Gen. Manager Escon-	El Paso.
				dida M. & D. Co.	
McCormick, Geo., Jr	1891	M. E	B. M. E	Chief Draughtsman	Houston.
	1000			Motive Dep't S.P. Ry.	Mandle D T
McColloch, C. C	1880	M	DME	Surgeon U. S. Army.	Manila, P. I.
McDonald, H. F	1890	M. E	B. M. E	Sup't City water works	Torroll Cuba
McGinnis, F. K	1900	п М	D. D. M. F	A se't Surgoon TI S A	Puerto Principe
MacNair H T	1887	M		Civ. Eng. Penn R'v Co	Cleveland, O.
McNeill J ()	1896	C. F.	B. S.	Surveyor.	Brazoria.
McQueen, T. B.	1884	M		Bookkeeper	Marlin.
Neathery, D. E	1892	A	B. S. A	County Treasurer	McKinney.
Ness, H.	1889	Н	B. S	Professor Botany	College Station.
Newton, G	1898	A	B. S	Bookkeeper	Rockdale.
Nichols, J. F	1889	H	B. S	Attorney	Greenyille.
Nichols, J. R	1889	A	B. S. A	Physician and Surgeon	Terrell.
	1			(first assistant).	D-11
Nichols, W. L	1891	Q. E	B. C. E	Chief Eng. S.L. & P.Co.	Dallas.
O'Bar, J. H	1893	A	B. S. A	Cotton Buyer	Lagrange.
Oglesby, G. B	1000	C. F.	B. C. H	Stoelzman	Laredo
Overshiper E M	1807	C E	B S	Lawyer	Dallas
VICIONINOL DA MILLION	11006	····			,

# AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS.

· · · · · · · · · · · · · · · · · · ·					
Name.	Year	Subject or Course,	Degree.	Occupation.	Residence.
Park, C. M	1896	C. E	B. S	Publisher	Dallas.
Parsons, B. C	1893	Н	B. S. H	Clerk Ft. Dep't M.I.Ry.	Eagle Pass.
Patrick, A. T	1883	M		Lawyer	New York.
Pearson, H. A	1893	C. E	B. C. E	Planter	Troy.
Pennington, R. E	1884	A		Lawyer	Brenham.
Perlitz, W. E	1893	C. E	B. C. E	Merchant	Schulenburg.
Pescay, C. H	1885	M		Spec. Ins. Agent and	Dallas.
				Adjuster.	
Peters, R. F	1894	M. E	B. M. E	Mech'l Draughtsman	Houston.
	1005	3.5		S. P. Ky.	Townston Man
Pfeuffer, F. L.	1000	NI	D C .A	Sugar Planter	Tampico, mex.
*Preuffer. W. O. R	1000	A	B. S. A	Taran han Manalanat	New Braunfeis.
Pfeuffer, U. S	1991	U. E	B. U. E	Lumber Merchant	New Brauniels.
Philpott, W. B	1001	A	D G A	Assoc. Prot. of English.	College Station.
Pittuck, B. U	1001	C F	D. O. A	Civil Engineen	Consigente
Polk, W. A., Jr.	10%0	U. E	D. U. E	Incurance	Dollas
Poulter, R. J	1000	H	DEU	Monufacture	Danas.
Radiord, J. S.	1800	Δ	D C A	Lowyor	Hallottevilla
Ragsdale, J. W.	1909	MF	D M F	Co Surv & Lond Agt	Fort Stockton
Ratchioru, W. I.	1808	ME	R S	Eng Don US A	Hawana Cuba
Rawlins, II. D.	1879	G	<b>D</b> . D	Wholesale Grocer	Houston
Reichardt, F. A.	1888	A	B S A	Sec'y and Treas (lot-	San Antonio
monnoro, r	1000			ton and Com. Co.	and the coulds
Rhodes, S. E.	1896	M. E	B. S	Ass't. Draftsman Eng.	Tyler.
TATOROS! O. Taunun				Dept. S. L. S. W. Rv.	
Rice, D	1882	М		Public Weigher	Houston.
Rike, H. M.	1893	O. E	B. C. E	County Surveyor	Haskell.
Boach, G. W	1884	M		Teacher	El Paso.
Robson, C. G	1898	Н	B. S	Mgr.Fayette Co.Tel.Co.	La Grange.
Roderiquez, D	1896	C. E	B. S	Student Cornell Uni	Ithaca, N. Y.
Rogan, Chas	1879	G. E. Ch. P.		Lawyer, Com. General	Austin.
				Land Office.	
Rogers, B. F	1889	C. E	B. O. E	Banker.	Jefferson.
Rogers, C. P	1900	Н	B. S	Law Student	Austin.
Rogers, G. A	1887	M	•••••	Merchant	Longview.
Rogers, R. A	1918	L.G.	•••••	Cotton factor and com-	Galveston.
		Dbil 170		mission merchant.	
Dolling C W	1803	0 F	BOE	Civil Engineer	Begumont
Rolling H M	1897	ME	B S	Engineer	College Station
Rose W F	1894	M. E	B. M. E	Draftman Or. R.&Nay.	Portland, O.
10.50, 11. 2.				Co.	
Rosenthal, H. H	1896	C. E	B. S	Manager Brick Plant	Oklahoma, O. T.
Ross, F. R	1894	A	B. S. A	Physician State Luna-	Austin.
,		~		tic Asylum.	
Ross, J. G	1894	C. E	B. O. E	County Attorney	Cold Springs.
Rountree, T. D	1898	U. E	B. S	Med. student, U. of va.	Quariottsville, va
Rowell, T. D.	1885	A	DOE	Att y at law & Co. judge	Jefferson.
Rudasill, W.S	1890	U. E	B. U. E	Stockman	Suerman.
Sanders, W. O	1000	<u>г</u> і	D. D	Bookkeeper	Bryan.
Sauvignet, E. H	1094	A	D. S. A	Hospital	San Antonio.
Sources B	1882	M		Lumber merchant	Clarendon
Scherer C L	1896	O E	BS	Surveyor	Anabuac
Scherer, W. A.	1898	Η	B. S	Stockman	Anahuac.
Schmidt, C. L	1890	M. E	B. M. E	Machinist M. N. Ry	Laredo.
Schmidt, D. T. C	1894	C. E	B. C. E	Ass't Foreman S. P.Ry.	Morgan City, La.
Schumacher. H. C	1892	O. E	B. O. E	Wholesale merchant	La Grange.
Sewell, M. S	1894	C. E	B. C. E	Bookkeeper	McGregor.
Shires, F. N	1897	M. E	B. S	Merchant	Wetumka, I. T.
Shires, G. M	1897	M. E	B. S	Ass't Chief Eng. Hous-	Houston.
~ · · · · · · · · · · · · · · · · · · ·	1004			ton Post.	
Shirley. A. L.	1884	A	D 16 D	Farmer and merchant	Anna.
*Shirley, M. W	1889	M. E	B. M. E	Deal Datate	McKinney.
Suffley, W. M.	1009	M F	D. U. L	wear Estate	McKinney.
Short A W	1000	Δ.	D. M. D	Stool farmer	Decetur
Short I I.	1900	Δ	RS A	Physician and surgeon	Houston
Simpson O M	1900	C. E	B.S.	Draftsman	Beaumont.
Simpson, S. H.	1900	Ŏ. Ē	B. S	Civ. Eng. Dept. S.P.Rv.	Houston.
Sleeper, W. M.	1879	L.Gr.G.M.		Lawyer	Waco.
Sloss, A. M.	1899	A	B. S	Assayer Minas de Dos	Dos Cabezas, Mex.
				Cabezas.	
Smith, A. U	1895	M. E	B. M. E	Agt. N. Y. Life Ins	Huntsville.
Smith, E. J	1888	A	B. S. A	Attorney at Law	Denison.
smith, T. L, Jr	1898	U. E	B. S	Uivil Engineer	Columbia.
Smither, R.	1894	M. E	в. м. е	Grocer	Huntsville.
Tomythe, H. G	1879	<u>ل</u> م	DR	Instructor Mill Co	bryan. Mallinne-
Sueeu, G. D	1988	A	D. D	Tustructor Mil. Sc. and	mentinney.
		1		Lactics Hawthorne	
Soles, C. B	1800	ME	BS	Farmer	College Station
	1099	El	Tri C	r at mer	conego bration.
.

