

KANSAS FARMER

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TOPEKA, KANSAS, THURSDAY, MAY 2, 1901.

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\$1.00 A YEAR.

BREEDERS' DIRECTORY.

SWINE.

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

Registered Stock, **DUROC-JERSEYS** contains breeders of the leading strains. **N. B. SAWYER**, - - Cherryvale, Kansas.

M. H. ALBERTY, - - Cherokee, Kansas. **DUROC-JERSEYS.** 100 head for this year's trade; all eligible to record.

MAPLE AVENUE HERD **J. U. HOWE,** WICHITA, KANSAS. Farm 2 miles west of city on Maple Avenue

DUROC-JERSEYS. CEDAR SUMMIT POLAND-CHINA SWINE FARM. Only choicest individuals reserved for breeding purposes. **J. M. GILBERT**, Busby, Elk County, Kansas.

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

PARKDALE STOCK AND FRUIT FARMS THOROUGHbred HEREFORD CATTLE. **CHAS. A. SCHOIZ**, Proprietor, FRANKFORT, KANS

RIVERSIDE HERD OF POLAND-CHINA SWINE Commodore Dewey No. 46187 head of herd, assisted by a grandson of Missouri's Black Chief. Young stock for sale reasonable. All stock recorded free. **M. O'BRIEN**, Liberty, Kansas.

DUROC-JERSEY SWINE---REGISTERED. Some choice July, August and September males at reasonable prices, to make room for spring farrows. **NEWTON BROS.**, Whiting, Kans.

POLAND-CHINA HOGS Herd headed by I Know Perfect 48263 O., sired by Chief I Know 37167 O. A few gilts for sale, also two 2-year-old sows that will be bred for August or September farrow and one 3-year-old sow by King Breckenridge. **W. E. NICHOLS**, Sedgwick, Kans.

D. L. BUTTON, North Topeka, Kans., Breeder of Improved Chester Whites. Stock For Sale. Farm is two miles northwest of Reform School.

MOUND VALLEY HERD OF POLAND-CHINAS Has some show gilts bred to I. B. Perfection (25172 S.). Others bred to Black U. S. Best (21707). Also a fine lot of fall pigs for sale. Prices reasonable. **W. P. WIMMER & SON**, Mound Valley, Kans.

Maple Grove Herd of Registered POLAND-CHINAS **Hiram Smith**, Colwich, Sedgwick Co., Kans. Headed by the grand boars, Black Chief 42357, Ideal U. S. 48269, and assisted by Perfect I Am Vol. XXIII, grandson of Perfect I Know 19172, sired by the great sow, Anderson's Model 43611, mated to a lot of choice selected sows of the most noted prize-winning families. A fine lot of fall pigs ready to ship. Inspection or correspondence invited.

...Prospect Park Herd of... Thoroughbred Poland-China Hogs. Perfect We Know, a son of Chief I Know, the sweepstakes boar at the Omaha Exposition, at head of herd.

J. H. TAYLOR, Telephone address Pearl, Kans. RHINEHART, Kansas. Telegraph address

SUNNYSIDE HERD OF PEDIGREED POLAND-CHINA HOGS. We now have for sale 10 Good Young Boars 8 months old, and 8 Bred Gilts—fine, well developed sows, and a choice lot of September, October, and November, 1900, pigs for sale cheap. Write me for prices on what you want. **M. L. SOMERS**, Altoona, Kans.

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.

SWINE.

J. D. MARSHALL, Walton, Kansas. For Sale: Thirty-five fine gilts, sired by "Miles Look Me Over" (18879) prize-winner in 5 fairs in 1900; also a few fine boars. Call on me or write your wants.

FAIRVIEW HERD DUROC-JERSEYS Contains breeders of the leading strains. We have some fine Summer and Fall pigs to sell at moderate prices. **J. E. DAVIS**, Fairview, Ks.

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 Co., Kans.

POLAND-CHINAS. Extra Good Fall Boars and Sows. **Fancy Strains.** **DIETRICH & SPAULDING**, Richmond, Kas

CHERRY GROVE FARM DUROCS. From best prize-winners. One spring boar, also fall and winter pigs for sale. **WARE & POCOKE**, Station B., St. Joseph, Mo.

Verdigris Valley Herd POLAND-CHINAS Large-boned, Prize-winning. We have for sale 80 head of fall pigs—the best grown out lot we ever raised. We can furnish herds not akin, of any of the fashionable strains. We have several that are good enough to fit for next fall's shows. Prices reasonable. Nothing but good ones shipped on orders. **WAIT & EAST**, Altoona, Kansas.

T. A. HUBBARD, Rome, Kans., Breeder of POLAND-CHINAS and LARGE ENGLISH BERKSHIRES. Two hundred head. All ages. 25 boars and 45 sows ready for buyers.

RIDGEVIEW FARM HERD OF Large English Berkshires Sold out of everything but fall pigs. Place your orders for them now. Silver Laced and White Wyandotte eggs for sale, \$1.50 per 15. **MANWARING BROS.**, Lawrence, Kans.

Pure Bred Poland-Chinas I have 25 choice October pigs that I will sell for \$10 and \$12.50 for the next 30 days, sired by Corwin I Know 18448, and Hadley U. S. 20186; dams equally as well bred, all good colors. I am also booking orders for choice spring pigs, sired by Logan Chief 2d 24427, and Proud Tecumseh 24655. My hogs have good heads, small, fancy ears. Come and see them or write. **JNO. BOLLIN**, Kickapoo, Leavenworth Co., Kans. Express Office, Leavenworth.

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—Some fine young stock, 20th Earl of Valley Grove at head of herd, for sale; breeding of the best, in color unexcelled. Address **F. C. KINGSLEY**, Dover, Shawnee County, Kans.

Breed the Horns Off by Using a RED POLLED BULL. **CHAS. FOSTER & SON**, FOSTER, Butler Co., Kas Breeders of Red Polled Cattle. Herd headed by Powerful 4682. Pure-bred and grades for sale. Also prize-winning Light Brahmas.

D. P. Norton's Shorthorns Dunlap, Morris County, Kansas. Breeder of Pure-bred SHORTHORN CATTLE. Herd bull, Imported British Lion 133692. Young Stock For Sale.

REGISTERED HEREFORDS **THOS. EVANS**, Breeder, HARTFORD, LYON COUNTY, - - - KANSAS. SPECIAL OFFERINGS: FOR SALE—Four yearling bulls, one imported 4-year-old bull, a few young cows and heifers.

CATTLE.

ROSEDALE HERD OF HOLSTEINS. **C. F. STONE**, Proprietor, PEABODY, KANSAS. Home of Empress Josephine 3d, champion cow of the world. Gerben's Mechtelilde Prince at head of herd. Young bulls and heifers for sale.

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. **JAMES A. WATKINS**, Farm is 2 miles south of Whiting, Kans. of Rock Island depot.

SHORTHORN BULLS FOR SALE. A few choicely bred young bulls—spring yearlings for sale at very reasonable prices; also 2 Shropshire, and 1 cross bred Shropshire-Cotswold buck. Address **JAMES C. STONE**, Leavenworth Kans.

RED POLLED CATTLE. Largest Herd in America. **S. A. CONVERSE**, Proprietor, Importer, and Breeder. **OKESCO**, HOWARD COUNTY, IOWA.

MT. PLEASANT HERD OF SHORTHORNS. Herd headed by Acomb Duke 18th 142177. Herd composed of Young Marys, Galateas, and Sanspareils. Young bulls for sale. **R. D. No. 3. A. M. ASHCRAFT**, Atchison, Kans. Inquire at Ashcraft & Sage Livery Barn, Main Street.

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.

RECORDED HEREFORD BULLS FOR SALE. The get of Marmion 66646 and Anxiety Wilton A-45811, 10 to 24 months old. These bulls are large, and good individuals, and of the best of breeding. Inspection invited. **FRED COWMAN**, Lost Springs, Kans. Breeder (not dealer) of Hereford Cattle.

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 Co, Kans

125 RAVENSWOOD SHORTHORNS 125 **C. 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. R. R. and Telephone Station, Bunceton, Mo. **ED. PATTERSON**, Mgr.

IDLEWILD SHORTHORNS. The blood of Roan Gauntlet and Champion of England can be had direct through our herd bull, Godoy 115975. His dam, Imp. Golden Thistle (Vol. 28) is by Roan Gauntlet; his grandam, Golden Lady by Champion of England. Godoy is still active and a sure getter. A few years later you can not get this blood direct. Godoy transmits the old scale and substance produced only by Cruickshank. Thirty-five Cruickshank females in herd; also Booths and Double Marys. Can offer Godoy calves from these tribes. **W. F. HARNED**, Vermont, Cooper Co., Mo.

CATTLE.

ROCKY HILL SHORTHORNS We have for sale 7 Scotch-topped bulls, about 1 year old. Quality and prices right. **J. F. TRUE & SON**, Newman, Kansas. (Newman is on U. P. R. R., 12 miles east of Topeka.)

Polled Durhams! THIS little ad. will direct you to the largest as well as the best Scotch bred Polled Durham herd of cattle in the United States. 150 fine Duroc-Jersey pigs **F. F. Fallor**, Newton, Iowa.

Norwood Shorthorns. **V. R. ELLIS**, Gardner, Kas Sir Charming 4th at head of herd. Cruickshank top crosses on best American families. Young stock for sale.

TWO CRUICKSHANK-TOPPED SHORTHORN BULLS FOR SALE. Both reds; 8 and 9 months old. Also summer and fall farrow POLAND CHINA PIGS—both sexes. Prompt response to enquirers. **O. E. Morse & Sons**, Mound City, Kans.

H. N. HOLDEMAN, Girard, Crawford Co., Kan., BREEDER OF— **PERCHERON HORSES**, and **HOLSTEIN FRIESIAN CATTLE** representing Josephine, Mechtelilde, and Parthena 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.

Sycamore Springs Stock Farm SHORTHORNS. **H. M. HILL**, Prop'r., La Fontaine, Kans. No Shorthorns for sale at present but will have a few young things in the spring. Personal inspection of our herd invited. Correspondence solicited.

SILVER CREEK HERD SHORTHORN CATTLE. **GWENDOLINE'S PRINCE** 120913 in service, a son of the \$1,100 cow, Gwendoline 6th. Best Scotch, Bates, and American families represented. Also breed high-class Duroc-Jersey swine. Can ship on Santa Fe, Frisco, and Missouri Pacific R. R. **J. F. STODDER**, Burden, Cowley Co., Kans.

BLACK DIAMOND ...STOCK FARM Has for sale a few choice Galloway bulls, sired by a World's Fair winner. Also, a few English Fox Terrier pups of finest quality. For Sale or Trade—A 15-acre, suburban property in Des Moines, Iowa. Information promptly furnished by the owner, **J. R. Higgins**, Reswick, Keokuk County, Iowa.

Sunflower Herd: SHORTHORN CATTLE POLAND-CHINA SWINE. Herd bull, Sir Knight 124403. Herd boars, Black U. S. 2d 22582 S., and Sunflower Black Chief 23603. Representative stock for sale. Address **ANDREW PRINGLE**, Rural Route 2, Eskridge, Kansas.

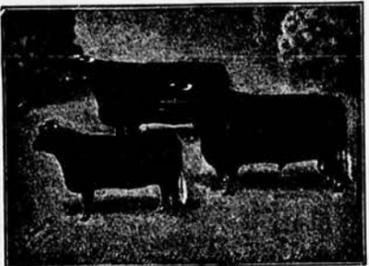
PURE BATES SHORTHORNS. **M. W. ANDERSON**, Independence, Mo Wild Eyes, Craggs, Peach Blossoms, Duchess Craggs, Harts, Barringtons, and Bracelets. 186th Duke of Wildwood 124671 at head of herd. Can sell young females, bred or open.

CATTLE.

H. M. Satzler,
Burlingame, Kansas,
.....BREEDER OF.....
HEREFORD CATTLE,
BERKSHIRE SWINE,
COTSWOLD SHEEP.
STOCK FOR SALE.

H. R. LITTLE,
HOPE, DICKINSON CO., KANS.,
Breeds Only the Best
Pure-bred
SHORTHORN CATTLE.

The herd numbers 185, headed by ROYAL CROWN 126698, a pure Cruickshank, assisted by Sharon Lavender 143003. For Sale just now 16 Bulls of serviceable age, and 13 Bull Calves. Farm 1 1/2 miles from town. Can ship on Mo. Pacific, R. I., or Santa Fe. Foundation stock selected from 3 of the great herds of Ohio.



GLENDALE SHORTHORNS, Ottawa, Kans
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.

CATTLE.

POLLED DURHAMS 10 bulls from 6 to 30 months. All stock recorded free in two records. Correspond at once before too late.
A. E. BURLINGAME, Knox City, Knox County, Mo.
A. D. SEARS & BROS., - - Leon, Iowa.
SHORTHORNS.
2d Grand Duke of Hazelhurst 160091, heads herd.

HORSES AND MULES.

PERCHERON HORSES, AND ABERDEEN-ANGUS CATTLE
GARRETT HURST, Breeder, Zyba, Sumner Co., Kans. For sale 1 young stallion, and 1 mare; also 3 cows, and 1 bull. All registered.

PERCHERON HORSES.

J. W. & J. C. ROBISON, Towanda, Kansas.
Importers and Breeders. Stallions for sale. Send for Catalogue.

LIVE STOCK AUCTIONEERS.

JAS. W. SPARKS LIVE STOCK AUCTIONEER
Marshall, Mo.
Have been, and am now, booked for the best sales of high-class stock held in America. Write me before claiming dates.

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

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

LIVE-STOCK AUCTIONEER

Col. J. M. Marshberger
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.



THE LINCOLN IMPORTING HORSE COMPANY
LINCOLN, NEBRASKA.

We have fully decided to offer special inducements for the next twenty or thirty days on our Percheron and Shire Stallions. Some of the largest and grandest individuals that ever crossed the ocean.
Our Percherons are coal blacks. Our Shiras are bays and chestnuts. All of them in the best of condition, healthy in every respect and sound as gold dollars. Parties coming to examine our stock and finding we have made any untrue statements, remember, we pay all expenses. Come at once and take advantage of first choice, and cut prices from 15 per cent to 25 per cent and some still more.

Opposite State Farm and Experimental Station.
Take University Place or Havelock Street Cars.
Inquire for Sullivan's Barns. Telephone 575.



Draft Stallions.

PERCHERONS, SHIRES, AND CLYDES.
Choice collection of imported Black Percherons west of the Mississippi River. All horses personally selected by a member of the firm with the aid of our own private interpreter, and a first choice from the oldest and leading breeders of France. All fresh, young stock. If you want a Good Stallion we can suit you. Barns are in town. For further information, address
KEISER BROS., Keota, Iowa.
(On C. R. I. & P. Railway, 14 miles west of Washington.)

Draft Stallions OF THE **SHIRE, CLYDE, AND PERCHERON BREEDS.**

IMPORTED, and HOME BRED All Ages
POLLED DURHAM AND SHORTHORN CATTLE. POLAND-CHINA HOGS. Prices Right.

Snyder Bros., Winfield, Kans



PEARL SHORTHORNS.

HERD BULLS:
BARON URY 2d 124970. LAFITTE 119915

Inspection Invited.

C. W. TAYLOR, - - Pearl, Kansas.

SCOTT & MARCH,
.....BREEDERS OF PURE BRED.....
HEREFORDS,
BELTON, CASS COUNTY, MO.

BULLS in service, HESIOD 29th 66304, Imp. RODERICK 80155, MONITOR 58275, EXPANSION 93662, FRISCOE 93674, FULTON ADAMS 11th 83731.

Twenty-five miles south of Kansas City on Frisco, Fort Scott & Memphis, and K. C., P. & G. Railroads



250 HIGH GRADE ANGORA DOES

All pure white, thin pendulant ears. Will sell very cheap if taken soon.
W. T. McINTIRE, Live Stock Exchange, - - Kansas City, Mo.

Dip & Wash (for Live Stock)

Dipping, washing or spraying live stock is essential for the cure of Scab, Mange, Itch, etc., and for killing and removing ticks, fleas, lice, etc. Lincoln Dip is composed of nicotine, sulphur and valuable oils, but contains neither lime nor arsenic. It is effective but not poisonous or injurious. Write for literature upon treatment of stock for skin parasites.



PASTEUR VACCINE CO., 56 Fifth Ave., Chicago.
Branch Office: 622 Whitney Building, Kansas City, Mo.

ENGLISH SHIRE, and PERCHERON STALLIONS.



WATSON, WOODS BROS. & KELLY CO., Importers of DRAFT STALLIONS.
Lincoln, Neb. Three Importations made in 1900.

All our horses are personally selected by Mr. Watson, who buys only of the best breeders in Europe. Mr. Watson was the World's Fair Judge of Draft Stallions. Our December importation is the 25th shipment made direct from Europe by him.
OUR STABLES are located corner Ninth and E Streets. Our office on the ground floor of the Burr Block TWELFTH AND O STREETS. We invite inspection. No trouble to SHOW HORSES. Visitors welcome.

AMERICA'S LEADING HORSE IMPORTERS.



100 PERCHERON STALLIONS
40 FRENCH COACH STALLIONS

Now on hand. All mature and ready for service. Frequently there is a neighborhood in which there is no stallion men who will invest the price necessary to procure a first-class registered Stallion. In such a locality those farmers and breeders who wish to raise horses must resort to some means of procuring a good Stallion in their neighborhood. We have a plan that has proven most successful where the above conditions exist, and will furnish full explanation upon inquiry.
If you live in such a neighborhood, write us and we will show you how you can procure one of the best stallions and raise horses that will sell for the highest prices.

McLAUGHLIN BROS.,
Sixth and Wesley Avenues, COLUMBUS, OHIO.

PURE PERCHERONS



The Richest Bred Herd in America,
—AND THE—
Oldest Breeding Establishment in the West

A limited number of choice young stallions for sale (including the herd stallion, Favorite 22937).

Correspondence Solicited. Inspection Invited.

HENRY AVERY & SON, WAKEFIELD KANS.

GEO. W. NULL, Odessa, Mo., LIVE STOCK AUCTIONEER.

Have sold for, and am booking sales for leading stockmen everywhere. Write me before claiming dates. I also have Poland-China swine, Bronze turkeys, B. P. Rock, and Light Brahma chickens. 150 birds, and a lot of pigs ready to ship. Write for Free Catalogue.

TEBO LAWN HERD SHORTHORNS

—HERD BULLS ARE—

IMPORTED COLLYNIE 135022 bred by Wm. Duthie.
 IMPORTED BLYTHE VICTOR 140609 bred by W. S. Marr.
 IMPORTED BAPTON MARQUIS bred by J. Deane Willis.
 ADMIRAL GODOY 133872 bred by Chas. E. Leonard.

FEMALES are the best CRUIKSHANK families topped from the leading importations in 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.

H. M. WILLIAMS, Manager. G. M. CASEY, OWNER, SHAWNEE MOUND, HENRY COUNTY, MO.



...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

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 Vektor 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 Gallahad out of 11th Linwood Golden Drop. Lord Mayor heifers bred to Laird of Linwood for sale. Also bred Shetland ponies. Inspection invited. Correspondence solicited. A few young bulls sired by Lord Mayor for sale.

T. P. BABST, Proprietor, Dover, Shawnee Co., Kans.



Sunny Slope Herefords.

290 HEAD FOR SALE

Consisting of 200 bulls from 8 months to 4 years old, and 90 yearling heifers. I will make very low prices on bulls, as I desire to sell all of them before May 1. Write me or come at once if you want a bargain.

C. A. STANNARD, Emporia, Kansas

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.



STEELE BROS., Belvoir, DOUGLAS County Kans

Breeders of SELECT

HEREFORD CATTLE

Young Stock For Sale. Inspection or Correspondence Invited.

GALLOWAYS

Largest Herd of Registered Galloways in Kansas.

Young bulls, cows, and heifers for sale.

H. W. THRALL, Eureka, Kans.

GALLOWAYS.



LARGEST HERD OF REGISTERED GALLOWAYS IN THE WORLD. Bulls and females, all ages for sale—no grades. Carload lots a specialty. M. E. PLATT, Kansas City, Missouri. Office at Platt's Barn, 1613 Genesee Street.

50 Shorthorn Bulls For Sale.

THE BILL BROOK HERD OF REGISTERED SHORTHORNS

Have on hand for ready sale, 50 young bulls from 6 to 20 months old; also a few good heifers. Address H. O. TUDOR, Holton, Kansas.

Agricultural Matters.

The Silo for Kansas.

PROF. H. M. COTTRELL, IN THE INDUSTRIALIST.

In the summer of 1899 the largest forage crop was raised in Kansas that the State has ever seen. In many counties there were five times the rough feed that the cattle in those counties could eat through the winter. Cattle were shipped in from other States, and yet thousands of tons of feed were wasted. In the summer of 1900 central Kansas suffered from a severe drought. Pastures began failing in July, the crops intended for winter feed were cut short and hundreds of carloads of stock cattle, chiefly breeding stock, were shipped and sold out of the State.

If the feed of 1899 that was wasted and that was fed to cattle brought from other States had been saved for 1900 this stock could have been kept on the owners' farms.

There is a great loss in selling stock under these conditions. Besides the loss from the low price at which the stock is sold, such sales cut off all possibilities of continuous improvement from breeding up. This is the most serious loss of all.

The surplus feed of 1899 could have been saved through the silo, and then would have been ready whenever needed.

The advantages of the silo for Kansas stockmen are many. Feed in the silo is always ready for use. This year the pastures were dry July 1 and stayed dry till September 15, when heavy rains put them in good feeding condition. The stockman with a silo could have opened it as soon as the pasture began to get short and could have fed silage until the rains came. Then if he had any silage left he could have covered it up and the silage would have been ready for feeding next winter or next year, or at any other time needed. Good silage in good silos will keep for years. It has been kept for seven years and then found to have been in as good condition as when first made. The man with plenty of ensilage has full feed for his cattle every day in the year, no matter what the weather may be.

All the rough feed may be saved if put in the silo. If it rains and forage can not be cut and cured dry, put it in the silo. We have put corn and clover in the silo between showers when the feed was dripping wet. If crops burn up with the drought, cut them as soon as possible, sprinkle with water until the material is thoroughly dampened and the ensilage will keep well. No matter what the season—wet or dry—crops may be saved in the silo in their most palatable form and the loss is considerably less than by the usual methods of harvesting.

Our best varieties of forage crops for ensilage are also the best varieties for resisting drought and the heaviest yielding varieties. In this way the silo will enable the Kansas stockman to get the largest amount of feed per acre.

In the past years the chief objections to silage has been the high cost of the silos, but in recent years the construction of the round silo has been developed until the cost has been lowered to the reach of the average stockman.

It is not probable that ensilage will ever take the place of dry feeds for the bulk of Kansas feeding. As long as the Kansas farmer can raise alfalfa hay and deliver it in the feed lot at an average cost not to exceed \$3 per ton, alfalfa and other dry feeds will be cheaper than ensilage. But ensilage will be the feed to use when pastures and crops are cut short by drought. This silage will be made from the surplus of unusually bountiful years on the farm where it is used, and the full number of stock that the farm can carry in a good year will be kept in all years.

We believe that the time is coming when every well-equipped stock farm in Kansas will carry enough ensilage to feed its live stock at least six months. When this time comes our stockmen will be independent of drought.

The Wheat Louse.

Some alarming reports have been sent from Oklahoma as to the wheat louse. Prof. J. S. Hunter of the entomological department of the State University has examined samples sent to him and has pronounced them the true grain aphid, the same insect that was present last June in large numbers in the wheat fields of Kansas, Oklahoma, and Missouri, and died before working any serious damage.

What will be the fate of the wheat

louse this year, whether it will be killed off before affecting the wheat crop, Prof. Hunter at present feels a hesitancy in saying, for the reason that the appearance of the aphid in such numbers at this time of year is unusual. It is, as a rule, six weeks later before the aphid attains to such numbers as to be noticeable. The appearance of the insect, so early in the spring is due probably to the long stretch of wet, cold weather, which, while it has been endured by the wheat louse, has proved unfavorable to the development of the parasites to whom the yearly suppression of the grain aphid is due. In all probability, however, this year's pest will go the way of all the wheat aphid, and before working any serious damage upon the wheat, will succumb to its parasitic enemies.

ITS APPEARANCE LAST YEAR.

About the first of last June the wheat aphid appeared in large numbers in the fields in Kansas and Oklahoma, and some places in Missouri. Their presence caused a great uneasiness among the farmers, who thought they detected in the wheat louse a pest which was to rival the chinch bug, but in a fortnight the bug had disappeared almost as quickly as it came, leaving behind little trace of damage.

The black flies which some have supposed to be a form of the aphid, are, Professor Hunter thinks, the parasitic bees which have come out of the dead bodies or shells spoken of. These bees cleaned out the lice last year.

The fine weather which has been promised for the next few weeks will enable the parasites to regain the supremacy over the aphid, lost during the cold spell, and unless something very unusual happens, the wheat lice will be put under control again before many days.

The wheat lice are very susceptible to changes of temperature. Cold rain will numb them to death, and a hard rain will wash them off their food plants in great numbers. The wheat louse does not breathe through its mouth, but through its pores, and a spray made of soap, kerosene, and water will stop its breathing apparatus and kill the bug. While this spraying is all right for a pansy bed infested with the aphid, it would never do on a quarter section of wheat. The insect enemies of the lice are the only agencies that keep them in check.

INSECTS THAT ARE MAN'S FRIENDS.

Professor Hunter says: "The yearly appearance of the wheat louse and its annual suppression by the lady beetle and the lace winged parasitic bees are typical examples of the war that is continually being waged in the insect world between the pests and their parasites. There is no practical mode of fighting the wheat louse by sprays or by mechanical means, but where man can accomplish nothing the insect enemies of the lice step in and do the work. The wheat lice are preyed upon by these classes of parasites. The parasitic bee, a tiny fly, smaller than a mosquito, stings the wheat aphid and lays an egg in its body. From the egg develops a grub which grows to maturity inside the louse's body, entirely consuming the liquid contents and leaving it only a dry shell, which serves the pupa of the parasite as a cocoon. When mature, the perfect insect, a small, 4-winged, dark-bodied fly, eats its way out of its nest through a hole in the back. The lace-winged fly catches the lice and sucks their blood, while the lady bird beetles, or 'lady-bugs' devour great numbers of the aphid. These insects, inconspicuous as they are, destroy countless numbers of the lice."

How to Gather Cow-Peas.

I will give my experience with the first and only crop we ever raised. Not having any experience in the business, I had to use my own judgment. We commenced to plow about the middle of May. I first tried to drill them with a wheat drill, but it crushed so many peas that I decided to sow broadcast on the rough plowed land. We just harrowed them in, but it would have been better to have followed the harrow with roller or drag to level the land. We sowed 12 bushels, aiming to put 1 bushel per acre, but I believe 1 1/4 bushels per acre would be better, as grass will start up if they are too thin. As we intended to thresh them for seed, we let them get thoroughly ripe, which was about the middle of August; this being a hot, dry time, was just what was needed to cure the vines. We cut them with a mower, cutting only in the forenoon; we also

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raked them in the forenoon with sulky rake. We hauled them any time to rick. We ricked 17 good-sized frame loads for seed, the remaining 3 loads of the rankest vines were put up for hay. We threshed them the same as wheat (same machine). With some little change in the machine, they can be threshed at the rate of 200 bushels per day. Out of the 17 loads we got 88 bushels, leaving a great many peas in the vines. We sold all we had to spare for \$1.50 per bushel. Had we threshed all, we would have had over 100 bushels, valued at \$1.50, and the hay at the low value of \$30 would make the crop worth \$15 per acre, and this for very poor land. In cutting and raking with machines there will be at least 2 bushels per acre left on the ground, but we turned hogs on them, and I never saw logs fatten faster on anything, and they cleaned them up clean.

