

KANSAS FARMER

ESTABLISHED, 1863.
VOL. XXVI, No. 30.

TOPEKA, KANSAS, THURSDAY, JULY 26, 1888.

TWENTY PAGES.
\$1.00 A YEAR.

BREEDERS' DIRECTORY.

Cards of four lines or less, will be inserted in the *Breeders' Directory* for \$15.00 per year, or \$8.00 for six months; each additional line, \$2.50 per year. A copy of the paper will be sent to the advertiser during the continuance of the card.

HORSES.

PROSPECT FARM.—H. W. McAfee, Topeka, Kas., breeder of Thoroughbred *CLYDESDALE* Horses. Horses for sale now. Write or call.

TWO IMPORTED CLYDESDALE STALLIONS will make the present season at my livery stable, No. 916 Kansas avenue, North Topeka. Terms, \$12 to insure. Also have pure-bred Plymouth Rock eggs for sale—price \$1 per setting. William Finch.

M. D. COVELL, Wellington, Kas., breeder of Registered Percherons. Acclimated animals, all ages and sexes. At head of stud, Theophile 2795 (3746), black, imported by M. W. Dunham, and sired by his celebrated Brilliant 1271 (755).

R. I. BLACKLEDGE, Salina, Kas., breeder of Thoroughbred and High-grade Clydesdale and French Draft Horses. Horses for sale. Correspondence solicited.

BOOK OF 500 PAGES—On treatment and care of domestic animals, horses, cattle, sheep, dogs, hogs and poultry, sent free. Humphrey's Homeopathic Veterinary Specifics, 109 Fulton St., New York.

CATTLE.

T. M. MARCY & SON, Wakarusa, Kas., have for sale Registered yearling Short-horn Bulls and Heifers. Breeding herd of 100 head. Carload lots a specialty. Come and see.

H. H. DAVIDSON, Wellington, Kas., breeder of Polled Angus and Galloway Cattle. The largest herd in the State. Choice stock for sale at all times. Correspondence and orders solicited.

F. R. FOSTER & SONS, Topeka, Kas., breeders of *HEREFORDS*. Bulls for sale.

OAKWOOD HERD OF SHORT-HORN CATTLE—All recorded. Choice-bred animals for sale. Prices low. Terms easy. Imported Earl of Gloster 74522 heads herd. C. S. Eichholtz & Son, Wichita, Kas.

ZINN & LACEY, Importers and breeders of *HOLSTEIN-FRIESIAN CATTLE*. Box 22, Topeka, Kas. Stock of all kinds for sale. Write for wants.

E. S. SHOKEY, Hereford Cattle, Topeka, Kas. **Bulls \$50 to \$100**

GEO. M. KELLAM & SON, Richland, Shawnee Co., Kas., breeders of Galloway Cattle and Hambletonian and Morgan Horses.

A. B. SPENCER, Rockport, Ohio, breeder of Ayrshire cattle. Registered stock of deep milking strains. Prices to suit the times.

J. ANDERSON, Dover, Shawnee Co., Kas., breeder of *HOLSTEIN-FRIESIAN CATTLE*. Thoroughbred bulls and heifers, also grade heifers, for sale at low prices.

SPRING GLEN HERD OF SHORT-HORN CATTLE, Buff Cochins Poultry and choice Peafowls. Young stock and birds for sale. Eggs in season. Address L. A. Knapp, Dover, Kas.

F. MOHARDY, breeder and importer of *GALLOWAY CATTLE*, Emporia, Kas. Young stock for sale at reasonable prices. Liberal credit given if desired. Mention *KANSAS FARMER*.

JERSEY CATTLE—A. J. C. C. Jersey Cattle, of noted butter families. Family cows and young stock of either sex for sale. Send for catalogue. C. W. Talmadge, Council Grove, Kas.