Name.	Year	Subject or Course.	Degree.	Occupation .	Residence.
*Spann. E. W Speer, R. H	1885 1894	M C. E	B. C. E	Stockman	Quanah.
Sternenberg, E. H Steward, W. W Swain, M. S	1897 1888 1888	C. E M. E H	B. S B. M. E B. S	Civ. Eng. and teacher Mill and Gin Stock and BondBroker	New Ulm. Steward's Mill.
Talbot, A Thrower, J. D	$1882 \\ 1900$	M	B. S	Planter. Student A.&M. College	Calvert. College Station.
Tilson, P. S	1886	м А	B. S. A.	Manufacturer and merchant. Assoc.Prof.Chemistry.	Texarkana. College Station.
Todd, A. M	1894	Ç. E	M. S., '94. B. C. E	U. S. Supt. of Const	Greenville, Miss.
Tracy, H. H. Trenckman, W. A	1898 1878	O. E G.	B. S	Stock farming Editor	Tulia. Bellville.
		E.,Ch., P.,			
*Tuller, W. L Ueckert, H. H VanZandt, K. M., Jr	1883 1897 1879	M C. E G	B. S	Draughtsman S. P. Ry. Auditor, Cashier, Pay-	Houston. Manzanillo, Mex.
VanZandt. R. L Vinther, F	1890 1897	C. E M. E	B. C. E B. S	With U.S.Supre'eCourt Mech. & draughtsman.	Manila, P. I. Pine Bluff, Ark.
Walden, W. J. Wangemann, A. E.	1900 1890	A A	B. S. B. S. A	Fellow in Chemistry. Wholesale grocer	College Station Brenham.
Watkins, R. O Watkins, W. A *Watson, D. H	1895 1892 1882	C. E M	B. C. E	Lawyer	Bryan. Brenham.
Watson, W. D Weidel, J	1893 1893	A C. E	B. S. A B. C. E	Dairyman Civ. Eng. A. T. & S. F. Ry.	Houston. Pueblo, Col.
Welhausen, C. B Wells, D. D.	$1891 \\ 1895 \\ 1883 \\ $	M. E A	B. M. E B. S. A	Merchant Ass't Surgeon U. S. A	Shiner. Washington, D.C.
West, T. B. Whealan, J. J.	1887	M M. E	B. M. E	Ag't S. P. Ry, Glidden. Machinist H.& T.C.Ry.	Columbus. Houston.
Whisenant, W. H	1897	U. Е Н	B. S	& B. V. Ry. Student	Chicago.
Whitaker, W White, G. R Whitener, H. L	1885 1895 1891	M C. E A.	B. C. E B. S. A	Stockman Physician	Brady. St. Louis, Mo.
Whitlock, E. H	1886	M	RS	Ass't Sup't and Expert M. E. Nat'l Carb. Co.	Cleveland, O. Pueblo, Col.
Winkler, A. Wight, A. T.	1900 1895	A C. E	B. S. B. C. E	Farmer. General Merchandise	The Grove. Roxton.
Wilson, W	1897 1893	С. Е С. Е	B. C. E	N. Ry. Attorney at Law	Port Lavaca.
Wipprecht, W	1884	A	в. S.A., '85.	and Mn'g'r Bryan Press Co.	Bryan.
Wisdom, F. L.	1896	C. E:	B. S	Car and Bill Clerk St. 1. S. W. Ry.	Tyler. Tokoma Pk., D.C.
Wright, E Wright, H. L	1892 1886	0. E	B. C. E	Lawyer	Paris. Palestine.
Woodward, W. F Wurzbach, W. A Total, 378.	1886 1888	м. С. Е	B. C. E	Lawyer.	San Antonio.

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 States 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.

And be it further enacted, That the land aforesaid, after being surveyed, Sec. 2. 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 treasuries 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

,



BATTALION REVIEW,

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 unless 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 hunderd 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 different portions 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.

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 Scnate 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 amendment, 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 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 library, 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 costs 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 Secre-

tary 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 24, 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 the 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 rotary 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 tabu-

lations 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 Commissioner 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, 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;



MAIN BUILDING AND ROSS HALL. (WINTER VIEW.)

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.

#### 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 anyone who is interested in advancing the agricultural interests of the State.

## THE FARMERS' CONGRESS.

Each year a number of important agricultural organizations of Texas hold joint sessions upon the College grounds during three days of July. These meetings are known as "The Texas 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 effected July 13, 1898, and the following State organizations now hold membership: State Horticultural Society, F. W. Mally, College Station, President; State Cotton Growers' Association, E. S. Peters, Calvert, President; Texas Dairymens' Association, L. H. Porter, Rockdale, President; Texas Truck Growers' Association, A. G. Pickett, Floresville, President; Texas Jersey Cattle Club, W. A. Ponder, Denison, President; Texas Live Stock Association, C. B. Lucas, Berclair, President; South Texas Truck and Fruit Growers Association, F. W. Mally, College Station, President; Texas State Floral Society, Mrs. J. M. Davis, Waco, President; Central Texas Beekeepers' Association, J. B. Salyer, Jonah, President; Texas Poultry, Pigeon and Pet Stock Association, H. B. Savage, Belton, President; Texas Nurserymen's Association, E. W. Kirkpatrick, McKinney, President.

The Congress meets in fourth annual session July 23 to 26, 1901.

