

Transactions of the Kansas State Board of Agriculture, 1875

Section 23, Pages 661 - 690

This annual report from the Kansas State Board of Agriculture includes information on livestock and other agricultural topics. A subject of note is a report on the Rocky Mountain locust invasion. Also covered are county statistics for population, acreages, productions, live stock, industry, and assessed valuation of property. State statistics, crop and livestock statistics are also included.

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KANSAS
HISTORICAL
SOCIETY



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STATE BOARD OF AGRICULTURE.

POST OFFICES IN KANSAS—Continued.

Elmira.	Galesburgh.	Rotterdam.
Excelsior.	Island.	Twin Creek.
Glen Elder.	Jacksonville.	
Lulu.	Ladore.	OTTAWA.
Naomi.	Odense.	Ada.
Pittsburgh.	Osage Mission.	Ailanthus.
Round Spring.	South Mound.	Bennington.
Saltville.	Thayer.	Bluffton.
Shockley.	Urbana.	Churchill.
Solomon Rapids.		Coal Creek.
Springfield.	NESS.	Culver.
Wacanda.	Bazine.	Delphos.
West Asher.	Ness.	Grover.
		Lamar.
MONTGOMERY.	NORTON.	Lindsey.
Caney.	Almena.	Minneapolis.
Cherry Vale.	Cactus.	Ohio Grove.
Coffeyville.	Devizes.	Pipe Creek.
Elk City.	Lenora.	Sumnerville.
Fawn Creek.	Leota.	Windsor.
Forest Grove.	Long Branch.	Yale.
Harrisonville.	Neighborville.	
Havana.	Norton.	PAWNEE.
Independence.	Port Landis.	Fort Larned.
Liberty.	West Union.	Garfield.
Parker.		Larned.
Radical City.	OSAGE.	
Rutland.	Arvonia.	PHILLIPS.
Sternerton.	Barclay.	Bow Creek.
	Burlingame.	Chillicothe.
MORRIS.	Carbondale.	Crow Creek.
Beman.	Draoon.	Dickeyville.
Council Grove.	Fairfax.	Fredericksburgh.
Diamond Springs.	Farmersville.	Goode.
Dunlap.	Kedron.	Granite Bluff.
Far West.	La Mont's Hill.	Jimtown.
Hill Spring.	Lyndon.	Kildare.
Leland.	Melvern.	Kirwin.
Parkersville.	Michigan Valley.	Logan.
Skiddy.	Olivet.	Long Island.
White City.	Osage City.	Matteson.
	Pop Corn.	Mound.
NEMAHA.	Quenemo.	Mount Zion.
Albany.	Ridgeway.	Norman.
America City.	Scranton.	Phillipsburgh.
Capioma.	Valley Brook.	Plumb Creek.
Centralia.	Wilmington.	West Cedar.
Clear Creek.		
Corning.	OSBORNE.	POTTAWATOMIE.
Granada.	Bethany.	Adams Peak.
Lappin.	Black Hawk.	Arispie.
Lorain.	Bloomington.	Bellegarde.
Neuchatel.	Bull's City.	Belvue.
Sabetha.	Corinth.	Blaine.
Seneca.	Covert.	Float.
Sother.	Delhi.	Grange.
Wetmore.	Emley.	Laclede.
	Free Will.	Leghorn.
NEOSHO.	Grand Centre.	Louisville.
Austin.	Kill Creek.	Maple Grove.
Chanute.	Mount Ayr.	Myers' Valley.
Cremona.	New Arcadia.	Oak Grove.
Earleton.	Osborne.	Olesburgh.
Erie.	Pleasant Hill.	Otter Lake.
Flat Rock.	Potterville.	Pleasant Run.



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POST OFFICES IN KANSAS—Continued.

Saint Clere.
Saint George.
Saint Mary's Mission
Savannah.
Spring Side
Vienna.
Wamego.
Westmoreland.

RENO.

Bone Springs.
Castleton.
Haven.
Hutchinson.
Idaville.
Jordan Springs.
Langdon.
Leslie.
Mount Liberty.
Netherland.
New London.
Nickerson.
Pretty Prairie.
Reno Centre.
Riverton.
Salt Creek.
Sego.
Westminster.

REPUBLIC.

Agenda.
Albion.
Belleville.
Centre Mound
Cuba.
Elma.
Gomeria.
Ida.
Jay Eu.
Mimosa.
Neilsburgh.
New Liberty.
New Scandinavia.
New Tabor.
Norway.
Prairie Grove.
Prairie Home.
Seapo.
West Creek.
White Rock.
Wilber.

RICE.

Allegan.
Atlanta.
Bartgestown.
Coopersburgh.
Fair Point.
Glen Sharrald.
Kansas Centre.
Lodiana.
New Cincinnati.
Noble.
Peace.

Raymond.
River View.
Stone Corral.
Wildwood.

RILEY.

Alert.
Bala.
Berlin.
Big Timber.
Manhattan.
May Day.
Milford.
Ogden.
Parallel.
Randolph.
Riley Centre
Stockdale.
Vinton.
Wild Cat.
Winkler's Mills.

ROOKS.

Floreyville.
Rockport.
Rooks Centre.
Stockton.

RUSH.

Alexander.
Belfield.
Brookdale.
Olney.
Rush Centre.

RUSSELL.

Bunker Hill.
Dorrence.
East Wolf.
Fairfield.
Kennebec.
Lura.
Russell.

SALINE.

Appin.
Broadview.
Brookville.
Falun.
Gypsum Creek.
Honek.
Mulberry.
New Cambria.
Pliny.
Poheta.
Salemsburgh.
Salina.

SEDGWICK.

Afton.
Blendon.
Clarion.
Clear Water.
Delano.
Eldridge.

El Paso.*
Fayette.
Garden Plain.
Greenwich.
Iowaville.
Jamesburgh.
Minneha.
Mount Hope.
Ohio Centre.
Park City.
Valley Centre.
Waco.
Wichita.

SHAWNEE.

Auburn.
Dover.
Kingsville.
North Topeka.
Pauline.
Plowboy.
Richland.
Rossville.
Silver Lake.
Tecumseh.
Topeka.
Wakarusa.
Waveland.

SMITH.

Cedarville.
Cora.
Corvallis.
Covington.
Crystal Plains.
Dresden.
Gaylord.
Germantown.
Judson.
Oriole.
Porter's Ranch.
Smith Centre.
Stone Mound.
Thompson.
Twelve Mile.
Union.
Valley Forge.

SUMNER.

Alton.
Argyle.
Belle Plaine.
Caldwell.
Chikaskia.
Guelph.
Hessville.
Littleton.
London.
Lone Star.
Milan.
Oxford.
Rolling Green.
Rome.
Salt City.

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POST OFFICES IN KANSAS—*Concluded.*

South Haven, Sumner. Wellington.		Ballard's Falls. Beekman. Brantford. Butler. Chepstow. Clifton. De Witt. Elm Grove. Haddam. Hanover. Hollenberg. Joy Creek. Kimeo. Peach Creek Reiter. Round Grove. Strawberry. Washington.		Verdi. Ward.
TREGO.				WOODSON.
Trego.				Belmont. Byron. Centre Ridge. Cherry Creek. Coloma. Defiance. Everett. Kalida. Neosho Falls. Rose. Toronto
WABAUNSEE.				
Alma. Bismark. Chalk Mound. Cobb. Eskridge. French Valley. Grimm. Harveyville. Maple Hill. Mission Greek Newbury. Pavilion. Rockton. Snokomo. Templin. Wabaunsee.				
WALLACE.				WYANDOTTE.
Fort Wallace. Wallace.				Armstrong. Connor's Station. Edwardsville. Maywood. Muncie. Pomeroy. Quindaro. Rosedale. Six Mile. Tiblow. White Church. Wyandotte.
WASHINGTON.				
Albia.		WILSON.		
		Altoona, Buffalo. Coyville. Fredonia. Greystone Guilford. Jurett. Middletown. Neodesha. New Albany.		

CLASSIFIED LIST OF POST OFFICES IN KANSAS, WITH SALARIES.

OFFICE.	COUNTY.	CLASS.	SALARY.	OFFICE.	COUNTY.	CLASS.	SALARY.
Abilene	Dickinson	3	1,100	Iola	Allen	3	1,200
Atchison	Atchison	1	3,500	Junction City ..	Davis	2	2,500
Baxter Springs ..	Cherokee	3	1,200	La Cygne	Linn	3	1,200
Burlingame	Osage	3	1,000	Lawrence	Douglas	1	4,000
Burlington	Coffey	3	1,000	Leavenworth ..	Leavenworth ..	1	4,000
Chanute	Neosho	3	1,100	Manhattan	Riley	3	1,900
Chetopa	Labette	3	1,400	North Topeka ..	Shawnee	3	1,200
Coffeyville	Montgomery ..	3	1,000	Olathe	Johnson	2	2,000
Ellsworth	Ellsworth	3	1,100	Osage Mission ..	Neosho	3	1,200
Emporia	Lyon	2	2,400	Oswego	Labette	3	1,300
Fort Leavenworth ..	Leavenworth ..	3	1,700	Ottawa	Franklin	2	2,300
Fort Scott	Bourbon	3	3,400	Paola	Miami	2	2,000
Garnett	Anderson	3	1,400	Parsons	Labette	3	1,900
Girard	Crawford	3	1,200	Salina	Saline	2	2,000
Hays City	Ellis	3	1,300	Topeka	Shawnee	1	4,000
Hiawatha	Brown	3	1,000	Wamego	Pottawatomie ..	3	1,000
Humboldt	Allen	2	2,000	Waterville	Marshall	3	1,100
Hutchinson	Reno	3	1,500	Wichita	Sedgwick	2	2,800
Independence	Montgomery ..	2	2,000	Wyandotte	Wyandotte	2	2,800

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LIST OF MONEY ORDER OFFICES.

SEPTEMBER 1, 1875.

Offices in *Italics* are *first-class* money-order offices.

Offices marked "*B*" are British international money-order offices; "*C*" Canadian international money-order offices; "*G*" German international money-order offices, and "*S*" Swiss international money-order offices.

No single order issued for more than \$50.

Parties desiring to remit larger sums must obtain additional money orders.

No applicant, however, can obtain, in one day, more than three orders payable at the same office and to the same payee.

RATES OF COMMISSION CHARGED FOR MONEY ORDERS.

DOMESTIC RATES.

By act of Congress, approved March 3, 1875, the fees for domestic money-orders have been changed, so that "on and after the first day of July, 1875," the fees or commissions to be charged for the issue of domestic money-orders, will be as follows, namely:

On orders not exceeding \$15	\$.10
Over \$15 and not exceeding \$30 .....	.15
Over \$30 and not exceeding \$40 .....	.20
Over \$40 and not exceeding \$50 .....	.25

BRITISH AND SWISS RATES.

On orders not exceeding \$10	\$.25
Over \$10 and not exceeding \$20 .....	.50
Over \$20 and not exceeding \$30 .....	.75
Over \$30 and not exceeding \$40	1.00
Over \$40 and not exceeding \$50	1.25

CANADIAN RATES.

On orders not exceeding \$10	\$.20
Over \$10 and not exceeding \$20 .....	.40
Over \$20 and not exceeding \$30 .....	.60
Over \$30 and not exceeding \$40 .....	.80
Over \$40 and not exceeding \$50	\$1.00

GERMAN RATES.

On orders not exceeding \$5	\$.15
Over \$5 and not exceeding \$10 .....	.25
Over \$10 and not exceeding \$20 .....	.50
Over \$20 and not exceeding \$30 .....	.75
Over \$30 and not exceeding \$40	1.00
Over \$40 and not exceeding \$50	1.25

OFFICE.	COUNTY.	OFFICE.	COUNTY.
Abilene	Dickinson.	Belleville	Republic.
Alma	Wabaunsee.	Beloit	Mitchell.
Americus	Lyon.	Blue Rapids	Marshall.
Arkansas City	Cowley.	Brookville	Saline.
Atchison, <i>B, C, G,</i>	Atchison.	Burlingame	Osage.
Augusta	Butler.	Burlington, <i>B</i>	Coffey.
Baldwin City	Douglas.	Carbondale	Osage.
Baxter Springs, <i>B,</i>	Cherokee.	Cawker City, <i>G</i>	Mitchell.
Belle Plaine	Sumner.	Cedar Vale	Chautauqua.