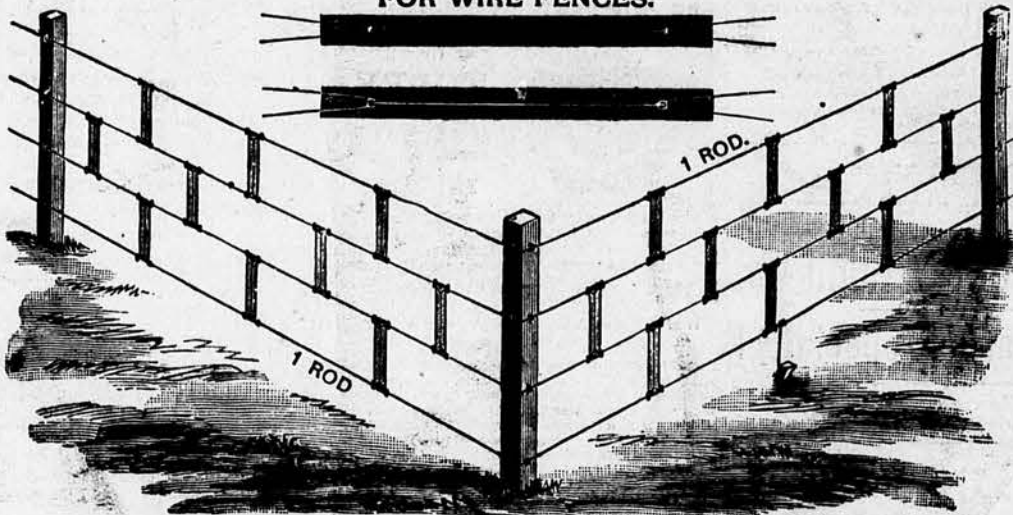
J. S. GOODRICH, Goodrich, Kas., breeder of Thoroughbred and Grade Galloway Cattle. Thoroughbred and half-blood Bulls for sale. Sixty High-grade Cows with calf. Correspondence invited.

M. S. BABCOCK, Nortonville, Kas., breeder of *HOLSTEIN-FRIESIAN CATTLE*. Inspection and correspondence invited.

J. S. HAWES, Colony, Kas., importer and breeder of *Hereford Cattle*. Lord Wilton, Grove 3d and Fortune families. One of the largest and oldest herds in the country. Send for catalogue.

W. E. GOULD, Marshall, Mo., breeder of Thoroughbred and Grade *Holstein-Friesian Cattle*. Calumet 3582 H. H. B., heads herd—a choice butterbred Netherland bull. Have now in my herd imported cows and strains from Aaggie, Texalar, Astreas, Duchess of York, Coronet and Barent. Choice young stock of both sexes for sale.

STEEL STAY GUARDS FOR WIRE FENCES.



MANUFACTURED BY THE WIRE FENCE IMPROVEMENT CO., 325 DEARBORN ST., CHICAGO.

[SEE ARTICLE ENTITLED "WIRE FENCE GUARDS."]

CATTLE.

DR. W. H. H. CUNDIFF, Pleasant Hill, Mo., proprietor of **ALTAHAM HERD** and breeder of fashionable Short-horns. Straight Rose of Sharon bull at head of herd. Fine show bulls and other stock for sale.

CATTLE AND SWINE.

J. L. TAYLOR & SON—Englewood Stock Farm, Lawrence, Kas., breeders of *Holstein-Friesian Cattle* and *Poland-China Hogs*. Stock for sale. Terms easy.

J. J. MAILS, Manhattan, Kas., breeder of *SHORT-HORN CATTLE* and *BERKSHIRE SWINE*. Some fine young bulls and choice pigs for sale now.

M. H. ALBERTY, Cherokee, Kas.—Registered *Holstein-Friesian Cattle*—single or in car lots, recorded *Poland-China Swine*, *Pekin Ducks*, *Wyandotte*, *Brown Leghorn*, *Plymouth Rock fowls*. Eggs for sale.

SWINE.

POLAND-CHINA SWINE—From No. 1 breeding stock. All stock recorded or eligible to record. Personal inspection solicited. Correspondence promptly answered. Satisfaction guaranteed. Henry H. Miller, Rossville, Kas.

F. M. LAIL, Marshall, Mo., breeder of the finest strains of *POLAND-CHINA HOGS* and *PLYMOUTH ROCK CHICKENS*. Eggs in season, \$1 for 13. Catalogue free.

F. W. ARNOLD & CO., Osborne, Kas., breeders of pure-bred *Poland-China Swine*. Breeders all recorded in Ohio Record. Young stock for sale. Also *Langshan Fowls* and *Pekin Ducks*. Eggs in season. Write for prices.

H. C. STOLL, Beatrice, Neb., breeder and shipper of the most fancy strains of *Poland-China*, *Chester White*, *Small Yorkshires* and *Duroc-Jersey Hogs*. Special rates by express companies. Satisfaction guaranteed in all cases.

REGISTERED POLAND-CHINA SWINE—Of the most fashionable families, at low rates. Pigs ready to ship May 1. Also, pure *Light Brahma Fowls*. Wm. Plummer, Osage City, Kas.