We have fed our horses no roughness but pea-hay (threshed vines) since December 1, last, and still feeding it; they eat it well, cattle eat it ravenously. We expect to sow about 25 acres this year. We aim to thresh this year about 12 acres, and turn hogs on the balance, and turn the vines under after the hogs have gathered the peas.—D. L. Smith, Sr., Gray's Summit, Mo., in Journal of Agriculture.

A Farm Implement Trust.

It is learned in this city that the report from Chicago that plow manufacturers have decided to form a fifty million dollar consolidation is only partly correct and that the present plans instead of being merely for a consolidation of the plow industry, contemplate a consolidation which shall include every branch of the farm machinery trade with exception of mowers and reapers. The reported capital of fifty million dollars is said to be a minimum figure.

There have been numerous efforts to unite special branches of the farm machinery trade, but this is the first attempt at a general consolidation. The organizers of the present consolidation argue that a partial union is inherently weak as it would be an easy matter for other manufacturers to enter that particular branch. But with a general consolidation it is contended this incentive to competition would be removed. The new company, if organized on the present lines, will, it is said, be in a position to manufacture all kinds of farm implements from a hoe to a thrasher, with the exception of mowers and reapers.

Among the largest concerns which are understood to favor the present plan are Deere & Co., Moline, Ill.; Parlin &

Orendorff, Canton, Ill.; Rock Island Plow Co., Rock Island, Ill.; Standard Harrow Co., Utica, N. Y.; Syracuse Plow Co., Syracuse, N. Y.; Empire Plow Co., Cleveland, Ohio; Hench, Dromgold & Co., York, Pa.; Aultman & Taylor Machinery Co., Mansfield, Ohio; Stoddard Manufacturing Co., Dayton, Ohio; Bissell Plow Co., South Bend, Ind.; Morrison Manufacturing Co., Fort Madison, Iowa; Buffalo Pitts Co., Buffalo, N. Y.; O. S. Kelley Co., Springfield, Ohio; Kansas City Hay Press Co., Kansas City.

It is intended to secure all concerns rated at \$100,000 or more. The financial details have not yet been arranged, but it is said that the capital of the new company, if formed, will be divided equally between preferred and common stock. Good will, etc., is to go in at about one-third the total capitalization. It is estimated that the tangible value of the plants it is intended to consolidate is upward of thirty-five million dollars.—New York Journal of Commerce.

Uses for Sunflowers.

Professor Wiley, chemist for the department of agriculture, has been making experiments with sunflower raising with a view to introducing the oil of that plant into America as it is used in Russia.

"For its sweetness and palatability," says Professor Wiley, "it is well suited to table use, and more nearly than any other known vegetable has the general properties of the oil of the olive."

Abroad, more especially in Russia, the plant is of great economic importance, its seeds being eaten in immense quantities, raw roasted, as peanuts are in America, while the oil, obtained by pressing the seeds, is widely used as an article of diet, besides, the stalks and oil cake make excellent fodder, the leaves are employed as a substitute for tobacco, and the fiber of the stalks has a high value.

"Between 1830 and 1840 sunflower oil began to be manufactured on a commercial scale in the southern provinces of Russia, and since that time a series of important industries, based on the production of oil and oil cake, has been developed there," says Professor Wiley. "It is used for woolen dressing, lighting and candle and soap making. For the last mentioned purpose it is superior to most oils."

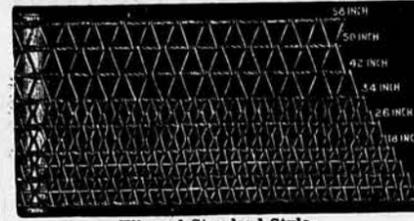
"There are many varieties of sunflower in Russia, and quantities of them are eaten raw. In palatability and wholesomeness they are quite equal, if not superior, to peanuts of this country. The stalks, straw, and chaff of the plant are highly prized for fuel, furnishing in some parts of the empire almost the only fuel employed. The plants used for ornamental purposes in this country are nearly all of the Russian variety and average fully six feet. The largest plant which has been described grew in Washington during the summer of 1897. The circumference of the stalk of this plant at the surface of the ground was eight inches, showing a diameter of almost three inches. The extreme height was twelve feet and six inches."

"The hedgerows of sunflowers on the prairies of Kansas, where they grow as free as the grass of the fields and furnish almost the only relief to the landscape, are not only a thing of beauty, but it is only of late years that we have realized that it has an economic importance which promises to be a source of wealth in the future. We have only just begun to learn from the experience of China and Russia the economic value of the plant itself. That there is an interest in the subject is evidenced by the hundreds of letters which have been received from all parts of the country."

Regarding the use of the seeds for oil it appears that the astute Yankee knew something even before Professor Wiley began to discuss the matter. Experts are of the opinion that the large amounts of seed imported into this country can not be used only for food of birds or animals, but is used in manufacturing soap, adulterating olive oil, and for similar purposes. Much secrecy prevails as to its real use, both of the seed imported and the thousands of tons raised in the Ohio valley, in Kansas and other parts of the country and shipped to New York. Secretary Wilson, who was appealed to for an investigation of the matter, is of the opinion that the seed is used only for the food of horses, cows and poultry, and so the seed of the sunflower is now admitted free as a flower seed.

The sunflower might well be chosen as our national floral emblem, inasmuch as it originated in this country, in the region of the Great Plains. Specimens of it were taken to Europe by the early Spanish explorers, and it was

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first cultivated in the Old World in the gardens of Madrid. The plant was utilized by American Indians long before the days of Columbus, and Champlain, when he visited Georgian Bay in 1615, found the aborigines there growing it and using on their hair the oil expressed from the seeds. It was raised chiefly, however, for the sake of the food which its seeds supplied. To so high a point had it been developed by the natives on this continent that, during the three and one-half centuries which have elapsed since its adoption by the white man, it has not been improved to any extent, merely retaining the abnormal size that distinguishes it from its wild original.

There are three principal varieties now cultivated in the empire of the czar—one with large white seeds, which are said to yield the most oil; one with smaller black seeds, which are sweeter and regarded as best for eating, and an intermediate form with striped seeds, used both for eating and for the production of oil.

The production of sunflower seed in Russia is about 228,000,000 pounds annually, the area devoted to the culture of the plant being 216,000 acres. One acre will yield 1,300 pounds of seeds, representing fifty gallons of oil, which, expressed on the spot, is yellow in color, thicker than hempseed oil, and dries slowly. The oil has to be purified for table use, and much of it is utilized for burning in lamps and for making candles and soap.

In the poorer districts of Europe, a fair kind of bread is made from sunflower seeds, and is used as a regular article of diet. Many cheap cigars, it is said, are made from the leaves of the plant. When properly cured, the large leaves make pretty fair wrappers for cigars, and for this purpose they are employed to a greater extent than is generally imagined. Pulverized and mixed with an equal quantity of tobacco, the combination is not so bad for pipe smoking; in fact, the sunflower leaves give a peculiar aromatic flavor to the tobacco that is liked by some smokers. Cheap cigarettes are frequently adulterated with sunflower leaves.

Three principal kinds of sunflowers are grown in the United States for their seeds. One of these is the common sunflower, now found in gardens all over the country, with nodding heads eight to sixteen inches in diameter. The other two are the "Mammoth Russian" and the "Black Giant."

By study of the reports which have been received from numerous correspondents of the division of statistics

and chemistry in the different parts of the United States, it is found that sunflowers grow best, for commercial purposes, in Kansas, Missouri, and the Ohio valley.

Many other parts of the country, however, are peculiarly suitable to the growth of this plant. As a rule, the soil that is adapted to the growth of Indian corn will be productive of a rich harvest of sunflowers. The cultivation should be of the ordinary kind, mostly superficial, and sufficient to prevent the weeds from growing and preserve the moisture during drought. Where the production of seed is sought, the best results are secured by limiting the number of seed heads on each plant to a very few, the superfluous heads being removed.

No special directions are necessary for the cultivation of the plant, since it is so much like that of maize as to be practically the same. Sunflower seed should be planted by a drill two or three inches apart; two or three inches in depth, and should afterward be thinned, after they are well formed, until they stand twelve to eighteen inches apart in the row. The harvesting of the crop is comparatively a small matter of expense, the machinery for removing the seed being simple and inexpensive. So far, there is no known factory in this country devoted exclusively to extracting oil from the seeds, but as Secretary Wilson says, it is believed that eventually the industry of making oil from sunflower seed will be developed in this country.

Couldn't Resist.

Mr. Travell—Yes, we had a fine time in Florida, but my wife got dreadfully sick one day.

Mr. Staytome—Really? That was too bad.

Mr. Travell—Yes; you see she's a poor sailor, but one of the boatmen offered to take us both out for 90 cents, instead of a dollar. Of course, that was a bargain sail, and she simply had to go.—Philadelphia Press.

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Dropsy

starting in the feet or ankles comes from a weak or diseased heart—a heart that cannot keep up the circulation. The blood then settles in the lower limbs where the watery portions ooze out into surrounding tissues causing bloat and swelling. The heart must be strengthened and built up before the dropsy can be cured to stay; and the best of all heart medicines is Dr. Miles' Heart Cure.

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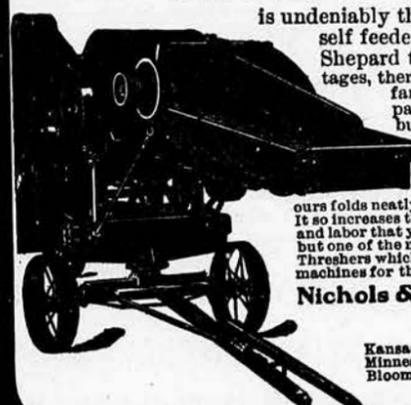
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is undeniably the most reliable and thoroughly good self feeder made. It is used on the Nichols-Shepard threshers only, and all of its advantages, therefore, accrue to the men who own and the farmers who employ them. Note the special patented double truss which supports the bundle carrier. It is strong, neat, easy to adjust and highly efficient. No legs, as in the case of all others, to sink into the ground, thereby twisting the feeder and preventing its working properly. Then ours folds neatly out of the way and carries perfectly in moving. It so increases the capacity of the machine, saves so much time and labor that your threshing becomes a quick and easy job. It is but one of the many points of superiority of the Nichols-Shepard Threshers which makes them the very best and most economical machines for the farmer to employ. If interested, write us.

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The Stock Interest.

THOROUGHbred STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.
 October 8-10, 1901—American Berkshire Association Sale at Kansas City.
 December 10, 11, and 12, 1901—Armour-Funkhouser, Herefords, Kansas City.
 December 13, 1901—H. C. Duncan, Shorthorns, Kansas City.

Bloody Murrain V. Anthrax.

EDITOR KANSAS FARMER:—In the veterinary columns of your issue of the 18th inst., under the heading of "Bloody Murrain," we note an inquiry from a subscriber who asks for information concerning the symptoms of the disease, whether the same is contagious, and if treatment is of any avail.

You will pardon us if we take exception to the answer made to the above inquiry. The symptoms mentioned as apparently applying to bloody murrain are almost identical with the symptoms of anthrax; and though it is true that anthrax can be successfully prevented by vaccination, yet there is no vaccine to prevent bloody murrain. If a stock-raiser were losing animals from a certain disease which he believed was, for instance, either anthrax or blackleg, anthrax vaccine would stop or prevent that disease he used the anthrax vaccine or the blackleg vaccine, as the case might be, he would be sadly disappointed in the results if the disease was not either anthrax or blackleg, against which he had vaccinated, as the anthrax vaccine would stop or prevent anthrax only, and the blackleg vaccine would stop or prevent blackleg only. And if he did not become aware of the fact that the disease from which he was losing animals was not the one against which he had vaccinated them, he would condemn the vaccine and on future occasions deprive himself of the benefit of vaccination in a case where it was really required. You will see, therefore, how important it is to make a correct diagnosis, so that proper treatment may be given. If a man were to vaccinate his stock with, for instance, the anthrax vaccine, when he was losing from bloody murrain, he would simply be throwing away time and money. We enclose a concise statement, pointing out the differential diagnosis of anthrax and murrain, which we think would be of interest to your readers, and correct any misapprehension which may have been caused by the above-mentioned article.

THE TWO DISEASES.

Bloody murrain, also known as red murrain, dysentery, and infectious gastro-enteritis is a disease of an infectious character, which appears to be due to eating spoiled or moldy food stuffs, or of grasses which are contaminated by parasitic growths. The exact cause of this disease is unknown; but that it is infectious in character there seems to be no doubt. It attacks cattle and sheep, also hogs and rarely horses. Some of the symptoms of bloody murrain are similar to those of certain other diseases, particularly that disease known as anthrax, for which it has frequently been mistaken, so that a brief comparison between the two will doubtless be of interest to stock-raisers. The ante-mortem symptoms of bloody murrain and anthrax are very similar, so much so that in certain cases it would be extremely difficult without a post-mortem examination, to determine whether the disease were anthrax or bloody murrain.

POST-MORTEM APPEARANCES.

In bloody murrain the mucous linings of the stomach are tumid and dotted with red spots. The blood is dark and pitchy and stains dark red any of the tissues with which it comes in contact. The liver is enlarged, and provided the disease has run a comparatively slow course, is found to be very soft. The flesh is sodden and has an offensive odor. The spleen, however, is not appreciably affected.

In anthrax, the post-mortem will reveal effusions of blood immediately beneath the skin. The blood is black in color, does not clot or coagulate and remains black on exposure to the air. The linings of the chest and abdominal cavities are dotted with red spots. These spots also are particularly noticeable on the capsules of the kidneys, liver, and heart. The spleen, however, is the organ in which the most decided changes are marked, and an examination of which will clearly denote the difference between anthrax and bloody murrain. In anthrax this organ is swollen from three to five times its natural size; the capsule covering it is loosened and distended by extravasated blood. The pulp is softened, liquid, and

dark red in color. Then again the lungs are congested and dropsical, which is not the case if the animal has succumbed to bloody murrain. A positive diagnosis between the two diseases may be made by microscopical examination of the blood. In the case of anthrax, this will reveal numerous small straight rods, immobile, with abrupt ends, many of which contain clear round spaces in the structure of the rod, which are known as spores, the rod being termed the bacillus of anthrax. This bacillus is only present in those cases where the animals have succumbed to anthrax, and can not be found in any other disease.

TREATMENT.

In bloody murrain, recoveries frequently occur, and the disease will often yield to treatment, whereas in anthrax the disease is invariably fatal, no treatment being of any avail when once the animal is attacked. Anthrax generally occurs in certain districts where the infection is known to exist in the soil. In such localities the disease is liable to break out at any time, and particularly during the summer months of the year. Anthrax can be prevented, however, by vaccination with Pasteur anthrax vaccine. This vaccine is now successfully employed in almost all the anthrax infected localities of the North American continent. In respect to bloody murrain, the exact cause of the disease has not been determined. It can not be prevented by vaccination, as no vaccine has so far been discovered for it; but as already stated, it will frequently yield to rational treatment. The removal of the stock to fresh pastures and the separation of the well from the sick animals will almost invariably stop the further spread of bloody murrain, but anthrax infection may be carried from place to place and for long distances. HAROLD SORBY.
 Chicago, Ill.

Twentieth Century Swine Breeding.

PROF. W. J. KENNEDY, UNIVERSITY OF ILLINOIS, BEFORE ILLINOIS SWINE BREEDERS' ASSOCIATION.

Time will not permit me to discuss at length the various difficulties that may present themselves, but I wish to call your attention to one of the things that brought disappointment to the nineteenth century swine breeder, and the main reason why he was not more successful in his most worthy enterprise. It may be termed a wide-spread epidemic disease which is grievously afflicting the great majority of the stock, no class excluded, and causing incalculable loss to the farmers of this state.

SCRUB FEVER.

This disease is cosmopolitan in its nature, and it exists in every live stock raising country in the world, and its ravages have thus far defied all remedies and efforts to check its progress. It is a disease compared with which hog cholera and swine plague are mild and harmless. "Scrub fever," good people, is by all odds a more serious drawback and a greater menace to the swine interests of Illinois than all other ills combined. It is an object of vital concern, far greater than anything that now threatens the agricultural interests, and is more deserving of the consideration of the farmers of Illinois than any other problem that confronts them to-day.

It is not necessary for me to diagnose the disease. All of you have seen it, for, unfortunately, over 60 per cent of the swine breeders in this state are suffering from it. Every market in the world discriminates against it. Then why so prevalent? It should not be the aim or object of this association to boom the live stock business, but to advance it by sound and legitimate means, and according to business-like and up-to-date methods, by carefully studying the business in all its details; by the exchange of experience at meetings of this kind, by thoroughly fitting and qualifying ourselves for the successful management of the stock business, and by disseminating knowledge everywhere, greatly enhance and better the methods of stock breeding and feeding pursued in our state.

We may recall past experiences, comment on existing conditions, but we must prepare for the future, and the only way to prepare for the future is to educate men who will be able to fill the future.

EDUCATION.

Education primarily is the province or object of this association. Men must learn to take advantage of the opportunities presented. They must have a comprehensive and intelligent knowledge of their industry to enable them to grasp the existing situation and successfully meet competition.

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not unlike his brother of the century just passed, will doubtless have many problems to contend with in swine breeding, such as lack of knowledge. To be more explicit, too many people do not know what constitutes a good animal. Others do not care, for with them "any old thing is good enough," providing a little money will buy it. I feel justified in saying that persistence in breeding scrub stock in this enlightened day and age, with market demands and every day market reports as object lessons of the plainest and most unmistakable kind, would indicate that the "scrub animal" is not alone, for he has a co-partner, who, for lack of a better name, we will call the "scrub farmer."

"Scrub fever" is by no means a new disease. It can not be said that it is an American product, for it raged long ere the new world was discovered. Like many other diseases, the only cure is prevention, and the only cure for the scrub farmer is education, and that should be the main motive of an organization of this kind.

A POTENT CAUSE OF SCRUB FEVER.

I wish to call attention to some of the things that cause "scrub fever." It is not my intention to discuss them in the order of their relative importance, for that will depend to some extent upon the man. I feel safe in saying that the continued use of immature animals for breeding purposes will cause deterioration in swine breeding as quickly, if not more so, than any other method that could be pursued. It is one of the commonest errors practiced by swine breeders at the present day. Over 60 per cent of the brood sows kept in the state to-day are under 15 months of age. The same is true of the sires used. The evil results of such a method, or lack of method of breeding are very pronounced, and can be seen on almost every farm where swine are reared. Every farmer thus becomes an experimenter, for he tests a new lot of sows each year. What are the results? He concludes, after he has experimented with the breed for several years, that they are not suited to his conditions, as they soon "run out," that is, they become too small, too fine in the bone, too weak in constitution, are susceptible to hog cholera, do not produce large enough litters, etc. Thus, he decides to try another breed, which he knows is much better adapted to his needs. It only takes him a few years to find that they are no better than the others. Thus he continues to experiment, until he finally decides that swine husbandry is not a profitable business. If he had been a good experimenter he would have kept his best sows as long as they bred good litters, and mated them with mature sires, and experience leads me to say that he would not have condemned the breed for the reasons I have heretofore mentioned. I am firmly convinced that larger litters, stronger and better pigs, can always be reared from mature animals than it is possible to get from immature stock.

CROSS BREEDING.

During recent years a great deal has been written and said about the crossing of different breeds of swine in order to secure larger litters, better grazers, more bone, early maturing, better bacon type, etc. In some instances the cross of the breeds may prove advantageous, but it must be done wisely, else disappointment will oftentimes follow such a practice. I believe that with good care and proper selection the above mentioned desirable characteristics can be secured from any of our generally recognized breeds without the introduction of any foreign blood. Cross breeding may sometimes prove useful, but it is not a wise policy to make it a general practice.

FANCY STRAINS.

I am inclined to believe that a great many swine breeders are laying too much stress on "fancy strains" and not enough on individual merit. A few weeks ago I was commissioned by a Minnesota friend of mine to buy him 5 Poland-China gilts. I visited a herd that is extensively advertised to contain all the best and most popular strains of the breed. The proprietor

dumfounded me with such names as Chief Perfection 2d, Perfect I Know, Chief Tecumseh 2d, Missouri Black Chief, Young Wilkes, etc., but he had not a gilt on his farm that I would pay the transportation charges on to Minnesota. I am a firm believer in good breeding, and always want the best, but, good people, what is the value of a pedigree without individual merit? The ultimate end of all swine is the block, and where is the market that demands a popular strain or fancy breeding. They all want the individual animal, and the aim of the breeder should be to produce such. Popular "strains" or "families" contain many animals of the very highest merit, but "scrub fever" prevails more or less in them all. So, good people, get the good individual with the good pedigree and then unto you success will come.

PROPER MATING.

Too much attention can not be paid to the proper mating of breeding animals in order to secure good results. This will apply more to the selection of the sire than sow, for his influence is very great in the herd, and will determine to a very great extent the type of the whole herd. Avoid the common error of to-day in selecting a fine-boned hog. Progeny from such a sire will not bear up the load of a well developed body, particularly when being transported to market. In making the selection of a sire always bear in mind the type you already have in your herd on the part of the sows, i. e., are they too long in the body, too high off the ground, too fine in the bone, too short etc. Then select a boar of the opposite type to correct these errors. You can not lay too much stress upon the matter of judicious mating.

CLOSE BREEDING.

The evil results which follow "in" or "close" breeding are numerous and very marked. Breeding of this kind generally causes a weakened constitution, thus the animal becomes very susceptible to disease. Sterility oftentimes follows, such a method of breeding, while a deterioration in the size of the animal always follows such a practice. When animals are strong in constitution and of good size, an "in" cross may prove beneficial, but it should not be indulged in too often, for undesirable results are sure to follow its continued use.

THE GRAND SIRE.

A grand sire should never be used, no matter how good an individual he may be. To use such a sire is gambling on

PROTECTED PIGS PAY

The verdict of thousands of stockmen who use Vesey's Star Anti-Cholera. It not only protects—it cures cholera hogs. It makes them grow and fatten; it causes early maturity. Sold under an absolute guaranty. Pay no money until satisfied with results. Call on or address

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PIGS BORN... CHOLERA PROOF.

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IMMUNIZE PIGS BEFORE BIRTH through the mother's blood.
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CURES SICK HOGS by flushing and cleansing the bowels and entire system.
HAS BEEN TESTED on over 20,000 hogs the past year.
HAVE AT MY OWN EXPENSE shipped into various states and exposed in cholera hundreds of my own pigs for weeks and months without harm and will continue to ship and expose on same terms.
HAVE SOLD TO OVER 2,500 of the best farmers and breeders in the United States.
DISCOVERED five years ago, was tested four years before offering to sell it.
LETTERS PATENT pending on all the above processes.
ALL INFRINGERS and their customers will be held responsible for damages.
BEWARE! of Logansport or other infringing companies.
AGENTS WANTED, WRITE the originator and rightful owner,
ROBERT RIDGWAY, Amboy, Indiana.

ZENOLEUM Kills Lice, Ticks, Mites, Fleas, Etc., on all kinds of animals and poultry. Given internally it drives out worms. Cures all cuts, wounds, sores, etc. Non-poisonous. Endorsed by leading veterinarians. "Veterinary Advisor" Free. Zenoer Disinfectant Co., 61 Bates St., Detroit, Mich.

the part of the breeder, for there are nine chances of him being a failure to one of him proving satisfactory. Such a sire lacks prepotency, which is the power to reproduce his like with any degree of certainty. Always bear in mind that the sire is half the herd; thus it is of vital importance that he be a good individual, with the best blood possible in his veins.

FEDING.

The question of the intelligent feeding of swine is one that must receive more attention in the future than it has in the past. No man can be successful in swine husbandry unless he is an intelligent feeder, and by an intelligent feeder I mean a man who studies the needs of his animals. Too many men are inclined to believe that quantity is the only requisite in successful swine feeding, but there is another which is equally important, that is, quality, or the composition of the food fed. It is all important that we know what the different kinds of food are capable of producing, that is, whether a food is a fat and heat producer or a bone and tissue builder. No man in the audience would think of building a house out of plaster and paint. You all know that the frame work must be built; then the plaster and paint will come in later and put the finishing touches on in order to make a complete building. Now fat in the animal corresponds to plaster and paint in the building; it puts on the finish which makes the animal appear well to the eye of the fancier. It is just as necessary to build the frame work of the animal as it is of the house before putting on the finish. But the vast majority of swine breeders commence with the wrong material. Thus there is but one avenue for them to travel in, namely, failure. You must commence at the bottom and lay a good foundation, for the height to which any castle can be built will always be determined by the foundation upon which it is started. Just so in the breeding of swine, the successful breeder has and always will have to lay a good foundation and build a strong frame work. It should always be borne in mind that out of nothing, nothing comes, likewise that bone and muscle are produced from nitrogenous food, and that fat and heat are the production of carbonaceous food. Thus we see the necessity of feeding nitrogenous food to young animals and those intended for breeding purposes. Corn is, and always will be, a great swine food for the Illinois farmer, but for young stock and breeding animals some supplementary food, such as oil-meal to the extent of about 10 per cent, shorts, skim-milk, and leguminous crops, as clover, cow-peas, etc., added to the corn ration would very much improve it.

I feel that I have taken up enough of your valuable time, but before concluding I want to impress upon your minds that success is our aim, and, in the words of Secretary Coburn of Kansas, "The successful farmer must fertilize with brains and make live stock an important auxiliary to his business."

Horses for Farm Work.

Some of the articles we see in the papers regarding this subject are truly remarkable considering the experience which this country has gone through in the past twenty years in seeking to improve its horse stock. The experience has been a sad one in many respects in that in many districts it has led to the creation of a new breed of misfits and mongrels having few if any of the virtues of the original stock of the country and as few of those of the imported breeds used to effect a change in the blood. Despite the results of ill-advised crosses and mixtures of blood in horse breeding alleged teachers are still busy spreading false doctrine as to methods of obtaining suitable stock. The latest conglomeration of utter bosh which we have seen is found in an essay on "The Ideal Horse for the Western Farmer" which has been awarded the first prize by the Indian Head Agricultural Society (Canadian Northwest) and asserts that the Cleveland Bay best fills the bill for the purpose stated. This assertion we are not going to criticize, for the breed mentioned is a good one, but what we object to is the argument which is made in connection with the matter of the essay. The writer after describing the breed and dilating upon its characteristics, says under the head of breeding: "A Cleveland Bay mare may be to advantage put to a three-fourth bred or a Hackney stallion. It is most important to remember that 'like produces like,' therefore this fact should be taken into consideration with regard to the selection of the parents." What rot this is to be sure! If Cleveland mares are selected as the best molds

from which to produce farm horses, "like" will only produce "like" when the breed is kept pure. The law of heredity teaches that only the fixed characteristics of a given breed are hereditary and transmitted to the progeny. Why then cross the pure-bred mare with a three-quarter bred stallion or cross with a stallion of another pure breed? It was by making mistakes of this sort that the country became flooded with nondescript horses which could not be used for breeding purposes and were of little profit or utility, being without any special qualifications for anything. Only where one breed of horses has been chosen and stuck to has real progress been made in filling a district with uniform stock of good qualifications for the special breed purpose of the breed adopted or bred up to by continued grading in the same direction by continuous use of pure-bred sires of the same blood. Nothing was ever accomplished by the use of a three-quarter bred stallion, bull, or boar in breeding towards a desired ideal or type and nothing will ever be accomplished by such foolishness in breeding. Little has been accomplished by the crossing of one pure breed of horse with another pure breed outside of the product of the first cross and that cross can not be successfully used for breeding purposes. The three-quarter bred horse and the cross-bred horse possess no fixed breed characteristics hence they have no prepotency from heredity to reproduce their own good qualities upon their progeny. For this reason the three-quarter bred stallion should not be used for breeding purposes and this is equally true of the cross bred progeny of two pure breeds. The female progeny should be retained for breeding purposes but should always be bred to the same breed of pure blooded males which gave them origin. Five top crosses of pure blood of the same sort upon females graded up in this way from native or improved stock will result in a practically pure bred animal and even that animal should not be used as a sire; the blood should be further improved by continued use of pure sires upon the female high grades. For farm use we want a suitable animal for the given work to be done but no matter what breed is considered best improvement will never be attained by occasional changes of blood by crossing or admixture with other breeds.—Farmers Review.

