

# KANSAS FARMER

VOL. XXXIX  
NO. 52

TOPEKA, KANSAS, THURSDAY, DECEMBER 26, 1901.

ESTABLISHED IN 1863  
\$1.00 A YEAR

## Breeders' Directory.

### DUROC-JERSEY SWINE.

**D. TROTT** ABILENE, KANS., famous Duroc-Jerseys and Poland-Chinas.

Registered Stock, DUROC-JERSEYS, contains breeders of the leading strains.

**N. B. SAWYER**, - - Cherryvale, Kansas.

**M. H. ALBERTY**, - - Cherokee, Kansas.

### DUROC-JERSEYS.

100 head for this year's trade; all eligible to record.

**MAPLE AVENUE HERD** **J. U. HOWE**,  
**DUROC-JERSEYS.** Wichita, Kans.  
Farm 2 miles west of  
city on Maple Avenue.

### FAIRVIEW HERD DUROC-JERSEYS.

Have sold all spring males, but have about 60 fine pigs of September and October farrow at reasonable prices.

**J. B. DAVIS**, FAIRVIEW, BROWN CO., KANS.

### DUROC-JERSEY SWINE—REGISTERED

Write for prices on what you want in February, March or April Gilts open or bred to order. A few extra June and July pigs, \$10 each.

**NEWTON BROTHERS**, Whiting, Kans.

### STANDARD HERD OF Registered Duroc-Jerseys

**PETER BLOCHER**, Richland, Shawnee Co., Kans.  
Herd headed by Big Joe 7363, and others. S. C. B. Leghorns.

### POLAND-CHINA SWINE.

**V. B. HOWEY**, Box 103, Topeka, Kansas.  
Breeder and shipper of Poland-China hogs, Jersey cattle, S. L. Wyandotte chickens. Eggs in season.

### POLAND-CHINAS.

15 April and May boars. 1 yearling boar by Chief Perfection 2nd. Good fall and spring gilts bred to our GREAT HERD BOARS.

**DIETRICH & SPAULDING**, Richmond, Kansas.

### RIVERSIDE HERD OF POLAND-CHINA SWINE

Contains up to date and prize-winning individuals. Young stock for sale. Correspondence or inspection invited.

**M. O'BRIEN**, (Riverside), Liberty, Kansas

**W. P. WIMMER & SON**, Mound Valley, Kans.,  
...Breeders of...

### FASHIONABLE POLAND-CHINA HOGS

Young stock for sale at all times. Prices reasonable.

### KANSAS HERD OF POLAND-CHINAS

has some extra fine spring gilts, some January gilts, and sows 18 months, bred to Sen. I Know, he by Perfect I Know; and some nice fall boars by Sen. I Know, and U. S. Toc. Address **F. P. MAGUIRE**,  
HAVEN, RENO COUNTY, KANSAS.

### T. A. Hubbard,

ROME, KANS., Breeder of POLAND-CHINAS and LARGE ENGLISH BERKSHIRES.

Two hundred head. All ages. Twenty-five boars and 45 sows ready for buyers.

### SUNNYSIDE HERD OF Pedigreed Poland-China Hogs

We now have for sale some extra good young boars, and a lot of gilts 8 to 10 months old. All good. Gilts will be bred or sold open as desired. This is a choice lot of young stuff that will be priced cheap, quality considered.

**M. L. SOMERS**, Altoona, Kans

### VERDIGRIS VALLEY HERD OF POLAND-CHINAS.

For Sale: 12 head of the best early boars that I ever produced; large, heavy-boned, and smooth. Ten head of May, June, and July boars that are fancy; also one last fall's boar that is a show pig.

**E. E. WAIT**, Altoona, Kansas.  
Successor to WAIT & EAST.

### ...THOROUGHbred... Poland-China Hogs.

Special drive on 10 spring boars, weighing from 180 to 225 pounds, at prices to move them; they are large, lusty fellows, 8 of them good enough to head any pedigree herd; also 20 choice gilts that I will breed to Star Perfection, by L's Perfection, Black Perfection—grand of Missouri's Black Chief and L's Perfection, and a Improver. 100 head in herd. Write for any want in Poland-China hogs. **John Bollin**,  
OO CITY, KAS. (Express Office, Leavenworth.)

### POLAND-CHINA SWINE.

### ..FANCY.. POLAND-CHINAS

FOR SALE: 125 fall and spring boars and gilts, sired by Dandy U. S. 17446, and Model Boy Jr. 2400. The sire of each of my herd boars cost \$1,000. Choice pigs offered at reasonable prices. Write at once to

**M. ROLAND HUGHES**, Independence, Mo.

### High-Class Poland-China Hogs

**Jno. D. Marshall**, Walton, Harvey Co., Kans.,  
Breeds large-sized and growthy hogs with good bone and fine finish and style. On Friday, January 17, 1902, at Newton, Kans., will hold a Public Sale of 40 bred sows, 3 boars, and pigs of both sexes.

### SHADY LANE STOCK FARM.

**HARRY E. LUNT**, Proprietor, Burden, Cowley Co., Kans

### Registered Poland-Chinas

25 Boars and 25 Gilts of late winter farrow, sired by Searchlight 25518, and Look No Further. Dams of the Black U. S., Wilkes, Corwin, and Tecumseh strains. Prices low to early buyers.

Remember the three days' Combination Sale at Wichita, Kans: February 11, 1902, Poland-Chinas by Snyder Bros. and H. E. Lunt; February 12, 1902, Shorthorns by J. F. Stodder, and February 13, 1902, Draft horses by J. C. Robison and Snyder Bros.

### ..KRAMER'S.. POLAND-CHINAS

FOR SALE: Boars old enough for service. Ten strictly fancy gilts bred to a son of Ideal Black Chief by Missouri's Black Chief. One extra fall yearling sow, bred. All stock sold on a positive guarantee to be as represented. Address—

**D. A. KRAMER**, Washington, Kansas.

### R. S. COOK, Wichita, Kansas,

BREEDER OF

### POLAND-CHINA SWINE

The prize-winning herd of the Great West. Seven prizes at the World's Fair. The home of the greatest breeding and prize-winning boars in the West, such as Banner Boy 23441, Black Joe 23608, World Beater, and King Hadley. FOR SALE—An extra choice lot of richly-bred, well-marked pigs by these noted sires and out of thirty-five extra-large, richly-bred sows. Inspection or correspondence invited.

### BERKSHIRE SWINE.

### Ridgeview Farm Herd of LARGE ENGLISH BERKSHIRES

Have for sale—spring pigs of quality, at reasonable figures. Write us before buying.

**MANWARING BROS.**, Lawrence, Kans

### East Lynn Farm Herd LARGE ENGLISH BERKSHIRES

Herd headed by Premier 4th 55577, assisted by a son of Imp. Commander.

For Sale—A grand lot of boars ready for service, and a few choice gilts. Will price them right if taken soon. Inspection invited 6 days in the week.

**WILL H. RHODES**, Tampa, Marion Co., Kans.

### CHESTER-WHITE SWINE.

**D. L. BUTTON**, North Topeka, Kas  
BREEDER OF IMPROVED CHESTER WHITES Stock For Sale. Farm is two miles northwest of Reform School.

### TWENTIETH CENTURY HERD OF UP-TO-DATE, PRIZE-WINNING CHESTER WHITES

We have 70 pigs, mostly sired by Balance All 11327, the champion boar of 1900 at leading State Fairs and the International Live Stock Exposition. Address **DORSEY BROS.**, Perry, Ill.

### CATTLE.

### ENGLISH RED POLLED CATTLE—Pure-bred Young Stock For Sale.

Your orders solicited. Address **L. K. HASELTINE**, DORCHESTER, GRAMM CO., Mo. Mention this paper when writing.

### MEADOW BROOK SHORTHORNS—Ten fine young bulls for sale—all red. Red Laird, out of Laird of Linwood, at head of herd.

**F. C. KINGSLEY**,  
Dover, Shawnee County, Kansas.

### POLLED DURHAMS.

Single and double standard. Male stock for sale. I have the largest and best herd of this breed of cattle in the State. Correspondence and inspection invited.

**J. Q. HOWES**,  
1221 West Douglas Avenue, WICHITA, KANS.

### POLLED DURHAMS.

The leading herd west of the Mississippi river. 25 head of both sexes for sale. Foundation stock sold to Kansas and Washington Agricultural Colleges the past year.

**A. E. BURLINGTON**, Knox City, Mo.

### Registered Herefords

Ten extra good bulls. 7 to 12 months old; 8 are sired by Klondike 72001, and 2 by Young Autoer 101417. Will sell cheap.

**ALBERT DILLON**, HOPE, KANS.

### Alfalfa Meadow Stock Farm,

Shady Bend, Kansas.

Herefords, Poland-Chinas, Light Brahmas. Stock of all kinds for sale. Special: 48 Poland-China pigs. 200 bushels of pure, fresh Alfalfa Seed.

**O. B. WHITAKER**, Proprietor.

### MAPLE LEAF HERD OF THOROUGHbred Shorthorn Cattle, and Poland-China Swine.

Farm is 2 miles south of Rock Island depot.

**JAMES A. WATKINS**,  
Whiting, Kans.

### Registered Herefords.

**THOS. EVANS**, BREEDER,  
Hartford, Lyon County, Kansas.

Special Offerings: Young sows and heifers, and a few bulls for sale.

### BREED THE HORNS OFF BY USING A RED POLLED BULL.

**CHAS. FOSTER & SON**, Foster, Butler Co., Kans.

Breeders of RED POLLED CATTLE.

Herd headed by POWERFUL 4682. Pure-bred and grades for sale. Also prize-winning Light Brahmas.

### ...125... RAVENSWOOD SHORTHORNS

**G. E. LEONARD**, Bellair, Mo.

Males and females for sale. Inspection especially invited. Lavender Viscount 124755, the champion bull of the National Show at Kansas City, heads the herd.

**ED. PATTERSON**, Manager.  
Railroad and Telephone station, Bunceton, Mo.

### Pure-bred Galloways

Young Breeding Stock for Sale

Several Bulls Ready for Immediate Service.

Large herd. Can supply demand now. Also pure-bred Cotswold rams. Write for prices.

**W. G. McCANDLESS & SON**, Cottonwood Falls, Kans

### MT. PLEASANT HERD OF SHORTHORNS.

Herd headed by Acorn Duke 18th 142177. Herd composed of Young Marys, Galatens, and Sanspareils. Young bulls for sale.

**A. M. ASHCRAFT**, Atchison, Kans. R. F. D. No. 3.  
Inquire at Ashcraft & Sage Livery Barn, Main Street.

### ..SUNFLOWER HERD..

SCOTCH, AND SCOTCH-TOPPED SHORTHORN CATTLE, POLAND-CHINA SWINE

Herd Bulls, Sir Knight 124403, and The Bares 121327.

Herd Boars, Black U. S. 2d 25582 S, and Missouri's Best On Earth 19826 S.

REPRESENTATIVE STOCK FOR SALE.

Address **ANDREW PRINGLE**,  
Wabaunsee County, ESKRIDGE, KANSAS.

### CATTLE.

### OHIOE GALLOWAY CATTLE.

I have registered Galloway bulls for sale.

**O. E. MATSON**, Furley, Sedgwick Co. Kans

### D. P. NORTON'S Breeder of Pure Bred SHORTHORNS

Dunlap, Morris Co., Kans. SHORTHORN CATTLE

Herd Bull, Imported British Lion 133692 Young stock for sale.

### E. S. COWEE, Burlingame, Kans., R. R. 2, Breeder of PURE-BRED HEREFORD CATTLE, and DUROC-JERSEY SWINE.

Kids' Duke 96487 at head of herd. Young bulls and heifers for sale.

### Norwood Shorthorns. V. R. ELLIS, Gardner, Kans.

Sir Charming 4th at head of herd. Cruickshank-top crosses on best American families. Young stock for sale

### O. F. NELSON, Hiawatha, Kansas Breeder of REGISTERED Hereford Cattle.

Herd headed by Dandy Dolan 102828 full brother to famous Dandy Rex.

### Rock Hill Shorthorns and ..Saddle Horses..

Bulls in service, Sompstres Valentine 157069, and Mayor 129229. A fine string of young bulls and a few heifers for sale.

**J. F. TRUE & SON**, Proprietors.

Post-office, PERRY, KANS. Railroad station, Newman, Kans., on Union Pacific R. R., 12 miles east of Topeka

### ...ALLENDALE HERD OF... Aberdeen-Angus Cattle

The Oldest and Largest in the United States

Splendid recently imported bulls at head of herd Registered animals on hand for sale at reasonable prices at all times. Inspect herd at Allendale, near Iola and La Harpe; address **Thos. J. Anderson**, Manager, Iola, Allen Co., Kans., R. R. 2, or—

**ANDERSON & FINDLAY**, Prop's, Lake Forest, Ill.

### Scotch Shorthorns FOR SALE.

The Great Missile Bull, Imp. Mariner 135024, BRED by W. S. Marr, Uppermill, sired by Golden Ray (67192), dam Missile 88th by Ventriloquist (44180). Also SIX YEARLING BULLS of choicest Scotch breeding.

**HANNA & CO.**, Howard, Kans.

### THE GEO. H. ADAMS HEREFORDS AT LINWOOD, KANS.

YEARLING Bulls and Heifers for sale, sired by Orpheus 71106, and Ashton Boy 59038, and out of choice imported, and home-bred cows. Address all correspondence to **GEORGE F. MORGAN**,  
General Manager, Linwood, Kansas.

### GALLOWAYS

DISPERSION SALE of the entire Wavertree Herd, at SOUTH OMAHA, FEB'Y 28 AND MARCH 1, 1902.

For Catalogue and other particulars, address **W. H. B. MEDD, V. S.**,  
NOBLES COUNTY. DUNDEE, MINN.

### E. H. WHITE, Estherville, Iowa, IMPORTER AND BREEDER OF GALLOWAY CATTLE.

Herd Foundation Stock A Specialty.

A few choice Females and 14 Bulls for sale.

Inspection or Correspondence invited.

CATTLE.

Aberdeen-Angus

THE RUTGER FARM HERD

—OFFERS—

Thirty registered bulls, 8 to 30 months old, low down, blocky fellows of choicest breeding and individuality. Also a few heifers bred to expand.

CHAS. E. SUTTON, RUSSELL, KANS.

CLOVER CLIFF FARM.

REGISTERED GALLOWAY CATTLE



Also German Coach, Saddle, and trotting-bred horses. World's Fair prize Oldenburg Coach stallion Babbo, and the saddle stallion Rosewood, a 14-hand 1,100-pound son of Montrose in service. Visitors always welcome.

Address BLACKSHERE BROTHERS, Elmdale, Chase County, Kansas.

Silver Creek Shorthorns.

The Scotch bull, Gwendoline's Prince 180913, in service. Also the imported Scotch Mistle bull, Aylesbury Duke. 100 head of the best Scotch, Bates, and American families. High class Duroe-Jersey swine for sale.

J. F. STODDER, Burden, Cowley Co., Kans.

Remember the three days' Combination Sale at Wichita, Kans: February 11, 1902, Poland-Chinas by Snyder Bros. and H. E. Lunt; February 12, 1902, Short horns by J. F. Stodder, and February 13, 1902, Draft horses by J. C. Robison and Snyder Bros.

H. R. LITTLE, HOPE, DICKINSON CO., KANS., Breeds Only the Best, Pure-Bred

SHORTHORN CATTLE.

Herd numbers 135, headed by ROYAL CROWN, 185698, a pure Cruickshank, assisted by Sharon Lavender 148002.

FOR SALE JUST NOW—16 BULLS of serviceable age, and 12 Bull Calves. Farm is 1/4 miles from town. Can ship on Me. Pac. R. I., or Santa Fe. Foundation stock selected from three of the great herds of Ohio.

OLOVER BLOSSOM SHORTHORNS

Herd Headed by the Cruickshank Bulls Imp. Nonpareil Victor 132573

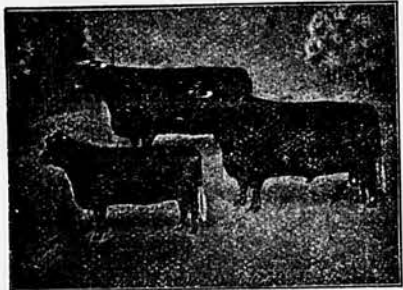
Sire of the champion calf and junior champion bull of 1900

...Grand Victor 115752...

Himself a show bull and sire of prize-winners.

FEMALES are Scotch, both imported and home-bred, pure Bates, and balance 3 to 6 Scotch tops. STOCK FOR SALE.

GEO. BOTHWELL, Nettleton, Caldwell Co., Mo. On Burlington Railroad.



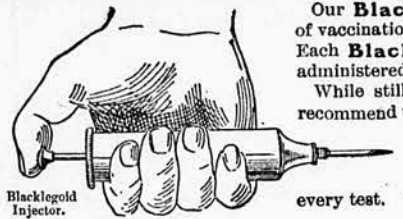
GLENDALE SHORTHORNS, OTTAWA, KANSAS.

Leading Scotch, and Scotch-topped American families compose the herd, headed by the Cruickshank bull Scotland's Charm 127264, by Imp. Lavender Lad, dam by Imp. Baron Cruickshank. Twenty bulls for sale.

C. F. WOLFE & SON, Proprietors.

Vaccinate Your Cattle

PARKE, DAVIS & CO.'S BLACKLEGOIDS (Blackleg Vaccine Pills) WILL POSITIVELY PROTECT THEM FROM BLACKLEG.



PARKE, DAVIS & CO., Detroit, Mich.

THE LINCOLN IMPORTING HORSE COMPANY, LINCOLN, NEBRASKA.

The Largest Importers of HIGH CLASS Draft Stallions in all the West.

Our last importation arrived October 14. They were selected by two as competent horse judges as ever crossed the ocean. Our facilities for building up and acclimating foreign stallions can not be excelled in the United States, our main barn costing over \$10,000.



HORSES AND MULES.

PERCHERON HORSES, and ABERDEEN-ANGUS CATTLE.

GARRETT HURST, Breeder, ZYBA, SUMNER COUNTY, KANSAS. Young stock for sale of either sex. All registered.

FOR SALE.

Percheron stallions and mares any age; Holstein-Friesian bulls, and Poland-China boars—leading strains represented.

H. N. HOLDEMAN, Rural Route No. 2, Girard, Kans.

HENRY AVERY & SON,

BREEDERS OF

Pure Percherons.

The largest herd of Percheron horses in the west and the best bred herd in America. A choice collection of young stallions and mares always on hand. Prices consistent with quality. Address, or come and see at

Wakarusa, Olay County, Kansas.

PERCHERON STALLIONS

FOR SALE.

DIRECT 18839, by Bendago 11807, by Brilliant 1271, dam Fenelo 14118 by Fenelon 2682, by Brilliant 1271. Bendago's dam the famous prize-winner Julia 5976 by La Ferte 5144. Also 6 Young Stallions by Direct.

HANNA & CO., Howard, Kans.

Pleasant Hill Jack Farm.

PHILIP WALKER, Breeder, MOLINE, ELK CO., KANS



25 Mammoth, Warrior, and Spanish Jacks Now For Sale.

Quality and Breeding Unexcelled. Inspection and Correspondence Invited.

Prospect Farm.



H. W. McAFEE, Topeka, Kansas,

Breeder of

OLYDESDALE HORSES, AND SHORTHORN CATTLE.

For Sale—25 Clydesdales, including 3 registered stallions of serviceable age, and 18 mares. Inspection and correspondence invited.

SHEEP.

ANOKA FARM RAMBOUILLET AND COTSWOLD SHEEP.

GEO. HARDING & SON Importers and Breeders, WAUKESHA, WIS.

25 Imported, and 75 American Rams and 150 Ewes for sale. Our show flock at the Pan-American and all State Fairs this year was a sweeping success. Write us your

wants and mention KANSAS FARMER.



Percheron Stallions.

70 First Class Young Percheron Stallions

Now in our Shenandoah stables. Our last importation arrived October 1, 1901—mostly black, 3-year-olds, 30 imported stallions. An elegant string of 25 big two's and three's of my own breeding. Thirty years in the business. Come and see the horses.

M. L. AYRES, Shenandoah, Iowa

Riverside Stock Farm

O. L. THISLER, & CHAPMAN & DICKINSON CO., KANS.

Importer and Breeder of PERCHERON, and FRENCH COACH HORSES, and SHORTHORN CATTLE.

For Sale—A few Shorthorn heifers, and Percheron stallions; also a Special Bargain on 9 Registered Hereford Bulls, 2 years old, and a few Full-Blood Percheron Mares.

WE ARE NOT THE LARGEST IMPORTERS

In the United States, neither have we all ton horses. But we do make five importations each year. Our stables at Lincoln, Neb., and at South Omaha Union Stock Yards are full of first-class Percheron and Shire stallions. If you want a good one for what he is worth, it will pay you to see us. Our horses won sweepstakes in all draft and hackney classes at Nebraska State Fair. Address all correspondence to

WATSON, WOODS BROS. & CO., Lincoln, Neb.

SPECIAL NOTICE: Woods Bros., of Lincoln, Neb., have two cars of Short-horn and Hereford bulls and cows at a bargain.



German Coach, Percheron, and Belgium Horses.

OLTMANNS BROS., Importers and Breeders, WATSEKA, ILLINOIS.

Three Importations in 1901. 100 Stallions For Sale.

No other firm enjoys such buying facilities; the senior member being a resident of Germany is personally acquainted with the best breeders in France, Germany, and Belgium. We can save you money. Come and see us. We shall exhibit at the International Live Stock Exposition, Chicago, Dec. 1-7, 1901.

S. A. SPRIGGS, Westphalia, Kansas,

BREEDER AND DEALER IN

Registered Mammoth, and Imported Spanish Jacks and Jennets; Also Registered Stallions.



All stock guaranteed just as represented. Correspondence solicited.

SNYDER BROS., Winfield, Kans.,

Breeders of

POLAND-CHINA SWINE; SHIRE, CLYDE, AND PERCHERON HORSES, AND POLLED DURHAM CATTLE.

For Sale at Special Prices—17 BOARS, and 25 GILTS, farrowed mainly in November and December. They are extra well bred and very thrifty.

8 Polled Durham Bulls, of serviceable age. 17 Stallions over 3 years. 2 Mammoth Jacks.

Remember the three days' Combination Sale at Wichita, Kans: February 11, 1902, Poland-Chinas by Snyder Bros. and H. E. Lunt; February 12, 1902, Shorthorns by J. F. Stodder, and February 13, 1902, Draft horses by J. C. Robison and Snyder Bros.

DRAFT STALLIONS

Percherons, Shires, and Clydes.



We have a selection that are sure to suit you. As grand a lot of young stallions, of serviceable age as can be found in the country. We do not claim to have every color or kind of a stallion, you or anybody may want, but what we claim you will find true if you pay us a visit. All of our selections are made by a member of our firm, who has been at this line of work the past decade and has absolutely a first choice from the leading breeders of Europe. Our last importation, consisting of the three great breeds, and 62 head in numbers were selected in the early part of February, before any of the shows and to-day are ready for sale. Write us, or come and see us, if you or your community are in need of the best to be found.

KEISER BROS., Keota, Keokuk County, Iowa.

America's Leading Horse Importers

Won at the Two Last Universal Expositions

At the Paris Exposition, 1900, our Percherons won Every First Prize with a possible exception. At the Pan-American Exposition, Buffalo, 1901, our stallions won Every First Prize including the Grand Sweepstakes over all draft breeds.

We import more horses than any other three firms in America, and more prize-winners than all others. We buy the best, can buy them cheaper and will sell them for less than anybody else.

If you want the kind that will improve your stock of horses, call on or write—

McLAUGHLIN BROTHERS,

COLUMBUS, OHIO.

LAWRENCE, KANS. EMMETSBURG, IOWA.



PERCHERONS.

J. W. & J. C. ROBISON, Importers and Breeders, TOWANDA, BUTLER CO., KANS.

LARGEST HERD IN THE STATE. IMPORTED, AND AMERICAN BRED STALLIONS AND MARES For Sale at all times.

Prices reasonable. Inspection invited. Seventeen young stallions for sale.

Remember the three days' Combination Sale at Wichita, Kans: February 11, 1902, Poland-Chinas by Snyder Bros. and H. E. Lunt; February 12, 1902, Shorthorns by J. F. Stodder, and February 13, 1902, Percherons by J. C. Robison and Snyder Bros.





**STEELE BROS.,** Belvoir, Douglas Co., Kans.,  
 Breeders of **SELECT**  
**HEREFORD CATTLE.**  
 YOUNG STOCK FOR SALE. INSPECTION OR CORRESPONDENCE INVITED.