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Centralia	Nemaha.	Lyndon	Osage.
Chanute	Neosho.	Manhattan, <i>B</i>	Riley.
Cherokee	Crawford.	Marion Centre	Marion.
Chetopa, <i>B</i>	Labette.	Marysville, <i>B, G</i>	Marshall.
Clay Centre, <i>B</i>	Clay.	Minneapolis	Ottawa.
Clyde	Cloud.	Mound City	Linn.
Coffeyville	Montgomery.	Muscotah	Atchison.
Columbus	Cherokee.	Neodesha	Wilson.
Concordia	Cloud.	Neosho Falls	Woodson.
Cottonwood Falls	Chase.	Netawaka	Jackson.
Council Grove, <i>S</i>	Morris.	Newton	Harvey.
Detroit	Dickinson.	North Topeka	Shawnee.
Dodge City	Ford.	Olathe, <i>B</i>	Johnson.
Doniphan	Doniphan.	Osage City	Osage.
El Dorado	Butler.	Osage Mission, <i>B</i>	Neosho.
Elk City	Montgomery.	Osawatomic	Miami.
Elk Falls	Elk.	Osborne	Osborne.
Ellsworth, <i>B</i>	Ellsworth.	Oskaloosa	Jefferson.
Emporia, <i>B, G</i>	Lyon.	Oswego	Labette.
Erie	Neosho.	Ottawa	Franklin.
Eureka	Greenwood.	Paola	Miami.
Florence	Marion.	Parker	Montgomery.
Fort Harker	Ellsworth.	Parsons	Labette.
Fort Scott, <i>B, G</i>	Bourbon.	Peabody	Marion.
Frankfort	Marshall.	Peace	Rice.
Fredonia	Wilson.	Peru	Chautauqua.
Garnett	Anderson.	Phillipsburg	Phillips.
Girard	Crawford.	Pleasanton	Linn.
Great Bend	Barton.	Russell, <i>B</i>	Russell.
Hanover	Washington.	Sabetha	Nemaha.
Hays City	Ellis.	Saint Mary's Mission	Pottawatomie.
Hiawatha	Brown.	Salina, <i>B</i>	Saline.
Highland	Doniphan.	Seneca	Nemaha.
Holton	Jackson.	Severance	Doniphan.
Humboldt, <i>B</i>	Allen.	Solomon City	Dickinson.
Hutchinson	Reno.	Thayer	Neosho.
Independence	Montgomery.	Tonganoxie	Leavenworth.
Iola	Allen.	Topeka, <i>B, C, G, S</i>	Shawnee.
Irving	Marshall.	Troy	Doniphan.
Jewell	Jewell.	Valley Falls, <i>B</i>	Jefferson.
Jewell Centre	Jewell.	(Late Grasshopper Falls.)	
Junction City, <i>B, G, S</i>	Davis.	Wamego	Pottawatomie.
Kirwin	Phillips.	Washington	Washington.
La Cygne	Linn.	Waterville	Marshall.
Larned	Pawnee.	Wathena	Doniphan.
Lawrence, <i>B, C, G, S</i>	Douglas.	Wellington	Sumner.
Leavenworth, <i>B, C, G, S</i>	Leavenworth.	White Cloud	Doniphan.
Le Roy	Coffey.	Wichita	Sedgwick.
Longton	Elk.	Winchester	Jefferson.
Louisburg	Miami.	Winfield	Cowley.
Louisville	Pottawatomie.	Wyandotte	Wyandotte.

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RAILROAD LANDS.

October 26th, the following letter was sent to the Land Commissioner of each of the land-grant railroads in the State:

"OFFICE STATE BOARD OF AGRICULTURE,

"Topeka, October 26, 1875.

"DEAR SIR: If you will furnish this office with a statement of the unsold lands of your company, by counties, with maximum, minimum, and average price, together with such other information as will be of public interest, the same will be published, with like information from other sources, in the Fourth Annual Report of the State Board of Agriculture, which is now being compiled.

"Yours respectfully,

"ALFRED GRAY, *Secretary.*"

In response to the foregoing, the following statements were received:

LAND DEPARTMENT OF THE ATCHISON, TOPEKA & SANTA FE RAILROAD COMPANY.

A. S. JOHNSON,

Acting Commissioner, Topeka, Kansas.

J. COOPER,

Secretary.

SECRETARY STATE BOARD OF AGRICULTURE:

In the following table you will find the whole number of acres belonging to this company, by counties; the number of acres sold in each county up to the 31st of October, 1875; the number of acres remaining for sale, and the minimum and maximum prices per acre:

COUNTIES.	WHOLE NO. OF ACRES.	NO. OF ACRES SOLD.	ACRES UNSOLD.	RANGE OF PRICES.	
				FROM	TO
Osage	894.34	520.28	374.06	\$4.00	\$8.00
Wabaunsee	13,127.94	2,442.66	10,685.28	2.50	8.00
Lyon	426.86	270.99	155.87	-----	6.50
Greenwood	640.00	-----	640.00	-----	3.75
Morris	32,549.81	4,121.88	28,427.93	2.25	7.75
Chase	131,331.42	11,867.55	119,463.87	2.25	10.00
Marion	211,130.80	121,109.21	90,021.59	3.50	9.00
Butler	52,253.95	16,802.98	35,455.97	3.75	9.00
Harvey	169,091.46	113,291.44	55,800.02	2.75	11.00
Sedgwick	82,880.74	22,872.75	60,007.99	3.75	12.00
McPherson	97,569.18	48,352.44	49,216.74	2.75	8.00
Reno	314,024.83	58,868.29	255,156.54	1.75	10.00
Rice	165,009.91	28,097.51	136,912.40	2.75	9.00
Barton	187,331.82	44,899.05	142,432.77	1.75	10.00
Rush	61,400.00	1,640.00	59,760.00	4.50	10.00
Pawnee	220,558.88	18,890.27	201,668.61	4.50	10.00
Edwards	135,000.00	2,344.06	132,655.94	4.50	9.00
Stafford	90,000.00	-----	90,000.00	1.75	8.00
Kiowa	46,000.00	-----	46,000.00	1.75	8.00
Hodgeman	120,000.00	-----	120,000.00	-----	-----
Ford	115,907.44	640.00	115,267.44	-----	-----
Unorganized	752,805.62	8,548.70	744,256.92	-----	-----
Total	3,000,000.00	505,580.06	2,494,419.94	-----	-----

TOTAL SALES AND CASH RECEIVED.

Total number of acres sold to October 31st, 1875.....	505,580.06
Total amount for which they were sold.....	\$2,627,383.44
Average price per acre.....	5.19%
Cash received on sales.....	\$ 664,016.95
Cash received on deferred payments.....	303,509.00
Total	\$ 967,526.85

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STATE BOARD OF AGRICULTURE.

With the first of January, 1873, we commenced keeping a record of the locality from whence our purchasers came, and we give below, a table showing the number from each locality, the total number of acres purchased, and the quantity to each purchaser:

FROM	NO. OF PURCHASERS.	ACRES.	AVERAGE NO. ACRES.	FROM	NO. OF PURCHASERS.	ACRES.	AVERAGE NO. ACRES.
Illinois	752	129,389.37	172	Texas	5	509.00	102.00
Foreign countries, direct	533	78,752.54	148	Mississippi	5	1,276.25	255.00
Kansas	348	48,535.42	139	West Virginia	4	640.00	160.00
Iowa	165	24,475.10	148	New Jersey	3	399.50	133.00
Ohio	100	17,213.90	172	Rhode Island	3	360.00	120.00
Indiana	98	15,653.10	159	Delaware	2	160.00	80.00
Michigan	50	6,716.30	135	Vermont	2	720.00	360.00
Pennsylvania	38	5,427.26	143	Louisiana	2	160.00	80.00
Wisconsin	37	4,913.90	133	Maine	1	160.00	160.00
Missouri	37	5,129.70	138	Virginia	1	160.00	160.00
Massachusetts	34	8,343.81	245	Oregon	1	160.00	160.00
New York	33	5,318.52	161	Nevada	1	80.00	80.00
Kentucky	26	6,198.37	238	Georgia	1	22.20	22.20
Tennessee	17	4,205.90	247	Connecticut	1	160.00	160.00
Nebraska	8	1,050.64	131	North Carolina	1	160.00	160.00
Canada	8	1,612.53	201	Maryland	1	160.00	160.00
Minnesota	7	799.72	113	California	1	160.00	160.00

I append a brief statement of our

TERMS OF SALE.

No. 1. Eleven years' credit, with seven per cent. interest. On the date of purchase, one-tenth of the principal is paid, with seven per cent. interest on the balance. The first and second years, only the interest at seven per cent. is paid each year; the third year, and each year thereafter, one-tenth of the principal, with seven per cent. interest on the balance, is paid annually, until the whole is paid.

No. 2 is also on eleven years' credit, with seven per cent. interest, only no part of the principal becomes due for four years. During the first four years only the interest is required, and in the last eight years, one-eighth of the principal, with seven per cent. interest on the balance, is paid annually until the whole is paid.

No. 3 is in three payments. In consideration of the purchaser paying one-third of the principal down, with interest on the balance at ten per cent., and the remainder in one and two years, with ten per cent. interest, we make a discount of twenty per cent. from the appraised value.

No. 4 is a cash sale, in which we make a discount of twenty per cent. from the appraised price, and give warranty deed.

HUTCHINSON, Kansas, October 26th, 1875.

COL. A. S. JOHNSON, Topeka, Kansas:

Dear Sir: In reply to your request for a statistical report of our success in tree planting along the line of the Atchison, Topeka & Santa Fe Railroad, I have to say, that we have planted a variety of trees and seeds at four different stations along the line of the said road.

The first experimental station is at Hutchinson, 180 miles west of the eastern line of the State, and 1,500 feet above the sea level. Soil, a light, sandy loam.

Trees planted in rows six feet apart and two feet apart in the row, measured in October, 1875, as follows:

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TREES PLANTED IN SPRING OF 1873. GROWTH OF THREE YEARS.

NAME OF TREE.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	DIAMETER IN INCHES.
Silver Maple.....	1 year old	50 per cent.	6 to 9 feet.	7 feet.	1 to 2 inches.
Box Elder.....	1 "	60 "	6 to 8 "	7 "	1 to 2 "
Honey Locust.....	1 "	95 "	5 to 7 "	6 "	1 to 3 "
Catalpa.....	1 "	100 "	8 to 10 "	9 "	2 to 3 "
Ailantus.....	1 "	100 "	10 to 12 "	11 "	2 to 4 "
American Elm.....	1 "	90 "	6 to 8 "	7 "	1 to 2 "
Silver Poplar.....	Cuttings,	20 "	6 to 8 "	7 "	1 to 2 "
Cottonwood.....	"	25 "	16 to 18 "	17 "	3 to 4 "
Peach.....	Seed,	"	7 to 8 "	7½ "	2 to 3 "
Box Elder.....	"	"	7 to 9 "	8 "	1 to 2 "
Catalpa.....	"	"	7 to 9 "	8 "	1 to 2 "
Ailantus.....	"	"	8 to 10 "	9 "	2 to 3 "
Black Walnut.....	"	"	5 to 7 "	6 "	1 to 2 "
Kentucky Coffee.....	"	"	2 to 3 "	2½ "	½ to 1 "
Ash.....	"	"	4 to 6 "	5 "	1 to 1½ "

TREES PLANTED IN SPRING OF 1874. GROWTH OF TWO YEARS.

NAME OF TREE.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	DIAMETER IN INCHES.
Box Elder.....	1 year old,	100 per cent.	7 to 9 feet.	8 feet.	1 to 2 in.
Ailantus.....	1 "	100 "	8 to 10 "	9 "	1 to 2 "
Cottonwood.....	Cuttings,	60 "	10 to 13 "	11 "	2 to 3 "
Grey Willow.....	"	20 "	6 to 8 "	7 "	1 to 2 "
Box Elder.....	Seed,	"	5 to 7 "	6 "	½ to 1 "
Ailantus.....	"	"	6 to 8 "	7 "	1 to 2 "
Black Walnut.....	"	"	2 to 3 "	2½ "	½ to 1 "
Burr Oak.....	"	"	6 to 10 inches.	8 inches.	"

TREES PLANTED IN SPRING OF 1875. GROWTH OF ONE YEAR.