A Good Shorthorn Sale.

The combination Shorthorn sale by Missouri and Kansas breeders at Kansas City, Mo., on April 22 and 23, drew a fairly good crowd of breeders and farmers, and proved to be a very successful sale, although, as has been proven a number of times this year, this seems to be an off year for bulls, and in this case there were a number of young bulls consigned which were not sold owing to the light demand and low prices offered. The females, however, went with a rush, at good prices.

The contributors to this sale, and number offered by each, is as follows: June K. King, Marshall, Mo., 30 head; Gentry Brothers, Sedalia, Mo., 25 head; John Morris & Son, Chillicothe, Mo., 20 head; W. P. Harned, Vermont, Mo., 16 head; N. H. Gentry, Sedalia, Mo., 11 head; Est. of T. J. Wallace, Bunceton, Mo., 6 head; Fred Cowley, Columbus, Kans., 3 head; while C. E. Leonard, Belle Air, Mo.; W. R. Nelson, Kansas City, Mo.; and Col. W. A. Harris, Linwood, Kans., offered 1 each. Some of the cattle were in good condition, few in extra good shape, and some not so good.

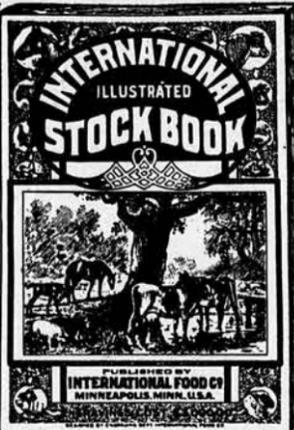
The highest figure paid at the sale was \$1,125, which was paid by Capt. W. S. Tough, of Kansas City, for Lord Barrington 3d 157320, a 11-months-old bull calf owned by Senator W. A. Harris of Linwood, Kans. This bull was bred by N. H. Gentry, Sedalia, Mo., and sired by his great herd bull, Victorious 121469. He was a prize winner at the Kansas City show, and was selected by Senator Harris to head his herd. He had never left the Gentry farm, however, owing to Senator Harris selling his herd, and was sold by Mr. Gentry at this sale as the property of Senator Harris. Capt. Tough will use this bull at the head of his herd at Linwood, Kans.

Kirklevington Duke of Wood Dale 121760, a 6-year-old bull which Mr. J. K. King has been using as his chief stock bull, was sold for \$1,000 to M. B. Guthrie of Mexico, Mo., and brought the second highest price of the sale. This bull is the son of Aldrie Duke of Hazelhurst 117846, and had a great many daughters in the sale in Mr. King's consignment. C. E. Leonard's bull, of which greater things were expected, Ravenswood Combination, sold for \$450, to J. G. Brinkman of Great Bend, Kans. Waterloo Duke of Cedarvale 2d 133066, one of the bulls used until recently by Col. W. R. Nelson, sold for \$350, to Smith Bros., of Carthage, Mo.

Eleven of the females sold for \$300 or more per head, the top being \$505, paid by F. M. Marshall, Blackwater, Mo., for N. H. Gentry's 5-year-old cow, Kirklevington Princess of Hazelhurst 7th, a daughter of Peopulated Wild Eyes 109349, Bigler & Son's bull. Two heifers consigned by J. K. King sold for \$400 each, and another at \$450. The following is a summary report of each consignment:

JUNE K. KING, MARSHALL, MO.
 22 cows sold for \$5,510; averaging \$250.45
 8 bulls sold for 2,125; averaging 265.63
 30 head sold for 7,635; averaging 254.50

JOHN MORRIS, CHILLICOTHE, MO.
 11 cows sold for \$1,755; averaging \$159.54



INTERNATIONAL STOCK BOOK
ILLUSTRATED

\$3000 STOCK BOOK

FREE POSTAGE PREPAID

It contains 183 Large Colored Stock Engravings that cost us over \$3000.00. Book is 9 1/2 by 6 1/2 in. Beautiful Cover in 6 Colors. Gives description and engravings of different breeds of Horses, Cattle, Sheep, Hogs and Poultry. It contains a finely illustrated Veterinary Department.

Mailed Free if you answer 4 questions: 1st—Did you ever use "International Stock Food" for Horses, Cattle, Sheep, Hogs, Colts, Calves, Lambs or Pige? 2nd—Is it for sale in your town in 25 lb. pails? 3rd—How many head of stock do you own? 4th—Name this paper. Over 500,000 farmers and 100 "Farm Papers" endorse this Book and "International Stock Food." Answer questions and write to:

Cash Capital \$300,000.00

International Food Co.,
Minneapolis, Minn., U. S. A.

Published by the Largest Stock Food Manufacturers in the World.

4 bulls sold for 530;	averaging 132.50	
15 head sold for 2,285;	averaging 152.33	
GENTRY BROS., SEDALIA, MO.		
23 cows sold for \$3,495;	averaging \$151.95	
2 bulls sold for 260;	averaging 130.00	
25 head sold for 3,755;	averaging 150.20	
N. H. GENTRY, SEDALIA, MO.		
9 cows sold for \$2,230;	averaging \$261.11	
2 bulls sold for 745;	averaging 372.50	
11 head sold for 2,975;	averaging 270.45	
FRED COWLEY, COLUMBUS, KANS.		
1 cow sold for \$160;	averaging \$160.00	
2 bulls sold for 165;	averaging 82.50	
3 head sold for 325;	averaging 108.33	
EST. T. J. WALLACE, BUNCETON, MO.		
5 cows sold for \$975;	averaging \$195.00	
1 bulls sold for 420;	averaging 420.00	
6 head sold for 1,395;	averaging 232.50	
W. P. HARNED, VERMONT, MO.		
4 cows sold for \$710;	averaging \$177.50	
W. A. HARRIS, LINWOOD, KANS.		
1 bull sold for	\$1,125	
W. R. NELSON, KANSAS CITY, MO.		
1 bull sold for	\$350	
C. E. LEONARD, BELLE AIR, MO.		
1 bull sold for	\$450	
GENERAL SUMMARY.		
75 cows sold for \$14,835;	averaging \$197.80	
22 bulls sold for 5,170;	averaging 230.45	
97 head sold for 21,005;	averaging 216.55	

At this sale Kansas buyers took 41 head, paying for them \$8,170, averaging practically \$200 each.

The Wool Situation.

Silberman Bros., wool merchants, Chicago, report: "In reviewing the past fifteen months our observation encounters one siege of disappointment after another. The conditions existing even now are entirely the reverse of those of a year ago, and the causes therefor, as elementary in principle as they are unreasonable in origin, are simply these. The first move inviting a decline was inaugurated in Europe; reckless speculation, war disturbances and tight money markets.

"At the January, 1900, auction sale in London the first blow toward a downward movement was dealt, and a further recession accompanied each consecutive sale up to January, 1901, when the level reached was the lowest recorded for many years.

"A sympathetic reaction in the American market occurred at once; nearly all manufacturers have been employing in their productions a larger percentage of cotton than wool, and these two factors so accelerated the weakened situation that the prices of our domestic wools are now lower than ever before witnessed during the existence of a protective tariff, the periods of money panics excepted.

"A comparison of 1900 prices with those of the present date submits the following: In January, 1900, fine and fine medium territory wools were selling, on a scoured basis, from 60 cents to 70 cents per pound; the latter price for the best staple and quality. At present similar wools sell from 38 cents to 45 cents; a decline approximating 35 per cent within the period of one year. All other grades have declined proportionately.

"Foreign wools of similar grades as above mentioned sold in January, 1900, adding duty, on a scoured basis, from 75 cents to 80 cents. At present such wools sell from 57 cents to 67 cents per pound including duty.

"Considering their value domestic wools are still far below the importing point. Therefore no reasonable cause exists for the extremely low prices now prevailing.

"Much encouragement is afforded by the

evident arrest of the decline in Europe as manifested at last month's auction sale in London. Fine wools showed an advance of 7 1/2 per cent. Although this appreciation has not as yet affected the values of our domestic wools, we judge that before long its favorable influence will be felt.

"The year 1901 romises a brighter future for wool. A most important indication is the public demand for a quality of goods far superior to the cotton composition hitherto furnished. Manufacturers have no alternative but to use wool instead of cotton in order to market their products, and much more wool, through sheer necessity, will be used in goods hereafter to be manufactured.

"With farmers situated financially better than for many years, labor well employed in all parts of the country, and a surplus of money in the banks seeking investments, the inducement was never greater for manufacturers and speculators to fill up their warehouses with wool and take advantage of present depressed values. With the gratifying financial and industrial conditions of the country likely to continue for some time an optimistic prediction appears fully justified.

"The stock of wool in the hands of manufacturers is not excessive owing to the conservative course pursued by them during the past twelve months, the buying having been of only such quantities of wool as would supply their immediate wants. It is true that up to date their orders for heavy-weight goods are not up to expectations, nevertheless we can not avoid the conclusion with the prospects so favorable, that numerous duplicate orders must follow, consequently we look for a brisk and steady demand for wool in the year 1901.

"Our advice to wool growers and handlers of wool is not to urge the sale of their wool at the low prices which will be offered to them at home. They should either keep it on hand or consign to a reliable commission house who can give assurance of protection to their interests in every respect, and who can realize better prices than are now prevailing. Adherence to this counsel will positively result profitably."

SOUTH DAKOTA, KANSAS, AND NEBRASKA.

Fine (heavy).....	9c to 11c
Fine (choice).....	12c to 14c
Fine medium.....	13c to 15c
Medium.....	14c to 16c
Coarse.....	15c to 17c
Cotted, etc.....	10c to 12c
Black.....	12c to 14c

Gossip About Stock.

F. F. Fallor, Newton, Iowa, at his recent sale of Polled Durhams closely following a big week's series sold 28 head at an average of \$171.70, exceeding by about \$20 the average of Carrier & Son the next day.

At M. B. Andrews' Shorthorn sale, held at Capron, Iowa, April 24, Colonel Woods reports that 55 head averaged \$363. The top price of the sale was \$1,300 for Nonpariel of Centre Grove 3d, sired by Imp. Master of the Mint, sold to John Lister, Grundy Center, Iowa.

The public sale of Shorthorns held last week in Iowa made low averages, owing to the prevailing poor condition and quality of many of the animals offered. A. D. Sears & Bros., Leon, Iowa, sold 23 cows for \$2,117.50, average \$92.07; 15 bulls for \$1,114, average \$75.17; 38 head for \$3,257.50, average \$85.66. Geo. W. Wadsworth, Leon, Iowa, sold 3 cows for \$242.50, average \$80.83. W. H. Colter, Decatur City, Iowa,

MOORE'S HOG REMEDY



Used externally with dipping tank or sprinkler quickly cures Mange and Scoury and kills all Fever Germs, Lice, and other vermin. Given internally in small doses weekly, removes all

WORMS, CURES COUGH, IMPROVES APPETITE, AIDS DIGESTION, AND PRODUCES FLESH

Every stockman knows when hogs are properly fed and kept free from lice, mange, and worms, they grow and fatten, and as a result bring a better price.

FREE TRIAL—Call at Our Office and get enough Moore's Remedy to rid FOUR HOGS of all LICE, MANGE, and WORMS, or send us 10 cents (stamps) and we will forward it prepaid. A trial gallon at dealers, or direct from factory, freight prepaid, on receipt of price, \$3.00. Book, "Care of Hogs," free. Call or address

Moore Chemical and Mfg. Co., Dept. J, 1501 Genesee St., Kansas City, Mo.

sold 7 cows for \$335, averaging \$90.71. C. A. Evans, Leon, Iowa, sold 1 bull for \$60. M. Lathrop, Leon, Iowa, sold 1 bull for \$100.

The latest report from Elder Lawn Farm Shorthorns owned by T. K. Tomson & Sons, Dover, Kans., is as follows: "Our stock are doing nicely and we are getting a beautiful lot of calves. Have recently sold a Young Mary bull calf to Mr. T. C. Howard, Burrton, Kans., and another of the same family to Mr. W. W. Denton, Purcell, Kans. The calves are both sons of Gallant Knight and go to head purebred herds and we predict that they will do their owners good service. We have a few choice bull calves yet for sale."

A. L. Sullivan, manager of the Lincoln Importing Horse Company, of Lincoln, Neb., informs the Kansas Farmer that some of their best sales have been in this State and he therefore offers the following: "Will you kindly say to your readers that we still have on hand some eight or nine Percheron and Shire stallions which we will absolutely close out at practically cost. Our discount of 15 per cent to 25 per cent brought us some good results as we have made several sales, and in every case the purchaser was well pleased."

The second annual pamphlet of the American Angora Goat Breeders' Association is just out and ready for distribution to those interested in this new giant industry. During the first year of the association's existence it has prospered and grown beyond the most sanguine expectations of its promoters. The second annual exhibition and sale of Angora goats will be held at Kansas City under the auspices of the association October 17-20, 1901. For further information address W. T. McIntire, secretary, Live Stock Exchange, Kansas City, Mo.

The Moore Chemical & Mfg. Co., Dept. J., 1501 Genesee St., Kansas City, Mo., have made a marvelous success with their live stock remedies, particularly with Moore's hog remedy, and Car-Sul Cattle Dip. Such gratifying reports have been received from stockmen using these remedies, that the company has concluded to try to extend them into new hands by sending out free trial packages, enough to rid 6 hogs of lice, mange and worms. Those calling at the office receive it for the asking, but if sent by mail, enclose 10 cents in stamps to prepay postage. This very fact of a free sample is a confidence of the manufacturers in the merits of the remedy, and what is still better for the firm it is putting a great many permanent customers on their books by reason of the free distribution.

W. L. DeClow held a very satisfactory sale of mammoth Kentucky jacks at Cedar Rapids, Iowa, on April 26, when an average slightly exceeding \$500 was made on the entire sale. The attendance of bidders was not large, but prices were very satisfactory. Some of the parties who came from a distance preferred to buy at private terms instead of at the auction, but there was little difference in the prices. This was the first public sale of jacks held by Mr. DeClow. He had invested a considerable amount of money in the stock, had advertised the sale widely, and is entitled to great credit for its success. The offerings were highly bred, the best in fact that could be got in Kentucky, and the individual animals were of excellent merit. A few teams of mules were sold which ranged from \$110 to \$305 a team. Carey M. Jones cried the sale and with good success. Some of the prices were as follows: \$725, \$660, \$500, \$610, \$500, \$350, \$355, \$450, \$575, \$400, \$580.

Publishers' Paragraphs.

Don't overlook the very attractive advertisement of the E. W. Ross Co., of Springfield, Ohio, who call special attention to their ensilage cutters which are recognized to be the very best on the market. Stockmen will find it to their interest to make some inquiries concerning ensilage and this cutter.

One of the most successful and progressive physicians in Topeka is Dr. C. F. Menninger. He has placed a regular card in the Kansas Farmer calling attention to his specialties, chronic and obscure diseases and heart and lung trouble. He has been successful in a marked degree with these human ailments, and, as the family doctor of the writer, has been prevailed upon to place his card in this paper for the benefit of such of our readers as may require his services.

The New Century Hotel, recently opened in Kansas City, located opposite convention hall on 12th and Central streets, is the finest equipped hotel in Kansas City and is a credit to the new century and a great metropolitan city. It is owned by Bowes & McKee and Sam B. Campbell, that prince of hotel purveyors, is manager. It goes without saying that this venture is already a popular success. Don't fall when in the city to give them a call and see a modern 20th century success.

A powerful chapter from one of the most remarkable of recorded human experiences, appears in McClure's Magazine for May—Captain Alfred Dreyfus's Own Story of his arrest, degradation and transportation to Devil's Isle. To this story is added a portion of the diary kept by Dreyfus on the island, for his wife and referred to so often and so mysteriously in the Rennes trial, but never made public. A more intense and convincing expression of human agony than that found in these fragments is inconceivable. From first to last it is evident that the sufferer is bewildered and maddened by what has befallen him, and that all which keeps him from insanity or death is his determination to prove that his persecutions are powerless to overthrow what he calls the "sovereignty of the soul." These dramatic passages make it clear, too, that Dreyfus was compelled to undergo on Devil's Isle every ignominy and hardship his jailers could devise, even to close confinement in a hut, enclosed by palisades and shut out from air and light, with double irons upon his legs throughout the night.

A Wonderful Potato Digger.

With many valuable improvements that place it far above any similar implement, the Hoover potato digger is offered to farmers as the most perfect and satisfactory potato digger in the world. The

Hoover digger is the only one that successfully separates the potatoes from the vines, the potatoes being delivered behind the machine, in a narrow row, on clean ground, while the vines are carried to the left side.

The shovel of the Hoover digger is of special design and composition, and is guaranteed against stumps and stones. This digger is also provided with dirt proof, reversible brass boxes, which are in turn provided with five-inch oil tubes. The Hoover digger can be changed to dig any depth while in motion, and is also provided with side-hill spurs which prevent the digger from sliding on hill side. Every machine is warranted and the price is within the reach of every farmer.

Hoover, Prout & Co., of Avery, Ohio, are the manufacturers of the Hoover potato digger and will send an illustrated catalogue of the machine to any one writing for it.

An Example of Success.

A man who is owner of one of the largest concerns in Chicago is an example of the success that may come from doing things well.

His first business venture was the making of haying tools. They were at that time by far the best tools on the market. There are none better to-day, and their sale still continues.

Then he invented a "Dictionary Holder," and coined that name. You will find it today in about every intelligent home in the country. You can find it wherever you go in the world.

The dictionary holder was made as well as it could be. It was made by the right machinery—made in the largest quantities—so that the price could be low. Any intelligent person who saw it would buy it, and he received the worth of his money.

This device made him a fortune. Then he turned to windmills, and he spent most of that fortune in learning how to make them right. He conducted five thousand experiments to learn how to make a wind wheel that would get the most power from a breeze. There were plenty of windmills that would work in a gale, but gales were uncommon. He started to make a wind wheel that would move in a zephyr. And before he made his first windmill he had devised a wheel that would move when all other wind wheels stood still.

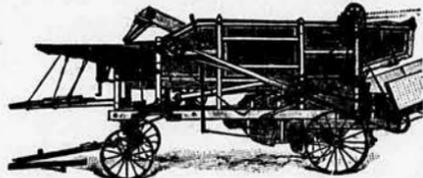
Then he made a windmill to go with it. He took up each part and improved it. For each part that was used in a windmill he invented something better. He kept on until he had revolutionized the whole windmill business, and covered his improvements by fifty-five patents.

Then he invented machinery for making them fast and cheaply. He reduced the cost so that every farmer could afford one.

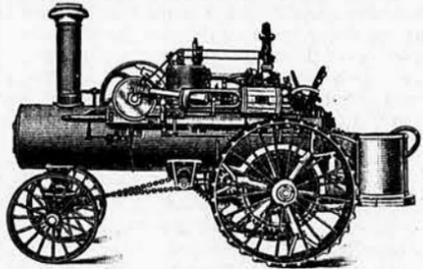
The difference between the windmills of to-day and of twelve years ago is almost entirely a result of his efforts. It was he who first introduced the most desirable features found in any windmill to-day. And success came so swiftly that his windmills now dot every country of the earth which is even half civilized.

The man is Mr. Laverne W. Noyes. The company he owns is the Aermotor Company, makers of more than half the windmills now sold in the world.

Good Threshing and the Farm.

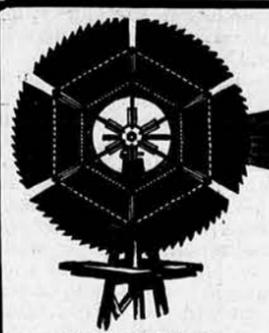


We show above a cut of the famous Nichols-Shepard threshing machine, made by Nichols & Shepard Co., Battle Creek, Mich. We are doing this for several reasons, among which may be enumerated the following: Since the farmer is the only man on earth who provides a use for machinery of this class, he above all other people should be most deeply interested in it. He should know that there are threshers and threshers. The simple act of knocking the grain out of the chaff and separating it in a more or less indifferent way, does not constitute good and economic threshing. When a man has been to all the trouble and outlay necessary to produce a crop of grain, he should see to it that it is threshed in the best possible way. Good threshing embraces not only the first separation of the grain from the straw, etc., but presumes that all the grain will be taken out and none of it passed on to the straw stack; it means also a perfect cleaning and chaffing of all grain, separating foul weed seeds, bits of dirt and indeed all foreign substances from the perfectly winnowed grain; the machine should so handle the straw that it will not be chopped or broken into small bits, but will be so handled as to preserve its long fiber and make it a valuable by-product, either for use on the farm or for sale for commercial purposes; the machine should be of large capacity so as to save time and the hire and board of a "gang," and it should be equipped with all those nice devices and conveniences which shall not only save the grain and the straw in the best possible form, but will also make threshing a pleasure rather than the drudgery it used to be.



(Nichols-Shepard Traction Engine.)

The Nichols-Shepard machines have been constructed with all these various points in view. They are, therefore, not only the best machine for the farmer to employ in doing his threshing, but the best for him to buy if he wishes to engage in the threshing business. We can not enter into a detailed description of these machines or the famous traction engines with which they are operated.



THE ECLIPSE WIND MILL

—IS—

**Better Made, Wears Longer,
Does More Work,
Costs Less for Repairs,
Than any other Wind Mill made.**

Manufactured by
Fairbanks, Morse & Co.,
KANSAS CITY, MO.

Write for Circular.
Address P. O. Station A A.

Suffice it to say that they are each the best of their kind so far as design, material, construction, finish and working ability and durability are concerned. Write these people for an illustrated catalogue, which they will take pleasure in mailing you free, and read of these wonderful machines. On another page will be found their advertisement. Like all of this series, it contains much food for thought, and we ask its careful perusal at the hands of our readers.

After Twenty-Eight Years.

We are not much in sympathy with advertisers who make use of extravagant claims, as being "biggest," the "best on earth," "none so good," etc. When, however, these or similar claims are borne out by the actual facts we believe that the advertiser has not only a perfect right, but that he should make the facts public. This is brought to mind by the advertisement of the Elkhart Carriage and Har-



(NO. 232 OPEN DRIVING WAGON.)

ness Manufacturing Co., of Elkhart, Ind., who regularly use this paper in season. These people for the past several years have been laying claims to being "the largest manufacturers of vehicles and harness in the world selling to the consumer exclusively." To one who will take the pains to investigate, or what is better still, if it is possible, go to Elkhart and look over this institution and examine their methods of doing business this statement will appear as modest and entirely within the bounds of truth. Of course this result is not one of sudden attainment; it has taken more than twenty-eight years of hard and persistent effort to bring this institution up to its present high plane. Having decided long ago that the public would much prefer to deal direct with the manufacturer, the man who made the goods, if the people but could be convinced that they were getting the best goods at the lowest procurable price, the Elkhart people inaugurated their present system of doing business. That their methods have been approved and appreciated is evidenced by the growth, magnitude and prestige of their present business. In their two large factories at Elkhart they manufacture 178 styles of vehicles and 65 styles of harness. In vehicles they are prepared to supply the public with every conceivable article from the open buggy through phaetons, stanhoopes, a long line of top buggies, surreys, two and three seated carriages, traps, spring wagons, etc., to wagonettes, busses and all classes of delivery wagons. In harness they have anything from single strap buggy harness all down the line to best double team harness for farm work. Remember that they make every article they sell in their own factories and that they employ no agents or middle men, but sell exclusively to the consumer at wholesale prices. Every article is guaranteed in a way that removes all element of chance. Everything is made of good material in the most substantial way, in the best and latest style and sold to the consumer at the most reasonable of prices. Write them for their large illustrated catalogue which they will take pleasure in sending to our readers free.

A HERD OF HEREFORDS FOR SALE.

J. M. Foster & Co., of Topeka, Kans., have concluded to offer at private sale their entire herd, consisting of the herd bull, True Briton, imported by C. S. Cross in 1898, calved February 27, 1896, bred by Tudge, Leinthal Ludlow, England, sire Rupert, tracing to Longhorn and the Grove, Lord Wilton and Horace, dam British Lass, a full sister to Ancient Briton, and grandam of Lord Wilton.

COWS.

- Countess 56402, calved 1893, sire Hero 46011, dam Countess King 36830.
- Virgie 61307, calved 1894, sire Hero 46011, dam Violet 15th 22365.
- Corra 51520, calved 1891, sire Count King, dam Countess King 3d 36830.
- Columbia 56432, calved 1893, sire Lincoln 46504, dam Catherine 41387.
- Myrtle B. 51538, calved 1891, sire Count King, dam Myrtle A. 28748.
- Myrtle C. 56422, calved September, 1893, sire Hero, dam Myrtle A. 28748.
- Era 26501, calved January, 1891, sire Count King, dam Elegance 23485.
- Viola 46510, calved May, 1891, sire Count King, dam Violet 15th 22365.
- Vera 76403, calved April, 1896, sire Jayson 55235, dam Virgie 61307.
- Corinna 76402, calved September, 1897, sire Jayson, dam Cora 51520.
- Myrtle A. 28748, calved July, 1896, sire Dronin 121169, a g. d. of Grove 3d, dam Myrtle 5th 7539, a splendid producer.
- Countess King 3d 36830, calved February 1889, sire Santiago 15469 (a Horatio-Horace bull), dam Countess King 22378.

HEIFERS.

- Martha, calved February 21, 1900, by True Briton, out of Mona, bred by F. R. & Son, Vol. 17 or 18.
- Virginia 96805, calved March 1899, by True Briton, dam Virgie.
- Myrtle Briton 105134, calved August 1899, sire True Briton, dam Myrtle B.
- Corra Briton 105130, calved September 1899, True Briton, out of Cora.
- Cordelia 105131, calved December 26, 1899, True Briton out of Countess King 3d.
- Countess Briton 105132, True Briton, out of Countess.
- Virginia 2d 114414, calved June 5, 1900, True Briton, out of Virgie.

BULLS.

- Mason 105133, calved December 19, 1899, True Briton, out of Myrtle A.
- Foster, calved June 17, Vol. 23, sire True Briton, dam Myrtle B.
- Valdez, Vol. 23, calved July 2, sire True Briton, dam Viola.

RECAPITULATION.

Twelve cows, 7 heifer calves, 4 bulls, making 29 in all. Three cows yet due to calve this spring, others safely bred for fall calves. Would like to close out the entire herd during the next thirty days. For further information address J. M. Foster & Co., Topeka, Kans.

ATTENTION, PLEASE!

We offer to the public heavy Pure Wool Cheviot Pants in black & blue, excellent and strongly made for \$1.55. Send price, waist and length measure, and color wanted to Eagle Pants Works, 306 Market St., St. Louis. To Dealers—A Snap. 5 per cent off in 1 dozen lots.

Remember our "Block of Two" offer.

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The Woman's Farm Journal

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The Home Circle.

THEN AND NOW.

It don't seem I kin ever believe it,
That that little thing up there
Was me when I wuz a baby,
So innocent like and so fair.

'Thout a stain of the world upon him,
'Thout a sign of wrong anywhere—
Me, here on my feet—a weak sinner—
An' me, as God made me, up there.

