VOL. XXXIX
NO. 45

TOPEKA, KANSAS, THURSDAY, NOVEMBER 7, 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
DUROC-JERSEYS. J. U. HOWE, Wichita, Kans. Farm 2 miles west of city on Maple Avenue.

FAIRVIEW HERD DUROC-JERSEYS
Has 80 pigs of March, April, and May, 1901, farrow for this season's trade at reasonable prices.
J. B. DAVIS,————Fairview, Kansas.

DUROC-JERSEY SWINE—REGISTERED
Write for prices on what you want; 100 to .....select from.....
NEWTON BROTHERS, Whiting, Kans.

STANDARD HERD OF
Registered Duroc-Jerseys
PETER BLOCHER, Richland, Shawnee Co., Kans.
Herd headed by Big Joe 7363, and others. Write for prices on what you want. S. C. B. Leghorns.

100 Duroc-Jersey Pigs.
For Sale—100 March and April pigs from the Rock dale Herd of Registered Duroc-Jersey Swine. The get of 8 herd boars. Prices right. Address
J. F. CHANDLER, Frankfort, Kansas.

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.

MOUND VALLEY HERD OF POLAND-CHINAS
Has some very fine spring pigs of either sex for sale at famine prices. Give us an order and we will surprise you as to prices and individuals. Most popular blood represented. Everything guaranteed as represented.
W. P. WIMMER & SON, Mound Valley, Kans

POLAND-CHINAS. 90 good spring pigs; only a few fall gilts bred but they are choice. Write for one. Don't delay.
DIETRICH & SPAULDING, Richmond, Kansas.

RIVERSIDE HERD OF POLAND-CHINA HOGS.
80 head spring farrow, both sexes, fancy bred, prices reasonable. Also Commodore Dewey 46187, the prize-winner of southern Kans. Write for prices on this noted show hog. M. O'Brien, (Riverside), Liberty, Kas

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.

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. For Sale—Thirty October and November gilts and 15 boars; also 100 spring pigs, sired by Miles Look Me Over 18879. Prices right. Inspection and correspondence invited.

POLAND-CHINA SWINE.

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. Tec. Address F. P. MAGUIRE, Haven, Reno County, Kansas.

Kramer's Poland-Chinas.
For Sale: Forty March boars and gilts, sired by Little Mack 14992 (the sire of Knox All Wilkes). Will now sell this grand herd boar, a tried and satisfactory sire. Address
D. A. KRAMER, Washington, Kas

..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.

THOROUGHBRED
POLAND-CHINA HOGS.
I have for sale a few October boars and gilts, 4 bred sows, and 70 winter and spring pigs, good head and ears, large-boned. Come and see them, or write me.
JOHN BOLLIN,
Kickapoo, Leavenworth Co., Kans.
(Express Office, Leavenworth.)

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 25513, 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 Winfield, 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, Shropshires by J. C. Robison and Snyder Bros.

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 28441, Black Joe 28608, 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

BERKSHIRES A Specialty
GEO. S. PRINE, Oskaloosa, Iowa.
For sale, 180 head of the best blood known, including Prine's famous Noras and other popular strains. Foundation stock supplied to breeders.

LIVE STOCK ARTIST.
H. L. RITCHIE, 504 N. Y. Life Bldg., Kansas City, Mo.
Sketching, and photographing live stock a specialty. Write for particulars.

When writing to advertisers, mention Kansas Farmer.

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, Green 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.

E. S. COWEE, Burlingame, Kans., R. R. 2, Breeder of
PURE-BRED HEREFORD CATTLE, and DUROC-JERSEY SWINE.
Kids' Duke 96637 at head of herd. Young bulls and heifers for sale.

Registered Herefords
Of either sex, at private sale. I also have 140 ¾ to ⅞ high-grades at private sale.
ALBERT DILLON, Hope, Kansas

ALFALFA MEADOW STOCK FARM.
1,300 acres. Pure-bred stock only. Herefords, Poland-Chinas, Light Brahmas, and Belgian hares. Stock of all kinds for sale. Pedigreed hares, $2.
O. B. WHITAKER, Proprietor, Shady Bend, Kans.

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.

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 4582. Pure-bred and grades for sale. Also prize-winning Light Brahmas.

Registered Herefords.
THOS. EVANS, BREEDER,
Hartford, Lyon County, Kansas.
Special Offerings: For Sale—One imported 4-year-old bull, 10 yearling bulls, 9 bull calves, 16 yearling heifers, and 12 heifer calves.

MT. PLEASANT HERD OF SHORTHORNS.
Herd headed by Acomb Duke 18th 142177. Herd composed of Young Marys, Galateas, 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 Baron 121327.
Herd Boars, Black U. S. 2d 25582 S, and Missouri's Best On Earth 19836 S.
Representative Stock For Sale.
Address ANDREW PRINGLE,
Wabaunsee County. ESKRIDGE, KANSAS.

CATTLE.

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

Rock Hill Shorthorns and ..Saddle Horses..
Bulls in service, Sempstress Valentine 157069, and Mayor 129223. 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

Hillside Stock and Poultry Farm
Extra Fine, Large, Pure-Bred
M. B. Turkeys, Embden and Toulouse Geese, Pekin Ducks, White Guineas, and 6 kinds of fancy chickens for sale.
Also Yorkshire Pigs, Cotswold Sheep, and Angora Goats
Send stamp for circular. A. A. RIEFF,
Box C.—289. Mankato, Minnesota.

H. N. HOLDEMAN,
GIRARD, CRAWFORD CO., KANS., Breeder of
PERCHERON HORSES, and HOLSTEIN FRIESIAN CATTLE
Representing Josephine, Mechthilde, and Parthenea families. Poland-China hogs. Son of Missouri's Black Chief at head of herd. B. P. R., and B. L. H. chickens. Eggs in season, always guaranteed as represented.

...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, Allen Co., Kans., and address Thos. J. Anderson, Manager, there; or
ANDERSON & FINDLAY, Prop's, Lake Forest, Ill.

CLOVER CLIFF FARM.
REGISTERED GALLOWAY CATTLE
Also German Coach, Saddle, and trotting-bred horses. World's Fair prize Oldenburg Coach stallion Habbo, and the saddle stallion Rosewood, a 16-hand 1,100-pound son of Montrose in service. Visitors always welcome.
Address BLACKSHERE BROTHERS,
Elmdale, Chase County, Kansas.

East Lynn Herefords.
Special Offering: Eleven cows and heifers, from 8 months to 8 years old. Cows bred to Java of East Lynn; all regular breeders and registered; also 10 registered bulls, from 8 to 20 months old. These bulls are large and bred right. If you want a bargain, write me or come and see them.
WILL H. RHODES, Tampa, Marion Co., Kans.

THE GEO. H. ADAMS
HEREFORDS
AT LINWOOD, KANS.
Yearling Bulls and Heifers for sale, sired by Orpheus 71100, and Ashton Boy 52058, and out of choice imported, and home-bred cows. Address all correspondence to GEORGE F. MORGAN,
General Manager, Linwood, Kansas.

125
RAVENSWOOD - SHORTHORNS
O. 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.

CATTLE.

D. P. NORTON'S SHORTHORNS Dunlap, Morris Co., Kans. | Breeder of Pure Bred **SHORTHORN CATTLE**
Herd Bull, Imported British Lion 133692
Young stock for sale.

O. F. NELSON, Hiawatha, Kansas,
Breeder of REGISTERED
Hereford Cattle.
Herd headed by Dandy Dolan 102328 full brother to famous Dandy Rex.

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.

Silver Creek Shorthorns.

The Scotch bull, Gwendoline's Prince 130913, in service. Also the imported Scotch Missie bull, Aylesbury Duke. 100 head of the best Scotch, Bates, and American families. High class Duroc-Jersey swine for sale.
J. F. STODDER, Burden, Cowley Co., Kans.

Remember the three days' Combination Sale at Winfield, 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, Shropshires 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, 125698, a pure Cruickshank, assisted by Sharen Lavender 143002.
FOR SALE JUST NOW—**16 BULLS** of serviceable age, and **12 Bull Calves.** Farm is 1½ miles from town. Can ship on Mo. 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.

PALO DURO STOCK FARM
Imported and American Bred
SCOTCH SHORTHORN CATTLE, AND
...REGISTERED PERCHERON HORSES.
The Property of
HANNA & CO., Howard, Kansas.

Bulls in Service: IMP. COLLYNIE 135022, IMP. MARINER 135024, AND IMP. LORD COWSLIP.

HERD is rich in the best Cruickshank blood and contains 10 females imported direct from Collynie and Uppermill. **For Sale**—10 bulls—herd headers—of choicest Scotch and Cruickshank breeding. No females for sale at present.

Registered Percherons (Brilliants) in Service.
DIRECT 18839 (by Bendago by Brilliant, dam Fenelo by Fenelon by Brilliant.) Bendago's dam the famous prize-winner Julia by Le Ferte
FOR SALE—Three 2-year-old stallions by Direct

HORSES AND MULES.

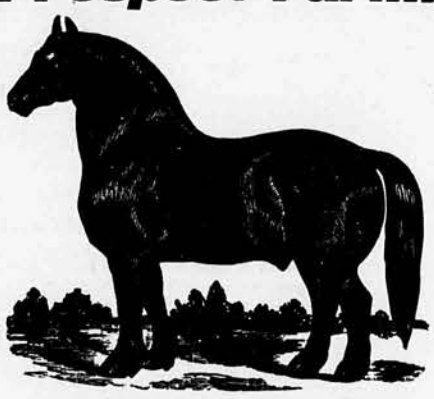
PERCHERON HORSES, and ABERDEEN-ANGUS CATTLE.
GARRETT HURST, Breeder, ZYBA, SUMNER COUNTY, KANSAS. Young stock for sale of either sex. All registered.

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 consistant with quality. Address, or come and see at
Wakefield, Clay County, Kansas.

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.

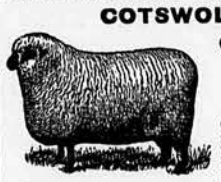


H. W. McAFEE, Topeka, Kansas,
Breeder of
OLYDESDALE HORSES, AND SHORTHORN CATTLE.
For Sale—25 Clydesdales, including 3 registered stallions of serviceable age, and 13 mares.
Inspection and correspondence invited.

SHEEP.

CHEVIOT SHEEP, AND POLLED DURHAM CATTLE.
Some fine rams for sale. The Cheviots are rustlers smooth, clean face, allowing clear vision to approaching danger. Write for prices and circulars.
A. E. Burleigh, Knox City, Knox Co., Mo.

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.

LIVE STOCK AUCTIONEERS.

CAREY M. JONES,
Live Stock Auctioneer,
Davenport, Iowa. Have an extended acquaintance among stock breeders. Terms reasonable. Write before claiming date. Office, Hotel Downs.

R. E. EDMONSON, late of Lexington, Ky., and Tattersall's (of Chicago, limited), now located at 208 Sheidley Building, Kansas City, Mo., offers his services as Live Stock Auctioneer. All the Herd and Stud Books. Wire before fixing dates.

R. L. Harriman,
Live Stock Auctioneer,
Bunceton, Mo.
SALES made everywhere. Thoroughly posted and up-to-date on breeding quality and values. Have a large acquaintance among and am selling for the best breeders in the country. Terms low. Write for dates.

LIVE-STOCK AUCTIONEER
Col. J. N. HARSHBERGER
Lawrence, Kans.
Special attention given to selling all kinds of pedigreed stock; also large sales of graded stock. Terms reasonable. Correspondence solicited. Mention Kansas Farmer.

James W. Sparks,
Live Stock Auctioneer
Marshall, Mo.

Sales Made Anywhere
Have been and am now booked for the best sales of high-class stock held in America. Thoroughly posted on pedigrees and individual merit. Large acquaintance among the leading stock-breeders of America. Terms reasonable. Write me before claiming your date.

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.

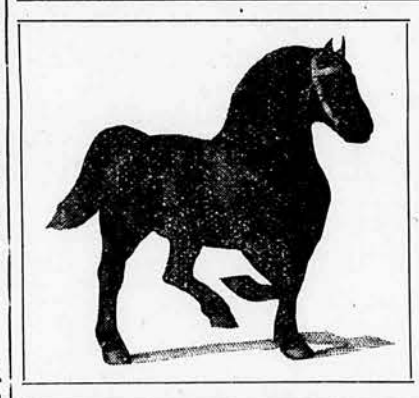
German Coach, Percheron, and Belgium Horses.
OLTMANNS BROS., Importers and Breeders, WATSEKA, ILLINOIS.
Three Importations in 1901. 100 Stallions For Sale.
No other firm enjoys such buying facilities: the senior member being a resident of Germany is personally acquainted with the best breeders in France, 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 2 years. **2 Mammoth Jacks.**
Remember the three days' Combination Sale at Winfield, 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, Shropshires by J. C. Robison and Snyder Bros.



America's Leading Horse Importers
At the Pan-American Exposition won a great victory for the Percheron breed and for themselves.
In competition with 30 prize-winners of all known draft breeds one of their Percherons won the **GRAND SWEEPSTAKES.**
In the stallion classes and in competition with the largest show ring of French Coachers and Percherons ever exhibited at one time on this continent their stallions won **EVERY FIRST PRIZE** given by the Pan-American Exposition.
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 Winfield, 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, Shropshires by J. C. Robison and Snyder Bros.

...IDLEWILD HERD OF...
Shorthorn Cattle.
Owned by W. P. HARNED, Vermont, Mo.

200 HEAD. | NO BETTER BREEDING FEW BETTER CATTLE
Cruickshank's Booth Lancaster, and Double Marys represented, with preponderance of Cruickshanks.
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 Barmpton. 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.

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

FOR SALE.
1,000 HEAD OF GRADE HEREFORDS
600 Cows and Heifers, 300 Calves,
100 Yearling Steers, 25 Registered Hereford Bulls
At Garden City, Kansas,
For particulars, address SCOTT & MARCH, Belton, Missouri.

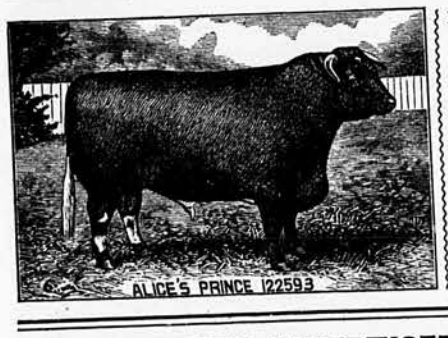
LAMPLIGHTER 51834.
Gudgell & Simpson,
Independence, Mo.,
..BREEDERS AND IMPORTERS OF..
Herefords
One of the Oldest and Largest Herds in America.
ANXIETY 4TH Blood and Type Prevail
Both Sexes, in Large or Small Lots, Always For Sale

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.

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

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 Gallaha- had out of 11th Linwood Golden Drop, Lord Mayor heifers bred to Laird of Linwood for sale. Also breed Shetland ponies. Inspection invited. Correspondence solicited. A few young bulls sired by Lord Mayor for sale.
Address T. P. BABST, Prop., Dover, Shawnee Co., Kans

TEBO LAWN HERD SHORTHORNS.



ALICE'S PRINCE 122593

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 Cruickshank 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. Address all correspondence to manager.

E. M. Williams, Manager. G. M. CASEY, Owner, Shawnee Mound, Henry Co., Mo

WHEN WRITING ADVERTISERS MENTION KANSAS FARMER.

Agricultural Matters.

Many persons have seen the sign "Pv" on grain elevators. This means that the ownership is that of the company of which Mr. F. H. Peavey, of Minneapolis, Minnesota, is the head. For the information it contains and to give readers of the KANSAS FARMER an insight into the views of the man who controls a larger part of the grain trade than any other individual, we present in this issue the paper read by Mr. Peavey before the last annual meeting of the Grain Dealers' National Association. It is interesting reading:

Historical Review of the Grain Trade of the Northwest.

F. H. PEAVEY, OF MINNEAPOLIS, AT THE ANNUAL MEETING OF THE GRAIN DEALERS' NATIONAL ASSOCIATION AT DES MOINES, IOWA, ON OCTOBER 3, 1901.

Ladies and Gentlemen: I esteem it a pleasure and a privilege to meet with you here to-day. I am especially pleased that our meeting should be in the good old State of Iowa—the State to which I immigrated from Maine away back in 1867, locating then in the northwest corner of the State at Sioux City which at that time was 100 miles beyond a railroad. The journey from Chicago to Sioux City required three days and three nights. There is, therefore, a very large, warm spot in my heart for everything that pertains to the interests of this great and glorious State—and there is no greater State in this Union of ours.

When I travel, as I frequently do through the northwest counties, I always enjoy sitting in the rear car of the train and reminiscing, going back to the old days when some of those counties were first settled—counties that are now large in population and settled by the best class of people, who have become wealthy and influential in the affairs of the State and the Nation.

I was sidetracked in Sioux City for eighteen years; thence going to my present home in Minneapolis.

The subject on which I have been asked to talk—"The Growth of the Grain Trade of the Northwest"—gives me a great scope, and its complete treatment would require a large volume, as few people even in the grain trade itself have a realizing sense of the enormous growth of the grain business in this country during the past decade.

I will give you briefly my observations and experiences

COVERING A PERIOD OF THIRTY YEARS,

when one firm that I recall started in a feed store with less than a carload of assorted grain, and to-day this same firm, which has never changed its name, controls and practically owns elevators scattered throughout the country of an aggregate storage capacity of 38,000,000 bushels.

I first chanced to think how wheat was handled in Sioux City, Iowa, in 1867, (that section which now boasts of its magnificent corn crop and has its corn palaces, was supposed to be beyond the corn belt at the time I mention). In those days the aggregate wheat receipts were small, although the entire country to the West was tributary. Farmers delivered the grain in sacks and the grain merchant used his back to convey the wheat to one corner of the warehouse; later it was resacked and carted to a Missouri River steamboat and shipped to Omaha, then the nearest railroad point.

The small volume of business uncertainty as to time of delivery; the necessity of using muscle in place of machinery; the lack of being able to hedge, all contributed to force the merchant to buy on a very wide margin, or to gamble that wheat would advance in price. The large majority of those who pursued the latter course died poor or are to-day without money or influence.

With the advent of the railroad came

PARTITIONED WAREHOUSES,

and those among you old in the business will recall how we fought for hill or knoll locations high enough to spout to cars without rehandling. Later came the balloon elevator driven by one blind horse, with a fanning mill in the basement. Some of you will remember alternating between the mill and the horse, using the same stick for both.

What are now known as

LINE ELEVATOR COMPANIES

had their origin in the early '70s, and one of the first was located on the Dakota Southern Railroad (from Sioux City to Yankton, a distance of 65 miles, one of the first roads to invade Dakota), now known as a branch of the C., M. & St. P. Ry.

With the advent of the St. Paul & Pacific R. R. (now known as the Great Northern), and the Northern Pacific, and the tremendous immigration following, the line elevator man became a necessity. Material was carried miles in advance of the railroad, and at heavy expense elevators were completed by the time the tracks reached there. Business was commenced with no banking facilities, and in many cases with no other building in sight; wheat receipts were heavy; steam power was used; currency was shipped from Minneapolis to the nearest express point, and then sent by special messenger to the side track elevator man, whose life was lonely and whose pistol was ready to protect the money and property in his charge.

About the same period the St. Paul & Sioux City R. R. (now known as the Omaha), was completed and established an elevator line of its own, all charges being included in the freight, thus preventing competition. Their houses would handle 6,000 to 8,000 bushels of wheat per day, and were operated by steam with two unloading places. I have known farmers at Sibley (and I remember when the first man settled in Osceola County), and later at Luverne, Minn., to wait twenty-four hours and even longer to be unloaded. A line would be formed, horses or oxen unhitched and farmers would attend to their own wants; about once an hour or so all those in line would return with their horses, hitch and draw up, and this process would be continued until each team arrived at the elevator and was unloaded.

This method of handling elevators did not prove successful to the railroad company, who sold or leased them to other parties, and confined themselves to their legitimate business of transportation.

To-day through the agricultural districts

THE GRAIN BUYER

is usually located in advance of the railway agent, his elevator being completed before the station house is ready; as the country becomes more densely populated, new towns spring up and new side tracks are put in, and hence we have a steady increase in country elevators, and in most cases the new houses are built of cribbing and operated by gasoline power. Through the older States the houses are owned by the independent buyer; in the Northwest the line elevator men predominate.

While the increase in the number of

I Will Cure You of
Rheumatism.
No pay until you know it.

After 2,000 experiments, I have learned how to cure Rheumatism. Not to turn bony joints into flesh again; that is impossible. But I can cure the disease always, at any stage, and forever.

I ask for no money. Simply write me a postal and I will send you an order on your nearest druggist for six bottles of Dr. Shoop's Rheumatic Cure, for every druggist keeps it. Use it for a month, and if it does what I claim pay your druggist, $5.50 for it. If it doesn't I will pay him myself.

I have no samples. Any medicine that can affect Rheumatism with but a few doses must be drugged to the verge of danger. I use no such drugs. It is folly to take them. You must get the disease out of the blood.

My remedy does that, even in the most difficult, obstinate cases. No matter how impossible this seems to you, I know it and I take the risk. I have cured tens of thousands of cases in this way, and my records show that 39 out of 40 who get those six bottles pay, and pay gladly. I have learned that people in general are honest with a physician who cures them. That is all I ask. If I fail I don't expect a penny from you.

Simply write me a postal card or letter. Let me send you an order for the medicine. Take it for a month, for it won't harm you anyway. If it cures, pay $5.50. I leave that entirely to you. I will mail you a book that tells how I do it. Address Dr. Shoop, Box 529, Racine, Wis.

Mild cases, not chronic, are often cured by one or two bottles. At all druggists.

TO CURE A COLD IN ONE DAY
Take Laxative Bromo-Quinine Tablets. All druggists refund the money if it fails to cure. E. W. Grove's signature is on each box. 25 cents.

KANSAS WHEAT FIELDS.

FROM THE NORTHWESTERN MILLER.

Ascertaining that the efficient secretary of the Kansas State Board of Agriculture, Mr. Coburn, intended to offer a small prize in money for the best photograph of a Kansas wheat field submitted to him, the Northwestern Miller asked permission to co-operate with him in the project, and to offer through Mr. Coburn, four prizes for the best views offered in the competition. The proposition was promptly and courteously accepted. In due time some 35 pictures were submitted and from the lot, Mr. Coburn made his selection and awarded the prizes relying largely, he states, upon the assistance and experience of Prof. E. B Cowgill, editor of the Kansas Farmer. The result of the competition is shown on the title page of this issue. (Reproduced above.) The first prize, a view in Saline county, was obtained by Mr. J. A. Ward, of Salina. The second was awarded to Mr. J. H. Robison, of Topeka, for his picture of a field in Sumner county. A photograph by Miss Emma Harvey, of Council Grove, showing a harvest scene in Morris county, earned third place, while Mr. W. C. Elwood, of Troy, secured prize number four for his view in Doniphan county. Altogether these photographs make an attractive group and give a fair idea of the magnificent wheat crop with which Kansas has been blessed this year. The thanks of the Northwestern Miller are hereby tendered to Mr. Coburn and Professor Cowgill for their kindly interest and assistance in this matter.

country elevators has been very rapid, the growth of

THE TERMINAL ELEVATOR

is still more marvelous. Terminal elevators are a necessity to transportation and commerce; they are the reservoirs which carry the product of the country until the grain is wanted for home or foreign consumption. It is impossible for the consumer to take the grain as fast as the producer rushes it to market, especially in the fall, and if it were not for the terminal elevators, backed by large capital and credit, cereal prices would be very greatly depressed. The necessity for the terminal elevators is most apparent to all thinking men. Large terminals are now contemplated, or are under construction, in New York, Boston, and New Orleans, in the United States; and in Quebec, Montreal, and Port Arthur, in the Dominion of Canada. When terminal elevators were first constructed they did not run over 300,000 to 500,000 bushels' capacity. One firm tore down an elevator the other day in Minneapolis that cost $60,000; it didn't pay to run it, for it costs but little more to operate a 3,000,000-bushel plant. Those first terminal elevators were built of wood, with all the bins about 20 feet above the main floor, and all belts running perpendicularly; the houses cost about 30 cents per bushel capacity according to the kind and amount of machinery used. It was soon discovered that annexes could be utilized and they were constructed of cribbing with bins running to within a few feet of the ground. These annexes were used for storage purposes alone; bins were flat bottomed and were loaded and unloaded by conveyors from the working house; at first the old spiral screw conveyor was used; later the rubber belt, at first concave, but now perfectly flat. I think the longest single elevator belt in sue is in one of the houses in Minneapolis—1,200 feet long. We

Stops the Cough and Works off the Cold.

Laxative Bromo-Quinine Tablets cure a cold in one day. No Cure, No Pay. Price 25 cents

adopted the horizontal belt system after I had personally investigated its advantages in Liverpool and London. The driving belt in all modern elevators has been superseded by the rope.

You will pardon me for being

SOMEWHAT PERSONAL,

but I have always aimed to keep abreast of elevator improvements, and ten years ago my firm became interested in the building of a system of 3 elevators in West Superior, Wis., of a total storage capacity of 5,000,000 bushels. The working house of 1,000,000 bushels' capacity was located on the dock and the other two houses, running lengthwise, were connected by steel galleries, the 3 houses being placed 450 feet apart. We had previously lost heavily through fire by the use of wooden galleries, and were at the mercy of the insurance companies—rates having become oppressive and in addition there was not enough insurance in the country to go around when wheat was high priced, and with the transfer rates cut from 1¼ cents to ½ cent per bushel it became imperative to adopt such improvement as would reduce the rates of insurance on grain. Mr. James J. Hill built in Buffalo the first steel elevator, and it proved a success; he later built one in West Superior. Minneapolis has 2 and Chicago 1. About two years ago the hollow tile tank system for storage was successfully adopted by some elevator companies. My firm was not entirely satisfied with either plan. We sought a material for elevator construction that would be absolutely fireproof, one that would grow stronger with age, would not require paint or repairs, and we decided upon

THE USE OF CEMENT,

and are now just about completing a plant in Duluth, costing between $750,000 and $1,000,000, that I believe to be the most complete and up-to-date elevator plant in the world. Men have come from Liverpool, Montreal, New York, and elsewhere to investigate this system of construction, and we have had letters of inquiry from Buenos Ayres. In adopting the cement system of construction, we did not act hastily, but made an exhaustive and intelligent investigation. We first noticed that the railway companies were using cement instead of stone for bridge work, and three years ago we quietly erected a circular tank 114 feet high and 25 feet in diameter, having an average thickness of 8 inches, as a test, and had it full of wheat from early fall until late spring (and most of the time since then it has been full of wheat), when the wheat came out dry and sweet. The following fall one of my partners, accompanied by an expert, spent three months in Europe, visiting Denmark, Germany, and France, and went as far north as Russia, noting, and investigating all structures built wholly or partly of cement. At Braila in Roumania, a large elevator was found owned and successfully operated by the government, built wholly of cement. Braila is situated on the Danube River, 30 miles from the Black Sea, and handles about 70,000,000 bushels of grain annually. Another member of my firm visited Italy and examined the cement used in the Colosseums in Naples and Rome over 2,000 years ago. I give you these details that you may know we spent time and money before arriving at a conclusion. Our Duluth plant has a capacity of 5,000,000 bushels—1,000,000 in the wooden working house, and 4,000,000 in cement cylindrical tanks, each 104 feet high and 35 feet in diameter, these tanks being located 50 feet from the working house, and connected by 5 conveyors, each capable of carrying 20,000 bushels per hour. About one-third of the cement part of this plant was completed last fall and in that part we carried 1,000,000 bushels of wheat all winter and spring without insurance, and we shall not carry any insurance on building or contents. We are justly proud of our undertaking, believing it to be in advance of any known elevator construction.

THE MOST PHENOMENAL GROWTH

of the grain business has occurred in the Northwest with Minneapolis and Duluth as terminals. When we commenced doing business through Duluth the elevator capacity of that city was 350,000 bushels; to-day it has a capacity of 32,000,000 bushels. Minneapolis in 1880 had an elevator capacity of 1,000,000; in 1901 its elevator capacity is 33,000,000 bushels.

Diverging a little it may interest you to note the immense

GROWTH OF THE GRAIN OPTION OR SPECULATIVE BUSINESS

in the Northwest. Citing Minneapolis alone, the first pit was put in on the floor about fourteen years ago; afterward it was taken out on account of no business; a couple of years later it was again tried and succeeded, and since that time has grown to very large proportions. Last year the trades averaged nearly 8,000,000 bushels per day of wheat alone. The largest trade of any one day was 24,000,000 bushels of wheat—dizzy figures and practically the growth of ten years.

In the old times we have paid 20 cents per bushel

FREIGHT CHARGES

on wheat from Duluth to Buffalo; to-day we regard a 2-cent rate as excessive, and have shipped wheat for ¾ of a cent. In 1885 the all-rail rate from Fargo to the seaboard on wheat was 39 cents per bushel and this fall the rate has been 21 cents per bushel. In other words, the producer at Fargo can ship his grain to the seaboard and sell it for 18 cents less than he did in 1885 and still realize as much money.

In the old days the capacity of a freight car was 20,000 pounds. To-day it is 80,000 pounds. Twenty years ago the ship on the great lakes carrying 30,000 bushels of wheat was regarded of large capacity; ships of to-day will carry 250,000 to 275,000 bushels each. In those old times it took all day to load a small vessel with wheat; to-day there are elevators at Duluth that can load 150,000 bushels per hour into a steamship. Twenty-five years ago there was little or no corn raised north of Sioux City. To-day in the State of Minnesota the corn crop amounts to 40,000,000 bushels. In 1876 the receipts of grain at Minneapolis were 5,185,000; in 1898 they were 116,096,160.

My firm was first to build elevators

ON THE PACIFIC COAST

—building in 1889 and 1890 under the name of the Pacific Coast Elevator Company, a million-bushel elevator at Portland, Ore., and 50 country elevators in Oregon, Washington, and Idaho, and it may interest you to know how the business is done there compared with the methods in vogue on this side of the Rockies.

The Pacific Coast grain elevator business entails more risk than that of this section of the country. I speak more particularly with regard to the Pacific Northwest. Warehouses are still most generally in use; farmers do not sell by the wagonload, but usually haul their entire crop to market in sacks, and, with others, pile it out doors on dealers' platforms many tiers high. Each owner has his private mark on his sacks and will not permit his grain to be mixed with that of his neighbors, for each man knows he has raised the best quality (the buyer can only sample the wheat by plugging). Sometimes the wheat will remain piled in the way mentioned for a month or more; frequently the farmers will pool their holdings and auction off the whole lot, advertising the fact in advance. Sacks must be bought with the wheat.

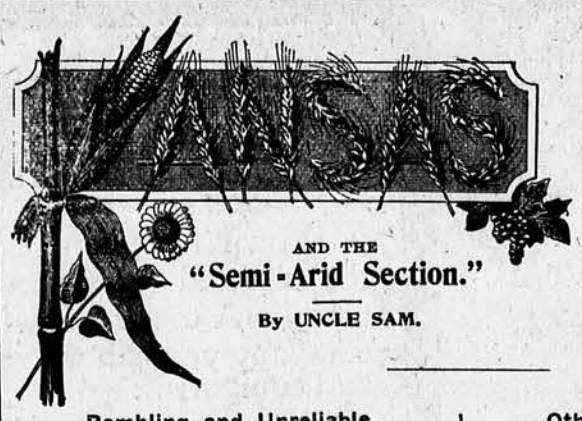
The first strife among buyers is to secure the wheat for their own platforms, for each buyer receives the handling charge in case others should ultimately purchase it. Buyers work for this preference from early spring, loaning sacks, selling them on time, making advances on the crop—anything to get there.

The grain is shipped in sacks to the seaboard and is there trucked to and piled up in a warehouse in piles 7 sacks high; it is thence loaded into sailing vessels for a four months' voyage to Europe around Cape Horn. Most cargoes, not sold in advance, are billed to Cork, Ireland, for orders.

Early in the crop year samples are gathered of Walla Walla Valley and Palouse Valley wheat, and by mixing them together, or by taking each valley by itself, one is supposed to secure a fair average quality of the crop. Samples of the same are sent to different European markets and hence the speculative grade is known as the f. a. q. grade. France likes light bread, while England is partial to strong bread, thus the Pacific Coast wheat is the most popular in France, while England favors our northern wheat.

Grain vessels going around Cape Horn can not be loaded to over one-fourth bulk on account of damage from cargo shifting. Upon arrival across the water the grain is transferred into what is known as millers' sacks, and is thence forwarded to mills throughout the country. The business on the coast is attended with much more risk than we are accustomed to take on this side of the Rockies. There is no way to hedge and dealers are expected to make charters months in advance, which of itself is most speculative; but let it be borne in mind that the next decade will see a wonderful growth west of the Rocky Mountains, and with that growth the objectionable features

(Concluded on next page.)



Corn raised in twenty years, 2,995,985,308 bushels.

Wheat, 691,297,613 bushels.

"Whosoever will may come."

Rambling and Unreliable.

More or less rambling statements have appeared in print, attributed to those who should know better, that Kansas and Nebraska are not a part of the corn belt, which they describe as being "Iowa, Illinois, and Missouri"; that "crops in Kansas and Nebraska are too uncertain; conditions there can never be counted on," and "the central parts of both Kansas and Nebraska belong to a semi-arid classification," hence agriculturally are quite unreliable.

Some figures taken from the official reports of the United States Department of Agriculture, which are supposed to be impartial, are presented herewith, intended to shed a few rays of light on the rank of Kansas among the States that really "grow things."

Uncle Sam certainly could have no purpose in prevaricating.

A Good Cereal Story.

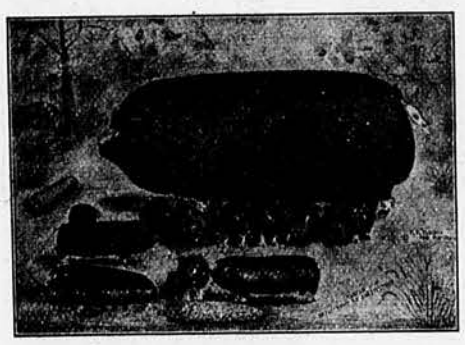
Here is a table compiled from the Government Year Books, giving by States, according to their rank, the total combined value of wheat and corn raised in each of the leading 15 States, in the five-year period beginning with 1896 and ending with 1900:

State.	Rank.	Value of Wheat and Corn.
KANSAS	**1**	**$378,433,347**
Illinois	2	361,630,618
Iowa	3	330,791,771
Nebraska	4	301,419,923
Missouri	5	275,961,983
Indiana	6	258,562,008
Ohio	7	252,763,713
Minnesota	8	226,883,967
Texas	9	182,489,833
Pennsylvania	10	168,518,387
Tennessee	11	155,085,808
Kentucky	12	153,204,900
Michigan	13	123,979,189
South Dakota	14	117,789,270
California	15	115,315,266

The Straw Not Counted.