NAME OF TREE.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	DIAMETER IN INCHES.
Cottonwood.....	1 year old,	100 per cent.	6 to 9 feet.	7 feet.	"
Ailantus.....	1 "	100 "	2 to 4 "	3 "	"
Cottonwood.....	Cuttings,	60 "	6 to 9 "	7 "	"
Peach.....	Seed,	"	24 to 36 inches.	30 inches.	"
Ash.....	"	"	12 to 20 "	15 "	"
Box Elder.....	"	"	20 to 30 "	25 "	"
Honey Locust.....	"	"	15 to 25 "	20 "	"
Black Walnut.....	"	"	12 to 18 "	15 "	"
Kentucky Coffee.....	"	"	4 to 12 "	6 "	"
Hackberry.....	"	"	12 to 20 "	15 "	"
Silver Maple.....	"	"	20 to 30 "	25 "	"
Catalpa.....	"	"	24 to 36 "	30 "	"

The second experimental station is at Ellinwood, 215 miles west of the east line of the State; elevation 1,760 feet. Soil a black, sandy loam, with stiff clay subsoil. The following table shows the success of the different varieties planted here:

TREES PLANTED IN SPRING OF 1873. GROWTH OF THREE YEARS.

NAMES OF TREES.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	DIAMETER IN INCHES.
Silver Maple.....	1 year old,	80 per cent.	7 to 8 feet.	7½ feet.	1½ to 2½ in.
Honey Locust.....	1 "	100 "	6 to 8 "	7 "	1 to 2 "
Catalpa.....	1 "	90 "	4 to 6 "	5 "	1 to 2½ "
Box Elder.....	1 "	90 "	6 to 9 "	7 "	1 to 2 "
American Elm.....	1 "	90 "	5 to 7 "	6 "	1 to 2 "
Cottonwood.....	Cuttings,	50 "	11 to 13 "	12 "	3 to 4 "
Catalpa.....	"	"	4 to 6 "	5 "	1 to 2 "
Box Elder.....	Seeds,	"	7 to 9 "	8 "	1 to 2 "
Ailantus.....	"	"	8 to 10 "	9 "	1 to 2 "
Peach.....	"	"	5 to 6 "	5½ "	1 to 2 "
Ash.....	"	"	3 to 4 "	3½ "	½ to 1 "
Black Walnut.....	"	"	3 to 5 "	4 "	1 to 2 "

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STATE BOARD OF AGRICULTURE.

TREES PLANTED IN SPRING OF 1874. GROWTH OF TWO YEARS.

NAMES OF TREES.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	DIAMETER IN INCHES.
Ailantus	1 year old,	90 per cent.	5 to 6 feet.	5½ feet.	1 to 2 inches.
Ash	1 "	80 "	3 to 5 "	4 "	½ to 1 "
Cottonwood	Cuttings,	60 "	7 to 9 "	8 "	1 to 2½ "
Grey Willow	"	20 "	5 to 7 "	6 "	1 to 2 "
White Willow	"	2½ "	4 to 5 "	4½ "	1 to 2 "
Ailantus	Seed,		5 to 7 "	6 "	1 to 2 "
Osage Orange	"		3 to 5 "	4 "	½ to 1 "
Black Walnut	"		2 to 3 "	2½ "	½ to 1 "

TREES PLANTED IN SPRING OF 1875. GROWTH OF ONE YEAR.

NAMES OF TREES.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	
Box Elder	1 year old,	90 per cent.	10 to 30 inches.	20 inches.	
Ailantus	1 "	100 "	3 to 5 feet.	4 feet.	
Catalpa	1 "	100 "	18 to 36 inches.	25 inches.	
Honey Locust	1 "	90 "	15 to 30 "	20 "	
American Elm	1 "	90 "	10 to 20 "	15 "	
Peach (seedling)	1 "	100 "	18 to 36 "	24 "	
Ash	1 "	100 "	6 to 18 "	10 "	
Black Walnut	Seed,		6 to 12 "	10 "	
Cottonwood	Cuttings,	75 per cent.	4 to 6 "	5 feet.	

The third station is at Garfield, 256 miles west of the State line; elevation 2,100 feet. Soil, light loam, with clay subsoil. Here we did not commence planting until spring of 1874, a year later than at the other stations.

The following table shows the success of different varieties planted here:

TREES PLANTED IN SPRING OF 1874. GROWTH OF TWO YEARS.

NAMES OF TREES.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	DIAMETER IN INCHES.
Box Elder	1 year old,	100 per cent.	4 to 6 feet.	5 feet.	1 to 2 inches.
Ailantus	1 "	100 "	5 to 6 "	5½ "	1 to 2 "
Cottonwood	Cuttings,	20 "	7 to 9 "	8 "	1 to 2 "
Grey Willow	"	10 "	6 to 8 "	7 "	1 to 1½ "
Box Elder	Seed,		5 to 6 "	5½ "	1 to 1½ "
Black Walnut	"		2 to 4 "	3 "	1 to 1½ "
Ailantus	"		4 to 5 "	4½ "	1 to 1½ "

TREES PLANTED IN SPRING OF 1875. GROWTH OF ONE YEAR.

NAMES OF TREES.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	
Box Elder	1 year old,	100 per cent.	12 to 30 inches.	24 inches.	
American Elm	1 "	90 "	6 to 24 "	18 "	
Honey Locust	1 "	80 "	6 to 20 "	15 "	
Ash	1 "	75 "	6 to 12 "	9 "	
Peach	1 "	100 "	12 to 30 "	24 "	
Cottonwood	Cuttings,	60 "	5 to 7 feet.	6 feet.	
Black Walnut	Seed,		6 to 12 inches.	9 inches.	
Catalpa	"		6 to 18 "	12 "	

The fourth station is at Spearville, 283 miles west of the State line; elevation, 2,480 feet; soil, deep, dark loam, with clay subsoil. This place is on the high upland prairie, and is generally known by the name of "Dry Ridge." While the growth is not quite as good, the trees lived about as well as at other points farther east, as the following table will show:

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TREES PLANTED IN SPRING OF 1873. GROWTH OF THREE YEARS.

NAMES OF TREES.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	DIAMETER IN INCHES.
Silver Maple.....	1 year old,	90 per cent.	4 to 5 feet.	4½ feet.	1 to 2 in.
Box Elder.....	1 "	80 "	4 to 6 "	5 "	1 to 2 "
Honey Locust.....	1 "	100 "	4 to 5 "	4½ "	1 to 1½ "
Allantus.....	1 "	100 "	4 to 6 "	5 "	1 to 2 "
Black Walnut.....	Seed,	-----	2 to 3 "	2½ "	½ to 1 "
Allantus.....	"	-----	4 to 5 "	4½ "	1 to 2 "

TREES PLANTED IN SPRING OF 1874. GROWTH OF TWO YEARS.

NAMES OF TREES.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	DIAMETER IN INCHES.
Box Elder.....	1 year old,	90 per cent.	4 to 6 feet.	5 feet.	1 to 2 inches.
Allantus.....	1 "	100 "	2 to 4 "	3 "	1 to 2 "
Ash.....	1 "	50 "	1 to 2 "	1½ "	½ to 1 "
Black Walnut.....	Seed,	-----	1 to 2 "	1½ "	½ to 1 "
Box Elder.....	"	-----	3 to 5 "	4 "	½ to 1 "

TREES PLANTED IN SPRING OF 1875. GROWTH OF ONE YEAR.

NAMES OF TREES.	AGE AT TIME OF PLANTING.	PROPORTION LIVING.	EXTREMES OF HEIGHT.	AVERAGE HEIGHT.	
Allantus.....	1 year old,	100 per cent.	12 to 30 inches.	24 inches.	-----
Honey Locust.....	1 "	90 "	6 to 15 "	12 "	-----
American Elm.....	1 "	75 "	3 to 12 "	9 "	-----
Peach.....	1 "	80 "	10 to 30 "	20 "	-----
Box Elder.....	1 "	80 "	12 to 36 "	24 "	-----
Ash.....	1 "	75 "	3 to 12 "	6 "	-----
Black Walnut.....	Seed,	-----	6 to 12 "	9 "	-----

Considering that all our planting the first year was on newly-broken sod, and having the devastating army of grasshoppers the second year (1874) to contend with, I think the success of our work will compare favorably with forest-tree planting in other parts of the country.

Yours respectfully,

C. H. LONGSTRETH,
Forester for A., T. & S. F. R. R. Co.

LAND DEPARTMENT OF THE KANSAS PACIFIC RAILWAY.

By S. J. GILMORE, Land Commissioner.

Lands belonging to Kansas Pacific Railway Company, and unsold October 1st, 1875.

COUNTIES.	ACRES.	COUNTIES.	ACRES.
Wyandotte.....	120.00	Rice.....	51,228.39
Johnson.....	378.69	Osborne.....	23,007.72
Douglas.....	40.00	Russell.....	232,060.74
Franklin.....	411.78	Barton.....	92,831.24
Jackson.....	707.13	Rooks.....	38,516.88
Shawnee.....	200.00	Ellis.....	218,069.57
Osage.....	80.00	Rush.....	77,409.05
Wabauusee.....	41,065.09	Graham.....	125,520.92
Pottawatomie.....	9,731.22	Trego.....	202,218.66
Morris.....	6,406.51	Ness.....	8,247.64
Davis.....	41,784.38	Sheridan.....	176,105.03
Riley.....	27,721.59	Gove.....	215,441.28
Marion.....	314.12	Wallace.....	608,903.05
Dickinson.....	27,237.11	Thomas.....	202,614.73
Clay.....	1,791.09	Sherman.....	68,867.28
Ottawa.....	41,811.74	Wichita.....	16,010.20
Saline.....	44,659.22	Greeley.....	60,081.34
McPherson.....	22,703.13		
Lincoln.....	80,685.56	Total in Kansas.....	2,919,144.38
Ellsworth.....	153,162.90		

Maximum price, \$6 per acre: minimum, \$2; average, \$3.



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STATE BOARD OF AGRICULTURE.

LAND DEPARTMENT, MISSOURI, KANSAS & TEXAS RAILWAY.

By ISAAC T. GOODNOW, Land Commissioner.

Agreeable to your request of the 28th ult., I hand you the following statement of lands unsold in the different counties within the grant of the M., K. & T. R. R., Nov. 1, 1875.

COUNTIES.	ACRES.	COUNTIES.	ACRES.
Morris	38,045.15	Lyon	45,129.97
Woodson	49,488.97	Davis	36,926.55
Wabaunsee	64,186.60	Chase	44,339.82
Greenwood	70,937.25	Dickinson	33,123.20
Coffey	22,224.68	Riley	16,382.00
Anderson	8,134.67	Allen	6,181.47
Bu'ler	5,615.97	Cloud	3,438.63
Clay	1,760.00	Marion	320.95

The prices of above lands are usually from \$2 to \$6 per acre, and sold on ten years' time, at seven per cent. interest; or 33½ per cent. discount for all cash.

LAND DEPARTMENT OF THE MISSOURI RIVER, FORT SCOTT AND GULF RAILROAD.

By JNO. A. CLARK, Land Commissioner.

The Missouri River, Fort Scott & Gulf Railroad Company has, in round numbers, 375,000 acres of land in Kansas remaining unsold, viz.:

Bourbon County	45,000 acres.
Crawford "	170,000 "
Cherokee "	155,000 "
Allen "	2,000 "
Linn "	3,000 "

The prices of the agricultural lands are from \$2.00 to \$8.00 per acre—averaging about \$5.50; and of coal land from \$8.00 to \$25.00—with some tracts higher—averaging about \$15.00. The lands are sold on credit, running through ten years; one-fifth, or 20 per cent., reduction is made for cash. The title is perfect.

CENTRAL BRANCH, UNION PACIFIC RAILROAD LANDS.