Cynthy sez, 'twas mother that give her
Th' picter when we was made one,
An' she's never let go of 't a minnit,
An' won't till her days is done.

An' you're me an' I'm you, little feller?
You th' beginnin'—me th' end;
Kin it be I'll be you agaln, ever,
When we with th' yuther world blend?

I only jus' wisht that I'd had ye
Always before my own face;
When wrong was a-crowdin' clus to me,
'Twould a-stayed me—your baby grace.

Fer, if sin seemed a-tearin' my innards,
I'd a looked right at ye an' see
That it couldn't be you as could hold it,
Ner me—seein' how you wuz me.

I'm a-go'in' t' look up at ye often,
An' mebbe by-me-bye I'll say,
'It's you that's been always eternal;
An' me that's jus' lived fer a day!"
—Gabriel Herrick, in *The Man With the Hoe*.

THE MAN OF THE WEEK.

Edmund Cartwright.

(Born April 24, 1743; died October 30, 1823.)

We are slow to learn that all great industries have an intimate dependence on all other great industries. We fail to appreciate as we should the community of interest that makes every trade, calling, and profession debtor to every other, and servant of all; for none are independent. Not one may say to its neighbors, Go your way; I can live alone.

Of course, it is easy to understand—as all of us knew when we reflect for but a moment—that the agricultural primacy of the West were impossible without the steam-engine. We do not need to be told that the West could not raise wheat for Europe without the railroad and the steamship. The farmer has been told so often that his is the foundation industry that he is quick to agree that other industries depend on agriculture; and it is not surprising that he is less ready to acknowledge his own dependence on other industries.

It is easy, for example, to understand that the business of the weaver depends on that of the farmer; for how could the weaver weave without cotton and wool and silk? It is not so easy for the farmer to realize his indebtedness to the weaver. Yet it is not impertinent to ask, What profit were there in producing cotton and wool and raw silk if the weaver did not make them into salable goods? And the weaver, does he not have to thank the maker of the loom and the man who spins the yarn? And the spinner, what could he do without his "mule?"

So the farmer, because of his business relations, as well as on account of the satisfaction and advantage of having good and cheap clothing, is interested in the power-loom and in its inventor, Edmund Cartwright, the subject of this sketch.

In his "Industrial Evolution of the United States," Dr. Carroll D. Wright says: "But it took the power-loom, invented by Dr. Edmund Cartwright in 1785, to give the spinning machinery all its power, for prior to his invention all the yarn spun by the power machines had been woven into cloth by the hand-loom weavers. The power-loom, therefore, closed the catalogue of machines essential to the opening of the new era of mechanical supremacy."

Edmund Cartwright was born at Marnham, Nottingham, England, when our Thomas Jefferson was eleven days old. After graduating at Oxford he became a minister. But he was a natural mechanic and inventor, and his inventions are his only title to fame. Besides the power-loom, he invented a wool-carding machine and a steam-engine in which alcohol was used. He also assisted Robert Fulton in his experiments with steamboats, and is said to have been the author of many improvements in the arts, manufactures, and agriculture.

In the chapter on the ethical influence of machinery on labor, Dr. Wright says, in the book already quoted:

"A fair adult hand-loom weaver can weave from 42 to 48 yards of common shirting per week; a weaver in a modern factory, tending six looms, can turn out about 1,500 yards per week. On the hand-wheel (one spindle) a spinner can turn off eight ounces of number ten cloth yarn in ten hours, or three pounds in one week; the operator, of

the mule spinning machine can turn out over 3,000 pounds in the same time. All this means a corresponding decrease in price."

And it means more. It makes it possible for everybody to have plenty of clothing, which was impossible before Cartwright's invention made clothing cheap. It means a multiplied demand for cotton and a corresponding increase of business for the cotton-planters. Cheap weaving by the power-loom means as much for the wool-growers. There are more sheep because of Cartwright's loom, and many more people are able to raise them profitably and to wear warm clothing made from their fleeces. Surely the inventor of the power-loom was a promoter of agriculture and a benefactor of humanity!

D. W. WORKING.

—Denver, Col.

Some Dainty Desserts.

Written for *Kansas Farmer*.

The housekeeper on the farm has a chance for dainty desserts that her sister in town who has to practice economy often longs for. The farmer's wife sometimes is too busy to take the time necessary to prepare anything that takes any amount of work, yet she is always glad to make something nice for special occasions. Where cream is produced as cheaply as it can be produced on the average Kansas farm the housekeeper should learn, if she does not already know, the value of whipped cream in preparing meals that are intended to be extra nice. Whipped cream is used in a hundred ways besides in desserts but it will be the aim of this article to give a number of ways in which it can be used for this purpose.

To whip cream one should have cream that has stood on the milk about forty-eight hours. Where cream is separated from the milk while the milk is fresh it is necessary to let it set a couple of days. A thick cream is then formed over the top which is known as "double cream" in the magazines and cook books. Have the cream as cold as possible and whip with a Dover egg beater or a cream whip which can be obtained at a low cost.

Plain whipped cream is served over ordinary custard when it adds to it greatly. It is served with cocoa, with coffee, and is flavored and used for cake filling. Cake with cream added in this way will keep but a short time and is best as soon as filled.

Date pudding is one of the daintiest desserts that can be made. All that it will be necessary to buy especially for the pudding is the dates if gelatin is in regular use. Put the gelatin to soak in cold water according to directions on the package and depending on the amount of pudding to be made. Prepare the dates by removing the seeds. Whip the cream, sweeten slightly and flavor with vanilla. Melt the gelatin over hot water and beat into the cream. When the mixture begins to set stir the dates well through it. Enough dates should be used to have them quite thickly scattered through the pudding. This pudding will keep one day in a cool place and will be liked by every one who likes dates and by some who do not like them ordinarily.

Orange pudding can be made at small cost where cream can be had. Use $\frac{1}{2}$ of a box of gelatin, juice of one orange and one lemon, $\frac{1}{2}$ cup of boiling water and $\frac{1}{2}$ cup of cold water, 1 cup of sugar and $\frac{1}{2}$ cup of thick cream. Dissolve gelatin in hot water after it has soaked in the cold, add the fruit juice. Have the cream whipped and sweetened, add the juice and gelatin mixture, pour into a mould lined with slices of orange and allow to cool and stiffen.

MARY WAUGH SMITH.

An Economical, Helpful Recipe.

Written upon request of a Kansas reader.

I am always ready and willing to help young beginners in housekeeping. My thoughts go back to the days when I too felt inexperienced and ignorant about many things. This young housewife is both practical and industrious; I judge, and as she reads the home page in the *FARMER* I will give her this excellent little recipe, which she desires, as it is the best home-made soap I ever used. It is economical and a great saving in household work. You first begin by saving all the broken scraps and pieces of soap—in bedroom, kitchen, everywhere—and keep a tin can to drop them in. When half full, dissolve three ounces of powdered borax into two quarts of warm water and pour into this tin can. Stir it all up together until melted, when cool it will form a jelly. A teaspoonful of this in a gallon of warm water will make a strong lather and is good for cleaning

all household goods. If you do not wish to wait for the scraps, buy two good bars of white soap and shave it off into the can, then dissolve the borax and mix just as you would with the scraps, but when not in a hurry save all the scraps, as it is such a nice way of utilizing all the little broken pieces of soap.

S. H.

To Polish and Varnish Furniture.

At house cleaning time most ladies find that some chairs, tables, and other wooden furniture needs a good polishing at least, and that some of it must have a new coat of varnish.

The following are some of the methods which are well spoken of for polishing and cleaning furniture:

Melt equal quantities of beeswax and castile soap in turpentine until it forms a paste, cream like, which use as usual. This recipe is from a successful restorer of old polished woods, and it is good for either polishing furniture or floors, as it cleanses, gives a beautiful gloss, and has no stickiness.

One pint of linseed oil, same of vinegar, and a half pint of alcohol, well shaken before using, is still another furniture cleanser and polisher.

The above polish and elbow grease used together, a large quantity of the latter, is sure to result favorably.

Professor Dudley, of the Pennsylvania Railroad, states that the best method to clean a varnished surface without injuring the gloss, is to use a mixture of powdered soap and tripoli, in proportions of about 3 parts of soap to seven parts of tripoli, applied with a wet cloth. The slight solvent action of the soap does not injure the varnished surface, but it removes the dirt, and the grit of the tripoli, which must be very fine, cuts off such matter as the soap fails to remove.

When furniture requires re-varnishing, it should be well washed with strong soda water, which will remove every particle of grease. Then wash with soft water, into which a little vinegar (oxalic acid is much better) has been put. This is to neutralize the soda.

Wipe dry and coat with a good quality of hard-drying varnish. When it is dry rub it off with a bunch of curled hair, to remove the gloss, and then flow on a good coat of cabinet finishing varnish.

The stains on furniture may be removed by a mixture of 6 drops of spirits of nitre and a teaspoonful of water. Dip a feather into this and touch the stained part, when the ink will disappear. Immediately after this rub the spot with a soft cloth and cold water to prevent a white mark, which will always appear, from becoming permanent.

To take out less serious spots and brighten the furniture at the same time, take two tablespoonfuls of sweet oil, one of vinegar, and half a tablespoonful of turpentine, rubbing this mixture on with a bit of flannel.

A Million Dollar Salary.

In the midst of its daily feast of wars and devastations the world has had a pleasant little shock of surprise in hearing that Mr. Charles M. Schwab, the head of the new United States Steel Corporation, is to draw a salary of \$1,000,000 a year, or, in round numbers, \$20,000 a week. Some time ago it was asserted that Mr. Rockefeller had expressed a willingness to pay that amount to anybody capable of taking the cares of his business off his hands.

Mr. Perkins, who is the new partner in the firm of J. P. Morgan & Co., is said to have had a guarantee that the income of his new position shall not be less than a quarter of a million a year. Of course, it may be a good deal more. Mr. Schwab and Mr. Perkins are both young men in their thirties.

Evidently we are reaching a period in which the world will accustom itself to an entirely new scale of salaries. We may yet have a labor union of trust presidents fixing a minimum wage scale of \$1,000,000 a year, enforced by threats of a strike. The time when an increase in the salary of the president of the United States from \$25,000 to \$50,000 a year shocked the economical sense of the country seems an age of remote antiquity.

The possibility that used to be held before the dazzled eyes of every American boy was that of growing up to be president of the United States. The new possibility is that of drawing a million-dollar salary. Such a salary is the prize that ability wrests from wealth. The men who draw this pay are not those who inherited millions, but who were born with the power to work and to direct the work of others. Mr. Schwab has been described as a "human thunderbolt." If his employ-



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any size wanted, any width of tire. Hubs to fit any axle. No blacksmith's bills to pay. No tires to reset. Fit your old wagon with low steel wheels with wide tires at low price. Our catalogue tells you how to do it. Address **EMPIRE MFG. CO., Quincy, Ill.**

ers pay him a million dollars a year, it is because they know that they can get several times a million out of him. He may have men in his office drawing less in a year than he does in a day who are his superiors in general intelligence, who could write better novels than he could, draw better pictures, express a more skilled appreciation of plays, frame better national politics and pass for men of abler minds. Not only could the Steel Trust not afford to pay one of those men a million a year for managing its affairs—it could not afford to let him manage its affairs if he paid for the privilege. Just that peculiar combination of qualities which Mr. Schwab possesses is needed to keep such an enterprise from wreck and make it profitable to its owners. The men who have the power of industrial generalship will be the Cæsars and Napoleons of future history, and they will win the rewards that have gone to military generalship in the past.—Saturday Evening Post.

The Formation of Habits.

Robert Mearns Yerkes reports in the *March Popular Science Monthly* some experiments undertaken at Woods Holl to determine to what extent and with what rapidity turtles can learn and to measure their intelligence. Probably turtles were selected because they are commonly classed among the most sluggish and unintelligent of animals. A simple labyrinth was arranged through which the turtle was compelled to find his way in order to reach his nest. On the first trip the turtle wandered about for 35 minutes, the third trip occupied but five minutes, while on the thirtieth trial the turtle reached the goal in 40 seconds. In a more intricate labyrinth the first trial lasted one hour and thirty minutes, the tenth four minutes.

Commenting upon the general subject of the formation of habits and their significance, the writer says:

"Habits are determinants in human life. It is true that we are free within limits to form them; it is also true that, once formed, they mold our lives. In the life of the brute habit plays an even more important role than it does in man. The ability to survive, for example, frequently depends upon the readiness with which new feeding habits can be formed. So, too, in case of dangers habitually avoided; those individuals which form habits most quickly have the best chances of life. But it is unnecessary to emphasize the importance of habit to all living beings, for it is obvious. We have now to ask, What precisely is a habit?"

"A habit proves in analysis to be nothing more or less than a tendency toward a certain action or line of conduct—a tendency due to structural and functional modifications of the organism which have resulted from repetition of the action itself; for nothing can be done by the animal mechanism without resultant changes in its organization. These changes it is which influence all subsequent activities and constitute the physical basis of habit. Repetition of an act apparently leads to the formation of a track for the controlling nervous impulse—a line of least resistance, so to speak—along which the current therefore tends to pass.

"Since habits make an animal what it is in great part, the study of their formation, of the manner and rapidity of their growth and of their permanence must be of practical as well as of scientific importance. We are rapidly realizing, as the increasing interest in animal psychology clearly indicates, that the mental life of all animal types must be understood before we can attain to a satisfactory science of psychology or give a history of the evolution of the mind."

Mothers! Mothers!! Mothers!!!

Mrs. WINSLOW'S SOOTHING SYRUP has been used for over FIFTY YEARS by MILLIONS OF MOTHERS for their CHILDREN, while DETHLING with PEBBLET SUCOBS, IT SOOTHES the CHILD, SOFTENS the GUMS, ALLAYS all PAIN, CURES WIND COLIC, and is the best remedy for DIARRHEA. Sold by druggists in every part of the world. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind. Twenty-five cents a bottle.

The Young Folks.

THE ROSE OF LIFE.

The Rose spoke in the garden:
"Why am I sad?
The vast of sky above me
Is blue and glad;
The hushed deep of my heart
Hath the sun's gold;
The dew slumbers till noon
In my petals' hold.
Beauty I have, and wisdom,
And love I know,
Yet can not release my spirit
Of its strange woe."

Then a Wind, older than Time,
Wiser than Sleep,
Answered: "The whole world's sorrow
Is yours to keep,
Its dark descends upon you
At day's high noon;
Its pallor is whitening about you
From every moon;
The cries of a thousand lovers,
A thousand slain,
The tears of all the forgotten
Who kissed in vain.
And the journeying years that have van-
ished
Have left you
The witness, each of its pain,
Ancient, yet new.
So many lives you have lived;
So many a star
Hath veered in the Signs to make you
The wonder you are!
And this is the price of your beauty:
Your wild soul is thronged
With the phantoms of joy unfulfilled
That beauty hath wronged,
With the pangs of all secret betrayals,
The ghosts of desire,
The bite of old flame, and the chill
Of the ashes of fire."—April Century.

Three Lions and a Man.

It falls to the lot of but few men to come so near to a violent death and yet escape unharmed as was the case with J. A. Smith, who had been working as a mechanical engineer at the Inez. Having finished the work for which he had been engaged, he left the Inez, intending to cycle into Salisbury, stopping for a couple of days at the Great Bear. He left the latter place for Gadzima, traveling along the line of railway extension. On reaching the spot where the line crosses the Umfuli River he found, as the bridge is not yet erected, that he would have to go round by the deviation and cross at the railway drift. This necessitated wading through the river and carrying the bicycle. On reaching the level again he put his machine down in order to resume his boots and socks, and, feeling rather fatigued after his exertions, stayed for a brief rest. While enjoying the rest his attention was drawn by a troop of very fine sable—two magnificent bulls and three cows—making their way up the other side of the river in the direction of a fringe of forest beyond. Feeling sufficiently refreshed, he picked up his machine preparatory to starting again for Gadzima, which he wished to reach before it became dark. The next moment Mr. Smith received a shock which he will not forget for many a long day. About fifty yards away, and slightly to his right were three lions, so intent on stalking the sable that they were not looking in his direction.

It was an awkward position, to say the least, and for a brief space he stood like one petrified, but, although his limbs for a moment were numb, his mind was active enough. The largest of the three was a huge, black-maned lion, the second a lioness, the third an almost full grown cub. The latter was the first to observe Mr. Smith, and uttering a low growl, made for the unhappy man who, dropping his bicycle, stayed not for the order of his going, but went for a friendly tree at top speed. He had just time to notice that the parent lions had started in the wake of their young hopeful, the sight, as may be imagined, only serving to accelerate his pace. The tree was but a short distance away, but to the hunted it appeared a mile, expecting every second to be struck down. It was destitute of branches for about ten feet up, and how he managed to climb it at all will forever remain a mystery to him. Just as he thought himself safe, however, there was a terrific roar behind him, and he had an uncanny feeling that he was being dragged off the tree. The lion, outstripping his mate in the chase, had made his spring, missing his quarry by a few inches only, even as it was his claws tore away the greater part of Mr. Smith's trousers and inflicted several fairly deep scratches—a narrow escape indeed. Exhausted and panting, trembling in every limb, with the perspiration streaming off of him, he managed to draw himself up into comparative security, and here for nearly an hour he remained in this dreadful position, while the baffled lion, now joined by the lioness, raged below, every now and again mak-

ing frantic springs, when their fetid breath came so unpleasantly near as to almost bring on nausea. The tree, it should be mentioned, was a small mampoda, about eighteen feet high.

At first Mr. Smith could not understand what had become of the young lion which went for him first, and but for the fact that he was not in a position to appreciate the humor of the thing, he witnessed a sight which must have been comical in the extreme, though to it alone he is firmly convinced, his life was due. It seems Leo, Jr., stopped half way to examine the bicycle, which had been fung down hastily, with the result that the front wheel was still revolving. This arrested the young lion's attention, and, like a child with a new toy, he turned aside to examine this curious phenomenon. Cautiously giving it a pat with one of his huge paws, which only made it go around faster, his wonder increased, and he sat down on his haunches, regarding it with a puzzled air, and not for some time did he join the parent couple at the foot of the tree, but not until he had "mouthed" the machine considerably and twisted the handlebar. During the tenure of his unpleasant perch Mr. Smith cast many wistful glances in the direction of his double-barrelled gun, which was strapped to his bicycle, but it might as well have been a hundred miles away. He cast his eyes about in order to discover some place of retreat as soon as the lions should retire, and, to his great joy, saw a hut some three hundred yards away. Just before dark his captors began to pay less attention to him, and, scenting the sable again in the vicinity by the aid of a strong breeze, they left after about three-quarters of an hour, to the extreme relief of their unfortunate prisoner. After waiting for about half an hour, until everything was quiet, he cautiously descended, and, not daring to go back for his gun, fearfully made his way to the hut referred to, making quick springs from tree to tree. There was no roof, and the hut was but a flimsy structure, but, after making the entrance as secure as possible, and kindling a big fire, he soon dropped off to sleep. At daybreak he was able to resume his journey, eventually reaching Gadzima and Salisbury little the worse, beyond a very natural nervous shock, after his thrilling experience.—Rhodesia Herald.

Important Questions for Boys Who Want to Seek a Fortune in the City.

Every country boy, whose ambition is to "go to the city," should ask himself the following questions. They are suggested by a very level-headed man:

Benjamin Franklin, one of the most sagacious and practical of the world's great statesmen, had the habit, it is said, of reducing every puzzling problem in life to a series of written questions and answers. "When I can see them before my eyes I can master them," he used to say. There are hundreds of boys and girls to-day on farms and in country villages who are eager to go to the nearest great city to "try their luck." We offer a few questions for them to consider before making their decision.

First. I am going to the city in the hope of making my fortune. Is there any duty at home on which I shall turn my back when I go—any duty weightier and more urgent than that of making my fortune?

Second. For every dollar to be earned there are at least ten competitors in the city for one here in the country. What qualities have I that will insure me success over the other nine?

Third. The Jack of all trades, or "handy man, who can turn his hand to anything," is not wanted in the city. He is speedily trampled out of sight. Success is to be won only by the men best trained in their own trades or professions. What trade or profession have I? What proof have I given of special ability in any trade I have in mind, or that may seem attractive to me?

Fourth. Have I energy, skill, pleasing manners, tact to win a place where the crowd and the competition are so great? Or is my only qualification for town work discontent with home and village life and unfitness for work in the country?

Fifth. At home I have the good will and friendship given to my family and to me by people who have known me since I was born. This is a valuable capital, out of which happiness can be made to come. What is there in the city to atone for the lack of it to a poor, friendless boy? Isn't there some occupation in the village or the country town that I can secure, or can not farm-

ing, with energy and industry, be made to give me an adequate livelihood?

These questions, if gravely considered, may lead a boy or girl of common sense to a wise choice at one of the great turning points of life.—The Man with the Hoe.

Where Violins Are Made.

In the village of Mittenwald, in the heart of the Bavarian highlands, live the men who manufacture the greater part of the world's supply of violins. Mittenwald has taken the place of Cremona, although it may take another two hundred years before its violins can be mentioned in the same breath with those of the famous Italian town.

Of the 1,800 inhabitants of the village, over 800 are exclusively occupied in the manufacture of violins, and the output reaches the incredible figure of 50,000 violins per annum. They are exported to all countries in the world, the better instruments going to England and America. One organization of makers alone exports 15,000. Each family of violin makers has its own particular trade secret, a sort of trick of the trade, handed down from father to son. Outsiders and, still more, rival makers, are not permitted in a workshop that is not theirs. The people of Mittenwald have an interesting violin school where the village boys are instructed in the general technical departments of violin building. In the hall of this building is an inscription to the following effect: "The object of this school is to instruct the scholars accepted in its various arts connected with the manufacture of stringed instruments, and to educate them as capable violin makers."

The course lasts three years, and embraces, in addition, the art of drawing, singing, and playing on the violin. In the building of a violin much is left to the individuality of the builders. It is seldom that two violins are exactly alike in every particular. The villagers of Mittenwald are generally of the opinion that the varnish with which the instrument is covered is of the first importance, and attribute the fine tone of the violins made by Stradivarius, Guarnerius, and others to a secret of varnish which has evidently been lost forever. Mittenwald uses maple wood for its violins, brought from the distant forests of Dalmatia and Bosnia, and pine wood of a certain quality and resinousness found only in the neighboring forests. The old looking violins seen in many a music shop window are not infrequently brand new instruments from Mittenwald. The blackness and shabbiness, the rubs and scratches, the Italian names of makers inside and the picturesque date—let us say of 1743—are often the work of the ingenious fiddle makers of this remote idyllic village in Bavaria. "We must supply the market," they say, in extenuation of this class of business, "if we do not, some one else will."—London Leisure Hour.

The Origin of a Name.

John Smith, Uniontown, Pa., contributes to the National Stockman and Farmer the following account of the origin of the name Smith:

"During the forty days' voyage of the Ark, Noah whiled away many lonesome hours telling stories to the boys. Now Noah was quite a spinner and some of the yarns he handed around to the little folks were of such a weave as to cause good Mrs. Noah no little concern. In fact, she frequently was heard to say: 'Now, Paw, don't be putting such stuff into Jap's head as that'; or, 'Hammy, dear, the armies of men he's telling you about are only myths. There ain't anybody on earth but us, and we're in pretty deep water ourselves.'

"Well, after the Ark landed and Mrs. Noah and the children had the carpets down and the papering started, the boys were over near 'Ratville one day, and when they came home they told a wonderful tale about a great multitude of people on the mountains. Mrs. Noah smilingly contradicted the boys, saying, with a sly twinkle in her eye, 'some myths again; your Paw's at his old tricks.'

"So Ham and Pap went out and told Shem, 'Maw said they were only s'myths.' Shem replied that if they were all Smiths, and Mr. Smith ever wanted to take his family boat riding he would have to get a bigger schooner than the one the Noah family came over in.

"So the whole human race, with the exception of Noah's family, was called Smith; and you'll remember that very little was ever heard of Noah after that. His descendants became Smiths. "Sometime later the ruler of the



PURIFY THE BLOOD

If you would have health and energy in hot weather you should see to it in the early Spring that your blood is pure and vital organs strong and active.

PRICKLY ASH BITTERS

IS THE GREATEST BLOOD PURIFIER ON EARTH.

The efficacy of this remedy in purifying the blood and putting the system in order is without a parallel in the medical world. So thorough and far-reaching is it that it carries its great cleansing and regulating influence to every part of the body, casting out impurities that have resulted from winter diet, purifying the bowels, strengthening the kidneys, liver and stomach, and preparing the entire body to resist the disease germs which come with warm weather. Those who use this great purifier during the Spring months will stand the heat better and be free from the debilitating ailments which invariably attack the body that is clogged up with impurities.

SOLD BY ALL DRUGGISTS.

PRICE, \$1.00.

Smithsonian Empire had a law made providing penalties for crimes and misdemeanors. Under its provisions the honored name of Smith was taken away from the culprit and he was given another which he and his family must wear through life. Thus a man who smashed a saloon mirror was called Nation; a thief (there were no embezzlers in those days) who swiped a shekel was sentenced Agglenaldo, etc.

"So you see you might all be Smiths yet had your forefathers behaved themselves. I have the original manuscript, translated from hieroglyphics, in my possession so that there can be no question as to the authenticity of this bit of history."

State of Ohio, City of Toledo, Lucas County, ss.

Frank J. Cheney makes oath that he is the senior partner of the firm of F. J. Cheney & Co., doing business in the City of Toledo, county and state aforesaid, and that said firm will pay the sum of One Hundred Dollars for each and every case of Catarrh that can not be cured by the use of Hall's Catarrh Cure.

FRANK J. CHENEY,
Sworn to before me and subscribed in my presence, this 6th day of December, A. D. 1886.

(Seal.) A. W. GLEASON,
Notary Public.
Hall's Catarrh Cure is taken internally and acts directly on the blood and mucous surfaces of the system. Send for testimonials, free.
F. J. CHENEY & CO., Toledo, O.
Sold by Druggists, 75c.
Hall's Family Pills are the best.

KANSAS FARMER.

Established in 1863.

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

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J. B. McAfee.....Vice-President
D. C. Nellis.....Secretary and Treasurer

SUBSCRIPTION PRICE: \$1.00 A YEAR.

E. B. Cowgill.....Editor
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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.

NOTICE EXTRAORDINARY. 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, and no single subscription will be entered for less than this price, 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 will be entered, both for one year for one dollar. Address, Kansas Farmer Company, Topeka, Kans.

The success of the British in catching the Boer general, De Wet, in South Africa, is much like that of the proverbial Irishman with the fee. Just when he was about to catch him he wasn't there.

A CENTRAL KANSAS FAIR.

There has been recently organized at Hutchinson, Kansas, the Central Kansas Agricultural Fair and Live Stock Association and it is proposed to offer in premiums \$5,000 or more. The names of the officers and directors indicate that this will be made the great fair of Kansas this year, at least it is the ambition of the promoters to so make it. In a letter to the secretary of the Kansas Improved Stock Breeders' Association the secretary says: "It is our intention to make a special effort to have a fine show of live stock and to that end will attempt to offer sufficient premiums to induce the national associations to duplicate our offers." For further information regarding this fair address A. L. Sponsler, president, or Ed. M. Moore, secretary, Hutchinson, Kansas.

A SUGGESTED CHANGE IN TAX LAWS.

The problem of equitable taxation is one with which statesmen have wrestled from the times when Daniel was treasurer of Babylonia, and perhaps, a good deal longer. In these later days, Kansas is seeking to improve her system of assessment and taxation, and has appointed a commission to prepare a bill thereon. This commission has invited suggestions as to this proposed bill. One of these suggestions comes from Hon. R. F. Bond of Sterling, who, while a member of the legislature, introduced and secured the passage of several bills which are among our most useful laws.