**Sunny Slope Herefords**  
 ...200 HEAD FOR SALE...  
 Consisting of 40 good Cows 3 years old or over, 10 2-year-old Heifers bred, 50 yearling Heifers, and 100 Bulls from 8 months to 2 years old. I will make **VERY Low Prices** on any of the above cattle. Write me or come and see me before buying.  
**C. A. STANNARD, Emporia, Kans**



**SCOTT & MARCH**  
 BREEDERS OF PURE BRED  
**HEREFORDS.**  
 BELTON, CASS COUNTY, MO.  
 BULLS in service, HESIOD 29th 66304, Imp. RODERICK 80155, MONITOR 58275, EXPANSION 93662, FRISCOE 93674, FULTON ADAMS 11th 88731.  
 25 miles south of Kansas City on Frisco; Ft. Scott & Memphis; and K. C., P. & G. Railroads



**Gudgell & Simpson,**  
 Independence, Mo.,  
 ..BREEDERS AND IMPORTERS OF..  
**Herefords**  
 One of the Oldest and Largest Herds in America.  
 ANXIETY 4TH Blood and Type Prevall  
 Both Sexes, in Large or Small Lots, Always For Sale

**T. K. Tomson & Sons,**  
 \* \* Proprietors of \* \*  
**Elderlawn Herd of Shorthorns.**  
 DOVER, SHAWNEE COUNTY, KANSAS.  
 GALLANT KNIGHT 124468 in service. How would you like a cow in calf to, or a bull sired by, Gallant Knight 124468? His get won 14 prizes at the National Cattle Show held at Kansas City last October. 100 head in herd. Correspondence and inspection invited.


**Valley Grove Shorthorns**  
 THE SCOTCH BRED BULLS  
**LORD MAYOR 112727, and LAIRD OF LINWOOD 127149**  
 HEAD OF THE HERD.

LORD MAYOR was by the Baron Victor bull, Baron Lavender 2d, out of Imp. Lady of the Meadow, and is one of the greatest breeding bulls of the age. Laird of Linwood was by Gallant Knight 124468. His get won 14 prizes at the National Cattle Show held at Kansas City last October. 100 head in herd. Correspondence and inspection invited.  
 Address **T. P. BABST, Prop., Dover, Shawnee Co., Kans**




**Pearl Shorthorns.**  
 Herd Bulls:  
**BARON URY 2d 124970, LAFITTE 119915.**  
 Inspection Invited  
**C. W. TAYLOR, Pearl, Kans**

**...IDLEWILD HERD OF...**  
**Shorthorn Cattle.**  
 Owned by **W. P. HARNED, Vermont, Mo.**  
 200 HEAD. NO BETTER BREEDING FEW BETTER CATTLE  
 Crulekshank's Booth Lancaster, and Double Marys represented, with preponderance of Crulekshanks.  
 IMP. GOLDEN THISTLE, by Roan Gauntlet, dam by Champion of England.  
 THE IMPORTED COW is the dam of Godoy, my chief stock bull, he by Imp. Spartan Hero, he by Bampton. Godoy is closer to the greatest Sittyton sires than any living bull except his full twin brother. For Ready Sale—25 Bulls, 12 to 18 months old, and 40 Yearling Heifers to sell at drouth prices. Railroad Station, Tipton; main line Missouri Pacific; Vermont, Mo., on branch Missouri Pacific.



**50 SHORTHORN BULLS FOR SALE.**  
 THE BILL BROOK HERD OF REGISTERED SHORTHORNS  
 HAVE ON HAND FOR READY SALE  
**FIFTY YOUNG BULLS,**  
 from 6 to 20 months old; also a few good heifers.  
 Address  
**H. O. TUDOR, Holton, Kansas.**

**TEBO LAWN HERD SHORTHORNS.**  
 HERD BULLS ARE: ALICE'S PRINCE 122593 bred by W. A. Harris; VICTOR BASHFUL 152797 bred by J. R. Crawford & Sons; VALIANT 151304 bred by C. C. Norton; ADMIRAL GODOY 133872 bred by Chas. E. Leonard.  
 FEMALES are the best Crulekshank families topped from the leading importations and American herds. These added to the long established herd of the "Casey Mixture," of my own breeding, and distinguished for **INDIVIDUAL MERIT**, constitute a breeding herd to which we are pleased to invite the attention of the public. Inspection and correspondence solicited.  
**G. M. CASEY,**  
 Rural Route No. 1, CLINTON, MO.



**GREAT SALE OF HIGH CLASS Poland-Chinas,**  
**FRIDAY, JANUARY 17, 1902.**  
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## Agricultural Matters.

### Experience With Alfalfa.

EMERY PROBST, BEFORE OAK GRANGE FARMERS' INSTITUTE.

In the spring of 1898, I sowed 5 acres of alfalfa with oats as a nurse crop. It was before I had learned how to prepare the ground for an alfalfa seed-bed and when to sow. I plowed the ground and harrowed it pretty thoroughly immediately before sowing. About an acre of this ground is what you would call creek bottom, the rest is ordinary slope, extending up quite an incline. Part of this land is underlaid with scattering bowlders or "Nigger heads," varying from the size of your fist to—well some of them will make the plow-handles jump up and hit you in the ribs. There are not many of the larger ones, but just enough so that I had a dull plow all the time I plowed in that field. There is nothing that will take the edge off of a sharp plow-share any quicker than a bolder about the size of a barrel solidly implanted about 6 inches beneath the surface. And I want to say while I am here that is one of the reasons I seeded that field to alfalfa. I wanted it sown to a grass that I would not have to plow up or reseed every year or two.

I sowed a bushel and a peck of oats and 20 pounds of alfalfa seed to an acre. I sowed it with a grain drill with seeder attachment letting the alfalfa seed fall on top of the ground in front of the hose. I afterwards cross-harrowed part of the field and part of it I did not, but I couldn't see any difference. I got a good stand of alfalfa all over the field.

As my neighbors will remember, it was not a very good year for oats that season, but chinch-bugs did remarkably well; in fact, they virtually ruined the oats so I cut it for hay. At the time I cut the oats there was quite a good deal of crab-grass coming on in the alfalfa, but the chinch-bugs being so numerous destroyed nearly all the crab-grass before leaving the field. If it had not been for the bugs that season the crab-grass would have nearly taken my young alfalfa.

I mowed it once or twice that season to keep down the weeds, but the alfalfa didn't have a good color. Some places in the field it would be green for a few rods square, then there would be a patch about the same size that looked yellow and the lower leaves would fall off the stem.

The following winter, 1898-99, as you will all remember, was very cold in February, and I think the thawing and freezing of February and March heaved or raised out of the ground part of the plants so that in the spring the crowns seemed to be from 1 to 2 inches above the surface, and those plants mostly all died. But still it seemed to be thick enough except in the part of the field where the ground was of a looser nature, and there it froze out so that there isn't a half stand.

That season, 1899, I cut some hay but I let it get in full bloom before cutting, which I have since learned was wrong. There still was part of the field which had that yellow, sickly color, not as much as the first year, but still there were patches here and there. In the spring of 1900 is came out with a good green color all over the field and I cut 4 crops that season, 3 for hay and 1—the third cutting—for seed. I have been told since, by parties who make a business of threshing alfalfa that the second cutting, nine times out of ten, is the most profitable one to let stand for seed. They claim the crab-grass, which I think is the worst enemy of alfalfa, unless it is the pocket-gopher, will generally be up and have a good start by the time the second crop is off and by the time the third crop is matured for seed you have about as much crab-grass as alfalfa, at least that was my experience. I know I would have had three times as much seed if I had let the second cutting stand for seed that season.

The past season, while I cut the field 5 times, the 4 last cuttings didn't make as much hay altogether as the first cutting, which made about 2 tons to the acre. While my field of alfalfa did not make 4 or 5 heavy cuttings of hay the past season, as some will tell you their's did, yet when the fall rains came it grew up nice and green, and in looking over the field I could find but very few plants that were not alive and growing, which is more than I can say for my clover that was seeded last year. I think nearly half of it is dead.

Our agricultural college sent out bul-

letins recommending disking after each cutting. I disked mine after removing the first cutting this season, but I believe in a dry year like the past season it did about as much harm as good. I used a steel harrow and harrowed the field both ways and I think it killed the crab-grass and left the ground in better condition than the disk did. There is no doubt but that the disk-harrow is all right to use in a wet season.

I seeded a small piece to alfalfa this fall on millet stubble by disking the ground both ways and harrowing, then sowing the seed with the grain-drill, letting the seed fall on top of the ground the same as before. There is a little over an acre in the piece and I put on 23 pounds of seed and got a very good stand. I find alfalfa responds to an application of well-rotted barn-yard manure as quickly as any grass we have. The grass will be a little better and heavier, not only once, but twice, three, or four times in a season when you have given it a good coat of fine manure.

I believe alfalfa makes the best hay to cut it as it begins to blossom. You had better cut it before it shows any bloom, rather than let it get in full bloom, if you expect to feed it to cattle. If for work horses, there is no doubt but that it is better to let it get in full bloom, as it is not so "washy." Let it cure in the windrow or shock, so it can be handled without losing too many of the leaves; for they tell us 100 pounds of alfalfa leaves have as much feeding value as 100 pounds of bran. Experience tells me that alfalfa hay should be put in a barn, as it is something like clover to stack; it does not turn water very well. The first cutting generally goes in the stack about the first of June, therefore it stands in all the rains from then till it is fed—probably six or eight months later—and they are liable to spoil a good portion of it.

I think any one who owns 40 acres or more plow land in Shawnee County and hasn't at least 5 acres of alfalfa is "behind the times," and is doing without one of the best and most profitable feeds. I think there is nothing in the way of hay any better for the milk cow, and the hay that will make a cow give milk will make her calves grow. I fed it to my work horses last spring and they stood the work and kept in good condition. Even if I thought alfalfa wasn't any better hay than clover or some of the other grasses, I would sow some for the simple reason that we get from 2 to 3 more cuttings in the same season.

### How the Best of the Agricultural College Alumni View a Mean Attack.

EDITOR KANSAS FARMER:—The Students' Herald, published by the students of the Kansas State Agricultural College, is supposed to represent in some degree the opinion of the student body, I suppose, and also to a limited extent the views of the alumni. I was greatly surprised and mortified, therefore, as others must have been, to find in the issue of October 31, an insulting personal attack on Mr. F. D. Coburn, a regent of the college. Perhaps we are not so liberal in Vermont as they are in Kansas; but I feel sure that a student editor who would admit such personalities in his paper, directed against one of the highest officers of the college, would be severely disciplined. If I had a vote on his case I would insist on his dismissal from the institution. I have taken some pains to learn whether any attention has been given to the editor of the Students' Herald, but no official notice seems to have been taken of his bad manners.

Inasmuch as the objectionable article was contributed by an alumnus, signing himself "A Graduate of 1901," I took the trouble to write the editor of the Students' Herald to show him that the alumni were not all in sympathy with such outbreaks. This letter I asked him to publish, but he has not seen fit to do so. Perhaps he has not had space. Perhaps the letter went astray and he never received it. Perhaps the Students' Herald prefers to have all contributors support the views of the editor.

As the case now stands it seems to me that two wrongs have been committed, either ignorantly or intentionally. In the first place Mr. Coburn has received a personal and official insult of the meanest sort. In the second place the alumni (and I hope the students) have been misrepresented, for I am sure they are far from indorsing the unpleasant sentiments of the "Graduate of 1901." For your own personal inspection I am enclosing a copy of my letter to the Students' Herald; but if you think that any good would come of it you are at liberty to use any portion of

that letter or of this one to you in your paper. Very truly yours,  
F. A. WAUGH.

F. A. Waugh has for many years been professor of horticulture in the University of Vermont. Following is a copy of his letter to the Students' Herald:

Editor Students' Herald:—You will excuse me, I hope, for doing what little I can to discount the impression given by your contributor on pages 61 and 62 of the Students' Herald of October 31. The attack on Mr. F. D. Coburn is both unwarranted and insulting. I can not understand how a students' paper can allow an officer of the college to be spoken of in this manner. I have known Mr. Coburn for many years as a personal friend and advisor, as well as in his character of a public officer of the highest integrity, and I can not withhold my word of protest when I see him so shamefully attacked.

In taking Mr. Coburn's part against the "Graduate of 1901" (why didn't he sign his name?) I do not wish to argue the questions now pending before the board of regents. That is their business. Besides I have no partiality toward either side. I would defend President Nichols, had I the opportunity and should the case require, just as readily as I speak for Mr. Coburn. I merely wish to call the attention of the nameless "graduate of 1901," and of the few others like him, to one or two matters which should have secured Mr. F. D. Coburn from such an attack.

Mr. Coburn's direct interest in the Kansas State Agricultural College dates back nearly, if not quite, a quarter century, to the time when the anonymous "graduate of 1901" was probably first trying to reach his toes. About twenty years ago Mr. Coburn became a regent in the college and served with distinction. During his term of office he led in various fundamental reforms which put the college for the first time on a reasonable working basis and which made the present grandeur of the institution possible. He has some right, therefore, to propose reforms at this time if he sees fit. A few years later Mr. Coburn certified his profoundest interest in the college by sending his 3 children to be students there. The entire trio graduated just ten years before Mr. Coburn's unknown critic of the class of 1901, and since that time have brought great credit on their alma mater by their good work in various parts of the United States. It seems to me quite likely therefore, that the Coburn family should know as much and care as much about the Kansas State Agricultural College as any unidentified "graduate of 1901."

Aside from all this, Mr. Coburn's long and unwavering patriotism for Kansas, his incalculable public services, and the unblemished reputation he has always borne, should have protected him from the slanderous criticisms of boys just out of school. There appear to be profoundly serious questions at issue in the board of regents of the Kansas State Agricultural College at this time, and these questions deserve to be settled on their merits. Any one who passes over these questions to make a personal attack on Mr. Coburn, President Nichols, or any other man concerned, is guilty not only of slander (in this case exceedingly guilty), but he is offering a direct injury to the institution which these officers are trying sincerely, honestly, and at great sacrifice to themselves, to serve.

F. A. WAUGH, Class of 1891.

### Money Value of One Institute.

EDITOR KANSAS FARMER:—The farmers' institute held at Burrton, Reno County, on December 5 and 6 proved most interesting and instructive to those in attendance. In spite of unfavorable weather about 150 intelligent, prosperous farmers attended all the meetings. They were representative men of that neighborhood and entered heartily into discussions concerning the culture of orchards, care of alfalfa hay, best dairy methods, and other kindred subjects. Nor were they interested alone in material prosperity, but entered heartily into discussions concerning the comforts and happiness of home life on the farm.

Some very fine specimens of farm products were displayed. Alfalfa, with remarkable growth both above and below ground was brought in. Apples, finer than which no State in the Union could produce, were brought in by Mr. Frederick. From a 7-year-old orchard of about 12 acres, 1,600 bushels of fruit were marketed, the windfalls bringing \$1 per bushel—all this in one of Kansas' "off years."

One institute had been held in that portion of Reno County before the one of 1901. The value of the first institute was put into figures by one man when he said that the previous meeting re-

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sulted in 1,000 acres of alfalfa being sown, every acre of which had yielded 10 tons of hay, every ton worth \$10. Nor was this the only good result mentioned by him.

The agricultural college was represented by Professor Dickens and Mrs. Calvin.

The following officers were elected for the ensuing year: President, J. A. Welch; vice president, H. Baughman; secretary, D. T. Davis; assistant secretary, C. F. Howard. X. X.

### Buck Plantain.

EDITOR KANSAS FARMER:—I have mailed you to-day under separate cover a sample of a weed or plant that is quite thick in our clover field. Some here say it is English or buck plantain. Please identify it if you can and let me know through the "old reliable" what it is. J. E. BARNES.

Linn County.

The specimen and the inquiry were referred to Prof. H. F. Roberts of the agricultural college, who replies as follows:

The plant as your correspondent suspects is the English or buck plantain, also known as Rib grass. It is a bad perennial weed, introduced from Europe. As to means of eradication, the only successful method that I can recommend is cutting the root about 2 inches below the crown. It does not propagate by root-stocks, hence there is not the same danger of spreading it by cultivation as in the case of Johnson grass, where the separate pieces of root-stocks furnish new starting points of growth. Cultivation can be relied on as a tolerably effective remedy.

### Exports of Wheat.

The Monthly Summary of Commerce and Finance for October, 1901, recently published by the Treasury Department, shows that exports of wheat from the United States for the ten months ended October 31, 1901, exceeded the exports for the corresponding months in 1900 by 75,201,993 bushels; and exports of wheat flour for the same months in 1901 exceeded those for the corresponding period in 1900 by 552,744 barrels. Flour is usually expressed in bushels of wheat by counting 1 barrel of flour equivalent to 4½ bushels of wheat. Exports of wheat flour, therefore, for the first ten months of 1901, exceeded those of the corresponding period in 1900 by a quantity equivalent to 2,487,348 bushels of wheat; and the total exports of wheat and flour, as wheat, up to November 1, 1901, exceeded like exports for the same period in 1900 by 77,689,341 bushels, an increase of almost 52 per cent.

The total value of wheat and wheat flour exported during the first ten months of 1901 amounted to \$172,309,733, against a total of \$114,022,100 for exports in the corresponding period of 1900. The increase in the total value of exports of these products to November 1, 1901, over those of the same period in 1900 amounts to \$58,287,633, or 51 per cent, corresponding very closely to the increase in exports as measured by quantity and indicating a remarkable

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steadiness in export prices during the two ten-month periods.

The following statement gives the quantities and values of wheat and flour exported during the first ten months of 1901 and 1900:

	1901 (10 months).		1900 (10 months).	
	Quantity.	Valug.	Quantity.	Value.
Wheat, bush. (bbls.)	155,142,574	Dollars. 113,197,125	79,940,581	Dollars. 57,465,111
Flour, (bbls.)	16,014,182	59,112,608	15,461,488	56,566,989

THE INCREASE IS CHIEFLY IN WHEAT.

A fact which for some months has attracted much attention and discussion is that the remarkable increase in the 1901 exports of wheat and wheat flour, taken together, is, upon analysis, found to be almost entirely due to increased exports of wheat; the exports of the manufactured article, flour, show little increasing tendency. In other words, exports of wheat in 1901, as shown in the above statement, have increased, as compared with those of 1900, about 94 per cent in quantity and 97 per cent in total value; exports of wheat flour, on the other hand, have increased only 3 1/2 per cent in quantity and about 4 1/2 per cent in total value.

It should be observed, however, that this is not an altogether abnormal condition in the export trade in these products. In only two previous years within the past decade have exports of wheat from the United States been on an exceptionally large scale as compared respectively with the years immediately preceding; but in both, exports of flour have failed to increase in anything like a corresponding ratio. In 1898, owing to short crops in Europe, exports of wheat increased in quantity over those of 1897 by about 86 per cent, but exports of flour showed an increase of only about 5 per cent. In 1892, likewise, exports of wheat, as compared with those of the preceding year, increased by about 185 per cent, while exports of flour, though showing a more decidedly increasing tendency than in the other years mentioned, increased by only 34 per cent, a gain, however, which has never since been wholly lost.

The United States Bean Crop.

CROP REPORTER.

With reference to weight, the commercial bean crop of the United States is more nearly comparable to that of rice than to any other domestic food crop. It is possible that the rice crop just harvested will prove to be the record crop of this country, and commercial authorities estimate it as high as 300,000,000 pounds. The bean crop is somewhat more important; for, excluding the important producing State of New York, for which no recent statistics are available, the production of beans in the principal producing States in 1895-6, the record year for that crop, was also about 300,000,000 pounds. Moreover, the average annual production of beans—exclusive of New York—for the five calendar years 1895 to 1899 inclusive, has been about 235,000,000 pounds, exceeding the annual average production of rice for the same period by about 85,000,000 pounds. As in the case of rice, also, the production of beans is insufficient for the country's needs. Excepting for a short period in the past decade, imports of beans and peas have exceeded the exports by quantities ranging from 8,000,000 to 80,000,000 pounds annually.

WHERE THE BEANS ARE PRODUCED.

Beans in great variety are produced in a small way in gardens and truck patches, and for consumption in both the green and dried state, in nearly, if not all, the States of the Union; but the common dried beans of commerce, to which the above statistics refer exclusively, are the product, as is the rice crop, of a comparatively small number of States. As is well known, the importance of dried beans as an article of food in this country dates from the Civil War. The adoption of this vegetable by the United States Government as a part of the army ration created for it an extensive demand; and upon the disbandment of the forces, the use of this accustomed article of diet naturally became popularized throughout the country. Production on a large scale, however, became localized in a few States, and at present Michigan, New York, California, and Wisconsin may be regarded, from a commercial point of view, at least, as the only important producing States. Recent statistics of production, however, are also available for the comparatively unimportant producers, Minnesota and Illinois.

The following statement gives the separate annual production of beans in the 4 States, Michigan, California, Minnesota, and Illinois, for the commercial years, 1891 to 1900. The figures for Michigan, Minnesota, and Illinois are estimates by the respective State officials; those for California are commercial figures relating to interstate shipments by land and sea, and hence do not include beans entering into State consumption. No figures of production were published in Farm Statistics of Michigan previous to 1895-6:

Production of beans in Michigan, California, Minnesota, and Illinois.

Year ended August 31.	Michi-gan.	Califor-nia.	Minne-sota.	Illi-nois.
1891	Bus. 431,323	Bus. 34,206	Bus. 19,921	Bus. 22,422
1892	427,725	31,172	15,540	20,621
1893	509,901	28,788	19,355	23,087
1894	600,818	49,325	20,621	23,087
1895	1,219,150	35,300	19,355	23,087
1896	2,109,338	926,795	199,415	23,087
1897	3,049,135	1,199,578	53,122	24,627
1898	1,765,175	963,623	30,583	17,072
1899	1,762,944	717,692	22,765	19,000
1900	1,558,888	691,148	*22,000	19,362

\*Estimated.

With reference to Wisconsin, no statistics are available later than those of the State census of 1895, which gives the yield of beans and peas in that year at 905,214 bushels from an area of 78,036 acres, against 816,039 bushels in 1885 from an area of 47,067 acres. The production of beans in the State of New York, according to the census of 1890, was 1,111,510 bushels.

If the above figures and statements be assumed to suggest, approximately, the commercial bean crop of the United States, it is manifest that the entire output, with the exception of a negligible per cent, is the product of Michigan, New York, California, and Wisconsin. In fact, it is only in these States that beans are cultivated to any considerable extent as a field crop. In Minnesota and in Illinois the cultivation of beans is generally confined to small individual tracts, more in the nature of truck farming than otherwise. In the crop year 1898-9, out of a total area in beans in Minnesota of 1,923 acres, Isante County alone had 687 acres. Only 3 other counties in the State exceeded 100 acres each in this crop.

BEAN PRODUCTION IS DECREASING.

By referring to the preceding tabulated statement it becomes apparent that the production of beans reached its maximum in each of the 4 States given during the period from 1895 to 1897, and that since 1897 production in each State has steadily declined. The increase in production during this period resulted in an excess in 1897, for the first time in the history of this trade, of exports over imports; but the subsequent decrease in production has again turned the tide, and imports for the past two years have been in excess.

EXPORTS AND IMPORTS OF BEANS.

The following statement gives the exports and imports of beans including peas into the United States from 1891 to 1901:

United States exports and imports of beans and peas.

Year ended June 30.	Ex-ports.	Imports.	Excess of ex-ports.	Excess of im-ports.
1891	Bus. 251,063	Bus. 1,656,768	Bus. 1,405,705	Bus. 236,078
1892	637,972	874,050	236,078	1,365,030
1893	389,913	1,754,943	1,365,030	857,133
1894	326,748	1,184,081	857,133	1,293,280
1895	242,680	1,535,960	1,293,280	139,826
1896	473,975	613,801	139,826	417,235
1897	900,219	482,984	417,235	690,274
1898	854,284	163,560	690,274	698,702
1899	883,201	184,499	698,702	319,676
1900	617,355	939,031	319,676	637,135
1901	458,670	1,095,805	637,135	

The decrease in production from 1897 to 1900 in California was due almost entirely to climatic conditions unfavorable to the crop; but in Michigan, Minnesota, and Illinois, the decline was largely the result of a decrease in acreage. It is said that the usual supply of lima beans in California is about 480,000 sacks of 80 pounds each (640,000 bushels of 60 pounds), but owing to the dry conditions prevailing in the bean-producing districts during the three years under consideration, the crop fell to 32,000 sacks in 1898, 100,000 sacks in 1899, and 200,000 sacks in 1900. In Michigan, where, however, the crop is chiefly navy beans, the 1896 area, that is, the area from which was produced the crop for the commercial year ended August 31, 1897, was 203,671 acres, the maximum up to that date. In the following year it declined to 118,228 acres, recovered to 155,627 acres in the succeeding year, and fell again to 138,810

acres for the commercial year 1900. Although no official quantitative estimates of production in Michigan have yet been issued for later years, it is evident from State reports that there has been some increase in the area devoted to this crop. For the commercial year ended August 31, 1901, there was reported an increase of 2 per cent over the area of the previous year, and an average yield of 12 bushels per acre, and for the crop just harvested a further increase in area of 8 per cent and the same average yield per acre as last year. The value of the bean crop of Michigan for the commercial year, 1900, was estimated by the State Secretary of State to be \$2,338,257, a little over 25 per cent of the value of the Michigan wheat crop for the same year.