This company has unsold lands, located as follows, to wit :

Atchison	9,300.43 acres.
Brown	49,594.94 "
Jackson	286.00 "
Marshall	94,155.49 "
Nemaha	32,756.01 "
Pottawatomie	43,710.19 "
Riley	7,445.18 "
Pottawatomie and Riley	3,456.70 "

Owing to the fact that the above list of lands was not received until after the maps of Atchison and Brown counties were engraved, the lands located in those counties do not appear on the maps.

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PUBLIC LANDS.

NORTH-WESTERN LAND DISTRICT.

Office at Kirwin, Phillips County, Kansas.

A. A. THOMAS, Register.

J. M. HODGE, Receiver.

BUSINESS TRANSACTED FROM JANUARY 1st TO SEPTEMBER 30th, 1875.

NO. OF ENTRIES.	BY WHAT AUTHORITY.	NO. OF ACRES.	CASH RECEIPTS.
258	Homestead Act.....	40,474.23	\$3,576.85
123	Final Proof of Homestead.....	19,447.62	486.20
108	Timber Culture Act.....	15,701.62	1,455.00
52	Cash Sales.....	2,261.66	2,827.08
650	Pre-emption Filings.....	104,000.00	1,300.00
69	Soldier Homestead Filings.....	11,040.00	188.00
93	Military Bounty Land Warrants.....	11,880.00	297.00
	Total acres taken under different acts.....	204,805.13	\$10,080.13

On the first day of January, 1875, there were 5,334,183.29 acres vacant land in this district. During the first three-quarters of the year 1875, ending September 30, 1875, there were taken under the different acts of Congress 204,805.13 acres, leaving a balance of vacant land in the district of 5,129,378.16 acres. In the counties of Sherman, Adams, Rawlins, Thomas and Sheridan, "all splendid grazing lands," not an acre has been taken. There are a few settlers in Decatur and Graham counties.

REPUBLICAN LAND DISTRICT.

Office at Concordia, Kansas.

B. H. McEckron, Register.

E. J. JENKINS, Receiver.

BUSINESS TRANSACTED FROM JANUARY 1st, 1875, TO SEPTEMBER 30th, 1875.

HOW ENTERED.	ACRES.
Lands entered under Homestead Act.....	48,366.69
" " " Timber Culture Act.....	19,137.65
" " " Final Homestead Act.....	121,052.55
" " " Pre-emption Act of 1841, excesses on H. E., etc.	1,460.57
" " " Pre-emption declarations filed, Act 1841	70,000.00
Land located with A. C. Scrip and M. B. Land Warrants	6,360.00
Total.....	266,377.46

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STATE BOARD OF AGRICULTURE.

SALINA LAND OFFICE.

T. L. BOND, Register.

D. R. WAGSTAFF, Receiver.

Statement of business of the U. S. Land Office, Salina, Kansas, from Jan. 1, to Sept. 30, 1875.

HOW ENTERED.	ACRES.	FEE.
Entered Homestead Acts.....	42,296.00	\$ 5,449.00
" Final Homestead Acts.....	34,072.04	1,555.76
" Timber Culture ".....	24,534.30	2,660.00
Cash Sales.....	1,228.79	4,121.95
Filed on Pre-emption Act, 1841.....	45,000.00	758.00
" Act June 8, 1872.....	10,080.00	126.00
Located with M. B. L. Warrants.....	1,020.00	46.00
" Col. Scrip.....	160.00	4.00
Certified to R. R. Companies.....	128,108.92	1,601.34
Coal-mining Act, March 3, 1873.....	480.00	6.00
Total.....	286,980.05	\$16,328.05

WICHITA LAND DISTRICT.

H. L. TAYLOR, Register.

J. C. REDFIELD, Receiver.

Business transacted from January 1st to September 30th, 1875.

Number acres sold for cash, under Sections 2,283, 2,284 and 2,285, Revised Statutes, U. S.....	83,808.23
Number acres sold for cash, under Sections 2,259 and 2,301, Revised Statutes, U. S.....	5,952.91
Number acres homesteaded, under Sections 2,289 and 2,304, Revised Statutes, U. S.....	32,381.54
Number acres final homesteads, under Section 2,289 and 2,304, Revised Statutes, U. S.....	30,484.88
Number acres under Timber Culture Act, of March 13, 1874.....	19,378.62
Number acres under Military Bounty Warrants.....	741.91
Aggregate.....	172,748.09
Number acres filed for, under Sections 2,259, 2,283 and 2,304, Revised Statutes, U. S.....	104,000.00
Total Cash Receipts.....	\$126,101.57

OSAGE LAND DISTRICT.

Office at Independence, Kansas; W. W. MARTIN, Register; H. M. WATERS, Receiver.

The following is a statement of the business done at this office from the 1st of January, 1875, to the 30th of September, 1875, both inclusive:

LANDS ENTERED FOR CASH.

Osage Trust and Diminished Reserve, acts July 15, 1870, May 9, 1872, and June 23, 1874.	
39,669.52 acres, at \$1.25.....	\$49,586.90
Interest.....	\$2,050.61
Osage Ceded Lands, under joint resolution of Congress, approved April 10, 1869.	
120 acres, at \$1.25.....	\$150.00
Cherokee Strip, acts of May 11, 1872 and April 29, 1874.	
1,333.24 acres, at \$2.....	\$2,466.44
Public Lands sold for cash, act September 4, 1841.	
164 acres.....	\$209.90
Lands entered, Homestead Act, May 20, 1862, and amendments.	
2,946.13 acres. Fees.....	\$295.00
Commissions.....	\$115.37
Lands entered under Final Homestead Act, May 20, 1862, and amendments.	
13,138.06 acres. Commissions.....	\$554.42
Timber Culture Act, March 3, 1873.	
240 acres. Fees.....	\$30.00
Commissions.....	\$12.00
New York Indian Lands, acts February 19, 1873, and June 23, 1874.	
719.76 acres. Amount.....	\$2,719.40
Number of declaratory statements filed, 155, at \$2.....	310.00
Lands patented to the Missouri, Kansas & Texas, and the Leavenworth, Lawrence & Galveston Railroads, ten and twenty mile limits, acts March 3, 1863, and July 1, 1864, 14,888.09 acres.	
Total number acres sold.....	73,118.78
Total amount received.....	\$58,500.04

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LARNED LAND OFFICE.

C. A. MORRIS, Register.

ELI GILBERT, Receiver

Amount of business transacted at the United States Land Office, at Larned, Kansas, from February 15, to September 30, 1875, inclusive.

	ACRES.	FEES.	COMMS.	TOTAL.
For fractional quarter ending March 31, 1875:				
29 timber culture entries	4,121.34	\$ 290.00	\$116.00	\$ 406.00
49 homestead entries	6,085.03	485.00	272.58	757.58
3 final homestead	468.60		23.43	23.43
107 declaratory statements, estimate	17,000.00	214.00		214.00
Osage lands sold for cash	300.65			381.11
For quarter ending June 30, 1875:				
49 timber entries	7,246.93	490.00	196.00	686.00
101 homestead entries	14,868.99	1,000.00	532.34	1,532.34
23 final homestead	3,436.78		167.84	167.84
151 declaratory statements, estimate	24,000.00			302.00
Public lands sold for cash	1,128.33			2,783.22
For quarter ending Sept. 31, 1875:				
74 timber entries	10,752.53	740.00	296.00	1,036.00
88 homestead entries	11,565.91	875.00	496.57	1,371.57
24 final homestead entries	3,807.15		189.85	189.85
211 declaratory statements, estimate	33,000.00			422.00
Public lands sold for cash	827.35			2,055.08
Osage land sold for cash	301.72			386.87

STATE AGRICULTURAL COLLEGE LANDS.

L. R. ELLIOTT, Agent.

List of lands in Washington, Marshall, Clay, Riley and Dickinson counties, belonging to the Kansas State Agricultural College:

Washington	11,520 acres.	Riley	5,600 acres.
Marshall	4,160 "	Dickinson	13,880 "
Clay	480 "		

These lands have just been restored to market, after having been withdrawn for several years. They were selected in 1863, from the great mass of unoccupied Kansas lands, and the Commissioners who made the selection, reported that "every quarter section would make a good farm." While they have been out of market, their value has been much increased by the construction of railroads, the opening of farms on adjacent lands, and the building of churches and school houses.

TERMS OF PURCHASE.

One-eighth cash, at time of purchase; balance in seven equal annual installments, with annual interest at 10 per cent.

STATE UNIVERSITY LANDS.

Under an act of the Legislature of 1875, a commission was appointed to examine and appraise the lands belonging to the State University. This commission consisted of T. D. Thatcher, Jno. Miller and O. S. Woodward. The commission met in the city of Garnett, and proceeded to examine and appraise the lands. The appraisement ranges from \$3 to \$8 per acre. The lands are to be sold at their appraised value, on the following terms: One-tenth of the purchase money to be paid down, and the remaining nine-tenths in nine equal annual installments, with interest, payable annually, at the rate of ten per cent. per annum. The following is a list of the lands by counties:

Allen	320 acres.
Anderson	16,960 "
Coffey	5,760 "
Lyon	3,520 "
Wabannsee	3,200 "
Woodson	16,160 "
Total	45,920 acres



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STATE BOARD OF AGRICULTURE.

HOW TO OBTAIN GOVERNMENT LANDS.

The great number of inquiries which are made for information concerning the public lands of the State, has made the publication of the following very full instructions, rulings and laws relating to said lands, necessary:

C I R C U L A R.

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE, }
WASHINGTON, D. C., June 17, 1875. }

The following is communicated in reference to the manner of acquiring title to the public lands under different laws of Congress:

There are two classes of public lands, the one class at \$1.25 per acre, which is designated as *minimum*, and the other at \$2.50 per acre, or *double minimum*.

Title may be acquired by purchase at public sale, or by ordinary "private entry," and in virtue of the pre-emption, homestead, and timber-culture laws.

BY PURCHASE AT PUBLIC SALE.

1. This may be done where lands are "offered" at public auction to the highest bidder, either pursuant to proclamation by the President or public notice given, in accordance with directions from the General Land Office.

BY "PRIVATE ENTRY" OR LOCATION.

2. The lands liable to disposal in this manner are those which were offered at public sale, but were not then sold, and which have not since been reserved or otherwise withdrawn from market. In this class of offered and unreserved public lands, the following steps may be taken to acquire title:

CASH PURCHASES.

3. The applicant will present a written application to the register for the district in which the land desired is situated, describing the tract he wishes to purchase, giving its area. Thereupon the register, if the tract is vacant, will so certify to the receiver, stating the price, and the applicant must then pay the amount of the purchase money.

The receiver will then issue his receipt for the money paid, in duplicate, giving to the purchaser a duplicate receipt, and at the close of the month the register and receiver will make returns of the same to the General Land Office, from which, when the proceedings are found regular, a patent or complete title will be issued; and on surrender of the duplicate receipt, such patent will be delivered at the option of the patentee, either by the commissioner at Washington, or by the register at the district land office.

LOCATIONS WITH WARRANTS.

4. Application must be made as in cash cases, but must be accompanied by a warrant duly assigned as the consideration for the land; yet where the tract is \$2.50 per acre, the party, in addition to the surrendered warrant, must pay in *cash* \$1.25 per acre, as the warrant is in satisfaction of only so many acres, at \$1.25 per acre, or furnish a warrant of such denomination as will, at the legal value of \$1.25 per acre, cover the rated price of the land. For example: a tract of forty acres of land, held at \$2.50 per acre, can be paid for with a warrant calling for forty acres and the payment of \$50 in cash, or by surrendering an eighty-acre warrant for the same—the forty acres to be in full satisfaction for the said location. Or a tract of eighty acres, rated at \$2.50 per acre, can be paid for by the surrender of two eighty-acre warrants. If there is a small excess in the area of the tract over the quantity called for on the face of the warrant in any case, such excess may be paid for in money.

A duplicate certificate of location will then be furnished the party, to be held until the patent is delivered, as in cases of cash sales.



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The following fees are chargeable by the land officers, and the several amounts must be paid at the time of location :

For a 40-acre warrant, 50 cents each to the register and receiver — total, \$1.00	
For a 60-acre warrant, 75 cents	1.50
For an 80-acre warrant, \$1.00	2.00
For a 120-acre warrant, \$1.50	3.00
For a 160-acre warrant, \$2.00	4.00

AGRICULTURAL COLLEGE SCRIP.