#### 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×, Cattle Feeding; No. 3×, Grasses and Forage Plants; No. 4×, Cotton Blight; No. 5×, Creameries for Texas; No. 6×, Cattle Feeding; No. 7\*, Cotton Blight; No. 8\*, Diseases of Grapes; No. 9×, Pear Stocks; No. 10×, Cattle Feeding; No. 11×, Effect of Cotton Seed and Cotton Seed Meal on Butter Product; No. 12×, The Screw Worm; No. 13×, Sorghum; No. 14×, Effect of Cotton Seed and Cotton Seed Meal on the Dairy Ration; No. 15×, Influence of Climate on Composition of Corn; No. 16×, Drainage Experiments with Cabbage, Irish Potatoes, and Strawberries; No. 17×, General Information; No. 18×, Liner Flukes; No. 19×, Corn Fodder; No. 20×, Grasses and Forage Plants; No. 21\*, Effect of Cotton Seed and Cotton Seed Meal in Feeding Hogs; No. 22×, Alfalfa Root Rot; No. 23×, Black Rot of the Grape; No. 24×, The Cattle Tick; No. 25×, Texas Soils; No. 26\*, Cost of Cotton Production; No. 27×, Steer Feeding; No. 28×, Sweet Potatoes; No. 29×, Effect of Cotton Seed Ration on Butter, Beef, Tallow, Lard and Sheep Suet; No. 30×, Veterinary Science; No. 31×, Insects Injurious to Stored Grain; No. 32\*, Varieties of Plums, Apricots and Japan Persimmons: Injurious Fungi and Insects; No. 33\*, Feeding Milk Cows; No. 34×, Field Experiments at College Station, McKinney, and Wichita Falls Sub-stations; No. 35×, Miscellaneous Chemical Analyses; No. 36\*, 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×, 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. 51, Fertilizers and Fertilizer Analysis: No. 52, Cabbage 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.

\* On hand.

x Out of print.

# INDEX.

Page.	Page.
Acts of Congress	Physics
Acts of Legislature94, 95	Veterinary Science
Admission, Requirements for19, 20	Discipline
Advancement 41	Distinguished Students
Affiliated Schools74, 78	Dormitories
Agricultural Course	100
Agricultural - Horticultural Build-	Entrance Examinations21, 24
ing 64	Equipment 46
Alumni Association 81.00	Examinations 41
Assembly Hell	Expenses
Austin Hell 65	Experiment Station-
Austin Itali	Advantage to College 102
Battalion Organization 81	Location and Support 101
Board of Directors 5	Objects 109
Books 25	Origin
Catalogue of Students 0, 17	Station Dublications 102
Cartificatos 49	Work Done and under Way 102
Civil Engineering Course 28	Work Done and under Way103
Collors Colordan	Faculty
Common common transison 82 82	Farm 67
Commencement Exercises	Farm Buildings 66
Courses of Study—	Farmers' Congress102
Elective 40	Foster Hall 65
General Science 41	Cathright Hall 64
Graduàte 38	Ganaral Information
Regular 27	Crades
Short 41	Graduating Class 50
Special 41	Graduating Class
Creamery 66	Graduation
Curricula	Honors 42
Degrees and Honors 79	Horticultural Course 28
Degrees and monors	Hygiene 71
A price 11 10 42	Tu famo and
Agriculture 43	Infimary
Botany 47	Injuries to Public Buildings97, 98
Chemistry and Mineralogy 48	Instructors and Omcers7, 8
Civil Engineering	Labor. 26
Drawing	Lands
English	Library 67
Entomology 53	Literary Societies 70
History 58	Live Stock 67
Horticulture and Mycology 55	Location 63
Languages	
Mathematics 58	Machinery 64
Mechanical Engineering 59	Main Building 63
Military Science and Tactics 60	Matriculation 24

# 110 Agricultural and Mechanical College of Texas.

Pag	ge.	, Р	age
Mechanical Engineering Course	28	Regulations, General72	, 73
Mess Hall.	65	Religion	. 70
Methods and Scope of Instruction.	19	Ross Hall	65
Military Organization	72		
Monthly Reports.	41	Session.	. 26
Museum		Shops	64
Euseum		Short Courses	41
Natatorium	66	Special Courses	41
Notice to Parents	71	Stationery	25
2.00100 00 2 01 02 02 01 02 02 01 02 02 01 02 02 00 00		Student Labor	26
Objects and Policy	18		
		Text-Books	, 37
Permanent Fund	92	Uniforms	95
Pfeuffer Hall (	65	0 11101 1113	20
Postoffice	63	Y. M. C. A	71
		1	

SPECIAL ATTENTION IS CALLED TO THE SPECIMEN ENTRANCE EXAMINATIONS, PAGES 22-27. YOUNG MEN INTENDING TO APPLY FOR ADMISSION ARE URGED TO SAT-ISFY THEMSELVES, BEFORE COMING TO THE COLLEGE, THAT THEY CAN ANSWER SUCH QUESTIONS.

STUDENTS SHOULD NOT ARRIVE BEFORE MONDAY, SEP-TEMBER 8.



MAIN BUILDING.

AUSTIN HALL.

ROSS HALL.



MAIN BUILDING.

CHAPEL.

ROSS HALL.