MARKETS FOR OUR BEANS.

The principal markets for exports of domestic beans and peas from the United States are the Central American States and the West Indies, with Cuba by far the leading purchaser. It is interesting to note that as Porto Rico has recently become the largest single customer for domestic rice exported from the United States taking about one-third of the entire exports, so Cuba within the last decade, has become our principal customer for exports of beans. Of the total quantity of beans and peas exported from the United States in the period from 1892 to 1900, inclusive, Cuba has taken upwards of 31 per cent. In 1895 and 1896, United States exports thither declined respectively to 101,833 and 107,405 bushels. But in 1897 they recovered to 212,381 bushels, increased to 275,233 bushels in 1898, and were 274,730 and 257,713 bushels, respectively, in 1899 and 1900. The Central American States and the West Indies, outside of Cuba, are customers, as a whole, for only a slightly less proportion of our exports than is Cuba alone. The balance is distributed, usually in small consignments, over practically all the countries of the globe.

EXPORTS OF IMPORTED BEANS.

In addition to the domestic exports, considerable quantities of foreign beans are brought into the United States for re-export. The following statement illustrates the extent of this trade for the past five years:

Exports of foreign beans and peas from the United States.

Year ended June 30.	Quantity. Bushels.	Value. Dollars.
1897	53,756	54,898
1898	41,916	40,243
1899	19,013	14,227
1900	104,855	111,351
1901	132,290	160,691

Up to 1896, when there was a great decrease in imports of beans and peas into the United States, the two principal countries from which imports were derived were the Dominion of Canada and Austria-Hungary. From 70 to 80 per cent of the total imports, the major portion usually being drawn from Canada, was derived from these sources. From 1896 to 1899, however, imports of this product from Austria-Hungary practically ceased, but in 1900 they were again resumed and almost one-half (436,209 bushels) of the total imports were derived from that source. Imports from Canada likewise rapidly decreased after 1896, and from a total of 668,768 bushels in that year steadily declined to 71,806 bushels in 1899, increasing to 181,112 bushels in 1900. Another notable feature of the import trade is that Mexico, in which country the annual production of beans is in quantity about treble that of the United States, has of recent years been the source from which a considerable proportion of our imports were drawn, amounting to 77,659 bushels in 1899 and 99,120 bushels in 1900. The other most important sources of supply are France, Germany, and Italy. It is notable, however, that after the short wheat crop in France in 1897 imports from that country practically ceased, but that exports thither increased from 2,305 bushels in 1896 to 80,577 bushels in 1898, and 67,964 bushels in 1899. In 1900 the old conditions of the trade were resumed, and imports from France amounted to only 20,309 bushels, against exports thither of 75,214 bushels.

Johnson Grass.

EDITOR KANSAS FARMER:—I wish to know what kind of pasture Johnson grass makes. I have a field from which pine trees have been cut out and I want to sow some kind of grass that will root well. Our native grass is too much of a surface grass. Any information along this line will be gladly received.

Nash, La. J. N. Hood.

Experience with Johnson grass leads men to diametrically opposite opinions as to its desirability. A correspondent

We Know What

Is going to happen to the little boy who is stuffing himself with green apples. A grown man couldn't be induced to try that experiment; and yet the grown man will overload himself with indigestible food for which he will pay a greater penalty than colic. It is this careless and thoughtless eating which is the beginning of stomach trouble and all its painful consequences.

Dr. Pierce's Golden Medical Discovery cures dyspepsia and other forms of "stomach trouble." It restores the weak and run-down man or woman to sound health.

"Some time has elapsed since I have written you in regard to the treatment I have been taking under your instructions," says Mr. E. F. Cingmars, of Minneapolis, Minn. "When first I commenced taking your remedies I was under treatment of a well-known specialist in this city (and had been for four months), for catarrh, and especially stomach trouble, and I was rapidly getting worse. Got so bad that I could not eat anything that did not distress me terribly, and I was obliged to quit taking the doctor's treatment entirely. I was greatly reduced in flesh. As a last resort I wrote to you and stated my case, and, after receiving your instructions I followed them closely. After taking five bottles of Dr. Pierce's Golden Medical Discovery and one vial of his 'Pleasant Pellets' I commenced to improve, and decided to continue the medicines and observe your instructions regarding hygienic treatment. It is now nearly six months since I commenced your treatment and I can say that I am well and never felt better in my life. Am very grateful to you for what your medicine has done for me."

Dr. Pierce's Pellets cure biliousness and sick headache.



writing to the KANSAS FARMER from Texas last spring said of Johnson grass: "All recommend it to the farmers of Kansas as a fine grass for both pasture and hay. This is all very true, but they didn't say when they wanted to let go they couldn't. \* \* \* It is ten times harder to get rid of than Canada thistle." Further on this correspondent says: "I would suggest to those who want to experiment with it to try a small handful [of the seed] on 160 acres. One small handful will satisfy those who wish to try it." Again he says: "When you want to kill it you just can't. It won't die as long as there is a root in the ground or a joint of the grass tramped in by stock."

Another correspondent wrote a little later, from Olathe, Kansas. He gave the following conversation between himself and a farmer in Talledega, Ala.: "How do you like Johnson grass?" "I prefer it to any other, for I can get more hay to the acre and all my stock are fond of it. When the circles come this way the agents look me up because I can generally furnish Johnson grass for their animals, and all that eat hay at all prefer it." "But suppose you want to get rid of it, is it not difficult to do so?" "Why should I want to get rid of it at all, when it brings me in more money than any other crop I can raise with an equal amount of expense?"

From these quotations our Louisiana correspondent will doubtless be able to determine whether Johnson grass will or will not be desirable on his farm.

Dry Weather Crops.

EDITOR KANSAS FARMER:—Of all things in the fodder line this year, listed amber cane has done the best for me, beating corn and Kaffir-corn and as it is such a sweet morsel I think I shall never fail to raise some of it. My Kaffir did not head out and the sorghum only partially headed, and both were so set back by the dry spell that the first hard frost cured them up nicely before I cut and bound them, so as fodder they are very nice looking and keep nicely.

Of all the crops that went right ahead without regard to the drouth, there was nothing that compared with the Mammoth Evergreen soy-beans, even the small early variety of soy-beans being a complete failure. I had 10 acres of them that grew about 3 feet tall and bore only about a half crop of beans, as a severe hail cut off about one-half the blooms. Yet I think I had 20 bushels per acre. This is only an estimate as I thresh out only a few for my seed, preferring to feed them threshed to the cows, sheep and once a day, in small quantities,

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ance their ration. These beans have a hay value equal to the very best of the clovers while the beans are the greatest of concentrates. An average American analysis shows that bean-meal contains 34 per cent of protein 17 per cent of fat and 33.8 per cent of carbohydrates. The percentage of digestibility is high. In 100 pounds of soy-bean seed there are 10.8 pounds water and 66.8 pounds digestible material, consisting of 29.6 pounds of protein, 16 pounds fat, 2.6 pounds of fiber, 17.6 pounds carbohydrates, and 1 pound of ash, with a nutritive ratio of about 1 to 1.3. They are almost as rich in crude protein as the best cottonseed-meal, with a higher percentage of fat. They contain three times as much crude protein and nearly  $3\frac{1}{2}$  times as much fat as oats; nearly  $3\frac{1}{2}$  times as much protein and about 3 times as much fat as corn and almost twice as much protein, and over 12 times as much fat as peas. All of this shows them to be one of the most concentrated of feeding stuffs.

With such a showing as this, can we ever again talk about feeding the calves and sheep a few sheaf oats, or a little clover hay to balance the ration? Why, these unthreshed beans are the equal of the very best clover well sprinkled over with oil-cake, and we all know how rich and desirable such a feed would be.

The early soy-bean will do well all over this State, but the Evergreen Mammoth will not make much seed north of this (Allen County), line. I have raised both varieties and several of the cow-peas, and I would not give 1 acre of the mammoth soy-bean for 20 acres of the others, for my own use. Still if I could not raise the late mammoth I would plant the early yellow sort. I drilled mine in rows about the same width apart as potatoes are planted and could not bind them with the corn binder as they would foul up and clog the machine, but got a neighbor to cut them with his table revolving rake reaper, cutting 2 rows at a time.

J. CLARENCE NORTON.

Allen County.

#### Broom-corn.

PRESS BULLETIN OKLAHOMA EXPERIMENT STATION.

Broom-corn is a variety of sorghum and has many of the qualities of ordinary sorghum. Like sorghum in being hardy, it is a great drouth-resister and thrives under reasonably unfavorable conditions.

It can be planted at any time from the opening of spring until as late as July 1 with fair assurance of a crop. But as early harvesting and early marketing are especially desirable, it is usually advisable to plant it as early as Indian corn is planted, or from April 1 to 15. If planted by the middle of April it will be ready to harvest by about the first of July. There is usually a lull in farm work about this time that makes it convenient for broom-corn harvest.

There are numerous methods of planting it. It may be planted in rows, checked and drilled. Drilling in rows gives the best results. The rows should be about  $3\frac{1}{2}$  feet apart and the stalks about 6 to 8 inches apart in the rows on ordinary upland and a little thicker on bottom-land. If it is planted too thin on good soil, the heads become so heavy that their own weight bends many of them down, forming the "crooks." This crooked brush is heavy

but because it is more difficult to make into brooms and makes a larger bulk in shipping, it brings only about half-price on the market.

Owing to its being a hardy plant, the cultivation of broom-corn is often sadly neglected. It will make a fair showing on poor land with very little cultivation, it responds to good treatment and should be cultivated as often and as thoroughly as Indian corn. After the first heads appear it is not long before it is ready for harvesting, and everything should be in readiness, because it soon depreciates in value after it is once ripe enough to cut. In order to make the best brush it should be cut when the seeds are in the dough stage. A small patch of seed can be left until fully matured.

The standard varieties are harvested by breaking two rows together in such a manner as to form a table upon which the heads, after being cut off, are laid to cure. It should remain in the field about a day. A light rain or a heavy dew injures the color of the brush. It is well if possible to cure it entirely in a shed. But if put in while green it must be placed in thin layers, which require considerable extra shed room. If left in the field, however, about a day after cutting, until it is nearly cured, it can be piled in good sized layers under cover and seeded when convenient. The seeding is done by holding the brush on a cylinder similar to a threshing machine cylinder. After it has been seeded, it should be bulked down in good sized piles and allowed to dry until the stems break quite readily. Then it is ready to bale. Both the seeder and the baler for a small farmer can be made by any carpenter at a small cost.

The yield varies, of course, with the soil and locality, but a good average yield is a ton of threshed brush from 3 to 5 acres. An experienced hand can cut about 1 acre a day. The threshing and baling costs about \$4 per ton. The price varies so much that the profits for one year can seldom be assumed as a standard. Ordinary brush one year with another averages about \$60 to \$70 per ton.

It is a good crop on the sod. It shades the ground and helps to rot the sod besides making as good a growth as Kafir or sorghum without cultivation.

The seed and the stalks are utilized for feed, but their feeding value is low and it would hardly pay to raise it for feed alone, although in the western part of Oklahoma dwarf broom-corn is sown for roughness instead of sorghum because it does not sour in the stack so badly. After the brush is harvested the stalks can be used for forage and then plowed under making an excellent green manure.

There are many varieties of broom-corn, but "Mammoth Dwarf," and of the standard varieties, "Improved Evergreen," and "California Golden," have proven to be the most satisfactory in Oklahoma. Seed can be secured from local raisers or from Western seedsmen.

Broom-corn is a "cash crop" and like other cash crops has its favorable and unfavorable features. Its cultivation on a very large scale is seldom successful, but if properly handled on a small scale, say from 15 to 25 acres for the average farmer and especially on new land where the variety of sure crops is limited, it will prove to be as paying as almost any crop that can be raised. Oklahoma has early seasons and can market the brush early in the season, when the highest price is usually paid, and for that and other reasons should easily become a great source of the Nation's supply of broom-corn.

#### Sensible Alfalfa Talk.

In a letter to S. M. Crow, of Shawnee County, some sensible suggestions are made by J. E. Good, of McPherson County. Through the courtesy of Mr. Crow the KANSAS FARMER is permitted to give its readers the benefit of the following copious excerpts from Mr. Good's letter:

You ask for some information regarding quantity of alfalfa seed to sow per acre, and time and mode of sowing same, which I will cheerfully give according to my observation and experience.

#### QUANTITY OF SEED.

I sowed 32 acres this fall on which I used about  $14\frac{1}{2}$  bushels, making about 27 pounds to an acre, on an average. I think 25 pounds to an acre should be plenty, and where ground is in good shape, and seed good 20 pounds may be sufficient, but for me, I would rather put a little more on than necessary, than not enough, and on that account get a poor stand. At any rate, what does 50 cents an acre extra, expended on first cost of seed, amount to com-



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pared with doing the work all over again, losing the use of ground for the season, and furnishing the seed to re-sow, in case of not getting a stand? Of course a person may also fall to get a good stand by sowing a half bushel, if circumstances or the season is against him, but still not so apt to as if only half as much is used. One the other hand, I don't think there is much danger of getting it too thick. With a heavy stand, the grass would naturally not grow quite so tall, but would yield as well, and would make finer and better hay.

#### TIME OF SOWING.

I would sow in the spring as early as possible but late enough not to have young plants cut by frosts. In the fall I would sow as soon after the middle of August as there is moisture enough in the ground to sprout it and keep it growing, but not later than the 10th or 15th of September. As I understand by your letter, you have your ground already plowed, and in fairly good shape to make a good seed bed, plenty of fine dirt, and so that by spring it will be well settled. All I think necessary, in that case, is to keep the weeds down in spring by harrowing until seeding time—an extra harrowing will do it no harm and may help it.

#### METHOD OF SEEDING.

I used a "fiddle-bow seeder" to broadcast mine, and then harrowed it in. I aimed to sow only about 15 feet, each time across the field, and let the casts of the seeder lap, whatever they were wider than that. I used stakes to walk by. In that way I was quite certain to get seed all over the ground. I have never had any experience at drilling in alfalfa, but understand that a person must be very careful not to cover too deep.

#### THE WHOLE STORY.

If I were to sow some alfalfa I would go at it about as follows: Plow the ground well in the spring, sow to millet so it would be ready to cut for hay immediately after harvest. After hay is taken off, run over once or oftener with a disk, to loosen dirt on top so as to make a good seed bed. (I prefer to disk half lap, thus keeping ground level.) Follow with a harrow, several times if necessary to put it in good shape. As soon after August 15 as there is moisture enough in ground to sprout seed and keep growing, broadcast seed and harrow.

Another good way, I think, would be to fall plow well, and sow to wheat, and after the wheat is harvested, burn the

stubble, and treat the same as after the millet crop.

#### PREFERS FALL SOWING.

I believe an important point is to have the ground well settled (not hard) so that it will retain moisture. I also like fall sowing, because you don't lose the use of the ground for a season, and more yet, you don't need to mow weeds several times so as to give the alfalfa the best chance, besides the hot summers often kill the young alfalfa before it has grown strong enough to resist the drouth. I have been told, though, that the spring frosts are very severe on fall sown alfalfa. I expect to know after a while how mine has stood the winter. This was my first experience at fall sowing.

#### Deafness Can Not Be Cured

by local applications, as they can not reach the diseased portion of the ear. There is only one way to cure Deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube gets inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed Deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

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## The Stock Interest.

### THOROUGHbred STOCK SALES.

Dates claimed only for sales which are advertised here to be advertised in this paper.

- January 7, 1902—Tom Clark, Chicago, Herefords.
- January 14, 15, and 16, 1902—Cornish & Patton and others, Kansas City, Herefords. C. R. Thomas, Manager.
- January 22, 1902—E. E. Axline, Oak Grove, Mo., Poland-Chinas.
- January 28 and 29, 1902—Winn & Mastin, Kansas City, Poland-Chinas.
- January 28 to 31, 1902—Sotham's Annual Criterion Sale at Kansas City.
- February 11 and 12, 1902—C. A. Stannard, Scott & March, and Gudgeon & Simpson, Fort Worth, Texas, Herefords.
- February 11, 12, and 13, 1902—J. F. Stodder, J. W. & J. C. Robison, and Snyder Bros., Wichita, Kans., Combination Sale.
- February 18, 1902—J. F. True & Son, Shorthorn cattle, Wichita, Kans.
- February 19 and 20, 1902—Breeders' Combination Sale, South Omaha, Herefords. C. R. Thomas, Manager.
- February 25-28, 1902—C. A. Stannard, Gudgeon & Simpson, Scott & March, and others, Kansas City, Herefords.
- February 28 and March 1, 1902—Dispersion of Waver-tree herd of Galloways, South Omaha, Neb.
- March 19, 1902—Dispersion Shorthorn Sale. Col. W. R. Nelson, Kansas City.
- March 20, 1902—B. B. & H. T. Groom, Kansas City, Shorthorns.
- March 25-27, 1902—National Hereford Exchange, Chicago, Ill. (Sotham Management.)
- April 16, 1902—W. O. Park, Atchison, Kans., Aberdeen-Angus.
- April 23-24, 1902—National Hereford Exchange, Kansas City, Mo. (Sotham Management.)
- April 25 and 26, 1902—H. O. Tudor, Holton, Kans., Shorthorns.
- May 7 and 8, 1902—Collin Cameron, Kansas City, Arizona Herefords.
- May 27-29, 1902—National Hereford Exchange, Omaha, Neb. (Sotham Management.)
- June 24-26, 1902—National Hereford Exchange, Chicago, Ill. (Sotham Management.)

### Profitable Age for the Hog.

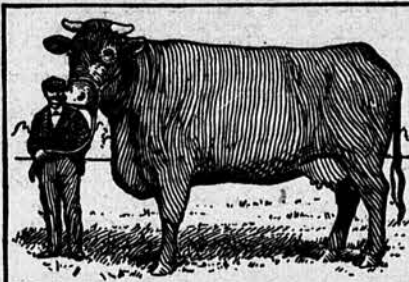
It is now pretty generally understood that sheep and cattle make gains at the least cost near the birth period, and also the most rapidly, says the Farmer, of St. Paul, Minn. This is owing to the greater activity of the secretions when animals are young. But this explanation does not so well apply to the case of swine. After several years of experimenting at the Minnesota Experiment Station, it has been ascertained that pigs do not gain nearly so rapidly when they are young as when of more mature age. When they are on the sow it was difficult to make them gain a pound a day. After weaning for two or three months they seldom made more than 1½ pounds per day, but after say five or six months for the next two or three months they gained well on 2 pounds per day. Thus it has been shown in several instances, that between the ages of 5 and 8 months pigs have made the most rapid increase in weight. The experiments referred to were not made with a view to test this question, but these results came out incidentally in a large number of tests. As a result of the casual manner in which these conclusions were reached, the relative cost of the gains can not be given, but it is probable those made near the birth period were the least costly, owing to the small amount relatively of the food consumed. This is a great question. It ought to be further investigated. The experience referred to calls up the thought that it may be possible to market pork too young to bring the grower the greatest profit, even when swine are sold as young as 6 or 7 months, the popular age at which to sell. These results in swine growing, so different from those obtained in growing cattle and sheep, are well worth the closest study.

### The Oldest of Breeds.

Mr. T. F. B. Sotham, of the Weaver-grace Breeding Establishment, Chillicothe, Mo., who is the owner of the manuscript and copyright of the late T. L. Miller's "History on Hereford Cattle," writes us as follows:

"I am to-day in receipt of a manuscript from my agent in England, Mr. W. H. Bustin, the celebrated animal and portrait photographer, of the city of Hereford, prepared by him from the ancient parochial records of the county, giving in correct chronology the history of Hereford cattle as far back as 1720. Mr. Bustin, from a long and tedious search from the Church records—the most important records of English history—has been able to clear up definitely several obscure points in the history of the Tompkins family, the early improvers of Herefords. That the information is indisputable can not, from the facts presented and vouched for by the aforesaid Church records, be denied. The manuscript in question contains proof positive that the Tompkins, as early improvers of Hereford cattle, preceded Bakewell in their improvement of domestic animals, and were not followers of Bakewell as has heretofore been erroneously asserted by Low and other celebrated writers. Mr. Bustin has proven beyond the question of doubt that the Hereford breed of cattle is the oldest improved breed in

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England. Such a fact has been confidently asserted before by myself and this confidence was based upon facts gathered from the dimly lighted past. But Mr. Bustin's facts are based upon indisputable proofs and records.

"Mr. Bustin has been charged with the duty of collecting photographs of old Hereford paintings, homesteads, portraits, etc., having an order to execute 150 different subjects as special and appropriate illustrations for the Miller History, and I also gave him unlimited authority to add to this catalogue of 150 subjects made by myself, any other appropriate illustrations that he might run across in his travels and searches. That Mr. Bustin has done his work well is amply attested by the consignments of photographs, engravings, etc., which are now constantly arriving at Chillicothe. I have announced before that the Miller History of Hereford Cattle will be the most valuable work on live stock ever published in the world. I am able to add to this that the work will be absolutely unique in its character, and without a rival or parallel. I would say to your readers—many of whom have sent me \$5 in advance for copy of the Miller book, that the delay in publishing same has been caused by the delay in getting these illustrations, the securing of which has made it necessary to travel throughout the length and breadth of England. Little patience on the part of my patrons will be richly rewarded, for I have hopes to present to them at an early date the best printed, the best illustrated, the most complete history of Hereford cattle ever published, and a work that will be equally important to the breeders of other breeds and essentially valuable to every lover of pure-bred stock."

### Cattle Business Changing.

There is a diversity of opinion among Western cattlemen as to the status of the cattle business some five years hence, says the Drover's Telegram, in a hopeful editorial. The standard of the business is being raised so rapidly that the time will soon pass when even the large ranchman can handle scrub cattle with a profit. That there is a shortage in range cattle will not be denied. Some attribute the shortage to the contraction of Western grazing lands, and some say that it is caused by the demand increasing more rapidly than the supply, while other authorities say that large ranch owners, who for years had range cattle on their land with no attempt to limit the number of head ranged, thereby seriously damaging the range, had fenced in large areas of land, sold their cattle and retired from active business for the time being, in order that the land might recuperate.

Colorado cattlemen talk irrigation and claim that the growth of the idea will cause the irrigated sections to settle more rapidly and the rangemen will become stock farmers like their brethren in the northern and eastern states, who have found it more profitable to raise a 2-year-old steer to weigh 1,200 pounds than holding it until 4 years old and getting no better weight. The Dakota and Montana rangemen declare that the days of free range are numbered, and predict that the cattle business is doomed. Texas is satisfied with her land-lease law, and every stockman appreciates the benefits of controlling his range by a nominal rental.

The changing conditions do not portend disaster, says the Telegram, on the contrary, they augur well for the future of the industry. The business of ranching on a large scale has become a habit with some who are loath to give it up. On the range 15 to 20 acres will produce one steer; in Illinois 2 acres are required, and the steer is

worth several dollars more than the Western. We should prefer to see a ranchman produce 1,000 steers, worth 6 cents per pound, on 2,000 acres, than the same number, worth 4 to 5 cents, on 20,000 acres. This can be done when certain things have been accomplished, is the optimistic opinion of the Telegram. When the semi-arid sections are under irrigation, when the large operator learns farming, then he can accomplish as much and raise better beef on one-tenth the area he now claims.

The contraction of the ranges does not mean a continued shortage, but should result in an increased supply. The lands that now produce nothing but grass may be made to yield corn, milo-maize, Kafir-corn, sorghum, alfalfa, and other feed stuffs of greater value than the wild grasses of the prairie. The range land is virgin soil and should produce marvelous yields of the staple forage crops. [If they could be irrigated. But 10 per cent is a big estimate of the proportion of the range land that can ever be irrigated.] No, this much-mooted question of "range contraction" will not damage the business. It means that the cattlemen who have become the victims of the habit must become intensive beef growers instead of extensive cattle raisers.

### Sore Mouth of Cattle.

DR. N. S. MAYO, VETERINARIAN, KANSAS EXPERIMENT STATION.

During the dry weather of the past summer, and in the early fall, a disease new to most cattlemen made its appearance in different parts of the State, but with the coming of the cool, moist weather of autumn generally disappeared. The disease was a sore mouth of cattle, and was popularly called "black tongue." The disease attacks cattle of all ages, cows as well as young cattle, and appears to be contagious, although it does not spread rapidly, and in some instances only one or two cases would occur among a large number of cattle. In other instances a dozen young cattle running together would all be attacked by the disease. The first symptom usually noticed was inability or disinclination to eat. There is also a profuse discharge of saliva that drips from the mouth, often frothy, due to the working of the jaws and tongue. Raw, depressed sores appear on the inside of the lips and cheeks, as well as on the tongue, gums, and pad of the upper jaw. In most cases the tissue seemed to slough out and the sores were covered in the center by black-colored, dead tissue, hence the popular term "black tongue." The edges of the sores were raw and inflamed, and often contained a little pus or matter. In some cases the sores were so extensive that the teeth are reported to have dropped out, and in other cases the tongue was swollen so severely that it protruded from the mouth. Associated with the soreness of the mouth there was an inflammation of the front feet. The feet were hot to the touch and tender to walk upon, and the animals appeared so stiff in the fore legs they could move with difficulty. There is a fever associated with the disease, the temperature rising, in most cases, to 105° F. In the cow the milk flow is lessened, and all animals fall away rapidly in flesh, because of the inability to eat.