PEDIGREED POLAND-CHINAS—At prices that will sell them. Well loaded with *Corwin blood* and other popular strains. Marion Brown, Nortonville, Kas.

POLAND-CHINA SWINE—If you want the best that money and experience can buy, send to me. The best herd in Kansas. Satisfaction guaranteed. Special rates by express. G. W. Sloan, Scottsville, Kas.

V. B. HOWEY, Topeka, Kas., (Box 103), breeder and shipper of the most fancy strains of *Thoroughbred Poland-China Swine*. *Light Brahma* and *White Leghorn* eggs, \$1.25 per 13.

OUR ILLUSTRATED JOURNAL—A full and complete history of the *Poland-China Hog*, sent free on application. Stock of all ages and conditions for sale. Address J. & C. STRAWN, Newark, Ohio.

SWINE.

W. W. WALTIRE, Carbondale, Kas., breeder for eight years of *Thoroughbred CHESTER WHITE HOGS* and *SHORT-HORN CATTLE*. Stock for sale.

Z. D. SMITH, Greenleaf, Kas., breeder and shipper of fine *Poland-China Swine*. Also *Jayhawk* strain of *Plymouth Rock Fowls*. Write for prices.

ROBERT COOK, Iola, Kas., thirty years a breeder of *Poland-China Swine* of the very best and most profitable strains. Breeders registered in O. P. C. R.

STEWART & COOK, Wichita, Kas., breeders of *Poland-China Swine*. Stock of all ages for sale at bottom prices.

J. S. HAWES, Colony, Kas., breeder of *Poland-China Swine*. Lord *Corwin 4th*, sweepstakes boar at Chicago and St. Louis, and *Moorish King*, head the herd.

SHEEP.

I. J. WILLIAMS & SONS, Muncie, Ind., importers and breeders of choice *Shropshire Sheep*. Large importation August 1, 1888, consisting of show sheep and breeding ewes. Write before buying elsewhere.

SHROPSHIRE-DOWNS—Ed. Jones, Wakefield, Clay Co., Kas., breeder and importer of *Shropshire-DOWNS*. A number of rams and ewes for sale, at lowest prices according to quality.

POULTRY.

COLLEGE HILL POULTRY YARDS—Pure-bred *S. C. B. Leghorns*, *Houdans*, *Wyandottes*, *Light Brahmans* and *Langshans*. Chickens for sale. Send for prices. W. J. Griffing, Manhattan, Kas.

M. F. TATMAN, Rossville, Kas., breeds *Poland-China Swine*, fancy *Poultry*, and best strains of *Bees*. We invite comparison and inspection when convenient; otherwise, correspondence promptly answered.

PURE-BRED PLYMOUTH ROCKS—Of the finest Ohio strains, at hard-time prices. Fine young cockerels, \$2 each; one cockerel and two hens, \$4.50. Eggs, per 13, \$1.50. Your order will be filled promptly. Address Mrs. M. E. Fitzgerald, Atlanta, Cowley Co., Kas.

IF YOU WANT—Eggs or stock from prize-winning *Light* and *Dark Brahmans*, *Langshans*, *Plymouth Rocks*, *Wyandottes* and *Pekin Ducks*, at reasonable prices, send for circulars. C. A. Emery, Carthage, Mo.

TOPEKA WYANDOTTE YARDS—A. Gandy, 624 Kansas avenue, Topeka, Kas., breeder of *White* and *Laced Wyandottes*. *White Wyandotte* eggs, \$4 per 13; \$7 per 26. *Laced Wyandotte* eggs, \$3 per 13; \$5 per 26. My yards are located two miles south of State house, on six acres of ground. I have six pens of *Wyandottes*. My birds are as fine as anybody's and mated for the best results. I have a few cockerels for sale cheap.

PLYMOUTH ROCKS, WHITE P. ROCKS, ROSE-comb Brown and *White Leghorns* and *Black Javas*. Fowls and eggs for sale. Large illustrated catalogue and price list free. Will send a beautiful little chromo of a pair of *P. Rocks* for 4 cents in stamps. Address Geo. T. Pitkin, 61 Washington street, Chicago, Ill.

POULTRY.

N. B. NYE, Leavenworth, Kas., breeder of the leading varieties of *Land and Water Fowls*. *DARK BRAHMAS* a specialty. Send for Circular.