Below is Uncle Sam's valuation of the wheat crop of the year 1900 in each of the leading 15 States, placed in proper rank:

State.	Rank.	Value of Year's Wheat
KANSAS	**1**	**$45,368,760**
Minnesota	2	32,450,829
California	3	16,555,302
Texas	4	14,973,384
Pennsylvania	5	14,602,560
Nebraska	6	13,145,007
Iowa	7	12,860,952
Washington	8	12,799,297
Missouri	9	11,873,429
South Dakota	10	11,686,817
Illinois	11	11,508,524
Maryland	12	10,783,372
Oklahoma	13	9,888,408
Tennesse	14	9,239.910
Oregon	15	8,908,907



Kansas' Pretty Rank.

List of States according to their rank in value of wheat, wheat and corn, and corn alone, produced by the leading 15 in the year 1900.

Thus saith the Year Book:

Rank	Wheat State.	Wheat and Corn State.	Corn State.
1	**KANSAS.**	**KANSAS.**	Illinois.
2	Minnesota	Illinois.	Iowa.
3	California.	Iowa.	Nebraska.
4	Texas.	Nebraska.	Missouri.
5	Pennsylvania	Missouri.	**KANSAS.**
6	Nebraska.	Indiana.	Indiana.
7	Iowa.	Texas.	Texas.
8	Washington.	Ohio.	Ohio.
9	Missouri.	Minnesota.	Tennessee.
10	South Dakota	Tennessee.	Kentucky.
11	Illinois.	Kentucky.	Georgia.
12	Maryland.	Pennsylvania	Arkansas.
13	Oklahoma.	Wisconsin.	Alabama.
14	Tennessee.	Georgia.	N. Carolina.
15	Oregon.	N. Carolina.	Wisconsin.

Others Raise Corn, Too.

This is what the Washington "Blue" Book suggests about the rank in value of corn produced by the leading fifteen corn States in the year 1900, and says was its value for each:

State.	Rank.	Value.
Illinois	1	$84,536,392
Iowa	2	82,582,186
Nebraska	3	65,233,320
Missouri	4	57,827,329
KANSAS	**5**	**52,438,602**
Indiana	6	49,024,256
Texas	7	38,522,568
Ohio	8	36,342,664
Tennessee	9	27,928,961
Kentucky	10	27,706,890
Georgia	11	19,448,132
Arkansas	12	19,447,157
Alabama	13	17,026,446
North Carolina	14	16,980,403
Wisconsin	15	16,350,589

Kansas Still "Ranks."

This table shows the rank in value of wheat raised in each of the leading fifteen States; also their rank in combined value of wheat and corn, and rank in value of corn, for the year 1900:

State.	Rank in Value of Wheat.	Rank in Value of Wheat and Corn.	Rank in Value of Corn.
KANSAS	**1**	**1**	**5**
Minnesota	2	9	23
California	3	21	35
Texas	4	7	7
Pennsylvania	5	12	16
Nebraska	6	4	3
Iowa	7	3	2
Washington	8	27	43
Missouri	9	5	4
South Dakota	10	17	22
Illinois	11	2	1
Maryland	12	22	26
Oklahoma	13	24	28
Tennessee	14	10	9
Oregon	15	30	39

Kansas Could Buy 'Em.

The following table is what Uncle Sam's Department of Agriculture Year Book shows as to the value of corn and wheat raised in each of the foremost fifteen States in the year 1900, named in the order of their rank:

State.	Rank.	Value of Corn and Wheat.
KANSAS	**1**	**$97,807,362**
Illinois	2	96,044,916
Iowa	3	95,443,138
Nebraska	4	78,378,327
Missouri	5	69,700,758
Indiana	6	53,512,447
Texas	7	53,495,952
Ohio	8	42,394,616
Minnesota	9	41,671,294
Tennessee	10	37,168,871
Kentucky	11	36,292,454
Pennsylvania	12	29,321,115
Wisconsin	13	24,777,212
Georgia	14	24,208,708
North Carolina	15	21,868,261

Figured "Per Capiter."

The table below shows, according to rank, the value of wheat and corn raised in each of the leading fifteen States for each inhabitant, in 1900, based on the United States census of that year, and the Agricultural Department Year Book, and also gives the age of each State:

Rank.	State.	Age.	Value of Wheat and Corn per capita, 1900.
1.	Nebraska	34	$73.50
2.	**KANSAS**	**40**	**66.51**
3.	Iowa	55	42.76
4.	Minnesota	43	23.79
5.	Missouri	80	22.43
6.	Indiana	85	21,26
7.	Illinois	83	19.92
8.	Tennessee	105	18.39
9.	Texas	56	17.54
10.	Kentucky	109	16.90
11.	Wisconsin	53	11.97
12.	North Carolina	112	11.54
13.	Georgia	113	10.92
14.	Ohio	99	10.19
15.	Pennsylvania	114	4.65

of the grain trade on the Pacific Coast will undoubtedly disappear. You may not have noticed it, but Greater New York alone has a population 300,000 greater than the combined population of our Pacific Coast States. In 1891

MR. C. WOOD DAVIS, OF KANSAS,

a man prominent as a statistician and who posed for many years as the farmers' friend, prophesied that this country would within five years be an importer rather than an exporter of wheat, and this opinion was concurred in by some of the larger grain dealers of the country at the time. I then stated in an interview that I felt the time fore importing wheat into this country was exceedingly remote. I feel to-day as I felt then, and I believe the grain business in this country is still young.

It was only last year that elevators were built in the extreme western part of Kansas and I think we will see the day when we will invade the State of Colorado.

Do you comprehend the

MAGNITUDE OF THE AGRICULTURAL PRODUCTS

of this country? It may surprise you to know that in 1895 the agricultural products of the State of Iowa alone exceeded in value the mineral output of the entire United States, including the coal production of Pennsylvania. Since then, however, the conditions have somewhat changed on account of the large gold discoveries in Colorado and Alaska.

Many of you remember when General Hazen made his

UNFAVORARLE REPORT TO THE GOVERNMENT

on the Northern Pacific Railway project, stating the road as projected would traverse a barren desert; but much of that country is now dotted with the homes of prosperous farmers. This past season General Washburn of Minneapolis has been opening up the country north of Bismarck—a country supposed to be absolutely worthless for agriculture. I have driven with him over his survey, and from the observations I then made it appears that after getting 25 miles north of Bismarck the rain belt is struck, and the country will undqubtedly prove to be the most productive.

My observation has been that the planting of trees and turning over of the sod attracts moisture. [!] (I recall the time when Sioux City paid $1 a tree for each tree that was planted and lived two years.) I believe that what is now known as

THE ARID WEST

will by artificial means be made an agricultural garden. I believe the canyons of Colorado will sooner or later be utilized as reservoirs, serving two purposes—confining the water in the spring and thus preventing the overflow of rivers, and later dealing it out as it is needed for irrigation purposes—and this work should be done by the government. Our association should exert its best influence, collectively and individually, at home and in Washington, in the interests of irrigation by the government. The Snake River district alone, if irrigated, would produce millions of bushels of grain, and with our fast increasing population and the Orient absorbing an increasing quantity of our Pacific Coast goods, we shall need more acres. We will find some good use for everything God has given us and we must tax our brains and energies to develop our endowment. Senator Warren, of Wyoming, in a recent address, made the following statement:

"There now remains at the disposal of tne general government

UNAPPROPRIATED AND UNRESERVED LAND

aggregating 900,000,000 acres; of this approximately 350,000,000 acres are in Alaska and practically all of the remaining 550,000,000 acres are in that part of the United States west of the Missouri River, once known as the Great American Desert, now called the Arid West, and destined in time to be freed from this implied designation of inferiority. To aid commerce the general government, since its establishment has dredged harbors, removed obstructions in channels, deepened river beds, built breakwaters, and otherwise diverted and controlled waterways. The expected benefits of such aid can not well be called local, for the territory to be subserved is as great in extent as the aggregate acreage of all the New England, Middle, and Southern States, and Ohio, Indiana, Illinois, Michigan, and Iowa additional."

The railroads are the great civilizers and

EQUALIZERS OF THE AGE,

and famine can not exist at one end of this country with plenty at the other. Wheat has been shipped from Oregon to Texas; Kansas wheat has found lodgment in Minneapolis and Minneapolis wheat in Kansas. Nebraska corn shipped to Duluth has been reshipped to Kansas City, and at the present time potatoes are being transported from Oregon to Texas. These moves are made as conditions change, which changes are hourly watched and the opportunities improved by the grain merchant. The farmers get the greater benefit, for the reason that competition is too keen or the opportunity is lost if one waits for more than a legitimate margin.

RIVALRY.

I have occupied every position in the elevator business and speak from personal knowledge and experience. I know how hard it is for the country buyer to allow his competitor to take the bulk of the grain even when he knows that the party is losing money on every bushel. I know how unhappy the traveling man is whose elevators rank second on the line. I know also that the cold, dry figures shown by the books in the main office constitute the keynote to the whole situation, for glory fades away at the end of the fiscal year if the balance is on the wrong side of the ledger.

I am a believer in men and that the best way to get along in the world is to be absolutely frank, open and aboveboard with one's competitors. The man who misleads or indulges in half truths not only is soon found out, but belittles himself in his own estimation and thus gives the honest and candid man the advantage.

MANY A QUARREL BETWEEN BUYERS COULD BE AVERTED

by openness and frankness. So far as line companies are concerned, I am quite positive that much trouble is brought about by the excess of zeal of our own men. We believe ourselves to be straightforward and honest, but we are prone to believe quickly anything bad that we hear about our neighbors.

There is no class of men in commercial pursuits who are given so large a financial credit as the elevator men. They are the medium through which the great crops of the country are collected and forwarded to all parts of the world, and in shouldering the heavy responsibilities involved in the scientific carrying on of this great trade they must of necessity have the confidence of the financial centers of the country. In the city of Minneapolis, the great grain center of this whole country—a position she is more firmly establishing every year—no class of men stand higher morally, socially, and financially than the elevator men, and the confidence that is reposed in them as a class is based on tne fact that they are known as non-speculators, confining themselves to the strictly legitimate business of dealing in grain, collecting it in sma.. parcels and delivering it in large. I do not recall in all my long experience the case of a single elevator man who has ever failed in business except from two causes—speculation and mismanagement.

I think many country merchants place

TOO MUCH RELIANCE UPON GOSSIP

they hear emanating from the various boards of trade. Much of the gossip circulating is written by men who are either long or short of the market, thus causing their judgment to be absolutely worthless; or, if not by men thus personally interested in the market, then by incompetent sensationalists, who are willing to tell you what to do, but have never done anything themselves.

These meetings are productive of very much good; they can not be held too frequently. When we can have but one a year of the national organization let us have more than that of the State organization, and still more of the county organization, and have daily intercourse and exchange of ideas with our neighbors. Do not deceive yourself by believing that you know it all and your neighbor knows nothing. Do not deceive yourself by thinking that you have any advantages at terminal points that he does not also get. Do not make the mistake of imagining that you receive favors from the railroad company that your competitor does not also receive.

The object of this meeting to-day is to absorb and impart, and it will not be a success if we fail to get some good out of it. In one sense we are competitors, but in real fact

WE ARE PARTNERS.

An advantage gained by one of us is of short duration and usually reacts. We must be systematic and watchful of details to be able to handle our business at the minimum cost. We will become bankrupts if we aim to secure the profits per bushel that obtained ten years ago. We must shrink our margins as the volume of business increases. Our field is larger, our opportunities greater and our competition keener, and to be successful we must change with the conditions and accept them as they exist to-day.

FARMERS ORGANIZE

your own Telephone Companies Then you will always **have control** of the best and quickest means for reaching your neighbors and the outside world. A telephone will pay for itself in a season. By organizizing a company you can also **effect a great saving in the cost** of telephones and equipment.

Don't Depend upon the tender mercies of the "trusts." They **never sell** telephones, but **put you under tribute.** If you own your own system, you save the trust's profits for yourself,

Write To Us and we will tell you how to organize, the kind of telephones and equipment you will need, and name you lowest prices on same.

The Kellogg Guarantee

which is worth the cost of your telephones, is back of every telephone and switchboard that leaves our factory. **We are independent manufacturers. Organizers wanted** in territory not already taken. Write us at once.

KELLOGG SWITCHBOARD AND SUPPLY CO., 230 S. Green St., CHICAGO.

Home-Made Windmills.

The home-made windmills seem to be most plentiful in the State of Nebraska, along the broad valley of the Platte River, and from Omaha west to the State line; for over 500 miles they are to be found in great numbers. They are often crude in appearance and of comparatively low enfficiency, but the aggregate amount of work they do is by no means insignificant. They will pump water for the stock and house, run light machinery about the farm, and sometimes furnish water to irrigate small tracts of land. The most important feature in the construction of these homemade mills is cheapness, hence tne ingenuity of the farmer is shown by the use of odds and ends, which he works into his mill to save the purchase of new material. Old wire and bolts, scrap lumber and old poles, neglected parts of buggies, mowers and reapers, cranks, chains, and sprocket wheels, all find their way into these strange windmills. Many of the mills have cost their makers nothing at all but time, others have cost two or three dollars, and occassionally in the case of the more elaborate ones the cost may run to $25, $50, or $75, but $2.50 is the fair average for a very large number. The prevalence of these windmills on the plains must not be taken to indicate a want of money among the people; on the contrary it shows a commendable thrift and ingenuity which is always evident in many other lines on the farms where the mills are in use.

So materially is the water supply of the great plains increased by the homemade mills that the United States Geological Survey in its comprehensive study of the water resources of the country has given them its consideration and published a pamphlet descriptive of them.

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.

Have You Hogs?

All our subscribers who own hogs should read Blooded Stock, Oxford, Pa. It is a first-class swine paper. Send stamp for sample.

FARM WAGONS The Western Farmer or Teamster who neglects to investigate the **new Tiffin Wagon** is not alive to his own interest. It **runs easier, wears longer** and **looks nicer** than any other wagon. **Insist** upon having it. If your dealer don't handle it and will not get it for you, *write to us.* "We will do the rest."

THE TIFFIN WAGON CO., Tiffin, Ohio, or Kansas City, Mo.

The Stock Interest.

THOROUGHBRED STOCK SALES.

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

November 12 and 13, 1901—D. L. Dawdy & Co., and Purdy Bros., Shorthorns, Kansas City.
November 21, 1901—Ernst Bros., Shorthorns, Tecumseh, Neb.
November 20-22, 1901—National Hereford Exchange, East St. Louis, Ill. (Sotham management.)
December 10 and 11, 1901—Armour-Funkhouser, Herefords, Kansas City.
December 13, 1901—H. C. Duncan, Shorthorns, Kansas City.
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, 12, and 13, 1902—J. F. Stodder, J. W. & J. C. Robison, and Snyder Bros., Winfield, Kans., Combination Sale.
February 25-27, 1902—C. A. Stannard and others, at Kansas City, Mo., 200 Herefords.
March 20 and 21, 1902—Edward Paul, Dispersion Sale of Galloways at South Omaha.
March 25-27, 1902—National Hereford Exchange, Chicago, Ill. (Sotham Management.)
April 16, 1902—W. O. Park, Atchison, Kans., Aberdeen-Angus.
April 22-24, 1902—National Hereford Exchange, Kansas City, Mo. (Sotham Management.)
April 25 and 26, 1902—H. O. Tudor, Holton, Kans., Shorthorns.
May 27-29, 1902—National Hereford Exchange, Omaha, Neb. (Sotham management.)
June 24-26, 1902—National Hereford Exchange, Chicago, Ill. (Sotham management.)

National Live Stock Association.

EDITOR KANSAS FARMER:—The general committee in charge of arrangements for the fifth annual convention of the National Live Stock Association, which will convene in Studebaker Theater at 9:30 o'clock the morning of December 3, is sparing no effort to make the program one of the most entertaining ever gotten up by the citizens of this city. Hon. M. D. Madden has been made chairman of this committee, which is sufficient assurance that everything will be of the highest order.

The business to be acted upon is of greater importance than any ever brought before a convention of the association, and for this reason no entertainments will be arranged so as to interfere with the sessions, which will be from 9:30 a. m., to 1:30 p. m. Every delegate is urgently requested to attend every session.

The afternoons will be given over to the International Live Stock Exposition at the Union Stock Yards, which will be the greatest show of the kind ever held on the globe, and in itself will be worth, as an educator, more than all the trouble and expense of making the journey. Other diversions will be an excursion to the drainage canal and the steel works. The great packing houses of Armour and Swift have extended invitations to all delegates to inspect their plants and for themselves witness the manufacture of oleomargarine. These are opportunities one has but once in a life time. One of the largest theatres in Chicago has been leased and will be given the delegates and visitors for one evening. The governors of 15 States will preside at a musicale one evening and make five-minute addresses on which is the greatest State in the Union. All delegates are assured that the famous "governors of North and South Carolina" will be present on this occasion. Tickets to the live stock exhibition will be furnished all delegates, a smoker will be given on the last evening of the convention, and arrangements for a grand excursion to Washington, D. C., the following day are now in hand.

Coupon books containing admission tickets to the convention hall and all entertainments together with badges will be issued in the lobby of the Great Northern Hotel, Monday, December 2, where all delegates should register as soon as they arrive in the city.

As Congress will be just organizing when the National Live Stock Association meets in Chicago in December, there will be unusual interest in Washington over the meeting, as the convention is expected to pass upon a number of important measures which will be forwarded immediately to Congress for consideration with the approval of the stockmen of the country. Congress is commencing to realize that the stockmen have an organization that means something and this time the requests of the stockmen will receive more than passing consideration at the hands of the Nation's law makers. Several members of the Senate and House have already announced themselves as the champions of the measures the stockmen desire enacted and as these measures have the approval of the government bureaus, a most interesting and beneficial session of Congress may be expected so far as the stockmen, at least, are concerned.

Several special excursion trains are now being organized to carry delegates and visitors to the National Live Stock Convention, which convenes in Chicago on December 3. The Oregon and Idaho delegation will have a special train and it is quite possible the Utah and Wyoming people will take another. The former will be loaded with arguments and ammuniation to capture the next convention for Portland, Oregon. A special train will go from Denver carrying the Colorado delegation and its famous cowboy band. The Colorado delegation will constitute itself into a committee of "rooters" for "Denver for the next convention." Texas will have one and possibly two specials. The Kansas City people are flirting with the Long Horns in hopes of securing that vote for the convention for the "City by the Kaw." Louisville, Kentucky, is a candidate for the honor, and St. Louis claims that in 1903 the meeting should be held there during the World's Fair. Special trains will be run from a majority of the stock States and as the attendance on the convention and the live stock exposition will be not less than a quarter of a million people there is a great rivalry among the transportation lines for this business.

C. F. MARTIN, Secretary.
Great Northern Hotel, Chicago, Ills.

The Forests and the Stock Grazers.

The matter of grazing stock on the government forest reserves has for a long time been the cause of considerable friction between stock growers and forestry officials of the government, as well as between growers of cattle and growers of sheep. The subject has been discussed by Mr. Gifford Pinchot on the part of the division of forestry, and the secretary of the National Live Stock Association. In a recent letter to the secretary, Mr. Pinchot sets forth his ideas as follows:

"In reply to your letter of September 13, following our conversation in Denver, it gives me much pleasure to send you the following brief statement of the way I think the grazing question in the forest reserves can best be handled.

"The central idea of this plan is that of coöperation between the government and the grazing interests in securing the best management and bringing about the best condition of the range. It may be summarized under the following heads:

(1.) "The government, through its forest officers, after consultation with the representatives of the various interests involved, to decide on the number of head to be grazed in each forest reserve, or each subdivision of a reserve, and to establish the boundaries between cattle range and sheep range.

(2.) "The local associations to assign ranges to owners within the limits thus laid down, subject to official approval.

(3.) "Both owners and local associations to be held responsible for the observance of the terms of permits and the prevention of fire and over-grazing.

(4.) "Each sheep owner to have the exclusive right to his range, and the same to apply within reasonable limits to groups of cattle owners.

(5.) "Permits to run for five years.

(6.) "Residents to have precedence in all cases over tramp owners, and owners from other States.

(7.) "Local questions to be decided on local ground, and on their own merits in each separate case.

(8.) "Since the forest reserves are usually summer ranges, provision to be made for necessary routes of transit.

(9.) "The policy of the government to be based on regulation rather than prohibition, except in special cases, it being understood that the avoidance of over-grazing is equally in the interest of all parties.

"These provisions seem to explain themselves and perhaps need no further comment. Their object, and I believe their result, would be to bring about hearty coöperation between the officers of the government and the stockmen, for the best interests of both, through a more intimate association and a better knowledge on both sides. It would lead to the equitable distribution of rights to the range by the stockmen themselves and prevent monopolies and the unfair exclusion of new men. It would give each owner a direct interest in keeping his range in good condition, through his exclusive right on it for five years, with probably renewals. Taken all together, it would, I believe, lead to a thoroughly satisfactory adjustment of the whole question."

Short Stops.

When scarcity or trust touches the button higher prices respond to the call.

A clean, comfortable, attractive school house makes lesson getting much easier.

Take good care of the plows you have, their price has been advanced 10 per cent!

It's with the hog as with people, the more he is worth the more he is respected!

Named farms are increasing in number, and the estimate of the farms is expanding proportionately.

Feed is too scarce and too high this year to give wheat screenings to elevator men; better keep 'em at home.

In all avocations the demand is that man shall do his best work, and the farm should be required to the same.

To hold wheat with profit the owner should be able to do it himself, and not have to get an elevator man to lasso it and a banker to hold the rope.—Farm, Stock, and Home.

Manure cast upon the asparagus bed now will be returned after many days, in the form of one of the most delicious and healthful of all vegetables.

If a man were to begin killing his neighbors he would doubtless discriminate between friends and enemies, but he don't do that when he kills birds.

"I hed a naber 'et was so absent minded 'et he'd forget to ast a feller to he'p hisself to a apple when he war showin' 'im thru his orchard."—Uncle Nathan.

"I never seen a man tenderer of his wife ner old Carker war; wouldn't never let 'er go 'way from hum—fer fear suthin' 'ud happen to 'er!"—Uncle Nathan.

A Nebraska Angus Sale.

At the dispersion sale of the Harding & Bewick herd of Aberdeen-Angus cattle at Humboldt, Neb., on Friday, October 25, there was a big attendance of cattlemen, including buyers from Iowa and Kansas as well as from Nebraska. Forty-eight head of cattle were passed under Col. F. M. Woods' hammer aside from the calves sold at foot of dam. The sale brought a total of $6,590, showing an individual average of $137.35. The 13 young bulls brought $1,265. This sale was made to close the partnership business, and at the outset Colonel Harding stated that there was a few lots that he desired to purchase as the foundation for a new herd on his own account. It will be noticed that he bought the two oldest cows in the herd—cows about 15 years of age. At the opening of the sale these gentlemen drove or led into the big sale ring the old 15-year-old cow, Lady, with her family of good things still on Prairie Lawn Farm. This old cow had raised a calf every year since her purchase, eight years ago, and as most of her produce were heifers it may be imagined that the old lady and her daughters took things by storm on sale day. It was an hour of enthusiasm for the "doddies." The cattle were presented in fine thrift. Mr. M. M. Sterns contributed 3 of the good things in the sale. Mr. L. P. Seivers, of Stuart, Iowa, was a liberal buyer from outside the State, as was also Mr. E. Marmet, of Sabetha, Kans. The sale was conducted under the management of

Miss Lillie Degenkolbe, Treasurer South End Society of Christian Endeavor, 3141 Michigan Ave., Chicago, Ill., Cured by Lydia E. Pinkham's Vegetable Compound.

"DEAR MRS. PINKHAM:—When life looked brightest to me I sustained a hard fall and internal complications were the result. I was considerably inflamed, did not feel that I could walk, and lost my good spirits. I spent money doctoring without any help, when a relative visited our home. She was so enthusiastic over **Lydia E. Pinkham's Vegetable Compound,** having used it herself, that nothing would satisfy her until I sent for a bottle. I have thanked her a hundred times for it since, for it brought blessed health to me and cured me within seven weeks.

I now wish to thank you, your medicine is a friend to suffering women."—LILLIE DEGENKOLBE.

$5000 FORFEIT IF THE ABOVE LETTER IS NOT GENUINE.

When women are troubled with irregular, suppressed or painful menstruation, weakness, leucorrhœa, displacement or ulceration of the womb, that bearing-down feeling, inflammation of the ovaries, backache, bloating (or flatulence), general debility, indigestion, and nervous prostration, or are beset with such symptoms as dizziness, faintness, lassitude, excitability, irritability, nervousness, sleeplessness, melancholy, "all-gone," and "want-to-be-left-alone" feelings, blues, and hopelessness, they should remember there is one tried and true remedy. **Lydia E. Pinkham's Vegetable Compound** at once removes such troubles. Refuse to buy any other medicine, for you need the best.

Mrs. Pinkham invites all sick women to write her for advice. She has guided thousands to health. Address, Lynn, Mass.

DIP AND **FEED** MOORE'S HOG REMEDY and cure Mange and Canker, kill Lice and Fever Germs, remove Worms and PREVENT CHOLERA, at a cost of 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.

Trade Mark.

LUMP JAW

Easily and thoroughly cured. New, common-sense method, not expensive. No cure, no pay. FREE. A practical, illustrated treatise on the absolute cure of Lump Jaw, free if you ask for Pamphlet No. 346. Fleming Bros., chemists, Union Stock Yards, Chicago, Ill.

FROM TO WITHOUT ADULTERATION Huyler's COCOA AND CHOCOLATE QUALITY UNEQUALLED

Mr. Chas. Escher, Jr., of Botna, Iowa, who is an expert in all matters pertaining to the "doddies." Below we give an account of all sale transactions of the day:

COWS AND HEIFERS.

Lady 7563 and cc., sold to Col. M. W. Harding, Humboldt, Neb.
Grace H. 21021, C. Marmet, Sabetha, Kans.
Luella H. 28514 and cc., Lewis Howe, Humboldt, Neb.
Lady Brooks 28518, M. M. Sterns, Humboldt, Neb.
Unison of G. P. 17034, Col. M. W. Harding.
Edna H. 21019, John Kostcka, Humboldt, Neb.
Dorama 28513 and bc., Lewis Howe.
Belle Gavitt 21020 and cc., John Marshall, Humboldt, Neb.
Carry McCoy 28516 and cc., Col. M. W. Harding.
Bess 2d of Mt. P. 16950, Freeman Lynch, Humboldt, Neb.
Salem Bess 30142, Lewis Howe.
Pryphosa of Allendale 20441, Col. M. W. Harding.
Lillian 6th 28716, J. C. Marshall.
Primrose of A. 3d and cc., P. L. Sievers, Stuart, Iowa.
Ariadne 4th of A. 20116 and cc., Lewis Howe.
Stillia 5th 22766, G. W. Butterfield, Humboldt, Neb.
Black Bess H. 34628, M. M. Sterns.
Prairie Lawn Beauty 34620, G. W. Butterfield.
Carry McCoy 2d 31554 and cc., P. L. Sievers.
Lady Bewick 33685, Lewis Howe.
Nellie Holman, E. Martel.
Prairie L. Edith 39952, Col. M. W. Harding.
Prairie L. Mary 39955, G. W. Butterfield.
Prairie L. Carrie 39954, Col. M. W. Harding.
Prairie L. Primrose 40420, P. L. Sievers.
Prairie L. Lady 40417, P. L. Sievers.
Prairie L. Ariadne 40416, Jerome Wiltse, Humboldt, Neb.
Prairie L. Zola 40414, Col. M. W. Harding.
Prairie L. Mame 40410, Col. M. W. Harding.
Prairie L. Annie 40412, E. Marmet.
Prairie L. Zoe 40504, Col. M. W. Harding.
Prairie L. Bessie 40998, Jerome Wiltse.
Prairie L. Queen 46022, E. Marmet.
Nita 46026, J. M. Veach, Crab Orchard, Neb.

BULLS.

Leon H. 30852, Col. M. W. Harding.
Prairie L. Leonidas 46023, John Hoagland, Humboldt, Neb.
General Butler 40418, Wesley Hummell, Humboldt, Neb.
Oom Paul Kruger 40419, George Marshall, Du Bois, Neb.
Prairie L. Major 46027, Jerome Wiltse.
Chief Manco 46028, Wm. Bartels, Tecumseh, Neb.
Earl Minto 46025, Chris Oberly, Humboldt, Neb.
Playfair 46030, P. L. Sievers.
Duke of Humboldt 46031, John Marshall.
Prairie L. Plato 46032, A. Hoagland.
Laddie of S. C. 43045, Chris Hummell, Humboldt, Neb.
Weeto 36295, Will Hughes, Humboldt, Neb.
Ariadne 9th of A. 24856, Wm. Nemechek, Humboldt, Neb.

How to Keep the Stock Hogs and Other Live Stock Through the Winter Without Corn.

The average farmer could dispense with any other of the common feedstuffs easier than corn. Yet I doubt not that our stock hogs would be better off with less corn and more of other foods. In winter our stock hogs do not get enough bulk in their feed and it is often too heating. My brood sows that have weaned their pigs are doing well in a woods pasture, without any feed other than the acorns they find. Adjoining their pasture is a small lot sown to rye to which they will have access a few weeks later when it is fit for them to be fed on it. I have considerable surghum which I shall feed them during the winter, and being largely carbonaceous it will supply heat for the body and keep the sows in a healthy condition. About a month before farrowing I shall begin to feed some middlings, as it will probably be cheaper than corn, pound for pound, and supply a better ration for the sows. A week or two after farrowing I shall begin to feed some corn.

Young calves need some concentrated food of some kind, and bran and oats are better feeds for them than corn. They should be given plenty of corn stover and clover hay with straw to pick at. Older cattle that are to be stocked through will do well on stock pasture in the early winter, with plenty of good corn sover, straw, and mixed hay during the latter part of the winter.

I expect to keep my horses that are not at work this winter on sorghum hay and mixed hay with some bran twice a day mixed with sorghum run through a cutting box.

Sheep will winter well on good hay and corn stover, but if they are young it will pay to feed some bran or oats. If the winter is an open one they will get much feed from the pasture.

No doubt there will be many valuable lessons learned this winter in economy of feeding and I hope that at least some of our Indiana Farmer readers will report on their lessons when the winter is over and let others have the benefit.

We can save much feed by providing our stock with comfortable quarters. There is no economy in starving our animals through the winter, but we can probably secure cheaper feedstuffs than corn, and by changing our corn for them I dare say we will be taking the wise course.—J. H. B., in Indiana Farmer.

J. H. B. will do well to continue the ration of shorts to his brood sows, leaving them entirely without corn as long as the price of shorts continues lower than the price of corn. Shorts will prove a better milk-producer than corn. [EDITOR KANSAS FARMER.]

To Help Secretary Coburn.

M. R. Platt, of Kansas City, has donated to the Kansas State Agricultural College the 2 pure-bred Galloway heifers, Golden Sunset of Dyke Creek and Black Velvet of Dyke Creek. Mr. Platt has the largest Galloway herd in the world and since 1876 has introduced into his herd the best blood that he could secure both in Scotland and the United States.

Mr. Platt said to a representative of the college: "My old friend, Secretary Coburn, is now a Regent of the Kansas State Agricultural College. He will push the live stock work of the college as it has never been pushed before. I want to help him. You may send the best expert you have and let him select the best 2 heifers in my herd, and I will give them to the college to help Secretary Coburn in his work of building up animal husbandry in your college.'

The 2 heifers are choice individuals and are descended from Black Prince of Drumlanrig, the premier Galloway bull of modern times. He was never defeated in the show ring, and $4,500 was offered and refused for him when he was upwards of eleven years of age. Were the heifers selected offered at auction they would easily go above $400 each.

The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the Kansas Farmer. Give age, color, and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply, all letters for this department should give the enquirer's postoffice, should be signed with his full name, and should be addressed to the Veterinary Department, Kansas Farmer, Topeka, Kans.

Weakness of Stifle-joint.—I have a 2-year-old colt that is bothered with lameness in the stifle-joint. The joint seems to fly out and the leg will become stiff, but after she walks a few steps it generally becomes all right. Can you tell me what to do for it?

Windom, Kans. J. W. COCHRAN.

Answer.—Take 1 ounce of powdered Russian Cantharides and 3 ounces of hog's lard. Mix and apply with the hand over the stifle-joint. Repeat it lightly every twenty days. It will take some time to cure it.

Barb Wire Cut.—About one year ago a horse of mine cut his foot on barb wire. Proud flesh formed in it, making a nut about the size of a walnut. This healed over and now whenever he stands on the foot he becomes lame. I have used liniment on it, but it does not seem to help any.

Argonia, Kans. GEO. A. JONES.

Answer.—Have a qualified veterinarian dissect it out and then treat as a healthy wound. It could not be removed with medicine after so long a time.

Diseased Udder.—The colt got with my mare last spring after weaning and caused soreness and a hard cake to form in one side of the bag, and this cake is still there. The bag runs a little and seems to be getting worse. I have been unable to scatter the swelling and drive the cake out.

Coats, Kans. J. C. PIERSON.

Answer.—Make a good opening to the bottom and syringe out with carbolic acid, one part to 20 parts of water, every day for ten days. Then apply 1 part of iodine crystals to 20 parts of vasaline externally, and in the wound, with the hand, once a day for two weeks.

Lice.—My calves have been afflicted with lice all summer, and I have tried several home remedies, but without success. They seem to be all over the calf, but mostly on the neck and along the back bone. The calves do not thrive, no matter what I feed them.

Denmark, Kans. T. W. HOLM.

Answer.—Apply Moore's Cattle Dip. You can procure it of the Moore Chemical & Manufacturing Company, of Kansas City, Mo. If you should not have enough to pay to use a tank, you can apply it with a brush.

The American Angora Goat Breeders' Association.

The American Angora Goat Breeders' Association held their second annual meeting in the Live Stock Exchange Hall., October 29. In the absence of the president, Mr. Thos. H. Mastin, of Kansas City, the vice president, Mr. R. C. Johnston, of Lawrence, Kans., presided. Those present were, L. A. Allen, Mrs. M. Armer, Col. Wm. L. Black, C. M. Beals, Geo. Q. Carey, Nick Johnson, Geo. F. Thompson, C. W. Gettys, Nathan A. Gwin, Geo. Baylor, Jno. S. Harris, J. J. Gentry, A. E. Hughey, J. Murray Hoag, W. G. Hughes, J. O. Landrum, Wm. M. Landrum, Sam Graham, R. C. Johnston, Chas. W. Lewis, F. W. Ludlow, W. T. McIntire, Jas. A. Moberley, S. D. Moherman, C. F. Johnson, W. C. Bailey, M. D., Richardson Bros., Aubry Gist, Dr. J. R. Stanley, W. D. Stoller, D. C. Taylor, C. S. Onderdonk, G. H. Vining, W. H. Woodlief, J. H. Troutman.