TREATMENT.—Sick animals should be isolated from the well and fed on soft, nutritious foods, such as mash, gruel, etc. If left in pastures they may starve because of the inability to eat. The mouth should be swabbed out two or three times daily with a saturated (all water will dissolve) solution of borax, applied with a sponge or soft cloth. A solution of a tablespoon of alum dis-

solved in a pint of water is also excellent.

Practically all cases make a good recovery if they are cared for and carefully fed. The greatest loss is due to the falling away in flesh. Milk from cows affected should not be used for food or fed to calves.

At the present time, December 1, the disease seems to have disappeared, and it is hoped may not reappear. The disease is not serious and is not the contagious "foot and mouth disease" of Europe.

### Cattle Distemper.

Within the past two years occasional reports have come to this department from different parts of the State of what appears to be a contagious disease of cattle that in some respects resembles "lump jaw." During the past few months these reports have been more frequent. Investigation shows the disease to be entirely different from true "lump jaw." The most important differences to be noticed by an ordinary observer are as follows: In cattle distemper the swelling comes on suddenly and always in the region of the throat and appears to be more contagious than true "lump jaw." True "lump jaw" comes on slowly and usually attacks the region of the face or jaws, and the lump or tumor appears to have grown fast to the bone in most cases. Cattle distemper attacks young animals most frequently, but may attack cattle of any age. The first symptom of cattle distemper usually noticed is a swelling of the throat, especially the glands in this region. This swelling appears quite suddenly, often within twenty-four hours, and is usually severe. This is preceded by a slight discharge from the eyes and nose and is associated with a slight fever, the temperature of the animal rising two or three degrees. As the disease progresses the swellings increase in size and an abscess containing a rather thick, yellow pus or "matter" forms. Sometimes two or three of these abscesses will form about the throat, on the side of the head or along the jaw. These swellings do not affect the bone but occur in the loose tissue and glands. If left alone the abscesses break and discharge pus, but do not heal readily, often remaining open and running for some time.

### TREATMENT.

The disease appears to be contagious, but so far experiments do not show in what way. It is not highly contagious. Affected animals should be isolated from the healthy and not allowed to eat or drink from a common receptacle. In the early stages if the swelling is thoroughly rubbed twice daily with a stimulating liniment it will usually "scatter" the swelling so no abscess will form. A liniment composed of equal parts of turpentine and kerosene is good. If 2 ounces of gum camphor is dissolved in ½ pint of turpentine and an equal amount of kerosene added the liniment is improved. This should be rubbed on twice daily until the skin begins to get sore. After pus has formed the abscess should be opened freely, washed out with warm water and a strong solution of blue vitriol (sulphate of copper), a tablespoon dissolved in ½ pint of water. This can be injected once daily for two or three days. Pure tincture of iodine is also good. In some cases putting a small lump of blue vitriol in the cavity works well. If the abscess is not opened

**DIP MOORE'S HOG REMEDY**  
and cure Mange and Canker, kill Lice and Fever Germs, remove Worms and PREVENT CHOLERA, at a cost of  
**FEED Five Cents Per Hog Per Year.**  
A postal gets particulars and book on "CARE OF HOGS." Address  
**MOORE CHEMICAL CO.,**  
1503 Genesee Street, - - Kansas City, Mo.

early there is a tendency for other abscesses to form.

Nearly all cases recover in a few weeks. Where they do not heal, the cavity can be swabbed out with "butter of antimony" once, and then the blue vitriol solution used.

N. S. MAYO, Veterinarian.  
Kansas Experiment Station.

Live Stock Men and the Press.

JOHN W. SPRINGER.

I can not too strongly impress upon every stockman of this Union the necessity for a liberal use of printer's ink; it has made and unmade millions of men. If you expect to take front rank as a breeder of live stock the world must know it, and they will learn it through the show ring and advertisements in the thousands of papers and magazines which encircle the globe. That little, parsimonious, grumbling soul, who is never known beyond his own front gate, or possibly his township, is deserving of little sympathy; he is outclassed, he lives in the wrong age, he is in the same boat with the political leaders who continually harp against everything and everybody. The public usually takes all such at their true worth and declines to notice them with commercial transactions or political offices. Cheap men and cheap ideas are too attenuated and circumscribed to even create a ripple upon the business circles of commercial activity. The marked man of our day is a liberal, progressive, wide-awake specimen of American manhood who lets the world know about it, and the world, in turn, pushes him a little higher up in the scale of higher accomplishments.

Gossip About Stock.

A. G. Dorr, of Osage City, Kansas, a breeder of Duroc-Jersey swine, reports his herd as being in the best of health. He now has the best lot of pigs he ever owned. He has 50 head of last spring and fall farrowing, for sale.

The 23 head of Percheron horses being fitted by J. W. & J. C. Robison for the combination sale at Wichita, February 11-13, 1902, are doing finely. The offering composes 8 registered stallions and 15 mares, nearly all blacks.

C. B. Bellows, of Maryville, Mo., held a sale of Shorthorn cattle at South Omaha on the 18th inst., and received \$12,785 for 55 head, an average of \$232.45. Thirty cows averaged \$245.17 and 25 bulls averaged \$217.20. Nebraska and Iowa bought the bulk of the offering. The only buyer from Kansas was J. R. Hale, of Severance, who secured a desirable bull.

Volume 49 of the American Shorthorn Herd Book has been received, which contains pedigrees of bulls from 1837 to 18875 inclusive, and also the pedigrees of 7,638 cows. This makes 4 complete volumes containing more than 6,000 pages that have been sent out within the current year. The volume is ready for distribution, the price to non-members being \$5, or \$3.85 charges prepaid. Address John W. Groves, Secretary.

Rome Park Stock Farm herd of Poland-China and Berkshire hogs, owned by T. A. Hubbard, Rome, Kans., has been headquarters for discriminating buyers for nearly a quarter of a century. At present he has a grand lot of good pigs for sale, and would like to hear from any reader of the Kansas Farmer in the market for pigs. Mr. Hubbard's reputation for square dealing is an accepted fact in Kansas.

The Oklahoma Swine Breeders Association held a meeting at Enid recently and the following officers were elected for the ensuing year: President, C. S. Williams, North Enid; vice presidents, A. J. Basel and F. D. Northrup, of Stillwater; R. C. Cook, of Karoma, and W. T. Barnum, of Council Grove; secretary and treasurer, G. G. Baker, Oklahoma City; executive committee, M. A. Watkins, North Enid; John Fields, Stillwater, and A. J. Henthorn, Oklahoma City.

At a meeting of the executive committee of the Oklahoma Live Stock Association held in Wichita it was decided to offer premiums for the best cars of branded cattle exhibited at the meeting of the association in February. There will be first, second, and third prizes consisting of \$100, \$50, and \$25. The committee also had a proposition from the "101 Ranch" for an annual entertainment during the meeting, consisting of a sham battle in which none but Indians are to participate, and some other features. A. B. Moore was appointed chairman of the committee on the riding and roping contests.

One of the most notable private sales of Hereford cattle of the year just closed was a recent transaction at Sunny Slope farm, owned by C. A. Stannard, of Emporia, Kans. Mr. Stannard sold to McNamara & Marlow, of Big Sandy, Mont., 10 very fine bulls, of which he says: "They are the best 10 head of bulls I have ever sold to any one man or firm; 2 are by Wild Tom, 5 by Keep On, 1 by Beau Dux, 1 by March On, and 1 by Java. Any one of these 10 bulls is good enough to do service in any pure-bred herd in the country, in fact many of the smaller breeders will not buy as good bulls as they are, but this is only another illustration of why our better feeders are going to the range country to buy their steers."

Henry Ackley, of Wellsville, Kans., consigns 5 yearling bulls to the Hereford combination sale at Kansas City, January 14, 15, 16, 1902. Mr. Ackley is one of the smaller breeders participating therein, but the bulls listed convince one that quality is not lacking. Three of them are sired by Shadeland Dean #2d by Shadeland Dean by Earl of Shadeland #2d. One is by Hesiod 16th and the other by Calvin 2d by Calvin by Hesiod 2d. Two of the dams of these calves are from the old Scott & Whitman herd, and Gudgeall & Simpson, Jas. A. Funkhouser and C. B. Smith each bred one of the three other dams. Mr. Ackley's offering deserves attention both on account of the breeding and the individual quality of the animals offered.

Henry Avery & Son, of Wakefield, Kans., report the sale of the stallion colt, Prosper 22950,

to Messrs. Brown & Cattell, who were representatives of a horse company, formed at Yorktown, Lincoln County, Kansas. The parties who made up this company had evidently "caught on" to the "horse company business," for although different salesmen and speculators professed their services to assist in the organization of the company and the selling of a stallion at prices ranging from \$1,600 to \$2,600, the men composing the company concluded they could struggle along without the assistance of this variety of "skilled labor" and so organized themselves into a joint stock company for the purpose of purchasing a pure-bred Percheron stallion. They let the "salesmen" and the "speculator" out of the proposition and began corresponding with the different breeders, appointed a purchasing committee as above named, who armed themselves with No. 1 credit letter from their local bank and started out to visit the different breeding establishments. They did not find anything to stop them until Messrs. Avery & Son led out the 2-year-old stallion, Prosper 22950, a Kansas-bred colt fed Kansas grain, hay, and sunshine, and who "tipped the beam" to the tune of 1,700 pounds. He sold for \$1,200, spot cash, and after very little conversation. This is a short story, but parties contemplating the purchase of a stallion on the "company" plan can profit by this example and save themselves a long expense.

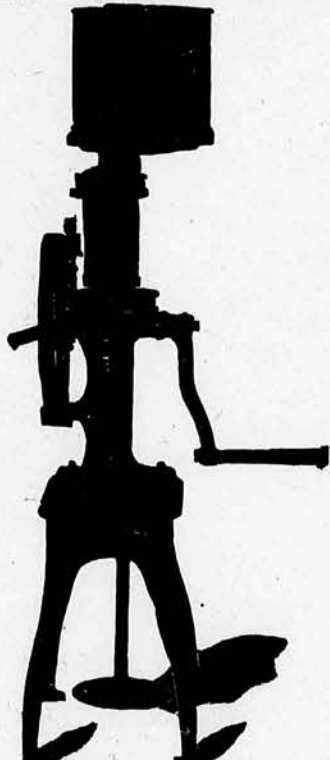
Combination sales seem to be the order of the day, but it would be hard, indeed, to get together a better lot of cattle, consigned by a more representative group of breeders, than that included in the announcement of Messrs. Cornish & Patten, Benton Gabbert & Son, and 22 other Hereford breeders who will sell 200 head of registered Herefords at Kansas City, January 14, 15, and 16, 1902. The breeders in this sale undoubtedly own the best breeding herds in the Central States and will probably number jointly about 3,500 head. With an annual increase of something like 1,400 head none can doubt their ability to sell 200 head at this time that will be of a better average quality than would be possible with a fewer number of cattle to draw from. In the show rings of the past year the herds represented in this sale won the bulk of the premiums in almost every competition. They have quality of a very high order in their herds and the breeders individually pledge themselves to consign some of their best young stuff to this great sale. Quantity and quality will be offered the bidders, and these two prime essentials of a successful sale should interest every possible purchaser of Hereford cattle. Bargains are always numerous when a large number of cattle are to be sold and this occasion will be no exception. A list of the contributors follows, with the number of cattle each will sell: Henry Ackley, Wellsville, Kans., 3; Est. of K. B. Armour, Kansas City, Mo., 8; Cornish & Patten, Osborn, Mo., 15; E. A. Eagle & Son, Rosemont, Kans., 10; Funkhouser & Ackley, Wellsville, Kans., 3; Funkhouser & Larson, Everest, Kans., 2; Benton Gabbert & Son, Dearborn, Mo., 25; Jas. A. Gibson, Odessa, Mo., 6; Gudgeall & Simpson, Independence, Mo., 10; O. Harris, Harris, Mo., 9; Jones Bros., Comiskey, Kans., 8; J. S. Lancaster & Sons, Chandler, Mo., 10; J. A. Larson, Everest, Kans., 1; L. P. Larson, Everest, Kans., 1; Lowell, Barroll & De Wit, Denver, Col., 20; C. N. Moore, Lees Summit, Mo., 8; T. C. Sawyer, Lexington, Mo., 4; Scott & March, Belton, Mo., 10; C. A. Stannard, Emporia, Kans., 6; Steele Bros., Belvoir, Kans., 12; Steward & Hutcheon, Greenwood, Mo., 6; R. T. Thornton, Kansas City, Mo., 2; N. H. Woolston, Sugar Lake, Mo., 1. A catalogue can be obtained by writing C. R. Thomas, Secretary, 225 West 12th Street, Kansas City, Mo.

Messrs. Benton Gabbert & Son, of Dearborn, Mo., have the largest consignment in the combination sale of Herefords to be held at Kansas City, January 14, 15, 16, 1902. They have the following to say concerning their offering: "Our consignment of 25 head includes 15 heifers and 10 bulls. The heifers are all right at 2 years old and over, and all safe in calf to such bulls as Columbus 61875, Columbus 29th 104516, Columbus 33d 112109, and Weston Stamp 15th 108353. Eight of these heifers are by Columbus and are the choice of his get. They are large, growthy heifers of the most desirable type and breeding, being from Hesiod 17th dams principally. Some of them will make show winners and be the mothers of show calves. All Columbus cows are safe in calf to Weston Stamp 15th, who will also be included in this sale and who has proven himself a most excellent cross on Columbus heifers. There are 7 Hesiod 17th heifers, all safe in calf to Columbus, Columbus 29th, or Columbus 33d. There is one of these heifers—Violet—that deserves especial mention as we think she is as good an individual as we have ever bred, and is a show cow from top to bottom. All 15 of these heifers are as nice a bunch of yearlings as were ever put before the public, there being not one cull in the lot, but the pick of the whole herd. There is one full sister to the \$5,050 Columbus 17th and that is Lady Columbus 18th. She is a worthy sister to her illustrious brother. The 10 bulls we offer range in age from 14 to 27 months. Six of these are sired by Columbus, who we believe to be the sire of more good bulls and higher priced cattle than any other bull in America. His get has averaged at both public and private sales, over \$500, including all that have been sold from this farm. Three are sired by Hesiod 17th, who is the sire of all our best cows. One, Weston Stamp 15th, for whom we paid \$1,030 at the as-

sociation combination sale in Kansas City last year, was a winner of three ribbons at same place, is sired by Cornish & Patten's imported bull, Weston Stamp. This bull is smooth as an egg and has as fine and curly a coat of hair as any bull ever possessed. He is a bull full of masculine character and proves it in his calves, which are all smooth, short-legged and heavy coated. He won second prize as best of 2 bulls 6 months old and under 12, and fourth prize as best bull under 12 months at the National Hereford show at Kansas City in 1900, the last mentioned ring being an especially strong one. We have bred about 40 cows to him and all are safe in calf from first service except in three or four instances."

They Want Your Cream.

By a fortunate combination of capital, skill, and enterprise the owner of a good cow may serenely contemplate the future confident that the cow assures him future competence and contentment. The farmers of the great Missouri Valley are exceedingly fortunate in having an opportunity to do business with the Blue Valley Creamery Co., of St. Joseph, Mo., whose regular announcement appears for the first time in the dairy department of the paper this week. There is unlimited Iowa, Missouri, Nebraska, and Kansas capital behind this practical enterprise, and the management is reliable and experienced.



The Blue Valley Creamery Co., the pioneer of the "farm separator system," has the exclusive sale of the "Iowa" Dairy Separator, illustrated herewith, which it recommends its patrons to use. Every owner of a few cows should not delay in writing this firm for full particulars about its new system, which experience has demonstrated to be the most popular and practical ever before adopted.

Publisher's Paragraphs.

The attention of our readers is called to the new advertisement of "Alfalfa Seed Our Specialty" by that old established and reliable firm, McBeth & Kinnison, of Garden City, Kans. The alfalfa seed which this firm offers for sale comes from the best seed-producing localities where seed is pure and fresh. There is every prospect of a large acreage to be sown this coming spring in central and eastern Kansas, and intending purchasers will find it to their interests to confer with McBeth & Kinnison and say that the Kansas Farmer advised it.

A Recognized Authority.—When Noah Webster set about compiling an American Dictionary of the English language, he did better even than he expected. He did a great deal to make possible the present purity and high standard of language used in the United States. From time to time his original work has been revised and enlarged by hands even more competent than his own, till to-day in the form of Webster's International, to which has been added 25,000 new words, bringing it thoroughly up to date, it easily stands at the head of recognized lexicons as is attested by testimonials which we have seen from eminent scholars, statesmen, diplomats, judges and authors throughout the world. In purchasing this up-to-date volume for the home, school, or office, you may be sure you are getting not only the latest but the best.

With the initial appearance of the J. R. Ratekin & Son seed-corn advertisement, to be seen in the Kansas Farmer this week, a clear and concise statement of their case may be in order. It may be taken as an accepted fact that Ratekin & Son's Nishua Valley Seed House, at Shenandoah, Iowa, is a fixture of the corn belt order of things. A seed house, whose orders for bags from a single bag factory have aggregated the grand total of 34,500 for the past eleven months, must necessarily have a business as widely distributed as the corn belt boundaries will permit, and it must be founded upon a popular need felt everywhere—East, West, North and South. The senior member of the firm is a dyed-in-the-wool corn specialist, whose years of practical experience as a corn grower well adapt him to the task he has set for himself of disseminating good seed broadcast over the entire country. Mr. Ratekin has prepared some very interesting and instructive printed matter which will be sent to all who ask for it. Ask for the "Book on Corn Growing." This book is supplemented by price list and other data important to all. Remember that the book is free, but sent 4 cents in stamps for postage on same. The Ratekin leader this year may be said to be the old standard white variety—Iowa Silver Mine. A close second in popular favor is the fine white variety, Imperial, with red cob. These two varieties are in stock in large quantity. They are to be exploited as par excellence, heavy yielders in times of drouth, and as peculiarly adapted to the soils and climatic conditions of the southern half of the corn belt. For such off-crop years as 1901 these varieties are the best and surest producers ever propagated by the Ratekins. Pride of Nishua is the leading yellow variety here, and it is held to be the most satisfactory yielder, one year with another,

of all varieties ever subjected to a long continued test by these critical corn growers. The writer has a close acquaintance with the Ratekin manner of doing business, and when we read the hundreds of letters, highly commendatory of the man and the good seed he is sending out, coming as they do from all quarters of the corn growing world, we deem it a pleasant duty to help bring his business to the attention of corn growers everywhere. See the advertisement, and note closely, also, the fine photograph in this connection, showing a pile of the Iowa Silver Mine as it appears after being sorted and "nubbed," and thus made ready for the sheller. It is a picture true to life, and some of this good seed should go into every neighborhood in the land. Write for "Book on Corn Growing," and mention Kansas Farmer.

KANSAS STATE POULTRY SHOW.

The officers of the Kansas State Poultry Association are making great preparations for their thirteenth annual exhibition to be held in the Auditorium, Topeka, January 6-11. Last year there was a large increase in entries over the previous year and a corresponding growth is anticipated this time. Topeka is naturally a good show town and breeders like to send their birds to a show held here. The officers of the show this year have had large experience and know how to handle a large show. Each exhibit is given their careful attention and birds are cared for the same as if they were their own.

The premium list is ready and every poultry breeder is urged to send for one at once, if not already supplied. The premiums this year are exceedingly liberal and will bring out a large exhibit. All premiums are paid promptly at close of show, and as the association has plenty of money in the treasury, the officers are in position to guarantee payment of every dollar.

There is nothing that will advertise fine poultry so well as exhibiting it at a good show and we urge all breeders to make an effort to send their birds and attend in person if possible. The show is held the same week when the State Board of Agriculture, the Improved Live Stock Breeders Association, and other meetings will be in session. Any further information will be cheerfully furnished by the secretary, Geo. H. Gillies, Topeka. Be sure and send for a premium list if interested.

Keep the bowels active if you would preserve your health. A dose of Prickly Ash Bitters now and then does this to perfection.

At the Kansas City Market.

There is probably no live stock commission firm that does business at the Kansas City Stock Yards that can give you better service in the way of selling or purchasing stock than the Union Live Stock Commission Company. This company has a corps of competent men in all of the departments of the live stock trade. It furnishes this paper and market reports free upon application.

Directors: M. S. Peters, Jerry Simpson, F. E. Rowles, W. K. Greene, Henry O'Neill, Geo. W. Williams, L. C. Boyle.

Coming Events.

State Improved Stock Breeders Association, twelfth annual meeting, Topeka, January 6-8, 1902; H. A. Heath, secretary, Topeka.  
State Poultry Association Show, Topeka, January 6-11, 1902; George H. Gillies, secretary, 603 Kansas Avenue, Topeka.  
Kansas State Board of Agriculture, thirty-first annual meeting, Topeka, January 8-10, 1902; F. D. Coburn, secretary, Topeka.  
Kansas State Dairy Association, annual meeting, at Manhattan, March 4-7, 1902; T. A. Borman, secretary, Topeka.  
The 14th annual meeting of the Farmers' Alliance Insurance Company will be held in McPherson, Kans., January 7, 1902. This company has upwards of 19,000 policy holders. Its business is confined to Kansas.

**Get Good Prices for Acme Tomatoes.**  
This Market Short of Tomatoes Last Year.

The "St. Louis Market" was short of tomatoes last year. Truck gardeners who had tomatoes received big prices. St. Louis will be filled with busy workers in 1902. Chicago was a better market the year before the World's Fair than during it. The Acme is probably the best tomato known for this section. It is as solid as a beefsteak, fine flavor, good bearer, vines strong and vigorous.

Our "Trucker's Catalog" of seeds tells all about the most profitable kinds of tomatoes to grow in this section, gives 128 pages of valuable information about everything for our market, tells you all about our seeds for other varieties of money makers. Write for it. It is free.

PLANT SEED CO., 810 Fourth St., ST. LOUIS.

**Everything in Seeds**

Who wrote  
**MACBETH?** The  
wise woman who  
got into some lamp  
trouble or other.

My name on every one.

If you'll send your address, I'll send you the Index to Lamps and their Chimneys, to tell you what number to get for your lamp.  
MACBETH, Pittsburgh.



# The Poultry Yard.

Unsuccessful Turkey Breeding.  
REPORT OF RHODE ISLAND EXPERIMENT STATION.

We have been surprised to find how great a proportion of those who attempt to raise turkeys use small and immature birds for breeders. Many kill their earliest and best birds for the market and keep for breeding those that are too small or too late to be salable. They kill the goose that lays the golden eggs. In buying a new gobbler or a few hens to change the blood they choose the late-hatched, immature turkeys, because they cost less. The reason sometimes given for this is that old hens are too cunning about stealing their nests and that young turkeys lay earlier. This practice is not confined to the poorest and least intelligent people, as would be expected, but is followed by those well informed and who appreciate and pay for a well-bred horse or cow. If such a course was followed with horses and cattle the best stock in existence would be ruined in a few generations. Many who know that turkeys 2 years old or older give the strongest and largest young continue to kill off the young hens for market after breeding from them one season. There seems to be a dread of having something too old or unsalable left on their hands. To breed from immature or poor specimens is to violate one of the first laws of breeding. Selection of the best for generations has given us the improved and most profitable breeds of stock. The hereditary influence of such selection is of great value. The most inferior bird out of a flock of such blood may "throw back" and breed very fine stock and do better than a much finer specimen from a poorly bred strain, but the repeated selection of inferior birds for a number of generations makes this inferiority hereditary.

### FREQUENT CAUSES OF LACK OF SUCCESS MAY BE TRACED TO THE PARENT STOCK.

The future stock depends almost entirely on the parent birds of their ancestry. If valuable birds are used for breeding their offspring will be like them and amply repay the extra expense. The best are none too good and are the cheapest.

Crandall Brothers, having used Western gobblers furnished by Mr. Vose, raised so many more turkeys in consequence that they estimate the benefit derived the first season at \$100. It would have been economy for them to have paid \$50 for the 2 gobblers rather than use the kind of stock they had previously bred from. This expenditure would have paid the first season, to say nothing about their improvement in their breeding stock for the future. Many breeding turkeys are over-fat in the spring—have been over-fed or given too fattening food. Quite frequently they die at this time as the result of over-feeding. The progeny of over-fat birds are less vigorous. Late-hatched hens that are growing all the time need more food; can not store up a surplus, and lay earlier because they are thin. Feed the old hens clover and less carbonaceous food in the latter part of the winter and they will give better satisfaction. Corn is all right when turkeys can find their own green food and insect ration to go with it, but when they get little exercise and can get nothing else to eat they become abnormally fat.