EUREKA POULTRY YARDS—L. E. Pixley, Eureka, Kas., breeder of *Wyandottes*, *B. B. R. Games*, *P. Rocks*, *B. and W. Leghorns*, *Buff Cochins* and *Pekin Ducks*. Eggs and birds in season. Write for what you want.

OAKLAND GROVE POULTRY YARDS—F. A. A'Neale, Topeka, Kas., breeder of *Brown Leghorns*, exclusively. Eggs \$1.50 per 13.

HENRY DAVIS, Dyer, Indiana, breeder of high-class poultry. Twelve varieties. Prices reasonable. Stock for sale at all times. Eggs in season. Send stamp for circular. Mention *Kansas Farmer*.

SHAWNEE POULTRY YARDS—Jno. G. Hewitt Prop'r, Topeka, Kas., breeder of leading varieties of *Poultry*, *Pigeons* and *Rabbits*. *Wyandottes* and *P. Cochins* a specialty. Eggs and fowls for sale.

JOHN C. SNYDER, Constant, Gowley Co., Kansas, breeds *PLYMOUTH ROCKS* exclusively. No stock for sale. Eggs in season. Write for wants or send for circular, and mention this paper.

I. H. SHANNON, Girard, Kas., breeder of *Wyandottes*, *P. Rocks*, *S. C. Brown Leghorns*, *Black Cochins*. Eggs, \$2 for 15; \$3.50 for 30. *Toulouse Geese* eggs, \$2 for 7; *Pekin Duck* eggs, \$2 for 10.

PLYMOUTH ROCK COCKERELS—Two dollars each; three for \$5. *Plymouth Rock* and *Pekin Duck* eggs, \$1 per 13. Mark S. Salisbury, Independence, Mo.

CHAS. H. HARTUNG, Van Horn, Iowa, breeder of *Silver Wyandottes*, *Plymouth Rocks*, *Light Brahmans*, *Partridge Cochins* and *S. C. Brown Leghorns*. Express charges paid on eggs for hatching to all points in the U. S. Send for circular—sent free.

MISCELLANEOUS.

FOR SALE—English Ferrets. Price, white, \$5 each or \$9 per pair; brown, \$4.50 each or \$8 per pair. W. J. Conner, M. D., Labette City, Kas.

F. H. ARMSTRONG, VETERINARY SURGEON. Graduate of Ontario Veterinary College. All surgical operations scientifically performed. Charges reasonable. Office—214 6th Ave. W., Topeka, Kas.

S. A. SAWYER, Fine Stock Auctioneer, Manhattan S. Riley Co., Kas. Have *Coats' English*, *Short horn*, *Hereford*, *N. A. Galloway*, *American Aberdeen-Angus*, *Holstein-Friesian* and *A. J. C. C. H. R. Herd Books*. Compiles catalogues.

Holstein-Friesian Cattle.

I have a choice herd of these justly-celebrated cattle of all ages. Also some nice grades, for sale at reasonable prices. Personal inspection invited. Call on or address
JNO. D. PRYOR,
Winfield, Cowley Co., Kas.

TOPEKA : BUSINESS : INDEX

Of the Representative and Best Business Firms of the Capital City of Kansas.

The KANSAS FARMER endorses the following business firms as worthy of the patronage of parties visiting the city or wishing to transact business by mail:

H. K. TEFFT, M. D.,
PHYSICIAN AND SURGEON.
Office—212 West Eighth street, Topeka, Kas.

H. C. ROOT, Attorney at Law. Practices in the Supreme Court and U. S. Courts. Collections a specialty. 110 Sixth street West, Topeka, Kas.

HENRY W. ROBY, M. D.,
SURGEON.
General Manager Kansas Surgical Hospital Association.

OFFICE:—118 Sixth Avenue W., TOPEKA, KAS.

JORDAN & CLARK,
(Successors to GEO. W. WATSON),
Real - Estate - Agent,
Southwest corner Sixth and Kansas Avenues,
TOPEKA, KANSAS.

Improved Farms, City Property, Improved and Unimproved Lands in all parts of the State, on Long Time and Easy Payments.

TOPEKA
Investment & Loan Co.
Farm Loans a Specialty!

Low rates of Interest. Money paid when papers are accepted.

RED STAR
Real Estate and Loan
AGENCY.

521 Kansas Ave., Topeka, Kansas.

Choice Bargains in City, Farm, Suburban and Country Property.

If you wish to sell or buy real estate of any kind in any part of the county, this agency will be pleased to correspond with you.