Mr. Bond proposes that taxes for state purposes be collected from the several counties on the basis of population. This plan, if adopted, will take away the chief incentive to one of the

most obvious evils which result from our present system. State taxes are now apportioned according to the valuation of property in the several counties. When the assessors of a county meet to fix the basis of valuation one of their chief anxieties is to make the basis as low as in any other county in order that their county shall not have to pay more than its share of state tax. To the uninitiated it is a matter of surprise that assessors will, on this account, disregard the law which says that all property shall be assessed at its actual value in money, and deliberately fix upon valuation of one-half, and one-third, or one-fourth of the actual value in money. This official disregard of the plain provision of the law is by many taken as a sanction for undervaluation, and by some as a hint at tax-dodging. It has, therefore, come to be the practice with the unscrupulous to omit to list such property as can be concealed. This works injustice and hardship to the strictly honest and to those who, like the farmer, have most of their wealth in visible property, such as lands, live stock, and bulky products.

Mr. Bond's suggestion will not cure all of the evils of the present system, but it is capable of curing one by removing the incentive. The suggestion is not a novel one as some have supposed. The constitution of the United States provides, in Art. 1, Sec. 2, that "Representatives and direct taxes shall be apportioned among the several states which may be included within this Union according to their respective numbers," etc. The proposition to apply to the laying of state taxes within the counties, the provision of the constitution as to the laying of national taxes within the state, ought to meet with patriotic approval, especially in view of the great improvement it is likely to make in the honesty of administration of our tax system.

SOME WHEAT FIGURES.

With a fine crop of wheat progressing satisfactorily at this date, the wheat belt farmer is interested in the prospect for prices for the growing grain. "Farm prices" for wheat, as estimated by the Department of Agriculture, have varied considerably even in the last ten years, as is shown by the following table:

FARM PRICES OF WHEAT.			
Year	Cents.	Year	Cents
1891	83.9	1896	72.6
1892	82.4	1897	80.8
1893	83.3	1898	58.2
1894	49.1	1899	58.4
1895	50.9	1900	62.0

Prices in 1901 are ranging higher than in 1900, the difference at this date being about 7 cents.

Several factors are concerned in determining the prices of wheat, but in a general way the most important of these are supply and demand. The demand for wheat is a constantly increasing one, owing to the world's increase in population, and especially to the increase of the races who eat wheat bread. Wheat is steadily taking the place of rye with peoples who formerly made their bread of rye flour. The rice-eating nations are inferior to the bread-eaters, and, while they are generally averse to change, they are, to some extent, substituting bread for rice, and they are giving way before the aggressive bread-eaters. The average increase in the world's wheat crop since 1873 is, according to the compilation of the Cincinnati Price Current, about 30,000,000 bushels per year. The world's production for 1900 is stated to have been 2,550,000,000 bushels, while the world's demand for that year is stated at 2,540,000,000 bushels, so that now the world's demand for and supply of wheat are practically balanced. It is worthy of note, also, that the average production of the five years 1896-1900 is estimated at 2,550,000,000 bushels. It is generally conceded that the world has now no great surplus of wheat in store, so that future demands will have to be met, substantially, by future crops.

The greatest wheat-exporting country in the world is the United States. That the last crop in this country was not equal to the demand upon it is apparent from the following estimates presented by the statistician of the Kansas City Star on April 21:

U. S. WHEAT CROP OF 1900.	
	Bushels.
Exported	164,500,000
Home consumption	285,000,000
Used for seed	65,000,000
Increase in stocks	24,000,000
Total distribution	538,500,000
Government crop estimate	522,000,000
Commercial estimate	550,000,000

This indicates a larger distribution than the government estimate of production. The proper inference from these figures (granting their approximate correctness) is that remainders of former crops are being drawn upon so that in the United States, the great ex-

porting country, the next crop will have to do full duty.

But, while the world's supply and more immediately the supply of the United States in relation to the demand will affect prices of the new crop, the supply, if any, left over in Kansas will have something to do with the price, at least locally. On this point the Star writer says:

"The calculations as to the quantity already accounted for seems to confirm the view that little [Kansas] wheat remains to come. Here is a statement which is as near the facts as they can be ascertained:

Kansas City receipts to date	34,000,000
Deduct Oklahoma and Nebraska wheat	10,000,000

Receipts from Kansas	24,000,000
Used for seed	6,000,000
Used by Kansas mills	34,000,000
Shipped through other channels	10,000,000

Total disposition	74,000,000
State estimate of crop	77,000,000
Government estimate of crop	82,000,000

It is evident that the great exporting State of Kansas will enter upon the new crop year with no great surplus with which the speculator may hammer down prices.

It should be remembered, on the other hand, that reports of the condition of wheat in the United States are, so far, favorable. The market manipulator, who is a notable factor, looks at two quantities, namely the supply on hand and the prospective crop. The position is such that every change in the prospect will be watched with even more than usually interest. Any widespread disaster would probably be taken advantage of by the "bulls" to send prices far above their present range.

WHEAT HARVEST CALENDAR.

The following is from the statistical annual of the Cincinnati Price Current:

January—Australia, New Zealand, Chili, Argentine Republic.

February and March—Upper Egypt, India.

April—Lower Egypt, India, Syria, Cyprus, Persia, Asia Minor, Mexico, Cuba.

May—Texas, Algeria, Central Asia, China, Japan, Morocco.

June—California, Oregon, Mississippi, Alabama, Georgia, North Carolina, South Carolina, Tennessee, Virginia, Kentucky, Kansas, Arkansas, Utah, Colorado, Missouri, Turkey, Greece, Italy, Spain, Portugal, South of France.

July—New England, New York, Pennsylvania, Ohio, Indiana, Michigan, Illinois, Iowa, Wisconsin, Southern Minnesota, Nebraska, Upper Canada, Roumania, Bulgaria, Austria, Hungary, South of Russia, Germany, Switzerland, South of England.

August—Central and northern Minnesota, Dakotas, Manitoba, Lower Canada, Columbia, Belgium, Holland, Great Britain, Denmark, Poland, Central Russia.

September and October—Scotland, Sweden, Norway, North Russia.

November—Peru, South Africa.

December—Burmah, New South Wales.

An Appeal to Poland-China Breeders.

The committee representing Poland-Chinas, composed of R. D. Burnham, H. M. Kirkpatrick, and Frank D. Winn makes an appeal to the Poland-China breeders throughout the United States for help in making the Kansas City show the great success it promises to be with the support of the liberal-spirited breeders of the United States.

The condition of the Poland-China breed in this show is most unfortunate in having no association or record company behind it. When the Kansas City Stock Yards Company offered \$500 to each breed on condition that this amount be duplicated by each breed the Berkshire and Duroc-Jersey record associations made the guarantee, while the \$500 of the Poland-Chinas had to be guaranteed by the three members of the committee. The committee wishes it to be distinctly understood that all the work they are doing in connection with this show is entirely gratis and that in addition to this the current expenses which have to be met are being taken care of personally and will have to be until after the show, and besides this each of the three members have made a liberal subscription to the special prize fund.

It would not be fair to even think that the breeders of the country who will derive as much good from and who should be as much interested in this show as the committeemen will refuse to aid this great undertaking. The \$2,500 to be raised for the State fair list is about all provided for and a good portion of the \$2,500 for specials to be raised by the breeders has already been pledged, but there is yet considerable to be raised which can be done easily

by a little help from each. It is not expected that breeders living at a distance will give a large amount; but any one can afford to give something and the committee wants it understood that anything offered will be gratefully accepted.

If you do not feel able to give \$25 give \$10 and if not \$10 then give \$1. There are thousands of Poland-China breeders and even \$1 from each would more than raise the money, although there are a few breeders who could afford to give at least \$5. The subscription blanks are now being sent out and it is to be hoped that no breeder will return same without something filled in.

The record companies have practically refused to take an interest in the show, the State fairs have cut the premium list down on hogs until no exhibitor can win enough money to pay expenses and it is due to the three members of the committee who are working untiringly to make this show a grand success that, when the subscription blanks are sent around, a donation of some kind be made. This is a breeders' show and nobody but the breeders will be benefited and each should see that he does his part.

There is a friendly rivalry between the breeds as to who will make the best show and have the most attractive premium list. Will the representatives of the great breed of Poland-Chinas stand still and see their favorite outdone? Consider this when filling out your subscription blank is the earnest request of the management.

Alfalfa in the Orchard.

EDITOR KANSAS FARMER:—It is said that alfalfa will kill an orchard if sown in it, but if the rows of apple-trees were 20 by 32 feet could not alfalfa be drilled in part of the land covered by the 2-foot trees, the alfalfa not coming close to them and then gradually narrowing the strip of alfalfa as trees get older? I will probably plant some apple-trees and have been thinking of the plan of sowing a strip of alfalfa among them, cutting it for hay; therefore how close could I drill to trees, how much should I plant and when should it be plowed under? If rye and vetches were raised in other parts of the orchard for hay how close should they be drilled to the young trees? Using rye and vetches all the time what distance should I keep plowed away from the trees yearly?

I noticed a correspondent stacking green alfalfa hay by using lime. Would not this means be successful with cow-peas hay, without waiting for it to be cured before stacking in open field?

Yours truly,
C. MYGME.

Alfalfa kills the trees of an orchard by appropriating available plant food and especially the water from the soil. It has been thought by some that under irrigation, or in a country having abundant precipitation, fruit-trees and alfalfa might be successfully grown together. A Colorado writer went so far as to assert, a few years ago, that with abundance of moisture the fruit-trees and the alfalfa were congenial neighbors. The editor of the KANSAS FARMER immediately wrote to him requesting details of the experience on which the assertion was based. The inquiry was never answered. Up to this date the writer has seen no account of any successful experiments with orchard and alfalfa on the same ground.

A few years ago the writer planted some fruit-trees beside an alfalfa field. The soil in which the trees were planted was in prime condition. The alfalfa was beautifully luxuriant. It occurred to the writer to sink the spade in the alfalfa field. The soil was found to be very dry, contrasting strongly with that a rod or two away in the orchard.

Our correspondent's suggestion to plant a strip of alfalfa between each two rows of trees would be better than planting more, but in the opinion of the writer the narrower the strip of alfalfa the better it will be for the trees.

In general small grains or crops that can not be cultivated are not suitable for the young orchard.

It is found to be good practice to grow red clover in the orchard after it comes into bearing, but the best practice with this is to have the clover on the land for a mulch.

Cow-peas have been reported to give good results both to the growing trees and to the pocketbook of the farmer.

The writer once examined some stacks of alfalfa that had been put up green and sprinkled with air-slaked lime. The animals ate it, but its appearance was very forbidding in comparison with nice green, cured alfalfa hay. Mr. S. M. Smith, of Fredonia, Kans., introduced the method with lime some three years ago. Alfalfa-growers will doubtless be glad to know how he is pleased with it by this time.

Important to Exhibitors.

Through the press, intending exhibitors and contributors to the Poland-China division of the Kansas City show and sales have been advised to write to Frank D. Winn, Kansas City, Mo., for catalogues, rules, and other printed matter relating to the show and sales. The result has been that he has been flooded with applications for such data and he has decided to inform breeders as far as possible on these matters, through the press, and thus save time and labor and a large expense to the association by writing each applicant. Every cent of the net money raised from every source will be offered in premiums, and the committee wants it distinctly understood that there are absolutely no salaries to be paid, no dividends or money to be expended, except what is absolutely necessary, and breeders, who should be as much interested in the success of the show as the committee, will understand the importance of deriving as much information as possible from the accounts of the show given in the press. All information necessary for the present and all that can be furnished until catalogues, premium lists, etc., are out, will be given below and applications for printed matter, unless some specific information is desired, will be placed on file and same will be sent to applicants just as soon as ready. It will be impossible to have catalogues, rules, etc., out for some little time yet, but as soon as they are out, they will be mailed to every applicant. The secretary asks breeders to take note of the following facts: Judges on Poland-Chinas, T. B. Hart, J. N. Klever, J. C. Hendrick and W. Z. Swallow. All ages will be computed from September 1st. Prize list for Poland-Chinas will include the regular State fair prize list, with which all breeders are familiar, and the following special prizes which have already been published in agricultural press on which it is requested breeders will copy and save.

1. Boar and not less than 4 of his get, any age or sex.
2. Sow and not less than 4 of her pigs, under 6 months.
3. Sow and 1 of her produce, any age or sex.
4. Boar and sow, any age.
5. Two swine, any age or sex, produce of same sow.
6. Boar and sow, 6 months and under a year.
7. Boar and sow under 6 months.
8. Two boars, any age.
9. Two boars under 6 months.
10. Two sows, any age.
11. Two sows, 6 months and under a year.
12. Two sows, under 6 months.
13. Four pigs, under 6 months, get of same boar.
14. Six pigs, any sex, under 6 months.
15. Ten hogs, any age or sex.
16. To the feeder of the best fitted exhibit.

So far as the sale is concerned, it is impossible to determine the number of head each will be allowed to contribute or the cost per head until the number and class of breeders so desiring to consign are known, and to this end it is earnestly requested that those desiring to contribute to the sale write to Frank D. Winn, Kansas City, at once, stating the number each desires to sell, so that the matter may be decided upon by the committee.

It is now the intention, in order to save expense, to have the catalogue, prize list, rules, etc., included in one pamphlet, and as the prize list must be out not later than July 1, those desiring to contribute had better get in their applications to the secretary.

The secretary advises that he already has a large number of applications, and that they continue to come in; those applying last will almost surely have to be cut out, so breeders should get in their applications without delay.

Important Insecticides.

One of the latest farmers' bulletins of the United States Department of Agriculture is No. 127, "Important Insecticides: Directions for Their Preparation and Use." At this season, publications of this nature are in demand by the fruit-grower and the farmers in general. While this bulletin contains much of value on the use of all kinds of remedies, and the kinds of insects for which each is beneficial, no part of it is of more interest now than that dealing with the use of Paris green and other arsenical poisons. In spraying work against the codling-moth, canker-worms, etc., Scheele's green, Paris green, London purple, and arsenate of lead are recommended. The first three can be sprayed at the rate of one pound to 150 gallons of water without injury to the foliage of apple-trees and other

hardy-leaved trees. The poison should be first made into a thin paste, in a small quantity of water, and quick-lime added to an amount equal to the poison used, to prevent scalding the leaves. After mixing with the rest of the water it should be strained into the sprayer. While applying the spray it is necessary to keep the mixture stirred constantly to keep the poison from settling. The nozzle to the spray pump should throw the spray as a mist and not in a stream or in drops. For good results, the spray should be applied to all parts of the tree evenly and until the leaves just begin to drip. The first application for the codling-moth should be made just after the blossoms fall. This should be followed by a second application a week later. In order to combat the second brood, the spraying should continue at intervals of ten days or so until the apples are more than half grown. In addition to this the old banding system is recommended. An earlier spraying is usually necessary for the canker-worm.

The bulletin contains information about sprays of all kinds, fumigation, application of dry poisons and powders, etc., altogether making a good, concise manual for the treatment of insect pests. It may be obtained free of charge on application to the secretary of agriculture, and should be in the hands of every wide-awake farmer in the State. N.

The Financial Outlook.

The causes contributing to present conditions, and the causes likely to contribute to reaction from these conditions have nowhere been more clearly stated than in a recent contribution by Mr. P. I. Bonebrake, president of the Central National Bank, of Topeka, in the Kansas City Journal. Mr. Bonebrake says:

"The United States is now enjoying a period of prosperity unparalleled in its history, and more in extent than any other of the great nations of the world. The question arises in the minds of the people whether the prosperity will last. A review of some of the causes of this prosperity may help to determine to some extent, an answer to that question.

"Among some of the more important causes of our prosperity are the following:

"First, the national banks have taken out additional bank currency, between March 31, 1900, and March 1, 1901, to the amount of \$106,966,000.

"Second, the national expenditures on account of the war in Cuba, the Philippines and China for the last three years exceed \$300,000,000.

"Third, the expenditures of England and the Boers, disbursed in the United States for food, horses, mules and war materials will certainly exceed \$50,000,000.

"Fourth, our exports in 1895-6, in excess of imports, were \$75,000,000; in 1896-7, \$100,000,000; in 1897-8, nearly 300,000,000, and in 1898-9, \$615,000,000, an increase unparalleled in the history of the nation.

"Now let us aggregate the items in the above list, that may be considered above normal conditions.

"First, there will be no increase of national bank currency, as United States bonds are too high-priced to admit of a profit in circulation.

"Second, the national expenditures on account of our war in the Orient will be reduced certainly \$200,000,000 in the next two years, as the army is being rapidly reduced, and extraordinary expenditures reduced.

"Third, the close of the war in Africa, which seems near, will cut off the expenditures of the contesting nations, in this country. England has already ordered purchase of meats, mules, and horses, etc., stopped, and an estimated expenditure of \$50,000,000 will be cut off.

"Fourth, in view of unfriendly regulations by governments, all of whom are alarmed at the extraordinary exports of agricultural and industrial productions, by the United States, these exports will be reduced for the coming year to at least \$500,000,000, which is \$200,000,000 above our exports in 1897-8. Already this decrease is showing up, as March, 1901, shows a decrease of \$9,000,000 as compared with March, 1900.

"This will aggregate a reduction of expenditure and a reduction of income of \$475,000,000.

"The British loan of \$250,000,000 has been offered on the market, and the banks, trust and insurance companies are investing largely in that loan. Russia and Germany are also offering their national loans in New York. It is safe to say that \$50,000,000 of American money will go into these loans.

"Bradstreet makes the statement that in the past three months corporations whose capital was \$2,500,000,000 have increased it to five billions, with no intrinsic value added.

"This system of watering stock is not new. Back in the first years of 1870 this same thing was adopted. The New York Central increased its capital from \$27,000,000 to \$112,000,000. The Erie railroad increased its watered stock to an amount equal to the capacity of the printing presses. Other railroads and corporations did the same thing, and the disaster of 1873 was the result. These samples of stock watering were a mere bagatelle to the operations of corporations of to-day. I see that the corporations owning five wells in the new Beaumont oil region are attempting to float a capital of \$50,000,000. A cotton trust with \$500,000,000 is another item. These corporations will attempt to earn dividends upon these increased issues of stock.

"Who will suffer if they succeed? The people at large, as earnings must come from the producers and consumers. If they fail to make money who will suffer? The people who have foolishly put their money in such stocks.

"I do not look for a panic, but I do look for a much closer money market in the next twelve months. If these billions of watered stock fail to make earnings as promised within the next year, in that event there is danger of a panic, as all holders will be anxious to unload, and values will go glimmering.

"We all remember that when Jay Cook failed in 1873, financial institutions went down like ten pins. The same result happened when the Baring Bros. failed in 1893.

"An eminent writer in reviewing the present outlook, says:

"The panic of 1893 was the product of a good many years of rash speculation, but the speculation of those days was in no particular more senseless than that now witnessed. The folly which then characterized a stock market dominated by such watered concerns as the Atchison, Northern Pacific, Reading, General Electric, National Cordage, and other companies of that stripe, fell, as a matter of fact, far short of the folly now witnessed in connection with an endless list of inflated industrial concerns."

"Shall we profit by experience?"

The Spider's Web.

The spider is the original telegraph lineman. Indeed, he is something more. After his lines are stretched, he establishes a "central," to which he runs as soon as any sort of vibration tells him that prey is entangled anywhere in his web. Once at central he listens a minute, then having gathered the direction glides away to weave still further netting of silken web about the luckless wasp or fly that has fallen into his clutches.

"He" would more properly be written "she." As in case of so many insects the female spider is ever so much bigger, more powerful, and more resourceful than the male. Spider courtship is, in fact, a perilous process for the wooer. Unless he shows himself both brave and nimble he is in danger of being eaten before he gets the ear of his fair one. By way of evening matters, after marriage, he shows himself a most heartless parent, seizing upon the clutch of eggs as soon as laid and devouring them before the eyes of their agonized mother. Thus it is that the mother spider keeps a death grip upon her bag of eggs. It is the daintiest fairy silken pocket, varying in shape and size according to species, but always exceedingly handsome and well spun. At the first hint of attack the mother seizes it and hurries away, often spinning a thread as she goes in the effort to escape. She will lose a leg, two legs, even, cheerfully in its defense. That is not, however, so wonderful as the fact that the lost legs very quickly grow again.

The name spider runs back to the Saxon, spinan, to spin, also the root of that austere word spinster. The Dutch name for the insect is cop, or cob, a head, hence cobweb, head or cobwoven, is linguistically allied to the so-famous Spion Kop. But cobweb is by no means so expressive as gossamer or sommerwebben, the summer woven.

In substance spider web is nearly identical with silk. But the spinners of it are far too wise to reel it up into cocoons, which may be plundered by men to feed the desire of the eyes and the pride of life. Web spinning is very wonderful work. The workers indeed deserve high rank as civil engineers, and often dealt with knotty problems in ways bespeaking almost human intelligence, as, for instance, when they

spin loose threads so deftly and with such nice calculation of wind force that the loose ends are carried exactly to the chosen spot, often a couple of yards away, and there anchor themselves of their own motion. It is thus the fairy cables which net trees and boughs, and stretch across all summer paths, are set in place. They are invisible save where the full sun glints upon them, or else when a misty morning strings them with dew drops. None the less they hold firm, and serve as aerial passageways along which the spiders run to and fro, safely and swift. Or else they serve as guys to brace the main web. In spinning the spider shows architectural genius to match her engineering skill.

First she surveys a site, then stretches across it a strong thread. She is not particular about having this first thread very taut—all that can be managed later. She spins another thread from the end of this diagonally to another point, whence she goes to a third anchorage, a fourth, even a fifth. Now she has a clear central inclosed at irregular angles. The inclosing threads have been spun of pure silk.

The next thing is to go over them with a viscid exudation which will make whatever touches them stick. When that is done she spins the web proper, running from side to side, with a thread trailing behind her, until all the web spokes are in place. Before she weaves the rays together with crossing threads, she must know that both they and the anchor threads are dependable. So she runs about, stretching, straining every one, and if it breaks spinning it over. Where there is pronounced slack she either takes it up by splicing a new thread next the center, and fastening it outside, or by attaching light weights, pebbles, bits of stick and so on, to the web's lower edge.

Now begins the last work—running round and round. The crossing threads are spun double—first very fine, then with a coarser ply. At the middle, where the ray threads meet and cross, she either bulks herself a snug station, or after everything is done cuts away the tangle and leaves a small clear space. This is the parlor into which the traditional fly was invited—with disastrous results—but Madame Spider does not habitually sit in it. Instead she lurks out of sight, ambushed at the foot of a ray thread. When vibrations tell of prey, she seeks the parlor, locates the disturbance and straightway goes to see about it. A strong-winged insect, as a wasp or bumble bee, left to himself, will soon break out of her flimsy toils, though he may so entangle his wings in doing it that he never flies again. So she takes no chances. Nimble she runs down the nearest ray thread, spinning as she runs. When she is a little beyond her victim she dexterously loops her new cable around him, draws it taut, and fastens it.

When this has been repeated a half dozen times, the prey bound wing and foot is ready for removal. She fastens a new thread at the parlor, loops it around the fly or wasp, carries it back, and pulls it as tight as she can. Sometimes she moves her prey a whole half inch with one thread. The next thing is to cut away all the outer threads that hold him. This she does quickly, then spins a new cable from the parlor. Thus spinning and cutting, unless the prey be disproportionately big, she brings it at last to the parlor, or very close about it, and there sucks its juices in leisurely content. But if it is too big to be moved, she gnaws off a leg at a time, sucks them, and after a while attacks the carcass. Sometimes, with fierce-stinging insects, she bites them just back of the neck so as to paralyze them.—New York Sun.

HOG CHOLERA CURED.

Dr. J. H. Snoddy, of Alton, Ill., who discovered the cure for hog cholera, has submitted his remedy to the most severe test that can be put on it, by some prominent members of the State Grange, and it is curing a larger per cent of cholera hogs than he claims for the remedy.

A report of these tests and a booklet which fully explains the cure will be mailed free of charge to every hog raiser who will send his name and address. Every hog raiser should write for it, because it has certainly solved the problem of a hog cholera cure.

A Married Man.

Jasper:—Why do you consider Bond-locks so especially lucky?
Jumpuppe:—Why, all his friends had gone back on him before he had succeeded, and he was able to begin life with a clean slate.—Life.

Horticulture.

Work in the Old Orchards of the East.
—Trim, Cultivate, Fertilize.

There is no reason why that old orchard should not be made one of the most profitable portions of the farm. Give the orchard the care and attendance it deserves, or that you give to an equal acreage of any other crop, and you'll be surprised at the results.

Your father, in setting out his trees, probably made the mistake that was commonly made in his day of setting trees too close together. The writer has seen many orchards where trees were not more than 20 feet apart each way, in many instances not over 15.

The up-to-date orchardist believes in setting his trees 30 by 40 feet, or even 40 by 40 feet, and then uses as filling dwarf pears, bringing the trees of the orchard, when all set, down to a distance apart of 20 by 20 feet.

In localities where peaches and plums can be grown many prefer them as fillers to dwarf pears. In any case the trees used for filling give returns before the apples are ready to bear, and go out of bearing and can be cut out at the full spreading of the apple trees.

If your trees were set out under the old plan, my advice to you is, get your next winter's firewood from the orchard by cutting out every other tree. Apple-tree wood, well seasoned, makes an extremely hot fire, and in many instances this is the most profitable use to which it can be put.

Now go into your remaining trees and trim out the tops, trimming from the top down and not from the bottom up. Trimming in this way you need not be much afraid of overdoing the matter. There are few crops grown but need sunshine for their best development; sweetness and quality, as well as color, are developed in apples by letting sunlight strike the fruit. March is a good month for trimming trees.

Most farmers make right here the additional mistake of quitting work after gathering up the wood cut from the trees. Did you notice the growth made by the terminal branches last year? Did it reach at least a foot in length? If not there is abundant evidence that your trees need a fertilizer—food. Stop and think a moment. Your orchard is growing two crops, one of wood and one of fruit, either of them taking from the soil all that any other crop would, and both of them taking from the soil more of the particular elements which they need than any other crop.

Plow your orchard, shallow plowing so as not to greatly disturb roots, and if you have them, broadcast unleached hardwood ashes to the extent of a ton per acre and then harrow them in. Potash and phosphoric acid are the two elements most needed by orchards, and of old orchards which are to be renovated is this especially true. A good fertilizer for orchards can be made by combining nitrates, acid phosphate and potash in such a way as to give 2 per cent nitrogen, 8 per cent phosphoric acid (available), and 10 per cent potash. I should say use from 600 to 800 pounds per acre, and give it all to the trees.

It is wrong to demand of the orchard that it should produce a third crop, no matter what the nature of the third crop might be. Cultivate and harrow, and harrow and cultivate, to keep the ground free from grass and weeds. Do the work with the best tools obtainable for the purpose. I have been looking up the record of the Acme harrow and orchard cultivator, and find that it has been eminently satisfactory wherever used. I expect to give it a thorough trial in the orchards this year.

Now a word about picking and packing fruit. Don't call windfalls hand-picked fruit. See that all fruit worth picking is hand-picked. Sort and keep sorted two and possibly three grades of fruit. Pack each separately. The first grade will sell for enough to give you a handsome profit and pay for all your trouble. The second grade will frequently sell for the price of ordinary, and the third grade will surely sell for all and more than windfalls bring.

If foreign shipments are to be made, be extra careful in the sorting, and use crates, not barrels, for shipping purposes. I find that English markets in particular discriminate against the ordinary barreled American fruit, but they will buy, and pay fancy prices for fancy crated fruit. Even in our home markets there is always a good stiff demand for first-class goods.

In closing, let me emphasize the need of sunlight, cultivation and fertilizers. You must, you owe it to your orchard,

see to it that it has all it needs of good plant food.