Those represented by proxies were, Geo. L. Andrews, Arizona Angora Goat Co., H. C. Aspinwall, Ayres & Farley Bros., Geo. McD. Blake, W. E. Bolton, C. J. Booth, Geo. H. Baldwin, W. C. Beardsley, E. E. Burnham, J. E. Burnham, Edwin A. Clump, A. G. Cox, Craig Bros., A. G. Dow, Jr., Frank Ernest, G. W. Fink, H. N. Fischer, Forman Bros., J. T. Frederick, Gannon Bros., Sam. G. Glover, U. S. Grant, A. M. Gray, Chas. P. Greer, W. H. Haskell, O. R. Haymaker, Nat. C. Houston, Chas. F. Johnson, Dr. Wm. Johnson, A. J. Knollin, C. E. Libby, L. A. Marsters, P. M. Martin, Mantey & Miller, Jas. H. McLatchy, R. H. Merrill, Jas. H. Moberley, John N. Neiss, Thos. Pegg, W. G. Perkins, D. B. Perkins, Peterson & Ward, Wm. Riddell, T. G. Snodgrass, D. D. Spencer, Henry Starr, Jno. B. Stump, M. M. Sutherland, Albert Trager, W. G. Vassall, D. B. Wilson, Jno. W. Zuber, Dr. Louis N. Wente, R. D. O. Johnson, W. M. Johnson, J. H. Black, J. Z. McAlister, H. O. Penick, Eddy Bros., Elmer Fraser, E. B. Walton, A. B. Beattie, Ed. Wigglesworth.

The following officers and directors were appointed for the ensuing year: J. M. Stewart, of Lewistown, Ill., president; Wm. L. Landrum, of Laguna, Texas, vice president; Wm. T. McIntire, secretary and treasurer. Directors: L. A. Allen, of Kansas City; Col. Wm. L. Black, of Fort McKavett, Texas; Dr. W. C. Bailey, of San Jose, Calif.; R. C. Johnston, Lawrence, Kans.; C. S. Onderdonk, Lamy, New Mexico; Horace A. Field, of Wellsboro, Pa.; J. M. Stewart, Lewistown, Ills.; V. Marmaduke, of Proctor, Mo.; Capt. J. Murray Hoag, Maquoketa, Iowa; W. J. Morgan, Sr., Saginaw, W. S., Mich.; Wm. M. Landrume, Laguna, Texas; Dr. J. R. Stanley, Plattsville, Iowa, and Col. Jno. S. Harris, of Salem, Oregon.

The new board of directors met immediately after the general meeting of the association, and the following were elected as executive committee: J. M. Stewart, Lewistown, Ills.; W. T. McIntire, L. A. Allen, Kansas City; R. C. Johnston and N. A. Gwin, of Lawrence, Kans.

It was arranged to send a representative to the National Live Stock Meeting to be held in Chicago, December 3, of this year.

A resolution was presented by Col. William L. Black, of Fort McKavett, Texas. It says that the Angora goat industry is in danger of developing more rapidly than the requirements for mohair, which is the fleece of the Angora goat. In order that there may be a greater market for the mohair the secretary of agriculture is requested to put forth every effort possible to induce the army authorities to use tents and army clothing made of mohair. It is asserted in the resolution that mohair possesses the combined qualities of strength, durability, and light weight; that it makes better clothes for soldiers than cotton; that it is almost impervious to water, and that it does not collect dust like cotton. Mohair, it is claimed, is also excellent material for sail cloths, and the men who are interested in the raising of Angora goats hope to increase its use in many other ways. The resolution is in the form of an open letter to the secretary, and will be given wide publicity in order that public sentiment may be created in favor of the industry.

Another resolution was also addressed to the secretary of agriculture, and in it he is requested to ask Congress to make certain tariff changes. The hide of the Angora makes good rugs, carriage robes, and overcoats. Under the present tariff, Asiatic goat skins are admitted to this country free of duty, in the raw state, and under a 20 per cent ad valorem duty if dressed. This duty amounts to not over $5 a skin. Congress will be asked to revise the scedule for the protection of American goat raisers, and to make the duty specific instead of ad valorem.

A paper read by C. S. Onderdonk, of Lamy, N. M., provoked considerable discussion. After a long debate it was decided to create a rule requiring that all goats for show purposes be shorn at any time after the first of January of the year they are to be exhibited, and that such animals be clipped close so that there may be an honest judging of fleece when the autumn show is held. Another resolution, dividing kids into 2 classes, with the first day of May as the dividing line, was adopted.

The Gruner Sale.

We call especial attention to the announcement, in this issue, of the first annual sale of Scotch-topped Shorthorn cattle and Poland-China swine, to be held at Oldenburg Stock Farm, near Parnell, Atchison County, Kans., on Monday, November 11, 1901.

Oldenburg Stock Farm is only 1½ miles from Parnell, and 4 miles from Atchison, and is on the lines of both the Santa Fe and Missouri Pacific railways. Every accommodation will be afforded to visitors. Vehicles will meet all trains and free lunch will be served on the farm. In case of bad weather the sale will be held under cover.

Mr. John Gruner, the owner, is a comparatively young breeder, but he has excellent ideas as to breeding, and this sale will undoubtedly prove a "snap" to the buyer in search of good stock at a fair price.

The offerings include 1 bull, 2-years-old, of straight Bates stock, by Minister 120229, sired by Baron Butterfly 96081, dam Clio 2d, out of Duke of Neosho 45913, and tracing back to Imp. Henrietta, by Duke of Tyne (17751); also 1 May bull calf and 4 yearling bulls, all sired by 95th Duke of Wildwood 119099, by Golden Victor 86744, dam Rose of Sharon 5th, by Winsome Duke 2d 72208, and tracing to Imp. Rose of Sharon, by Belvidere (1706).

These animals have never been pampered and are now in vigorous breeding condition.

The offering of Poland-Chinas is exceptionally meritorious and consists of 15 boars and 10 gilts, all spring pigs, and all of Missouri's Black Chief and Chief Tecumseh 2d stock.

They are strong, growthy shoats, with good head and ears, typical color, good hair, strong backs, and altogether a nice, smooth lot of youngsters, that anyone might be glad to own. The gilts are of the type of the dam and while the offering consists of different litters, they are all good. Don't wait to write for a catalogue. You can get one of them at the sale, but get on the train and secure some of this stock.

The Kirkpatrick Poland-China Sale.

Kirkpatrick & Son held their twelfth public sale at Riverview Farm, Wolcott, Kans., on November 2. The offering consisted mainly of spring pigs and farmer's stuff, and yet the attendance was mainly of breeders desirous of buying the brood sows and fall pigs, all of which went at good prices. Six brood sows sold for $237, an average of $39.16; 4 fall gilts sold for $170, an average of $42.50; 4 fall boars brought $126, an average of $39. The spring pigs, owing to lack of farmers, sold quite low; 17 males averaged $12.50, and 26 gilts $16, or a general average of about $15 for spring pigs. Firty-seven head, all ages, sold at an average of $17. V. B. Howey, of Topeka, topped the sale at $78 in the purchase of the fall gilt, M. C. B. Queene, a daughter of Missouri's Black Chief. He also paid $77 for W. K's. Tecumseh 63208. Mr. Leon Calhoun, Potter, Kans., bought an L's Perfection boar for $50, and another one sold to James Mains, of Oskaloosa, Kans., for $53, the top prices for fall boars. The other purchasers at this sale were, W. P. Goode, F. B. Linn, and H. G. Gillett, of Lenexa, Kans.; A. P. Reardon, McLouth; Wm. Plumer, Barclay; H. C. Sydnor, Higginsville, Mo.; Gus Aaron, Kickapoo; H. G. Skeet, Tonganoxie; C. M. Tabler, Maywood; W. K. Faulkner, Bowling; E. C. Proctor, and J. Dunkenson, Tonganoxie; J. G. Athens, Hamburg, Iowa; W. D. Davis, Piper; J. T. Robinson, Bates City, Mo.; H. L. Storer, Bethel; I. L. Garrett, Ackerland; J. N. Williams, Wolcott; J. B. Walton, Sibley; M. Lynk, White Cloud; B. Ebert, Jiper; Geo. B. Ross, Lyons; J. L. Darth, Huron; H. G. Randall, Wolcott; Wm. Burrell, Bowling; E. E. Axline, Oak Grove, Mo.; and H. A. Marxen, Piper.

IN THE PARSONAGE

A Chapter from the Life of the Village Parson's Helpmate.

In every village the pastor's wife exerts an influence often as great as that of her husband. Needless to say, the responsibility of her position is great. Her approval or disapproval is not given without careful and conscientious consideration. This emphasizes the importance of the enthusiasm shown by Mrs. S. E. Leech, wife of the pastor of the Methodist Episcopal church of Madison, Me., over an important event in her life. The experience is best told in her own words.

"In 1895," she says, "the birth of a child left me with complaints which caused me to suffer for several years. I was distressed after eating and was troubled with nausea and the formation of gas in my stomach. There were severe pains and weakness in my back and loins and I was also afflicted with other troubles to which my sex is subject. Doctors treated me nearly all the while for three years but I was not benefited to any extent."

"But you seem to have recovered marvelously," was suggested.

"Yes," Mrs. Leech answered, "and I will tell you how it was brought about. I had read of cures effected by Dr. Williams' Pink Pills for Pale People and I decided to see what they would do for me. There was a decided improvement while I was using the second box of the pills but I did not stop taking them until I had taken six boxes and was cured."

Mrs. Leech suffered from the same troubles that are making thousands of women miserable. A few of the symptoms are severe headache, loss of appetite, exhaustion, pains in the groin or limbs, pale or sallow complexion, nervousness, offensive breath, etc. The sufferer may exhibit one or more of these symptoms, or may have all. They simply indicate the ravages disease has made upon the system, and the more of these symptoms the patient shows the greater the necessity for prompt and persistent treatment until they have been banished and the bloom of health is restored. To accomplish this end, Dr. Williams' Pink Pills for Pale People are the only unfailing remedy. They are on sale at all druggists or will be sent postpaid on receipt of price, fifty cents per box or six boxes for two dollars and a half, by Dr. Williams Medicine Co., Schenectady, N. Y.

Gossip About Stock.

A dispatch to the New York Herald from Buneos Ayres says: "The government has informed the American minister that it can not allow the importation of American cattle for breeding purposes.

Dr. W. H. B. Medd, Dundee, Minn., announces that the dispersion sale of Wavertree Herd of Galloways will be held at South Omaha, February 28, and March 1, 1902.

Newton Bros., Whiting, Kans., breeders of Duroc-Jerseys, write: "We still have a few good males and 30 head of choice spring gilts, which will be large, roomy, and well finished for December and January breeding. Write for breeding description and prices, and be convinced."

Mr. John Gruner informs us by a later mail that he has secured the services of Col. John Daum to cry his sale of Shorthorns and Poland-Chinas, to be held at Oldenburg Stock Farm, near Parnell, on Monday, November 11. Mr. Gruner has one litter of spring pigs—4 boars and 1 gilt—out of Gruner's Tecumseh that are especially noteworthy. The boars are a nice even lot, well marked with good coat and ear and are each good enough to head any herd.

A Buffalo, N. Y., dispatch says: Frank A. Converse, superintendent of live stock of the Pan-American Exposition, has announced the following results in the breed tests in the model dairy: Net profits in butter fat—Won by the Guernseys by a net profit of $4.66. Net profit in churned butter—Won by the Guernseys by a net profit of $5.86. Total solids—Won by the Holstein-Freisians by a net profit of $26.14. Total solids and gain in live weight—won by the Holstein-Freisians by a net profit of $31.63.

The next great Hereford event at Kansas City will be the Armour-Funkhouser sale on December 10 and 11, 1901. The Armour cattle for this sale were chosen by the late Kirk. B. Armour, under the conviction that they would form his greatest offering. The selection comprises a great many of his own breeding and some 40 head imported from the best English herds. The Funkhouser selections have been made upon an understanding with the late Kirk. B. Armour, that the whole offering would be the best ever made by them. They intend to vindicate this statement with the very highest class of cows and bulls that both herds afford.

Secretary F. D. Coburn purchased for the Kansas State Agricultural College the pure bred Galloway bull, First King of Avon, of O. H. Swigart, Champaign, Ill. This bull was purchased at the American Royal Cattle Show, Kansas City, where he won first prize in strong competition.

First King of Avon this year also won first prizes at the Pan-American Show, and at the Michigan State Fair, and won second at the State Fairs of Iowa, Minnesota, Wisconsin, and Illinois. He is almost perfect in form, and will be used in teaching students the form of a model beef animal.

Besides being a wonderful individual, the college bull is one of the best bulls in America. His sire, King Hensol, was a great winner at the Columbian World's Fair, and at State fairs, and stood at the head of the first prize herd at the Interstate Fair, Atlanta, winning over Shorthorns, Herefords, and Red Polled, the Hereford herd being headed by the $3,000 imported bull, Salisbury. King Hensol also won senior championship at the International Exhibition, Chicago, 1900.

This is the last call for the two days' sale of Shorthorns at Kansas City next Tuesday and Wednesday, November 12 and 13, by Purdy Bros., of Harris, Mo., and D. L. Dawdy & Co., of Arrington, Kans. Intending purchasers of Shorthorns will find this an exceptional offering of the best Scotch blood. If a number of the animals catalogued were offered by some of the older breeders this sale would be the sensational sale of the year. However, it will be an unusual opportunity for buyers. A study of the sale catalogue will show a number of prize winners in the Purdy Bros. offering at the recent American Royal show as well as at other shows. Among the notable animals, Lot 1, Golden Knight of Enterprise; Lot 16, Orange Lad; Lot 14, Orange Blossom of Fairview 3d; Lot 7, Lovely 30th; Lot 22, Golden King; Lot 2, Posy Queen; Lot 3, Rose Victor; also lots 3, 4, 5, 6, 9, 12, 13, 15, 19, and 21 are all special bargains for buyers. The offering is one of very high individual excellence and we would recommend to our readers that no time be lost in writing for a catalogue of this sale. It not only contains numerous illustrations of the cattle to be sold, but is also one of the most complete and interesting in descriptive matter and foot notes that has yet come to our attention. In the Dawdy & Co.'s offering we recently published a picture of the Champion of Kansas, a sample of the string of fine young bulls. The heifers are a uniformly strong, Scotchy lot, all with heavy coats, and with one exception, remarkably well ribbed and strong in chine and crops. This is true, also, of the older heifers and young cows. Not only is the Scotch Butterfly of Hillside 3d and also her sister, a massive roan, of less length but more smooth conformation, of just this sort, but the richly Scotch-topped Rubys, Rose of Sharons and Nellie Blyes are also some of the best individuals consigned. One of these latter is Princess Briseis, a beautiful Rose of Sharon 2-year-old with three full Cruickshank tops. She is Lot 2 of the catalogue. Lot 7 is another great one on that order, her grandsire and great grandsire having been bred by A. Cruickshank, while her sire is also Scotch—Bonnie Chief 118193, by the Marsh Violet bull Bonnie Scott 106590. She is one of the H. C. Duncan's best Nellie Blyes. Perhaps the heaviest animal is the big roan Peri, 6-year-old Peri Duchess of Tylerwood 7th. She is the result of a straight Bates-Scotch cross, her sire being Matchmaker 112904, a descendant of Imp. Matchless 15th by Champion of England. She is good for 1,800 pounds, and is suckling a fine bull calf by Armor Bearer 152555. Of the 2-year-olds a choice one is the handsome Illustrious of Cambria 3d, a three-fourths Scotch Illustrious, being by Glen Baron, an Oange Blossom son of Baron Victoria 118027, and having back of that 2d Baron of Maple Hill and a string of finely bred Bates, Booth and Rose of Sharon sires. But the female feature of the second day's sale will be the string of yearlings, which, for coats of hair, strong heart girths and general rugged, thrifty appearance would attract attention anywhere. Observe previous notes on this sale and secure catalogues as per the advertisement in this week's issue.

Publisher's Paragraphs.

Our readers have doubtless observed the advertisement of Iver Johnsons Arm and Cycle Works, of Fitchburg, Mass. Their arms and bicycles have the same quality and durability of any made by any other factory in this country. Any of our readers interested in this line should secure a catalogue. Notice their advertisement in this issue.

Mr. L. G. Hepworth, who is a graduate of the Kansas State Agricultural College, has lately opened a wholesale and retail seed house at his home town of Burlingame. He is up-to-date with everything that the feeder, the farmer, and gardener needs and can supply large orders on short notice. He is just now making a specialty of handling baled shredded corn fodder which has become so popular among feeders. He uses the Robinson Cypher and will wire quotations at any time. Write him.

A UNIQUE COLLECTION OF DOLLS.—The making and dressing of dolls has always been a favorite occupation of womankind; no girl child, from the highest to the lowest rank in life, has been able to do without the facination of "a baby of her own." All sorts and conditions of dolls, of ivory, wood, corn-husks, and even the Soudanese doll, a veritable "rag, a bone, and a hank of hair," are pictured in a lengthy article in the December Delineator that will be interesting to both the adult and child. In the same issue, in another place, are given a variety of styles for dolls' wardrobes.

A prominent official of the Burlington route, recently commenting upon the interest of his road in the International Live Stock Exposition, said: "During 1900 our line brought into Chicago 612,000 head of cattle, and their estimate weight was 734,400,000 pounds. Now, suppose by interesting the farmers from all over our 8,000 miles miles of road, they come to the Live Stock Show, see the splendid exhibits—the largest and finest in the world—realize the difference between high grades and scrubs, see the extravagance of putting good feed into poor stock, and so by encouraging them to breed better animals, which when fat would weigh 10 per cent more than the old sort, it is plain that our tonnage on this class of freight would be increased to the extent of 73,440,000 pounds, an item of considerable importance. The annual Live Stock Exhibition at Chicago is a big thing for the country, the farmers, and the railroads. Don't forget that for a minute."

A Handsome, Helpful Book.

"More Money From Your Hens" is the title of a new book issued by the Stratton Mfg. Co., of Erie, Pa., manufacturer of the well known line of Dandy Green Bone Cutters. It is attractively printed in two colors, well illustrated, and goes into the question of making poultry profitable in a very thorough manner. Of course it places special emphasis on the value of freshly cut green bone as an egg producer and growth promoter. There is no doubt in the minds of poultry raisers that a little green bone added to the feeding ration is productive of the very best results in two ways; it not only saves in the grain bill, an important feature this fall when grain is high, but it also makes the poultry more productive in every way. It is a double-headed money maker.

The "Dandy" Bone Cutter has been on the market a number of years with increasing popularity. It has an automatic feeding device, is strongly and substantially built, has a large cutting capacity, and we know that many of our readers have demonstrated that it is a satisfactory machine in every way. You will be interested in the handsome book which the company sends free.

Some Rations for This Year.

The Missouri State Board of Agriculture has issued a bulletin in which the feeding problem is considered with especial reference to the peculiar conditions of the present season. The following excerpt will be found interesting:

These rations are suggested on the assumption that the farmer has some corn, a fair supply of corn fodder, perhaps some sorghum, millet, or Kaffir-corn, hay or straw, but not enough of any or all to carry him through the winter, and that he will have to buy at least some grain and perhaps some roughness. It is clear from what has already been shown in regard to the advantages of balancing the ration that such coarse fodders as clover, alfalfa, or cow-pea hay should be bought to the extent that roughness is required and that the grain selected should be of a character to further balance the ration rather than buy material similar to that which is already on hand.

It is to be understood that the amounts of grain, etc., shown in the ration are intended to be only sufficient to make a fair growth and take the animals to grass in good, thrifty condition when properly sheltered. If less or more growth or gain is required, the amount should be decreased or increased accordingly.

FOR WINTER CALVES.

I. Three pounds corn-and-cob-meal, or 2½ pounds of wheat-meal. Three-fifth pounds clover, alfalfa, or cow-pea hay.

All the wheat or flax straw, corn fodder, or sorghum hay they will eat.

II. Three pounds of corn-and-cob-meal, or wheat-meal. Two pounds of bran or oats.

All the wheat straw, flax straw, corn fodder, or sorghum hay they will eat.

This ration will be less economical than the first, but is suggested on the assumption that the clover hay can not be gotten.

For yearlings these same rations will apply equally well except that the grain and clover should be increased about one-half.

FOR DAIRY COWS.

I. Six pounds corn-and-cob-meal, or 5 pounds wheat-meal. Two and one-half pounds cottonseed-meal or gluten-meal. Six pounds of clover, alfalfa, or cow-pea hay.

All the straw, corn fodder, or sorghum hay they will eat.

II. Eight-twelfth pound corn-and-cob-meal.

All the alfalfa or cow-pea hay they will eat, and straw or corn fodder to eat when out of the barn during the day.

III. Eight pounds corn-and-cob-meal, or 7 pounds corn-meal. Four pounds cottonseed-meal or gluten-meal.

All the straw and corn fodder or sorghum they will eat.

These are what may be considered fair amounts. A good dairy cow, however, ought to be able to consume larger quantities and return a greater profit than these amounts. It is assumed that the dairyman will feed his cows up to the point of their greatest profitable production. Naturally as the milk flow diminishes toward the end of lactation period the feed will be reduced, not forgetting that in the case of pregnant cows allowance must be made for the nourishment of the young calf.

FOR HOGS.

With good shipstuff or middlings at practically the same price per ton as corn, it will pay abundantly to use this material freely in connection with corn especially for the young hogs and brood sows. The superiority of this mixture over either fed singly is clearly shown in the results of the following experiment from the Wisconsin Station:

Feed.	Days fed.	Food eaten, lbs	Total gain, lbs.	Feed for 100 pounds gain.
Corn-meal	42	559	104	537
Middlings	42	501	96	522
Equal parts corn meal and middlings	42	470	107	439

Note how much less food was required to make 100 pounds of gain when a mixture of middlings and corn was fed than when these materials were fed separately.

At present prices, for young hogs, the mixture can be very properly equal parts (the proportion of middlings being gradually reduced to one-fourth of the ration at the end.

Ground wheat may be substituted for the corn without changing materially the result, provided the wheat costs no more than the corn.

A Model Barn.

EDITOR KANSAS FARMER:—In almost every farm paper we see advice given as to how to maintain the best sanitary conditions about the barn and hog house. The common mistake, made by most farmers, in building their barns is that they do not allow enough sunlight. They build good barns out of the best material, but they do not give proper consideration to light and sunshine. More horses go blind from poorly lighted barns than from anything else. We know how beneficial sunshine is in our homes, and it is just as essential to our domestic animals.

I send the outlines of a barn which I have in mind. Perhaps it may be of some interest to those who are thinking of building. Every farmer should build with the view of getting the most for the least expenditure. All the windows should have iron grating over them. It is a good idea to spout the barn and put the cistern or tank on the south side where it will be more sheltered from the cold and will thaw quicker, in winter. Have a hay fork on the west end of the barn and a window in the east end. Ventilators can be made in the ends just beneath the comb. There should be small hooks in the seed room for grain sacks and large ones in the harness room to hang the harness on.

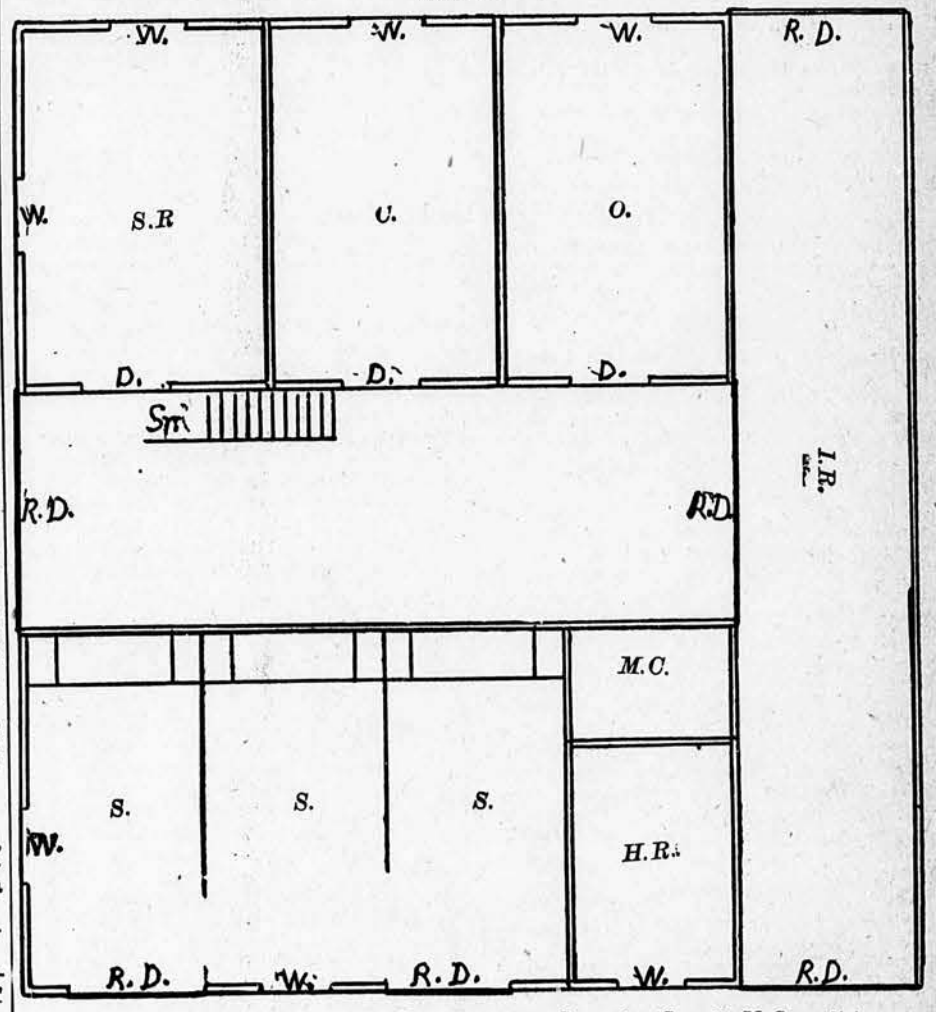
Try to shelter all the animals during the winter. It takes just half as much feed and the satisfaction one derives from it more than pays for the work. There is nothing worse than to have milch cows standing out in the storms with sleet all over their backs, shivering with cold. It is better to have four cows stabled than eight unstabled and they will give more milk.

A horse should never be tied around the neck with a rope. The price of one horse will buy many halters. Give all animals humane treatment and never forget that they have feelings.

The barn is not a proper place for hogs and they should never be allowed with the horses. They will undermine the foundation of the barn and do other damage, and there is danger of them getting crippled by getting under the horses' feet or under wagon wheels. Nothing is more disagreeable than filthy beds of straw in the barn and it is the surest way to breed disease. Filth is always the forerunner of plague. It is well to keep a good lantern at the barn but matches or a man with a lighted pipe or cigar should never be allowed there.

MRS. H. L. WILLIAMS.

Louisburg, Kans.



S. R., seed-room; C, corn; O, oats; R. D., rolling-door; Sr., stairs; S, stall; M. C., medicine-closet; H. R., harness-room; W, window; I. S., implement-shed.

The Home Circle.

PLENTY OF TIME.

I hear you complaining, Dearest—
 You have ever too much to do:
Your temper is worn with trying
 To make old things look like new;
You sew for the little children,
 You mend for the rolicking boys,
You were never a shirk, and you fret and work,
 Till your life is shorn of joys.

If the day were longer, Dearest!
 If you never need go to bed!
But the time goes racing by you,
 Till the hurrying week has sped,
And your basket's overflowing,
 And your tasks are never done;
Poor, weary friend, will they never end,
 Till the sleep of death is won?

It's time you are needing, Dearest;
 Ah, yes! but there's time to spare,
If you'd let Our Father carry
 One end of your load of care.
If you'd tell Him all the trouble,
 And ask from His tender hand
The gift of His peace, your pain would cease;
 His way you would understand.

There is time for loving, Dearest;
 If we take the time there is,
And fill that up with sweetness,
 Whatever beyond we miss.
Let the little frocks be plainer,
 Let the dust alone for awhile;
Let the good man see how blithe it can be,
 His home, in your tender smile.

Get out in the sunshine, Dearest;
 There is time for that be sure—
If you'll only let the flowers
 And the birds, your steps allure.
Go out in the sunshine, Dearest;
 And bring it back with you;
Don't sit in the gloom, when His lilies bloom,
 And His bending skies are blue.

—Margaret E. Sangster.

MEN WHO HAVE HELPED THE FARMER.

Sir Walter Raleigh.

(Beheaded October 29, 1618.)

Everybody knows that Sir Walter Raleigh introduced the potato into Ireland, where it became Irish by being planted in the Irish soil of Munster in 1584. Two years later the discouraged colonists whom Raleigh had tried to establish in Virginia brought to England the habit of smoking tobacco, which they had learned from the Indians. The good people of England were horrified at this practice borrowed from savages, and a proclamation was issued against the smokers and their barbarous custom; but "the splendid Raleigh made it fashionable amongst the fine Court gentlemen, who envied, imitated and admired him." And so the wonderful American weed became popular.

We remember Raleigh for bringing 2 typical American plants into public notice; the school children remember that he was the first man to attempt to plant an English colony on American soil; and those who dig into histories know that Raleigh built according to his own plans the best ship in the English fleet that destroyed the Spanish Armada in 1588. Yet we do not realize the greatness of the debt which the English-speaking people owe to this remarkable man.

Tobacco was a small item in American agriculture when Raleigh won his bet with Queen Elizabeth, having convinced her of his ability to weigh the smoke of a pipeful of the fragrant weed; but in the present year of grace it figures as one of the large items in our agriculture, our manufactures, our commerce, and our national revenue. The average value of the tobacco crop of the United States for the ten years ending with 1896 amounted to $38,000,000. The average export value of American tobacco during the years 1894-1898 was nearly $30,000,000. More than 700,000,000 pounds of tobacco were manufactured in the United States in 1898. During the twelve months which ended June 30, 1901, the United States Government received from taxes on tobacco the sum of $62,481,907.43. So tobacco has grown to be great in the industrial world. The smokers who love it may thank Raleigh for making its use respectable; and those of us who have no use for the "filthy weed" may content ourselves with the reflection that the tobacco-users pay pretty heavily for their privileges.

Of course the potato is eminently and unquestionably respectable. We all eat it, and most of us count it among the necessities. Moreover, it is used to some extent in the manufacture of whisky—a liquid known as a medicine in Kansas and as a necessity in Kentucky. Since Raleigh "Irished" this typical American vegetable, the potato has increased wonderfully in size, edibility, and agricultural and commercial importance. "The potato crop of the United States in 1900," says the latest Yearbook of the Department of Agriculture, "was 210,926,897 bushels, worth on the farm $90,811,167." This crop was grown on 2,611,054 acres—an area twice as great as that of the State of Delaware.

The reader who cares for speculation may form his own opinion of our debt to Raleigh for encouraging the planting and use of the potato in the British possessions, as well as for his influence in encouraging the use of tobacco. At the least, it is interesting to connect his great name with these important products. It is not uninteresting to know that Raleigh was something of a farmer himself, having a large estate in Ireland, on which, according to his biographer, Hume, he made "many improvements in tillage and management."

But Raleigh's life was a long series of adventures, brilliant projects, striking successes, and humiliating failures. His towering ambition, and his extraordinary versatility and power made him the most conspicuous subject of the great Elizabeth. Born in 1552, he grew up during the stirring times when England was beginning to become conscious of her power on the wide waters. He became courtier and soldier, explorer and colonizer, member of Parliament, poet, and historian. He knew something of everything, and was a man of rare gifts of mind and graces of presence. He it was who introduced the poet Spencer to the Queen and induced him to publish the "Faery Queen" one of the most famous poems in the language. During his imprisonment in the Tower, "for a crime which he had not committed," as Froude says, Raleigh wrote his History of the World, as well as important papers on a variety of subjects.

"It is fittting," says Martin A. S. Hume in the preface of his life of Sir Walter—"it is fitting that a series relating to the lives of those who have reared the stately fabric of our Colonial Empire should begin with the story of the man who laid the foundation of it. The prescient genius of Sir Walter Raleigh first conceived the project of a Greater England across the seas, which should welcome the surplus population of the mother country to industry and plenty, and make of England the great mart for the products of its virgin soil. Others before him had dreamed of Northwest passages to trap the trade of the teeming East; of gold, and gems, and sudden riches, to be grasped in far-off lands; but to Raleigh and his brother, Sir Humphrey Gilbert, belongs the more enduring honour of a nobler ideal—the planting in savage lands of English-speaking nations, ruled by English laws, enjoying English liberties, and united by links of kinship, and allegiance to the English crown. To them, more than to any other men, is it due that for all time to come the mighty continent of North America will share with England the cherished traditions and the virile speech of the race to which Raleigh belonged. To measure the greatness of the world's debt to him it will suffice to compare the sloth and poverty of the Southern part of the continent with the riches and activity of the North."

"This is a sharp medicine," said Raleigh, as he felt the edge of the headsman's axe a few moments before his execution, "but it is a sound cure for all diseases." He had spent the last of his fortune in an unsuccessful attempt to discover the gold mines of Guians; had been betrayed by King James I. to the Spanish, who used every effort that cunning could suggest to defeat the expedition and to humiliate the coward king; and had returned to meet his fate. For the faithless James had promised that if Raleigh "dared so much as to look upon" any of the Spanish possessions, he would be delivered up to be hanged in the Plaza of Madrid. With this promise in their possession, the Spaniards had no trouble in securing the conviction and execution of the innocent man who had spent his fortune and his life in the service of England. But the Spaniards were wise, and required King James to murder his own great subject in his own country.

Denver, Col. D. W. WORKING.

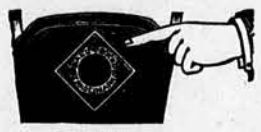
A Rat

in the coffee bin—not a pleasant thought, yet when coffees are kept open in bulk who knows what different "things" come climbing and floating in?

Lion Coffee

put up in sealed packages insures cleanliness, uniform quality, freshness and delicious flavor.

A Small Red Ball on a Rubber Boot



On Boots.

On Rubber Shoes and Arctics.

On Knit Boots.

The small red ball on "Ball-Band" goods is something more than part of a trade mark—it stands in the realm of rubber as the sign of the highest standard attained in the manufacture of wool or rubber footwear. It stands for quality, honesty in methods—reliability all through.

When you buy rubber boots, shoes, arctics, knit boots and socks with the *Red Ball* in the trade mark, it means you can rely on them with absolute certainty to **wear longer** than rubber or knit boots of any other make.

"Ball-Band" Boots

are *not* made by the trust. They are made by the largest independent makers of rubbers in the world. The "Ball-Band" boots have earned their fame through superior wearing qualities. They have attained and maintained the highest standard of excellence known in the making of rubbers.

Insist on getting the kind with the **Red Ball** in the trade mark. Get them from your local dealer.

MISHAWAKA WOOLEN MFG. CO., Mishawaka, Ind.

Our Farming Industry.