### ISOLATION OF DISEASED BIRDS NECESSARY.

If a turkey becomes sick and is allowed to roam with the others, and to eat, drink and roost in the same places, the others will probably have that trouble very soon. If a flock becomes diseased, the land which they wander over may become contaminated and infect other flocks that occupy the same ground. Therefore stamp out disease when it first appears. Let every turkey raiser be a board of health; quarantine or kill and bury deep all sick fowls and disinfect what they have contaminated. Prevention of the spread of disease is possible. Doctoring very sick turkeys is rarely practicable. If turkeys are kept where they may drink from stagnant pools in the barnyard, near the pig pen, privy vault, or from the sink drain, sudden and fatal attacks of bowel trouble should be expected among them. A running stream is of great value on a turkey farm. If brine is poured out and they drink it, or they pick up pieces of salt, salt meat or salt fish, death usually follows.

The man who has kept his mind bright and active, his conscience clear, his obligations paid, his stock comfortable, and his subscription to the KANSAS FARMER renewed, can approach the close of the year with cheerful tread.

## THE MARKETS.

Kansas City Markets to Monday Evening December 23, 1901.

The proverbial "Christmas dullness" was much in evidence in the hog market last week. To begin with, the supply was liberal at 94,000 head, against 76,000 the same week a year ago. All the chief markets were heavily supplied, and as a result, the packers tried to bear the market for all they were worth. Good fat hogs were from 10 cents to 25 cents lower and generally in strong demand, but pigs declined more than during any other week of the season, ranging from 25 cents to \$1 lower. The acknowledged scarcity of fat hogs throughout the country and the meager supply of lard-making stock keeps the packers more in line on heavy stuff. The average weight of hogs still continues light and bears out the reports of scarce feed. Last week's arrivals averaged only 174 pounds, against 215 pounds the same week a year ago. The cattle market was fairly well supplied, but prices were not sustained. Heavy fat cattle had the preference of the buyers and the decline on them was not over 25 cents to 30 cents. Cheap or medium beef steers, including wheat-fed stock, were 40 cents to 50 cents off from last week's best figures. The best Christmas cattle sold as high as \$6.45. This week in 1900, choice beefs brought \$5.25, or \$1.20 lower. The stocker market slumped off a little, but not so much on the best grades as did the fat cattle market.

The sheep supply was about an average one, and the week closed a little stronger, with the exception of native ewes, which fell off 15 cents to 25 cents. Part of this loss was replaced on Monday, however. Lambs closed 10 cents to 15 cents higher for the week. The outlook for sheep is good for the sellers, though to what extent the advance, if any, will be, is not certain. Lambs for the Christmas trade sold at \$5.40 during the week.

Horses and mules both exhibited a slight improvement from the previous week, mules especially, showing strength. The cotton mule trade was much in evidence the past few days and good 14 1/2 to 15 hand mules, suitable for such purposes, brought from \$60 to \$80. Southern horses weakened somewhat, but later regained the loss, while Eastern horses sold steady.

Wheat surprised the trade somewhat by putting on 3 cents during the week. May wheat closed on Monday at 80 1/2 cents, just 14 cents above the price a year ago. The supply of Kansas wheat is getting lighter, and it is thought by the trade that the winter wheat movement is waning. Receipts of Nebraska wheat last week were fair for this time of the year.

The week's total receipts amounted to 263 cars, against 350 cars a year ago. Corn remained nearly steady all week, and closed Monday at 68 cents, 35 cents above last year's figures. Corn speculation was the lightest in any week since the drought.

There was a fair Christmas demand for poultry, but prices were not sprung to any extent. Hens brought from 7 cents to 8 cents and turkeys the latter figure. On account of the cold weather the past ten days, eggs advanced rapidly and sold up to 30 cents retail. They eased off somewhat at the advent of warmer weather, and closed at 28 cents to 29 cents.

The present week is expected to be a quiet one in all branches of trade, owing to the breaking in of Christmas day upon the routine work.

**Kansas City, Dec. 22.—Cattle—Receipts, 3,347; calves, 671. The market was steady on best and slow on others. Representative sales:**

### SHIPPING AND DRESSED BEEF STEERS.

No.	Ave. Price	No.	Ave. Price
38.....	1339 \$5.85	90.....	1233 \$5.65
72.....	1334 5.45	60.....	1073 4.50
60.....	1207 5.35	55.....	1234 4.75
99.....	1262 4.50	1.....	1100 4.00

### WESTERN STEERS.

25.....	1220 4.50	18.....	1024 4.25
1.....	840 3.00	23.....	987 3.85
3.....	610 2.85	30.....	1001 2.75
2.....	600 2.65	1.....	460 2.25

### WESTERN COWS.

1.....	820 3.00	20.....	901 1.80
11.....	950 2.00	1.....	890 2.00
22.....	877 2.00		

### NATIVE HEIFERS.

8.....	911 4.10	3.....	653 3.85
4.....	790 3.25	25.....	824 3.35
4.....	795 3.10	2.....	825 3.25
3.....	713 3.00	4.....	690 2.85

Hogs—Receipts, 9,719. The market was steady to 5 cents higher. Representative sales:

No.	Av. Price	No.	Av. Price	No.	Av. Price
70.....	239 \$6.55	67.....	228 \$6.35	11.....	329 \$4.25
60.....	294 6.45	73.....	220 6.25	74.....	207 6.20
107.....	149 5.50	18.....	170 5.50	205.....	122 5.50
90.....	163 5.45	79.....	152 5.40	21.....	144 5.35
23.....	97 4.10	55.....	104 4.25	164.....	96 4.20
58.....	88 4.10	85.....	79 4.00	82.....	90 4.15

Sheep—Receipts, 231. The market was strong. Representative sales:

11 lambs...	97 \$5.30	35 lambs...	92 \$5.30
151 lambs...	55 4.00	6 lambs...	100 5.25
37 lambs...	110 3.25	13 lambs...	67 3.75
12 sheep...	85 1.50	142 sheep...	83 3.00

### Chicago Live Stock.

Chicago, Dec. 23.—Cattle—Receipts, 18,000. Good to prime, \$6.00@7.00; stockers and feeders, \$2.00@4.00; Texas fed steers, \$4.25@5.00.

Hogs—Receipts, 42,000. Mixed and butchers, \$5.75@6.25; bulk of sales, \$5.75@6.25.

Sheep—Receipts, 15,000. Good to choice wethers, \$3.50@4.10; western sheep, \$3.00@4.00; native lambs, \$2.50@3.10.

### St. Louis Live Stock.

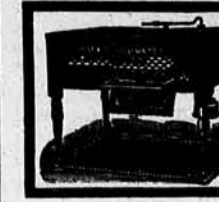
St. Louis, Dec. 22.—Cattle—Receipts, 1,000. Native steers, \$5.00@5.20; stockers and feeders, \$2.40@4.25; Texas and Indian steers, \$2.00@4.20.

Hogs—Receipts, 7,000. Pigs and lights, \$5.30@5.50; packers, \$5.50@6.00.

Sheep—Receipts, 1,500. Native sheep, \$3.20@3.85; lambs, \$4.00@5.40.

### Omaha Live Stock.

Omaha, Dec. 22.—Cattle—Receipts, 2,700. Native beef steers, \$4.00@5.00; western



Behold The Hen Doth Lay An Egg. Her part of the work is done, then we take care of that egg with the Successful Incubators and Brooders, turn it into a strong, vigorous, bread-winning chicken, that will work for a living around the farm yard. Here's something new in catalogues—5 different editions, in 5 different languages. English edition sent for 4 cents; others free. Covers the poultry question like a blanket. **DES MOINES INCUBATOR CO.,** Box 83 Des Moines, Ia., or Box 83 Buffalo, N.Y. Write to nearest office. You will save time and money.

### POULTRY BREEDERS' DIRECTORY.

SIXTY MAMMOTH BRONZE TURKEYS—Two separate pens, headed by a 42-pound tom. Address Mrs. Fred Cowley, Columbus, Kans.

FOR SALE—100 choice Light Brahma cockerels; 100 hens and pullets. Write for prices. Best stock for money. F. W. Dixon, Holton, Kans.

FOR SALE—White Holland turkeys. Egg orders booked. Annie D. Galbraith, White City, Kans.

FOR SALE—Choice blue-barred Plymouth Rock cockerels, \$1 to \$1.50 each. Address Mrs. L. Hothan, Carbondale, Kans.

BARRED ROCK COCKERELS at reasonable prices. Write for what you want. Score card with all birds. Standard bred. John C. Snyder & Sons, Klondike, Okla.

### BELGIAN HARES...

Belgian hare fry beats chicken, and a good breeding pair of hares will keep you supplied all the year round. I can supply you in the finest breeding stock at \$3.50 per pair; \$5 per trio, until further notice.

A. H. DUFF, Larned, Kansas.

steers, \$3.70@5.40; Texas steers, \$3.40@4.40; stockers and feeders, \$2.75@4.35.

Hogs—Receipts, 8,300. Heavy, \$5.90@6.50; bulk of sales, \$5.50@6.10.

Sheep—Receipts, 2,800. Fed muttons, \$3.50@4.25; fed lambs, \$4.50@6.40.

### Kansas City Grain.

Kansas City, Dec. 23.—Wheat—Sales by sample on track:

Hard—No. 2, 76 1/2@78 1/2c; No. 3, 76 1/2@77c.

Soft—No. 2, 82@83c; No. 3, 82@87 1/2c.

Mixed Corn—No. 2, 68@68 1/2c; No. 3, 67@67 1/2c.

White Corn—No. 2, 68 1/2c; No. 3, 68c.

Mixed Oats—No. 2, 49c; No. 3, 48c.

White Oats—No. 2, 48 1/2@49c; No. 3, 48 1/2@48 1/2c.

Rye—No. 2, nominally 67 1/2c.

Prairie Hay—\$5.00@13.50; timothy, \$9.00@13.50; clover, \$9.50@13.00; alfalfa, \$11.00@13.00; straw, \$5.50@6.00.

Cotton Seed Meal—\$25.50 ton in car lots. Linseed meal, \$29 per ton.

### Chicago Cash Grain.

Chicago, Dec. 23.—Wheat—No. 2 red, 83 1/2@85 1/2c; No. 2, 79 1/2@85 1/2c; No. 2 hard winter, 78 1/2@80c; No. 3, 77 1/2@79c; No. 1 northern spring, 79@80 1/2c; No. 2, 77 1/2@79c; No. 3, 75@78 1/2c.

Corn—No. 2, —; No. 3, 64 1/2@64 1/2c.

Oats—No. 2, 40@46 1/2c; No. 3, 45 1/2@46c.

Futures: Wheat—December, 78 1/2c; January, 78 1/2c; May, 82@82 1/2c; July, 82c.

Corn—December, 64c; May, 67@67 1/2c; July, 66 1/2@66 1/2c.

Oats—December, 44 1/2c; May, 45 1/2@45 1/2c; July, 39 1/2c; September, 33 1/2c.

### St. Louis Cash Grain.

St. Louis, Dec. 23.—Wheat—No. 2 red, cash, elevator, 86 1/2c; track, 87 1/2c; No. 2 hard, 79@82c.

Corn—No. 2 cash, 67 1/2c; track, 68@68 1/2c.

Oats—No. 2 cash, 48 1/2c; track, 49@49 1/2c; No. 2 white, 51@51 1/2c.

### Kansas City Produce.

Kansas City, Dec. 23.—Eggs—Fresh, 22c doz; country held eggs, 18c doz.

Butter—Creamery, extra fancy, separator, 22c; firsts, 18c; dairy, fancy, 17c; packing stock, 13c; cheese, northern full cream, 10c; Missouri and Kansas full cream, 10c.

Poultry—Hens, live, 5 1/2c; roosters, 20c each; springs, 7c lb.; ducks, young 6 1/2c; geese, 4c; turkey hens, 6 1/2c; young gobblers, 6 1/2c; pigeons, 5c doz; squabs, \$1.25@2.00 doz. Choice, scalded dressed poultry 1c a bove these prices.

Game—Rabbits, drawn, 50c per doz.; jack rabbits, undrawn, per dozen, 50c; squirrels, 50c; frogs, 50c@82.00 per dozen; plover, 75c@1.00 per doz.; jack snipe, 75c@1.00 per doz.; sand snipe, 25@40c per doz.; ducks, mallard, per dozen, \$4, red head, \$5; canvas back, \$5; teal, \$2.50; mixed, \$2.00.

Potatoes—\$1.10@1.20 per bushel in small lots; car lots, \$1.00@1.04; sweets, \$3.00@3.25 per barrel.

Fruit—Apples, \$1.00@5.00 per barrel; cranberries, \$7.50@9.00 per barrel; California pears, \$2.25@2.60 per box.

Vegetables—Navy beans, \$2.20 bu.; cabbage, \$1.00@1.75 per cwt. Onions, 90c@1.10 bushel in job lots; beets, 40@60c bu.; turnips, 15@25c bushel.

### PATENTS.

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Which has no defects and has advantages over all other machines. You can raise the chicks in THE ONLY BROODER, which will get flocks, smother, or overheat the chicks. Write for Catalogue. Sold on 30 days trial. THE ONLY INCUBATOR CO., Box M, Lincoln, Neb.

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### STANDARD POULTRY.

Barred Plymouth Rocks, White Plymouth Rocks, Partridge Cochins, Buff Cochins, Light Brahms, Black Langshans, Silver Wyandottes, White Wyandottes, Silver Spangled Hamburgs, Brown Leghorns, and Belgian Hares. All Our Breeding Pens of this season at Bottom Prices, also Spring Chicks. Prices now less than half of winter prices. Fine Exhibition and Breeding Stock of Rare Quality. Write Me Your Wants. Circular Free. A. H. DUFF, Larned, Kansas.

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..THE IOWA.. has no Cold Corners but equal heat and ventilation in the egg chamber. Our methods are endorsed by prominent poultrymen because they succeed when others fail. Our FREE Catalogue will prove our claims. IOWA INCUBATOR COMPANY BOX 57, DES MOINES IOWA

**English and Fitch Ferrets** Trained to Hunt..... RATS, Rabbits, Etc. Prices Low..... FARNSWORTH BROS., Elk Falls, Kas.

The Home Circle.

SORROW.

An angel of God to two women came, Saying: "What will ye ask in the Father's name...

Written for the Kansas Farmer. Mrs. Smith's Systematic Day. ELEANOR KINLEYSIDE HOWELL.

One Saturday afternoon last spring I finished my week's mending, and with a sigh of relief laid the last pair of neatly darned socks on the top of the goodly pile in the basket; and thought, "Now I can read a little while with a clear conscience."

Now, that letter made me thoughtful. I could not help wondering if she strained and skimmed all the milk in the forenoon, and if she had had six children instead of one, if the work would have been so easy.

To begin with I must wash on Monday. I had fallen into the habit of doing my washing on Tuesday, for two reasons. One was that I had been brought up on the shorter catechism, and did not think gathering up dirty clothes and putting them to soak, either a "work of necessity or mercy" on the Sabbath.

On Monday morning I got up earlier than usual, got breakfast out of the way, filled dinner pails and started the older children off to school, dressed the two little ones and sent them out to play, washed the dishes, had just

finished sweeping and making the beds, and was putting up a dinner for the herd-boy, when John came to the door with a chilled lamb in his arms.

Of course, I said I would, for "Loss of time, although it grieved me sore; Yet loss of lambs, full well I knew, Would trouble me much more."

I fed the lamb hot milk with a spoon, rubbed it, and placed it on a stool before the open oven door, and had the satisfaction of seeing it standing on its own "wobbly" legs when John came for it.

At last they were all out and feeding quietly, and I went back to the house, to find my fire out and a good part of the morning gone.

I then went to work with all my might and main, and was just getting the first boiler full into the rinse water, when the hired man's little girl from the tenant house rushed breathlessly into the kitchen.

I was just going in at the door when a wagon drove up to the gate and somebody helped out old Mrs. Simpkins from the poor-farm.

I saw the preacher and his wife drive up. I thought of my unchanged washing dress, my hair in crimping pins, my empty cake-box, and stale bread, but I tried to summon my most pleasant expression as I opened the door for them.

Advertisement for Enameline. Includes image of a can and text: "BIGGER BOX SAME PRICE THE MODERN STOVE POLISH Brilliant, Clean, Easily Applied, Absolutely Odorless. LIQUID-BETTER YET! FIRE PROOF!!"

There would be silversmith, blacksmith, and tinsmith shops, electrical repair and machine shops, flourists, hair-dressing-rooms for men and women, Turkish baths, upholstery and furniture shops, decorators and seamstresses, a steam laundry, a messenger service, a printing office, a wine-cellar, with half a million dollars' worth of choice vine-tages, and a club house with billiard and reading rooms and cafes.

The proprietor of this town would assume all the housekeeping cares of his 1,500 tenants, and of many of his 1,500 employees.

Thoughts on Reading. There is no more potent influence in the average life than the books one reads.

Immense New York Hotels. "If one of New York's big modern hotels could be whisked to the country and spread out in village formation the result would be a model proprietary town of about 3,000 inhabitants.

Whatever else one neglects, one should keep in touch with the progress of the day, and to that end newspapers and magazines are a necessity, but even with these discretion may be exercised.

A girl who had been very clever at college came home the other day and said to her mother: "Mother I've graduated but now I must inform myself in psychology, philology, bibli—"

Advertisement for No Mask Lion Coffee. Includes image of a lion's face and text: "No Mask of eggs or glue is used in roasting LION COFFEE It is all coffee—pure coffee—strong and of delicious flavor."

## The Young Folks.

### THE MAN TO AVOID.

Preserve me from the man who says:  
"Well, really, I must go!"  
And who, then, settles down to chat  
With me an hour or so.

Preserve me from the man who says:  
"I was about to say  
That I would feel obliged if you  
Would let me \$5 to-day."

Preserve me from the man who treads  
Upon my coals to see  
If they are painful, then who says:  
"I hope you'll pardon me."

Preserve me from the man who tries  
When'er we chance to meet.  
To pass me on both sides at once  
And take up all the street.

Preserve me from the man who has  
The only kid, and who  
Is always telling me about  
The things that kid can do.  
—Columbus (Ohio) State Journal.

### Highway Robbery.

A school teacher recently had an amusing experience with her favorite pupil, a bright little maid of eight years. The class for the first time had been asked to write a composition at home and bring it for criticism the next day.

A moment after the school-bell rang little Amy, panting and red-eyed, stumbled to her desk and dropped her face on her arms, her shoulders shaking with sobs. The teacher went to her and tried sympathy to find out what was the trouble. Amid piteous sniffs and gasps she thought she caught the word "composition."

"Didn't you get your work done, Amy?" she asked, kindly.

"Oh, yes!" sobbed Amy, in a burst of indignant grief. "I g-got it d-done, Miss Brown, but B-b-billy Smith's horrid g-g-goat chased me and eat it up!"

Still funnier was the robbery committed by a gray ape of terrifying size and aspect, which once escaped from the zoo at Washington, as the story is related by Mr. Camillus Phillips. The monkey was missing for several hours. When it was found, in a bit of woodland near the city, it had not only escaped from its human captors—it had captured a human being!

It was holding prisoner a trembling little ducky, who stood with hands held up and tears running down, while the contents of his pockets lay scattered around. The ape had him firmly clutched by the trousers-leg, and was investigating his foot with interested gravity of aspect.

"He's done hel' me up," the little chap whimpered, as the keeper approached. "He's stole ma hoss-shoe-nail ring, an' de sho-nuff slapjack, an' de kyte-string, an' de tenpenny-nail, chunk ob chewin-gum, an' de candy sour-ball dat ain't half-sucked yit, an' now he's tryin' to steal ma big toe. Fo' de good lan's sake please gemmen, take him off'n me be-fo' he gits it!"

He was rescued, with the toe still intact, and his assailant, chattering and grimacing with fury, went ignominiously back to captivity.—Youth's Companion.

### Breaking It Gently.

"What do you want, little boy?"  
"Is this where Mr. Upjohn lives, ma'am?"

"Yes."

"The Mr. Upjohn that runs the bank?"

"He is an officer in a bank."

"The Mr. Upjohn that went down town on a trolley car this morning?"

"I presume he went on a trolley car. What—"

"Is he the Mr. Upjohn that was in that hor-ble street car accident?"

"I haven't heard of his being in any street car accident."

"Didn't hear 'at he'd sprained his ankle jumpin' out o' the car when the train run into it?"

"No. Little boy, you frighten me. What has—"

"Didn't hear how he run to a drug store fur a piece o' court-plaster to stick on a little cut he'd got over one eye?"

"Not at all. For mercy's sake—"

"He isn't in, is he, ma'am?"

"No, he's—"

"Name's John U. Upjohn, isn't it?"

"Yes, that is his name."

"Then he's the same man. He won't be here for an hour or two, I guess, 'cause he's stoppin' to have one of his teeth tightened that got knocked a little bit loose when he was jumpin' out o' danger, y' know."

"Little boy, tell me the whole story. I think I can bear it now."

"Well, ma'am, he's in the hoss-pittle with 4 ribs broke, an' one leg's in a sling, an' his nose is knocked kind o' sideways, but he's gettin' along all right an' he'll be out again in about a month.

an' here's a letter f'm the doctor, tellin' ye all about it, ma'am."—Epworth Herald.

### The Favorite Mistletoe.

Why will we set our hearts on the degenerates of life and despise those that are wholesome and hearty? When a plant is really robust and thoroughly able to take care of itself we turn up our noses at it and call it a weed. Here at Christmas time we hang from our chandeliers sprays of mistletoe, not only a degenerate, but, what is worse, a parasite, and make it the accompaniment of our most festive season. Any one who walks through the woods of central New Jersey may readily meet this strange plant. It is found forming whisp-like growths on the oaks and on the sour gum trees.

The story of how the mistletoe gets on the trees is to me a most interesting one. Covering the mistletoe twigs are pearly white berries. These come in the winter season, when food is comparatively scarce, and hence some of our birds eat them freely. Now when a robin eats a cherry he swallows simply the meat and flips the stone away. The seed of the mistletoe the bird cannot flip. It is sticky and holds to his bill. His only resource is to wipe it off, and he does so, leaving it sticking to the branches of the tree on which he is sitting at the time. This seed sprouts after a time, and not finding earth—which indeed its ancestral habit has made it cease wanting—it sinks its roots into the bark of the tree and hunts there for the pipes that carry the sap. Now the sap in the bark is the very richest in the tree, far richer than that in the wood, and the mistletoe gets from its host the choicest of food. With a strange foresight it does not throw its leaves away, as do most parasites, but keeps them to use in winter, when the tree is leafless. When our old Saxon ancestors worshiped under the oaks, and indeed worshiped the trees themselves, they naturally felt a respect for the mistletoe which the oak supported. When we hang it in our rooms at Christmas time we are but making a blending of our early heathen with our later Christian religion.—Ladies' Home Journal.

### The Tomb of Washington.

The original resting place of the father of his country, and the old family sepulchre, is south of the mansion, immediately on the bank of the Potomac, though a steep and woody descent of over a hundred feet intervenes between it and the water. This sepulchre is a mere excavation in the earth, walled over in the rudest manner, and looking far more, at its entrance, like a hop-kiln or out-door cellar than a place of rest for the illustrious departed.

But this cemetery is now deserted and, of course, dilapidated. A new and more fitting mausoleum of brick was constructed in 1837, south of the garden and some 200 or 300 yards southwest of the former, in which the remains of the Washington family are now deposited. It is built on ground sloping to the south, and the family cemetery is excavated in the hillside, and is entered by an iron door; but in front of this, under the neat and appropriate brick structure itself, separated from the outer world only by a strong iron railing, rest side by side, in two marble sarcophagi, the ashes of George and Martha Washington.

These marble enclosures are well executed, though simple, and I believe were presented by T. Struthers, a Philadelphia artist, as a token of affectionate reverence and admiration for the memory of the great departed. The inscription upon the top merely states the name, age, and time of the decease of each respectively, the death of Mrs. Washington having occurred in 1801, two years after that of her revered consort; and as her age is stated at seventy-one years, while he did not reach sixty-eight, she must have been nearly two years his senior.—Horace Greeley.

### Washing Windows in Winter Time.

There is a right and wrong way to wash windows. In the winter it is often difficult to wash windows as often as they require it, as the work can not be done in freezing weather, nor when the sun is shining upon them. At such times dust them well, if there is dust upon them, and leave them until a warm day and an hour when the sun is not shining upon them. Use a large painter's brush to brush the dust off the ledges of the window, and wipe it off the windows with a dry linen cloth. Do not use soap in washing windows, but rub them over on the inside with a little whiting moistened with alcohol and water in about equal parts. Polish off the whiting, using a chamouis-skin or an old newspa-



per, which has been softened by the hands, to do so. Take care not to allow the powder to scatter around the room, as it will, if it is not gathered up in the paper or chamouis-skin while it is being rubbed off. Regular glaziers always polish window glass with whiting. Do not use strong ammonia in washing windows, or it will leave a mist on the glass which will be difficult to take off.—Country Gentleman.

## The Apiary.

Conducted by A. H. Duff, Larned, Kans., to whom all inquiries concerning this department should be addressed.