Spraying, spraying formulas, and the value of spraying the orchards will be treated in later articles.—J. Reynard Lawrence, in American Cultivator.

The Apple.

Probably of all fruits the apple is most popular and valuable. It is put into more forms of consumption than any other fruit. We have the apple butter, apple sauces, apple pie, the dried apple, and the cider. It is more eaten than any other fruit in uncooked form. Apple cider vinegar is recognized as the best in the world. As wheat is conspicuous among the cereals, so the apple is the chief of fruits. Since cold storage has been introduced fresh apples are available nearly the year round. Nothing in the fruit line will be more profitable.

The apple is historical, scriptural. The Adam's apple in a man's throat, according to a myth, was caused by the eating of the apple by Adam, which was the forbidden fruit. "The apple of his eye" is an expression of the supreme love of a father for his child—it is accepted as the most endearing expression.

It is singular that eating this forbidden fruit introduced sin and death into the world, when in these modern and scientific days consumption of the apple is regarded as promotive of health and longevity. The apple has been honored in all ages, and more especially in England, Canada, and her apple producing dependencies. Many things have been written of that ancient and in some respects heinous fruit, the fatal agent of human woes. Some pleasant things have been said of the apple as a health-giving food. Among these is the following:

"An apple a day Sends the doctor away.

"Apple in the morning Doctor's warning.

"Roast apple at night Starved the doctor outright.

"Eat an apple going to bed Knocks the doctor on the head."

More interesting than these is an old orchard verse, which is was the custom to recite on ancient farms on the plucking of the first ripe apples of the crop. Superstition caused it to be supposed that omission was followed by misfortune of its utterance with quite a little ceremony. The first apple over which it was shaken being presented to a young girl, who halved it and bit it before other fruit was gathered or at least tasted. It ran thus:

"The fruit of Eve receive and claim, And taste the flesh therein 'tis good A wholesome food for man 'tis good That once for man was sin.

"And since 'tis sweet why pluck and eat The Lord will have it so: For that which Eve did grieve, believe, Hath wrought its all of woe— Eat the apple."

The orange and other fruits are delightful, but nothing like the apple. "It will give you health, it will give you wealth ye blooming sons and daughters."

Raise the apple.—Rural Californian.

Profit in Growing Celery with a Mulch and Irrigation.

One of my main money crops is celery. This I grow by a method very similar to the one which has been called the "newest celery culture," says W. H. Jenkins, in Farm and Fireside. The celery was planted on very rich ground in rows, with alternate spaces between them of 12 and 18 inches. After the celery had grown a few inches high a mulch of manure was placed in the 18-inch space, and the blanching boards were set up when the celery was about 1 foot high, so that the rows that were 12 inches apart were between the boards, thus boarding 2 rows together, but keeping the boards apart, so they would not cover the plants until they had grown above the boards, which were about 18 inches wide. The field of celery was irrigated by pouring the water on the mulch of manure between the rows with the hose. The plants on a part of the field have grown more than 3 feet high, and some of them with roots on weighed 8 pounds.

I grow the White Plume and Golden Self Blanching by this method, and the large, well balanced bunches sell very readily for 50 to 60 cents a dozen. My salesman, who goes on the road for me, tells me that there is no competition on such goods, and the price is not questioned. Because of lack of help to do the work a small portion of the field was not mulched and irrigated, and, the season being very dry, the celery made so small a growth that it was

- ARMSTRONG & McKELVY Pittsburgh.
- BEYMER-BAUMAN Pittsburgh.
- DAVIS-CHAMBERS Pittsburgh.
- FAHNESTOCK Pittsburgh.
- ANOHOR Cincinnati.
- ECKSTEIN Cincinnati.
- ATLANTIC New York.
- BRADLEY New York.
- BROOKLYN New York.
- JEWETT New York.
- ULSTER New York.
- UNION New York.
- SOUTHERN Chicago.
- SHIPMAN Chicago.
- COLLIER St. Louis.
- MISSOURI St. Louis.
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IN PAINTING barn or house it is well to remember that Pure White Lead never cracks or peels, but wears away very slowly and gradually, perfectly protecting the wood from decay so long as a vestige of the paint remains upon the surface.

In repainting a building, if Pure White Lead is used in the first instance, no dangerous gasolene paint burner is required to put the surface in good condition for a new coat.

The brands of Pure White Lead manufactured by the National Lead Company, named in margin, are made by the "old Dutch process" of slow corrosion and are the best White Lead that it is possible to manufacture.

For any color or shade required, use NATIONAL LEAD COMPANY'S Pure White Lead Tinting Colors. Pamphlet sent free upon application.

National Lead Co., 100 William Street, New York.

hardly marketable at any price. The only difference in the culture was in the mulching and irrigation. This cost about \$35 an acre, and by expending this additional amount a field of celery was made to pay a good profit that would not have paid the expense of growing without the mulching and irrigation.

CAULIFLOWERS.

Cauliflowers I have always found in good demand and at remunerative prices. The market is not generally overstocked because few people undertake to grow them for market, thinking their culture is too difficult. I have found nothing very difficult in their culture. I give them almost the same treatment as cabbages, except when the plants are about half grown I place a mulch of manure between the rows and then irrigate them in the same way as the celery, and this generally insures the crop. If a drought should come when the plants are heading, the crop would be uncertain, but the mulching and irrigation prevent their suffering for lack of moisture at this time and make the crop a profitable one.

Pretty Evergreen Vines.

EDITOR KANSAS FARMER:—Will you say to your lady readers, whose homes are not already beautified with those two lovely evergreen vines, to send to some friend here, in Washington, and get them, as now is the time to set them out. Both grow here to perfection, and are prominent features of adornment in the homes of the citizens. I refer to the "Running Winter Ivy" and the "Winter Honeysuckle."

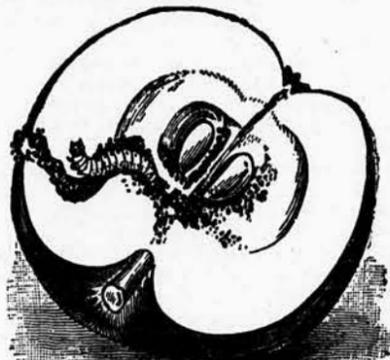
The latter is flowering and fragrant, and if the vine is trained, and fastened, will climb 15 to 20 feet, making a charming porch or trellis shade. The ivy is a wonderful climber, and a few roots set out along side of the house will soon grow and spread fan-like, to cover its sides completely. Both seem to be impervious to frost and cold, and are beautifully green all winter long. They are hardy, and the roots will stand transportation long distances by mail, or otherwise. There are several of these vines growing here, some of which lose their foliage in winter, but the kinds I mention are beautifully green twelve months in the year.

FLETCHER MEREDITH.

434 Fourth St., N. E. Washington, D. C.

Spraying Fruit Trees.

The question of spraying fruit trees to prevent the depredations of insect pests and fungus diseases is no longer an experiment but a necessity.



Our readers will do well to write Wm. Stahl, Quincy, Ill., and get his catalogue describing twenty-one styles of spraying outfits and full treatise on spraying the different fruits and vegetable crops, which contain much valuable information, and may be had for the asking.

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Residence or Business Property for Cash no matter where located. Send description and selling price and learn my successful plan of selling property. W. M. OSTRANDER, 1215 Filbert St., Philadelphia, Pa.

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Free Farms of 160 acres to every male of eighteen years of age, and to every female head of a family. Railroad and Government Lands for sale at low prices. For full information apply to F. Fedley, Superintendent of Immigration, Ottawa, Canada, or to

J. S. CRAWFORD, 214 W. Ninth St., Kansas City, Mo. Special low excursion rates during February, March and April.

FREE TO WEAK MEN.

Any man sending their name and address to W. E. Harter, 321 Ash St. Nevada, Mo., will receive absolutely free, full knowledge of how he cured himself of Lost Manhood, Nervous Debility and its associate diseases, after he had tried all sorts of medicines in a vain effort to be cured.

ATTENTION! Gents' finest blue, heavy overall with bibs. Cannot rip. Any size on receipt of 75 cents. A rare bargain. EAGLE PANTS WORKS, 306 Market St., St. Louis.

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His Customary State.

"Your friend Tackey is 'way off in Honolulu now. Doesn't that surprise you?"

"It does and it doesn't."

"Heard he was going there, eh?"

"No, I didn't know he was in Honolulu, but I knew he was 'way off even when he was here."—Philadelphia Record.

He Knew Better.

"Oh, John," she cried, 'baby's cut a tooth.'

"Aw, go 'way," broke in little Willie, who was playing on the floor. "You can't cut a tooth! You may break it, but you can't cut it."—Chicago Post.

The Apiary.

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

Bees and Blossoms.

Now that the fruit trees are coming into a profusion of bloom, it might be profitable for us to discuss the relations that these blossoms bear to the thousands of insects, and especially bees, which fit from flower to flower in quest of either honey or pollen, says E. Whitcomb, in Twentieth Century Farmer. It might be necessary in the beginning to say that flowers possess sex and are the generative organs of the plants which bear them. No seed is produced unless pollen shed by the anthers is carried to the pistil. Some flowers have anthers and no pistils; these are male blossoms. Others have pistils and no anthers; such are the female blossoms. But by far the greater number are hermaphrodite, that is, carry both sexes within themselves. Female blossoms must have pollen brought to them from male bloom, generally speaking, of the same species, or seed must fall. The wind and insects are the two servants upon which they depend to perform the work. Wind fertilized flowers are, as a rule, scentless, honeyless, and inconspicuous. But flowers that require the aid of insects must invite their visits, hence honey is offered, sweet perfumes attract, and fine colors reveal.

Hermaphrodite flowers need the aid of insects scarcely less than female ones, for although they produce pollen, yet their own pollen is not so desirable as that from other blossoms. In-breeding is for a profound purpose, which should not be touched here, for bidden, and so flowers have frequently about them wonderful devices for making insects, and among them bees especially, the instruments for producing cross fertilization. For an example, take the young bloom of the common sage. The connective is extremely long and turns on a sort of a hinge. As the bee enters she pushes the lower part forward; this brings the pollen, borne by the anther cell, at the other end of the connective, down upon her back. The anthers now wither, and the stigma takes its place, and if we imagine the bee visiting an older blossom we find that the stigma is brought down upon the back of the bee at the same point where the pollen was shed in visiting the younger blossoms and the pollen is transferred to the ripe and sticky stigma. In the strawberry the stigmas are ripe long before any pollen is produced. Bees especially, walking over the bloom seeking honey, carry pollen to the stigma. When fertilization takes place the strawberry develops, but if it fails in part we have there a hard, shrunken, and greenish mass. Any dish of strawberries will give instances of imperfect fertilization, and without this fertilization no crop follows. To produce a single perfect strawberry from 100 to 300 independent fertilizations must be accomplished. In the blackberry or raspberry every little rounded mass has had its stigma which an insect has visited.

In the apple bloom the stigma comes to maturity before the anthers, and bees passing from bloom to bloom carry pollen from the older to the younger bloom and secure fertilization, without which no apples can be produced. An object lesson of the value of bees as fertilizers was told us a few years ago by Senator Swink of Colorado. When the great melon industry was started in the Arkansas Valley the conditions were not favorable. No blossoms set prior to the coming of the prairie sweet bee, and consequently the crop was late and unsatisfactory. Senator Swink bethought himself that the want of fertilization was the prime cause of this trouble, and a small apiary was located in the melon field, and he tells us that the result was more than four times the former crop of melons. The experience of parties who have attempted to produce cucumbers in hot-houses without the aid of bees might with as much propriety be cited. On the great treeless prairies of the West there is manifestly a lack of insects to accomplish this fertilization, and our attention is at once turned to the honey bee, which is out before the first bloom of spring and which works both early and late to accomplish the task.

The Drone Bee.

The drone can easily be distinguished from the queen or worker bees. The body is hardly as long as that of the queen, but much thicker. The drone is not provided with baskets on his legs in which to carry pollen,

neither has he a tongue suitable to gather honey from flowers. If he was left to depend on himself for a living he would certainly starve to death. He appears to be entirely exempt from labor, and his existence depends upon the colony. The young are ready to leave the hive when they are ten or twelve days old, and this they do only on pleasant days, about the middle of the day, and from that to two or three o'clock p. m. They sally forth at the same time of day that the young queens do, and perform the only work for which they are intended, that of fertilizing the queens. From the most careful observations we have, they will often fly long distances, as much as two miles or more. But their return to the hive is seldom deferred over an hour. To give an exact account of the length of time the drones will live is impossible, as they seldom get leave to live more than two or three months, or during the honey season, at the end of which time the bees will destroy them. The only way in which they can be retained is to keep them in a queenless colony. If the bees are deprived of their queen, or if without a laying queen, they will retain their drones, and have been known to keep them during the entire winter. Drones can be reared out of season by stimulating the colony on heavy feeding, and in order to continue raising queens during the entire summer this has to be resorted to, especially if the honey season is of short duration. Drones are not so evenly and distinctly marked as the worker bees. The Italian drones are of all shades, from yellow to almost black. If we were to judge the purity of Italian bees by the color of the drones we would pronounce them hybrids. Hence we have no way to a certainty in testing the purity of Italian drones. But in the worker bee we have and can tell to a certainty by the yellow bands encircling the body. Drones draw heavily on the stores of honey, and contrivances are used to destroy them. Since the use of foundation, it is an easy matter to regulate the number of drones in a colony of bees. If the comb in a colony is all worker comb they can not raise any drones, hence the number of drones may be regulated by the amount of drone comb given them.

Notes for the Apiary.

The most of us like to do things the easy way, and the easiest way to feed bees is to tip up the front of the hive a little above a level and pour in the sirup at the entrance on the bottom board. The bottom must of course be tight to hold the sirup, and not more than a gill put in at one time. This should be done every evening about dark.

Bees must have a convenient watering place, and if some natural source does not furnish it, we would provide it for them. A barrel that will let the water leak just a little is a very good arrangement. Bees will go some distance and get water, and if there is running water within a mile they will get along without our assistance ordinarily, but in early spring when the wind is strong, they are much better served nearer than this.

About the first honey the bees gather is from fruit bloom, and if the weather is good they will store quite a good lot if there are many fruit trees near them. Bees will go a long way to fruit blossoms; I have known them to go 8 miles in the prairie country, and have pretty good evidence that they have gone 10 miles. It is very lucky indeed for both the beekeeper and the owner of orchards that the weather is fine during the blooming season, so the bees can work the blossoms well.

The bees should be well watched during spring time when they are breeding, and if any colonies come near being short of honey at any time, give them a frame of honey from some other hive that can spare it, but be sure not to rob one to supply another. Better feed them some sirup made of sugar, and give them plenty. A colony can store away in the combs during one night, or day (but feed only at night), enough sirup to last them a week or more. They may take a half gallon or less, owing to the strength of the colony. Never feed bees during the day, it matters not whether there is but one colony or many colonies. It causes confusion, and bees frequently get cross and go to stinging anything they come to.

It will pay you to try an extractor, even if you have but two or three colonies. You can get enough extra to pay for an extractor with only a few colonies. Many small bee-keepers would greatly enlarge their crop of honey by extracting, and perhaps have enough honey for home use, that otherwise get

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The altitude varies from 2300 feet at the south to about 4700 at the north. The temperature is equable and the climate unexcelled for healthfulness. This is the best cattle and stock breeding country in the world. Panhandle cattle are of very superior quality, a carload of steers bred on this Ranch having been reserve number for the grand champion carload of fat steers at the International Live Stock Exposition in Chicago, December, 1900. The stock subsists on the pastures the entire year, finding very nutritious food in the cured native grasses. This is an unprecedented opportunity for those desiring to engage in the stock farming business or for investors willing to hold for appreciating values. The small ranchmen in the Panhandle have made more in recent years for the capital and energy invested than the farmers in any section of our country.

The Ft. Worth & Denver City Ry. traverses the north end of this land, the Pecos Valley and Northeastern Ry. (part of the Santa Fe system) the south end, and the Chicago, Rock Island and Pacific Ry. is constructing a line from Liberal, Kas. to El Paso, Texas, which will soon traverse the middle of it.

Title perfect. Will be sold in solid blocks to suit purchaser for cash or very liberal time payment.

To inspect lands call on A. G. Boyce at Channing, a station on the Ft. Worth & Denver City Ry. in Hartley Co., Texas, and for full particulars write him or Wm. Boyce, agent, Amarillo, Texas; or Geo. Findlay, agent, 148 Market Street, Chicago, Ill.

but little of any honey by letting the bees do about as they please. The extractor will not fail to create an interest, and will soon show you what it can do in the way of turning you off honey if you do your part.

It is absolutely useless to undertake to work with bees and succeed without a bee smoker, and especially so with the beginner. Trying to do without a bee smoker in working with bees has discouraged many, and caused them to condemn bees and discard them. Smoke, if we do not have a way to apply it properly, is not of much avail, and this can only be done right with a bee smoker, of which there are many different patterns, but all work well enough to bring the desired results. The smoker need not be put to its use at all times, and but very little at most times, but should always be in readiness.

Give the bees a good, large entrance to the hives in summer. The entrance should be the whole width of the hive in front, and not less than three-eighths of an inch in height, and a half inch is better with very strong colonies. Bees need it for ventilation as well as convenience in getting in and out of the hive. A good, clean, smooth doorway should be in front of every hive, and no weeds or obstructions of any kind should block the way of the bees in entering the same. The ground banked up around the hive is better than boards or any other material, as it does not draw the heat so bad. Hives do not need shade, except in the hottest part of the summer, when during the warmest part of the day a temporary shade may be used. Moderate shade, however, will do no harm, such as shade from trees.

The ladies wonder how Mrs. B. manages to preserve her youthful looks. The secret is she takes Prickly Ash Bittres; it keeps the system in perfect order.

Don't forget to look up our "Block of Two" offer.

Another Napoleon of Finance.

Mr. Jackson (who has been absent for a year)—"What's de chu'ch debt now, Pahson?"

Parson White (proudly)—"Not a cent, sah, an' we hab money in de bank, besides."

Mr. Jackson (astounded)—"Good Lawd! Some millionaire remembah yo' in his will?"

Parson White—"No, sah; I simply did away wif de collection plate altogether an' had a couple of dem jack-pot slot machines placed in de vestibule ob de chu'ch."—Puck.

Generalship.

"I suppose generalship counts in politics, just as it does in the field of battle?"

"I have my doubts about that," answered Senator Sorghum. "There was a time when generals and colonels and those people seemed to have a great deal of a pull. But the trouble with those people nowadays is that so many of them haven't any money worth mentioning."—Washington Star.

Well Merited.

"I understand Miss Goode took piano lessons at the conservatory."

"Oh, yes. She's got a gold medal."

"Yet I was paying a visit at her house last night and she positively refused to play; said she had decided to give it up."

"Yes, that's what she got the gold medal for. The neighbors gave it to her."—Philadelphia Press.

Art's Limitations.

"So that's a photograph of your young man, is it, Clara? He's quite handsome, but what are those two singular pillars he seems to be sitting between?"

"Those are his—er—knees. He's rather tall, and the photographer had to make him sit on a low chair in order to get all of him in the picture."—Chicago Tribune.

WEEKLY WEATHER CROP BULLETIN.

Weekly Weather Crop Bulletin of the Kansas Weather service, for the week ending May 2, 1901, prepared by T. B. Jennings, Section Director.

GENERAL CONDITIONS.

A warm week with a large per cent of sunshine. No rain fell in the southwestern or northeastern counties, while light showers extended from the northwestern counties across the state to the southeastern, being heavier from the northeastern part of Ness to the southwestern part of Lincoln, and very heavy in Kingman and Sedgwick; some hail fell in the northeast part of Ness.

RESULTS.

EASTERN DIVISION.

Wheat is growing rapidly in all parts, and is jointing in Montgomery. Corn planting is well advanced in the southern counties, is progressing rapidly in the central, and has begun in the northern. Oats sowing is finished, the oats are coming up in the central and southern counties, and the earliest sown in the northern. Flax sowing is finished and the flax is coming up. Peaches and plums are blooming in the north and cherries and early apples in the central counties; strawberries in Coffey and crab apples in Shawnee. Pastures are beginning to support stock. Early pota-

MIDDLE DIVISION.

Wheat is in good condition and growing rapidly; it is 6 to 10 inches high in Smith, and is beginning to joint in Republic; the heavy rain, Friday, in Harper County washed out some large fields of wheat in the southern part. Oats sowing is about completed and the oats are generally coming up. Corn planting has progressed rapidly in most of the counties, while in a few it is just beginning; in the southern part of Harper listed corn was washed out or covered up, necessitating replanting; corn is coming up in Cowley and Butler. Alfalfa is growing well and in Sedgwick better than the other grasses. Peach, pear, plum, cherry, and early apple trees are in bloom. Strawberries are beginning to blossom in Reno. In Cowley the early fruits were badly damaged by the frost last week. Pastures are improving and in a few counties are supporting the stock.

Barber.—Vegetation of all kinds growing rapidly; cattle doing well on range; cherries and pears in full bloom; garden truck abundant.

Barton.—Corn planting progressing rapidly; grass commencing to grow; cattle doing well; early apples in bloom.

Butler.—Pastures doing finely; corn planting nearly finished, some corn coming up; wheat, oats, and alfalfa look fine; peaches all right; apples blooming; early gardens look well.

Cloud.—Corn planting nearly done; wheat and oats in fine condition, but must have rain soon; pastures good.

the range grass is quite green. In Finney about 500 acres have been planted to sugar beets. Peaches, apricots, plums, and cherries are beginning to bloom in the northern counties.

Clark.—No rain but a good growing week. Decatur.—Fine week for work; cherries, peaches, and apricots coming into bloom; alfalfa and wheat growing rapidly.

Finney.—A large acreage of forage crops being put in; fruit all right so far; about 500 acres have been planted to sugar beets.

Gove.—Wheat fields green; pasturage for cattle good; grass is fine; oats are up and look well; fruit promises good; corn planting has begun.

Grant.—Fine growing week; grass becoming good; stock improving; peaches in bloom.

Kearney.—Warm and dry, rain needed; alfalfa and grass crops strating; prospects for all fruits promising.

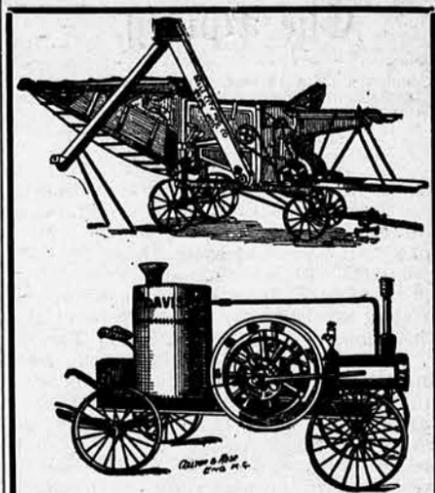
Lane.—Alfalfa doing finely; prairie grass starting nicely and making good pasture; trees getting green; all crops doing well.

Morton.—Fine growing weather; grass growing rapidly and cattle doing well; some plowing and planting, not general.

Ness.—Wheat, rye, and barley look fine; early peaches and wild plums in bloom; corn planting well advanced; large acreage of forage crops being put in; grass starting nicely, stock on range doing well; good rain in northeastern part, a little hail.

Sheridan.—Fall and spring grain doing finely; corn planting general; cherries commencing to bloom; peaches will be a light crop; gardens growing; cattle on grass.

Thomas.—Fine growing week; early wheat and rye cover the ground; late wheat thin and weedy; barley and oats coming up; corn planting in progress; stock thin; alfalfa starting well; apricots in bloom.



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SCALE IN INCHES.

Less than 1/4. 1/4 to 1. 1 to 2. 2 to 3. Over 3. T, trace.

ACTUAL RAINFALL FOR WEEK ENDING APRIL 27, 1901.

toes are coming up in Morris. The ground has become hard on top in some of the counties, in others it is very cloddy, needing a rain to soften it. Chinch bugs were flying in Shawnee and Wilson the last days of the week. Allen County.—Ground too dry to work; flax up; corn planted; pastures beginning to furnish feed. Atchison.—Favorable week for farm work; vegetation starting well; peaches in bloom; corn planting begun; stock going on grass. Bourbon.—Oats and flax seeding completed; one-third of the corn planted; oats and flax coming up; prospect good for all fruits; ground breaks into clods, needs rain. Brown.—Oats sown; corn planting progressing rapidly; wheat looks fine; fruit very promising. Cherokee.—Fine week for work; wheat looks very well; fruit bloom in abundance; farm work progressing well. Coffey.—Farm work progressing rapidly; some corn planted before the rain being replanted; wheat and fruit prospects very good; strawberries are blooming. Crawford.—Good growing week; grass starting nicely; wheat growing rapidly; oats thin and a spotted stand; corn planting progressing as rapidly as ground can be prepared; cherry and apple trees in full bloom. Elk.—Fine week for farm work; apple trees in full bloom; most of the corn in the ground. Franklin.—Oats and flax sowing finished; one-fifth corn ground planted; fruit promises very good. Greenwood.—Half the corn ground planted; apple trees full bloom 27th; grass has grown finely and stock about all turned out. Jackson.—Good working week; some corn has been planted, ground works hard; early sown oats coming up. Johnson.—Good week for work; plowing and corn planting progressing rapidly. Lyon.—Corn planting progressed rapidly this week. Marshall.—Good week for planting and sowing; oats, potatoes, and garden truck nearly all in; much corn planted; grass growing rapidly; fruit trees in full bloom. Montgomery.—A large acreage of corn planted, early plantings had to be replanted; wheat jointing, fine condition; oats doing well; apples in full bloom; cherries blooming; stock on pasture. Morris.—Corn planting progressing rapidly; some early potatoes coming up; wheat and oats growing rapidly; alfalfa very fine. Nemaha.—Good week; potatoes planted; plowing for corn; oats up, a good stand; peach, plum, and cherry trees in full bloom; other trees leafing; wheat fine. Neosho.—All grains needing rain; wheat apparently suffering from fly. Osage.—Ground in fine condition for plowing; corn planting rapidly progressing. Pottawatomie.—Corn planting well begun; apples commencing to bloom; pastures improving. Riley.—Oats need rain; trees in bloom; some corn planted. Shawnee.—Corn planting general; cherries, crab-apples, and plums in bloom; wheat, oats, and grass growing rapidly; cattle on grass southern part; chinch bugs flying on 27th. Wilson.—Corn planting nearly done, beginning to come up; apple trees in full bloom; grass growing; wheat looks fine; chinch bugs flying. Woodson.—Corn planting general, much to be planted; apples blooming; some stock on pasture; wheat and oats doing finely. Wyandotte.—Wheat in fine condition, oats coming up slowly; corn planting just begun; all forest trees very backward.