"Joseph, son of Jacob, had to warehouse a good deal of wheat in the seven fat years to carry the Egyptians through the seven lean ones. The American farmers produced enough in 1898 to make Joseph's little stock look like a pea in a tub. If it had all been piled in form on the plain of Gizeh it would have made 9 pyramids the size of the pyramids of Cheops, and with the surplus another could have been reared four-fifths as large. That was the biggest American wheat crop ever recorded. It amounted to 675,148,705 bushels, grown on 44,045,278 acres of land. Next year the yield was lighter, and the Americans only turned off seven and nine-tenths pyramids of wheat. In 1900 they even fell short of that, producing only a paltry seven and a half pyramids. Still, that would have been a comfortable addition to Joseph's stock, and considering that it was grown on a smaller acreage than the crop of 1899, was a rather creditable performance. The deficiency was made up with a 2,000,000,000-bushel corn crop, and 210,000,000 bushels of potatoes.

"There was considerable ado over the increase of the standing army to 100,000 men. If every man in such an army were a good fast milker, and worked at it ten hours a day, the whole force couldn't milk more than one-third of the cows that are now being milked in this country—not to speak of the goats. And if they could milk them all, and if they did, and if they milked them into the Chicago Drainage Canal, beginning with it entirely empty, they could milk it bankful in about two weeks.

"If all the hens in this country were to be consolidated, like some of our other manufacturing establishments, into one hen, and that hen were to lay an egg with the cubic contents of all the eggs laid daily on American soil, that egg would be as big as—well, it would be a very large egg. A chick hatched from it ought to be able to peck wheat off the dome of the national capitol. In 1890 there were 258,871,125 chickens in the country, and during the year 819,722,916 dozen eggs were produced and sold.

"When Mr. Reed depreciated a billion-dollar Congress, somebody retorted that it was billion-dollar country. It is. The millions period is no longer adequate to express the magnitude of our manufactures, our trusts, our fortunes and our farming industry.

"The acreage of American farms in 1890 was greater than the combined acres of France, Germany, Austria, Italy, and the British Isles. The value of their realty was $13,279,252,649, and the tools and implements on them represented nearly half a billion more. They produced over $3,500,000,000 worth of food and raw material. The value of their exports in 1899 was $792,811,733, or more than half the value of the entire exports of the country by $42,000,000. The growth of this industry had the most primitive beginnings, and has gone forward in the face of the most discouraging vicissitudes.

"The American of the revolutionary period was an extremely poor farmer. Looking back on his methods and his work, it is hard to say which were the more crude, his implements or his ideas.

"He used a wooden plow; he was afraid an iron one would 'poison the soil.' He had not yet learned that glanders was contagious, and would work and stable healthy stock alongside stock affected by it, and wonder what there was in the soil, air, or climate that carried them off. He didn't understand the use of fertilizers, and instead of spreading his barnyard manure on his fields, he let it accumulate around his barn until the approaches were impassable. Then he dug the barn out and moved it. Instead of rotating crops to save his soil, he planted according to the phases of the moon. There were few sheep in the country, and other like stock was poor and scanty. In Virginia the belief prevailed that it would kill cows to house and milk them in the winter.

"Transportation was poor, and continued so for a long time. The roads could not have been worse. Markets were scattered and far between. Each farm attempted to be self-sustaining in as large a degree as possible. What the farmer couldn't grow or his wife make they went without. Wasteful methods of tillage eventually exhausted a soil originally rich, and in the reign of Andrew Jackson agriculture had fallen into such an alarming state of neglect and inefficiency that the Government had to come to its relief. Through the efforts of Henry L. Ellsworth, commissioner of patents, a bureau was established in the Patent Office, which developed into the Department of Agriculture. By aid of that department principally farming has been made a science."—Frank M. Todd, in Ainslee's.

Stupid of Him.

She—If you could have one wish, George, what would it be?

He—It would be that—that—that—oh, if I only dared tell you what it would be.

She—Oh, please go on. Do tell me.

He—I dare not; but, oh, if I only could!

She—Well, why don't you? What do you suppose I brought the wishing subject up for?—The King.

For the serious diseases that attack the kidneys, Prickly Ash Bitters is an unfailing remedy. Relieves backache, swelling of the feet and persistent headache—symptoms which indicate kidney trouble.

The Young Folks.

OLD GRIMES.

Old Grimes is dead, that good old man—
We ne'er shall see him more;
He used to wear a long black coat
All buttoned down before.

His heart 'twas open as the day,
His feelings all were true;
His hair was some inclined to gray—
He wore it in a queue.

Whene'er he heard the voice of pain,
His breast with pity burned—
The large round head upon his cane
From ivory was turned.

Kind words he ever had for all,
He knew no base design;
His eyes were dark and rather small,
His nose was equiline.

He lived at peace with all mankind,
In friendship he was true;
His coat had pocket holes behind,
His pantaloons were blue.

Unharmed, the sin which earth pollutes
He passed securely o'er—
And never wore a pair of boots
For thirty years or more.

But good old Grimes is now at rest,
Nor fears misfortune's frown;
He wore a double-breasted vest—
The stripes ran up and down.

He modest merit sought to find,
And pay it its desert;
He had no malice in his mind,
No ruffles on his shirt.

His neighbors he did not abuse—
Was sociable and gay;
He wore large buckles on his shoes,
And changed them every day.

His knowledge, hid from public gaze,
He did not bring to view,
Nor make a noise town-meeting days,
As many people do.

His worldly goods he never threw
In trust to fortune's chances,
But lived (as all his brothers do),
In easy circumstances.

Thus undisturbed by anxious cares
His peaceful moments ran,
And everybody said he was
A fine old gentleman.

—Albert G. Grene.

Feeding a Python by Force.

Long Tom, the big python, had another meal yesterday. It was breakfast, lunch, and dinner combined, and the first for eight weeks. He was not consulted about the matter, and not until he found himself securely held did he realize that he was up once more for food.

Eight weeks is a long period between meals for any one but Long Tom. He holds a record few would wish to struggle for. It is not a case of disappointed love, or a violent attack of despondency developing into suicidal mania, taking the form of death by starvation; simply the fact that he is in captivity, and maybe doesn't like his boarding house.

He lay in his cage yesterday morninb, coiled upon the platform apart from the tank, his eyes closed. Not an inch of his 31½ feet of sinewy body showed the slightest sign of life, but he was beautiful to look upon. To look at a snake from the safe side of a heavy plate glass cage is one thing, and to stand beside him in the open, with only the hands of men to protect you, is another. The thought that he was to be taken from the tank and held while food was thrust down his throat sent a certain thrill through the body not exactly pleasant.

"Hold him straight, now, be sure! Don't let him form the 'S.' If you do, it's all up with everybody!" shouted someone who knew. On the whole, the warning was not reassuring. Standing at the tank was Beatrix Roderico, or, as she is more familiarly known, "Trixie," the snake charmer. The glass came off and the snake raised its head. In a flash "Trixie" had covered it with a cloth, and, holding fast, drew the monster out slowly. The men filed in and took hold, one on each side, shoulder to shoulder, hugging close to their bodies the writhing form of Long Tom. The snake was taken from the tank much as one would tug to draw out a long strip of large hose.

Long Tom, held by the arms of his score or more of attendants, was straightened out for the application of the "stuffing" process he alone indulges. Just as one would stuff a pillow, or more likely, a bed roll, with feathers, just so was this snake stuffed with rabbits. "Trixie" held his head, while next to her, holding the snake, were Walter Fox, Frank Prior, and Roger Davis, while Charlie Bunker, a man of some weight, was put upon his tail, a very important part of a python in such a fix should he succeed in getting it free.

To guard against canker, Long Tom's mouth had to be washed out with a weak solution of carbolic acid and water. He didn't appear to desire such a douche, and held his mouth tightly closed. "Trixie" soon overcame that difficulty by force when she discovered that one of his teeth was loose. Holding the snake's head with one hand, she reached for a hairpin, and with this feminine instrument played dentist with success. The mouth washed, it became "luncheon time."

J. T. Benson appeared with a bamboo pole 9 feet long. On the end of this in a string were 5 rabbits. The whole "meal" hanging from the pole was perhaps 4 feet long. When a snake eats of its own volition it unlocks its jaws. This will permit the eating of animals of almost any size. Long Tom was not hungry and refused to give up the key, so the rabbits had to be prepared in such a form as would permit of their being forced down his throat.

When the end of this string of rabbits was placed in his mouth Long Tom began to make himself felt. His great body swayed, and the men, strong as they were, had hard work to keep the body straight. Once in, the process of "stuffing" was slow, danger of injuring the snake and difficulty in holding him entering into the question in no small measure. Gradually the body grew as the rabbits were forced down the throat, and after twenty minutes of the hardest kind of work, the pole was withdrawn and Long Tom's luncheon was over. His mouth was washed again, and then began the journey back to the tank.

He had come out head first; he went back tail first, and coiled up as each man let go. His head was dropped and the glass front went up in a flash, the men wiping the perspiration from their faces, with sighs of relief.

To feed a snake by the stuffing process does not always mean that he will retain the nourishment, so there was some anxiety concerning Long Tom's general disposition for food. When, after an hour's wait, the snake was seen drinking as if he enjoyed it, fears as to the success of the morning's work were dispelled.—Boston Herald.

Girls Who Are Glad They Are Girls.

A writer in the National Review sets forth some curious and amusing results secured by asking several hundred schoolgirls the following questions: "Which would you rather be, a man or a woman, and why?" There is a striking difference between the answers of the children in Germany, in England, and in the United States; also between the answers of the little girls of New England and of Indiana. Apparently the farther west one comes the higher is the estimation in which womanhood is held.

In Indiana only 14 per cent wished they were men, and in New England 15 per cent. In England 34 per cent wished to be men, urging that men had a better time, more glory, and more money. In Germany most of the girls were not allowed to answer, but those who did so took the sober view that "it is wicked to wish to be a man." In Germany there were none who expressed a belief in the superiority of women. In England there were 4 per cent, in New England, 14 per cent, and in Indiana 34 per cent. Evidently the women of Indiana are of superfine material.

The reasons of the 85 or 86 per cent who were true to their sex are interesting if not alarming to the masculine mind. A large percentage, especially in New England, said tney would rather be women because women are better than men. Twenty per cent of the Indiana maidens were glad they were not men because men's lives were so dull and commonplace. In general, the American girl seems to be convinced that "it is more important to be a woman than a man," and is determined to get her "share of the world" in spite of the men who own it. One says she would rather be a woman because she cannot be anything else, and she means to be "as good as a man, anyway." One is reminded frequently of Mrs. Poyser by the replies of the Indiana girls, of which these are delightful examples:

"Women are more industrious than men are.'

"Women have good chances in life; they can be in any profession; or, if they do not want to be, they can marry and do nothing."

"I would rather be a woman, because they suffer more than men, and it is blessed to suffer."

"I was born a girl, and I shall have to be a woman, so there is no use in crying over spilt milk."

"A man can work harder, and a woman has more sense. If I wanted to be a man it would be no use, and men swear and spit on the floor, so I have not lost much."

"I would rather be a woman, as they have better chances in life as teachers in public schools."

"I would rather be a woman any day; men get drunk and steal, and they can't work or make children's clothes or do anything useful."

Evidently there is a hard time coming for American men when these frank-spoken Hoosier maidens grow to maturity. Their almost unanimous verdict on the comparative merits of men and women ought to cause the lords of creation to take a humbler estimate of themselves.

Hermit of the Grand Canyon.

Only a few years ago the Grand Canyon of Colorado was almost a terra incognita, save to Major Powell, U. S. A., and his exploring expedition and a few scouts and hunters. The Indians avoided the marvelous wonderland as the abode of evil spirits, and seldom went near it. But it had become known to pale faces and red skins that there dwelt upon the very brink of the mighty canyon in summer, and in its depths in winter, a lone white man Major Powell found him there, and later others did, and he came to be known as the Hermit of the Grand Canyon.

Many stories were told of this strange man; some being that Indians had gone there to get his scalp, and had found the place, through his deadly aim, a sure and quick trail to the Happy Hunting Grounds.. Again it was said that on several occasions lawless white men had sought his retreat, believing that he had found much gold there; but they never got the gold, and John Hance, for such is his name, could show perhaps, like the man from Texas, his private burying ground.

Few persons knew the history of this strange man, though he has never sought to hide it; but since there is now a stage line from Flagstaff, Ariz., to carry visitors to the greatest natural wonder of the world, Hannnce's camp and Hance's trail are becoming better known. John Hance is about 60 years of age, though he does not look nearly so old. He is a man of iron frame, wiry and quick as a panther, and dwells in his cabin with his cats and dogs, his only companny, though he has a herd of ponies. He is as much at home along the frightfully dizzy heights of the canyon as is a mountain sheep, is afraid of nothing and, though living for long years in utter solitude, can outswear a driver of army mules. He was born in the mountains of east Tennessee, not many miles from Knoxville, and loves nature in her grandest grandeur. He entered the confederate army, served through the war, and at its close, his home being ruined and family scattered, he turned his horse westward and held onto the trail until he at last paused upon the brink of that land of silence and mystery. There he made his home, making a semi-yearly pilgrimage to the nearest fort or settlement for provisions, hunting, fishing, and dwelling alone, save for his pets. And there John Hance lives to-day, some assert, with the knowledge of vast riches the mighty canyon holds, unknown to all save himself.

"Some day I may visit the great world toward the rising sun," he says.

But will he do so, or will he ever leave the grandeur of the mighty canyon, remaining there until his spirit crosses the Great Divide, leaving his body to crumble to dust amid the scenes he has loved so long and so well.—Detroit Free Press.

The Change in the Tenderfoot.

"This is a remarkably healthy climate, they say," said the easterner.

"You're right, thar," said Arizona Al. "F'r instance, not long ago a tenderfoot with a weak chest an' a pale face dropped inter the 'Miners' Delight,' called me a liar an' o' course I had to clean up.. 'Bout two months after a big sunburnt cowboy stopped me on the street, wiped the earth up with me an' slammed me up in a tree to recuperate. Same feller. Best climate in the world."—Indianapolis Sun.

The Easy Life.

"When I want a real, out-and-out mental rest I go south."

"Why?"

Well, up north you have to keep your mind on judges, doctors, professors, captains, mayors, majors, and the like; but down south it is safe to call every man 'Colonel.'"

An Old Friend, Indeed!

"How did System begin his proposal?"

"He said: 'Miss Blight, I take the liberty of looking upon you as one of my oldest friends.'"

"Well?"

"He didn't get any further."—Cleveland Plain Dealer.

CONSTIPATION

It is surprising how many people there are who allow themselves to become and remain constipated. They apparently do not know that this condition poisons the entire system. Not immediately of course, but after a little time as the poisonous impurities accumulate they attack the vital organs and undermine the constitution. As a result, the victim becomes pale, hollow-eyed and sallow, the breath is foul, the head aches frequently, the strength slowly declines and the once strong, active body becomes weak and nervous.

Prickly Ash Bitters

is a cleansing tonic and restorative just suited to such conditions. It is a genial stimulant for the stomach, liver and bowels, purifies the system thoroughly and invigorates the kidneys, conveying strength and new life to the whole internal organism. Under its marvelous reviving influence there is at once a brightening up in body and brain, renewed energy, strength, vim and cheerfulness.

SOLD AT DRUG STORES. PRICE, $1.00.

SEVEN GREAT SCHOOLS.
Chillicothe Normal School
Chillicothe Commercial College
Chillicothe Shorthand College
Chillicothe Telegraphy College
Chillicothe Pen-Art College
Chillicothe School of Oratory
Chillicothe Musical Conservatory

Last year's enrollment 729. $130 pays for 48 week's board, tuition, room rent, and use of text-books.
For FREE Illustrated Catalogue, address
ALLEN MOORE, President, Box O, CHILLICOTHE, MO

The Topeka Business College

Large School. Reasonable Rates. Good Positions. Catalogue Free. Address L. H. Strickler, Topeka, Kans.

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO., - - TOPEKA, KANSAS.

E. B. COWGILL.....President
J. B. MCAFEE.....Vice-President
D. C. NELLIS.....Secretary and Treasurer

SUBSCRIPTION PRICE: $1.00 A. YEAR.

E. B. COWGILL.....Editor
I. D. GRAHAM.....Associate Editor
H. A. HEATH.....Advertising Manager

ADVERTISING RATES.

Display advertising, 15 cents per line, agate (fourteen lines to the inch).

Special reading notices, 25 cents per line.

Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of $5.00 per agate line for one year.

Annual cards in the Breeders' Directory, consisting of four lines or less, for $16.00 per year, including a copy of the Kansas Farmer free.

Electros must have metal base.

Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All advertising intended for the current week should reach this office not later than Monday.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all orders:

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. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year with one dollar to pay for both. In like manner two new subscribers wil be entered both for one year for one dollar. Address, Kansas Farmer Company, Topeka, Kans.

The KANSAS FARMER is under obligations to the Northwestern Miller, Minneapolis, Minn., for the engraving representing Kansas wheat scenes, presented on another page of this paper. The magnificent crop, unofficially estimated at 100,000,000 bushels, is made up from the duplication of views similar to these.

On another page is presented the great showing of Kansas' rank as a producer of wheat and corn. It will be observed that this State is numbered first by a very large majority, according to government official figures. This compilation was made by Secretary Coburn. It exposes the silliness of all intimations that either Kansas or Nebraska is not in the grain belt.

The publishers of the KANSAS FARMER desire to express their appreciation of the manner in which old subscribers have taken hold of the "Two for One" proposition. Many have gone further and have sent in large numbers of new subscribers at the introductory rate of 50 cents for the first year. This is to authorize every subscriber to extend the introductory rate to every friend not now a subscriber.

Prof. L. Haworth, of the mining engineering department of the University of Kansas, has been appointed by the International Mining Company as chairman of a committee on Congressional legislation in behalf of the mining schools of this country. During the last session of Congress a bill appropriating $10,000 a year to the mining schools established by the various States in connection with their educational institutions was passed by the Senate, but was crowded out of consideration in the House, and it is hoped that the passage of a similar bill by both branches of Congress will be brought about this year.

INTERESTED IN KANSAS.

The eighth annual meeting of the National Association of Agricultural Implement and Vehicle Manufacturers, which was held in Kansas City last week, was a most successful one. The attendance was large—manufacturing houses from almost all parts of the country being represented—and the enthusiasm great. Many of the papers and addresses delivered were of special importance to the people of the West as they were discussions of problems connected with transportation facilities, foreign trade relations, combinations, legislation in different States and national legislation, which latter embraces matters concerning a parcels post for the United States, reclamation of the arid lands of the West, repeal of the stamp act, a governmental department of commerce and industry, commercial reciprocity, the new German tariff, etc.

The most significant feature of the meeting was the keen interest which the delegates and visitors took in all things western and particularly in things Kansan. The eyes of the manufacturing world are turned upon Kansas. It is here that they find their purchasers. The wide awake and progressive farmers of Kansas are up to date in questions of farm implements and vehicles and they set the pace for the farmers of other States. Kansas farmers have the cash with which to buy, and, realizing that their best interests are enhanced by the aid of improved machinery, they are keen students of the points of excellence offered by the various manufacturers.

As illustrating this mutual interest of manufacturer and purchaser perhaps nothing that occurred during the meeting was so full of meaning as the courtesy with which the representatives of the KANSAS FARMER were everywhere received and the eager demand made upon them for copies of the paper.

We predict that one of the most prominent results of this meeting will be the opening of the eyes of the eastern manufacturers to existing conditions of prosperity in Kansas and the wonderful possibilities ahead of it.

THE NET PROFITS OF THE ORCHARDS.

"I think I shall buy another 160 acre farm and plant it in apples." Thus spoke Judge Fred Wellhouse on Monday of this week. "I don't know what else to do with the money. I have always done well with farms and orchards, and I don't know how to do anything else," continued Mr. Wellhouse. But the reader is interested to know where this money came from? From the orchards, of course. From the orchards near Tonganoxie, Leavenworth County, Kans., partial returns have been received as follows:

THE 7-YEAR-OLD ORCHARDS.

25 acres, Jonathan	819	bushels
35 acres, Missouri Pippin	2,057	bushels
35 acres, York Imperial	320	bushels
80 acres, Gano	3,125	bushels
80 acres, Ben Davis	6,411	bushels
255 acres, total	12,732	bushels
130 acres, 6-year-old orchards	1,800	bushels
Total	14,532	bushels

The returns from the Osage County orchards have not been completed, but they will be about the same as those from Leavenworth County, making the entire crop from these 2 series of young orchards 28,000 to 30,000 bushels.

The old orchards at Fairmount, in Leavenworth County, and in Miami County have come forward this year with several thousand bushels of apples, apparently as a plea for extension of their lease of life, for it had about been concluded that they had served their time of usefulness. They will now be kept for a few years longer.

The apples were sorted to 4 grades, but the buyers lumped them into only 2 grades. The proportion of the 2 grades obtained was 3 bushels of firsts to 2 bushels of culls.

The firsts were sold to Pat Gleason, LeRoy, N. Y., at $2.50 per barrel. The culls were sold to Smith, of Leavenworth, at 40 cents per 100 pounds.

Work for the new orchard will commence soon. One-year-old seedlings will be bought at Topeka. Mr. Wellhouse has for many years used Topeka seedlings on account of their superior size and vigor. The roots of these will be cut into 2-inch pieces for grafting. The scions will be cut from the topmost branches of Mr. Wellhouse's bearing orchards. The grafting will be done during the winter. In spring the grafts will be placed in nursery rows on the farm on which the prospective trees are to be planted. At least twice as many grafts will be made as are to be used in the orchard. This makes it possible to select and to use only the best. After they shall have grown in the nursery for two or three years, the trees will be planted in the orchard.

Mr. Wellhouse's usual plan is to plant at distances of 32 by 16 feet. In the new orchards he will try an experiment with 40 acres of Missouri Pippines. These will be planted at 16½ by 8¼ feet. They will be pruned to dwarf them and no tree will be allowed to attain a height of over 7 feet. It is expected that they will be brought into bearing very early and that by the time they shall cease to bear good large apples they will have returned their profits. This 40 acre orchard will be given high cultivation, and no crop but the trees and apples will be grown upon the land. If 300 trees to the acre live to bear 3⅓ bushels to the tree, the crop will be 1,000 bushels to the acre. Not many such crops will be needed to make the experiment profitable. No ladders will be needed in gathering the fruit. The remaining 120 acres will be planted at 32 by 16 feet and treated after the manner which has so often compelled Mr. Wellhouse to buy more land and plant more orchards in order to provide profitable investments for the returns of his apple crops.

WHAT KINDS OF WINTER APPLES?

EDITOR KANSAS FARMER:—I am going to set out 54 apple trees this fall. They are to reset an old orchard. The orchard has plenty of summer and fall fruit and 10 Rawles' Janet trees. I want all of these trees to be winter fruit. What is the best winter fruit for this climate? Please let me know through your valuable paper.

E. F. CARAD.

Wichita, Kans., Route 1.

Our correspondent should remember that the experience of orchardists is against resetting an old apple orchard with apple trees. Apple trees do not grow well where apple trees have grown before. The writer saw this fact strikingly illustrated in the Wellhouse orchards at Tonganoxie. The trees for planting the orchard had been grown in a square block near the middle of one of the fields. The 3-year-old trees were taken up and set very rapidly. The average time from taking a tree up to complete planting was twenty minutes. The rows of trees in the field in which the nursery had grown extended straight across the nursery plot, and as this was the last field planted the planting was continuous across this plot. At the time of our visit the orchard was beginning to bear. In all except the nursery plot the trees were exceedingly thrifty. The land between the trees was well set in red clover. The red clover was as vigorous on the nursery plot as anywhere, but the apple trees on this plot were nearly all dead, while those not dead were exceedingly scrawny. The transition from thrifty trees on three sides was sudden. On one side a row—probably on the border of the nursery plot—showed some thrifty trees, some trying to live, and some dead. Judge Wellhouse stated that this was his third attempt to grow an orchard on a nursery plot, the result being the same each time. He has made many attempts to reset an orchard. Fair success was had the first and second years after the orchard was planted, but where an apple tree has been in place three years or more the soil has become unfit for another apple tree.

Another example: Many years ago Hon. J. B. McAfee planted an orchard on his farm 3 miles west of Topeka. After a few years he attempted to replace the dead trees. To make a success of this he had very large holes dug and hauled the soil taken from them to another part of the farm, replacing it with soil that had never known an apple tree. His replanting was done with the utmost care, but without success.

Mr. J. H. McCracken, of Mission Center, Shawnee County, has an old orchard on which vacancies are continually occurring. He is filling these vacancies with peach trees and is bringing on a nice young orchard on an adjoining plot.

Our correspondent's inquiry about varieties has reference, evidently, to a "family orchard" as distinguished from a "commercial orchard." He has plenty of summer and fall fruit. If he had stated the varieties represented it would be possible to be more certain about exactly meeting his needs. If he has Jonathan and Grimes's Golden among his fall varieties it is well, otherwise these varieties should be added. In cold storage they are good keepers and people who have ever used them desire them ever after.

Selections may be made as follows: Jonathan, Grimes's Golden, Missouri Pippin, Ben Davis, Gilpin or Little Romanite, York Imperial, Winesap. This list might be greatly extended, but the family that has the fruit from 8 trees of each of these varieties will have little occasion, during the winter and early spring, to covet what the neighbors have.

When writing advertisers please mention Kansas Farmer.

THE OLD FOLKS AT HOME.

Some farmers entertain the hope of one day retiring from the activities of the farm to a home in town. The writer has seen towns composed almost entirely of such retired farmers. Frequently those who have so retired are not well pleased. Many a business man dreams that he will some day retire from the exacting cares of his city life to a quiet home on a farm. Not very many business men ever do so retire. Generally they either become more deeply involved in business or they fail and, therefore, have not the wherewith to buy the farm and its equipment. While the business man is usually very sure that he can farm better than the best farmer he ever saw, he not infrequently makes a failure of it when brought to face with the manifold requirements of the farm.

There is now and then an exception to the rule, however. Last week the writer drove out to Oak Grange. On the hill just above the grange hall is the farm home of Mr. J. H. McCracken. The 80-acre farm stretches off into the bottom-land near the head of the Shunganunga. Mr. McCracken was in a store during his younger days. His health gave way and he sought the farm. The children are all grown up and settled so that the home is now occupied by just two hale and hearty old people. The farm, the stock, and the orchard are sufficient to keep time from hanging heavily on the hands of Mr. McCracken, while the housekeeping, the flowers, and the poultry furnish interesting employment for Mrs. McCracken.

But this is not all of their lives by any means. In the house one finds books, magazines, and papers. Introduce a topic of the day, of history, or of literature and they are discussed with the interest of people of affairs, with the accuracy of the deeply read, with the appreciation supposed to have its home in the literary club.

These people make their living on the farm and are adding to its "improvements" with as much gusto as a newly settled pair.

Of the grange Mrs. McCracken is the secretary and is active in promoting its interests. Her writing has long been familiar to and prized by readers of the KANSAS FARMER. The wholesome and wholesale way in which she jollies young and old, the interest she extends to their interests, the sympathy that goes out in times of affliction—these make her one of those members of community without whom there would be a great deficiency.

Would it be rational for such people to want to retire to town?

Figuring on Feeding.

Notwithstanding that Kansas farmers are just about now turning their stock upon about 6,000,000 acres of the finest pasture in the world (wheat), all figuring on feeding is this year important. The Oklahoma Experiment Station has issued a press bulletin in which occurs the following:

This is a winter of high prices for feeds, and it behooves every feeder to put much thought and skill into his operations that he may have the balance on the right side of the ledger at the close. Fat stock are bringing good prices and no doubt will the rest of the winter; and there is as much opportunity for profit in stock feeding in Oklahoma this winter as there has been any winter in the past. All that is necessary is to feed the right kind of feeds in the proper manner and combinations, to good stock.

COMPOUNDING PROPER RATIONS.

To compound the proper ration, (according to feeding standards), and the most economical ration, the feeder must take into consideration the market price of the feeds and the amount of digestible nutrients they contain, and the character of the nutrients or compounds. Each nutrient in a feed performs more or less of a special office or work in the keeping up or building up of the animal body. For some purposes in the process of animal nutrition any of these compounds in the feeds will supply the want and do the work; but there are some functions in this process of building up of the animal body that require a certain one of these compounds or nutrients, and no matter how much of the other compounds is present in the feeds, they can not take the place of this nutrient which is called protein. It goes to form blood, lean meat or muscles, hide, hair, milk, wool, and other like products that contain nitrogenous material in the animal body. As a rule for feeding purposes, the value of a feed depends largely upon the amount of protein it contains. For instance, every hundred pounds of corn contains 7.9 pounds of this nutrient,

protein, that is digestible. Cottonseed-meal contains in every 100 pounds, 37.2 pounds. When corn is worth 60 cents per bushel or $1.08 per hundred, cottonseed-meal is worth about $40 per ton. This is when based on the amount of protein that the two contain, and to realize anything like these comparative values the feeds must be fed in the proper combination, etc. For instance, for an exclusive feed for almost any kind of stock, corn is worth more per hundred than cottonseed-meal. There is just as much loss of the nutrients in feeding when too much protein is feed, as when too little is fed. An example of the former case would be where nothing but cottonseed-meal was fed; and when nothing but corn was fed would be an example of the latter case. When feeds are very cheap these losses may not count for much, but when feeds are high priced, as they are this winter, it is very important to see that the combinations of the feeds are such that they will furnish the different materials in the proper proportion to the animals, in order to make the waste as little as possible. The above comparative prices put on corn and cottonseed-meal might be said by some to be theory, but numerous experiments at the experiment stations have demonstrated that they have this approximate value when fed in proper mixtures, amounts and manner.

PRICE AND COMPOSITION.

The following table will aid in determining the best and cheapest feeds to use and combine:

Market price and digestible nutrients per 100 lbs. of the following feeds:	Price per 100 lbs.	Digestible nutrients per 100 lbs. Protein, lbs.	Carbohydrates and Fat equivalents.	Total digestible nutrients.
Wheat straw	$ .15	.4	37.2	37.6
Cottonseed hulls	.15	.3	36.9	37.2
Alfalfa	.60	11.	42.3	53.3
Oat straw	.25	1.2	40.4	41.6
Prairie hay	.40	3.5	45.	48.5
Corn stover	.30	1.7	34.	35.7
Cottonseed-meal	1.25	37.2	44.4	81.6
Cottonseed	.70	12.5	68.9	81.4
Oats	1.25	9.2	56.8	66.
Bran	1.15	12.2	45.3	57.5
Wheat	1.00	10.2	73.	83.2
Kaffir-corn, whole	1.08	4.7	32.6	37.3
Kaffir-corn meal	1.12	5.8	56.5	62.3
Corn	1.08	7.9	76.4	84.3

Bear in mind that the total amount of digestible nutrients in a feed goes as much toward determining the value of a feed as the amount of protein it contains.

The above feeds must be in the normal condition to contain the given amount of digestible nutrients. For instance, if corn stover or prairie hay were cut at the wrong time or allowed to get wet or are otherwise handled improperly, they might not contain more than half of the amount given above.

IN ANSWER TO MANY INQUIRIES.

The following is given as answer in part to the many inquiries received by the experiment station about feeding cottonseed and cottonseed-meal:

Steers give the best returns when merely fed on cottonseed or cottonseed-meal.

The following results were obtained at this station during the winter of 1899-1900. The results are for 4 lots of steers containing 5 steers in a lot, and for thirty-five days.

The daily gain per steer was 2.6, 3.2, 2.45, and 2.99 pounds respectively.

Grain eaten per pound gain was 8.02, 6.54, 8.73, and 7.01 pounds.

The grain for the first and third figures was Kaffir-meal 18 parts, cottonseed 4 parts, cottonseed-meal 2 parts. In the second and fourth, corn-meal took the prace of Kaffir-corn.

To realize the value of this showing, the fact must be known that the thirty-five days was the last of a feeding period of 147 days, and that in the first 112 days of this period the steers had made good gains. Where cottonseed or cottonseed-meal are mixed with corn, Kaffir-corn, or wheat, steers made most excellent gains, and this is the most economical way to feed it. Roughly, from 4 to 6 pounds of the meal mixed with 16 to 18 pounds of ground corn, Kaffir-corn, or wheat will make a good daily ration for a 1,000 pound steer, if he has good roughage.

COTTONSEED-MEAL.

Near the oil mill it is quite a practice to feed no other grain but cottonseed-meal mixed with the hulls in the proportion of 1 of the former to 3 or 4 of the latter. Experiment station trials go to show that much better gains can be made for the amount of grain consumed when corn chop or some other like feed is a part of the ration. Even at the present price of corn and wheat it will pay well to buy wheat or corn to mix with cottonseed-meal for steers.

Steers can be fattened exclusively on cottonseed, but they will not eat enough of it per day (about 13 pounds), to enable them to make the best gains.

The Texas Experiment Station considers 33⅓ pounds of cottonseed worth about as much as 28 pounds of corn for steers and dairy cows. This makes cottonseed quite valuable this year. Cattle want to be brought onto a feed containing cottonseed very gradually.

Cottonseed and cottonseed-meal are most excellent feeds to feed with other grains for dairy cows. Not more than 3 or 4 pounds of the meal should be fed per day. When fed in small quantities, 3 or 4 pounds per day, cottonseed-meal may be fed indefinitely to steers and cows without injury to them, but if fed in larger quantities, they will go blind in about ninety days. At this station rough yearling steers have been fed the whole winter on a ration of 4 pounds cottonseed-meal and 2 pounds of corn and what roughage they would eat, and with good results.

Some deaths have resulted from feeding cottonseed-meal to calves, but others have had good results.

It is generally conceded that cottonseed or cottonseed-meal should not be fed to swine as many of them so fed die after three or four weeks feeding on it.

But before letting swine want for the proper ration, it is well to consider the proposition of feeding them some cottonseed-meal. In the experience of the feeder with a large number of experiments, cottonseed-meal mixed with corn or Kaffir-corn has given the best of gains, but there has been some loss from hogs dying. But we think that the risk of loss is so small with our method of feeding it that all hogs on the station farm will have cottonseed-meal as a part of their ration this winter. The ration should consist of about 1-5 cottonseed-meal and 4-5 corn, wheat or Kaffir chop. This should not be undertaken unless the risk of losing a hog or two can be taken, and the proper methods are followed. (See Oklahoma Report for 1900-1901, page 102.) In our judgment, the feed and cost that will be saved will over balance any hogs that we may lose.

Horses have been fed cottonseed and cottonseed-meal in small quantity mixed with other grains, with the best of results. Such a mixture would be the superior to a single grain, as corn, and this winter would lessen the cost of feed very much.

In all feeding, stock should be put on a grain gradually, and changes must be made very gradually, and care must be taken not to feed too much.

For Another Crop of Timber.

The general awakening to the fact that under practices that have heretofore prevailed the timber supply must soon be depleted has led to an appreciation of the necessity of carefully harvesting the remnant of the timber crop and of so promoting the growth of another crop as to make such other crop possible. Owners of tracts of timber land begin to realize the fact that present returns may be obtained with due regard for future profits as well as in the reckless and wasteful methods heretofore pursued. On this account the Bureau of Forestry of the U. S. Department of Agriculture receives frequent requests for advice and assistance in the management of private woodlands in the South. One of the latest requests is for a working plan for 1,000,000 acres of longleaf pine-land in southeastern Texas, the property of the Kirby Lumber Company and the Houston Oil Company of Texas.