5. This scrip may be used —

First. In the location of lands at "private entry," but when so used is only applicable to lands not mineral, which may be subject to private entry at \$1.25 per acre, yet is restricted to a technical "quarter section," — that is, land embraced by the quarter section lines indicated on the official plats of survey; or it may be located on a part of a "quarter-section," where such part is taken as in full for a quarter; but it cannot be applied to different subdivisions to make an area equivalent to a quarter section. The manner of proceeding to acquire title with this class of paper is the same as in cash and warrant cases, the fees to be paid being the same as on warrants. The location of this scrip at private entry is restricted to three sections in each township of land.

Second. In payment of pre-emption claims, in the same manner and under the same rules and regulations as govern the application to pre-emptions of military land warrants; this, too, without regard to the limitation as to the quantity located in a township or in any one State.

Third. In payment for homesteads commuted under section 2,301 of the Revised Statutes of the United States.

PRE-EMPTIONS ADMISSIBLE TO THE EXTENT OF ONE QUARTER SECTION, OR ONE HUNDRED AND SIXTY ACRES.

6. These are admitted under sections 2,257 to 2,288 of the Revised Statutes of the United States, upon "offered" and "unoffered" lands, and upon any of the unsurveyed lands belonging to the United States to which the Indian title is extinguished, although in the case of unsurveyed lands no definite proceedings can be had as to the completion of the title until after the surveys shall have been extended and officially returned to the district land office.

The pre-emption privilege is restricted to the heads of families, widows, or single men over the age of twenty-one who are citizens of the United States, or who have declared their intention to become citizens, as required by the naturalization laws. This does not include Indians, except such as have ceased their tribal relations, and been declared citizens by treaties or acts of Congress.

7. The right of pre-emption, formerly extended by act of Congress of March 3, 1853, for one quarter section, or 160 acres, at the price of \$2.50 per acre, to the alternate United States or reserved sections along the line of railroads, is continued by the Revised Statutes, sections 2,257, 2,259, and 2,279.

8. Section 2,281 thereof protects the rights of settlers on sections along the line of railroads, where settlement existed prior to withdrawal, and in such cases allows the land to be taken by the pre-emptors at \$1.25 per acre, but requires that they shall file the proper notices of their claim, and make proof and payment as in other cases.

9. Where the tract is "offered" land, the party must file with the district land office his declaratory statement, as to the fact of his settlement within thirty days from the date of said settlement, and within one year from date of settlement must appear before the register and receiver and make proof of his actual residence on, and cultivation of, the tract, and secure the same by paying cash or locating thereon military bounty land warrants, or agricultural college scrip, according to law.

10. Where the tract has been surveyed and not offered at public sale, the claimant must file his declaratory statement within three months from date of settlement, and make proof and payment within thirty months after the expiration of the three months allowed for filing his declaratory notice, or in other words, within thirty-three months from date of settlement.

11. Where settlements are made on unsurveyed lands, settlers are required, within three months after the date of the receipt at the district land office of the improved plat of the township embracing their claims, to file their declaratory statement with the register of the proper land office, and thereafter to make proof



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and payment for the tract within thirty months from the expiration of said three months.

When two or more settlers on unsurveyed land are found upon survey to be residing upon, or to have valuable improvements upon, the same smallest legal subdivision, they may make joint entry of such tract, and separate entries of the residue of their claims. This joint entry may be made in pursuance of contract between the parties or without it. (Revised Statutes, sec. 2,274.)

12. Should the settler, in either of the aforesaid cases, die before establishing his claim within the period limited by law, the title may be perfected by the executor, administrator, or one of the heirs, by making the requisite proof of settlement and paying for the land; the entry to be made in the name of "the heirs" of the deceased settler; and the patent will be issued accordingly. The legal representatives of the deceased pre-emptor are entitled to make the entry at any time within the period to which the pre-emptor would be entitled if living.

Section 2,261 of the Revised Statutes prohibits the second filing of a declaratory statement by any pre-emptor qualified at the date of his first filing where said filing has been in all respects legal. Where the first filing, however, is illegal from any cause, he has the right to make a second and legal filing.

LAWS EXTENDING THE HOMESTEAD PRIVILEGE.

13. The laws extending the homestead privilege, embraced in sections 2,289 to 2,317 of the Revised Statutes, give to every citizen, and to those who have declared their intention to become citizens, the right to a homestead on surveyed lands. This is conceded to the extent of one-quarter section, or 160 acres, or a half quarter section, or eighty acres, the former, in cases where the land desired is embraced in the class of lower priced lands held by law at \$1.25 per acre, when disposed of to cash purchasers; the latter, where it is of the class of higher priced lands, held at \$2.50 per acre, when so disposed of.

14. To obtain homesteads, the party must, in connection with his application, make an affidavit before the register or receiver, that he is over the age of twenty-one, or the head of a family; that he is a citizen of the United States, or has declared his intention to become such; and that the entry is made for his exclusive use and benefit, and for actual settlement and cultivation; and must pay the legal fee and that part of the commissions which is payable when the entry is made, as given in tables below.

15. Where the applicant has made actual settlement on the land he desires to enter, but is prevented by reason of bodily infirmity, distance, or other good cause, from personal attendance at the district land office, the affidavit may be made before the clerk of the court for the county within which the land is situated, under section 2,294 of the Revised Statutes.

16. On compliance of the party with the foregoing requirements, the receiver will issue his receipt for the fee, and that part of the commissions paid, a duplicate of which he will deliver to the party. The matter will then be entered on the records of the district office, and reported to the General Land Office.

17. An inceptive right is vested in the settler by such proceedings, and upon faithful observance of the law in regard to settlement and cultivation for the continuous term of five years, and at the expiration of that time, or within two years thereafter, upon proper proof to the satisfaction of the land officers, and payment to the receiver of that part of the commission remaining to be paid, as given in tables below, the receiver issuing his receipt therefor, the register will issue his certificate, and make proper returns to this office as the basis of a patent or complete title for the homestead.

NOTE.—The law is specific in requiring final proof to be made within *two* years after the expiration of the five years.

In making final proof, it is required that the homestead party shall appear in person at the district land office, and there make the affidavit required of him by law in support of his claim. Where, from physical disability, distance, or other good cause, the *witnesses* of said party cannot attend in person at the district office, their testimony in support of the claim may be taken where they reside, before an officer authorized by law to administer oaths.

Their testimony must state satisfactorily the reason of their inability to attend at the district office; and the credibility and responsibility of the witnesses must be certified by the officiating magistrate, whose official character must be authenticated under seal.

The corroborating testimony thus prepared must be deposited with the register



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and receiver, and filed with the affidavit of the homestead party, and the decision of the register and receiver endorsed thereon, as a preliminary to the transmission of the same to the General Land Office.

18. Where a homestead settler dies before the consummation of his claim, the widow, or in case of her death, the heirs, may continue the settlement and cultivation, and obtain title upon requisite proof at the proper time. If the widow proves up, the title passes to her; if she dies before proving up and the heirs make the proof, the title will vest in them.

Where both parents die, leaving infant heirs, the homestead may be sold for cash for the benefit of such heirs, and the purchaser will receive title from the United States.

19. The sale of a homestead claim by the settler to another party before completion of title is not recognized by this office, and not only vests no title or equities in the purchaser, but would be *prima facie* evidence of abandonment, and might give cause for cancellation of the claim.

A party may relinquish his claim, but on his doing so, the land reverts to the Government. The party so desiring should surrender the duplicate receipt issued for the entry, with his written relinquishment of the same endorsed thereon, to the register and receiver of the proper district land office. If the duplicate receipt has been lost, he should submit to those officers a written relinquishment of the entry, in which he should state the fact of the loss of the duplicate receipt, and which should be duly signed and acknowledged. The register and receiver will report the relinquishment, as any other evidence of abandonment, with their opinion thereon, for the action of this office.

Where application is made to contest the validity of a homestead entry on the ground of abandonment, the party must file his affidavit with the district land officers, setting forth the allegations on which his application is founded, describing the tract, and giving the name of the settler. Upon this the officers will set apart a day for a hearing, giving all the parties in interest due notice of the time and place of trial.

After the trial, the land officers will transmit the testimony, with their joint report, for the action of this office.

The expenses incident to such contest must be defrayed by the contestant, and no entry of the land can be made until the district officers have received notice from this office of the cancellation of the entry covering the same; nor does any informant obtain any privileges thereby. Such person must, if he desires the land, by proper diligence ascertain when notice of cancellation is received by the register and receiver, and then make formal written application for the tract; the land, after reception by said officers of notice of cancellation, being always open to the *first legal applicant*, unless withdrawn from entry by competent authority.

20. As the law allows but one homestead privilege, a settler relinquishing or abandoning his claim cannot thereafter make a second entry; but where, a party having made one entry, it is canceled as invalid, for some other reason, he is not thereby debarred from entering again.

Where an individual has made settlement on a tract and filed his pre-emption declaration therefor, he may change his filing into a homestead, if he continues in good faith to comply with the pre-emption laws until the change is effected. If, however, the land has become double minimum in price he cannot, unless entitled as a soldier or sailor, under section 2,304 of the Revised Statutes, commute for more than a "half quarter section," or 80 acres.

21. If the homestead settler does not wish to remain five years on his tract, the law permits him to pay for it with cash or warrants, or agricultural college scrip, upon making proof of settlement and cultivation for a period not less than six months from the date of entry to the time of payment.

This proof of actual settlement and cultivation must be the affidavit of the party, made before the district officers, corroborated by the testimony of two credible witnesses.

22. There is another class of homesteads designated as "adjoining farm homesteads." In these cases the law allows an applicant, *owning and residing* on an *original* farm, to enter other land lying contiguous thereto, which shall not, with such farm, exceed in the aggregate 160 acres. Thus, for example, a party owning or occupying 80 acres may enter 80 additional of \$1.25, or 40 acres of \$2.50 land. Or, suppose the applicant to own 40 acres, then he may enter 120 acres at \$1.25, or 40 at \$1.25, with 40 at \$2.50, if both classes of land should be found contiguous to his original farm.



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In applying for an entry of this class, the party must make affidavit describing the tract which he owns and upon which he resides as his original farm. In making final proof, it is not required that he should prove actual residence on the separate tract entered; but if he does not, it must appear from the proof adduced that he has continued for the period required by law to reside upon and cultivate the original farm tract, and has *bona fide* made use of the entered tract as a part of the homestead, inclosing, cultivating, or otherwise improving the same.

23. *Provisions for the benefit of soldiers and sailors of the late war, their widows and minor orphan children.*—Sections 2,304, 2,305, 2,306, 2,307, 2,308, and 2,309 of the Revised Statutes, for the benefit of soldiers and sailors, their widows and minor orphan children, provide—

1st. In section 2,304, that every soldier and officer of the army, and every seaman, marine, and officer of the navy, who served for not less than ninety days in the army or navy of the United States "during the recent rebellion," and who was honorably discharged, and has remained loyal to the government, may enter, under the provisions of the homestead law, 160 acres of the public lands, to be taken, if desired, from the class double minimum lands.

2d. In section 2,305, that the time of his service, or the whole term of his enlistment, if the party was discharged on account of wounds or disability incurred in the line of duty, shall be deducted from the period of five years during which, as per section 2,291, the claimant must, to perfect title, reside upon and cultivate the entered tract, but with the proviso that the party shall in every case reside upon, improve, and cultivate his homestead for a period of at least one year after he shall have commenced his improvements.

3d. That any person entitled to the benefits of section 2,304, who had, prior to the 22d of June, 1874, made a homestead entry of less than 160 acres, may enter an additional quantity of land sufficient to make, with the previous entry, 160 acres.

4th. That the widow, if unmarried, or in case of her death or marriage, then the minor orphan children, of a person who would be entitled to the benefits of section 2,304, may enter lands under its provisions, with the additional privilege accorded, that, if the person died during his term of enlistment, the widow or minor children shall have the benefit of the whole term of enlistment.

5th. That any person entitled to the benefit of section 2,304 may file his claim for a tract of land through an agent, and shall have six months thereafter within which to make his entry and commence his settlement and improvement upon the land.