Cowley.—Wheat fine condition; corn coming up, but a great deal had to be replanted; early fruit badly damaged by last week's freeze, late fruit unhurt. Dickinson.—Wheat making good growth; oats coming up; corn planting begun; peaches in bloom. Edwards.—Grain in fine condition; pear and plum trees heavily laden with bloom; grass growing finely, stock on pasture; a few planting corn. Harper.—Severe rain storm Friday in south part washed out or covered up listed corn, necessitating replanting; some large fields of wheat entirely washed out; where rain was not heavy all crops in good condition. Harvey.—Wheat generally looks fine, a few fields somewhat yellow; oats growing nicely; corn planting nearly finished, some ground too wet yet; fruit seems uninjured. Jewell.—Oats up; wheat and rye growing rapidly; peaches in bloom; some corn planted; grass starting slowly; alfalfa has grown rapidly. Kingman.—Wheat growing very rapidly; cherries in full bloom; grass growing rapidly; stock doing well. Lincoln.—Planting corn rapidly; top of ground is hard; fine growing weather. McPherson.—A week of rapid growth; fruit trees in full bloom; corn planting well advanced; wheat growing rapidly and no insects reported. Ottawa.—Corn planting begun; peach, pear, and plum trees full of bloom; pastures starting nicely; wheat still vigorous, though some complaint of fly and other insects; oats up and doing well. Phillips.—Wheat, rye, and oats are doing finely; alfalfa doing well; stock poor; grass starting well. Pratt.—Good rain 26th-27th; corn planting well advanced; wheat looks fine; fruit appears in good condition. Reno.—Fine growing weather; wheat and alfalfa look fine; oats up well; listing corn progressing rapidly; pears and cherries in full bloom; apples and strawberries beginning to bloom. Republic.—Corn planting has fairly begun; much alfalfa sown this spring; rye and wheat beginning to joint; good growing weather. Rice.—Farm work resumed; cherries, plums, and pears in bloom; some planting corn; potatoes all planted; alfalfa 6 inches high, looks fine; wheat and oats fine. Russell.—Good rain on 27th; spring work well under way. Saline.—Some corn being planted; wheat generally in good condition; peach and plum trees nearly out of blossom; apple trees blooming; alfalfa growing nicely. Sedgwick.—Apple trees in full blossom; pasture grass very late in starting; farm work much behind, ground too wet to work; wheat and oats are looking well; alfalfa growing better than other grasses. Smith.—Wheat growing rapidly, from 6 to 10 inches high; half the corn ground is planted; peaches in full bloom; apples coming into bloom; gardens coming up; trees leafing. Stafford.—Farm work well advanced; wheat doing well; grass nearly sufficient for pasture. Sumner.—Apples in bloom; most of the corn is planted; fine weather has started everything to growing. Washington.—Trees leafing out; peach, plum, and cherry trees in bloom; oats all in and most of it up; getting ready to plant corn.

WESTERN DIVISION.

Wheat is growing and generally is in very good condition. Early sown oats and barley are up. Corn planting is becoming general. Alfalfa is growing rapidly and

The Poultry Yard

Eggs and Their Uses as Food. FARMERS' BULLETIN NO. 128, U. S. DEPARTMENT OF AGRICULTURE.

Perhaps no article of diet of animal origin is more commonly eaten in all countries or served in a greater variety of ways than eggs. Hens' eggs are most common, although the eggs of ducks, geese, and guinea fowls are used to a greater or less extent. More rarely turkeys' eggs are eaten, but they are generally of greater value for hatching.

The eggs of some wild birds are esteemed a delicacy. Plover eggs are prized in England and Germany, while in this country the eggs of sea birds have long been gathered for food. On the eastern shore of Virginia, eggs of the laughing gull are frequently eaten, and the eggs of gulls, terns, and herons were a few years ago gathered in great quantities along the coast of Texas. Thousands of eggs of gulls and murrens have been gathered annually on the Farallon Islands, off the coast of California.*

Other eggs besides those of birds are sometimes eaten. Turtle eggs are highly prized in most countries where they are abundant. They were once more commonly eaten in America than now, possibly owing to the more abundant supply in former times. The eggs of the terrapin are usually served with the flesh in some of the ways of preparing it for the table. Fish eggs, especially those of the sturgeon, are eaten in large quantities, preserved with salt, under the name of caviar. Shad roe is also a familiar example of the use of fish eggs as food. Mention may also be made of the use of the eggs of alligators, lizards, serpents, and some insects by races who lack the prejudices of western nations. However, in general, the term eggs, when used in connection with food topics, refers to the eggs of birds, usually domestic poultry, and is so used in this bulletin.

The appearance of an egg—the shell with its lining of membrane, inclosing the white and yolk—is too familiar to need any discussion. The physiological structure of the egg is perhaps less familiar. A fertile egg contains an embryo and is at the same time a storehouse of material for the development and growth of the young individual from the embryo, until it has reached such a stage that life is possible outside the narrow limits of the shell. The embryo is situated quite close to the yolk, which furnishes the nutritive material for its early development, the white being used later.

For convenience, birds may be divided into two groups: (1) Those in which the young are hatched full fledged and ready in a great measure to care for themselves, and (2), those in which the young are hatched unfledged and entirely dependent upon the parents for some time. Domestic poultry are familiar examples of the first group; robins and sparrows, of the second. The eggs of the two classes differ materially in composition. It seems evident that more nutritive material is needed proportionally in the first case

*The danger of exterminating these desirable birds by gathering their eggs for food has been discussed in the U. S. Dept. Agr. Yearbook, 1899, p. 270.

than in the second, since the growth is continued in the egg until the bird reaches a more advanced stage of development. The quite marked differences in composition of the two sorts of eggs have been shown by chemical studies but need not be referred to further in the present discussion.

Since in all cases the egg is designed to furnish the sole source of material for growth and development of the young individual for a considerable time, it is evident that it must contain all the elements required; that is, what it must be a perfect food for the purpose intended. Milk is another familiar example of animal food containing all the elements of a complete food for the young and growing individual. Milk and eggs are frequently spoken of as perfect foods on this account. The designation is, however, misleading, for although it is true that they contain all the required elements for the growth and maintenance of the young bird or the young mammal, as the case may be, the elements are not in the right proportion for the sole nourishment of an adult individual. The food value of eggs is discussed in greater detail beyond.

Considering both wild and domestic birds, the color of the shell ranges from white through a variety of tints and mottlings. The eggs of domestic fowls are not highly colored; those of hens vary from white to a more or less brown tone, the eggs from a particular breed of hens being always of the same color. The eggs of ducks are bluish white; those of geese are commonly white; the eggs of guinea fowls are light brown, more or less mottled with a deeper shade; and the eggs of turkeys are speckled with a yellowish brown. Any special coloring of eggs of wild birds is commonly explained as a protective measure which has been developed to render the eggs inconspicuous in their normal surroundings, and therefore less easily found by their enemies. Such reasoning would indicate that the observed differences in the color of hens' eggs are due to characteristics which different breeds have inherited from remote wild ancestors. The color of the shells, whatever its reason, is a feature which has some effect on the market value of eggs of domestic poultry, though not upon their food value.

(To be Continued.)

Wild Turkey Gobblers.

For hardy qualities the New York Farmer advocates wild blood. For practical purposes a quarter-wild gobbler will give the best results as a breeder. Part-wild mothers will make their young too wild. To avoid the disadvantages of wild blood, use nothing but quarter-wild males. Quarter-wild birds treated gently are more tame and fearless, but if not, they may be as wild as the wild birds of the woods. If half-wild birds are bred together, the wild blood has most influence and overcomes that of the domestic blood, and the progeny gradually recovers the characteristics of the wild stock. The older the wild-cross birds become, the more they show their wild nature. Wild-cross turkeys, on account of their apparent slender build and blue, peaked head, may be taken for sick turkeys by those unaccustomed to them. Mr. Tucker, of Prudence Island, R. I.,

who was raising several hundred turkeys every year, was induced to raise for the experiment station a lot of three-eighth wild birds for distribution about the State. A three-fourths wild-cross gobbler was mated with his plump, medium-sized hens. He reported at the end of the season that the birds raised were not so tame as those he had previously grown, but that he managed them all right, and that of those hatched more lived than of any other lot he had ever had.

They were larger, more uniform in size, ate heartier, fattened quicker, and were more plump and handsome when dressed. Those distributed about the State have in the hands of experienced and successful growers give satisfaction. Inexperienced raisers have not had much success with them.

A number who liked the appearance of the half-wild birds so much that they were not satisfied with anything else, had reasons to regret they bought them, I believe in every case. They could do nothing with them, and in some cases had to shoot them in order to catch them.

Poultry Talk.

As the time of year is nearing when the people become enthused or rather inoculated with the contagion of the poultry fever, I thought perhaps some words or suggestion from our pen might act as an antidote or panacea for the much-dreaded disease. That there are nice profits to be derived from poultry culture, intelligently conducted, no intelligent person will deny. State statistics based upon the census reports stand out in full evidence of this statement. The paramount cause why so many fail with poultry is due to negligence or carelessness in the management and the lack of proper care for the poultry.

There is perhaps no business more confining and one that requires more constant attention than the poultry business. The adage that "a stitch in time saves nine" is much in evidence with the successful poultryman. There is nothing particularly laborious connected with it, but unless one can be contented and so arrange to be constantly with the poultry they are not apt to succeed. This is why perhaps that the hen is commonly on better terms with farm wives than the granger himself. The hen is very sensitive to neglect and abuse and equally appreciative of kind and gentle treatment. To be brief, to succeed in the poultry business is to love the poultry business and it is the same in all things. To many who become inspired with the beauties and profits of poultry in early springtime and for lack of proper knowledge, stamina and love for the business, they flounder as it were. They came and went with the season, bloomed with the spring and withered with autumn. It is very much like a vessel cast at sea without anchor. There are many, very many hundreds of our would-be poultry people who come and go each season after this manner.

Just for lack of proper plans and sticktoitiveness and notwithstanding all this haphazard poultry culture the sale of poultry and eggs from the United States and Canada, for the year ending, aggregate the enormous sum of one billion dollars. Biddy is a good rustler, isn't she? For the next few months the express companies will carry thousands of eggs for hatching to all parts of the earth and the fancier will anxiously await the coming forth of the tiny balls of fluff and down, then after months of watch and care his attention is directed to preparation for the exhibition where his ambition for the fancy has ripened and flourished in all its fullness. But, alas, if his pretty pets meet with defeat he has not only become contaminated with the chicken fever, but is chicken sick. In fact, too many people who buy stock and eggs are too exacting and expect too much for their money. It is due to people not knowing what they are inquiring for should look like. As a poultry judge would say, we too often don't see what we look at. What the poultry people want is to take more poultry papers and to read them, too. By this means they will be enabled to understand many things they otherwise never would know.—W. A. Bloomer, Lebanon, Kans., in Western Breeders' Journal.

Preserving Eggs.

Recently in Germany twenty methods of preserving eggs were tested. The eggs were kept for eight months with the following results: Those preserved in salt water, i. e., brine, were all bad, not rotten, but unpalatable, the salt having penetrated the eggs. Of the eggs preserved by wrapping in paper, 80 per cent were bad; the same propor-

tion of those preserved in a solution of salicylic acid and glycerine were unfit for use. Seventy per cent of the eggs rubbed with salt were bad, and the same proportion of those preserved by packing in bran, or covered with paraffin or varnished with a solution of salicylic acid and glycerine. Of the eggs sterilized by placing in boiling water for twelve to fifteen minutes, 50 per cent were bad. One half of those treated with a solution of alum or put in a solution of salicylic acid were also bad. Forty per cent of the eggs varnished with water glass, cullodion, or shellac were spoiled. Twenty per cent of the eggs packed in peat dust were unfit for use, the same percentage of those preserved in wood ashes, or treated with a solution of boracic acid and water glass, or with a solution of permanganate of potash were also bad. Some of the eggs were varnished with vaseline; these were all good, as were those preserved in lime water or in a solution of water glass. Of the last three methods preservation in a solution of water glass is especially recommended, since varnishing the eggs with vaseline is time consuming, and treatment with lime water sometimes communicates to the eggs a disagreeable odor and taste.

Water glass or soluble glass is the popular name for potassium silicate or for sodium silicate, the commercial article often being a mixture of the two. The commercial water glass is used for preserving eggs, as it is much cheaper than the chemically pure article.—Farmers' Review.

Food and Feather-Pulling.

We have never seen a flock of fowls that were given to the habit of feather-eating in the summer when they had free range of the farm. Now we have not given our hens free range for many years excepting in the fall, when crops were all harvested, and when we had no winter crops of spinach, kale or dandelions within their travels. But we did not have feather-eating fowls at any time. In winter, when we knew that they could not get bugs, worms, or insects of any kind, they had a daily allowance of beef scraps, about a handful to each quart in the morning mash, and they also had a teaspoonful of salt in each quart or two quarts of warm mash. We never could decide whether fowls pulled feathers because of a desire for the salt taste that they had or from a desire for animal food, of which they found both at the base or root of the feather, but our treatment always seemed to prevent the trouble, and we think it will cure it whenever hens have become addicted to it as a habit. At least when those who had hens pulling feathers asked for a remedy, we have always advised the feeding of salt pork cut into pieces the size of dice as long as they would eat it, and then adding beef scraps and a little salt to the mash and we have heard many say it effected a cure, and none say that it failed. But prevention is better than cure, and we would advise every poultry-keeper to follow this plan, and thus avoid all troubles of this kind. It will not occur in summer, when fowls are ranging where they can get insects, but in a village one can not give fowls unlimited range, but even in small yards with fruit-trees in it they find many insects which is a benefit to them and to the fruit.—Poultry Journal.

Nicknames for Parents.

In our own country "papa" and "mamma" have been in familiar use for some three hundred years at least. They probably reached us from Italy, where their use was of much older date. Dante uses "mamma" in the "Purgatorio." Words of this kind are word, and is of great antiquity. The before they find their way into the written language of books, so that it would not be easy to say when "papa" and "mamma" were first heard among us, but one of the earliest literary traces of their use is to be found in Lyly's "Euphues" (1579), an Italian story crammed with curious verbal absurdities, for the most part copied or imitated from the Italian fashions and affectations of the day. From that time instances of the use of one or the other of the words, or of both, are fairly common.

Another familiar and childish variant is "dad" or "daddy." "Dad," or "tad," as the earlier form is, is a pure Welsh word and is of great antiquity. The Lord's Prayer begins in Welsh with the words "Ein Tad," or "Ein Dad," the first word of the phrase meaning "Our." "Dad," with its derivatives "daddy" and "dada," has long been familiar in the mouths of English children. Like "pap" it was doubtless in use many years before literature too knote of it; still it is found more than two centuries ago in a burlesque poem attacking James II.

POULTRY BREEDERS' DIRECTORY.

LIGHT BRAHMAS—Forty cockerels \$1 each; 10 cockerels, very choice, \$3 each; 30 hens and pullets \$1 each. Eggs in season. Address **F. W. DIXON, Holton, Kansas.**

EGGS—S. C. and R. C. B. Leghorn; and S. Sp. Hamburg. Strictly pure. Shoemaker's strain. \$1.00 per 15. Satisfaction guaranteed. Vira Bailey, Kinsley, Kans.

DARBY FRUIT FARM—White Wyandotte, 15 eggs, \$1; White Holland turkey, 10 eggs \$1.50. Satisfaction guaranteed. Five hundred acres orchard range. Darby Fruit Co., Amoret, Mo.

FOR SALE—Light Brahma eggs from A. J. Silberstein stock, the greatest egg producers, and wins the highest prizes everywhere. Nothing better in the land. Thirty eggs from first pens, \$3; second pens, \$1.50; third pens, \$1. Satisfaction guaranteed. Thanking you for orders, I am, Mrs. John R. Kenworthy, Wichita, Kans.

FOR SALE—Choice Single Comb White Leghorn hens, one year old. \$4 dozen. Ella F. Ney, Bonner Springs, Kans.

POULTRY—Don't order, but write. I have pure bred, from laying strains. It pays to have hens that lay, and that is what I can boast of. Write C. L. Hollingsworth, Coffeyville, Kans.

BLACK MINORCAS—Biggest layers of biggest eggs. Pairs, trios, and breeding pens for sale cheap; 50 cockerels from \$1.25 up; eggs for hatching \$1.50 per 15. Also American Dominiques, Houdans, White Crested Black Polish, White Crested White Polish, and Buff Laced Polish; eggs same price. Fair hatch guaranteed. James C. Jones, Leavenworth, Kans.

PEKIN DUCK EGGS—(Rankin strain) \$1.25 per 12. Also a few drakes for sale. E. W. Adams, Berryton, Kans.

The doggerel contains both "dad" and "dada." Dryden, too, in a translation of the twenty-seventh Idyl, of Theocritus has the line:

But Mam and Dad are pretty names to hear.

There are curious differences in the present day pronunciation of both "dada" and "papa." In the country and country town districts, for instance, of northeast Ireland children of the poorer and less educated classes all say "dada," with the accent on the second syllable. This is true, also, of some of the eastern Irish counties, Kilkenny and others, and the same pronunciation is common in South Lancashire and South Wales and in Durham. Papa, again, becomes "pappa" in Cheshire, where "mamma" is also accented on the first syllable. If we go to the United States, variations in the pronunciation of "papa" may be found in every State. Perhaps the commonest forms are "papa" and "momma." In Indiana, the "Hoosier" State, the most familiar is the very absurd "popsy." The maternal correlative, however, is not "mopsy," though it is hard to say why this has not followed as a matter of course.

The social vicissitudes of "papa" and "mamma" among ourselves have been curious. Their use was formerly entirely restricted to the upper classes; but they gradually filtered down till people of a class which, sixty or seventy years ago, had probably never heard the words, or, at all events, had never dreamed of using them, taught their children to say "papa" and "mamma," as being more "genteel" than father and mother, or daddy and mammy. When the change was effected the upper classes reverted to father and mother and left their imitators to the enjoyment of the ancient baby words. George III, a hundred and forty years ago, addressed his mother as "mamma," but royalty does not affect that mode of speech to-day.

Children of a larger growth have other equivalents for father and mother. Boys who think that they are too big to use the tender sounding names which were familiar to their infancy talk of the "pater" and the "mater." "Governor" is another colloquial variant which has little to recommend it.

Sam Weller addressed his father by that name, but Sam had quite a varied selection of epithets for his revered parent. He addresses him as "old fellow" and "old codger," and announces him to Mr. Pickwick as the "old 'un." When the old gentleman, muffled in ample shawls, makes his appearance, Sam is taken by surprise. "Why, I wouldn't ha' believed it, sir," he cries. "It's the old 'un." "Old one," said Mr. Pickwick. "What old one?" "My father, sir," replied Mr. Weller. "How are you, my ancient?" With which beautiful ebullition of filial affection Mr. Weller made room on the seat beside him for the stout man, who advanced, pipe in mouth and pot in hand, to greet him.

A few shades worse than "governor" is "relieving officer"—a phrase affected by sons who look upon their fathers chiefly as the source of financial supply. There are other similar epithets in use, but they are neither attractive nor dignified. When daddy and mammy or papa and mamma are put aside as too childish, or are discarded for any other reason, there are no parental names which can for a moment compare with the simple but dignified, plain but beautiful Anglo-Saxon words, father and mother.—London Globe.

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In the Dairy.

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

Kaffir-Corn vs. Good Butter.

PRESS BULLETIN NO. 86, FROM FARM DEPARTMENT KANSAS STATE AGRICULTURAL COLLEGE.

The Kansas Experiment Station has received numerous letters from farmers and dairymen asking if Kaffir-corn will produce a poor quality of butter. The cause of these inquiries has been the reading of the following dispatch in our daily papers:

"Lyndon, Kans., March 26.—It has cost the Overbrook Creamery of this place \$400 to learn that the milk from cows fed on Kaffir-corn will not produce good butter. For the past three months the manager of the creamery has been unable to make high-grade butter, and has lost about \$400 on a reduction in the price. He had experts at work to locate the trouble, but they failed. Finally one of the common laborers at the creamery did some experimenting on his own account. He kept the milk separate and churned some of each. He soon found out that the milk from cows fed on Kaffir-corn was what brought down the grade of butter."

If Kaffir-corn, which has been such a good yielder and drought-resister, should be excluded from the ration of the dairy cow many farmers in central and western Kansas would be obliged to quit the dairy business. This would result in a loss of thousands of dollars annually. Fortunately, other experiences do not tally with this report. The Kansas Experiment Station has fed the grain and fodder of Kaffir-corn for months at a time and has never experienced a particle of trouble from its producing a poor quality of butter. During the months of February and March, 1898, the station herd was fed almost exclusively on Kaffir-corn meal for the grain ration. At that time the dairy school was in session and we were making butter from the milk of this herd without the addition of any milk from outside sources. The butter was tested by competent judges and pronounced excellent in quality. Since this time both the grain and the fodder of Kaffir-corn has been used as the whole or part of the ration, the milk being sent to the Manhattan creamery, where it has been saved to use in the making of starters. The milk has also been used each year at the dairy school, both with and without milk from other sources; it has been specially sought for by our cheese boys in their effort to make a first-class quality of cheese and in no instance have we heard a single complaint from the use of the college milk on account of the cows being fed on Kaffir-corn.

When the season is a poor one for the curing of the crop and the grain has been left on the fodder, considerable penetrating dust arises from the crop when handled at feeding time. If the feeding is done just before or at milking time particles of this dust, with all the germs that they carry with them will undoubtedly find their way to the milk-pail and may cause a poor quality of butter. In the instance of the Overbrook Creamery, the manager states that the Kaffir-corn in that part of the country had all been damaged by rains, and where the feed was the poorest the milk from that farm made the poorest butter. Indications point to a slight decomposition of the feed. Hay and fodders of any kind contain large numbers of offensive germs, which if allowed an entrance into the milk-pail and permitted to multiply rapidly, will cause a very undesirable quality of butter.

This experience, together with others with which we are familiar, points to the necessity of feeding after rather than before milking. In this way, Kaffir-corn, properly balanced, is one of our best feeds for a dairy cow and should be grown extensively where corn is uncertain.

D. H. O.

A Letter From J. A. Conover.

Mr. Conover, a young man well known to Kansas dairymen, and who left Kansas last fall in order to superintend the dairy work on D. H. Watson's ranch, Kearney, Nebraska, writes, in a private letter to the dairy editor, matter that is of general interest and extracts of the letter are given here-with:

"We are making some progress up here although it is rather slow. We have had all the cows in the new barn since February 22. We are now milking 120 and get about 2,800 pounds of milk a day. Twenty-five head are heifers with their first calves. I think we have some of the most promising heifers that I ever saw.

Since last I wrote I have been to New York after a car-load of cows; we brought out two car-loads, and will have another one here by the last of this month. Some of these were pure bred, the rest grades. We can bring a car-load just as cheap as we can bring one animal alone.

I stayed ten days in New York, in and around Courtland, which is about thirty miles from Syracuse, south and west. I was driving nearly every day in search of cows. There are a great many nice dairies around Courtland. Nearly all the cows are black and white, and strange to say they did not want to sell any of them. We could buy Jerseys or common red cows much easier and cheaper than we could the black and white. Quite a number ship them to New York City and Hoboken, New Jersey. The man who purchased most of our cows for us runs a dairy and ships his milk to Hoboken; he was clearing about three dollars a day from twenty-three cows; he got three cents net per quart for his milk.

"You asked me to tell you how I liked the Bidwell stall. I am very much pleased with it. If the stall is properly made, and properly adjusted, the cows keep nice and clean. We have some three foot six inch and some three foot three inch stalls. The three foot three inch are a little too narrow for our big cows and too wide for the heifers. The stalls when put in right 'look very nice in the barn."

For Men Who Do Not Like to Milk.

H. J. RICH.

The reason why dairying lags in good times is, that many men do not like to milk. I want to say that these men are missing one of the best chances in the world to learn one of the most important lessons of this life, saying nothing about the money part of it, and that is to control your temper. Most of us know what it is to milk a cow, when the first thing she does is to put her foot in the pail or try to shake hands with you with her right hind foot, or maybe lovingly entwine her tail around your neck so the end just hits your eyes, just now at this particular moment is where it tells whether you are greater than he who controls an army or not. And I might say also whether you will make a successful dairy farmer or not.

I might say that the only way to do on an occasion of this kind is to say, "So, bossy," just as gently as if nothing has happened, go to the corn crib, get a choice nubbun of corn and while on your trip just think that that cow is paying you \$75 or \$80 a year. These thoughts will help to ease your mind of the load it is carrying. Then give the corn to her and talk just as quietly and nicely as you would to your sweetheart, and then sit down to milk her and she will stand; if she doesn't, repeat the dose until she does. I will guarantee that, if you do just as I have said, after it is all over you will have a feeling of satisfaction of controlling your temper that money could not buy. Try it. One thought more, why is it that women are almost invariably successful milkers. I will say the same thing in regard to men; you may see a man have a kicking match with a cow but a gentleman, never. So I would advise the ones who do not like to milk, to learn to do it properly and to fix conveniences to do it in a correct way. Do it as any other work is done on the

farm, and particularly in the day time, and you will find it is no worse to be kicked by a cow than it is by a plow.

Prizes for Jerseys at the Pan-American Exposition.

The American Jersey Cattle Club, at the executive committee meeting last Thursday, voted \$845 for prizes on Jerseys at the Pan-American Exposition. Of this, \$280 is to be divided so as to add fifty per cent to each of the prizes offered by the Pan-American authorities, which aggregates \$560; making a total of \$840 in regular classes.

In addition, \$565 is apportioned for the following special prizes:

For bull with four of his daughters in milk, all owned by exhibitor, and females bred by exhibitor: First prize, \$75; second, \$40; third, \$20; fourth, V. H. C.; Fifth, H. C.

For cow with two of her produce, one of which shall be a female in milk: First, \$35; second, \$20; third, \$10; fourth, V. H. C.; fifth, H. C.

For bull under two years, show with dam or with full sister in milk: First, \$35; second, \$20; third, \$10; fourth, V. H. C.; fifth, H. C.

For bull under two years, with two yearling heifers and two heifer calves, all bred and owned by the exhibitor: First, \$35; second, \$20; third, \$10; fourth, V. H. C.; fifth, H. C.

For herd of five cows in milk, owned by exhibitor: First, \$75; second, \$40; third, \$20; fourth, V. H. C.; fifth, H. C.

For sweepstakes: Best bull any age, \$50; best cow any age, \$50.

Suitable ribbons will be provided by the club for "Very Highly Commended" and "Highly Commended" awards.

No action was taken on the question of a judge for Jersey cattle. The regular meeting of the board of directors will be held April 30, and no doubt the club will make its recommendation at that time.

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Grange Department.

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

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

National Grange.

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

Kansas State Grange.

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

Report of National Grange Committee on Agriculture.

The report of the Committee on Agriculture, adopted by the National Grange at its last session, is worthy of a more extended circulation than it receives in the official publication of the order, and I am glad to have the opportunity to submit it for the careful consideration of the readers of the KANSAS FARMER.

"The foundation of this government is the farm, and whatsoever changes the condition of the farm and the farm home, creates new conditions in the whole structure. Recognizing this to be a fact, it has ever been the object of this organization to so change the condition of agriculture and the agriculturist as to place this fundamental interest on the highest possible plane.

"That evil exists, and that agriculture is bearing some unjust burdens, is admitted by all. These excesses are the direct result of special legislation, and if they are ever removed it must come by and through the same medium, legislation.

"It is not our purpose in this general report to take up the various subjects which demand the earnest efforts of this body as well as the general membership at large. These questions will naturally come before you in the usual way, by the presentation of resolutions.

"We only desire to emphasize the oft repeated truth that the National Grange should be in the advance along the line of progress and reform, never losing sight of the fact that it is a great national organization and as such it must favor that legislation which will be of benefit to the greatest number of our people.

"Each patron may well feel proud of the achievements which have been accomplished by the united efforts of the Grange, but had it accomplished nothing during its thirty-three years of existence except securing, as it has, the establishment of free rural mail delivery, it would have more than paid the American farmer all it has ever cost.

"The Department of Agriculture, another achievement of the grange, is accomplishing a great work, and should be encouraged to go until markets are found that will return a more remunerative price for our surplus products. But besides measures of a legislative character, the National Grange has other important functions, as is beautifully set forth in the declaration of purposes, where it says, 'We shall endeavor to advance our cause by laboring to accomplish the following objects—to develop a better and higher manhood and womanhood among ourselves; to enhance the attractions and comforts of our homes and strengthen our attachments to our pursuits.'