The holdings of these companies cover about 80 per cent of the virgin forest of longleaf pine in Texas. The officials state that they are anxious to exploit their forests on scientific lines, cutting the merchantable timber in such a way as to insure protection to the young growth. A preliminary examination of this large tract will be made during the winter, by agents of the Bureau. All things considered this large area of timberland, if handled on the lines which the Bureau will advise, should prove to be one of the most interesting undertakings in the line of forestry by private owners yet attempted in the United States.

The above request for assistance is but one of a number that have recently been received by the Bureau of Forestry. The Baltimore and Ohio Railroad Company has asked for a working plan for its tract of 125,000 acres of mixed hard and soft woods, situated in Nicholast and Pocahontas counties, southeastern West Virginia. Burton & Co. has asked for an examination of their tract of 25,000 acres of pine-land situated in Berkeley County, South Carolina. The East Tennessee Iron and Coal Company, owning 60,000 acres of hardwoods in the Cumberland mountains, desires to cut its timber on conservative lines, and has requested a preliminary examination of its tract.

From North Carolina comes a request from Mr. Hugh McRae, for advice in the handling of 16,000 acres of hardwood situated near Grandfather Mountain. A request has been received from the Georgia Iron and Coal Company, with headquarters at Atlanta, Ga. This company desires advice in the handling of two tracts; one of 16,000 acres in Bartow County, and the other of 30,000 acres in Dade County. An examination is also asked for, by another firm, for 16,000 acres of pine-land in Polk County, Ga. Agents of the Bureau of Forestry will inspect these tracts at an early date.

A working plan is to be made this winter by the Bureau of Forestry for the woodlands belonging to the Okeetee Club, the preliminary examination having already been made. This tract is located in Beaufort and Hampton counties, South Carolina, and contains 60,000 acres of longleaf pine-land.

The foregoing include only the most recent requests for assistance from private owners in the South. The Bureau for more than a year past has been coöperating in the handling of timber tracts in that section. At Sewanee, Tenn., the domain of the University of the South, consisting of 7,000 acres of hardwoods, is being lumbered according to a working plan made by the agents of the Bureau. A working plan has also been completed for 100,000 acres of pine lands in Arkansas belonging to the Sawyer & Austin Lumber Company, of Pine Bluff. Another interesting piece of work just completed by the Bureau is a working plan for a tract of 60,000 acres in southeastern Missouri, belonging to the Deering Harvester Company, of Chicago.

During the summer the agents of the Bureau of Forestry have been at work collecting the necessary data for a working plan for 85,000 acres in Polk and Monroe counties, East Tennessee. This tract is the property of U. S. Senator George Peabody Wetmore, of Rhode Island, and the timber consists of a wide range of hardwoods. A working plan has also been made during the past field season for a tract of 60,000 acres in the Cumberland mountains of Tennessee.

In October, 1898, the U. S. Department of Agriculture, through its Division of Forestry, first offered to give practical assistance to farmers, lumbermen, and others, in the handling of their forest lands. The response to this offer was immediate, and in three years private owners of over 4,000,000 acres of woodland have availed themselves of the opportunity.

In no part of the country is wider interest being shown in conservative forest management by private owners, than in the Southern States. Up to date the amount of private lands in the South for which advice in handling has been asked of the Bureau, is 1,534,000 acres, and a very large part of the work which will be done by the Bureau for private owners in the immediate future will be in that section.

The industrial development of the South on all sides during the last ten years has been remarkable, but no single industry has made greater strides than the lumber business. This is not surprising when it is considered that the Southern States contain a greater percentage of forest area than any other section of the United States. The South has become a very imporant factor in the lumber markets of the world, not only through its wealth of forests, but from the fact that it has unusually good transporation facilities. In reaching the home markets Southern lumbermen have the advantage of a number of excellent railroad systems to handle their products and such important seaports as Norfolk, Charleston, Savannah, Mobile, Tampa, New Orleans, and Galveston, provide excellent outlets through which to reach the foreign markets.

Within recent years many lumbermen from the North have been attracted to the Southern field; the forests of Pennsylvania, Michigan, and Wisconsin having been almost exhausted, many of the leading woodmen of those States are now engaged in cutting timber in the South. The forests of the three States just mentioned were once considered inexhaustible, but once lumbering begins in earnest no forest area is inexhaustible. The present condition of the forests in many Northern and Eastern States is sufficient evidence on this point.

The South now has a great army of lumbermen cutting away its forests, and in spite of their great extent, unless the cutting is done on conservative lines, the day is not far distant when the conditions now existing in the North and East will be found there also. For this reason it is encouraging to see the interest in practical forestry displayed by the owners of private timberlands. This tendency to cut timber conservatively, looking to the future value of the forests as well as to present profits, must be the safeguard. Conservative methods are now being taken up in the North when almost too late, and it will be greatly to the credit of Southern lumbermen if they begin the protection of their forests in time; taking to heart the sad experience of people in other sections.

In addition to more than a million and a half acres of private forest-land in the South, the Bureau of Forestry has requests for the handling of more than 2,500,000 acres in other sections. Added to this are nearly 50,000,000 acres of United States forest reserves and State lands, for which the Bureau is asked for technical assistance from time to time.

Not only have the people throughout the country shown interest in practical forestry, but Congress at its last session so far recognized the importance of the government's work in this line as to raise the Division of Forestry to the rank of a Bureau. The annual appropriation was also increased from $88,520 in 1900 to $185,440 in 1901. Still the demands upon the Bureau continue to greatly outstrip its resources.

Agriculture at Manhattan.

EDITOR KANSAS FARMER:—This subject is deservedly receiving attention at the hands of the KANSAS FARMER, and I wish to add a little from the standpoint of a graduate in the agricultural course, and one that has not quit farming and gone to teaching school. The editor of the Rural New-Yorker states that he starved while getting through an agricultural college, and starved after getting through, while he was forgetting some things that he learned; I was ready to "shake" with him on that, for I have just completed the double period of starvation.

I do not wish to "stake" my opinion of what an agricultural college should be, against the Board of Regents, as they are learned men of widely diversified occupations and able to pass on nearly all questions; yet if diversity of occupation is necessary, I would suggest a board composed of an astronomer, an admiral, a miner, an Esquimo, and a Chinese; these would give the "Rural Academy" a broad course of study. My opinion is, that our college is just in sight of a proper agricultural course. Previous to the time of President Will there were only 2 terms devoted strictly to agriculture in the four years. My class was the first to benefit by the change in course; 19 men took their degrees in the agricultural course and one-half of these are now following other persuits, so that out of a class of 39 men, there remain only 10 educated farmers. "The Swath of Agriculture" at Manhattan is narrow. This leads us to consider that editorial in the Student's Herald on the "Swath of Agriculture." Let me explain that the Herald is run entirely without faculty supervision, and the editor writes what he likes. This one takes the general science course and does not know the needs of the agricultural course. From my experience on the Herald staff, and from reading it ever since the first copy, I know that nearly all its editorials are written to "fill up," and the one referred to seems no exception.

Last June the writer spent three days at Manhattan in the interests of the agricultural course, looking to an improvement in the course to cover deficiencies that we found, from experience, after graduation. We were most cordially not received by the board, as they were so busy. We noticed them have one short meeting in the three days.

The agricultural course at Manhattan does not fit one for a position. Of course, it is no trouble to get a "job" as on a farm for $40, or teaching school at $45, or running a skimming-station for $30. Our college graduates ought to be capable of something higher; it is a disgrace for them to take the schools away from the schoolmarms. I know from experience that there are positions paying $100 per month awaiting our agricultural graduates when they receive the right kind of practical instruction.

There is not a college in the United States that gives enough of advanced practical agriculture—no, not one. There is not a college in the United States that expressly fits its students for the civil service positions under the Department of Agriculture—no, not one. What a promising opportunity for Kansas.

F. ZIMMERMAN.

Moray, Kans.

Horticulture.

"Forest Extension in the Middle West."

WM. L. HALL, ASSISTANT SUPERINTENDENT OF TREE PLANTING, U. S. BUREAU OF FORESTRY.

The above bulletin issued by the Bu r au of Forestry at Washington, has been received at this office. It is a carefully prepared document of a dozen pages, with six extra half tone views showing successful forestry in Kansas. This booklet contains a great deal of valuable information to the tree grower and general farmer living in a prairie State. It also enumerates the trees from which the greatest profit and usefulness may be expected. In giving the general conditions of forestry Mr. Hall sounds the key-note when he says: "If 500,000 acres of timber should be planted annually, well distributed throughout the Middle West, the product would yet be inadequate to meet the requirements of the country, and the planters could hope for liberal profits."

People of Kansas ought to be very much interested in forestry because persistent tree planting has been the means of beautifying our State, which was less than thirty years ago a vast grassy wind-swept prairie.

This bulletin is too long for a full report. However, we will take many of the leading thoughts given by Mr. Hall, which will be practical and helpful to our people. A letter addressed to the Bureau of Forestry, Washington, D. C., will procure the bulletin.

PURPOSES FOR WHICH TIMBER MAY BE GROWN.

FENCE POSTS.—The timbers best suited for this purpose are Osage Orange, Locust, Hardy Catalpa, Red Juniper, Mulberry, Black Walnut, Oak, and Ash.

Osage Orange posts have been obtained from native timbers and from old hedge rows, mostly from the latter source. This tree has been used extensively as a hedge plant in eastern Kansas, Missouri, Iowa, and Illinois. Hedge rows sometimes turn out as many as 25 posts to the rod. It has seldom been planted except in this way, but will grow well in plantations. Its durability in contact with the soil is greater than that of any other wood commonly used, and it justly ranks high as a post timber. It requires from twelve to fifteen years to reach suitable size for posts.

Locust (Black Locust) is a well-known post timber. It grows rapidly, is well adapted to hard, stiff soils, and stands more drouth than any other timber used for posts. These properties make it very popular in many parts of the West.

The Hardy Catalpa has been more abundantly planted as a post timber than any other tree. It is especially popular, and deservingly so, in eastern Kansas and Nebraska, where several large plantations have been made. It does best on deep, porous soils. Its durability in the ground has probably been overestimated by some, but not fully appreciated by the public generally. When cut at the proper season its durability nearly equals that of the Osage Orange, but if young wood be cut when full of sap it is subject to attack by a fungus which destroys it rapidly. If to its durability we add its rapid growth, good form, lightness, strength, elasticity, immunity from checking or becoming unduly hard, we have an array of good qualities that to many men of experience place it first among post timbers. It requires from eight to twelve years to become large enough for use.

Red Juniper (Red Cedar) is a durable and valuable post timber, commanding good prices everywhere. Its main drawback is its slow growth, and it may never become popular as a domestic post timber except in limited areas. Twelve or fifteen years are required to grow it.

Mulberry, especially the Russian type, has made a good record in some sections of the West. It grows rapidly, is usually more or less crooked, but lasts well in the ground. It does best in porous, sandy soils, and when grown thickly in the row. It can be used in ten years after planting.

Black Walnut posts are used extensively in some localities. Posts from the old wood last a long time, but those from the young wood soon decay. It is of slower growth than Catalpa and Locust.

Oak, principally White Oak, Bur Oak, and Post Oak, has furnished more posts in the past than any other timber, the native trees being used. As the supply is exhausted in various sections its use will largely cease; it grows too slowly to be planted extensively.

Ash, principally White Ash and Green Ash, has been planted throughout northern Nebraska and South Dakota. Its growth is rather slow, from twelve to fifteen years being required to produce a post of good size. Its life in the ground is quite satisfactory and for the region it seems to be the best post timber.

RAILROAD CROSS-TIES.—It is certain that timber can be grown for railroad ties at a profit.

Two extensive plantations of Catalpa at Farlington, Kans., established twenty years ago, have now some trees large enough for ties. The soil of the locality is not well suited to the Catalpa, and the management of the plantation has not been the best. Hardy Catalpa and Locust can be grown to the proper size for cross-ties in fifteen years under favorable conditions of soil and management. Only in certain localities of the West will the Oaks be planted for this purpose. The White Oak requires thirty or forty years to make the growth that the Hardy Catalpa makes in fifteen, whereas it is generally conceded that there is little difference in their value as tie timbers.

GENERAL LUMBER PURPOSES.—When timber is large enough for cross-ties it is approaching readiness for other uses. There will always be great demand for this class of lumber for use in furniture, cars, implements, and vehicles. Whether it will be profitable to hold plantations for these uses rather than to sell them for the uses mentioned can not as yet be determined.

Of the trees considered, the Hardy Catalpa has better prospects for success, in its section, than any other. This is due to the ease with which it can be managed, its rapid growth, and its adaptability to a large category of uses. That it thrives in but a limited section is to be regretted. Nevertheless, its territory is large enough for great quantities of it to be produced.

VALUABLE TREES OTHER THAN THOSE MENTIONED ABOVE.—It is freely admitted that there are many trees valuable for planting in the Middle West not included among those given above. All the Elms, Maples, Poplars, and Willows are omitted, and the writer knows well that they have a high silvicultural value; but in a system of forest operations instituted for profit and carried on under competition, such trees can as yet have little place. They have been widely planted and will continue to be planted for shade, shelter, and ornament, but not for profit. In their influence upon the country they have a high value, and as a class they are not to be lost sight of or disregarded in forest planting; but since this article concerns itself only with those elements that lend themselves readily to the immediate extension of forest operations, a general discussion of these trees is not included.

A Planter's Notes On Trees and Shrubs.

The following notes on the behavior of trees and shrubs are drawn from an experience of nearly twenty years in the planting of ornamental woody plants, chiefly on the lawn and in the trial grounds of the Kansas State Agricultural College and Experiment Station. They are presented as suggestions to intending planters, and it is believed that the results here shown will be very nearly found good in most localities in middle and eastern Kansas.

THE TULIP TREE.

The tulip-tree, or poplar (Liriodendron tulipifera), a noble native of rich lands in the central Mississippi River region, has been growing for nearly twenty years upon the college grounds, making a growth less satisfactory than if in better soil, but the trees having become fairly established are admired by all viewers. The conspicuous yellow tulip-shaped flowers in May attract much attention, as does also the peculiar foliage, whether in the fine light green of spring or in the rich yellow autumnal coloration. We note that this tree does not thrive in the infertile clay soil of the slope lands, but does better on the low grounds where it receives the wash of the hills. Small trees are less hardy, being occasionally destroyed by hard winter weather, especially when succeeding dry weather in August. We have found it possible, in spite of popular experience to the contrary, to transplant this tree with fair results, even when it is 2 or 3 inches in diameter, it being necessary, however, to saw the top off at the ground and allow a single strong shoot to reform the head. Once established, this tree is in most danger from the scorching southwest sun and wind, which often kill the bark on that side of the trunk, making a blemish practically incurable. This danger can be largely avoided by selecting for the tree a situation measurably protected, and by heading the tree low for the first few years.

Other trees of the Magnolia family, to which the tulip-tree belongs, have been planted for trial, but with none of them is there a reasonable hope for success. To the list of failures in this family pertain the cucumber tree (Magnolia acuminata), Soulange's magnolia (M. Soulangeana), and an allied species, Cercidiphyllum japonicum.

THE PAWPAW.

The pawpaw (Asimina triloba), a native in lower grounds through the eastern part of the State, has some desirable and some undesirable features as a lawn tree. It is of a decidedly tropical aspect. Its abundant broad leaves are of a beautiful soft green in summer and of the clearest pale yellow in autumn, while the form of the tree, even with little attention to training, is symmetrical and pleasing. Its tendency to sprout will not weigh greatly against it if it is planted somewhat distant from the more formal part of the grounds, against a background of larger trees. A liking for the peculiar flavor of the pawpaw fruit has generally to be acquired, but there are many who are fond of it, and no doubt the future will give us this fruit in greatly improved forms. Great variation occurs in the size and quality of the fruits as they grow in our timbered lands, and it seems that a little effort in selection should give us ample and early reward in the way of improvement.

THE CORALBERRY.

The coralberry (Cocculus carolinus), native in our southeastern counties, is a woody twiner with broad ovate, often lobed, leaves and bright red berries. It is of only moderate density as a trellis plant and not equal to the next species, its relative, as an ornamental. It thrives best in moist ground, and is prone to spread beyond bounds by suckers, a tendency that forms a drawback to its use in neat places.

THE MOONSEED.

The moonseed (Menispermum canadense) is a woody twiner, native throughout the eastern half of the State, growing in rich soils in thickets and along fences. It is well worthy a place in even a moderate collection of climbers, making a close screen of broad, rich foliage, agreeably diversified in summer by clusters of small white flowers and in autumn by black grape-like fruit. Like its relative, the coralberry, this vine suckers from the running roots, but this habit is not sufficiently pronounced to give trouble.

AKEBIA QUINATA.

Akebia quinata, a graceful slender woody twiner of Japanese origin, bearing handsome palmate leaves with 5 leaflets and purple flowers of medium size in small clusters, followed by very large oblong purple berry-fruits, while desirable in respect to its beauty, is with us, unfortunately, rather tender, suffering rather from our hot, dry summers than from the severity of our winters. It should be planted upon an eastern exposure and given protection during winter. It can not be recommended, however, for general planting.

THE BARBERRY.

The European barberry (Berberis vulgaris) is a shrub that proves well adapted to general planting. Under favorable conditions it attains 7 or 8 feet in height, with a corresponding breadth, and with a little attention to pruning away the worn-out wood is an agreeable specimen at all seasons. Its spring foliage is a beautiful clear green, among which the yellow flower clusters in May and June, show to good advantage. Usually the summer effect is less agreeable, the leaves becoming somewhat dull in color. In the autumn, however, the colors are exceptionally good, including shades of yellow, red, and red-brown, the foliage hanging later than that of most shrubs. An additional beauty is offered in the bright crimson, scarlet, or purple fruits, which remain on the bush nearly throughout the entire winter. The close growth of the barberry adapts it well for the purposes of a garden hedge.

The variety purpurea, or atropurpurea, as the purple leaved form is called in the catalogues, is one of the best shrubs of its color, the foliage being very attractive during the first half of the growing season, though becoming somewhat dull and dusky looking during the hot weather in August. It is less hardy than the normal form.

Berberis Thunbergii, a low-spreading, picturesque Japanese species, is much admired where well grown, and has proved perfectly hardy. The leaves are somewhat smaller and more sparsely placed, the small greenish flowers are scattered and inconspicuous, the bright red fruits, however, being sufficiently distinct and showy. This shrub grows naturally in a pleasing

Uncle Sam's Mail Service

requires physical and mental ability of a high degree to withstand its hard labors. The high tension to which the nervous system is constantly subjected, has a depressing effect, and soon headache, backache, neuralgia, rheumatism, sciatica, etc., develop in severe form. Such was the case of Mail Carrier S. F. Sweinhart, of Huntsville, Ala., he says:

"An attack of pneumonia left me with muscular rheumatism, headache, and pains that seemed to be all over me. I was scarcely able to move for about a month when I decided to give Dr. Miles' **Pain Pills** and Nerve Plasters a trial. In three days I was again on my route and in two weeks I was free from pain and gaining in flesh and strength."

Sold by all Druggists.

Dr. Miles Medical Co., Elkhart, Ind.

A Boon To Humanity

Is what everybody says who has used

St. Jacobs Oil

For it cures the most difficult cases of Rheumatism—after every other form of treatment has failed.

St. Jacobs Oil never fails.

It Conquers Pain

Price, 25c and 50c.

SOLD BY ALL DEALERS IN MEDICINE

J. G. PEPPARD,
1101 to 1117 West 8th St.
(Near Santa Fe St.)
KANSAS CITY, MO.

MILLET CANE CLOVERS TIMOTHY GRASS SEEDS.

SEEDS

KENTUCKY BLUE GRASS SEED.

For a beautiful as well as a most profitable pasture sow BLUE GRASS.
The genuine Kentucky seed is what you want, and from September until June is the proper time to sow. For pure seed of our own raising, and full particulars, write MT. AIRY SEED FARM, Paris, Kentucky.

form, requiring little or no pruning, and is well adapted to planting in borders or in the near foreground of tree groups. Like the common barberry, it takes striking foliage colors in autumn, and in favorable seasons is at that time a mass of rich color.

Berberis (Mahonia) aquifolium, the Oregon grape, or hollyberry, is offered by most nurserymen, and is often planted, but in most situations it is only half hardy and rarely makes a handsome specimen. It can not be recommended except under careful cultivation and with due protection both summer and winter. This plant has long pinnate leaves, the leaflets shining green with prickly edges, those of the new shoots, extending until almost frost, being of particularly pleasing and delicate shades.—E. A. Popenoe, in the Industrialist.

Fall Treatment of Pear Blight.

In those orchards where the blight has been carefully and persistently removed and destroyed most of the trees have been saved. In some instances the cutting was not severe enough to remove all the blight-producing organisms, that is, the diseased branches were not cut far enough below the lowest discolored point on the bark to remove the organisms, and as a result the disease remains in the tree and continues its destructive work so long as soil and weather conditions are favorable.

At this season it will be observed that the blight is not spreading and the disease is not advancing even in the partially dead branches. It has been found, however, that the disease producing organisms, although inactive during the fall and winter, are not dead, that they are capable of living over the winter, if the diseased branches have not been removed from the trees. As soon as the sap begins to flow in the spring these organisms again become active, and it is from these so-called hold-over cases that the blight is spread. When the organisms become active in the spring they find their way to the surface of the infested branches either through exuding of the sap or otherwise, and are carried by the bees or wind to neighboring trees where they lodge and produce disease.

It is clear form these facts that have been determined by careful investigation that there is only one way in which to prevent an outbreak of this disease next season, and that is by destroying all the organisms before the sap begins to flow in the spring. The only method by which this can be accomplished, so far as known at present, consists in cutting out and burning the affected branches. In many orchards where the blight was so destructive the past season, it was found that little or no effort had been made to destroy this pest during the preceding season. While the blight was not so destructive generally in 1899, as in 1900, it was present in most orchards and in many isolated trees; hence where it was not cut out it accumulated and became more destructive during the past season.—Small Fruit Grower.

Missouri State Horticultural Society.

EDITOR KANSAS FARMER:—The Missouri State Horticultural Society will hold its 44th annual meeting at St. Joseph, Missouri, on December 3, 4, and 5, 1901, in the Odd Fellows' Auditorium. The St. Joseph fruit growers are making ample preparation for the society. The St. Charles Hotel will take care of members for $1.50 per day, and the Union and Savoy hotels at $1.00 per day. One hundred dollars will be given in premiums, and all exhibits found worthy will get an award. Only one plate of a variety will be allowed in the collection, and 5 specimens make a plate. The Artesian Ice and Cold Storage Company, of St. Joe, has kindly offered to take care of all fruits sent for exhibition free of charge. Railroads will all agree to give a rate of one fare and a third on the certificate plan. The fine fruit crop of the past season has given an impetus to our business, and we have many matters to discuss at this meeting, and we look for a very full attendance. A complete and very instructive program will be carried out.

L. A. GOODMAN, Secy.
4000 Warwick, Kansas City, Mo.

For Love.

He—"I understand she married him for his money."

She—"No, it was for love."

He—"Love, indeed?"

She—"Of course. Love of his money."

The kidneys are small but important organs. They need help occasionally. Prickly Ash Bitters is a successful kidney tonic and system regulator.

The Poultry Yard.

Food as a Factor in Disease.

DR. N. W. SANBORN, IN THE POULTRY KEEPER.

Food, and the way it is fed, plays an important part in the causing of poultry diseases. This is impressed upon me more and more as I have occasion to advise as to the cure of sick birds. In fact, I seldom am willing to say what I think the cause of an outbreak of disease may be until I know just what is fed and how it is given. Here in New England most cases of diarrhea and nearly every outbreak of so-called "cholera" may be traced to improper feeding.

Until late years we had little trouble from the food used. Birds had free run, going as they pleased upon the farm or over the village lot. This gave them a chance to get the most of their food where they pleased and when they wished. The corn fed was balanced up by the clover leaves and seeds from the hay mow, and bugs and worms added the animal element needed. Now, the old way is changed. The birds are fenced in from garden and neighbors, and are dependent upon their owners for quality and quantity of food. Now poultrymen are crowding their birds to get rapid growth and the largest possible number of eggs. All this is worth considering if we wish to avoid loss and probably failure in poultry keeping.

SOUR AND SLOOPY FOODS.

Spoiled food has no place in the poultry feed pail. This is as true of soured food, spoiled after mixing, as it is of grain or meat that comes already tainted. All wet foods, as mash, should be prepared in quantities just enough to be fed out at once. If left standing in pail or feed dishes it soon "works" and is the direct cause of many a large death rate in brooder chicks and also leads to diarrhea in adult birds. Better feed too dry than too wet. Young chicks grow finely, with few losses, when fed all dry food up to eight weeks of age.

It is money lost to feed grain that has been wet and probably through the burning of an elevator sold a little lower than the best feed. "Burned" wheat or oats not only do not furnish as much food as a sweet article, but are always a dangerous feed when fed to live stock. It does not pay from the point-of-view of the pocketbook to buy damaged grain. The best is the cheapest in the end, and brings the best results sought.

The supply of green bone or ground dried meat and blood should be above suspicion. Most of the bagged meat on the market is good, but now and then you will run across a lot put out by an unknown firm that is fit only for fertilizer. These dried meat products when exposed to dampness sometimes spoil and thus become a dangerous article to use. Green bone should be used while fresh, as it stands exposure to insect life badly. Get it as needed, grind quickly and feed at once.

GREEN FOOD, GRAIN AND MEAT.

An unbalanced ration leads to trouble An over supply of the starches, middlings, and corn-meal, results in overfat birds that are seldom profitable. Too much animal food, such as green bone or ground meat, is followed by diarrhea and is likely to be accompanied with some rheumatic symptoms. The feeding of a ration in which green food, such as cut-clover or hay is lacking, is like giving a cow grain and no hay and expecting to keep the animal healthy. Birds at liberty, of course, fill upon grass that they help themselves to or eat the leaves from the barn floor. If kept from grass and hay, hens will "fill up" on dry leaves or eat corn fodder. Knowing this need of a healthy hen, see that it is supplied in some good way.

Vegetable food, such as clover and grass, when taken in too long pieces, often produces cases of crop bound or stoppage.

COOKED MASH.

As between cooked or uncooked mash the evidence is in favor of the cooked. There is less danger of fermentation if the mash is cooked, that is, the food will keep longer before being fed, and stands a better chance of getting digested after it is taken by the bird. Many a fine lot of chicks has gone to join the silent majority because fermentation began in its food before the digestive process could stop it.

LACK OF GRIT.

Although not an article of food, grit is necessary to a bird's welfare and must be thought of as a possible cause of trouble. In my work of advising in poultry troubles I have opened dozens of brooder chicks that had both crop and gizzard filled with grit. Grit and nothing else. It is not safe to place grit and nothing else before little chicks. They are hungry and will fill up on grit alone if that is all within reach. It forms a solid impaction that is hard to break down and many chicks die as the result of it.

Adult birds, shut in during the winter months away from the soil, need grit and it must be supplied to have the birds keep healthy and lay eggs. If kept before them they will help themselves and not be obliged to scratch over the droppings to get filthy grit that has been through the fowl. Filth in any form is dangerous to health and being introduced on grit does not lessen the risk.

IMPURE OR INSUFFICIENT DRINKING WATER.

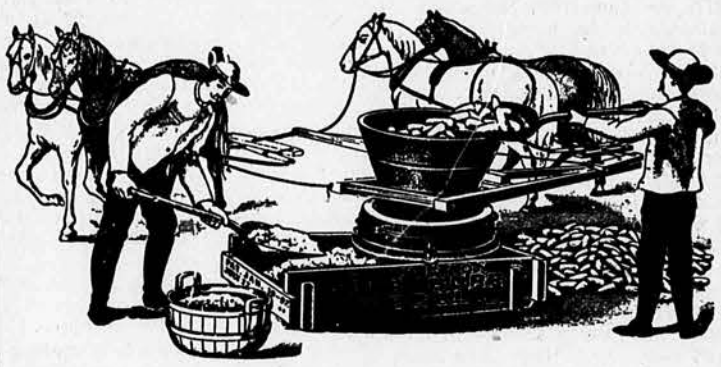
Water is necessary to the bird's well

This Mill has Four Burrs All Grinding at Once

There is No Oil or Ball Bearing Needed

There is No Gearing and No Friction

This is The Four-Burr Mogul No. 1



ONE OF THESE MILLS

Ground All of the Corn for 365 Head of Steers and 2000 Head of Sheep on Full Feed

AND SAVED ITS COST EVERY 36 HOURS

IT IS MANUFACTURED AND SOLD BY THE

IOWA GRINDER AND STEAMER WORKS,

Waterloo, Iowa.

This Mill has Four Burrs All Grinding at Once

POULTRY BREEDERS' DIRECTORY.

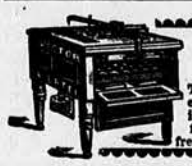
Bushels of Eggs

if you get a fast cutting Dandy Bone Cutter. Price $5 up. Sold direct on 30 days trial.. Handsome catalogue free. STRATTON MFG. CO., BOX 76, ERIE, PA.

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.



VICTOR INCUBATORS

The simplest, most durable, cheapest first-class hatcher. Money back if not as represented. Circular free; catalogue 6c. We pay the freight. GEO. ERTEL CO. Quincy, Ill.

200-Egg Incubator for $12.80

Perfect in construction and action. Hatches every fertile egg. Write for catalogue to-day. GEO. H. STAHL, Quincy, Ill.

You Can Hatch Chickens by the Thousand IN

The "ONLY INCUBATOR"

Which has no defects and has advantages over all other machines. You can raise the chicks in THE ONLY BROODER, which will not freeze, smother, or overheat the chicks. Write for Catalogue. Sold on 30 days trial. THE ONLY INCUBATOR CO., Box M, Lincoln, Neb

POULTRY PICTURES. French Color Plates. Beautiful to Frame. Not a cheap, but a first-class picture. Send for a FREE sample copy of Fanciers' Gazette and see what they are like. Six of these Color Plates and one year's subscription for 25 cents. This Poultry Paper covers all there is to know about the poultry business.

FANCIERS' GAZETTE CO.,
Care F. G. 128. Indianapolis, Indiana.

Globe Incubators Make Big Money

With the Globe Incubator there are no failures—every fertile egg hatches. It is so simple to operate any person can handle it successfully. With its system of hot water pipes for heating, and the ventilation being so perfect it hatches stronger, healthier chicks and more of them to the 100 eggs than any other. Teachers, preachers, students, professional men, business men, farmers, farmer's wives, mechanics and day laborers, with no experience and little money, make their leisure hours pleasant and profitable with Globe Incubators. There is always a good cash market for chickens. Write for catalogue, price lists and full information free. C. C. SHOEMAKER, Box 420, Freeport, Ills, U.S.A.

STANDARD POULTRY.

Barred Plymouth Rocks, White Plymouth Rocks, Partridge Cochins, Buff Cochins, Light Brahmas, 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.

KRAUSERS LIQUID EXTRACT OF SMOKE

Smokes meat perfectly in a few hours. Made from hickory wood. Delicious flavor. Cleaner, cheaper. No smokehouse needed. Send for circular. E. KRAUSER & BRO. Milton, Pa.

DR. HENDERSON

101-103 W. 9th St., Kansas City, Mo.

A Regular Graduate in Medicine. Over 30 Years' Practice—22 in Kansas City.
The Oldest in Age and Longest Located.
Authorized by the State to treat CHRONIC, NERVOUS AND SPECIAL DISEASES.

Cures guaranteed or money refunded. All medicines furnished ready for use—no mercury or injurious medicines used. No detention from business. Patients at a distance treated by mail and express. Medicines sent everywhere, free from gaze or breakage. No medicines sent C. O. D., only by agreement. Charges low. Over 40,000 cases cured. Age and experience are important. State your case and send for terms. Consultation free and confidential, personally or by letter.

Seminal Weakness and Sexual Debility The results of youthful follies and excesses. I can stop night losses, restore sexual power, nerve and brain power, enlarge and strengthen weak parts, and make you fit for marriage. Send for book.

Stricture and Gleet Radically cured with a new and Infallible Home Treatment. No instruments, no pain, no detention from business. Cure guaranteed. Book and list of questions free—sealed.

Syphilis Blood poisoning and all private diseases permanently cured.

Varicocele, Hydrocele and Phimosis Permanently cured in a few days without pain or danger.

Book for both sexes—96 pages, 27 pictures, with full description of above diseases—the effects and cure—sent sealed in plain wrapper for 6c. stamps—free at office.

☞ Eleven rooms and parlors, so arranged that patients need not see each other.

Free Museum of Anatomy for Men.

Office Hours: 8 a.m. to 8 p.m. Sundays 10 to 12.

being and must be supplied in quantity and quality right for health. Too little water makes the bird restless, nervous, and lessens the egg yield. Water dishes so arranged as to collect filth, or if allowed to go long uncleaned, become a source of trouble, if indeed they do not cause serious sickness. Warm water in summer and ice cold drink in winter are contrary to common sense, and the egg yield tells us that common sense is right.

The Poultry Crop of 1901.

The following estimate of the poultry product for 1901 has been prepared by the Sprague Commission Co., from reports from producers and shippers throughout Ohio, Illinois, Indiana, Iowa, Wisconsin, Missouri, Arkansas, Tennessee, Kentucky, Michigan, Kansas, Nebraska, Minnesota, and the Dakotas. It will be of interest to our readers:

The reports received this year indicate a material decrease in the supply of ducks and geese, a rather liberal supply on chickens but no larger than last year, and a smaller crop of turkeys. Weather conditions have been of such a variable and unseasonable character as to have had a very important effect on the production of poultry in its various stages of growth. In the first place the cold and unusually late and wet spring worked very unfavorably against the early hatches. This was particularly the case with turkeys, many of the young birds dying from cold and wet, and their growth was greatly retarded from the same causes. Then came the excessively hot weather during July, the hottest experienced for years, with the thermometer ranging continuously for weeks from 100° to 110° at different points all over the country. The fertility of the eggs was affected, and many hatchings did not bring out half a brood during this period, but the later hatchings met with better success, and the early failures induced farmers to put out a larger quantity and thus in the case of chickens particularly the early losses were made up. But the very hot weather and absence of rain, especially in the West and Southwest, had a decided effect on the crop of ducks and geese. Water is an important factor in the raising of the web-footed fowls, and ducks and geese suffered seriously. The creeks and ponds dried up, and in many places there was no water to be had, and besides the losses in dead stock, a great deal of stock was shipped to market during the summer and much earlier than usual, and these facts created the belief that the coming supply for winter will be smaller than for several years. As a result of the drouth, the corn crop is not much over half of that of last year, and this induced farmers to sell off a considerable portion of their stock earlier than usual.

TURKEYS.