24. The following is the course of proceedings for parties to avail themselves of the benefit of these sections of the Revised Statutes in making homestead entries:

1st. On the party producing the proper proof of his right to do so, immediate entry of the tract desired may be made; but if the party so elect, he may file a declaration to the effect that he claims a specified tract of land as his homestead, and that he takes it for actual settlement and cultivation. The register and receiver will number the declarations so filed in a separate series, according to the order of filing, enter them on their records, and, with their monthly returns, forward an abstract, to embrace all declarations of this class filed with them during the month. Thereafter, at any time within six months from the date of filing, the party may come forward, make his entry of the land, and commence his settlement and improvement. Should the party present his declaration through an agent, as authorized by section 2,309, said agent must produce a duly executed power of attorney from the principal desiring to make the entry, who will be bound by the selection his agent may make, the same as though made by himself. Failure of the party to make entry of the tract filed upon by himself or agent, within six months from the date of filing will be regarded as an abandonment, and a forfeiture of his right to enter; but in any case where the party acted in good faith, and the failure resulted from sickness, misfortune, or any insurmountable cause, he may submit, through the register and receiver of the proper district land office, his affidavit, setting forth that such was the case, with the reasons of his failure; and that he has not attempted by sale, barter, or in any way whatever, to alienate for gain or profit his claim or right under the filing, or to the land covered thereby. If the showing so made should be found satisfactory, the register and receiver will be instructed to permit him to enter as a homestead the same tract for which his declaration was filed, if no valid adverse right to that tract shall have intervened, or any other tract subject to entry, in case a valid adverse right shall have intervened to the tract filed upon.

2d. The claims of widows and minor orphan children may be initiated by declaration as above. Minor orphan children can act only by their duly-appointed guardians, who must file certified copies of the powers of guardianship, which must be



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transmitted to this office by the registers and receivers with their abstracts of declarations. The law does not require, as a condition to enjoying its benefits, that the party should first file a declaratory statement, and, as before stated, immediate entry may be made.

3d. Applications for additional entries must be for a quantity which, with the original entry, will not exceed 160 acres.

Where the party's first entry has been consummated, the register and receiver will require him to make application and affidavit in the forms prescribed and to pay the same fee and commissions as in cases of original entry. The receiver will issue his receipt for the money paid, and these papers will receive the current date and the proper numbers in their homestead series. Then, to complete the transaction—it being an object for the convenience of business that the additional entry papers, and the final papers therefor, in such cases, shall be kept separate and distinct—the party will make payment of the usual final commissions on the entered tract, for which the receiver will issue his receipt. The register will thereupon issue his final certificate for the additional tract; the receipt and certificate to bear their proper number in the final homestead series, likewise a reference to the original entry and to the final certificate thereon, by their number, and also by their district, where the party's first entry shall have been made in a different district.

In case the party has not made proof on his original homestead entry when he applies for additional land, he will be allowed to make the additional entry on proper application and affidavit, as above stated, and paying the usual fee and commissions, for which the receiver will issue his receipt; the papers to receive their proper numbers in the homestead series, with a reference thereon to the original entry. Thereafter, when the party shall make final proof on the original entry, he will be required to pay the final commissions on both entries, when a final receipt will be issued for the money, and thereupon a final certificate issued to call both for the tract in the original entry and the additional tract. On these papers the register and receiver will make a reference to the original and the additional entry, and on them one patent will issue for both; yet where it happens that the original entry and the additional entry are made in different land districts, this rule must be departed from, so far as regards the issuing of one final certificate and receipt for both.

25. The following proof will be required of parties applying for the benefits of these sections, in addition to the prescribed affidavit of the applicant:

1st. Certified copy of certificate of discharge, showing when the party enlisted and when he was discharged; or, if this cannot be procured, then the affidavits of two respectable, disinterested witnesses, corroborative of the allegations contained in the prescribed affidavit on these points.

2d. In case of widows, the prescribed evidence of military service of the husband, as above, with affidavit of widowhood.

3d. In case of minor orphan children, in addition to the prescribed evidence of military service of the father, proof of death or marriage of the mother. Evidence of death may be the testimony of two witnesses or certificate of a physician duly attested. Evidence of marriage may be a certified copy of marriage certificate, or of the record of same, or testimony of two witnesses to the marriage ceremony.

26. The register and receiver will be allowed to charge one dollar each for receiving and filing the initiatory declaration of the parties in cases where such declarations are filed. This fee the receiver will account for in the usual manner, indicating the same in his accounts as fees for "homestead declarations," which will be charged against the maximum of \$3,000 now allowed by law. In the States and Territories, for which 50 per centum additional is allowed by the twelfth subdivision of section 2,238 of the Revised Statutes, the additional allowance will apply to the fee herein named, viz: California, Oregon, Washington, Nevada, Colorado, Idaho, New Mexico, Arizona, Utah, Wyoming, and Montana.

27. *Provisions for the benefit of Indians.*—The 15th and 16th sections of the act of March 3, 1875, extends the benefits of the homestead act of May 20, 1862, and the acts amendatory thereof (now embodied in sections 2,290, 2,291, 2,292, and 2,295 to 2,302, inclusive, of the Revised Statutes), to any Indian, born in the United States, who is the head of a family, or who has arrived at the age of twenty-one years; and who has abandoned, or may hereafter abandon, his tribal relations with the exception that the provisions of the eighth section of said act of 1862 (section 2,301 of the Revised Statutes), shall not be held to apply to entries made thereunder, and with the proviso that the title to lands acquired by any



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Indian by virtue thereof shall not be subject to alienation or incumbrance, either by voluntary conveyance, or the judgment, decree, or order of any court, and shall be and remain inalienable for a period of five years from the date of the patent issued therefor.

An Indian desiring to enter public land under this act must make application to the register and receiver of the proper district land office; also an affidavit setting forth the fact of his Indian character, that he was born in the United States, that he is the head of a family or has arrived at the age of twenty-one years; that he has abandoned his tribal relations and adopted the habits and pursuits of civilized life, and this must be corroborated by the affidavits of two or more disinterested witnesses.

If no objection appear, the register and receiver will then permit him to enter the tract desired, according to the existing regulations, so far as applicable, under the homestead law, the register writing across the face of the application, the words, "Indian homestead—act of March 3, 1875;" they will note the entry on their records and make returns thereof to this office, with which they will send the affidavits submitted. It will be observed that the provisions of the eighth section of the act of May 20, 1862 (section 2,301 of the Revised Statutes), which admit of the commuting of homestead to cash entries, do not apply to this class of homesteads.

28. All lands obtained under the homestead laws are exempt from liability for debts contracted prior to the issuing of patent therefor.

29. For homestead entries on lands in Michigan, Wisconsin, Iowa, Missouri, Minnesota, Kansas, Nebraska, Dakota, Alabama, Mississippi, Louisiana, Arkansas, and Florida, fees are to be paid according to the following table:

ACRES.	PRICE PER ACRE.	COMMISSION.		FEES.		TOTAL FEES AND COMMISSIONS.
		PAYABLE WHEN ENTRY IS MADE.	PAYABLE WHEN CERTIFICATE ISSUES.	PAYABLE WHEN ENTRY IS MADE.	PAYABLE WHEN CERTIFICATE ISSUES.	
160	\$1 25	\$4.00	\$4.00	\$10.00		\$18.00
80	1 25	2.00	2.00	5.00		9.00
40	1 25	1.00	1.00	5.00		7.00
80	2.50	4.00	4.00	10.00		18.00
40	2.50	2.00	2.00	5.00		9.00

NOTE.—Where entries are made on \$2.50 lands by officers, soldiers and sailors, under section 2,304 of the Revised Statutes, double the amount of the above commissions must of course be paid, that is, for 160 acres of \$2.50, \$8 at the date of entry, and \$8 upon proving up.

By section 2,303 of the Revised Statutes, the public lands in five of the above States, viz: Alabama, Mississippi, Louisiana, Arkansas, and Florida, are not subject to disposal in any other manner than according to the provisions of the homestead laws. In addition to the States and Territories named, the above rates will apply to Ohio, Indiana and Illinois, if any vacant tracts can be found liable to entry in these three States, where but very few isolated tracts of public land remain undisposed of.

30. In the Pacific and other political divisions, viz., on lands in California, Nevada, Oregon, Colorado, New Mexico, and Washington, and in Arizona, Idaho, Utah, Wyoming, and Montana, the commissions and fees are to be paid according to the following table:

ACRES.	PRICE PER ACRE.	COMMISSIONS.		FEES.		TOTAL FEES AND COMMISSIONS.
		PAYABLE WHEN ENTRY IS MADE.	PAYABLE WHEN CERTIFICATE ISSUES.	PAYABLE WHEN ENTRY IS MADE.	PAYABLE WHEN CERTIFICATE ISSUES.	
160	\$1 25	\$6.00	\$6.00	\$10.00		\$22.00
80	1 25	3.00	3.00	5.00		11.00
40	1 25	1.50	1.50	5.00		8.00
80	2.50	6.00	6.00	10.00		22.00
40	2.50	3.00	3.00	5.00		11.00

The note to the table under the 29th head applies also to this table of rates.

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LAWS TO PROMOTE TIMBER CULTURE.

31. The timber-culture act, of March 13, 1874, amendatory of the act of March 3, 1873, (sections 2,464 to 2,468 of the Revised Statutes), is to the following effect:

1. The privilege of entry under this act is confined to persons who are heads of families, or over twenty-one years of age, and who are citizens of the United States, or have declared their intention to become such;

2. The affidavit required for initiating an entry under this act may be made before the register or receiver of the district office for the land district embracing the desired tract, or before some officer authorized to administer oaths in that district, who is required by law to use an official seal;

3. Not more than one quarter of any one section can be entered under this act;

4. The privilege of making more than one entry thereunder, is confined to such parties as shall enter, in each and every instance, a fractional subdivision of less than forty acres, and the aggregate area of such entries shall not exceed 160 acres;

5. The ratio of area required to be broken, planted, etc., is, in all cases initiated under the first section of this act, one-fourth of the land embraced in the entry;

6. One-fourth part of the area required to be devoted to timber must be broken within one year from the date of entry; one-fourth part more within two years from date of entry; and the remaining one-half within three years from date of entry;

7. One-fourth part of the area required to be devoted to timber must be planted within two years from date of entry; one-fourth part more within three years from date of entry; and the remaining one-half within four years from date of entry;

8. The trees are required to be not more than twelve feet apart each way, and the same are required to be protected, cultivated, and kept in a healthy growing condition for eight years next succeeding the date of entry;

9. If, at the expiration of the said eight years, or at any time within five years thereafter, the person making the entry, or, if he or she be dead, his or her heirs or legal representatives, shall prove by two credible witnesses the fact of such planting, cultivation, etc., of the said timber for not less than the said period of eight years, he, she, or they shall receive a patent for the land embraced in said entry;

10. In case of the death of a person who, having entered a quarter section, has complied with the provisions of this act for the period of three years—that is to say, who has broken ten acres the first year, ten acres the second year, and twenty acres the third year, and who has planted ten acres with timber the second year, and ten acres the third year—then, and in that case, his or her heirs or legal representatives shall be permitted, at their option, to continue to comply with the provisions of this act during the unexpired portion of the eight years, and thereupon receive a patent for said quarter section; or, on making proper proof of the compliance of the deceased settler, with the requirements of the act for the said period of three years, they shall receive, without delay, a patent for forty acres of said quarter section, upon the condition that they relinquish to the United States all claim to the remainder of the land embraced in such entry;

11. If, at any time, after not less than one year from the date of entry under the first section of this act, and prior to the issue of a patent therefor, the claimant shall fail to do the breaking and planting required by this act, or any part thereof, or shall fail to cultivate, protect and keep in good condition such timber, then, and in that event, such land shall become liable to a contest in the manner provided in homestead cases; and upon due proof of such failure the entry shall be canceled and the land become again subject to entry under the homestead laws, or by some other person under the provisions of this act;

12. Each and every homestead settler, at any time after the end of the third year of his or her residence, who, in addition to the settlement and improvements required by the homestead laws, shall have had under cultivation for two years one acre of timber (the trees thereon being not more than twelve feet apart each way, and in a good thrifty condition) for each and every sixteen acres of said homestead, shall, upon due proof of such fact by two credible witnesses, receive his or her patent for said homestead;

13. No land acquired under the provisions of this act shall in any event become liable to the satisfaction of any debt or debts contracted prior to the issuing of final certificate therefor;

14. The fees for all entries under this act shall be ten dollars, and the commission



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of registers and receivers on all entries, irrespective of area, shall be four dollars, two dollars to each, at the date of entry, and a like sum at the date of final proof;

15. No distinction is made, as to area or the amount of fee and commissions, between minimum and double-minimum lands; a party may enter 160 acres of either on payment of the prescribed fee and commissions;

16. The fifth section of the act entitled "An act in addition to an act to punish crimes against the United States, and for other purposes," approved March 3, 1857, shall extend to all oaths, affirmations, and affidavits required or authorized by this act;

17. Parties who may have already made entries under the timber-culture act of March 3, 1873, of which this is amendatory, shall be permitted to continue and complete the same in the manner and under the conditions prescribed by this act.