### Dividing not a Success.

EDITOR APIARY DEPARTMENT:—I have been wanting to say my little piece on the busy bee, and for fear I could not make it plain, I kept silent. But to keep silent is not the best way to learn, so I will just give it my way. Last spring I had a fine colony of bees, and was anxious to increase them to more colonies, but did not like the idea of swarming for fear of losing some, so I concluded to divide them, which I did, and supposed them to be all right. But I must have failed in my attempt to get a queen with my new colony and this fall we discovered that the bees were all dead and the combs which I had taken from the old hive were a solid mass of web and worms. I took all the combs from the frames and burned them.

I have two kinds of hives, one (the old one) has a super and the other is for extracted honey. Now must I leave the empty super on the hive through the winter, or should it be removed, and the lid placed down on the lower story? I wish so much to be a successful apiarist, but I am not getting along as I would like to. I am not discouraged. I love the hum of bees, they are such sensible little creatures. Will it do to move the hive where the sun will shine on it all day through the winter? I bought my bees for Italians. Can you tell me why the moths took possession of that colony?  
EMMA SMITH.  
Arkansas City, Kans.

The reason the moths took possession of your hive is because of the absence of both queen and bees. If your colony had a queen, and was in proper condition otherwise, the moths would not have harmed it, if your bees are Italian bees as you say. Moths will frequently get the best of the old native black bees, but never the Italians. Moths will almost invariably take possession of combs thus in a hive when there are no bees, or not enough bees to protect them. You made your mistake when you divided your bees, in that you did not see that they raised a queen at the proper time, and if they failed to do so, you should have given them more young brood from which to produce one. In dividing bees, you must be careful to give them a few combs that contain young brood and eggs in them, for without this they can not raise a queen. In about twenty-five days after dividing they should have a queen laying eggs. But it is the proper way to have a laying queen ready to introduce to your new colony when the division is made. Then, a colony should never be divided until it is very strong, just about ready to swarm.

No, do not move your hive of bees to get more sun. It is possible to get too much sun in winter. Bees can be placed anywhere in this respect, except near the south side of a building, where the sun has too much effect on them. The upper stories or supers of all descriptions are best removed for winter, and the bees should be confined in the lower story or brood chamber. You should make a chaff hive for this one colony, as the trouble and expense for but one hive is not much, and thus give it the best chance possible. But remember that to work with bees in cold weather is damaging to them, so that only on a day that they are flying, should you work with them.

Bees should be fixed up and protected in some manner in the fall before cold weather has come. Either chaff hives or winter cases should be used, and thus have the hives of bees enclosed with good overcoats. The win-

ter cases are simply boxes a little larger than the hives, placed over the same, leaving a dead air space between the two. The chaff hive is larger, and the space packed with chaff. Some may say that such protection is not necessary in our climate, but those who say so have not given the matter proper attention. The book we send you for your report as above, will show you how to make chaff hives for your bees. Others can have these books by sending similar reports.

### Have They Prairie Dogs in the East?

EDITOR KANSAS FARMER:—I have recently read something about a method of killing prairie dogs by the use of some substance mixed with gasoline, which when placed in their holes makes a gas. I think it was being tried by some one connected with the Kansas Experiment Station. Can you inform me what the ingredients are and how used? I would like to experiment with it as a "rat killer." Any information you may give me will be thankfully received.  
Yours truly,  
HENRY L. ALLEN.  
Buffalo, N. Y.

Prof. David E. Lance, Manhattan, Kans., is experimenting in the destruction of prairie dogs under a special act of the Legislature. He has had good success in smothering them by using a mixture of bisulphide of carbon and gasoline. This mixture, as well as its ingredients, is explosive so that in using, the smoker had best lay aside his pipe. Balls of horse manure are saturated with the mixture and placed in the prairie dogs' holes. These holes are then closed with earth. The vapors from the mixture are death to all animals. Professor Lance will issue a full report upon completing his investigations.

Blooded Stock, Oxford, Pa., is the most practical swine paper printed for the business farmer, giving the best of everything in its line, and just the paper that every swine grower should have. The regular subscription price is 50 cents a year, but we have made arrangements so that it will be sent free to subscribers of Kansas Farmer who send one dollar to this office for one year's subscription to Kansas Farmer.

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KANSAS FARMER.

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KANSAS FARMER CO., 116 West Sixth Ave., Topeka, Kans.

BLOCKS OF TWO.

The regular subscription price for the KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable.

The oleomargarine fight is to be resumed with redoubled vigor in Congress after the holidays. It is the dairy interests against the beef cattle and packing house interests.

In Mr. M. F. Tatman's excellent communication from Rossville published in last week's KANSAS FARMER Mr. Tatman wrote: "2 1/2 tons of alfalfa to the acre the first cutting," etc.

The year 1901 will soon be numbered with the times that have been. The season was a capricious one. The early spring gave high hopes. As to the wheat crop these hopes were fully realized.

The editor of the KANSAS FARMER attended a lively farmers' institute last week at Oneida, Nemaha County. It was presided over by Mr. John Brinkworth. The questions considered were not greatly different from those which usually come before gatherings of this kind.

lights of alfalfa hay and pasture are presenting object lessons which act as germs for the infection of the alfalfa fever. We had the pleasure of meeting at Oneida, Mr. Geo. T. Pettit, one of the editors of the Practical Farmer, published at Philadelphia.

SUGAR-GROWING IN SOUTHWEST KANSAS.

Men who were young when the first attempts were made to establish a beet-sugar industry in the United States have now silvery locks. Since that time Herculean efforts to establish a sorghum-sugar industry have had their birth, maturity, decline, and burial.

The improved seed could be transported to this country. The improved machinery of the factory could be still further improved by American inventors. But the patient hand labor—the work of the German women and children, by which the best beets were produced—always was, is now, and probably always will be distasteful to Americans.

But in the continued and widespread experimentation there have been found portions of the United States in which the average sugar content of the beets is far above that of even the favored portions of Germany. These beet-growing portions of the United States have persistently refused to be confined by bounds of isothermal lines laid down by high authority, as including the only climatic conditions suitable for growing good beets.

By a law passed by the last Legislature a bounty of \$1 a ton was offered on all sugar-beets containing over 12 per cent of sugar. Under this law Miss Gertrude Coburn, daughter of Secretary F. D. Coburn, was appointed to determine who were entitled to the bounty. With characteristic enterprise, Miss Coburn has met more than the bare requirements of the law and has furnished a vast amount of valuable information.

Miss Coburn's report shows that the beets raised this year in western Kansas developed an average of 17 per cent of sugar, factory test, while the average per cent of sugar developed by the beet farmers of Germany, the home of the industry, is 15 per cent. Tests by Professor Willard, of the Kansas State Agricultural College, however, showed that 16 different samples of the same beets developed an average of 21 per cent of sugar, but the beet growers are satisfied with the factory tests, which it is thought were made as fairly as possible under the circumstances.

Most of the farmers who planted experimental plots of beets this year will raise a larger acreage next year. The American Beet Sugar Company, of Rocky Ford, Col., which purchased this year's crop, is anxious that a large acreage of beets be planted. The men behind it have stated that they will erect a factory in western Kansas as soon as the tonnage of beets raised in that section is great enough to warrant it.

Western Kansas farmers have much to learn about beet raising, however. The trouble is that they try to handle too large an acreage. To successfully

raise beets it is necessary to cultivate them highly. More money can be made by carefully tending a few acres than by half cultivating 40 or more acres. Another trouble the western Kansas farmers have to combat is the difficulty of securing cheap labor. About two weeks after the beets come up they must be thinned. This has to be done by hand and requires the attention of a number of persons for every acre.

Following are some statistics regarding this year's experiments in western Kansas in beet culture, compiled by Miss Coburn:

Table with 2 columns: Metric and Value. Includes rows for Number of beet growers, Number of acres harvested, Average acreage for each grower, Total number of tons harvested, etc.

The following table contains the showing made by 15 of the most successful of the beet-growers who have reported to date, but a complete report would, it is believed, contain the names of others whose tonnage and profits would be even greater:

Table with 4 columns: Name, Tons, Price per ton, Total. Lists growers like Carl Coerber, M. D. Blehn, R. B. Glass, etc.

The foregoing statement of "profits per acre" is exclusive of the bounty to be paid by the State.

THIRTY-NINE YEARS OLD.

This number of the KANSAS FARMER completes the thirty-ninth volume. It is a pretty old paper. When it first appeared, it was little more than a leaflet. Its purpose was to advocate the interests of the State Agricultural Society—now the State Board of Agriculture.

The present editor has occupied his position for a little more than ten years. The ten volumes produced in these years are almost a cyclopedia of Western farming. This character comes quite as much from the contributions of the readers as from the work of the editor.

Of all the years of the existence of the KANSAS FARMER the year 1901 has been the best for growth of circulation. It is the purpose of the management to continue to push the circulation until at least half of the farmers of Kansas shall be receiving the benefits of the weekly visits of the "Old Reliable."

the value of the KANSAS FARMER, and when you renew your own subscription send his subscription with yours, both for \$1, provided one be a new subscriber.

Several improvements will be introduced next year. The first page will be devoted to reading matter instead of advertisements. Some new work will be taken up, and every effort will be made to make the paper more valuable and more readable.

The advertising patronage of the KANSAS FARMER has always been good, and it has been the almost uniform testimony of advertisers that they have received good value for their money. This department has been under its present manager for twenty years.

The policy of the paper will continue, as in recent years, clear of politics.

There is plenty for an agricultural paper to do without attempting to instruct people how to vote. More work is required to make an interesting agricultural paper than to deal with political questions. But there are plenty of able exponents of all shades of politics in Kansas while there is only one KANSAS FARMER.

Farmers of Kansas read more of the science of farming than is read by any other like number of farmers in the world. Superior intelligence enables them to profit by this kind of reading. The man who makes his industry consist in the application of the sciences concerned with that industry is at once removed from the domain of drudgery and into the realm of reasonable certainty of success.

The KANSAS FARMER now looks forward to its fortieth year with bright anticipations and hopes that by the time these lines shall be read its friends will each and all have enjoyed a merry Christmas and have laid their plans for a prosperous and happy New Year.

TRADE EXTENSION WITH MEXICO.

The allied industries of Kansas have finally gotten together in a most enthusiastic manner on the proposition of trade extension with Mexico. On Monday of this week, in response to the invitation of Governor Stanley, representatives of the various industries of the State met in conference in the Supreme Court rooms at the State house and formulated plans for a permanent organization and a convention to further consider the matter.

As a result of the conference, it was decided that on January 21 and 22, 1902, a State convention of the commercial, live stock, and agricultural interests in Kansas shall be held in Topeka, for the purpose of urging the making of reciprocal treaties with Mexico and other Latin-American countries. The decision to hold the convention was determined by a conference of about 50 representatives of the various industries in the State.

As the convention will be held at the same time as the Kansas Mid-Winter Exposition the attendance may be larger than expected, and it will give the manufacturers and business men of the State an excellent opportunity to attend two meetings both of which are to their interest. It is hoped to have the governors of several other Western States present to talk on the subject of reciprocity, and the convention will request them to initiate a similar movement in their States.

Among the representatives present at the conference were the following: J. H. McNair, president Millers' Association, Halstead; J. A. Hawkinson, Swift & Co., Kansas City; H. Work, grain, Ellsworth; L. Cortelyou, grain, Muscotah; D. N. Delaney, stock yards, Wichita; J. E. Howard, secretary Millers' Association, Wichita; C. T. Wells, produce, Wichita; W. F. Jensen, Continental Creamery Company, Topeka; Chris. B. Hoffman, miller, Enterprise; T. J. Anderson, Commercial Club, To-

peka; H. A. Heath, secretary Stock Breeders' Association, Topeka; J. E. Nissley, dairy interests, Topeka; J. K. Forney, creamery, Abilene; E. C. Lewellen, creamery, Newton; H. M. Brandt, creamery, Topeka; J. H. Taylor, cheese, Topeka; T. A. Bowman, dairy, Topeka; J. A. Bucklin, president Farmers' Co-operative Association, Oakley; James Butler, secretary Farmers' Co-operative Association, Topeka; M. M. Sherman, farmer and cattleman, Geneseo; Elmer H. Wood, Union Pacific Railway, Omaha; J. L. West, Missouri, Kansas & Texas Railway, Kansas City; J. B. Zinn, live stock exporter, Topeka; August Manglesdorf, seed exporter, Atchison; F. C. Maegley, Santa Fe Railroad, Topeka; C. W. Cook, Santa Fe Railroad, Topeka; H. F. Probst, miller, Arkansas City; H. G. Kaill, Union Pacific Railway, Kansas City; Thomas Page, miller, Topeka; H. F. Blaker, grain, Pleasanton; E. J. Smiley, secretary Grain Dealers' Association, Topeka; James A. Wheeler, cement, Iola; Joseph Sparks, grain and live stock, Bison; H. P. Childs, assistant general manager stock yards, Kansas City; A. B. Hulit, live stock, Chihuahua, Mexico; Charles V. Brinkman, miller, Great Bend; F. C. Dumbeck, Frisco Railway, Kansas City.

#### OAK GRANGE INSTITUTE.

The Mission Township Farmers' Institute held its 1901 session at the usual place, Oak Grange Hall. The attendance was limited only by the capacity of the hall, notwithstanding the disagreeable weather. The program was so loaded with addresses that discussion was nearly impossible within the time limits. The program was carried out substantially as published in the KANSAS FARMER.

During the afternoon of the second day of the institute Mr. H. Wallace, a prominent farmer of Mission Township, introduced the following resolutions, which were unanimously adopted: Whereas, The Kansas State Agricultural College was founded "to teach such branches of learning as are related to agriculture and the mechanic arts," and

Whereas, There has been manifested in some quarters a disposition to dwarf the prominence of agriculture in agricultural colleges, therefore

Resolved, That the farmers' institute, this day in session at Oak Grange Hall, Shawnee County, Kansas, approves the efforts of Hon. F. D. Coburn and the KANSAS FARMER to maintain the prominence of agriculture and kindred branches in the instruction and experimentation of our agricultural college.

Resolved, That we commend to future governors of Kansas the wisdom of selecting farmers for regents of said college.

The KANSAS FARMER is not insensible to recognition such as is contained in these resolutions. It is pleased to be able to say, however, that since the KANSAS FARMER first called attention to the matter those in authority at the college have developed an apparent determination to meet the views expressed in this paper's editorial discussions and to pursue the policies advocated in the board by Mr. Coburn. The honest and earnest continuance of this disposition will be cause for congratulation, and its execution by a needed stronger hand than that now at the head of the college, actuated by a mind and heart fully in accord with advanced views of the usefulness of industrial education, will be commended generally by the farmers of Kansas.

The suggestion that farmers be selected for regents of the college seems entirely fitting. Some of the broadest minded men in Kansas are farmers. They have a lively appreciation of the mechanic arts as well as of agriculture. They know the bearing of liberal education on the development of men and on national progress. They are found in all political parties, so that no governor need go into other pursuits or regents for the college having his own political faith. Almost to a man these farmers of Kansas agree with Secretary Coburn as to the purposes and mission of an agricultural college.

One of the most important addresses at this institute was that of Dr. Henry Wallace, editor of Wallace's Farmer, on the subject of landlord and tenant. This will appear in full in an early number of the KANSAS FARMER as will others of the excellent papers read.

Kansas was given a liberal development of the free rural delivery system last year. Plans are made to about double the number of routes during the coming year. It will be well for every community to get ready and to ask for this modern improvement as rapidly as possible.

#### KANSAS STOCK BREEDER'S MEETING.

The twelfth annual meeting of the Kansas Improved Stock Breeders Association will be held at Representative Hall, Topeka, Kans., on January 6, 7, and 8, 1902. A two days' session, immediately preceding the thirty-first annual meeting of the Kansas State Board of Agriculture, beginning promptly at 2 p. m. Monday, January 6, 1902.

An unusually interesting program has been prepared, besides the important business affairs of special interest to every breeder and feeder of live stock in the State, which will be up for consideration. The State Poultry Association will hold its annual show during the entire week, all together a week of attractions. Among the notable specialists, outside of Kansas, recognized authorities on live stock and agriculture, who will be present and participate in the meetings of the week are: Prof. W. A. Henry, Dean of the Wisconsin College of Agriculture, the author of "Feeds and Feeding;" Prof. C. S. Plumb, of the Indiana Experiment Station; Professors Mumford and Shamel, of the Illinois Experiment Station; John M. Grant, of Kansas City, an eminent authority and specialist on the horse and mule industry; W. T. McIntire, of Kansas City, Secretary of the American Angora Goat Breeders Association, will discuss the Angora industry; a St. Louis official of the Louisiana Purchase Exposition Company will make an address on "The World's Fair at St. Louis in 1903."

Among the subjects for general discussion and papers prepared especially for the association are the following: "The Horse Our Farmers Should Raise;" "Color in Shorthorns and the Red Craze;" "Baby Beef;" "The Best Class of Cattle to Feed for Profit;" "Diseases of Live Stock;" "Twenty Years' Experience in Sheep Raising in Kansas;" "Sure and Profitable Crops for the Stockman;" "Lessons from the Drouth;" "The Evils and Extravagance of Horse Companies;" "A State Fair—What Will Kansas Do About It?" "The Work of Agricultural Colleges;" "Object Lessons from the American Royal Show at Kansas City and the International Live Stock Exposition at Chicago;" "The Desirability of Raising Cattle and Hogs Together."

"Suggestions as to Breeding and Feeding Swine," and "Some Evils of Over-fattening Young Sows," are the principal matters, which with President Glick's Annual Address, will be subject to pertinent discussion, and members are urged to prepare for these discussions.

The feeders' session, conducted by J. D. Small, of Atchison, and C. P. Dewey, of Manhattan, the largest and most successful stock feeders in the West, is among the new features this year. There will be one exclusive "free for all" session, with a time limit, an experience and class meeting of five-minute speeches by members, which will be a red hot event of the week. The breeders' annual banquet will be held Wednesday night, January 8, 1902. "Whosoever will may come." "In union there is strength."

All Kansas railroads have granted for these meetings an open rate to everybody of a fare and one-third for round trip tickets, and no receipts or certificates will be necessary. Tickets will be on sale January 4 to 11, inclusive, and be good for return passage until and including Monday, January 13.

Every Kansan interested in improved stock is most cordially invited to become a member (\$1 pays all membership fees and dues for 1902) of the Kansas Improved Stock Breeders Association.

Don't fail to attend the twelfth annual meeting of this great live stock organization. For further information, membership blanks, programs, etc., address, H. A. Heath, Secretary, 116 W. 6th St., Topeka, Kansas.

#### State Board of Agriculture.

Following is the program of the thirty-first annual meeting of the Kansas State Board of Agriculture, to be held in Representative Hall, Capitol Building, Topeka, Kans., beginning Wednesday, January 8, 1902, at 4 o'clock p. m., and continuing in session three days, or until the business requiring attention shall be disposed of.

WEDNESDAY, JANUARY 8, 1902.

Afternoon Session.—Opening at 4 o'clock. Roll-call. Appointment of committees. Reports of Committee on Credentials. Reading minutes of preceding meeting. Report of officers.

The following topics will be taken up and considered, as near as may be, in the order given. Papers will be subject to pertinent discussion, and delegates are urged to prepare for these discussions. Others present, of whom there is likely to be a large number, will also, as heretofore, have the privilege of participating

in the discussions, and are cordially invited to do so.

Evening Session.—7.30 o'clock.

Address of welcome—Gov. W. E. Stanley. Address of welcome on behalf of the city—Mayor J. W. F. Hughes. Response—The President, Edwin Taylor. "Gypsum as a Soil Fertilizer"—Prof. E. H. Worth, State University, Lawrence. "Three New Farm Hands"—John M. Stahl, Secretary Farmers' National Congress, Chicago.

THURSDAY, JANUARY 9.

Morning Session.—9.30 o'clock.

"Some Insect Enemies of Wheat in Kansas"—Prof. E. A. Popenoe, State Agricultural College, Manhattan. "Kansas Wheat and Its Products"—Herbert Hackney, Topeka.

Afternoon Session.—1.30 o'clock.

"Breeding Farm Animals"—Prof. C. S. Plumb, Indiana Experiment Station, Lafayette. "Lessons from the Live-stock Exhibitions"—Prof. H. W. Mumford, Illinois Experiment Station, Urbana.

"Work of the Experiment Stations in Beef Production"—Prof. H. M. Cottrell, Kansas Experiment Station, Manhattan.

Evening Session.—7.30 o'clock.

"The Rural-school Problem"—Frank Nelson, State Superintendent of Public Instruction, Topeka. "The Country Schoolhouse"—Mrs. Lucy B. Johnston, Topeka.

FRIDAY, JANUARY 10.

Morning Session.—9.30 o'clock.

"Corn Culture and Breeding"—Prof. A. D. Shamel, Illinois Experiment Station, Urbana. "The Lister in Kansas Corn Economy"—Theo. W. Morse, Mound City.

Afternoon Session.—1.30 o'clock.

Election of officers and members. "Alfalfa and Its Significance to Kansas"—Senator E. V. Peterson, Norton. Address—Albert Dean, Agent U. S. Bureau of Animal Industry, Kansas City, Mo. Query box.

Evening Session.—7.30 o'clock.

Address—Prof. W. A. Henry, Dean of the Wisconsin College of Agriculture, Madison. "The Farmer's Wife and the Rest Room"—Mrs. S. E. Roby, Topeka.

OTHER MEETINGS.

The Kansas Improved Stock Breeders Association will hold its regular annual meeting in Topeka in the same week as the State Board of Agriculture (on Monday, Tuesday, and Wednesday), and the State Poultry Association will be holding its annual show during the entire week. H. A. Heath, Topeka, secretary of the Stock Breeders Association, and Geo. H. Gillies, Topeka, secretary of the Poultry Association, will furnish programs and desired information of their respective meetings. It is believed that no man or woman interested in the agricultural and live-stock industries, or in wholesome home-making can attend these meetings without being profited. Their sessions and discussions are open to all.

#### RAILROAD RATES.

All Kansas railroads have granted for these meetings an open rate to everybody of a fare and one-third for round-trip tickets, and no receipts or certificates will be necessary. Tickets will be on sale January 4 to 11, inclusive, and be good for return passage until and including Monday, January 13. "Whosoever will may come." Be sure to ask for reduced-rate round-trip tickets.

#### HOTEL RATES.

Rates at Topeka hotels and boarding-houses will, as usual, be reasonable, and accommodations can readily be secured suited to the purses of all classes.

#### Farmers' Institute Dates.

The following dates and speakers have been assigned for farmers' institutes to be attended by representatives of the agricultural college:

January 4, Junction City, Professor Willard.

January 21-22, Edgerton, Dr. Mayo and Mrs. Calvin.

January 22-23, Seneca, Professors Willard and Popenoe.

January 23-24, Berryton, Dr. Mayo and Mrs. Calvin.

January 29-30, Rockport, Dr. Mayo and Professor Walters.

#### He Had His Reasons.

An officer in one of the English volunteer regiments, who had made himself exceedingly unpopular with the men, was coming home one evening when he slipped and fell into deep water. He was rescued with great difficulty by a private in his own regiment.

The officer was profuse in his expressions of gratitude and asked his preserver how he could reward him.

"The best way," said the soldier, "is to say nothing about it."

"But why?" asked the officer in amazement.

"Because," was the blunt reply, "if the other fellows knew I'd pulled you out they'd chuck me in."

#### Educational Notice.

A subscriber of ours, a prominent business man of Boston, writes that he will be very glad to hear from any ambitious reader of the Kansas Farmer who desires a technical education, and has not the means to attend school. This gentleman, whose name is withheld at his request, has at his disposal a few scholarships in a well-known educational institution. If you are ambitious and in earnest, write to W. L. B., Box 3737, Boston, Mass.

## Brain Markets.

Conducted by James Butler, Secretary of the Farmers' Co-operative Grain and Live Stock Association.

"The human race is divided into two classes,—those who go ahead and do something, and those who sit still and say, why wasn't it done the other way."—Oliver W. Holmes.

#### Grain Markets to 2 p. m., Dec. 23.

Grain markets closed strong to-day at following quotations: Chicago.—No. 2 red wheat, 83-84½ cents; No. 2 Kansas hard wheat, 80-81 cents; No. 2 corn, 64½-65 cents; No. 2 oats, 47½ cents. Kansas City.—No. 2 red wheat, 88 cents; No. 2 hard wheat, 77-78½ cents; No. 2 corn, 68½ cents; No. 2 oats, 48½ cents.

#### Market Letter.

BY F. W. FRASIUS, OF THE FARMERS' CO-OPERATIVE GRAIN AND LIVE STOCK ASSOCIATION.

Contrary to the usual custom during the holidays, the markets for cereals have been anything but dull the last few days. Although the rapid advance of a couple of weeks ago terminated in a break of prices, recovery has been rapid, and wheat, in Kansas City at least, closed stronger than it did at any time during this crop year. Speculators and others, who were influenced in holding back their orders to purchase wheat are gradually coming into the market. They have discovered that following the government crop reports, or the reports made out by much praised State statisticians, is not always good business; they have found out, to their dismay, that the men who issue these reports are often talking through their hats; and they did this with a vengeance this year.