"These are among the fundamental principles of the order. In passing over our great country it is true that we see many, very many, homelike residences, about how often on the contrary do we see the place that some hard-working farmer and his family must call 'home'—a house with four bare walls, no shade or ornamental trees or shrubs to shelter the family from the scorching sun or piercing wind. At such homes there is little time given to recreation or social enjoyment, the children know nothing but drudgery, and no wonder that they leave the farm to seek new environments.

"These are some of the little things that this national organization should consider, for it is upon the little things of life that the weal or woe, not only of the individual, but of the nation, depends. Erect and create pleasant and happy homes throughout the length and breadth of our land, we have laid the foundation for a grand and noble republic—one in which the citizens will at all times work for the best interests of society.

"In urging action along this line your committee does not wish the grange to relax its efforts in other directions, but to the contrary, redouble them, demand-

ing at all times of our national and state legislatures the enactment of such measures as are just and equitable, placing the responsibilities and burdens of government equally upon all classes of citizens.

"Let our motto ever be, 'Equal rights to all, special privileges to none.' Although clouds have hung heavy and still seem to hang over agriculture, they have, we believe, silver linings.

"We have faith in the future. We believe the time is coming when the farmer will have equal opportunities and bear only equal burdens. We also believe that chief among the influences that will bring this result is the great National Order of the Patrons of Husbandry. Fraternal submitted,

"OLIVER WILSON,
"Chairman for the Committee."

"Has-Beens."

I am not quite ready to accept the title of "has-been" yet. I am not quite 79, and I feel about as smart as ever when I think of the splendid record the grange is making. I wish I could write like some of the correspondents of the Bulletin, but my hand is stiffened with toil and will not so readily adapt itself to chirography as formerly, and I am sometimes puzzled to know how you can decipher the rude hieroglyphics that I send you.

But I am a patron and I feel more and more like one as the days go by and I want to help the cause along as fast as possible. I have had the grange harness on now these twenty-five years and have never felt the least galling from the wearing.

I well remember when many thought it was no honor to a man to be identified with the grange. It was not thought to be the right thing, but now everyone seems to court us, especially when they want an office. They seem to think the farmer's vote is of more account, even if cast by a granger.

I well recollect meeting Bro. Giller in Boston, and I hope to meet him again in Lewiston next fall and we will show the young men how the old fellows look. But there are so many I shall not meet again on this side of the great divide that it makes me almost dread going to the National Grange.

If I could meet Bros. Darden, Blanton, Lipscomb, Aiken, and a score of others who have gone over the river, with whom I sat in the National Grange and with whom I took counsel as to the future of the order we all loved so well, it would seem like the old times. But, alas! they have finished their course and laid down the arms of their warfare. It is hard to realize that they are gone, but they have left their mark on the pages of time and we honor their memory. I hope they will not be wanting those to carry on the work after the balance of us old fellows have passed away.

The work is well under way and the course plainly marked out. Stick to the "declaration of purposes" and go forward in the work of upholding the agriculturist first of all, for from him first comes the means of living to us all.—D. H. Thing, Past Master Maine State Grange, in Grange Bulletin.

Grange Headquarters at the Pan-American.

State Master Norris of New York writes: "We are making fine arrangements for grange headquarters at the Pan-American and have entered into arrangements with the Keese Information Company to book and take care of all the patrons and their friends, so as to avoid all schemes to take advantage or be without a place. We expect to have the finest arrangements to take care of the patrons on the grounds. A man can have a place from 75 cents to \$7 per day, just as he chooses. A large attendance of patrons is anticipated. Printed instructions to patrons will be mailed soon.—National Stockman and Farmer.

A Grange by Telephone.

Michigan can't wait to walk, so goes by telephone. The Grange Bulletin tells the following "good one:" Up in Michigan where the grange workers have the will to find the way to overcome all obstacles, they have lately organized a new grange by telephone. Something like 100 families in that section are "on the line." Bad storms and bad roads had upset several attempts to organize. The names were down on the deputy's list, charter fees had been paid. Ad- vices from headquarters said it would be legal. An eve: ing was agreed upon, and the general call of eight bells was given, everyone answering at once. The deputy explained the purpose of the meeting and all reported in favor of organizing by telephone. The roll of charter members was called, and all of-



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ficers duly elected, and committees appointed, and it was named "Telephone Grange." Now will some one from Michigan stand up and tell us how the "grip" can be given by telephone? We have heard of "courting by electricity," "marriage by lightning," and "divorce by-thunder," but this is the first "grange by telephone."

Told by a Chinese Missionary.

"Suddenly, about midnight," says Rev. Frederic Poole in the May "New" Lippincott, "we were startled from our restless slumber by the crashing of some heavy object against the side of our boat, and, seizing my revolver, I sprang on deck, only to find that a belated rice-boat, manned by a drowsy crew of Chinamen, had been allowed to drift down the stream and struck us as we lay hidden beneath the shade of the trees that jutted out from the embankment. Instantly all was confusion, the crews of the boats bitterly denouncing each other, until I succeeded in separating the belligerents and induced the crew of our unwelcome visitor to continue on their way down the river.

"There was no more sleep for us that night. Our secret was out. I had been recognized as a 'foreign devil,' and my worst fears were soon realized.

"With a heavy heart I began to prepare for the conflict that I knew must soon come. Pulling our boat into the middle of the river, we dropped our anchor and—waited.

"Scarcely had the anchor gone overboard, when the yelling of scores of natives told us that the alarm had been given and the hunt for the hated foreigners had begun."

"I looked up, but the sky was cloudless, and through the clear atmosphere the stars sparkled like diamonds.

"Casting my eyes across that dark-blue expanse, my attention was arrested by the fact that the moon had assumed a most peculiar shape, and while this all happened in less time than it takes to tell, yet I distinctly remember the sense of perplexity which this celestial phenomenon produced.

"The sensation was brief, and was

succeeded by a positive certainty. It was an eclipse, thank God! and in this I saw a glimmer of hope.

"I knew with what suspicious dread the Chinese regard a lunar eclipse, and I determined to work upon that well-grounded fear. Stepping forward to the prow of our boat, revolver in hand, I raised my hands to heaven and fired two shots at the moon, and with a hysterical laugh I cried,—
"Look! look there!"

"Involuntarily every face was uplifted. The effect was magical. The shouting ceased, the stones dropped from their hands, and an awesome fear took possession of them. Already the spectacle had been observed by the inhabitants of the town, and the very dogs were responding to their peculiar canine instinct and were furiously barking in harmony with the general consternation. Gongs were being beaten, fire-crackers exploded, and drums of every description belabored with the belief that is universal among the Chinese that it is only noise, and plenty of it, that will frighten away the 'dragon that is consuming the moon.' The deafening din is kept up until the eclipse has passed, and the natives are jubilant in the conviction that they have succeeded in scaring the rapacious monsters away, and under such circumstances who could prove to them that they had not?"

"This was the sight that paralyzed our tormentors, and with terrified haste they slunk away to join the anti-dragon demonstration in the town, while I still remained motionless, with my glistening revolver menacing the moon; and that perfectly natural phenomenon in the heavens, so awe-inspiring to the Chinese, is undoubtedly attributed to me and my noisy revolver to this day by the inhabitants of that inhospitable Chinese town."

...MEN...

Book for men only, explaining health and happiness sent free in plain envelope. Address
CHICAGO MEDICAL INSTITUTE,
110 West Sixth Street, Topeka, Kansas

MARKET REPORTS.

Kansas City, April 29.—Cattle—Receipts, 4,816; calves, 166. The market was weak to 10 cents lower. Representative sales:

Table with columns: No., Ave. Price, No., Ave. Price. Rows include STEERS, TEXAS AND INDIAN STEERS, WESTERN STEERS, SOUTHWEST STEERS, IOWA STEERS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include TEXAS AND INDIAN COWS, OKLAHOMA COWS, IOWA COWS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include NATIVE HEIFERS, NATIVE COWS, NATIVE FEEDERS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include NATIVE STOCKERS, STOCK COWS AND HEIFERS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include Hogs—Receipts, 8,705. The market was 7 to 10 cents lower.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include Hogs—Receipts, 45,000. Mixed and butchers, \$5.60@5.85.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include Sheep—Receipts, 18,000. Good to choice wethers, \$4.55@4.75.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include St. Louis Live Stock, St. Louis, April 29.—Cattle—Receipts, 2,700.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include Hogs—Receipts, 6,000. Pigs and lights, \$5.60@5.75.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include Omaha Live Stock, Omaha, April 29.—Cattle—Receipts, 2,900.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include Kansas City Grain, Kansas City, April 29.—Wheat—Sales by sample on track.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include Chicago Cash Grain, Chicago, April 29.—Wheat—No. 2 red, 74 1/2¢.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include St. Louis Cash Grain, St. Louis, April 29.—Wheat—No. 2 red cash, elevator, 73 1/2¢.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include Hogs—Receipts, 45,000. Mixed and butchers, \$5.60@5.85.

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Kansas City Produce. Kansas City, April 29.—Eggs—Fresh, 10 1/2 doz. Butter—Creamery, extra fancy separator, 18c; firsts, 16c; dairy, fancy, 15c; packing stock, 11c; cheese, northern full cream, 12 1/2c; Missouri and Kansas full cream, 11 1/2c.

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 to try it!

FOR SALE—One Jersey bull old enough for service. Will be sold very low for want of place to keep him. Sired by Stoke Pogis Marigold, whose dam and sire's dam each made over 25 pounds butter in seven days. This ad. is to be in but once. Come quick. W. C. Moore, Junction City, Kans.

FOR SALE—One 4-year-old Jersey bull, full blood, not registered, good individual, sure breeder, will be sold cheap. Inquire of Aug. Bentel, Alma, Kans.

FOR SALE—Pure-bred Shorthorn bulls ready for service. Pure White Holland turkeys, scoring 96 to 98. Also Barred Plymouth Rock cockerels. Address A. C. Rait, Junction City, Kans.

FOR SALE—3 registered Shorthorn bulls, 13 to 24 months old. John J. Thorne, Kinsley, Kans.

FOR SALE CHEAP—Four good registered Galloway bulls, from 1 to 5 years old. J. M. Rhodes & Son, Tampa, Kans.

FOR SALE—Six registered Hereford bulls, 7 to 12 months old; 7 registered Shorthorn heifers, 20 to 24 months old. Louis Hothan, Carbondale, Kans.

FOR SALE—30 Polled Durham heifers, high grade, dark reds, short legs, 3 to 12 months old, price \$20 each. High grade bull calves, not skin to heifers, \$30 to \$50. C. E. Schee, Chambersburg, Clark Co., Mo.

FOR SALE—Five registered Holstein bulls, also high grade Shropshire rams and ram lambs. E. W. Melville, Eudora, Kans.

HORSES AND MULES.

BIG JOHN.—Black jack, 15 1/2 hands high, with white points. Will make the season of 1901 at the gas works, corner Quincy and First streets, Topeka. We think he stands without a peer in this part of the country. Come and see him. Cowdrey & Hull.

FOR SALE—Four big black jacks, cheap for cash; no trade. Address J. P. Wilson, Wellsville, Mo.

LEAVENWORTH COUNTY JACK FARM.—Seven Mammoth jacks for sale. O. J. Corson, Potter, Kans.

HEIRLOOM.—All lovers of fine horse flesh should come and see the great pacing stallion, Heirloom, record 2:15 1/4, before breeding. He will serve the coming season at my new stables, corner First and Quincy streets. R. E. Cowdrey.

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

FARMS AND RANCHES.

ALL KINDS OF LAND FOR SALE.—Farms and ranches, all sizes and prices, in Kansas and Colorado. Some fine ranches here and farther west. E. W. Voorhis & Co., Russell, Kans.

A FINE WHEAT FARM—160 acres, 140 of which is in cultivation and in wheat; fine bottom land, lies nearly level, 3/4 of crop to purchaser if sold soon. Offered at \$1,750, for thirty days only. Write us for our latest list. Little Bros., LaCrosse, Kans.

I WANT TO BUY—A good farm in eastern Kansas. Box 346, Herington, Kans.

160-ACRE improved farm in eastern Kansas; snap; \$16 per acre. G. E. Winders, Ottawa, Kan.

PRATT COUNTY, KANSAS, LANDS FOR SALE.—Write me for a new list of good bargains in farm lands, etc. These lands are moving rapidly and those wishing to buy should apply at once. W. H. Thompson, Pratt, Kans.

One skimming plant for sale, nearly new. W. J. Wedd, Lenexa, Johnson Co., Kans.

UNION PACIFIC LANDS—50 cents to \$10 per acre, in Kansas, Nebraska, Colorado and Wyoming. E. W. Voorhis & Co., Russell, Kans.

100 ACRES \$700.

Texas Co., Mo., 9 miles north of Cabool, on Memphis R. R.; P. O., store, church, and school 1 mile. 80 acres fenced and cultivated, smooth, rich land, 400 bearing fruit trees, fine spring; three room house, large barn; a cosy home. Only \$350 down. Lott, the Land Man, N. Y. Life Building, Kansas City, Mo.

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FARMS AND RANCHES.

EXCHANGE—General merchandise stock consisting of staple furnishing goods, shoes, hats clothing, etc. Stock can be removed or business continued. Stock appraised at about \$2,200. Will accept part land, about \$580 cash required to pay indebtedness. J. D. Rice, Savannah, Mo.

FOR SALE—80 acres improved land, 1 mile from station, 11 miles from Topeka; or will trade for more land further west. Address, Box 14, Wakarusa, Kans.

800 ACRE RANCH FOR SALE—200 acres of it ideal alfalfa land, creek bottom, improved, etc. M. F. Hudson, Osborne, Kans.

FOR SALE OR TRADE—160-acre farm—100 acres in cultivation; 6 room house, outbuildings, 3 miles from Florence, Kans., first-class spring water. Price \$17 per acre. For full particulars, write Jno. Fox, Jr., New Cambria, Kans.

40 ACRES FOR HORSE.

Texas Co., Mo., 40 acres 6 miles from Memphis R. R., fine spring—want single driver or saddle horse \$100. Lott, the Land Man, N. Y. Life Building, Kansas City, Mo.

MISCELLANEOUS.

WANTED—200 or 225 head of cattle to pasture this season; 25 cents per month or \$1.40 per head from May 1st to November 1st. Good spring water and buffalo and blue stem grass. Plenty of water and grass guaranteed. Will be responsible for strayed stock. Six and one-half miles south of Greensburg, Kiowa County, Kans. L. W. Phillips.

TRACTION ENGINE FOR SALE—Cheap. Address, Gresham Bros., Bucklin, Kans.

FOR SALE—Early yellow soy-beans. A. M. Dull, Washington, Kans.

EARLY YELLOW SOY-BEANS FOR SALE—at \$1.50 per bushel. H. G. Mosher, Topeka, Kans.

FOR SALE—Early yellow soy-beans. \$1.65 per bushel. Chas. A. Streeter, Milford, Kans.

WANTED—TRUSTWORTHY MEN AND WOMEN to travel and advertise for old established house of solid financial standing. Salary \$780 a year and expenses, all payable in cash. No canvassing required. Give references and enclose self-addressed stamped envelope. Address Manager, 355 Caxton Bldg., Chicago.

WOOL WANTED—We want, and will pay the highest market price in cash for 500,000 pounds of wool. When you write for prices send us a sample of your wool by mail to Oakland, Kans. Be sure and get our prices before you sell. Topeka Woolen Mill Co.

EARLY YELLOW SOY BEANS—For sale, at \$1.65 per bushel, sacked on track at Vera, Kans. H. H. Clothier.

FOR SALE CHEAP—4 Great Dane pups, 3 months old. Pure-bred, and fine individuals. W. H. Richards, V. S., Emporia, Kans.

500 bushels seed sweet potatoes for sale. Assorted varieties; also plants in season. For prices, address N. H. Fixley, Wamego, Kans.

FOR SALE—Feed mills and scales. We have two 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.

THE Smith Cream Separator.

The only separator on the market that does not MIX the milk and water, and sold under a positive guarantee. More cream, better butter, milk fine, and no labor at all. Get a SMITH. Agents wanted. Mention Kansas Farmer.

Smith Cream Separator Co., 113 W. Locust St., Des Moines, Iowa

BINDER TWINE. FARMERS wanted as agents.

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, Ind.

THE STRAY LIST

Week Ending April 18. Leavenworth County.

CATTLE—Taken up by E. C. Proctor, in Stranger Tp., January 19, 1901, 1 Shorthorn, deep red, fork in left ear; 1 Shorthorn, light red and white, white bar across forehead, fork in left ear; 2 Shorthorns, light red and white, white spot in forehead, fork in left ear; 1 Hereford, fork in left ear. These cattle are all coming 2 years old; 2 steers and 3 heifers.

Cheyenne County—G. A. Benkelman, Clerk. HORSE—Taken up by E. Chaffee, Jaqua Tp. (P. O. Jaqua), March 9, 1901, one gelding, 3 years old, gray; valued at \$30.

HORSE—Taken up by E. Chaffee, Jaqua Tp. (P. O. Jaqua), March 17, 1901, one roan mare, eight years old; valued at \$30.

HORSE—Taken up by E. Chaffee, Jaqua Tp. (P. O. Jaqua), March 17, 1901, one brown mare, fifteen years old, H on right shoulder; valued at \$1.

HORSE—Taken up by E. Chaffee, in Jaqua Tp. (P. O. Jaqua), March 17, 1901, one roan mare colt, one year old; valued at \$10.

HORSE—Taken up by E. Chaffee, in Jaqua Tp. (P. O. Jaqua) March 17, 1901, one bay mare, three years old; valued at \$25.

HORSE—Taken up by E. Chaffee, in Jaqua Tp. (P. O. Jaqua) March 17, 1901, one bay mare, three years old; valued at \$25.

HORSE—Taken up by E. Chaffee, in Jaqua Tp. (P. O. Jaqua) March 17, 1901, one bay gelding colt, one year old; valued at \$10.

HORSE—Taken up by E. Chaffee, in Jaqua Tp. (P. O. Jaqua) March 17, 1901, one bay mare colt, one year old; valued at \$10.

HORSE—Taken up by E. Chaffee, in Jaqua Tp. (P. O. Jaqua) March 17, 1901, one bay mare, eight years old; valued at \$25.

Greenwood County—C. D. Pritchard, Clerk. PONY—Taken up by M. Haskins, South Salem Tp. (P. O. Ivanpah) April 5, 1901, one bay mare pony, about nine years old, branded on left shoulder but not able to describe; valued at \$10.

Cherokee County—S. W. Swinney, Clerk. MARE—Taken up by Mary M. Jones, in Crawford Tp. (P. O. Columbus) on February 11, 1901, one bay mare, 15 1/2 hands high, star in face, shod all round, harness marks showing it had been worked; valued at \$50.

Pratt County—John Mawdsley, Clerk. HORSES—Taken up by J. W. Seals, in McClellan Tp., on March 20, 1901, one spotted sorrel horse, 10 years old; valued at \$15; one brown mare, six years old, valued at \$20; one light bay mare, five years old, with foal, valued at \$20; one horse colt, a bay in color, one year old, valued at \$12.50; one brown horse colt, one year old; valued at \$12.50.

Labette County—E. H. Hughes, Clerk. SOW—Taken up by W. O. Davis, in Hackberry Tp. (P. O. Bartlett), on March 29, 1901, one sow, weight about 250 pounds, black and sandy spotted, short tail, ears torn off, long nose; valued at \$12.50.

Miami County—L. Flanagan, Clerk. SOW—Taken up by W. H. Saunders, in Miami Tp., one black sow, one year old, white spot on forehead; valued at \$11.

Pullman Ordinary Sleeping Cars for Tourists

are the most comfortable, commodious means of travel for large parties, intending settlers, homeseekers, and hunting parties.

These cars are run on the Union Pacific daily from Nebraska and Kansas points, and are fitted up complete with mattresses, curtains, blankets, pillows, etc., requiring nothing to be furnished by the passengers. Uniformed porters in charge of the cars, are required to keep them in good order, and look after the wants and comforts of all passengers. The cars are new, of modern pattern, and are almost as convenient and comfortable as first-class Palace Sleepers.

For full information call on or address, F. A. Lewis, City Ticket Agent, 525 Kansas Avenue, J. C. Fulton, Depot Agent.

Advertisement for CHICAGO HOUSE WRECKING CO. featuring REBUILT MACHINERY, UNLIMITED SUPPLIES at BARGAIN PRICES, and various services like PERFECTION PREPARED FELT ROOFING, RUBBER BELTING, and IRON PIPE.

Subscribe for the Kansas Farmer.

PAGE

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who has been using PAGE Fences for 15 years, and he never swore a swear during that time. His neighbors say so. Send for descriptions.

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ROSS ENSILAGE CUTTERS

Furnished with BLOWER, or CARRIER, as desired. GUARANTEED to be the BEST.

E. W. Ross Co., Springfield, O.
Send for Catalogue No. 49

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KANSAS CITY HAY PRESS CO.

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Build A FENCE

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KIRKWOOD FOR 1900

STEEL WIND MILLS, STEEL TOWERS, PUMPS, and CYLINDERS, TANKS, and FITTINGS OF ALL KINDS

—Address—
Kirkwood Wind Engine Co
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The Celebrated LaDow-Budlong DISC HARROW.

The bumpers in the center take all the side draft. All boxes guaranteed against wear for two years. No other manufacturer will give you such a guarantee. No Neck Draft. No raising up in the center. All steel but tongue. We also make the Celebrated Disc Harrow and Drill throwing the earth all one way. Send for our Big Free Catalogue. It costs you nothing. We sell 1000 things you want at one-half dealer's prices. Address

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The only plow factory in the United States selling direct to the farmer.

WE SAVE YOU MONEY

on every rod of fencing you buy from us. Why? Because we sell you the

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Direct from the Factory at Wholesale. Dealers cannot buy it any cheaper than you can. We save you the middle man's profit. Get a good fence at a low price. Beats a hand fence machine all to pieces. No loose ends to unravel. All closely interwoven—cross wires cannot slip. Write at once for our free circulars and special discounts.

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Heller Chemical Co., Dept. 47, Chicago.
"The Only Mail Order Drug House in the World."

Epworth League California Excursions

Account Fifth International Convention of Epworth League, San Francisco, July 18-21.

San Francisco is an ideal summer resort—weather always cool. Trip thither in summer, across high tablelands of New Mexico and Arizona, is pleasant—air bracing, no oppressive heat or dust. Best way to go is via Santa Fe Route, only line under one management, Chicago to San Francisco; daily trains to California, Fred Harvey meal service, personally-conducted excursions.

On the way visit Indian pueblos and petrified forest, also Grand Canon of Arizona—world's greatest scenic spectacle, now easily accessible.

See southern California—its noted resort hotels, idyllic valleys, majestic mountains, smooth beaches and lovely islands, its old missions, its semi-tropic fruits and flowers, its great oil wells. This important section reached via Santa Fe Route cheaper than most other lines and with greater comfort.

Extremely low round-trip rates; liberal stop-over privileges; choice of routes returning; open to everybody. All ticket agents sell via Santa Fe Route. Descriptive literature on request.

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BULL-STRONG

With our Duplex Automatic Ball Bearing Woven Wire Fence Machine, any farmer can make 100 styles, and from 50 to 70 rods a day of the best and most practical fence on earth at a cost for the wire to make it of from 20 to 30c per rod. We sell Ornamental Fence and Gates, Farm Fence and Gates, Plain, Barbed and Coiled Spring Wire direct to the farmer at wholesale prices. Catalogue free.

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The worst possible spavin can be cured in 45 minutes. Curbs, splints and ringbones just as quick. Not painful and never has failed. Detailed information about this new method sent free to horse owners. Write today. Ask for pamphlet No. 12.

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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.

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HOMES FOR THOUSANDS

in the KIOWA, COMANCHE, AND APACHE RESERVATIONS

which are to be opened for settlement in 1901.

...THE GREAT...
ROCK ISLAND ROUTE

is the only line running to, through, or near the RESERVATIONS.

BUTTER AND EGGS.

Sell to us at highest market prices. We will always pay you more than your local dealer can. We furnish this package to ship in. Also, Cream Separators. Write for prices and particulars.

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ONE FARE FOR THE ROUND TRIP

—VIA—
THE UNION PACIFIC

FOR
Annual Meeting German Baptists (DUNKARDS)
Lincoln, Neb., May 24-31, 1901,

From points east of Denver, Cheyenne, and in Kansas and Nebraska. In order to give those attending this meeting an opportunity to visit points of interest, an open rate of one fare, for the round trip, will be made to all points in Nebraska from Lincoln.

For further information call on F. A. LEWIS, City Ticket Agent, 525 Kansas Avenue; J. C. FULTON, Depot Agent.

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Corner of Monroe Street and Wabash Avenue. Located most central to the wholesale and retail stores, theaters, and public buildings. The prices range from 75 cents and upwards per day. European plan. Visitors to the city are welcome.

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ECONOMY CREAM SEPARATOR.

Pays for itself in a few days. Separates in 40 minutes automatically and gets all the cream. Only costs a trifle and lasts for every farmer buys. Where we have no agent we will send a Separator at agents' prices, to introduce it. Write for catalogue, prices, etc., to

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KANSAS CITY, MO.
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The Centropolis has been remodeled entire and refurnished complete. American and European plan. Prices very reasonable. Take surface cars in front of Union Depot direct to hotel.

RECTOR'S IMPROVED CREAM SEPARATOR

The greatest time and labor saver of the century for butter makers. Separates AUTOMATICALLY in 40 minutes. Gain in cream from 5 cows in one month pays for it. Agents wanted. 100 per cent profit. Women successful as men. For catalogue and wholesale prices address

J. A. RECTOR, T 107 K. & P. Bldg., KANSAS CITY, MO.
Reference: Western Exchange Bank.

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A book describing these lands and conditions of entry, SENT FREE.

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CREAM SEPARATOR FREE

This is a genuine offer made to introduce the Peoples Cream Separator in every neighborhood. It is the best and simplest in the world. We ask that you show it to your neighbors who have cows. Send your name and the name of the nearest freight office. Address

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DEPT. X, KANSAS CITY, MO.

HERMIT REMEDY CO.,
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PILES Sure cure, quick relief, simple treatment. Bed Cross Pile and Fistula Cure and Book mailed free. DR. REA & CO., Dept. 41, Minneapolis, Minn.

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Is being solved in a most satisfactory manner, along the line of the.....

MISSOURI PACIFIC RAILWAY

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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.....

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Direct from maker to user 75-lb. stone, diameter 20 inches, \$2.50. 100-lb. stone, diameter 24 inches, \$3.50. Either size stone mounted, \$1.25 extra. The prices include cost of delivery at nearest railroad station. Write for circular.

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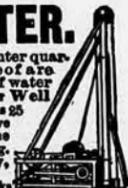
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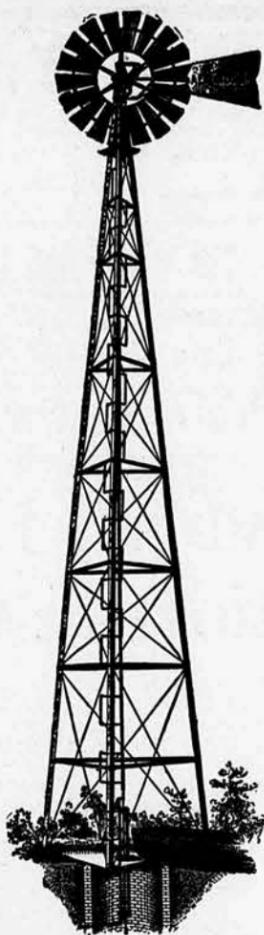
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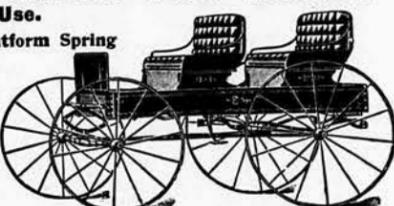
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