32. Pursuant to the foregoing provisions, the following regulations will be observed, viz:

First. The register and receiver will restrict entries under this act to some one "technical quarter section" in any section of public land which is wholly prairie and naturally devoid of timber, and, hence, subject to the operation of the act, which may be either the northeast quarter, southeast quarter, northwest quarter, or southwest quarter, as the first legal applicant for a timber-culture entry in such section may elect. Before allowing any entry applied for they will, by a careful examination of the plat and tract books with reference to any previous entry or entries within the limits of the same section, satisfy themselves that the desired entry is admissible under this rule.

Second. In the case of an application for a fractional subdivision containing less than forty acres, they will require the applicant to state in his affidavit that he has, or has not, as the case may be, made a previous entry of a similar fractional subdivision. If he shall have made one or more such previous entries they will require him to exhibit his duplicate receipts or patents therefor, and will note the same by number, acres, district, and description of the land, upon the application presented, thus: "Previous entry No. —, [Description,] — acres, — District."

Third. When they shall have satisfied themselves that the land applied for is properly subject to such entry, they will require the party to make affidavit, and to pay the fee and that part of the commissions payable at the date of entry, and the receiver will issue his receipt therefor, in duplicate, giving the party a duplicate receipt. They will number the entry in its order, in a separate series of numbers, unless they have already a series under the act of March 3, 1873, to which this act is amendatory, in which case they will number the entry as one of that series; they will note the entry on their records, and report it in their monthly returns, sending up all papers therein, with an abstract of the entries allowed during the month under this act.

Fourth. The fee and commissions in this class of entries the receiver will account for in the usual manner, indicating the same as fees and commissions on timber-culture entries, which will be charged against the maximum of \$3,000 now allowed by law.

Fifth. When a homestead party claims a patent for his homestead entry under the fourth section of this act, the register and receiver will require him to make affidavit, and proof, which must show that he has resided upon and cultivated the tract for not less than three years, in addition to the facts that the land is prairie in character, and that he has cultivated timber thereon, as required to bring the case within the provisions of said fourth section. This being done, and the proper commissions paid, the receiver will issue his receipt for the money, and the register his final certificate for the entry, the papers to be numbered in the regular final homestead series.

Sixth. In all cases under this act it will be required that trees shall be cultivated, which shall be of the class included in the term "timber" the cultivation of shrubbery and fruit-trees not being sufficient.

PRESENTATION OF APPEALS.

33. Any party aggrieved by the rejection of his claim has a right to appeal from the decision of the register and receiver to the commissioner of the General Land Office. Such appeal, however, with the reasons therefor, must be filed with the land officers within thirty days from the date of their decision, accompanied by the rejected papers, if any; also, with any argument the party desires to file. These papers will then be forwarded to the commissioner by the district land officers for review and decision. Their report should set forth the nature of the claim, whether



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homestead, pre-emption, timber culture, railroad, mineral, swamp, or other State selection, with the names of parties, description of land, number of filing, entry, list or selection, and date of hearing.

No appeal will be entertained unless sent up through the district land office.

The party may still further appeal from the decision of the commissioner of the General Land Office to the Secretary of the Interior. This appeal must be taken within sixty days after service of notice on the party. It may be filed with the district land officers, and by them forwarded; or it may be filed with the commissioner, and must recite the points of exception.

If not appealed, the decision is by law made final. (See section 2,273 of the Revised Statutes.) After appeal, thirty days are usually allowed for filing arguments, and the case is then sent to the Secretary, whose decision is final and conclusive.

REGISTERS' AND RECEIVERS' RETURNS.

34. Within three days from the close of each month the district land officers are required to make out and transmit to the General Land Office a statement of the business of their respective offices for the preceding month.

These reports are in the form of abstracts of pre-emption declarations and of soldiers' declarations filed, abstracts of lands sold, abstracts of homesteads entered, abstracts of timber culture entries allowed, abstracts of military bounty land warrants, and of agricultural college scrip located, accompanied by the certificates of purchase, receiver's receipts, homestead and timber culture applications and affidavits, military bounty land warrants and agricultural college scrip surrendered as satisfied, and the certificates of location thereof.

The abstracts, after being carefully examined by the register and receiver, are to be certified by them as correct, and as in conformity with the papers in the entries or locations embraced therein, and with their records, which papers, abstracts, and records must agree with each other.

The receiver is required also to render promptly a *monthly account of all moneys received*, showing the balance due the Government at the close of each month.

At the end of every *quarter* he must also transmit a *quarterly account* as receiver; upon the several accounts an adjustment is here made and submitted to the Treasury Department for final settlement.

He must also render a quarterly disbursing account of all moneys expended.

The receiver is required to deposit the moneys received by him at some depository designated by the Secretary of the Treasury when the amount on hand shall have reached the sum of *two thousand dollars*; and in no case is he authorized, without special instructions, to hold a larger amount in his hands.

35. It is the duty of the registers and receivers to be in attendance at their offices, and give proper facilities and information to persons applying for lands.

37. Laws and instructions relating to mining claims form the subject of a separate circular.

Lands bearing "*gold, silver, cinnabar, lead, tin, copper, or other valuable deposits*," are not subject to disposal under the homestead and pre-emption laws.

38. Registers and receivers of the land offices are not authorized by law to make any charge for their services in accepting or entering pre-emption or homestead claims other than such as are herein set forth.

39. By section 2,224 of the Revised Statutes it is, among other things, provided that upon satisfactory proof that either of said officers, or any other officer, has charged or received fees or other rewards not authorized by law, he shall forthwith be removed from office.

S. S. BURDETT,

Commissioner of the General Land Office.

EXTENSION OF TIME TO PRE-EMPTORS IN DISTRICTS RAVAGED BY GRASSHOPPERS.

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE, }
WASHINGTON, D. C., May 11, 1875. }

Registers and Receivers:

GENTLEMEN:—Referring to my circular letter of Jan. 5th, 1875, transmitting to you a copy of the act for the relief of settlers on the public lands, approved



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STATE BOARD OF AGRICULTURE.

December 28, 1874, I have now to inform you that, upon the earnest representations of senators in Congress, and other distinguished citizens of some of the States aforesaid, and from considerations of humanity believed to be consistent with the general purposes of the legislation in question, I deem it proper to so far modify the instructions embraced in the concluding paragraph of my said circular letter, as to hold that the benefits extended by the law to pre-emptors who, by reason of the ravages of grasshoppers are compelled to leave and be absent from their lands, may also be extended to pre-emptors whose crops have in like manner been destroyed but who have, nevertheless, continued their residence upon their respective claims.

Those whose crops were destroyed or seriously injured in 1874, will be entitled to the extension of one year from and after July 1, 1875, and when the injury occurs in 1875, the extension will date from July 1, 1876.

To the end that this class of pre-emptors may not be confounded with those whose crops are not destroyed or seriously injured, written notice should be filed in your office by those claiming the extension prior to the date when their respective periods for proof and payment would otherwise expire.

S. S. BURDETT,

Commissioner of the General Land Office.

The circular letter to which the foregoing refers, permits homestead settlers whose crops were destroyed by grasshoppers in 1874, to be absent from their homesteads until July 1, 1875; and in case the grasshoppers should re-appear in 1875, and make like destruction, a like permit of absence is granted until July 1, 1876.

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NAMES OF COUNTY CLERKS, TREASURERS AND COUNTY SEATS.

COUNTIES.	COUNTY SEATS.	COUNTY CLERKS.	COUNTY TREASURERS.
Allen	Iola	J. W. Goltra	Edward Rayn.
Anderson	Garnett	C. H. Krebs	Sol. R. Washer.
Atchison	Atchison		
Barbour	Medicine Lodge		
Barton	Great Bend	James H. Brown	E. J. Peek.
Bourbon	Fort Scott	Henry Isely	H. Seburn.
Brown	Hiawatha	Vincent Brown	E. B. Brainerd.
Butler	Eldorado	E. B. Hibbard	W. W. Jones.
Chautauqua	Sedan	S. A. Breese	J. S. Doolittle.
Chase	Cottonwood Falls.	E. McPherson	Slem Lisle.
Cherokee	Columbus	E. P. Huston	Allen Wilson.
Clay	Clay Centre	Edmund Martin	W. E. Reid.
Cloud	Concordia	Job Throckmorton	S. J. Carter.
Coffey	Burlington		
Comanche			
Cowley	Winfield	J. H. Waterman	W. B. Curtis.
Crawford	Girard	P. V. Trovinger	Rob't O. Rizer.
Davis	Junction City	M. P. Jolley	C. H. Lebold.
Dickinson	Abilene	C. Rappelye	Rob't Flickinger.
Doniphan	Troy	T. B. Smith	
Douglas	Lawrence	Wm. Emerson	N. L. Humphrey.
Edwards	Kinsley	Geo. Thompson	Nicholas Momma.
Elk	Howard City	C. Creasey	Fred. Krueger.
Ellis	Hays City	C. C. Sprigg	George Huycke.
Ellsworth	Elisworth	W. F. Sweeney	A. B. Webster.
Ford	Dodge City	Geo. D. Stinebaugh	S. H. Barnett.
Franklin	Ottawa	W. S. Reece	W. H. Daum.
Greenwood	Enreka		
Harper	Bluff City	H. W. Bunker	A. B. Gilbert.
Harvey	Newton	J. G. Porterfield	W. A. Allen.
Jackson	Holton	D. B. Baker	I. Southward.
Jefferson	Oskaloosa	J. M. Allen	John Burns.
Jewell	Jewell Centre	J. Martin	Henry A. Taylor.
Johnson	Olathe		
Kingman	Kingman	S. C. Howard	Geo. M. Caldwell.
Labette	Oswego	O. Diefendorf	E. Hook.
Leavenworth	Leavenworth	E. M. Harris	James B. Goff.
Lincoln	Lincoln Centre	John W. Flora	J. P. Way.
Linn	Pleasanton	J. S. Craig	J. Ernst.
Lyon	Emporia	Thomas W. Bowen	R. C. Coblo.
Marion	Marion Centre	Jas. G. McIntyre	James Smith.
Marshall	Marysville	J. R. Wright	Anton Hogwell.
McPherson	McPherson	C. H. Giller	S. R. Smith.
Miami	Paola	Levi J. Best	J. F. Cooper.
Mitchell	Beloit	E. T. Mears	Carey Oakes.
Montgomery	Independence	H. W. Gildemeister	L. P. Rude.
Morris	Council Grove	W. J. Ingram	Edwin Butt.
Nemaha	Seneca	C. F. Stamper	A. S. Lapham.
Neosho	Erie		
Ness	Smallwood City		
Norton	Norton	Ed. Spaulding	John S. Edie.
Osage	Burlingame	C. W. Crampton	R. R. Hays.
Osborne	Osborne City	F. M. Sexton	George E. Burnham.
Ottawa	Minneapolis	T. McCarthy	A. O. Bruner.
Pawnee	Larned	J. H. Laird	G. W. Young.
Phillips	Phillipsburg	H. P. Smith	— McProud.
Pottawatomie	Louisville		
Pratt	Prattville	H. W. Beatty	G. W. Hardy.
Reno	Hutchinson	E. M. Crummer	Isaac O. Savage.
Republic	Bellville	W. T. Nicholas	R. E. Lawrence.
Rice	Atlanta	Wm. Burgoyne	James W. Blaine.
Riley	Manhattan	L. C. Smith	M. M. Stewart.
Rooks	Stockton		
Rush		C. M. Harshberger	G. W. Smvser.
Russell	Russell	John Anderson	J. B. Hamilton.
Saline	Salina	John Tucker	L. N. Woodcock.
Sedgwick	Wichita	J. Lee Knight	Chester Thomas, Jr.
Shawnee	Topeka	Geo. W. Buckley	S. M. Helm.
Smith	Smith Centre	Stacy B. Douglass	A. B. Mayhew.
Sumner	Wellington	G. W. Watson	Joseph Fields.
Wabawsee	Alma		
Wallace	Sheridan	G. W. Pasko	T. M. Achenback.
Washington	Washington	G. E. Butire	Henry Brown.
Wilson	Fredonia	I. N. Holloway	R. A. Hurt.
Woodson	Defiance	D. R. Emmons	E. S. W. Drought.
Wyandotte	Wyandotte		

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PROCEEDINGS OF THE EIGHTH ANNUAL MEETING OF THE KANSAS ACADEMY OF SCIENCE.