On account of these glowing crop reports, foreigners have held up their purchases, expecting to buy wheat supplies cheaper during the winter months. These foreigners must have wheat, and I will miss my guess if they do not come into the American wheat markets after the holidays and put wheat up to fancy prices. Of course, the farmers who sold out can not take advantage of this coming advance, but the fellows who own the millions of bushels of wheat now piled up, and the capitalists, will reap the benefit. Wheat prices are to-day higher in Kansas—the biggest wheat State—than in any other wheat territory. No. 2 red wheat is being shipped from Chicago and St. Louis to Kansas City. Reports from all over Kansas are agreed that the wheat is being fed at a very rapid rate, and at many stations bringing nearly Kansas City prices, and that most of the wheat is gone. Where has it gone? It is plain enough that millions of bushels have been fed, and this in less than six months after harvest. Before another crop is raised this will have been so forcibly impressed upon the farmers, that they would wish they had held some of their wheat. The foreigners must have our wheat and would as quickly pay \$1 for it, as 75 cents in Chicago, at which price foreigners have taken about 25,000,000 bushels per month since July 1st; or at the rate of about 300,000,000 bushels per year, which is over 100,000,000 bushels more than the average for the past ten years. To be exact, exports since July 1st up to last Saturday, December 21—twenty-five weeks—were 141,577,000 bushels compared with 90,240,000 bushels at the corresponding time a year ago. These figures mean something, and if foreigners continue to buy our wheat in the next six months, as they have in the past, where is the wheat to come from? Exports last week were 4,333,000 bushels and in the corresponding week a year ago we exported 4,123,000 bushels, but exports of corn on account of its scarcity are running less than 25 per cent of what they were a year ago.

Receipts of wheat are falling off everywhere, they are phenomenally low in the Southwest; aggregating only 263 cars for Kansas City last week, with only 199 cars for Chicago, and 108 cars for St. Louis during the week.

The spring wheat receipts, too, are showing a marked falling off, and were only 3,104 cars in Minneapolis and Duluth, against 4,619 cars a week ago. Everything tends to indicate higher prices, and my advice is, hold your wheat. It is perhaps useless to say anything on corn, for few Kansas farmers have any corn to sell; large quantities of corn are being shipped into Kansas from Illinois and Iowa for feed; and while this condition obtains, the home market governs the price.

If the farmers of Kansas were thoroughly organized and sold all their wheat through the State association, how long do you think the trust and gamblers would continue to fix the price on Kansas wheat?

## Horticulture.

### Missouri Horticulturalists.

The forty-fourth annual meeting of the Missouri State Horticultural Society at St. Joseph, brought out, as usual, an able body of energetic and wide-awake people. Following is a report of the address of President U. F. Murray on THE POSSIBILITIES OF FRUIT GROWING IN MISSOURI.

He stated that for forty-four years the society had been in existence, and during the time had grown into a large and useful organization. He said that during that time fruit culture in Missouri had become a great industry. Then there was no such thing as commercial fruit growing in the State. Then there was only \$20,000,000 worth of fruit produced annually in the United States. Now Missouri alone produces \$10,000,000 to \$25,000,000 worth of fruit annually.

He said that it was possible in this State to raise \$1,200 worth of strawberries from a single acre of ground.

Land in Missouri is comparatively cheap and in Colorado the fruit men pay \$150 an acre for their land, pay \$500 per car to ship it East and yet make a profit of \$80 per acre per year on their land. How much more could be made here, in old Missouri?

He said that in 1830 there were only 32 nurseries in the United States. Now there are 4,478.

In the time since 1880 the production of fruit has increase fivefold while the price of fruit has nearly doubled. Mr. Murray holds that there can be no over production of fruit. The fruit belt is only a strip of 400 or 500 miles wide, extending across the United States. This must supply the remainder of the world. He urged the cultivation of the orchards in strong terms.

Mr. T. Lee Adams, of Kansas City, read an interesting paper on "SUMMER AND FALL BULBS."

Her main point was that in growing plants the foliage should be grown well. She dwelt particularly on the history of bulb culture as followed in Holland in the raising of tulips. The main bulbs planted are tulips, hyacinths, and crocus.

She would plant bulbs in October and take the covering of leaf mold or mulch off of them in March. As a soil for bulbs she recommended one of 1 part leaf mold, 1 part clean sand and 1 part well rotted manure.

She stated that in 1836 the Dutch became very enthusiastic in the raising of tulips, often paying as much as 3,000 florins, or £180 English money, for a single bulb. At this time there were also regular tulip marts in London.

### THE TOWN GARDEN.

R. A. Brown, of St. Joseph, made an address on "The Kitchen Garden." Mr. Brown is an attorney by profession, but is also one of the best posted men on gardening and intensive farming. That every one should have an asparagus bed and a strawberry bed. To grow asparagus successfully one must fertilize threefold what would seem necessary.

In raising strawberries in the city one should have new plants every year, as this method gave the best results. A patch of berries 40 by 80 feet in size would furnish enough berries for a common-sized family.

He would grow tomatoes on a trellis and keep them growing as high as possible, new clusters of fruit forming higher as the vines grow upward.

He would advocate plenty of grapes and a few peach and pear trees in the town garden. Mr. Brown states that he has kept hothouse roses out of doors all winter in this climate by properly covering them with mulch.

### THE MODEL ORCHARD.

A paper was read by Mrs. W. T. Flournoy, of Marionville, Mo., on "The Model Orchard and How to Produce It." The part of her paper that related to cultivation of orchards brought up a discussion. It is as follows:

"When continuous shallow cultivation is practiced without breaking up the lower strata by deeper plowing, the ground underneath the shallow cultivation often gets very hard, apparently making a good conductor for heat downward through its compact condition, while its perpendicular pores give egress to the heated moisture below.

With deeper plowing more horizontal air spaces are made, thus making a non-conductor for heat and checking the up-flow of moisture. We have been led to believe that a good plan to resist drouth is by deeper plowing or stirring, followed by rolling or dragging the ground down, and this followed by continuous shallow cultivation. When

the ground becomes thoroughly wet and packed again it is run tight together and may once more need deeper stirring. Deep plowing must necessarily do more damage to tree root system where trees are planted too closely. Plowing very deep near a tree and damaging roots must be avoided.

The discussion apparently settled the question of "cultivation or no cultivation" in favor of cultivation.

C. W. Murtfeldt, of Kirkwood, said that apple trees should not be planted too close. The trees should be 30 to 40 feet apart. Land for orchards is cheap in this section of the country.

In discussing the question of deep or shallow plowing, President Murray said: "Plow deep and don't be afraid of breaking the roots of the trees. I have always cultivated my orchards so and have not had a failure of apple crop in twenty years."

George T. Tippin, of Nichols, spoke indorsing what President Murray and Mrs. Flournoy had said. He said they struck the key-note. "Successful orchard growing depends on good, common sense, applied to conditions of soil and climate as they exist. Take for your examples those successes nearest to you.

"As to cultivation, I would say this year has shown us that we don't know much about orchard growing. The present year has shown the necessity of cultivation. Cultivation should be thorough and proper. The best orchard we packed this year was thoroughly cultivated with cultivators all during the summer. We should husband the moisture if we expect to succeed as apple growers."

Professor Smith, of Chillicothe wanted to know how to cultivate, whether with cultivator or disk harrow. He said that he found apples 50 per cent better where plowed with a disk harrow in the fall, and in the spring planted in corn.

The best fruit was on 6-year-old trees, where the land was plowed very deep during the summer.

"Would you break up with a breaking plow and keep on doing so?" President Murray said: "Yes."

Col. J. C. Evans said: "Yes, provided you keep up the cultivation every year." Cultivate every year is his watchword.

Col. D. A. Robnett, of Columbia, is an advocate of thorough cultivation right up to the trees, but says keep it up. Don't stop for one, two, or three years and then begin again; if you do the results will be detrimental.

Frank Holsinger, of Rosedale, Kans., is also an advocate of deep cultivation.

### DROUTHS.

Col. J. C. Evans, of Kansas City, Mo., read a paper on "Drouth of 1897, Freeze of 1899, and Drouth of 1901." He said in part:

"The result of the drouth of 1897 may be summed up in part as follows: The deepest rooted trees in the forest—the hickory—about the middle of August began to die and in some sections of the country dozens of trees could be seen at a look that were dead or dying, and a little later other trees began to go, and by the last of August the orchard trees showed that they, too, were dying, so that by the time winter set in, thousands of trees in both orchard and forest, in many sections of the country, were dead or dying. Small fruits were also damaged to the extent of cutting the crop nearly one-half for the next year, besides requiring a year or more to repair the damage. Orchards that were carrying a crop of fruit through this could not form fruit buds for the next year, and, of course, did not bear a crop in 1898, and this was perhaps the best for the owner, as it gave the trees a chance to rest and repair the damage.

I have in mind a section of country—we'll call it a few counties—where not enough rain has fallen since April 17 to more than lay the dust, and yet it has produced the largest and best crop of tree fruits for many years; but in this same section the water question has been a very serious one. Many have had to haul water from 3 to 10 miles for the last five months, and are glad to get in that way. One village of a few hundred people get all of their water for all purposes over 3 miles away. Neighborhoods have clubbed together and driven their live stock 15 to 20 miles away to streams of water. This may not seem very singular or peculiar to some, but I consider words too mild to express the real condition.

Springs that never failed before since the country was settled have not afforded a drop of water for months. Wild animals and birds have had to move nearer to the borders of streams in search of water, and in some cases families have been compelled to move to where they could get water."

"Fighting the Drouth," a paper by D. A. Robnett, of Columbia, Mo., was read by Prof. C. H. Dutcher, of Warrensburg. Mr. Robnett is a strong advocate of cultivation in dry weather as a means of combatting the drouth.

### SPRAYING.

The matter of "Spraying" received extended discussion. The ball was started by a paper by W. D. Maxwell, of St. Joseph. He regarded spraying as a necessity to secure a perfect crop, and preferred the dust spray to the liquid form. In the general discussion that followed the majority of the speakers favored the liquid spray. Mr. Murray, of Oregon, Mo., became facetious and said that he would not dare to use the dust spray unless he had a good, heavy life insurance policy, for he said to inhale the dust in spraying with a good, strong "dust" would mean certain death.

F. H. Speakmen, of Neosho, Mo., gave these formulas for a liquid spray that he used: Three pounds of bluestone to 50 gallons of water; and 4 pounds each of lime and bluestone, 1/2 pound Paris green, to 50 gallons of water.

Secretary Goodman said that he thought the liquid spray the best, but that he used the dust spray on his farm, as it was easier to handle.

### LEAF ROLLER STING.

Prof. J. M. Stedman, of the State Agricultural College, Columbia, Mo., discussed "Leaf Roller Sting in the Apple." He holds that the so-called sting in the apple is not due to a stinging insect, as has been so long supposed, but to the ordinary plum curculio, which works in an entirely different way in apples than in plums and peaches. The eggs are deposited beneath the peel and are there hatched, and when they do so cause a speck to appear on the surface of the apple. The speaker absolutely condemned the traps and appliances designed to catch moths, forest and orchard insects and pests, and said these appliances are worthless.

Secretary Goodman read the paper of William J. Murray of the Armour Company on "Cold Storage." It is held that the best time to put fruit in cold storage is just before maturity.

### FORESTRY.

Secretary Goodman read a paper on "City Forestry." He said, in part:

"First, the best trees are grown in the nursery from seeds, and there well cared for, headed at the proper height, and, where necessary, transplanted, once or twice or thrice before planting out in their permanent home; all trees are much more valuable when thus transplanted. Second, trees must be taken up with plenty of roots, about 1 foot in diameter for each inch the tree is in diameter at the crown of roots. Third, handle so that they will not be exposed to the air any more than absolutely necessary; cover all roots with wet straw or wet sacks as soon as dug. Do not bruise root or top. Fourth, prune so that there will always be some of the 1-year-old wood left on the tree; cut back tops so that it will compensate for the roots cut off. Fifth, in lawn planting always plant in clumps or groups. The beauties of the tree are much more prominent when broad patches of green grass intervene between the clumps of trees. It makes a setting for the trees, a framework for the picture. This is always a safe, sure, and satisfactory plan."

### OFFICERS ELECTED.

The following are the newly elected officers: President, D. A. Robnett, Columbia; first vice president, G. T. Tippin, Nichols; second vice-president, C. H. Dutcher, Warrensburg; third vice-president, C. W. Murtfeldt, St. Louis; treasurer, W. G. Gano, Parkville; secretary, L. A. Goodman, Kansas City.

### Winter Pruning of Trees.

JOSEPH MEHAN, IN PRACTICAL FARMER.

It has been my own practice to have a lot of pruning done in the winter season; in fact, the whole of the trees in the orchard and on the lawn are gone over at that season, and everything in that line is finished before the opening of spring. It is referred to here because of reading in some horticultural paper recently that it was bad practice to prune in winter, as it often started decay, etc. In a practice of over thirty years in the care of trees, I do not remember any instance at all of any tree showing signs of decay where it was pruned. The advice referred to, not to prune, is on a par with many other things seen in print. Someone starts an idea, others see it in print and follow it as gospel, and along it goes on its rounds. So far as ever seen trees may be pruned at any time after the

## I Can Sell Your Farm

or other real estate for cash, no matter where located. Send description and selling price and learn my wonderfully successful plan. **W. M. OSTRANDER**, North American Building, Philadelphia, Pa.

## APPLES.

Six varieties—good, hand-picked eastern winter stock. White and Yellow Seed Corn, red onions, and 16 varieties strawberry plants. Have some 100,000 well matured plants for spring setting. Get our list and prices; freight paid on apples. **J. M. Lancaster & Co., Beatrice, Neb.**

## SEED CORN.

Our Iowa grown Seed Corn is thoroughly well matured, tested, and of best quality for Southern planting. Our improved varieties yield 20 to 50 bu. per acre more than other sorts, under ordinary conditions—have yielded 215 bu. per acre by special culture. Choice seed corn \$1.00 per bu. and upwards.

SEED OATS. Sow some of the newer varieties this year. They are harder, more vigorous, and more productive. Iowa grown, new crop, tested seed at low prices. Large descriptive catalog of Seed Corn, Oats and other farm and garden seeds free, if you mention this paper. **IOWA SEED CO., DES MOINES, IOWA.**

## Hardy and Reliable SEEDS Northern Grown

### FOR THE FARM AND GARDEN.

We raise them ourselves in MINNESOTA from the best and most careful selected Seed Stock. Choice and Rare Kinds of

VEGETABLE AND FLOWER SEEDS. New and improved varieties of Seed Grain, Seed Potatoes, etc. Timothy, Clover, Bromus-Inermis, and other valuable Grass Seeds. Write for illustrated catalogue.

**FARMER SEED CO.,**  
15 4th St., FARBALUT, MINN.



We have been the original introducers of more varieties of squash than all our brother seed men combined. Here's a partial list: Hubbard, Marblehead, Victor, Warren Butman, Chestnut and Golden Bronze. Our annual catalogue of Vegetable and Flower Seed sent Free.

If you want the purest grass seed sold in the U. S. try ours. **J. J. GREGORY & SON,** Marblehead, Mass.

**GREGORY'S SEED CATALOGUE FOR 1902**

## Seed Corn.

**\$1.00 — \$1.25**

### Nebraska Grown.

White or Yellow Prize, large, medium early, hand picked, tipped, dry, and well-matured at \$1.25 per bu. Same corn not tipped, \$1 per bu. All sacked on cars. Catalogue free January 1st.

**GRISWOLD SEED CO.,**  
P. O. Box A. LINCOLN, NEB.

fall of the leaf. In many large nurseries, where thousands of trees have to be pruned annually, the work is usually started about New Years and is kept up all winter, when snow does not prevent, until the opening of spring. The only case where pruning may be delayed to advantage is in that of raspberries, blackberries, grapes, and similar fruits, and for the reason that these often grow late in the fall, failing to properly mature their wood. Some of this immature wood will be injured in winter, and as the pruning will have to be below this, it is better to wait till winter is over, to see just where the shoots are best cut. Gooseberries and currants, which ripen their wood early in summer, may be pruned at any time after the fall of the year, and are really the better for being done early. Those who have trees to prune should sharpen up their tools and get to work at it whenever the days are favorable.

Happiness is but another name for perfect health. Use Prickly Ash Bitters and be happy. It keeps the vital organs healthy and well regulated.

Honey for Kansas, Missouri, and Oklahoma.

Two cans, 120 pounds net, amber \$7.80, whitest (more from alfalfa bloom) \$9.00, comb honey in one pound sections, 10 to 13 cents. Also small cans, all sizes. See price list. Nothing but genuine bees' honey. Reference, Kansas Farmer Co. Address, Arkansas Valley Apiaries, Oliver Foster, Proprietor, Las Animas, Col.



**In the Dairy.**

Conducted by D. H. Otis, Professor of Dairy Husbandry, Kansas Experiment Station, Manhattan, Kans. to whom all correspondence with this department should be addressed.

**Enthusiastic Over the Short Courses.**

Mr. M. H. Matts, of Homewood, Kans. writes as follows: "I am willing to do all I can to advertise the short courses in dairying and agriculture, not only advertise them but persuade as many eligible persons as I can to attend them as I am confident there are many who are sadly in need of just such information and knowledge as they can obtain by attending. As for myself, I would not hesitate for one minute to take a four or six years course there if I was financially able to do so. Nothing would suit me better and I have expressed that opinion to others not a few times.

**Make the Cow Comfortable.**

ROSCOE WHITE.

A cow is a great deal like a person, she enjoys a good and comfortable place to eat and sleep as well as a man. Do you think that you would enjoy standing out on the south side of a barbed wire fence to eat your meals, when the wind is blowing at the rate of 40 or 50 miles an hour from the northwest, in the winter? No, I guess not. Can you expect the cow to make you money when served in that way? Then summing up all of this the cow must be at perfect ease and comfortably situated and have kind treatment in order to give good results.

**Pleased With the Cow Contest.**

D. W. Wilson, editor of the Elgin Dairy Report, writes as follows: "I congratulate you upon your idea of selecting cows as a means of interesting the farmers and holding them interested in the work of the college and experiment station. There is not enough of that particular "getting at" of the farmers in the work of the experimental stations and for that reason, although they are doing excellent work, it does not result in as much good to the common every day farmer as it might. This idea of yours strikes me so favorably that I wish to thank you in behalf of the farmers of Kansas for the idea. Don't get it patented and other States may improve upon it.

We are doing some field work in this State through the university in the

matter of determining right on the farms whether the best methods are pursued in the feeding and caring for cattle by determining what the cost of maintaining the dairy herds is, and what returns in milk and butter fat are. This is being done under the direction of the experiment station at Urbana by a young man who is very capable. So you see we are beginning to be up to date even in Illinois.

**Does Boss Pay for Her Grain?**

F. E. UHL.

The answer depends upon circumstances. It certainly pays to feed a cow giving a large yield of milk and testing well. Feeding may not cause the fresh cow to give much more milk for the time being, but may do so indirectly, in that she will hold to her yield longer if well cared for. Cows then, which are fresh or have calved during the fall, may generally be fed grain or meal to advantage. It certainly does not pay to feed the stripper for the purpose of increasing her milk yield. She may, however, need some grain to help her through the winter in good condition. The promising heifer may pay for her feed by better development. Then, too, it may pay to feed some cows at a loss for the present in order to hold them to a good yield until pasture comes again. Those who have wheat or other good pasture during the winter, should be liberal in feeding the cow when she is snow bound. When the yield is once lowered, it can not be brought back where it was, even though the same feed be continued. In deciding whether or not feeding grain pays one should take into consideration the maintenance of the cow's flesh as well as milk yield. Stock may exist through a winter, but not recover from poor treatment given for a year afterwards. Better to have fewer stock and take proper care of them than to stint a larger number.

**Frozen Milk.**

ED. H. WEBSTER.

The last few days have been tough times for the boys at the weigh-cans in our creameries and stations. No doubt many of them wished for the nice warm days of last July and August. There is nothing that so puts a man out of humor as to have to sink every can into a wash tub and thaw out from 3 to 5 inches of ice, but while this is inconvenient there is another side to this question of frozen milk which should appeal to the patrons. The man at the weigh-can can not spare the time that it would take to thoroughly thaw out every can and as a result as soon as the ice is melted enough to break up and dump out of the can it is weighed up—here the frozen milk plays hob with the tests.

Anyone can see that a can of milk

half ice dumped into the weigh-can is in a poor shape to sample. The ice is mostly made up of the value of the milk. From this one would think the test might be in the patrons favor but the facts may be the reverse—the lid of the can is usually frozen full of ice which holds much of the cream of the can—just compare the color of the ice from the bottom of the can with that from the lid. One is more like ordinary ice while the other has the rich yellow color of cream. If the milk weigher has time to thaw all of this completely down he may get a fair sample but in most cases this would require more time than one can possibly spend for this kind of work. Dip a sample out of this frozen milk—

**Brown Bessie.**

On November 28 we presented our readers with a short sketch and a cut of Brown Elsie 96595 and on December 5 we presented a sketch and abbreviated pedigree of Brown Elsie's Grandson, the young Jersey bull owned by the Kansas Agricultural College. This week we present our readers with a cut of Brown Bessie 74997, who has the reputation of being the champion butter cow at the World's Fair. In a ninety day test Brown Bessie produced 3,634 pounds of milk, (a daily average of over 40 pounds) which yielded 216.67 pounds of butter. Her highest record for one day was 3.48 pounds of butter and during four other days she exceeded the 3 pound mark. In a thirty day

HOUSTON WYETH, PRESIDENT; President Wyeth Hardware Co., and Vice-President National Bank of St. Joe.

J. A. WALKER, VICE-PRESIDENT AND MANAGER; of Walker Brothers, Marysville, Kans.

L. C. HAMILTON, TREASURER; Manager Artesian Ice & Cold Storage Company.

W. W. MARPLE, SUPERINTENDENT OF TERRITORY; formerly with the Beatrice Creamery Company.

**Blue Valley Creamery Company,**  
ST. JOSEPH, MISSOURI.



Pioneers of the "Farm Separator System."

WE WANT TO BUY YOUR CREAM.

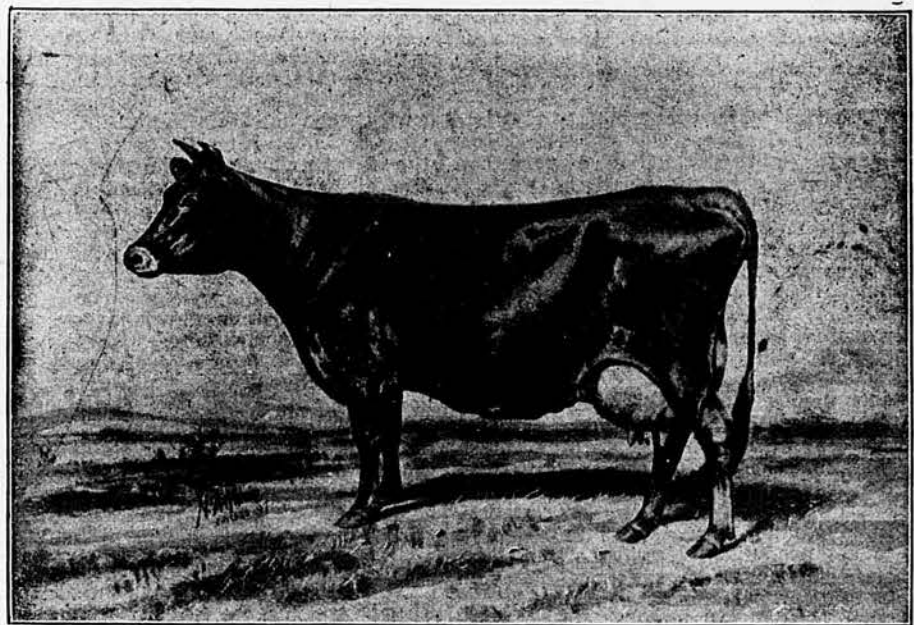
The plan on which we operate is entirely new, and our experience for the past year has proven that it is very far in advance of any plan or system ever before adopted. The most attractive features about this plan is its economy and in consequence the increased price paid to the man who milks. On this plan we are able to pay, at the present time,

**23 Cents a Pound for Butter Fat.**

It is just as easy and practical for you to ship your own cream as to have the middleman ship it for you; therefore, we invite correspondence with every man who milks that lives within 500 miles of St. Joe, Mo., and we know that it is to your interest to do so. Any further information concerning the system or the way to ship will be cheerfully given. All correspondence promptly answered. Look us up carefully. Have your banker look us up. We take pleasure in referring you to The National Bank of St. Joseph, The Merchants Bank, and The Tootle-Lemon Bank.

Write to us immediately and prepare to place your name on our list of patrons with hundreds of others who are daily testifying to the merits of the new system. Address

**BLUE VALLEY CREAMERY CO.**  
ST. JOSEPH, MISSOURI.  
Agents for the "Iowa" Dairy Separator.



BROWN BESSIE 74997.

what have you got? Some milk with the thin ice floating in it. It is well for the creamery man and patron to think about this as to who are getting their just dues.