The crop of turkeys, it is estimated, will be fully 15 per cent short of last year, or about 85 per cent of a full crop. Last year was considered about a full crop. The crop is about the same as during the year 1899, possibly a little larger. Our reports in nearly all instances claim the turkeys are much poorer than usual this year, and the scarcity of feed, it is argued, will bring in a larger quantity of turkeys around Thanksgiving of a poor quality than last year. Christmas turkeys are likely to bring good prices.

CHICKENS.

The majority of our reports indicate an increased crop, some of the correspondents in their sections, giving as much as 25 per cent increase, while a fair proportion gives less than last year. It probably would be fair to place the crop this year at about 95 per cent as compared with last year. The early hatchings were smaller than in former years, but the later settings made up for a good share of the shortage, and while we estimate the crop a little short of last year, it might develop that the crop may, by late hatchings, be larger than last year. Old chickens have been marketed rather freely, and may have been sold off more closely than in former years on account of the drouth scare.

DUCKS.

Everything points to a smaller drop of ducks, if our correspondents can be relied upon. From the estimates given it would be fair to place the crop fully 10 per cent short of last year. Last year the crop was fully 20 per cent less than the year 1898, but as the crop that year was away above an average crop, we are justified in saying that the production this year will not be much below an average crop. Prices realized have not been giving much encouragement to farmers to raise ducks. They seem to have been marketed freely on account of the anticipated scarcity of feed and the short water supply.

GEESE.

Another shrinkage in the crop is indicated by this year's report of about 10 to 15 per cent as compared with last year, making a showing of about 70, against 80 last year, or some 30 per cent less than the crop of 1898, which was considered a full crop.

Poultry Notes.

N. J. SHEPEHERD, ELDON, MO.

Before they have cost too much for feed all inferior or deformed fowls should be marketed, reserving nothing to be wintered over except the needed breeding cocks and the most healthy hens and pullets.

The stability of any business or industry depends to a great extent on its profitableness and the profitableness depends as a rule on the management by the men who are engaged in the business. This is certainly true in poultry raising, for if it is poorly managed failure is almost certain.

The average weight of eggs is about 8 to the pound, therefore a dozen eggs weigh about 1½ pounds. There is no flesh food that can be served in so many palatable ways or none so easily obtained by the average farmer. Like milk, eggs are perfect foor, containing all of the constituents of nourishment and are easily digested in three hours.

One of the worst objections to purchasing exhibition fowls for breeding purposes is that the repeated fatenings often prove injurious to the reproductive powers, and when they are used fail to give as good results as are expected. It would be better, as far as breeding is concerned, if fowls could be exhibited in a more natural rather than a pampered condition.

Improvement is seldom found in a cross and if found it is only with and after great care in guarding and perpetuating such a cross that it becomes a distinct breed in itself. Usually this care and attention can not be given by the average keeper of poultry, hence a distinct variety is desirable—one in which a distinct and pure blood can be added annually if desired.

If the growing chicks seem weak and inactive at this time, they are either troubled with lice or need food that will more perfectly assist them in the growth of feathers. No fowls can thrive, no matter how well fed, if troubled with lice. If the latter is the cause feed a little crushed bone and broken oyster shells with the morning feed. A little pulverized charcoal will also be found helpful.

When soft food is given, the best and the most economical way is to have broad, smooth boards upon which it can be placed. If the soft feed is thrown upon the ground not only is more or less wasted, but more or less filth is picked up and this is sure to generate disease. The objection to troughs is that unless considerable care is taken in cleansing the cracks and crevices will become filled with sour or decayed food, which will prove very unfavorable for health.

New Use for Telephones—Farmers Furnished Markets By Wire.

What was considered one of the wildest of Bellamy's "Looking Backward" schemes is a reality to-day. The news of the world delivered daily to telephone subscribers over the wire is a scheme practised to-day by Mr. W. S. Pershing, editor and postmaster at an Indiana town. At 8 o'clock every morning the contents of the evening newspapers are telephoned to subscribers living near or remote from a central exchange in direct communication with all the phones on a company's system. As soon as the last edition of the afternoon newspapers is received Mr. Pershing notifies his subscribers to get ready to receive the news contained in the paper. Not all of the contents are read over the wire, but enough to give an exact idea of the events of the day. Special attachments for home telephones have been provided for all who desire to secure them, by means of which the receiver may be held at the ear while the person receiving is seated at the family table or on the veranda. It is the custom for the person listening to repeat the message to those about him, so that all in the circle may instantly receive the benefits of the service.

At 7 o'closk prompt there are 3 rings, and every farmer adjusts his receiver to his ear. The report opens as follows: "Good-evening. Now all be quiet. Washington standard time 40 seconds after 8 o'clock. Weather indications for the next 36 hours, fair and cooler, with probable rains tomorrow afternoon. Chicago markets—corn, 60; wheat, oats, clover, rye, timothy, hogs, cattle, potatoes, etc."

Then follow crop indications that have local application the quotations for the local stock market, and other information of interest to the community. After this the foreign news is given; then comes a review of the State news, and then all local matter that is of sufficient importance to repeat.

In speaking of the scheme editor Pershing said: "I do not claim entire originality in this daily-news service, but so far as I know, except in one county in southern Missouri, this is the only daily-news service of the kind in the world. While this is a great stride forward, the telephone in its application to farmers' use is only in its infancy. The day is at hand when farmers all over Indiana will have these news reports furnished by regular news agencies at least once daily, and perhaps the future will bring several daily editions. Wherever the telephone reaches in the country districts this is not only possible, but will come. We have demonstrated that it is practical. The results are manifold. The farmers who now have the service would not let it be discontinued at any reasonable cost. It is beneficial to their co-operative telephone companies, as demonstrated by the fact that since the service has been started orders for phones and wires are greater than can be supplied, and the lines are being run down every road. The day will come when busy farmers who are interested in the county fairs and races, but can not leave their crops to drive 10 or 20 miles, can have them reported heat by heat or discussed as the heats are run—such as, Jaybird has the pole; Mary C gets off ahead; all in a bunch; Mastondon leads by a nose at the quarter, etc. When great political orators of the future come to town they will be able to address the people of the country districts for 20, 30, or even 50 miles around."

That ordinary business transactions effected over telephones is regular and binding is proven by the fact that twice recently courts have established the validity of contracts made by telephone. Some day this ruling by the courts may make it possible for farmers living at a distance from polling-places, or rendered incapable from attending the voting-booth by sickness or other cause, to cast their ballots over the wires.

One of the most successful editors in Indiana whose original methods have attracted wide notice is the editor of "Truth." He sees at hand a complete revolution in news service for the farmer. He is preparing for a similar service to that described, but he is building his own lines all over his section of country, only asking the farmers to coöperate in so far as putting up his poles and stringing his wire. He will supplement the news contained in the metropolitan dailies with the late editions of newspapers printed in the neighboring county-seats and all late local news. He is also organizing a system by which he expects to do a general traffic business and a merchandise delivery.

Practically all the first congressional district is now covered with farmers' telephone-wires. In Warwick, Posey, Gibson, and other counties, including parts of Vanderburg, Pike, and Spencer, all in the southwestern part of Indiana, there are more than 3,000 farm-houses connected by telephone. It is claimed that the "Pocket" farmers were not only the first in the State, but also in the entire Mississippi Valley to adopt the telephone as an essential part of farm equipment. They resorted to it to obviate the evils and inconveniences resulting from impassable roads in the winter and during the season of overflow of the Wabash and its lower tributaries. They are now engaged in organizing just such a system as the one described for receiving the daily news. All their lines now center in Oakland City as the general central exchange, thought they have a dozen smaller exchanges over the district. They now hang-distance, free-toll lines of the best copper wire, and farmers can talk almost 100 miles free of all charge except the stated regular rentals. The ladies make their calls that way, and inter-county matrimonial alliances have been the result of a free use of the electric current.

The farmers in 61 of the 92 counties of the State are now putting up lines and utilizing the phones. Already farmers in all counties surrounding Indianapolis can be reached direct from the city, and they will all soon be having a regular daily-news service furnished by a company organized for that purpose. In Tipton County, where the scheme has long passed the experimental stage, it is noticed that after a few weeks the farmer who gets such service begins to live in a wider world. He wants and must have, the daily papers for details, and he subscribes for them. Many are favored with free mail delivery and others are organizing county carrier routes so that they can have their daily mail delivered at their doors without government supervision.—C. M. Ginther, in Farm and Fireside.

SAVES 75 PER CENT ON YOUR COAL BILL.

The "DIAMOND" Hot Blast

Secures PERFECT COMBUSTION.

Burns Soft Coal, Siftings, Slack, Coke, Cobs, Etc.

A ton of sort coal does the work of a ton of hard coal; no dust, no smoke, no clinkers. The Fuel Saving in One Season will more than pay cost of stove. It burns all the gas and gives the same result and the same even heat and cleanliness obtained by hard coal in the best base burners. It holds fire over night and requires very little attention. Size 14-in.

PRICE $10.85.

SEND $1 with order and will ship Stove C. O. D. with privilege of Free Examination. We advise sending entire price with order, thus saving C. O. D. collection charges of from 25 to 50 cents.

DIAMOND STOVE & RANGE COMPANY, P. O. Box 1019, Chicago.

"Of course you're glad to have school open again, Willie." "Sure; now we kin have some more fun playin' hookey."—Indianapolis News.

A bottle of Prickly Ash Bitters kept in the house and used occasionally means good health to the whole household.

How's This!

We offer One Hundred Dollars Reward for any case of Catarrh that can not be cured by Hall's Catarrh Cure.

F. J. CHENEY & CO., Props., Toledo, O.

We, the undersigned, have known F. J. Cheney for the last fifteen years, and believe him perfectly honorable in all business transactions and financially able to carry out any obligations made by their firm.

West & Truax, Wholesale Druggists, Toledo, Ohio.

Walding, Kinnan & Marvin, Wholesale Druggists, Toledo, Ohio.

Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system. Price 75c. per bottle. Sold by all druggists. Testimonials free.

Hall's Family Pills are the best.

Big Bargain In Railway Travel

Only one fare plus $2 for a round-trip ticket to Kansas, Colorado, Oklahoma, Texas, New Mexico, Arizona, Salt Lake City.

October 15, November 5 and 19, December 3 and 17.

Tourist sleepers and chair cars.

See the great Southwest—its irrigated lands, cattle ranches, mines, oil wells, and orchards.

The place to get a home or make Profitable investments.

Santa Fe.

Address, T. L. King, Agent, Santa Fe, Topeka, Kansas.

FARMER AND CAPITAL

$1.25.

The Semi-weekly Capital, published twice a week at Topeka, Kansas, is an excellent 8-page Republican newspaper. It is issued Tuesday and Friday of each week and contains all the news of Kansas and the world up to the hour of going to press.

To a farmer who cannot get his mail every day it is as good as a daily and much cheaper.

By a special arrangement we are enabled to send the Kansas Farmer and Semi-weekly Capital both one year for $1.25. This is one of our best combination offers and you can't afford to miss it. Address: THE KANSAS FARMER CO., Topeka, Kansas.

Grain 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. Nov. 5, 1901.

Northwest receipts of wheat are still very large. Minneapolis and Duluth had 919 cars in this morning. Chicago had 55 cars and Kansas City only 51 cars.

As I have advised for some time that it would do, wheat got a "move on" the last two days and closed strong at following quotations:

Chicago.—No. 2 red wheat, 74 cents; No. - hard wheat, 72½ cents; No. 2 corn, 59½ cents.

Kansas City.—No. 2 red wheat, 71¼ cents; No. 2 hard wheat, 68½ cents; No. 2 corn, 64 cents.

Market Letter.

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

November 5, 1901.

Wheat, which has hung so long in the balance around 70 cents in Chicago, gives indications of getting started for a higher level. If the reports from South America are true, in claiming serious damage to their wheat crop, we will have no competition of consequence from that section in supplying European wants. The belief in higher prices for wheat, which is gradually growing, must find expression in purchases; and it is evident should any material demand for wheat spring up soon, that demand could not be satisfied without advancing prices considerably. Fact is, there is absolutely nothing in the way of higher prices for wheat except the enormous deliveries by northwestern farmers, which is indicated by the very large receipts of wheat in Minneapolis and Duluth, where the receipts of Monday morning this week, were 1,060 cars, with only 112 cars in Chicago, and 121 cars in Kansas City, for the same period.

Speculators in wheat as well as consumers have accepted the private statistician estimates of a crop running all the way from 700,000,000 to 800,000,000 bushels, although the government estimate shows only 650,000,000 bushels.

Suppose the latter estimate is true, with millions of bushels being fed to stock and the largest export in our history, what will our surplus be by July 1 next?

As to the northwestern situation, we quote from the Minneapolis Market Record:

"The receipts at Minneapolis and Duluth so far on this crop year amount to 40,007,319 bushels, against 24,886,247 bushels for the same time last year, 39,172,247 bushels two years ago, and 39,904,302 bushels in 1898. Notwithstanding the large increase in receipts over last year, the prices on cash wheat are higher, when compared with futures, than they were a year ago. Cash wheat in Minneapolis is selling at 1½ cents over December, against ¾ cents premium last year. Two years ago cash wheat was selling at a slight discount under December price. The situation at Duluth is fully as strong, cash wheat having advanced within the past day or so from the December price to 1¼ cents premium. No. 2 and No. 3 wheat are fully as strong as the contract grade. Last year No. 2 sold at 1½ cents to 2 cents under December. Two years ago the difference was about the same. This year No. 2 is selling at the December price to ¼ cent discount. Minneapolis and Duluth stocks are now 12,717,000 bushels, against 16,561,000 last year, and 15,078,000 bushels two years ago.

From the above it would not appear that the northwestern situation is as weak as grain speculators and elevator owners would make it appear. We are inclined to the belief that wheat will do better when their spacious storehouses are filled and the famers have sold out!

Exports are again on the increase with close on to a million bushels for Monday of this week.

Exports of wheat and flour from both coasts of the United States for the week were 6,673,000 bushels; preceding week, 4,952,000 bushels; a year ago, 3,642,000 bushels; two years ago, 3,047,000 bushels; three years ago, 6,774,000 bushels.

Exports of wheat and flour in the eighteen weeks since July 1 amount to 107,673,000 bushels, compared with 63,956,000 bushels, in the corresponding time a year ago, 72,588,000 bushels two years ago, and 73,840,000 bushels three years ago.

Isn't it about time farmers were beginning to think about putting their own price on the products of their labor?

Mr. George Phillips, the Chicago "Corn King," hits the nail on the head when he says:

"It seems a sin to me to sell weekly so many millions of wheat at 20 cents a bushel under what we could get for it. I believe wheat will well reward anyone who invests in it at present prices."

The corn situation is a peculiar one. Corn is selling at higher prices for home-consumption all over the West than it is bringing in Chicago, and it is only a question of time until wheat, too, must do better.

Would Build Grain Elevators.

"The State Board of Railroad Commissioners will go to Marquette, Kans., November 1, to hear a complaint against the Missouri Pacific. Permission was asked for the erection of an elevator upon the right of way of the Company, which was refused, and the board is requested to order the company to grant the request."—Topeka Capital.

The above tells its own story. Fellow citizens, what do you think of having to get down in the dust to ask a railroad company's consent or permission to build a warehouse on its right of way, which was practically donated to it for public purposes? In the above case the people merely asked the privilege of the railroad company to build a warehouse or depot in which to store grain.

The warehousing of grain preparatory to shipping is a function that belongs to the carrier companies, and the railroad companies should furnish storage, in case cars can not be obtained, or let whoever wants to build an elevator do so—without giving that privilege to members of the grain trust only.

"We contend that there is only one way that the grain business can be successfully and profitably conducted and that is a division of the grain made between the dealers operating in a town, this specified in writing and signed by all parties interested. I stand ready at any time to lend my assistance in arranging a division of the grain between you and your competitors. Many of the dealers throughout the State within the past year have adopted this plan, and the fact that elevator property has advanced in price at least 25 per cent is evidence that the plan mentioned is a success."—E. J. Smiley, in an address to the Kansas Grain Dealers' Association, March 15, 1900.

He says the profitable way of conducting the grain business is to make a division of all the grain coming into a town. Never mind the farmer who produced the grain, he has nothing to say—just take his grain and divide it like the freebooters of old divided their booty. This is the modern way of the grain dealers belonging to the grain trust. How much longer will the producers submit to this?

Victoria, Kans., Nov. 3, 1901.

Farmers' Coöperative Grain and Live Stock Association, Topeka, Kansas.

I was informed some time ago that your company was selling shares at $10 a share, and if such is the case I will ask you to kindly inform me where I can buy some shares, because I think that this is the best thing that has happened to the farmers of our great State, because if we do not get our shoulders to the wheel and do our utmost the grain trust of this State will have it all their own way and the poor farmer will become their slave. Yours respectfully,

F. B. BRUNGARDT.

Now is the time for organization. Now is the time for serious thought and investigation. Now is the time for farmers to show their independence and manhood, and as sure as they do so, they will rid themselves of the parasite grain trust and will soon keep step with the progress and advancement of other organized industries.

Farmers have now under their own control a business organization that is founded on up-to-date business principles adopting the same methods of other successful corporations and yet does no man an injustice. If you have not investigated the foundation principles and plans of this association you should do so at once.

We want your orders for potatoes in car load lots. We want to supply merchants who deal with our members. We want to supply every association that can use as much as a car load. Write us for prices if you can use as much as 500 bushels. Address, James Butler, Topeka, Kans.

The Grain Dealers' Association is now attempting to prevent the mills from buying the farmers' wheat, except it comes through a regular dealer. A miller that can be scared by the Kansas Grain Dealers' Association at this time, would scare at a shadow.

Farmers must learn to be more lenient, generous, liberal and appreciative of those who work in their interest; it is essential to their success.

The Farmers' Co-operative Grain and ...Live Stock Association...

Will handle your grain, hay, and feed on commission. If you appreciate honest work, good treatment, and prompt returns, consign your grain to us. We want the consignment of all co-operation associations, independent dealers, scoop shovel men, and farmers. Correspondence solicited.
Address all communications to

JAMES BUTLER, Secretary, Room 14, Office Block, Topeka, Kansas

Too Good to Be Enjoyable.

Oberlin, O., in the center of the Connecticut western reserve, is probably the most Puritanic spot in the entire United States. A large university gives the town its being, and so jealously have the college fathers guarded the morals of their young people that not only is the sale of liquor prohibited in the village limits and for miles around, but tobacco, whether for smoking, chewing, or snuffing, is unknown in the stores, while playing cards are even scarcer than the proverbial hen's teeth. One Mr. Monroe, formerly a congressman from the Oberlin district, was the leading Republican of the village, and usually entertained political orators of the party when they visited "the city."

During Mr. McKinley's first gubernational campaign Prof. Monroe had the pleasure of entertaining the candidate. After dinner on the evening preceding the address Mr. McKinley took a cigar from his pocket and casually remarked: "You don't mind if I smoke, do you, professor?"

Mr. Monroe was aghast. He didn't wish to appear inhospitable, yet dreaded the almost certain social ostracism due to follow the discovery of a smoker on his piazza, even be he the prospective governor of the great state. He compromised by conducting Mr. McKinley to the second floor, through a long hall to a back balcony, where safely screened from public view, the weed was enjoyed. As the smoke curled upward, instinctively McKinley looked about him for a cuspidor. "There isn't such a thing in town," said Prof. Monroe. A coal bucket was finally impressed into service as a compromise.

Two days after the Oberlin meeting Mr. McKinley spoke in East Liverpool, the great pottery center. Chancing to mention the Oberlin experience to his friend, Col. John N. Taylor, the proprietor of one of the big potteries, he said:

"By the way, Taylor, just for a joke, send a gross of your china spittoons to Prof. Monroe. Don't tell him where they came from or he will suspect that I had a hand in it."

Following the suggestion, Col. Taylor crated up an assortment of really beautiful chinaware and sent it on to Oberlin. A year later Mr. McKinley with a liberal supply of good Havanas, again was Mr. Monroe's guest. Forewarned and consequently forearmed he again sought the secluded and vine-draped balcony. Lighting his cigar, he said with a twinkle of his eye:

"You haven't a cuspidor in town, yet, have you Monroe?"

"It's mighty funny," was the response, "but a few days after you were here last year some one sent me a whole crate of those things. Of course, I hadn't any use for them and they were such nice china and so prettily painted that my wife used them all for flower pots. There isn't one about the house not in use."—Omaha Bee.

In expressing his appreciation of the neighborhood telephone system, Hon. Edwin Taylor, of Edwardsville, says: "Think of it! A telephone system that costs me $5 a year for maintenaince, supervision, etc. It adds enormously to the satisfaction of country living and economizes in a hundred ways. The advantages of a local system in every neighborhood can't be overestimated."

OIL **STOCK WILL EARN MILLIONS** OIL

Our Stock Belongs to this Class.

Get in the right company at the right time. We have a business proposition for business men. Send for prospectus. It will convince you forcefully of this fact.

EASTERN TEXAS OIL AND DEVELOPMENT CO., Dept. D 134 Monroe St., CHICAGO

SALARY $900.00 A YEAR. $18 WEEKLY. STRAIGHT OUT SALARY. BONAFIDE SALARY. NO MORE, NO LESS SALARY.

Several trustworthy gentlemen or ladies wanted in each state by an old established house of solid financial standing to manage our business in their own and nearby counties. It is mainly office work conducted at home. Salary straight $900 a year and expenses—definite, bonafide, no commission, easy to understand. SALARY PAYABLE EACH WEDNESDAY IN CASH direct from headquarters. MONEY ADVANCED FOR EXPENSES EACH WEEK. Nine years in business find us compelled to secure competent reliable managers to handle our rapidly growing trade. References. Enclose self-addressed stamped envelope.

THE DOMINION COMPANY, Dept. S, 10 - Chicago, Ill.

$1,000.00 IN GOLD FREE!

THE PARROT HAS ESCAPED FROM THE CAGE—TRY TO FIND HIM Boys and girls over twelve years of age who will cut out this picture and mark plainly with pencil or pen the missing bird (if they can find it) **MAY SHARE IN THE DISTRIBUTION OF $1,000.00 WHICH WE ARE GIVING AWAY IN FIVE MONTHLY PREMIUMS** for doing a little work for us. This is a contest where both brains and energy count. We are determined to make the name of our charming monthly magazine a household word, and we take this novel plan of advertising. This and other most liberal offers are made to introduce one of the most entertaining New York magazines into every home of the United States and Canada. **WE DO NOT WANT ONE CENT OF YOUR MONEY.** There is only one condition, which should take less than one hour of your time, which we will write you as soon as your answer is received. **After you have found** the missing parrot, send it to us at once. It may take an entire evening, but it will pay you to **STICK TO IT AND TRY TO GET YOUR SHARE OF THE $1,000.00.** A sample copy of our **MAGAZINE WILL BE SENT FREE** to everyone answering this advertisement. Try to solve this puzzle. Do not delay. Send your answer in immediately. We positively guarantee that this Missing Parrot can be found. Of course, like all problems, it will require some thought, patience and time. But the reward is well worth striving for, especially when we do not ask you to send us any money with your answer. The golden prizes of life are being gained by brains and energy nowadays. Lazy people and the drones and idlers are always complaining of bad luck. Now here is a **GOLDEN CHANCE** for anyone who will strive hard, and the pleasing part of it is that it does not cost you one cent outside of the letter you send us. Our magazine will please you. It delights us to please our readers. We are continually giving away large sums of money in different contests, as we find it is the very best kind of advertising. **Try and Win.** If you find the parrot and **send the slip with it marked thereon to us at once,** *who knows* but what you will get the **gold?** Anyway, *we do not want any money from you,* and a puzzle like this is *very interesting.* As soon as we receive your answer we will at once write you and you will hear from us by return mail. We hope you will try for it, as *we shall give the $1,000.00 away anyway.* Do not delay. Write at once. Address **THE ROBINSON PUB. CO., 22 NORTH WILLIAM ST., NEW YORK CITY.**

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.

An Excellent Opportunity for Bright Young Men.

Kansas has always been noted for doing things and on account of this characteristic Kansas young men are in demand. The dairy department has received numerous requests for young men to operate skimming-stations, to act as butter-makers, to superintend dairy farms, and to fill the position of instructors in agricultural colleges. Many of these requests have been unsupplied on account of not having men to fill them. Last year we had 65 young men enrolled in the short dairy course. Two weeks before the close of the school all the young men that could be recommended had secured good positions, and there was an immediate demand for 25 or 30 more. The agricultural college is trying to meet this demand by enlarging the scope of the dairy work and offering greater attractions for the young men to take up this line of work. The creamery work at the college will run the entire year. Mr. Ed. H. Webster, the young man who secured the highest score at the National Buttermakers' Association last winter, will have charge of the advanced butter-making and cheese-making. The week of March 3 to 8 will be devoted to judging dairy cattle. Four distinct breeds (Ayrshires, Guernseys, Holstin-Friesians, and Jerseys), 2 dual purpose breeds (Polled Durham and Red Polled), 50 common and grade cows and heifers are available for judging and contrast with 4 distinct beef breeds (Aberdeen-Angus, Galloways, Herefords, and Shorthorns). T. A. Borman, who realized $81 per cow per annum, will be expert judge and instructor. The State Dairy Association will meet March 3, 4, 5, and 6, of the same week. There will be exhibits of butter, cheese, and dairy machinery. Programs will be provided, including the best talent in and outside of the State. Music will be furnished by the music department of the college.

The week of March 10 to 15 will be devoted to judging swine and the dairy students will receive instruction in this as well as in judging dairy cattle. Four breeds (Berkshires, Duroc-Jerseys, Poland-Chinas, and Tamworths) will be exhibited and judged. Geo. W. Berry, the noted and successful hog raiser, will act as expert judge and instructor. Special programs will be rendered on rearing, feeding, and marketing swine.

The course of study for the dairy students gives considerable prominence to the feeding, breeding, judging, and handling of dairy cows and hogs. If the student returns to the farm he will need the instruction on the farm, if he works for a creamery company he will need the instruction to assist his patrons to get more out of their cows and hogs.

The new and special features for the next dairy school will make it the most interesting and profitable of any yet held.

If any young man desires to become more proficient in his present position, if he desires to improve himself in order to hold a better position, he will find a most excellent opportunity to carry out his desires at the Kansas State Agricultural College next winter term. D. H. O.

Improved Cream-test Bottles.

ED. H. WEBSTER.

While acting in the capacity of superintendent of the Continental Creamery this summer, my attention was called more than ever to the crudity of the cream-test bottles in common use. After using several gross of bottles sent out by a supply house, I became convinced that a decided improvement could and should be made. The last gross of bottles purchased proved "the straw that broke the camel's back."

The scale read to 40 per cent and the graduations 1 per cent for each division. The necks of the bottles were so large that even with this division the marks were too close to read with ease.

It was impossible to read with any degree of accuracy closer than 1 per cent. At that time we were handling more than 30,000 pounds of cream per day. A little mathematical calculation will show the degree of variation possible with such a test bottle.

Much of this cream was purchased subject to the butter fat test and all stations were held accountable by the factory test of their cream. By this it can be seen that any such variation in the possible reading of a test was unfair both to the creamery company and to the stations. The same relation existed as between creamery and patrons in buying whole milk, and the same degree of accuracy was eminently desirable.

A variation of 1 per cent in reading the tests meant a difference of from 100 to 300 pounds in the amount of butter-fat for the day's receipts. This reduced to money value amounted to from $18 to $54. This might be in favor of or against the creamery.

After some correspondence with an Eastern manufacturer of bottles, a special bottle was ordered, which has proved very satisfactory.

I am indebted to the Hanford-Hazelwood Company for the idea of the long neck bottle. This neck is about 6 inches long. I differed from this bottle in having the neck made smaller, so that the length would scale about 30 per cent. This allows for much finer division of the scale, single divisions being but 1-5 of 1 per cent, or the same as in the ordinary Babcock milk bottle. The reading can be readily made to 1-10 of 1 per cent. The element of error introduced by weighing 9 grams of cream and doubling the result is reduced to a minimum when a correct reading of the test can be made. For instance, in the 40 per cent bottles mentioned, but 9 grams of cream could be introduced, and when the reading could not be made accurate within 1 per cent, the element of error was very great. With the improved bottle the reading can be made with a fair degree of accuracy to 1-10 of 1 per cent. Allowing that the error be 1-10, double this and we have but 1-5 of 1 per cent as in the other case it was anywhere from 1 to 2 per cent.

Our 32 bottle ideal tester would not take these long necked bottles. To overcome this difficulty the top was raised 3 inches and the spindle lengthened to correspond. With this arrangement 16 bottles could be run at a time. The greater ease of reading and accuracy of results secured more than offset the loss of time occasioned by the use of but half the number of bottles.

Some enterprising supply house should take up the matter of making machines which would handle a long necked bottle. The greater degree of accuracy would, I believe, make such a bottle a necessity if machines for handling them could be secured.

The introduction of hand separator and skimming-station systems demands better methods of handling the cream to secure justice to all. Perhaps some one has devised a simpler and more nearly correct way than I have described for getting accurate results in testing cream. It would be worth something to the creamery industry for you to let us know, through the columns of creamery papers, what you many have found.

Cooling and Caring for Milk.

H. A. RICHARDS.

Milk should be cooled as soon as drawn. A good way is to build a box of some kind so that all the water that is pumped for the stock will pass through this box. This will keep the water cool all the time. Put the cans in this box and have the water as high around the cans as the milk is on the inside.

Milk is caused to sour in a great many ways, as follows: First: The milk contains a great number of bacteria and the first stream drawn should be milked in a cup and fed to the cats; second—the dust from the hay and the milker's clothes; third—the utensils. The bacteria that comes from the hay can be settled a great deal by sprinkling the bedding and the floor just before milking. Brush the udder and the sides of the cow with a damp cloth. The utensils should be washed with warm water then steamed or scalded.

It is bacteria that causes the milk to sour, but the souring bacteria are not the only kind that enters the milk. Different kinds of disease producing bacteria may get into the milk. Another thing to consider is the hauling of the milk. The best way is to have five-gallon cans and have all the cans full except one, so that the milk will not churn if the roads happen to be rough. In summer the cans should be covered with a damp cloth to help keep them cool.

If the reader happens to be a station operator and you try to do all this talking and get any result from it you must first win the friendship of your patrons by being always honest with them in every respect and always be friendly with them in the station and every where you meet them.

After you have done this, and have won their friendship, you can tell them things and they will believe you and will come to you for information on different subjects, which you should be able to answer. I think it would be a good thing to have a set of rules to go by, let the people know that it is no use to bring in bad milk of any kind, but if they do just quietly set it aside until the last, then run it through and give them their own milk back. They will not like that way of doing things very long and will either bring in good milk or not any. Finally try and encourage them a little.

Select the Breed Best Adopted to Your Climate and Soil.

H. E. RICHTER.

Which is the best breed for the dairy and how is it obtained? This question has been before the dairy public for the last quarter of a century, and today is by no means settled among practical dairymen. If you go among the breeders of thoroughbred stock you will get no end of argument, backed by a formidable pile of statistics, to show that this or that breed is the best. It is now Shorthorns, then Jerseys, or Ayrshires, Guernseys, or Holsteins.

Now these different breeds may all be good breeds. But that any one of these breeds is best adapted to all soils, all climates, and for all purposes, is quite another matter. The practical questions for dairymen to decide before going into the dairy business, are, first: What breed of cattle is best adapted to the climate, the soil, and the surface of the country or farm where the stock is kept? and second, what is best adapted to the particular purpose for which it is wanted?

No one will deny that one essential requisite to success in dairying is to have good cows for the business, and in considering how these are to be obtained it is evident that the surest method would be to rely upon breeding the animals upon the farm where they are to be used, rather than to purchase them at random from different herds, providing a kind or race of animals can be obtained that will transmit desirable qualities from generation to generation with reasonable certainty.

Again it is of some importance to have cattle acclimated. How long it may take a race of cattle reared in a climate different from ours to become perfectly adapted to the change from one country to another I can not say, but it is evident that it requires some

WORK OF THE DE LAVAL MACHINES

—AT THE—

BUFFALO EXPOSITION.

The award of the GOLD MEDAL to the De Laval Cream Separators (the highest and only award of its kind) at the Buffalo Exposition, was well supported by the magnificent work of the De Laval machine used in the Model Dairy of the Exposition, which made a record in practical work, under ordinary every-day use conditions, in every way unapproachable by any other than an improved "Alpha-Disc" De Laval machine.

PAN-AMERICAN EXPOSITION, 1901.

(COPY) BUFFALO, N. Y., Oct. 21st, 1901.

THE DE LAVAL SEPARATOR CO.,
74 Cortlandt St., New York.

GENTLEMEN:

The work of the De Laval Centrifugal Cream Separator, Dairy Turbine size, guaranteed capacity 1,000 pounds per hour, used by us in the Model Dairy at the Pan-American Exposition, Buffalo, N. Y., brought out the following points:

First: The machine has been run from August 9th, 1901, to September 28th by the buttermaker and his assistant, and had no special attention given it by any expert of the Company.

Second: The official tests were made by two of the best experts in Babcock testing, and for the whole time, or 71 consecutive tests, shows a loss of .0161 of one per cent of butter fat.

Third: It was run at its full guaranteed capacity of 1,000 pounds per hour, at times exceeding that amount, but at no time was the feed reduced to make a skimming record.

Fourth: The amount of power used was very small.

Fifth: It did what you claimed for it in every particular.

EDWARD VAN ALSTYNE, *Supt.*
DE WITT GOODRICH, JAS. STONEHOUSE, } *In charge of tests.*
JNO. A. ENNIS, *Buttermaker.*
ELMER C. WELDEN, *Asst. Buttermaker.*

OTHER GREAT EXPOSITIONS.

The supremacy of the De Laval machines at Buffalo is a continuation of their triumphant record at all previous great expositions. At the World's Fair, Chicago, in 1893, they received the Gold and only medal awarded by the regular jury of awards and were the only separators used in the Model Dairy. At Antwerp in 1894 and at Brussels in 1897 they received the Grand Prizes or highest awards. At Omaha in 1898 they received the Gold Medal, and again at Paris in 1900 the Grand Prize or highest award.

THE DE LAVAL SEPARATOR CO.

General Offices: 74 CORTLANDT STREET, NEW YORK.

RANDOLPH & CANAL STS., CHICAGO.
1102 ARCH STREET, PHILADELPHIA.
103 & 105 MISSION STREET, SAN FRANCISCO.
327 COMMISSIONERS STREET, MONTREAL.
75 & 77 YORK STREET, TORONTO.
248 MCDERMOT AVENUE, WINNIPEG.

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

time. Hardiness and good constitution are of the utmost importance in milch stock.

Choosing and Perparing a Churn for Use.

M. H. MATTS.

The following points are to be considered in buying a churn: The most complete churning possible in a proper space of time—from one-third to one hour, according to the condition of the cream and room temperature—easy filling, emptying, examining, and cleaning. The material of which the churn is made should be of some hard, close grained wood, made solid or firm, and fitted with a suitable arrangement for warping, each churn has its own working capacity, but is generally limited to about one-third its actual measure. instantaneous churning is not advisable for the reason of too great a loss of butter fat in the buttermilk and an inferior quality of finished butter.