THE eighth annual meeting of the Kansas Academy of Science was held in the Senate Chamber, at Topeka, beginning at 3 p. m. October 12th, and closing at 10 p. m. October 13th.

Among the proceedings of the Academy, the following will be of public interest:

A resolution was presented and passed as follows:

"Resolved, That the increasing popular demand for scientific information makes it a duty of members of this Association to embrace every appropriate occasion to aid the efforts of those seeking the introduction of the natural sciences into the common schools."

A committee, consisting of Profs. W. K. Kedzie, M. V. B. Knox and B. F. Mudge, was appointed to draft resolutions in regard to the necessity for a geological survey of the State, for presentation to the Legislature. The following report was unanimously adopted as an expression of the opinions of the Academy:

"It is now notoriously the fact that tons of choice minerals and fossils of Kansas are being shipped by collectors to the cabinets of eastern universities.

"It is exceedingly important for the educational and scientific interests of the State that these valuable specimens should be detained in the cabinets of the State. There is also a constantly increasing demand for more accurate and intelligent information as to the coal, gypsum, salt and other resources of the State.

"It is also well known that much money has been wasted in this State, in useless mining enterprises, which might have been saved by proper geological knowledge. Therefore,

"Resolved, 1st, That in the opinion of this Academy, a thorough geological survey of the State is imperatively needed.

"2d. This survey is necessary to develop fully the coal, salt, gypsum, lead, zinc, building stone, ochre and other resources of the State.

"3d. That such a survey should also include a thorough investigation of the rain-fall, spring and river system and general water supply of the State.

"4th. That the material already accumulated by this Academy, including lists of plants, birds, minerals and insects of the State, will be gladly contributed to this work.

"5th. That not only would such a survey place us on an equality with the more advanced States of the Union, but must prove for the State a most profitable monetary investment."

The resolutions were given to the Executive Committee of the Academy, who were directed to act thereon in conjunction with the State Board of Agriculture.

The following papers were read:

Additions to the Catalogue of the Lepidoptera of Kansas, by Prof. F. H. Snow.

Observations on the Botany of Kansas, with list of Plants observed since last year, by Prof. J. H. Carruth.

Descriptions of the several stages of *Plagioderia scripta* Fabr.—by William Osburn.



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- Remarks on some Characteristic Fossils of Western Kansas, by Prof. B. F. Mudge.
 On the Hot Bluffs of the Missouri River in Nebraska, by Prof. W. K. Kedzie.
 On the San Juan Mining Region, by Dr. W. H. Saunders.
 On the Habits of certain Larvæ, by Geo. F. Gaumer.
 Catalogue of the Mammals of Kansas, with notes, by Prof. M. V. B. Knox.
 On the Ozone in the Atmosphere of Kansas, by Prof. W. K. Kedzie.
 Additions to the Catalogue of Kansas Birds, by Prof. F. H. Snow.
 On the Chalk of Kansas, by Prof. G. E. Patrick.
 On the Larva and Chrysalis of the Sage sphinx (*Sphinx lugens* Walker), by Prof. F. H. Snow.
 The following officers were elected for the ensuing term of one year:
President—Frank H. Snow.
Vice Presidents—B. F. Mudge, J. H. Carruth.
Secretary—Joseph Savage.
Treasurer—R. J. Brown.
Curators—F. H. Snow, W. K. Kedzie, E. A. Popenoe.
 The following commissions were also appointed:
 GEOLOGY—B. F. Mudge, M. V. B. Knox.
 CHEMISTRY AND MINERALOGY—W. K. Kedzie, G. E. Patrick.
 MAMMALOGY—M. V. B. Knox.
 ORNITHOLOGY—F. H. Snow.
 ENTOMOLOGY: *Lepidoptera*—F. H. Snow; *Coleoptera*—E. A. Popenoe; *Hymenoptera*—William Osburn; *Diptera*—George F. Gaumer.
 BOTANY—J. H. Carruth, John Wherrell.
 ENGINEERING—F. W. Bardwell, William Tweeddale.
 METEOROLOGY—J. D. Parker.
 PHILOLOGY—D. H. Robinson.
Committee on Publication—B. F. Mudge, *Chairman*; A. Gray, F. H. Snow.
Committee on Local Arrangements—P. McVicar, *Chairman*; A. H. Thompson, E. A. Popenoe.
 The Society adjourned to meet in 1876, in Topeka—the date to be announced by the Executive Committee.
 E. A. POPENOE, *Secretary pro tem.*

OZONE IN KANSAS ATMOSPHERE.

By PROF. WM. K. KEDZIE, of the State Agricultural College.

We hear much from every quarter of the healthfulness so generally characteristic of the climate of Kansas; and no person long resident within the State can have failed to be strongly impressed by the unmistakable health-producing and health-sustaining features of Kansas atmosphere. None of us need to be reminded of the general immunity which we enjoy from the inroads of bronchial and lung difficulties; nor to recall the startling recoveries which we have all witnessed when invalids are brought into our midst completely prostrated by these maladies as they prevail in more eastern localities. I doubt not every thoughtful student has

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carefully sought for the adequate causes which have brought about so admirable a sanitary result. Our altitude above the sea is considerable, and yet is manifestly insufficient to account for so well marked a condition. Our atmosphere is proverbially a dry one; but an arid climate is not necessarily a healthful one. Now it is far from being the object of this paper to attempt any solution of this interesting problem, in which so many elements must obviously enter, and in the discussion of which any unanimity of opinion is well-nigh impossible. It is simply my desire to call your attention as a possible explanation of our climatic superiority, to the existence of an element which has thus far received little attention among us: the Ozone, everywhere prevalent in Kansas atmosphere. Nor is it any part of my intention to present here any elaborate discussion of the nature of this element nor of its supposed relations to the conditions of health and disease. This element has now been known to chemists barely thirty-five years, and yet ever since its discovery in 1840, by Schonbein, of Basle, it has probably received from chemists more universal attention with less satisfactory results than any other one body. It is only recently that a prominent member of the British Association pronounced any attempt to investigate the nature or relations of Ozone, "a delusion and a snare," and the great majority of English and American chemists have seemed disposed to "take him at his word," as its investigation has been by them almost wholly neglected. The whole matter seems to have been left to the researches of a few German and French chemists whose half contradictory results have appeared only in disjointed articles in the foreign periodicals. Indeed but one volume of English authorship, making any pretensions to thoroughness in the matter, has appeared; and even in this the subject is treated in a most fragmental and unsatisfactory manner.

But notwithstanding this disheartening meagerness of knowledge of the nature of Ozone and of the conditions in which it appears, there can be no shadow of a doubt that the relations which it sustains to organic life in every form are of most vital importance, and that we to-day are more generally indebted for our sanitary well-being to its indirect influence than we have as yet any conception. Now we know this Ozone to be an allotropic form of oxygen. We know it to be commonly produced by the action of electricity on the oxygen of our common air. Its peculiar odor as thus produced has been known from the most remote antiquity. Homer, in his Odyssey, speaks of the atmosphere, after the passage of the thunderbolt, as being "quite full of sulphurous odor," and it is a common experience of those who have happened near a lightning stroke that it is instantly followed by this strong characteristic odor. A positive proof of this fact, however, was furnished by a Swiss scientist, Buchwalder, who, while traveling in the Alps, was overtaken by a violent thunder storm in which his guide was instantly killed by a lightning stroke, and the powerful odor was at once apparent. Shortly afterward he visited the laboratory at Basle, in which Schonbein was manufacturing a large quantity of Ozone for experiment, when he at once expressed his astonishment at the strong "smell of lightning" which he had just observed a few days before in the thunder storm on the Alps. Thus the identity of the phenomena was plainly established. The same odor may be observed around an electrical machine during its operation in a close dry room. The allotropic condition of Ozone, however, is best illustrated by a single experiment. We know that the metal silver remains bright and unaltered in dry oxygen gas. But let a strip of silver be enclosed in a tube of oxygen, and let a succession of electric sparks be passed through, Ozone will be produced and the silver will almost immediately become covered with a black

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deposit which is nothing else than silver oxide. On heating this black deposit pure oxygen gas will be again given off. The views of Schonbein as to the nature of Ozone are not at the present day generally accepted. He looked upon oxygen as an electrically neutral body made up of an electro-positive and an electro-negative atom. Its condition then pictured itself to his mind as $O^+ O^-$, standing side by side. By the action of the electric current he considered its particles to become so altered in their mutual positions as to produce two distinct bodies: First, Ozone, represented $O^- O^+ O^-$; second, Antozone, represented $O^+ O^- O^+$.

This view is now, however, wholly abandoned. As to the existence of Antozone it is here entirely unnecessary to speak. It is now looked upon by the generality of chemists as probably nothing else than the per-oxide of hydrogen. Ozone itself is now regarded by leading authorities as merely condensed oxygen, with a density of one and a half times that of oxygen. Hence if we represent a working particle of oxygen by O_2 , that of Ozone would be O_3 . We would thus give it the equivalent 48. For the purposes of experiment we can produce Ozone by a great variety of methods: By a slow oxidation of phosphorous in a moist and confined atmosphere; by the decomposition of the vapor of sulphuric ether by the agency of a glass rod heated to temperature of $250^\circ F.$; or in large quantities by the decomposition of the permanganate of potassium by sulphuric acid. As evolved by all these methods it exhibits its remarkable properties: A colorless gas of a powerful, pungent odor (whence its name, which signifies "odor producer;") exerting a peculiar irritating effect upon the mucous membrane of the throat and lungs; and with the oxidizing characteristics of ordinary oxygen much intensified. It will attack metals and decompose binary salts which it is entirely beyond the power of ordinary oxygen to touch.

Thus much and briefly as to the nature of this remarkable body. Next as to its existence in our atmosphere. This is found by careful experiment to be all but universal, but varying immensely in degree and intensity as determined by surrounding circumstances, particularly the presence or absence of decomposing organic matter. The natural processes which produce Ozone in our atmosphere are most numerous and varied. Its production by atmospheric electricity has already been mentioned, and although the results from this cause are most startling it is not probable that its effects are at all proportionate to that of the numberless silent producers of atmospheric Ozone. Indeed it seems very probable that there is no process in nature in which oxygen is either absorbed or liberated in which there is not a proportionate quantity of Ozone evolved. Meissner has plainly proved that not only in rapid process of combustion, but in the slow processes of decay, a certain quantity of Ozone is produced, the greater portion, of course, instantly disappearing when brought in contact with the decomposing matter, but still a recognizable portion escaping undestroyed into the general atmosphere. The mere process of evaporation from large bodies of water is also a most powerful contributor of Ozone to the atmosphere. But above all these, the latest researches in this fascinating field have indicated a third possible and more powerful source still: the process of vegetable growth. We know that the processes of vegetable nutrition depend primarily upon the fixation of carbon, that is, the absorption of carbonic acid from, and the return of oxygen to, the atmosphere. Now Daubeny has proved by careful experiment upon a slow current of air passing over a living plant that the liberated oxygen thus produced was accompanied by indications of Ozone. No matter how minute the amount thus produced, when we consider the enormous extent to which this operation is everywhere in progress, we must look upon it as a