Better not let the milk freeze, cover it with blankets while bringing it in and deliver it to the creamery in the right shape. Keep it from freezing at home and see to it that the hauler does not let it freeze on the way or else rest easy should your test be too low or too high, Mr. Patron and Mr. Creameryman.

To make cows pay, use Sharples Cream Separators. Book "Business Dairying" and Catalogue 237 free. West Chester, Pa.

test she produced 1,134.6 pounds of milk which made 72.23 pounds of butter.

Shortly after the World's Fair Brown Bessie died of acute congestion of the lungs. Fortunately she left behind her two sons, one owned by H. C. Taylor, Orfordville, Wis., and the other by Richardson Bros., Davenport, Iowa. It is to be hoped that these sons will produce offspring of capacity equal and possibly a little better than Brown Bessie. Brown Bessie is a great grand dam of Brown Elsie's grand son, which Kansas is proud to have at the head of her Jersey herd at the agricultural college.

The cuts of Brown Elsie and Brown

**A CARD.**

**PARIS SEPARATOR AWARDS.**

The De Laval Cream Separators received the **GRAND PRIZE** award at the Paris Exposition, in the name of "SOCIETE ANONYME SEPARATOR," which is the French translation of "AKTIEBOLAGET SEPARATOR," the Swedish name of the De Laval European organization, both names meaning "SHAREHOLDERS' SEPARATOR COMPANY, LIMITED."

The repeated misrepresentation of the VERMONT FARM MACHINE Co. (manufacturers of the so-called "U. S." Separator) in this regard, culminating with the malicious falsehood that no such award was made and that the DeLaval Company is guilty of "lying" in so claiming brings the matter to a point where common business self-respect demands that some radical action be taken.

We have, therefore, this day instructed counsel to at once take such legal steps as may be justified and proper in the circumstances against both the VERMONT FARM MACHINE Co., and, where practicable, such papers as may have given advertising publication to these false and libelous statements.

**THE DE LAVAL SEPARATOR CO.**

New York, December 17, 1901.

Bessie which have appeared on the dairy page of the Kansas Farmer show the type and conformation of good Jersey cattle and present a valuable and interesting study to the student of dairy problems.

Handling the Bull. H. B. THATCHER.

In handling a bull, the most important precaution is to keep your eye on him. People will generally do this with a strange bull, but when they get acquainted with him and he acts so very gentle they are apt to regard him as safe.

On account of a bull's disposition he should be ringed before he is a year old, in farming countries it is folly not to have rings in the bulls noses as the rings are the best bull conquerers known to modern agriculture.

If it pays to curry a \$25 horse, will not the same truth apply to your \$125 bull? Besides the generally acknowledged benefit of currying, the constant or daily handling of the bull tames him considerably.

Grange Department.

"For the good of our order, our country and mankind."

Conducted by E. W. Westgate, Master Kansas State Grange, Manhattan, Kans., to whom all correspondence for this department should be addressed. News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

Master.....Aaron Jones, South Bend, Ind. Lecturer.....N. J. Bachelder, Concord, N. H. Secretary.....John Trimble, 514 F St Washington D. C.

KANSAS STATE GRANGE.

Master.....E. W. Westgate, Manhattan. Lecturer.....A. P. Reardon, McLouth. Secretary.....Geo. Black, Olathe.

Report of the Lecturer of the National Grange.

Worthy Master and members of the National Grange: The report of your lecturer will contain, in a very concise form, a statement of the work of the year and brief suggestions upon the educational work of the organization.

FIELD MEETINGS.

The arrangement of a successful field meeting includes attention to many details in order to attract people outside the order whose membership is desirable.

press extensively used in advertising the meeting. An exhibition of farm products and machinery is frequently made an instructive adjunct of these gatherings where the meeting extends more than one day.

EDITORIAL WORK.

In pursuance of the editorial work we have issued 4 numbers of the National Grange Quarterly Bulletin, sending a copy free to each Pomona and subordinate grange in the country, and to a small number of paid subscribers.

Traveling expenses and per diem in lecture work.....\$375.93 Postage, printing and editorial expense..... 775.96

\$1,151.89

It may not be out of place in this connection to make brief recommendations along the line of lecture and editorial work suggested by our experience and observation.

PRINTED PROGRAMS.

The Pomona and subordinate lecturers should prepare and distribute printed programs for the year, thereby reducing the lecture work to a system, for system always brings better results than haphazard methods.

GET EVERYBODY TO WORK.

The important work of State, Pomona, and subordinate lecturers is executive rather than oratorical. The most successful lecturer is not necessarily the one that makes the best speech, but rather the one that has the greatest faculty of getting others to speak.

RITUAL WORK.

Ritual work when properly done is a great educational factor in the grange. Rituals are for use in memorizing the work and not to read from in grange ceremonies.

THE DE LAVAL COMPANY

acknowledge that they

Have Been Lying About Paris Separator Awards

One of their latest advertisements is headed

"More Lying as to Paris Separator Awards"

which is one of the most truthful statements they have made lately, as we believe the readers will acknowledge if they try to reconcile some of their statements in the advertisement referred to with some in their previous advertisements.

In the advertisement headed "More Lying as to Paris Separator Awards" they publish what purport to be three "official" statements, dated Stockholm, Sweden.

Two weeks ago they advertised as follows:

"At the Paris Exposition the De Laval machines received the Grand Prize, or highest award, \* \* \* being entered and receiving such award in the name of 'Societe Anonyme Separator,' which is the French translation of 'Separator Corporate Company,' the name of the De Laval European organization."

Notice by this advertisement they claimed "Societe Anonyme Separator" to be their European organization, thus acknowledging that no award was given to Aktiebolaget Separator.

But when we proved that "Societe Anonyme Separator" exhibited a Butter Radiator or Butter Extractor, and not a Cream Separator, they lose their tempers again and accuse us of "lying and misrepresentation" and advertise the three statements referred to above in their efforts to prove that the Aktiebolaget Separator did get an award at Paris and claim it as their European organization.

We call special attention to the dates of these statements, viz.: December 5, 1900; April 2, 1901, and April 17, 1901, then ask the reader to bear in mind that it was in the last of November, 1901, that they advertised that the award they claim was given to "Societe Anonyme Separator."

Being cornered on one claim, they abandon it and claim another; cornered again, they go back to their first abandoned claim. We recommend our "would-be competitors" to try once more.

An expert remarks that the De Laval Company will have to "eat hair" in order to make their statements hang together.

We still say that the official list of awards distributed at Paris did not contain an award to the De Laval Separator Company or the Aktiebolaget Separator.

To be continued in our next.

The United States Separator still leads the world. Today it has no equal.

VERMONT FARM MACHINE CO., - - Bellows Falls, Vt.

well as for the impression made upon candidates.

WRITE FOR THE PAPERS.

We desire to emphatically endorse the suggestion of our worthy National master in regard to contributions to the grange press. Many persons to-day are drawing comfortable salaries in some form of clerical or literary work from the training which they have received which commenced in writing news for the press.

PRACTICAL WORK OF THE GRANGE.

These suggestions are intensely practical because we believe in practical work. Before we can walk around the dome of the magnificent building or across the span of a wonderful bridge, someone must go down into the earth and lay the foundation of the structure, strong and deep and well.

If we would have a magnificent grange structure, elevating the mental and moral standard, bringing sunshine and happiness, to farmers' homes, shaping public sentiment along wholesome lines, influencing the legislation of the State and Nation and promoting the interests of every legitimate industry in the entire land, we will need to look well to the foundation which is the educational work.

Woman and the Grange.

Among the happiest speeches made at the reception given by the Governor of Maine to the officers and members of the National Grange, at Lewiston, was that by that eloquent sister in our order, Mrs. J. J. Woodman, of Michigan. She said:

Were it not for the fact that the great sisterhood is not represented on this platform I would not take your time. I feel it far from right, however, to go from here without speaking one word for that womanhood that has planted prosperity in our order.

The grange has been kept from the chilling frosts of adversity by woman. It was my good fortune to go up and down this grand old State of Maine last summer and talk to the people.

A short time since I stood before that marvelous tower at the Pan-American and admired its beauty. Those who saw its wondrous power will remember that the figure of a woman stood upon its highest pinnacle. I asked for the significance of this and was told that it was the tribute of Buffalo to the American womanhood.

Womanhood! Let us rear sons and daughters who will make this grand country still grander. Where the eagle builds her nest among these rugged hills there, also, can noble men and women be raised. Let us plant the foundation of noble womanhood and manhood, and the future of our country will be secure.

Advertisement for KNEELAND OMEGA Cream Separator, featuring an image of the machine and text describing its ease of operation and durability.

Advertisement for DAVIS CREAM SEPARATOR CO., featuring an image of a woman and text encouraging dairymen to buy their cream separator.







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Special Want Column.

"Wanted," "For Sale," "For Exchange," and small or special advertisements for short time will be inserted in this column, without display, for 10 cents per line, of seven words or less, per week. Initials of a number counted as one word. Cash with the order. It will pay. Try it!

CATTLE.

HEREFORDS FOR SALE—Five heifers and 8 young bulls, staked by Imp. True Britton. Address J. M. Foster & Co., Topeka, Kans.

FOR SALE CHEAP—Seven registered Galloway bulls, all of serviceable age, little thin in flesh but good individuals, are all sired by Prince of Clifton 11506. Dams of some of these are imported cows. Thos. Gribben, Hope, Kans.

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FOR SALE—Registered Shorthorns; five cows, two heifers, three heifer calves, three bull calves calved January and February, 1901, herd bull calved January, 1900. Catherine Anderson, Admix, 153 North 9th St., Salina, Kans.

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FOR SALE—One dark red, registered Shorthorn bull; a sure breeder. Brookover Bros., Eureka, Kans.

FOR SALE—3 pure Cruickshank-Shorthorn bulls. H. W. McAfee, Topeka Kans.

SHORTHORN CATTLE SALE—I will offer at public sale 1 1/2 miles south of Marysville, at 2 o'clock p. m., on Tuesday, October 15, 17 registered Shorthorns, 19 high grade Shorthorns, and 3 thoroughbred Jerseys. Lewis Scott, Marysville, Kans.

HORSES AND MULES.

FOR SALE OR TRADE—Two standard-bred race horses—very fast, sure money winners, perfectly sound and no blemishes. Want land, brood mares, blooded cattle, or town property. Address J. C. Cave, Edna, Kans.

PERCHERONS—For sale at a bargain. Three 1,800-pound mares—one aged, others 7 and 8 years old, one 3-year-old (Brilliant) stallion, one 10-year-old 2,100-pound stallion; all registered. Two high-grade fillies, 2 and 3 years old; all good ones, grey. Would take part pay in well-bred registered Shorthorn heifers or young cows. S. T. Marshall, Atlanta, Kans.

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FOR SALE—Four registered Percheron stallions of Brilliant blood. Ages are one 7 years old, two 3 years old, one yearling. Weights from 1,750 to 2,300 pounds. No heavier or better stallions can be found among the main breeders of America. Prices and description quoted upon application. C. Spohr, Rome, Kans.

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PROSPECT FARM—CLYDESDALE STALLIONS, SHORTHORN CATTLE and POLAND CHINA HOGS. Write for prices of finest animals in Kansas. H. W. McAfee, Topeka, Kansas.

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WE WILL GIVE the exclusive agency of our specialty to one canvassing agent in every town; up-to-date article and big profits. Daisy Mfg. Co., Seymour, Iowa.

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FOR SALE—Pure-bred Duroc-Jersey boars and gilts old enough for service. H. A. J. Coppins, El Dorado, Kans.

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FOR SALE—Three serviceable boars: Yearling boar, a grandson of Chief Tecumseh 2d, out of daughter of Hadley Jr.; also, May boar, grandson of Hadley Jr., out of granddaughter of One Price, second dam by World's Fair Hadley, thirteenth dam Oik Harlander Sow 11. Also March boar, grandson of Chief Tecumseh 2d, out of granddaughter of Look Me Over. Address Geo. W. Maffet, Lawrence, Kans.

FOR SALE—Berkshire boar, 2 years old, registered. Write W. H. S. Phillips, Carbondale, Kans.

FOR SALE—Berkshire boars and gilts. O. P. Updegraff, Topeka, Kans.

PIGS BRIGHT—Prices right. Duroc-Jerseys and Poland-Chinas, all sizes. Write D. Trot, Abilene, Kans.

PEDIGREED POLAND-CHINAS—\$5 each; registered Shorthorns cheap. Send for my Pig Booklet, FREE. M. C. Hemenway, Hope, Kans.

TEN FANCY BOAR PIGS—By M. B. P. out of prize-winning dams, for sale at one-half price, to make room for fall pigs. Jos. R. Young, Richards, Mo.

FARMS AND RANCHES.

FOR SALE OR TRADE—A nice home in Topeka, Kans., located on corner of 11th and Lime Street. Fifty foot front, fine shade trees in front and on south side, house of 7 rooms, nicely finished, closets, pantry, cellar, good well and cistern, brick walks in front. This property is convenient to the business center of the city, the Santa Fe shops, yards, and close to Electric Railway, etc. Price \$1,800. Incumbered for \$650. Will trade for an improved farm and pay off mortgage on house, or will trade equity for western land, cattle, sheep, or horses. What have you to offer? John G. Howard, Eskridge, Kans.

FOR SALE—Several 10-, 15-, and 20-acre tracts of land with good houses on West 6th and 10th Sts., Topeka, close in. Bargains on good terms. Better see these before they are sold. F. J. Brown, 17 Columbian Bldg., Topeka, Kans.

IF YOU want to buy a good farm, address J. F. Schump, Garden Plain, Kans.

160-ACRE IMPROVED FARM—In Marion County, Kansas, for sale or trade; a bargain. Full particulars by return mail. Address John Fox Jr., New Cambria, Kans.

SOUTH TEXAS IS RICH in her great crops of cotton, rice, sugar cane, oats, corn, and alfalfa. The soil and climate are especially adapted to the growing of these crops, and it is not uncommon to cut five crops of alfalfa a year. Cotton yields from one to two 500-pound bales per acre. Rice yields from 15 to 20 barrels per acre, which usually sells from \$3 to \$5 per barrel. Corn, oats, and sugar cane always a big crop. Unimproved rice land along canal sells for \$20 to \$25 per acre. Cotton and corn land sells for \$6 to \$12 per acre. These lands are convenient to railroads and good markets. Join the excursion early in January. Write for date and booklet about Rice Culture. John G. Howard, Land Dealer, Eskridge, Kans.

FOR SALE CHEAP—240-acre fruit and stock farm; a valuable orchard of 85 acres—mostly apples. For particulars, address John Pimm, Enon, Barber Co., Kans.

FREE A book of statistics, information, and 200 E. Kans. farm descriptions. Write G. E. Winders Realty Co., Ottawa, Kans.

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FARM LOANS—Low rate, best terms, 5 to 10 years with privilege to pay in full or in partial payments before due. Loans can be closed at once. Call on or write The Kansas Mutual Life Insurance Co., 701 Jackson Street, Topeka, Kans.

FARMS AND RANCHES.

FOR SALE—A splendid home in Topeka, Kans., located on West 8th St., 10 blocks west of Kansas Ave., and one-half block east of the Governor's mansion. Seventy-five feet front and improved with two good houses, as follows: One house of 7 rooms, all nicely finished in hard wood, closets, pantry, cellar, front and back porch, 100-barrel cistern, good well, the house is piped for gas, good barn 20x22, coal house, chicken house and yard, closet connected with sewer, brick walk, nice shade trees, nice yard. Also one new house of 7 rooms—full two story, two halls, closets, pantry, electric lights in every room, halls, pantry, bath room, cellar, gas for cooking and heating, hot and cold water, bath room, fine bat. tub, cistern, city water, all connected with sewer front and back, good walks. This property is on paved street and in one of the most desirable parts of the city for a home. Price reasonable. We also have a fine tract of land containing 12 1/2 acres, two miles from North Topeka. This is a fine tract for fruit growing or gardening purposes, has about 60 apple trees; no other improvements, nearly all in cultivation and rents for \$5 per acre. We might take a part or all of this property for a good stock farm at actual cash prices. John G. Howard, Eskridge, Kans.

MISCELLANEOUS.

FREE—To introduce our catalogues of buggies and harness, we will send Free, in each locality, one set fine harness. Send stamp for particulars. M. Kober & Son, Brownstown, Ind.

OYSTER SHELLS—Eighty cents per 100. Poultry and stock foods, and feed. Topeka Seed House, 306 Kansas Avenue, Topeka, Kans.

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WANTED—Cane and Kaffir-corn seed in car lots Mail samples and quote price. McBeth & Kinnison, Garden City, Kans.

WANTED—If you wish to buy or sell corn, oats, hay, cane seed, kaffir-corn, corn chop, or anything in the feed line, correspond with us. Western Grain & Storage Co., Wichita, Kans.

HIGHEST PRICE paid for cane seed, alfalfa, millet, kaffir-corn, and pop corn. Please send samples. Kansas City Grain & Seed Co., Kansas City, Mo.

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CHOICE ALFALFA SEED, price \$4.50 f. o. b. J. E. Good, Canada, Kansas.

ALFALFA SEED—None better than I have. Buy direct from a grower. Quantities to suit. Write for samples and prices. V. S. Jones, Syracuse, Kans.

WANTED—Alfalfa, millet, cane seed, kaffir-corn, timothee, and pop corn. If any to offer please correspond with us. Kansas Seed House, F. Barteldes & Co., Lawrence, Kans.

WOOL WANTED—We have just completed our New Woolen Mill in North Topeka and want at once 200,000 pounds of wool for which we will pay the market price. Write us if you have wool for sale. Western Woolen Mill Co., North Topeka, Kans.

BALMOLINE—Nature's Wonderful Healing Salve. Man or Beast. Druggists, 25 and 50 cents. Trial size 4 cents from B. H. De Huy, Ph. D., Abilene, Kans.

FOR SALE—Feed mills and scales. We have 2 No. 1 Blue Valley mills, one 600-pound platform scale, one family scale, and 15 Clover Leaf house scales, which we wish to close out cheap. Call on P. W. Griggs & Co., 208 West Sixth Street, Topeka, Kans.

When writing advertisers mention Kansas Farmer.

(P. O. Havana), July 12, 1901, one golden bay horse, 8 1/2 years old, collar marks; valued at \$40. Also one iron grey stallion, 8 years old; valued at \$20.

Week Ending December 19.

Greenwood County.

STEER—Taken up by J. H. Pegram, in Lane tp., November 30, 1901, one red steer, 8 years old, brockie face, white on belly, brush of tall white; valued at \$25.

Cherokee County—S. W. Swinney, Clerk.

STEER—Taken up by H. Stuckey, in Pleasant View tp., November 4, 1901, one dark red steer, 2 years old, underbit in right ear; valued at \$18.

Week Ending December 26.

Washington County—S. T. Yoder, Clerk.

MARE—Taken up by J. T. Morehead, in Highland tp. (P. O. Hollenberg), September 19, 1901, one black mare, weight 1,000 pounds, 4 years old, star on forehead, sweeney in left shoulder; valued at \$20.

Wabaunsee County—B. Buckli, Clerk.

STEER—Taken up by C. A. White, in Mission Creek tp. (P. O. Eskridge), November 23, 1901, one roan steer, 2 years old, branded 4 7 on left side and both ears sloped on under side. Also one roan steer, 1 year old, no brand, left ear underbit. Also one red steer, 1 year old, no brand, left ear underbit; valued at \$55.

COWS—Taken up by E. J. Dailey, in Mission Creek tp. (P. O. Eskridge), November 23, 1901, one red cow, dehorned, right ear cropped. Also one brindle (white face) cow, dehorned, right ear cropped; total value, \$40.

HEIFER—Taken up by L. T. Rice, in Mill tp. (P. O. Halifax), November 23, 1901, one red heifer, 1 year old, no marks or brands; valued at \$15.

Sumner County—W. E. Wood, Clerk.

COIT—Taken up by J. B. Randall, in Avon tp. (P. O. Dalton), December 4, 1901, one pony colt, color mostly white with large bay spots on body, not branded; valued at \$15.

MARE—Taken up by Frank Manning, in Caldwell tp., one bay mare, 1,100 pounds, 7 years old, shod in front, white hind feet, star in forehead, some harness marks, small scar on right knee. Chase County—W. A. Waddell, Clerk.

STEER—Taken up by F. W. Jeffrey, in Diamond Creek tp. (P. O. Elmdale), November 25, 1901, one red and white steer, 1 year old, no brands; valued at \$10.

Cherokee County—S. W. Swinney, Clerk.

MARE—Taken up by Walter Allen, in Mineral tp., November 30, 1901, one bay mare, 14 1/2 hands high, 3 white feet, star in forehead, black mane and tail, had saddle on, branded H. F. on left thigh; valued at \$20.

Elk County—G. J. Sharp, Clerk.

CATTLE—Taken up by A. N. Webster, in Painter Hood tp., November 12, 1901, one black steer, short yearling, white face, crop off left ear; valued at \$12.50. Also one red bull, short yearling, white face, crop off right ear; valued at \$12.50.

Chautauqua County—C. C. Robinson, Clerk.

STEER—Taken up by S. Stroud, in Washington tp. (P. O. Nlotaze), November 6, 1901, one red and white spotted steer, 2 years old; valued at \$20.

STEER—Taken up by David Chilcote, in Hendricks tp., November 28, 1901, one red Texas steer, 4 years old, branded A N on right hip, crop and underbit off right ear and underslope on left ear; valued at \$20.

Bourbon County—Lydia Barton, Clerk.

MARE—Taken up by G. H. Toyton, 2 1/2 miles west of Fulton, Bourbon County, Kans., December 2, 1901, one bright bay mare, with white hind feet, white spot on face, brown legs, dark mane and tail, about 4 years old, weight 1,000 pounds; valued at \$20.

Ford County—S. T. Reynolds, Clerk.

HEIFER—Taken up by S. R. Bright, in Dodge tp. (P. O. Dodge City), one red heifer, 2 years old, branded + and F on left hip; valued at \$17.

Lyon County—H. E. Peach, Clerk.

STEER—Taken up by L. R. Wright, in Emporia tp., November 18, 1901, one red and white spotted steer, 2 years old, branded N° on left hip.

The Stray List.

Week Ending December 12.

Lyon County—H. E. Peach, Clerk.

HEIFER—Taken up by John J. Bees, in Pike tp., 7 1/2 miles southwest of Emporia, one dark red heifer, 2 years old, branded on right side, right ear split—with the end of the lower half either cut or frozen off.

Montgomery County—D. S. James, Clerk.

STEER—Taken up by Geo. Ikard, in Rutland tp.



### No Time to Lose

You cannot afford to disregard the warnings of a weak and diseased heart and put off taking the prescription of the world's greatest authority on heart and nervous disorders—

### Dr. Miles' Heart Cure.

If your heart palpitates, flutters, or you are short of breath, have smothering spells, pain in left side, shoulder or arm, you have heart trouble and are liable to drop dead any moment.

Major J. W. Woodcock, one of the best known oil operators in the country dropped dead from heart disease recently, at his home in Portland, Ind., while mowing his lawn.—The Press.

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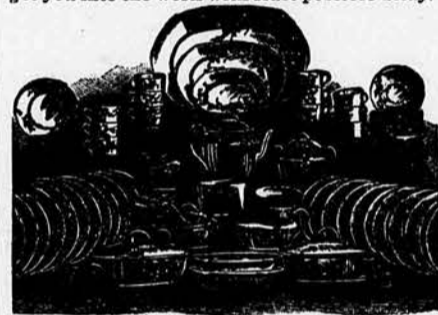
Of course they will. What could they say that would give them an excuse? They cannot say that our Baking Powder is not the best in the world. They cannot say that you are not giving them the amount for their money that anybody else gives. No, certainly not!

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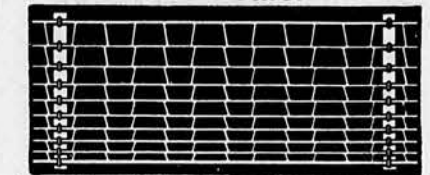
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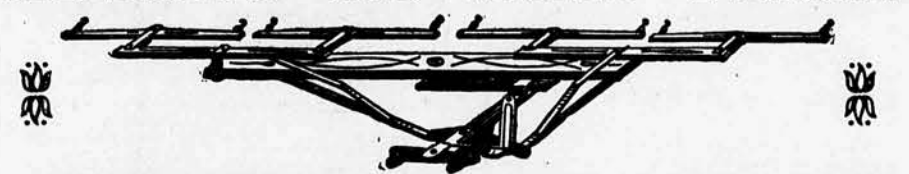


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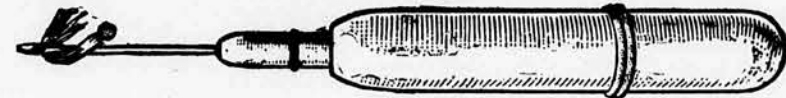


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