In preparing a churn for use, first wash with hot water, and then cold water, remembering to always leave the vent hole open when using hot water, in cleaning use water in the reverse order—hot and cold water with the occasional use of a little alkaline water is all that will be necessary in preparing and cleaning a churn. Churn covers must always be left open when not in use.

Call for Kansas Equal Suffrage Association Convention.

EDITOR KANSAS FARMER:—The 18th annual meeting of the Kansas Equal Suffrage Association will convene at McPherson, November 7 and 8, 1901. All friends of justice and equal rights are requested to be in attendance. Able speakers will be present and an entertaining and instructive program will be provided. Four States, Wyoming, Colorado, Utah, and Idaho have granted full suffrage to women, while 25 additional States have admitted the justice of the claim by extending to women partial suffrage. The best element of all parties in each of these States has acknowledged the benefits resulting therefrom. Women have become more intelligent and self-reliant; the better men have been encouraged by their aid and the States have gained a new dignity by woman's enthusiasm and force.

"Kansas next," is our rallying cry. Friends of suffrage are invited to assist in the formation of plans to secure this result. Each auxiliary please be prepared with full report. Persons remote from an auxiliary may become members by paying $1 annual membership fee. Delegates and those desiring entertainment send name to Mrs. T. J. Smith, chairman of entertainment committee, McPherson, Kans.

HELEN KIMBER, President.
ABBIE A. WELCH, Secy.

Marries and Saves His Job.

"It does not always pay for a man to scribble all over the face of the earth the name of the woman he is in love with," said a prominent business man the other day, "but it saved one follow his job and made a success of him. The man, who was then a mere youth, was working for me for $50 a month. I thought a good deal of his industry, intelligence, and accuracy. Suddenly he became very unreliable, making all sorts of inexcusable mistakes. About the same time I found the name 'Amy' written on blotters, loose scraps, on the wall—everywhere.

"I called the young man to me one day and told him that he was getting so careless and unreliable that I was going to give him thirty days in which to stop making mistakes or resign. Suddenly it occurred to me that the name 'Amy' was in his handwriting. 'Who is Amy?' I asked him abruptly. He blushed deeply. 'She's my swetheart, sir,' he replied. 'We're going to get married as soon as I can save $300. I'm putting away $25 a month, and we'll get married in a year.' I looked at him hard and he turned redder.

"'No, you won't,' said I; 'you'll be out of a job and, what's worse, unfit for work before then. You go to Amy and tell her she must marry in a month.' 'But I can't do that, sir,' replied the clerk; 'I'm only beginning to save this month.' 'You do what I tell you,' I rejoined. 'You tell Amy that you've got her on the brain so that you are not worth $10 a month to me and that if she does not marry you in a month you'll lose your job.'

"The poor follow was in a quandary. 'She won't marry me,' he said; 'I must wait until I can give her a home. How can I get $300 in a month?' 'Oh, that's all right, Jim,' I said; 'I'll let you have the $300. You can pay it back to me $10 a month. But you must be married inside of thirty days. I'll give you thirty days to go on making mistakes while you're thinking of getting married. Then no more mistakes or out you go.' Well, Jim made mistakes for two days. He got married in thirty days exactly. That was five years ago. To-day he and his wife and two boys are as happy a little family as you could find anywhere. He is still working for me. He gets nearly $150 a month salary and the first boy was named for me. Now, all this shows merely that a man should not let his love affairs affect him like 'dope' and that most men achieve their best work when they are happy."—New Orleans Times-Democrat.

Arthur Foley Winnington-Ingram, Lord Bishop of London, contributes an interesting paper to the November Cosmopolitan on "The Overcrowding of Great Cities and Remedies for It." Apropos of the discussion of the invasion of England by Americans, Edmund Gosse furnishes in the same number an essay scoring Englishmen for their narrowness of intellect. Incidentally he has a hit at American intellectual life in the twentieth century.

George Johnson, of Republic County, whose wife, Elizabeth A. Johnson, gave to the State the site of the ancient Pawnee village where Pike raised the American flag, has 65,000 bushels of corn which he has carried over from the crops of 1900 and 1899. He is selling part of it at 55 cents a bushel and the rest he will use as feed.

Sidetracked.

Clara—"Pa has been home a whole week, and he hasn't got to telling a thing yet about the Pan-American."

Laura—"Why not?"

Clara—"Oh, everything he began to tell reminded ma or me of something at the Chicago world's fair."

The Usual Thing.

Briggs—"I suppose, now that you've got back from your vacation, you will take a good long rest."

Griggs—"That's the worst of it. I spent so much money that I've got to work harder than ever."

Publisher's Paragraphs.

Following the precedent of almost thirty Thanksgiving Days, Horace Vose, of Westerly, Rhode Island, will send the prize turkey of all his flocks to grace the new President's dinner-table on November 28. "When Mr. Vose began the custom of sending a turkey to the President," writes a contributor to the November Ladies' Home Journal, "he had no motive other than the desire to send a Thansgiving bird to the man who writes the Thanksgiving proclamations. The pioneer turkey went to President Grant in 1873. It weighed 36 pounds, and elicited the first of the courteous notes that have been coming ever since in acknowledgement from the Executive Mansion. Mr. Vose has been dubbed 'The Turkey King.' All through the summer and fall he makes occasional visits to the farms in the vicinity, keeping a watchful eye on the many flocks, and eagerly scanning and strutting companions for the coming champion, the distinguished member of all the feathery tribes that is to rise eventually to the dignity of a place on the White House dinner-table."

"Mr. Bunny, His Book," is a work which all children will appreciate. It is thoroughly up-to-date in arrangement and subject matter. There are no long prosy poems, but bright merry jingles, rivaling any of the famous Mother Goose melodies. Filled with fascinating stories told in rhyme; quaint pictures of the little ones, their four-footed friends and playmates, "Mr. Bunny, His Book" will amuse children by the hour and will also interest their elders in no small degree. It is pure, sweet, and clean, as all books should be which are placed in the hands of the wee men and women. "Mr. Bunny, His Book" was prepared especially to delight the eyes and gladden the hearts of the little folks. With its comical, mirth-provoking pictures and its quaint and sparkling verses, no other book will serve as a more charming "bedtime story teller." The author, Adah L. Sutton, has drawn largely upon her intimate knowledge of children, and most of the happy little folks, even the redoubtable "Mr. Bunny" himself, are taken from life. Likewise the delightful birds and beasts—"The biggest dog I ever saw," etc.—are pictures of many friends and playmates of the boys and girls of to-day. There is a gorgeous array of big and little people, marvelous animals and strange devices. Every line in "Mr. Bunny, His Book" is unique, original, forceful, captivating, witty, and exceedingly funny. All the stories are fully illustrated—each page printed in three gorgeous colors. The book is substantially bound; over one hundred pages; 9 by 11½ inches; front cover design stamped in three bright colors, also back cover design showing a comical bunny base-ball team; title page in three colors; printed on good, strong paper, in large-faced type, easily read. The price of "Mr. Bunny, His Book" is only 75 cents, delivered, all charges prepaid. A copy will be sent on receipt of the price by The Floral Publishing Company(Springfield, Ohio. Or send $1.45 to Kansas Farmer Co., and it will pay one year's subscription and the book will be sent to your address free.

Have You Got It?

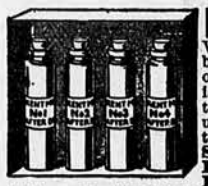
A new and practical way to save money for our readers as well as supply means which are frequent and sometimes urgent, is the opening of a large house where you can buy small quantities at wholesale prices of high grade drugs, chemicals, perfumes, toilet preparations, household and homeopathic remedies, spices and flavoring extracts, hair goods, combs, brushes, soaps, nursery goods, rubber goods, trusses, abdominal belts and bandages, deformity apparatus and appliances, surgical instruments, electric belts, suspensories, plasters, absorbent cotton, gauzes and chest protectors, medical books, batteries and therapeutical appliances, veterinary instruments, books and remedies, dairy and poultry preparations, fertilizers, optical goods, spraying apparatus and chemicals, acids, drugs and patent medicines, cameras, druggists' sundries, bottles and glassware, chemists' supplies, paints, oils, varnishes and brushes. This house is the Heller Chemical Co., of Chicago, Ill., whose advertisement appears elsewhere in this paper. This is truly a long-felt want, as in many places people can not buy at all the things in this line that they want, and if tney do succeed in finding them they are often obliged to pay enormous prices for them, besides substitution is often necessary. But with this house it is not so, as they carry everything, their sales being so enormous necessitites a replenishing of their stock continually, and this insures you pure, high-grade goods. They sell in most cases goods at half the amount usually charged by others.

The Heller Chemical Co. is a large corporation in Chicago, doing both a wholesale and retail drug business in the territory covered by this paper. This establishment occupies large quarters, besides tney have a number of laboratories located in the city of Chicago. Words can not tell about their handsome catalogue; the goods listed are both of the old school and of tne new, of the allopathic and homeopathic kind, and you can get anything that is made and which should be kept by all first class druggists. Every family ought to have one of these catalogues, as it is a household necessity, and one can never tell when there may be a need of medicine, so that when it is needed it will be at hand. Much suffering and oftentimes life is saved by having such needed articles when they are required. This beautiful catalogue can be obtained by addressing the Heller Chemical Co., Chicago, Ill., U. S. A., and send ten cents to partly pay the postage, which they will refund upon receipt of your first order. When writing please mention this paper.

EMPIRE
THE LEADING
CREAM SEPARATOR
CATALOGUE FREE
U.S. BUTTER EXTRACTOR CO. BLOOMFIELD, N.J.
WESTERN OFFICE FISHER BLDG CHICAGO

U S U S U S
Improved U. S. Separator
WINS
GOLD MEDAL
The Highest Award at the
Pan-American Exposition
BUFFALO, N. Y., 1901
ALSO WINS
The King's Commemorative Medal
The Highest Award at the
INDUSTRIAL EXPOSITION
TORONTO, ONT., CAN., 1901
WRITE FOR DESCRIPTIVE CIRCULARS
VERMONT FARM MACHINE CO., BELLOWS FALLS, VT.
235

YOUR FORTUNE TOLD FREE
BY THE ZODIAC. Astrology reveals your life. We will send you a Horoscope Reading of your life, a Book on Astrology and a copy of one of the most fascinating occult magazines of mystery published, if you send the date of your birth and 10 cents for postage, etc. Our readings have made people happy and full of hope and success. Address THOMPSON & CO., 22 N. William St., New York City.



FOUR BOTTLES FREE!
We will send four bottles of our unrivalled remedy, securely packed in wooden box, like cut, no distinguishing marks, postpaid, FREE. This remedy, the result of many years of practice, study and experiment in leading European hospitals, is unsurpassed for the treatment and cure of ALL BLOOD DISEASES and the resulting different forms of Eruptions and Ulcers. We also send free valuable pamphlet describing the cause and growth of skin disease and the proper treatment of Pimples, Blackheads, Itching of the Skin, Eczema, Liver Spots, and all skin diseases, inherited or self-acquired, Loss of Hair, Ulcers Running Sores, Pains of a Neuralgic or Rheumatic Nature, BLOOD POISON, etc. There is a certain cure for your affliction. WRITE TODAY.
Address KENT MEDICAL INSTITUTE, 313 Houseman Bldg, Grand Rapids, Michigan

Send No Money
Send name and address and we will send you this magnificently engraved double hunting case, "American Standard" watch for free inspection. Case is made of the newly discovered gold alloy with extra heavy plate of 14 karat Solid Gold, and even experts cannot tell it from a 50 dollar watch. High-grade movement, fully jeweled, duplex escapement, patent pinion, quick train, stem-wind and set, with absolute 20 YEARS GUARANTEE. The American Standard is the handsomest and best time keeping watch ever offered for the price. Watch dealers buy them in preference to other makes, costing 15 to 20 dollars. We have received during the last 3 months over 10,000 duplicate orders and thousands of testimonials from all over the world. Our regular factory price is $60.00 per dozen, but in order to extend our trade, we will for the next 45 days only, send a sample watch for free *This firm is thoroughly reliable.—Editor.*
WARNING! Beware of catchy-looking, worthless imitation watches, so frequently advertised by unprincipled concerns. We are a perfectly reliable firm and absolutely stand back of our guarantee, and take back any watch after six months if not perfectly satisfactory in every way.

20 Years High Grade

Our 45 Day Offer
inspection to any person who will recommend and show it to their friends. We want to advertise our watches and convince you of their superior quality, before you pay one cent. Send us your name, post office and express office, state if you want ladies or gents size, and we will send you at once our watch for free inspection. After you have convinced yourself to your own satisfaction, that the watch is equal to any that would cost 15 dollars in your own town and the greatest bargain you ever saw, then pay our SPECIAL FACTORY PRICE OF $4.85 and express charges, otherwise not one cent. Many write us they sold the watch same day with ten dollars profit. Anyone can sell several of these watches every week without devoting any extra time or effort, and make a profit of 5 to 10 dollars on every watch. Order at once at our special factory price as this offer is limited. Catalogue free. Address,
EAGLE WATCH MFG. CO., 160 Lees Bldg., CHICAGO.
EDITOR BADGER writes: Your watch is a beauty, looks like my $50 watch. Keeps perfect time. Don't see how you can sell it at such a price.

PILES--No Money till Cured
All diseases of the rectum treated on a positive guarantee, and no money accepted until patient is cured. Send for free 200-page book; a treatise on rectal diseases and hundreds of testimonial letters, valuable to anyone afflicted. Also our 64-page book for women; both sent free. Address,
DRS. THORNTON & MINOR, 1007 Oak St., Kansas City, Mo.

MARKET REPORTS.

Kansas City, Nov. 4.—Cattle—Receipts, 9,488; calves, 656. The market was active and strong to 10 cents higher. Representative sales:

SHIPPING AND DRESSED BEEF STEERS.

No.	Ave.	Price.	No.	Ave.	Price.
65	1248	$6.35	33	1277	$5.95
18	1366	6.00	18	1354	5.75
17	1245	5.00	67	1158	5.05
20	1152	4.90	31	1194	4.75
WESTERN STEERS.					
96	1273	5.60	90	1097	4.25
23	1108	4.15	2	1075	4.00
21	1025	4.10	26	893	3.25
18	977	3.90	1	590	2.50
TEXAS AND INDIAN STEERS. (Quarantine Division.)					
43	1064	4.65	43	992	4.50
53	901	3.70	42	1086	3.75
185	830	3.40	12	894	3.25
56	840	3.15	3	890	2.50
COLORADO STEERS.					
60 fdr	1123	3.65	53 fdr	1123	3.65
37 stk	901	3.25	59 stk	880	3.00
60 fdr	1123	3.65	53 fdr	1123	3.65
PANHANDLE STEERS.					
37 stk	901	3.25	39 stk	880	3.00
WESTERN COWS.					
6	986	3.10	105	868	2.65
38	799	2.60	21	1057	2.65
19	810	2.50	18	715	2.40
6	656	1.85	31	780	2.05
TEXAS AND INDIAN COWS. (Qurantine Division.)					
11	861	3.00	51	752	2.40
80	783	2.60	25	713	2.40
25	774	2.00			
PANHANDLE COWS.					
44	870	2.75	5	752	2.00
NATIVE HEIFERS.					
7	527	4.00	6	776	3.50
5	870	2.35	4	760	3.25
1	840	3.00			
NATIVE COWS.					
29	1135	4.50	2	1105	3.25
3	1243	3.50	7	831	3.10
4	1040	2.25	2	825	1.75
2	610	1.85	3	656	1.50
NATIVE FEEDERS.					
24	957	3.75	3	956	3.75
10	949	3.75	51	915	3.70
1	1220	3.50	1	1050	3.00
NATIVE STOCKERS.					
30	623	4.15	37	523	3.90
10	862	3.75	1	560	3.30
43	575	3.20	19	770	3.15
3	833	3.00	5	748	3.00
STOCK COWS AND HEIFERS.					
5	690	3.10	5	692	3.00
3	820	2.80	2	660	2.90
2	500	2.75	3	510	2.85
4	652	2.15	1	790	2.25

Hogs—Receipts, 5,771. The market was 5 to 10 cents higher. Representative sales:

No.	Av.	Price	No.	Av.	Price	No.	Av.	Price
63	354	$6.10	75	235	$6.00	74	251	$6.00
62	265	6.00	78	236	5.97½	75	261	5.97½
66	168	5.70	77	173	5.70	41	158	5.65
195	161	5.65	98	161	5.65	64	174	5.62½
42	94	5.05	25	100	5.10	38	160	5.25
2	200	4.50	53	98	5.02½	52	58	4.60

Sheep—Receipts, 2,639. The market was strong to 10 cents higher. Following are the sales:

78 W.lms	64	$4.50	88 Col.lms	66	$4.40
2 Ariz.w	75	2.75			

Chicago Live Stock.

Chicago, Nov. 4.—Cattle—Receipts, 2,000. Good to prime steers, $6.00@6.80; stockers and feeders, $2.00@4.25; Texas fed steers, $3.00@4.10.

Hogs—Receipts, 25,000. Mixed and butchers, $5.70@6.12½; bulk of sales, $5.80@5.95.

Sheep—Receipts, 22,000. Good to choice wethers, $3.50@3.75; native lambs, $2.50@4.75.

St. Louis Live Stock.

St. Louis, Nov. 4.—Cattle—Receipts, 4,000. Native steers, $4.35@6.75; stockers and feeders, $$2.35@4.00; Texas and Indian steers, $2.80@4.15.

Hogs—Receipts, 4,000. Pigs and lights, $5.50@5.70; butchers, $5.80@6.15.

Sheep—Receipts, 7000. Native sheep, $3.00@3.50; native lambs, $3.75@4.65.

Omaha Live Stock.

Omaha, Nov. 4.—Cattle—Receipts, 5,000. Native beef steers, $4.40@6.40; western steers, $3.70@5.20; Texas steers, $3.50@4.40; stockers and feeders, $2.60@4.30.

Hogs—Receipts, 2,800. Heavy, $5.82½@6.00; bulk of sales, $5.80@5.82½.

Sheep—Receipts, 14,000. Common and stock sheep, $2.75@3.50; lambs, $3.50@4.60.

Kansas City Grain.

Kansas City, Nov. 4.—Wheat—Sales by sample on track:

Hard—No. 2, 67½@68c; No. 3, 66½@67½c.

Soft—No. 2, 70½c; No. 3, 68@70c.

Mixed Corn—No. 2, 62½@63c; No. 3, 62½@63c.

White Corn—No. 2, 63½c; No. 3, 63c.

Mixed Oats—No. 2, 40½c; No. 3, 39½@40c.

White Oats—No. 2, 40½@41c; No. 3, 40c.

Rye—No. 2, nominally 56c.

Prairie Hay—$5.00@13.50; timothy, $8.00@13.00; clover, $9.50@12.00; alfalfa, $9.00@11.00; straw, $4.25@4.75.

Cotton Seed Meal—$25.00 ton in car lots. Linseed meal, $29 per ton.

Chicago Cash Grain.

Chicago, Nov. 4.—Wheat—No. 2 red, 72@73c; No. 3, 70@72c; No. 2 hard winter, 70½@71¼c; No. 3, 70@76½c; No. 1 northern spring, 71½@71¼c; No. 2, 70@71c; No. 3, 67@70c. Corn—No. 2, 59c; No. 3, 58¾@59c. Oats—No. 2, 37½c; No. 3, 37@37¼c.

Futures: Wheat—November, 70¾c; December, 71¼@71⅜c; May, 74½c. Corn—November, 57⅞c; December, 58⅜c; May, 61⅛c. Oats—November, [illegible]; December, [illegible]; May, [illegible]

When writing advertisers please mention Kansas Farmer.

St. Louis Cash Grain.

St. Louis, Nov. 4.—Wheat—No. 2 red cash, elevator, 71¾c; track, 72½@73¼c; No. 2 hard, 69½@70c. Corn—No. 2 cash, 60¾c; track, 61@61½c. Oats—No. 2 cash, 39c; track, 39@39½c; No. 2 white, 40½@41c.

Kansas City Produce.

Kansas City, Nov. 4.—Eggs—Fresh, 17½c per doz.

Butter—Creamery, extra fancy separator, 20c; firsts, 17c; dairy, fancy, 16c; packing stock, 11½c; cheese, northern full cream, 10c; Missouri and Kansas full cream, 10c.

Poultry—Hens, live, 6c; roosters, 20c each; springs, 6½c lb.; ducks, young, 6c; turkey hens, 6c; young, weighing over 7 pounds, 6c; young gobblers, 5c; pigeons, $1.00 doz. Choice scalded dressed poultry 1c above these prices.

Potatoes—95c@$1.10 per bushel in small lots; car lots, 97c; sweets, 75@90c per bushel.

Fruit—Apples, $1.00@3.50 per barrel; cranberries, $6.00 per barrel; California pears, $2.00@2.25 per box.

Vegetables—Tomatoes, 50@60c half bu.; navy beans, $2.20 bu; cabbage, 90c@$1.10 per cwt. Onions, 90c@$1.00 bushel in job lots.

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 or a number counted as one word. Cash with the order. It will pay. Try it!

SPECIAL.—Until further notice, orders from our subscribers will be received at 1 cent a word or 7 cents a line, cash with order. Stamps taken.

CATTLE.

FOR SALE—Red Shorthorn bulls, all ages, grades, and registered. Can furnish what you want. F. H. Foster, Mitchell, Kans.

REGISTERED SHORTHORN BULL CALVES—Seven months old for sale; also some registered Poland-China boars and gilts. Write me for prices. P. H. McKittrick, McCracken, Kans.

ONE RED BATES SHORTHORN BULL—Eight months old, tracing to Kirklevington Duke 2d for $50. A. B. Mull, Iola, Kans.

FOR SALE—Twenty-six Hereford bulls, seven-eighths and better, from 6 to 10 months old. Also two recorded bulls. S. Wertzberger, Volland, Kans.

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

BUY YOUR BULLS NOW! Pure-bred, non-recorded Hereford bulls, calves, and yearlings, suitable for very heavy service next year, at drouth prices. As fine as anybody's average registered stock. Write to-day. Also registered bulls. A. F. McCarty, Humboldt, Kans.

FOR SALE—Five registered Shorthorn bull calves, 10 cows and heifers; on account settling estate. Catherine E. Anderson, Admix., 153 North Ninth Street, Salina, Kans.

FOR SALE—Five Scotch-topped Shorthorn bulls, from 6 to 16 months old; 2 are from Gallant Knight, and took first and second premiums at the Rice County Fair. J. P. Engel, Alden, Kans.

SHORTHORN CATTLE SALE—I will offer at public sale, 1½ 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—Saddle and harness stallion, has five saddle gaits, trots in harness. chestnut, very stylish, 4 years old, weight 1,100 pounds, 16 hands high, will geld if desired, a beauty. Also high-grade Percheron stud colts. F. H. Foster, Mitchell, Kans.

FOR SALE—At a bargain—young draft stallions. A. I. Hakes, Eskridge, Kans.

FOR SALE OR TRADE—A good, young jack, and a young draft stallion. Would trade for pasture land. Write me at Agenda, Kans. H. Harbaugh.

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

SHEEP.

COTSWOLD SHEEP—I have two registered, and 12 high-grade Cotswold rams, lambs, and yearlings for sale. Write me for prices and descriptions. John H. Rust, Altamont, Kans.

FOR SALE CHEAP—Two pure-bred Shropshire rams and 1 Cotswold ram, 1 Duroc-Jersey boar, 6 months old; will exchange him for 2 gilts 3 months old. This stuff is prize-winning stock, will sell at less than full value. H. H. Hague & Sons, Walton, Kans.

GRADE SHROPSHIRES and Merino ewes to put out on shares. Bucks and wethers for sale. W. Leghorn roosters 50 cents. W. W. Cook, Russell, Kans.

FARMS AND RANCHES.

WANTED—Lease for term of years. Will pay cash rent on desirable farm of 80 to 160 acres. Northern Kansas prefered. G. P. Monroe, Whiting, Kans.

FOR SALE OR TRADE—For a good farm, a first class livery barn, all stocked in good shape; and a fine residence in Carbondale, Kans., on main line of Santa Fe R. R., doing a good business Address W. Q. Hyatt, Carbondale, Kans.

FOR SALE—200-acre farm 16 miles from Topeka, 3 miles from good town and railroad, 100 acres in cultivation, 40 acres stock pasture, 8 acres clover, fenced hog tight, 6 acres apple, 5 acres peach, 3 acres vineyard, nice shade trees. Balance meadow, 6-room house, 2 cellars, cistern, pump in kitchen, stone stable, cribs and granary, implement shed, stock shed, corrals, etc., 3 wells, hedge fences, nice, rolling upland, good soil, an excellent farm, cheap. Price $32.50 per acre. R. A. Richards, sole agent, 111 West 6th St., Topeka, Kans.

FOR SALE OR TRADE—160-acre improved farm, in central Kansas. A bargain. For full particulars, address Jno. Fox Jr. New Cambria Kans

HANDSOME AMERICAN LADY, independently rich, wants good honest husband. Address ERIE, 193 Washington Street, CHICAGO.

MISCELLANEOUS.

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

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

FIFTY THOUSAND apple and peach trees; wholesale price list, on application. The Seneca Nursery, Seneca, Kans.

WANTED—Alfalfa, millet, cane seed. kaffir-corn, milo maize, 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.

FOR SALE OR TRADE—One large size (six roll) Keystone corn husker and fodder shredder mounted and complete; been used but one season. Can use good work team or registered Shorthorn bull. E. F. Gregory, Garnett, 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.

ALFALFA SEED—Crop of 1901, pure and fresh. Write for prices. McBeth & Kinnison, Garden City, Kas

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.

SWINE.

FOR SALE—Some extra good pigs (both sexes), of Chief Tecumseh, Look Me Over, and Chief Perfection 2d strains. Wm. Maguire, Haven, Kans.

FOR SALE—Two yearling boars, one by Chief Perfection 2d, the other by Missouri's Black Chief, fall yearling sows, spring pigs of both sexes. June, July, and August pigs at $15 a pair; $20 a trio if taken soon; breeding as good as can be found. Cockerels at $1 each until Thanksgiving of Light Brahma, Buff Cochin, Buff, White, and Barred Rocks, R. C. B. Leghorns. A. B. Mull, Iola, Kans.

PEDIGREED POLAND-CHINAS—$5 each; registered Shorthorns cheap. M. C. Hemenway, Hope, Kans

SWINE FOR SALE—Three pedigreed Duroc-Jersey boars; two 7 months old, one 18 months. H. A. J. Coppins, El Dorado, Kans.

POULTRY.

WHITE HOLLAND TURKEYS—Shoemaker and Fisher's strains. Prices cut in two until December 1. Very fine birds. G. D. Willems, Buhler, Kans.

W. P. ROCK COCKERELS—Mammoth Bronze toms for sale. Mrs. S. L. Garrett, Homewood, Kans.

PATENTS.

UNITED STATES AND FOREIGN **PATENTS**
F. M. COMSTOCK & CO.
OFFICE 529 KANSAS AVE., TOPEKA, KANSAS.

J. A. ROSEN, attorney and counselor in patent, trademark, and copyright causes. Patents procured and trademarks registered. Office, Rosen block, 418 Kansas Avenue, Topeka, Kans.

Agents Either sex are earning $4 to $10 a day selling our 25-cent household necessity. Show what it will do and it sells itself. Sample Free. Write us to-day. *Domestic Supply Co* DETROIT, MICHIGAN.

TWO RICH GRAIN AND STOCK FARMS FOR SALE.

Located in the great wheat belt of Kansas. One of 640, the other of 1,400 acres. Splendid land for wheat, rye, oats, corn, kaffir-corn, sorghum, and alfalfa. Large pastures for stock. Never-failing water. Two houses, barns, and sheds on each. A young orchard of 15 acres on one. Only 2½ miles from depot, schools, and churches. Each would make three good farms. Address for 30 days,

E. P. MILLER, Owner, Medicine Lodge, Kans

After December 1, 1901, address

41 West 26th Street, New York City, N. Y.

TRANSIT HOUSE.

EDW. ZOLA, Proprietor.
KANSAS CITY STOCK YARDS,
KANSAS CITY, MO.

The TRANSIT HOUSE is under new management, and has a first-class restaurant, steam heat, electric lights. Can accommodate 100 guests with lodging. Stockmen visiting the Market, Fine Stock Sales, or the National Cattle Shows made welcome.

The Stray List.

For Week Ending October 24.

Montgomery County—D. S. James, Clerk.

COW—Taken up by George Riggans, in Rutland tp., September 26, 1901, one red cow, 3 years old; valued at $25.

For Week Ending October 31.

Doniphan County—Margaret Schletzbaum, Clerk.

STEER—Taken up by James B. Roberts, in Wolf River tp., September 21, 1901, one red steer, with mottled or white face, 18 months old; valued at $22.

For Week Ending November 7.

Clay County—J. H. Kerby, Clerk.

COW—Taken up by Fred Hanson, three miles east and one-half mile south of Clay Center, Clay County, Kansas, one red and white cow, 3 years old, 4 feet and 3 inches high, letter F branded on right hip; valued at $12.50.

Labette County—E. H. Hughes, Clerk.

MULE—Take up by J. A. Jones, in Mt. Pleasant tp., (P. O. Altamont), October 22, 1901, one black mare mule, 14½ hands high, 2 years old; valued at $50.

Sumner County—W. E. Wood, Clerk.

COW—Taken up by Arthur Scott, (P. O. Caldwell), October 1, 1901, one large red cow, dehorned, star in forehead, white spot on left shoulder, 7 years old.

COW—Taken up by same, one strawberry roan cow, dehorned, unknown brand on left hip, branded F on right hip, 7 years old.

Marion County—Ira S. Sterling, Clerk.

MULE—Taken up by Daniel Dell, in Peabody tp., December 1, 1900, one brown horse mule, blind in one eye, 12 or 13 years old, 14 hands high; valued at $25.

Marion County—Ira S. Sterling, Clerk.

HEIFER—Taken up by O. H. Craw, in East Branch tp., one red yearling heifer, has horns and a few white spots on the belly, came to his place about September 10, 1901.

Notice of Final Settlement.

The State of Kansas, Shawnee County, ss.

In the Probate Court in and for said County.

In the matter of the estate of John S. Firey deceased.

Creditors and all other persons interested in the aforesaid estate are hereby notified that I shall apply to the Probate Court, in and for said County, sitting at the court house, in Topeka, county of Shawnee, State of Kansas, on the 3rd day of December, A. D. 1901, for a full and final settlement of said estate.

J. B. McAFEE,
Administrator of the estate of John S. Firey, Deceased.

October 26, 1901, A. D.

Notice of Final Settlement.

The State of Kansas, Shawnee County, ss.

In the Probate Court in and for said County.

In the matter of the estate of William Firey, deceased.

Creditors and all other persons interested in the aforesaid estate are hereby notified that I shall apply to the Probate Court, in and for said county sitting at the court house, in Topeka, county of Shawnee, State of Kansas, on the 3rd day of December, A. D. 1901, for a full and final settlement of said estate.

J. B. McAFEE,
Administrator of the estate of William Firey deceased.

October 26, 1901 A. D.

Best Fruit Paper

If you want to succeed with your fruit gardens or orchard, you should read the best fruit paper published, the **Western Fruit Grower.** It is fully illustrated, 16 to 48 pages, monthly; 50 cents a year, 3 months' trial subscription for **Ten Cents.**

Address **Western Fruit Grower**
Box 5, St. Joseph, Mo.

Do You Make Kansas City?
..If So, Stop at the..
...MIDLAND...
HOTEL.

KANSAS CITY, MISSOURI.
Stockmen's Headquarters.
Street Cars direct from Depot or Stock Yards.

LARGE WHOLESALE HOUSE

intends to establish an **Office** and distributing depot in each state, and desires Manager for each office. **Salary $125 per month and extra profits.** Applicants must furnish reference as to character and have $800 to $1,000 cash. Previous experience not necessary. For full particulars, address,

PRESIDENT, Box 1151, Philadelphia, Pa.

...STIMSON & CO...

Wants your name and address. They will send you their Free Catalogue of **Farmers' Needs.** This is the house that saves you money on everything.

STIMSON & CO., Station "A", KANSAS CITY, MO

When writing advertisers please mention Kansas Farmer.

BURLINGAME, KANSAS,
...SEED HOUSE...

SHREDDED CORN FODDER and BALED HAY
....IN CAR LOTS A SPECIALTY....

All kinds of Feed, Coal, Grain, Field and Garden Seeds, and Implements—wholesale and retail. Quotations by wire. Write for prices.

L. G. HEPWORTH

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.
Secrtaery.....Geo. Black, Olathe.

Oak Grange.

At the regular meeting last Wednesday the patrons gathered at an early hour, as dinner was to be served. Preparations were soon made, the tables being spread in the lower hall. They were quickly filled with the usual excellent varieties of good things, making in their artistic arrangement a kaleidoscope of color. A huge boiler of coffee diffused a grateful aroma sharpening appetites and bringing all to table without a second invitation.

Through the courtesy of the grange, a large number of guests were present, and this social hour was thoroughly enjoyed by both patrons and visitors.

Immediately after dinner, the members repaired to the upper hall, and the Third and Fourth degree was conferred on a waiting candidate. The doors were then thrown open to the guests and the worthy lecturer, who had an entertaining program prepared, assumed charge.

Sister Higgins gave an interesting outline of some investigations made of the Marconi system of wireless telegraphy, while at the Pan-American, recently. Brother Robert Stone gave in detail the work of the Good Roads Convention, to which he was a delegate, recently held at Buffalo. Sister Sims contributed some original sketches, which aided much to enliven the session. A brother who had regaled the grange at a late meeting with a wonderful story of a wonderful sword-fish, which received his earnest attention while at the "Pan," was asked to repeat it, but declared his inability to bring out similar facts in "twice told tales." He, however, substituted a "frog story," which was even more miraculously wonderful.

A revival seems to have set in. Oak Grange must keep pace with the prevailing prosperity, as it always has been found in the foreground with the march of progress. Eleven applications for membership were received and a special meeting appointed to ballot, etc

Through the notification of our efficient deputy 3 members of this grange were appointed to attend the delegate meeting to be held in Topeka, October 26.

We are sorry to see so few granges contributing to the "Grange Department" in KANSAS FARMER. Brothers and sisters, come, let us reason together. An interchange of ways and means and various methods for the upbuilding of the order must result in much good, and especially will it cheer the heart of our Worthy State Master Westgate.

This lovely ideal October weather calls for frequent jaunts to the woods, "along country lanes." Though the leaves are putting the final touches to their artistic coloring, they yet convey no warning of the "melancholy days" said to await us. In our hearts we will give them no place. Winds may wail and meadows be brown and sere, but they must sigh their own requiems. Hic jacet melancholy! With church, home, and grange, books and club work to fill our lives to the brim, we have no leisure to entertain melancholy.

KITTIE J. MCCRACKEN, Secy.

Grange Results.

The grange in our locality, as doubtless elsewhere, has tended to increase the social element among the farming population. It has given the farmer a sense of his relation to his fellow farmers and has made all feel the need of coöperation as worked in the same department of work. Let me speak, too of the fact that it has fostered a love for reading not only professionally, but in other lines, so that the feeling has arisen that it is well for a farmer to know something beyond what pertains to the technique of his calling. Thereby his influence upon the public life of the community in which he dwells is increased.

The grange has also tended to awaken pride in farming as an occupation. A man can succeed so much better in an occupation which he delights in following and in which he takes a proper pride. So much of the population of this land is a farming population that farmers ought to assert themselves as a class and receive the rights and privileges to which they are entitled. What the farmer shall receive as his right and portion depends upon what he wills to be himself, whether he will open his mind to new impressions, or whether he will be unduly conservative; whether he will realize his proper relationship to others of the same calling and whether he will coöperate and aid in making his home and his occupation a matter of helpfulness to the world. Let the farmer read, think, and give his family a chance to get in touch with the best things and avoid the chance of becoming too narrow in his outlook upon life. Let him be the master of his work that he be not sodden and brutalized in it like too many in our shops and factories; let him use his time and his strength intelligently, remembering that he is a man and not a machine. Thus his mind will become the source of reasonable notions of human life and can never be the receptacle for false, crude, and destructive theories. He is of the soil and the soil as he tills it shall give, if he only will, strong and healthful notions of God, of his fellowmen, and of work. These familiar thoughts always come to me when I think of the grange, for it is capable of becoming exceedingly helpful to the farmer in the directions I have indicated. It has done much. It may do more. I should be glad to see a grange in every town in this vicinity. I regard it as a valuable means to assist men in getting out of a state of isolation and narrowness, most injurious to true happiness, and I am inclined to think most hurtful to what the world calls prosperity. F. C.

Branford, Conn.

Patrons of Husbandry at the Pan-American.

October 10 was National Grange Day at the Pan-American Exposition, and a notable day it was. The attendance was large in spite of the rainy morning. All the forenoon the grange building was made the center of throngs of visitors. Sister B. B. Lord, manager of the grange building, was made chairman of the reception committee, being ably assisted by Sister Jones of the National Grange, and Sister Norris of the New York State Grange. Many States were represented by the visitors. At 1.30 p. m. the organization formed by line, with Past Lecturer E. P. Cole and Secretary W. N. Giles of the New York State Grange as marshals, and marched to the Temple of Music, where a delightful meeting was held. Numerous very short addresses were made, and a special musical program added to the interest. The meeting was presided over by Master Aaron Jones of the National Grange, who said that it represented 500,000 members. An address of welcome was given by Director-General Buchanan of the Exposition. The response by Master Jones was followed by E. B. Norris, master of the New York State Grange, J. H. Brigham, past master of the National Grange and now assistant Secretary of Agriculture. Other speakers were: C. J. Bell, master of the Vermont State Grange; N. J. Bachelder, of New Hampshire, lecturer of the National Grange; State Master Westgate, of Kansas; G. B. Horton, master of the Michigan State Grange; and Jabel Robinson, master of the Dominion Grange. There seems to be no doubt in the minds of all who have watched the Exposition affairs that the grange building, as headquarters of the organization the country over, has been a great success, affording special comforts to all comers, and making itself a rallying point and source of good feeling and enlarged fraternity to all.

Maine.

National Grange.—The Augusta board of trade and Capital Grange have extended an invitation to the National Grange to visit their city during its coming session at Lewistown. The invitation has been accepted.

The State Grange extra meetings for conferring the sixth degree are being largely attended. This indicates how enthusiactic the patrons of Maine are. State Master Gardner has neglected all private duties for the furtherance of the grange in Maine.

Busy Workers.—Fair at Saco. Spelling match at Phipsbury. Fair at Windsor. Literary contest at Wellington. Brothers' night at Steuben. Children's day at Readfield. Fair at Caribou. Degrees without ritual at Sagadahoc. Visitation at Richmond. Degrees on six at Brighton, and on Saturday at Pownal.

We are far from home if not far from "my ain countree," and are under some disadvantages for editorial work. It goes without saying that we are enjoying our opportunity for visiting old scenes and former friends, though a certain degree of sadness is mingled with the pleasure. We have visited only one grange in session, but are invited by one of the deputies to accompany him in his tour of inspection of subordinate granges, and hope to learn something from the New Hampshire grange work that will be of advantage if made use of in Kansas granges, but more of this hereafter. We send a few clippings from the New England Farmer.

The grange is doing much to upbuild and broaden the minds of men and women.

A farmer can do more for himself and for his neighbors by belonging to the grange than he can out of it.

Never slight the ritual. It may seem a small thing, but if you slight small things you may neglect larger ones.

The Combination Oil Cure for Cancer.

Has the endorsement of the highest medical authority in the world. It would seem strange indeed if persons afflicted with cancers and tumors, after knowing the facts, would resort to the dreaded knife and burning plaster, which have hertofore been attended with such fatal results. The fact that in the last six years over one hundred doctors have put themselves under this mild treatment shows their confidence in the new method of treating those horrible diseases. Persons afflicted will do well to send for free book giving particulars and prices of Oil. Address Dr. W. O. Bye, Drawer 1111, Kansas City, Mo.

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.

When writing advertisers please mention Kansas Farmer.

SORE EYES

Granulated Lids, Cataracts or Blindness cured at Home.

Dr. W. O. Coffee, the noted eye specialist of Des Moines, Iowa, has perfected a mild treatment by which anyone suffering from Failing Eyesight, Cataracts, Blindness or any disease of the eyes can cure themselves at home. If you are afflicted with any eye trouble write to Dr. Coffee and tell him all about it. He will then tell you just what he can do. He will also send you, **FREE OF CHARGE**, his 80-page book, "The New System of Treating Diseases of the Eye." It is full of interesting and valuable information. All cures are permanent. **Write To-day** for yourself or friend to

W. O. COFFEE, M. D., 837 Good Block, DES MOINES, IA

IVER JOHNSON

SEMI-HAMMERLESS AUTOMATIC EJECTOR — SINGLE GUN TRIGGER ACTION

THE TRIUMPH OF THE NEW CENTURY

HONEST GOODS AT HONEST PRICES — MADE TO SHOOT ACCURATELY

A Perfect Gun at a Popular Price, **$9.50**

Made on Entirely New Principle.

No Top nor Side Action. Absolutely Safe.

Experience, age and best results are correlative. The

Iver Johnson Fire Arms

show it. They are the triumphs of the New Century. Look for our name on barrel of every gun, none genuine without it.

Ask your local dealer or send for Catalogue.

Iver Johnson's Arms and Cycle Works,

Fitchburg, Mass., U. S. A. N. Y. Office, 99 Chambers St.

Manufacturers of the well-known Iver Johnson Bicycles, Guns and Revolvers. Established 1871.

FOX AND WOLF HOUNDS

Of the best English strains in America; 33 years' experience in breeding these fine dogs for my own sport; I now offer them for sale. Send stamp for circular.

T. B. HUDSPETH,
Sibley, - Jackson County, - Missouri.

SKUNK KILL THEM and send their skins to us. Also ship all other kinds of raw.... **FURS.**

Highest market price paid. Farmers will get 50 cents to $2.00 more by shipping to us their... **Cattle and Horse Hides** than they can by selling same to the local butcher. Prompt **CASH RETURNS** at highest market price guaranteed. Write for price list and shipping tags. **ANDERSCH BROS., Dept. 10. 412-415-419 Main St., Minneapolis, Minn.**

VARICOCELE A safe, painless, permanent cure guaranteed. Twenty-five years' experience. No money accepted until patient is well. *Consultation and Book Free*, by mail or at office. Write to **DOCTOR C. M. COE, 915 Walnut Street, KANSAS CITY, MO.**

PILES **TRIAL TREATMENT FREE.** We will forfeit $50 for any case of **Internal, External** or **Itching Piles** the **Germ Pile Cure** fails to cure. Instant and permanent relief. Write at once. **Germ Medical Co., Dept A, 49. 3d st., Cincinnati, O.**

BEETHOVEN PIANOS and ORGANS

You can get any high-grade BEETHOVEN

PIANO or ORGAN FREE

of any charge set up in your own home, no matter where you live. Write us to-day for full particulars and we will surprise you with the bargains we have to offer you.

WE DON'T WANT ANY MONEY

in advance. Our new catalogue will show you how to get a high-grade Piano or Organ at the right price and on the right terms.

ONE YEAR'S FREE TRIAL TO ALL

We ask no advance payment and sell on terms to suit any purchaser. NO AGENTS. NO STORES. NO MIDDLEMEN. Only one way from our big factory right into your own home at lower than WHOLESALE PRICES. Send to-day for our new and magnificent up-to-date SPECIAL BARGAIN CATALOGUE just out, of Pianos and Organs (mention which) ABSOLUTELY FREE.

BEETHOVEN PIANO and ORGAN CO.,
BOX 1330 WASHINGTON, NEW JERSEY.

No. 11330 After sending for Catalogue cut this advertisement out and keep this number where you can get at it. It may pay you handsomely.

Soft Harness

You can make your harness as soft as a glove and as tough as wire by using **EUREKA Harness Oil.** You can lengthen its life—make it last twice as long as it ordinarily would.

EUREKA Harness Oil

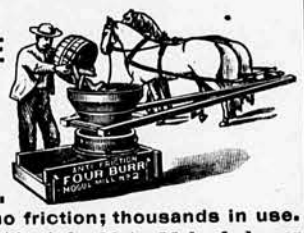
makes a poor looking harness like new. Made of pure, heavy bodied oil, especially prepared to withstand the weather.

Sold everywhere in cans—all sizes.

Made by STANDARD OIL CO.

This Mill Does all kinds of work fine; on one set of grinders without injuring them. The **Tandem Sweeps** are easy on the horses. **No Gearing. No Friction.** It's different from all others. (*Also make 7 sizes belt-power mills*) 2 to 25 H.P.
C.N.P. Bowsher Co. South Bend, Ind.

THE OLD RELIABLE ANTI-FRICTION 4-BURR MOGUL MILL.



No gearing; no friction; thousands in use.

Four-horse mill grinds **60 to 80 bushels per hour**; two-horse mill grinds **30 to 50 bushels per hour.** We make a full line of **Feed Mills,** best ever sold, including the

Famous Iowa Mill No. 2, for $12.50.

Also Feed Steamers, Farm Boilers, and Tank Heaters. Send for free catalogue.
Manufactured and sold by the
IOWA GRINDER & STEAMER WORKS,
Waterloo, Iowa.

WROUGHT IRON PIPE

Good condition, used short time only; new threads and couplings; for Steam, Gas or Water; sizes from ½ to 12 inch diameter. Our price per foot on ¾ inch is 3c; on 1 inch 3½c. Write for free catalogue No. 61
CHICAGO HOUSE WRECKING CO.,
W. 35th and Iron Sts., CHICAGO.

FREE Drug Book

They cost us $2. each. 1500 illustrations. Contains over 15000 **drugs, medicines, home remedies, flavoring extracts, trusses, electric belts, paints, oils, etc.** We save you 15 to 75% on any of them. Send 10c to pay cost of mailing book which amount is refunded on your first order. Send for book to-day, you may need medicine to-morrow. One can never tell. Better get it and keep it handy.
We are "The Only Mail Order Drug House in the World."
Heller Chemical Co. Dept 47 Chicago, Ill.

$6.50 For this large stove. (Reservoir $4.50 extra) very substantial, has 4-7 inch holes, Aluminum lined oven doors, heavy corners, porcupine fire brick, enamel iron reservoir with Japanned covers, large fire box, etc. Our catalog shows big line, all styles, good values. We sell nearly everything—all kinds of wearing apparel, household goods and family supplies. We save you money. Send 4 cents to pay part postage for catalog No. 500.
E. H. STAFFORD & BRO. Chicago.

COAL, LEAD, and ZINC

The coal, lead, and zinc lands of Central Missouri are the richest undeveloped mineral lands in the west. They offer the best, safest, and most profitable investment. We have some fine speculative propositions involving from 500 to 2,000 acres. A number of 40-acre tracts may yet be had for $500 each. One railroad; others being built. Now is the time to make an investment. Titles guaranteed perfect. These lands are accessible from north, east, and west. Address:

THE KANSAS AND MISSOURI INVESTMENT AND MINING COMPANY, (Incorporated),
Versailles, Morgan County, Missouri.

O. F. MENNINGER M. D.,
Consulting Physician.
727 KANSAS AVENUE, TOPEKA, KANSAS.
Specialties: Chronic, and Obscure Diseases Heart and Lungs

W' in Chicago, Stop

ished and decorated hotel. Steam ic elevators. Formerly the Clifton the

or-Clifton Hotel

eet and Wabash Avenue. Lo- to the wholesale and retail ublic buildings.
cents and upwards per day. ors to the city are welcome.

EGSTEN, Proprietor

The Apiary.

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

Forty Pounds to the Colony.

EDITOR APIARY DEPARTMENT:—You state in the KANSAS FARMER that you will send a book on the care of bees to any one sending in a report of how his bees have done in the last year, together with stamps for mailing the same. I herewith submit my report. I had 5 colonies of bees that I kept over last winter. They came through the winter in good shape. My bees are the small kind. They swarmed one swarm to each colony, but the swarms were large ones. I had some swarms to come out two or three different times, but refused to settle, and returned to the old hives again. I "capped" the old hives, but they did not put a particle of honey in them. The new hives averaged about 40 pounds of honey to the colony. The new swarms were late, coming off the latter part of June and the first of July. My bees had 6 acres of alfalfa, and white clover.

MRS. M. A. PALMER.

Fall River, Kans.

Your report is very good, but you omitted some very important things in not telling us the kind of hives you kept your bees in, and the kind of "caps" you use for surplus honey. It is indeed very rare that you will get bees that have swarmed to work in surplus boxes, and it is useless to put supers, or caps as you say, on such hives, at least until they have become strong again, and the honey harvest is lengthy and a good one. At any rate, it depends somewhat on the kind of supers you use, with any colony under any conditions, as to their adopting it and storing honey in it. Frequently bees will pay no attention to surplus honey boxes, and refuse to occupy them when there is no excuse for them to do so, and the result is usually swarming. This is the case more often when ordinary empty boxes are placed on the hive without anything added to induce the bees to take hold and store honey in them. The latest supers for the storage or surplus comb honey are furnished with foundation comb for starters for the bees to begin on, and in addition to this, we use a few sections that have been worked out by the bees, and that contains a little honey. Two or three of these are always sufficient to start the bees to work in the supers. No inducement will make them work in surplus boxes after the colony have swarmed, until they have again bred up strong, and honey continues coming in.

The reason these swarms returned to the old colonies or parent hives, is because the queens failed to come with the swarms. Swarms will never fail to thus return, if the queen does not accompany them, and very frequently this is the case. This will occur with any swarm, whether it be the first swarm containing the old queen, or second, third, or any other swarm. Often it occurs with the first swarm and the old queen. The queen not having used her wings for a whole year, may not be able to fly on the first trial, but in most cases she succeeds the second time, if her wings are sound and good. Sometimes the wings of queens become worn off, and this prevents them from flying ever after. Indeed many beekeepers clip the wings of their queens to prevent them from flying, and thus running off with swarms, for no swarm will go off without the queen. When this is practiced, then the hives must be closely watched for issuing swarms, and when they make their appearance, the apiarist is keeping a close watch at the entrance of the hive for the queen, and as soon as she makes her appearance he catches her and puts her in a cage. If the swarm is wanted separate from the old colony, the old hive is set aside, and a new one put in its place, and when the colony returns it goes right in the new hive, and the queen is liberated with them. The old colony is then placed back, and the new one taken to a new stand.

You remark that your bees are the "small kind." This is rather a "new one" on us beekeepers, for we did not know that there was much difference in the size of bees. Perhaps it has been said that the Italian bees were larger than the old native bees, but this is more imagination than anything else.

When writing advertisers please mention Kansas Farmer.

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.

Mains' Herd of Poland-Chinas.

Pigs by Anderson's Perfect, Harris' Black U. S. (the champion sweepstakes boar at the Iowa State Fair of 1900), Kemp's Perfection (the highest priced pig by Chief Perfection 2d sold last year), for sale from the very best of sows. Stock of all ages for sale. : : : : : : : :

James Mains, Oskaloosa, Kas.

PASTEUR VACCINE COMPANY,

Chicago, New York, Kansas City, Omaha, Ft. Worth, San Francisco.

TRADE-MARK "BLACKLEGINE"

Single Blackleg Vaccine
Double Blackleg Vaccine } **Powder Form.**
Blackleg Vaccinating Outfit

Single Blacklegine
Double Blacklegine } **Vaccine ready for use. Each dose separate.**
Blacklegine Outfit (Needle with handle), 50c.

TRADE MARK LINCOLN

Dip
Disinfectant
Feeding Compound
Scour Cure (Alexander)
Virus for Destroying Rats

ALL WELL-KNOWN, SUCCESSFUL REMEDIES. WRITE FOR PARTICULARS AND PROOFS OF SUCCESS. FREE SAMPLE OF DIP AND DISINFECTANT SENT UPON REQUEST. BEWARE OF DANGEROUS IMITATIONS OF OUR VACCINES.

JANNEY COMMON SENSE CORN HUSKER AND FODDER SHREDDER.....

Write for Prices and Catalogue.

Of steel construction, of correct principle, has great capacity, is light draft, two men can feed 150 bushels of corn through large size machine in one hour. Husks the corn well and shreds the fodder into

CORN HAY

It is a money-maker. Admitted to be the best and only up-to-date corn husker on the market.

MANF'D —BY—
JANNEY M'F'G CO., OTTUMWA, IOWA.

FERGUSON IMPLEMENT CO.,
GENERAL AGENTS,
1209 Union Avenue, - - Kansas City, Missouri.

THE OLD RELIABLE

LIGHNING HAY PRESSES
HORSE AND STEAM POWER CATALOG FREE
KANSAS CITY HAY PRESS CO
129 MILL ST KANSAS CITY MO

A Sure Preventive of Blackleg

Is Parke, Davis & Company's Blackleg Vaccine Improved. Ready for Immediate Use. No Expensive Outfit Needed.

All you have to do is to put the Vaccine in your syringe, add boiled water according to directions, and inject into your cattle. It will positively PROTECT your cattle from the dread disease, Blackleg, the same as vaccination prevents Smallpox in the human family. Specify Parke, Davis & Co.'s Blackleg Vaccine Improved, and get the kind that is sure to be reliable. EVERY LOT IS TESTED ON CATTLE BEFORE IT LEAVES OUR LABORATORIES. Write for Literature and Full Information, Free on Request. FOR SALE BY ALL DRUGGISTS.

PARKE, DAVIS & COMPANY, Detroit, Michigan.

Branches: New York City, Kansas City, Baltimore, New Orleans, Chicago, Walkerville, Ont., Montreal, Que., and London, England.

THE BUSINESS FARMER

—the man who knows how to make and save money is the man we're after. We sell him

Advance Fence

at wholesale prices, from our factory direct. He thus saves the dealer's profit and at the same time gets the best fence made. Many heights. Special discounts, etc., free.

ADVANCE FENCE CO 180 H St., Peoria, Ill.

PAGE

FOR HARD USAGE

we don't think you can find anything better.
PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.

GRIND YOUR WHEAT

OUR MILLS for 1901 are made for that, and are *Improved Corn Grinders* beside. You will find a surprise in prices in our circular of ungeared and double and triple geared mills. Ask for our Windmill Catalogue, too, when you write. Add.,

Currie Windmill Co., Topeka, Kans

KIRKWOOD FOR 1900

STEEL WIND MILLS, STEEL TOWERS, PUMPS, and CYLINDERS, TANKS, and FITTINGS OF ALL KINDS

—Address—

Kirkwood Wind Engine Co
Arkansas City, Kans.

DO NOT BUY

WELL DRILLING

MACHINERY until you see our new Catalogue No. 41. We will furnish it to you FREE. Write to our address, either Harvey, Ill., Chicago, Ill., or Dallas, Texas.

F. C. AUSTIN MFG. CO.,
Factories at Harvey, Ill.

WINTER WATER.

When the stock goes into winter quarters you will want to be sure of a reliable and constant supply of water. A bored well is the safest and surest. Our Well Machinery does it best and cheapest. Drills 25 to 1500 ft deep. We make all appliances. Have stood the test of 13 years. We also have Gasoline Engines for all purposes. Send for free catalog.

W. M. Thompson Co. Sioux City, Iowa.
Successors to Sioux City Engine & Iron Works

DO YOU

need a feed mill? Why not buy the one which will do everything any other mill will do, and at the same time supply power for other purposes.

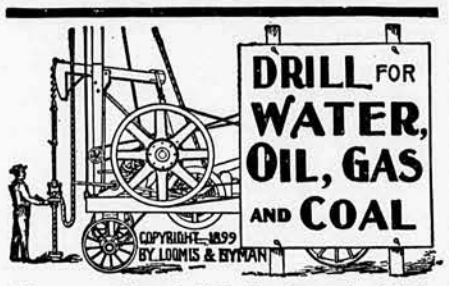
NONE BETTER MADE.

BUCKEYE

Feed Mills and Power Combined

meet all these conditions. Grinds corn and cob, other grains, especially wheat, etc. Shell, cut feed, saw wood, pump water, etc. Ask your dealer for them. Write us today for free catalogue W.

STAVER CARRIAGE CO.,
76th and Wallace Sts., Chicago.



Use our machinery! It is the strongest. It takes the least power. Carries the heaviest tools. Drills much faster. Lasts longer and **makes the owner more money** than any other Drilling Machine on earth. Machines made for drilling any depth or diameter, and for Horse, Steam or Gasoline Power.

LOOMIS & NYMAN, TIFFIN, OHIO.

The "SMALLEY" Family of "Feed Savers"

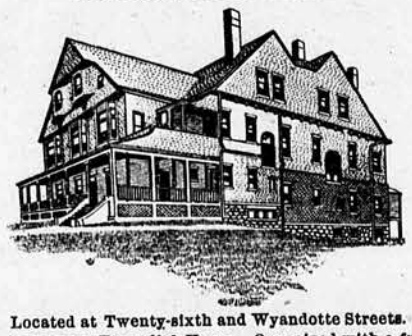
Embraces for this season **Cutters for Ensilage and Dry Fodder** with **Corn Shredding** and **Husking** attachments; Chain or Independent Blower Elevators; **Grinding Mills** for Ear Corn and Small Grain; **Root Cutters** and **Corn Shellers**; **Self Feed Drag Saws**; **Bolting Mills**. Also **Big Line Farm Powers** for operating. **Feed Saver Catalogue** and **Silo Sense** booklet mailed **free** to any one *naming this paper*.

Smalley Mfg. Co., Manitowoc, Wis.

When writing advertisers please mention Kansas Farmer.

DR. COE'S SANITARIUM

Established 15 Years



Located at Twenty-sixth and Wyandotte Streets.

A pleasant Remedial Home. Organized with a full staff of Physicians and Surgeons for the treatment of all Chronic and Surgical Diseases, and equipped to treat, room and board patients. A quiet home for women during confinement.

Trusses, Braces, and Appliances for Deformities manufactured.

Trained Attendants. Best Invalid's Home in the West. Diseases of Women a Specialty.

Write for circular on deformities—club feet, curvature of the spine—nasal, throat, lung, kidney, bladder, and nervous diseases, stricture, piles, fistula, tumors, cancers, paralysis, epilepsy, all eye, skin, and blood diseases.

All the Most Difficult Surgical Operations Performed With Skill and Success.

New restorative treatment for loss of Vital Power, Rupture, Varicocele, Hydrocele, Hare Lip, etc. Persons unable to visit us may be treated at home by mail. One personal interview preferred. Consultation at office or by letter free and confidential. Thirty years' experience in Sanitarium work. My book, to either sex, containing much valuable information, sent free. Address,

DR. C. M. COE, Propr.,
Office, 915 Walnut St., Kansas City, Mo.

Cheap-Rate Excursions Southwest

Only one fare plus $2.00 October 15, November 5 and 19, December 3 and 17.

The Santa Fe most directly reaches the fertile valleys, industrial centers, and noted mining camps of Kansas, Oklahoma, Texas, Colorado, New Mexico and Arizona.

Go out and see the country for yourself.

Santa Fe.

Address T. L. King, Agent Santa Fe, Topeka, Kansas.

HOMES FOR THE MILLION

—IN—

Southwestern Missouri, Western Arkansas, Eastern Texas, and Western Louisiana.

ON THE LINE OF THE

K. C. S.

KANSAS CITY SOUTHERN RAILWAY

"Straight as the Crow Flies"

FROM

KANSAS CITY TO THE GULF

Through the cheapest land now open for settlement in the United States.

A magnificent country adapted to the cultivation of small grain, corn, cotton, rice, sugar cane, apples, peaches, berries, commercial truck farming, and the raising of horses, mules, cattle, hogs, and sheep at prices ranging from **FREE GOVERNMENT HOMESTEADS to $25 and More Per Acre.**

Write for a copy of "CURRENT EVENTS" published by the **Kansas City Southern Railway.**

S. G. WARNER, G. P. & T. A.,
Temple Block, Kansas City, Mo

H. D. DUTTON, Trav. Pass. Agent, Kansas City, Mo.
F. E. ROESLER, Trav. Pass. and Immigration Agent, Kansas City, Mo.

Centropolis Hotel.

The best $2.00 (and $2.50 with bath) Hotel in America.

W. J. KUPPER, Proprietor.
CLARK D. FROST, Manager.
KANSAS CITY, MO.

LIGHTNING WELL MACHY

IS THE STANDARD

STEAM PUMPS, AIR LIFTS,
GASOLINE ENGINES
WRITE FOR CIRCULAR
THE AMERICAN WELL WORKS
AURORA, ILL. - CHICAGO - DALLAS, TEX

BRAND NEW STEEL ROOFING

Bought at Receivers' Sale. Sheets either flat, corrugated or "V" crimped. No tools except a hatchet or hammer is needed to lay the roofing. We furnish free with each order enough paint to cover and nails to lay. Price per square, $1.75

A square means 100 square ft. Write for Free Catalogue No. 61 on General Merchandise. Chicago House Wrecking Co., West 35th and Iron Sts., Chicago, Ill.

RHEUMATISM....

Is quickly relieved and promptly cured by

Dr. Drummond's Lightning Remedies.

The internal remedy is pleasant to take, acts immediately, does not disturb digestion, and is for rheumatism only in all its torturing forms. The external preparation restores stiff joints, drawn cords, and hardened muscles. If your druggist has not these remedies in stock, do not take anything else. Send $5 to the Drummond Medicine Co., New York, and the full treatment of two large bottles will be sent to your express address. Agents wanted.

PILES

Fistula, Fissures, all Rectal Troubles quickly and permanently cured without pain or interruption of business. Mr. Edward Somers, Castleton, Ill., suffered with bleeding, swelling, and protruding piles for many years, doctors had given his case up as incurable; he was completely cured by our treatment in three weeks.

Thousands of pile sufferers who have given up in despair of ever being cured, have written us letters full of gratitude after using our remedies a short time. You can have a trial sample mailed FREE by writing us full particulars of your case. Address

HERMIT REMEDY CO.,
Suite 736, Adams Express Bldg., Chicago, Ill.

BED-WETTING I will send FREE to any mother a sample of a simple remedy that cured my child. MRS. G. SUMMERS, Box C, Notre Dame, Ind.

I WILL SEND FREE—To any mother a sample of **Bed Wetting,** a simple remedy that cured my child of bed wetting. MRS. G. SUMMERS, Box C, NOTRE DAME, INDIANA.

The Agricultural Problem....

Is being solved in a most satisfactory manner, along the line of the

Missouri Pacific Railway

....AND....

Iron Mountain Route

All sorts of crops are being grown, and they are large crops, too. Reduced rates are offered the first and third Tuesdays of each month, and these events are called low rate Homeseekers' Excursions. Literature on Missouri, Kansas, Arkansas, Texas, and on

ZINC AND LEAD MINING,

will be mailed free on application to H. C. Townsend, General Passenger and Ticket Agent, St. Louis.

TO THE

SOUTHEAST

A NEW SYSTEM REACHING WITH ITS OWN RAILS,

MEMPHIS, BIRMINGHAM

AND MANY OTHER IMPORTANT POINTS IN THE SOUTHEAST. GOOD CONNECTIONS AT BIRMINGHAM FOR

MONTGOMERY, MOBILE, ATLANTA, SAVANNAH

AND ALL POINTS IN THE STATE OF

FLORIDA.

PASSENGERS ARRANGING FOR TICKETS VIA THE

FRISCO SYSTEM

WILL HAVE AN OPPORTUNITY TO ENJOY THE COMFORTS OF A BRAND NEW, UP-TO-DATE LIMITED TRAIN—

THE SOUTHEASTERN LIMITED.

FULL INFORMATION AS TO ROUTE AND RATES CHEERFULLY FURNISHED UPON APPLICATION TO ANY REPRESENTATIVE OF THE COMPANY, OR TO

726 CENTURY BUILDING,
SAINT LOUIS.

THE BEST PATENT ON THE MARKET.

$100 REWARD

If 6 months' treatment don't cure any case of **Bad Health, Catarrh, Bad Blood, Bad Taste, Bad Breath, Bad Complexion, Irregular Appetite, Bowel Trouble, Weak Kidneys, Lazy Liver, Rheumatism, Dyspepsia, Headache, Backache, Stomach, or Heart Trouble.**

The very best constitutional treatment in unhealthy seasons and places is **HUNT'S DIGESTIVE TABLETS.** One tablet per day, ½ hour before breakfast.

One month's treatment by mail, 25 Cents. Six months' treatment, 180 tablets, $1.00.

Put up by ***T. J. HUNT, Merom, Indiana.***

VIRGINIA FARMS AND OLD COLONIAL HOMES.

We have for sale any number of Farms in Virginia, suitable for country homes or for stock-raising and general farming purposes; acreage ranging from 25 to 1,500; prices ranging from $600 to $60,000. In many cases the buildings are worth more than the price asked for entire farm. Send for our Virginia farm list. LIGGETT & GOEHRING, 417 Fourth Ave., Pittsburg, Pa.

UNION PACIFIC — THE OVERLAND ROUTE — WORLD'S PICTORIAL LINE.

Wonderful Northwest

Towards which the eyes of the world are turned; where great opportunities are open to everyone, is best and quickest reached by the

UNION PACIFIC.

No better trains in the world than those run via this line.

For full information, call on or address

F. A. LEWIS, City Ticket Agent, 525 Kansas Avenue.

J. C. FULTON, Depot Agent.

SHOW CATTLE AT AUCTION

GREAT TWO DAYS' SALE OF

SHORTHORNS

KANSAS CITY, MO., NOV. 12 and 13, 1901.

Nov. 12, 1901, Purdy Brothers.
Harris, Missouri,

Will sell 53 Head, including their very successful young show herd. At Kansas City, last week, they won first prize on senior yearling heifer; first on senior heifer calf; second on junior bull calf; third on senior bull calf; third on young herd.

Females of breeding age bred to the great bulls, Golden Knight of Enterprise 143815 (included in sale), and Lord Lovell 130157. The offering includes choice representatives of the following Cruickshank families: Victoria, Secret, Lovely, Lancaster, Maid of March, Louisa, Orange Blossom, and Eliza.

Nov. 13, 1901, D. L. Dawdy & Co.
Arrington, Kansas,

Will sell 52 Head, a representative one-half of their herd. Scotch-bred cattle of the following Crnickshank families are included: Secret, Brawith Bud, Butterfly, Barmpton Rose, and Village Lass. Females of suitable age are, with two exceptions, bred to the Cruickshank show bull, Orange Viscount 157352.

Cruickshank bulls, herd headers, are included in each of the above offerings. .·. Write to either of the consignors for illustrated Catalogues.

COL. F. M. WOODS, COL. J. W. SPARKS, } Auctioneers. ✪ **COL. JAS. E. DUNCAN, COL. J. D. MATHEWS,** } Assistants.

ARMOUR-FUNKHOUSER

PUBLIC SALE

OF

..Hereford..

Cattle.

KANSAS CITY STOCK YARDS SALE PAVILION
TUESDAY, DECEMBER 10, AND
WEDNESDAY, DECEMBER 11, '01

The Armour cattle for this sale were chosen by the late Kirk. B. Armour, under the conviction that they would form his greatest offering. The selection comprises a great many of his own breeding and some forty head imported from the best English herds.

The Funkhouser selections have been made upon an understanding with the late Kirk. B. Armour, that the whole offering would be the best ever made by them. We intend to vindicate this statement with the very highest class of Cows and Bulls that both herds afford. .·. .·. .·. **Catalogues ready November 10.**

CHARLES W. ARMOUR, For Estate of KIRK B. ARMOUR, Kansas City, Mo.
JAMES A. FUNKHOUSER, Plattsburg, Mo.

FIRST ANNUAL SALE.

MONDAY, NOVEMBER 11, 1901.

OLDENBURG STOCK FARM HERD OF
SCOTCH-TOPPED

Shorthorns, and Poland-China Swine.

Owned by JOHN GRUNER, Parnell, Kans.

Six Young Mary and Britania bulls out of Minister 120229, and 95th Duke of Wildwood 119099 all ready for service. .·. Also—25 spring Poland-China pigs out of Missouri Black Chief and Chief Tecumseh 2d, 15 boars and 10 gilts all in fine condition. .·. Lunch at 11 o'clock. Sale begins at 12 o'clock sharp. Address for Catalogue, and bids by mail,

JOHN GRUNER, Parnell, Atchison Co., Kans.

GREAT BERKSHIRE SALE

At the Great Live Stock Headquarters, Dexter Park, Union Stock Yards, Chicago, Ill.,

WEDNESDAY, DECEMBER 4, 1901,

During the International Live Stock Show **50-Head of High-Class Berkshires-50** Will be sold at the time and place named above.

The consignments to this sale will be made by well known breeders and the contributions will be creditable specimens of the best American herds. For Catalogues and particulars, address

CHAS. F. MILLS, Springfield, Ill., Secretary American Berkshire Association.

---

15 POLAND-CHINA BOARS FOR SALE.

... Bred by F. M. LAIL, Marshall, Mo ...

The boars offered are mostly sired by the 1901 champion boar, Corrector 26466, recently sold to Winn & Mastin. .·. Correspondence and inspection invited. .·. Mention Kansas Farmer.

100--POLAND-CHINA PIGS FOR SALE--100

Our old herd boar, Missouri Black Chief, was the sire of most of our prize-winners at the Missouri State Fair. Our herd boar, Missouri's Black Perfection by Missouri Black Chief, and out of a Chief Perfection 2d sow, won sweepstakes. I now offer for sale my 2-year-old herd boar, Missouri Black Chip by Missouri Black Chief and out of a dam by Chief I Am.

....Also, 100 Pigs of Similar Breeding....

J. R. YOUNG, Richards, Mo.