W. F. FILE, Manager.

FARM, AGRICULTURAL
AND PASTURE
LANDS

For sale in different portions of Kansas.

Also property in Topeka, and lots in Knox's First, Second and Third Additions to Topeka, on easy terms.

INVESTMENTS MADE FOR PARTIES.

Interest paid on Time Certificates of Deposit. Call on or write to

JOHN D. KNOX & CO.,
INVESTMENT BANKERS,
620 Kansas Avenue Topeka, Kansas.

WONDERFUL RUSH!
TO THE
SUNFLOWER STATE

The ROCK ISLAND LAND OFFICE is making its customers happy every day by locating them on valuable farms or elegant city property.

LANDS IN THE FAMOUS

Golden Belt of Kansas
A SPECIALTY.

Property in every section of the State for sale or exchange. Low prices, moderate interest and long time if desired. Our property is better and safer for investment than GOVERNMENT BONDS.

Write for lists or call at the

ROCK ISLAND LAND OFFICE,
WILLIAM ALLOWAY & CO.,
323 Kansas Ave., TOPEKA.

For reliable information in regard to Real Estate in Topeka and Kansas, write to or call on

STRICKLER, DANIELS & POUNDS,

515 KANSAS AVENUE, TOPEKA, KAS.

They are exclusive agents for many of the best additions to the city of Topeka, and have a large list of desirable Farms, Ranches and Tracts of Land all over the State, and inside City Property.



We are Headquarters for all kinds of **MUSICAL MERCHANDISE**

TERMS CASH, OR EASY PAYMENTS.
E. M. MILLER & CO., TOPEKA, KAS.
821 Kansas Avenue.

DRS. MULVANE, MUNK & MULVANE,



Make a specialty of all Chronic and Surgical Diseases. We have practiced medicine and surgery here for fifteen years, and during that time have treated successfully hundreds of chronic cases which had resisted the skill of local physicians.

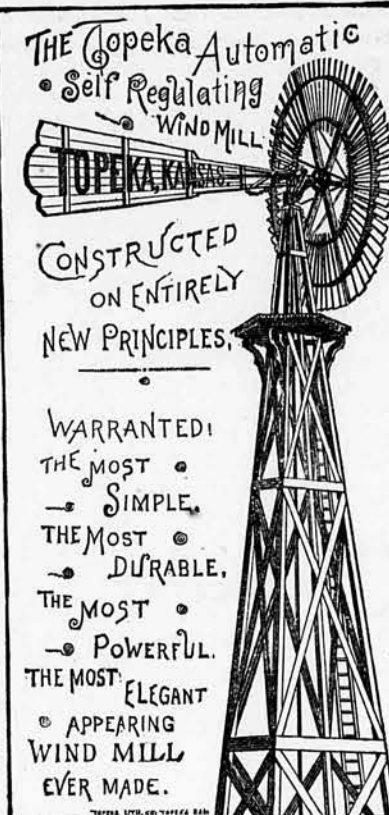
WE CURE ALL FORMS OF CHRONIC DISEASES,

Remove tumors, cure cancers without the knife, cure piles without knife or ligature. ALL DISEASES peculiar to women speedily and successfully treated. We remove tape worm entire in from two to four hours. If you have any chronic or private disease, you will find it to your interest to write us. Correspondence free and confidential.

Refer by permission to Bank of Topeka; John D. Knox & Co., Bankers, Topeka; Citizens Bank, North Topeka; American Bank, North Topeka.

Send for printed list of questions.

DRS. MULVANE, MUNK & MULVANE,
110 W. 6th St., Topeka, Kas.



The Topeka Wind Mill Manufacturing Co., manufacturers of Solid and Sectional

WIND MILLS: ALSO POWER MILLS OF ALL SIZES, PUMPS, TANKS, PIPE AND FITTINGS

Of all descriptions. We guarantee satisfaction and invite correspondence. Write for Price Lists, etc. Reliable Agents Wanted.

TOPEKA WIND MILL MANUFACTURING CO.,
Topeka, Kansas.

JOB PRINTING

FOR FARMERS! & FOR STOCKMEN!
FOR NURSERYMEN!

Every description of Job Printing neatly and promptly executed. Our facilities are the best and workmanship of the highest grade. Full line of cuts of all kinds of stock. Write for estimates on what you want.
DARLING & DOUGLASS,
Job Printers, Topeka, Kas.

TOPEKA SEED HOUSE.

Established 1878.

All Kinds of Field, Garden and Flower Seeds.

We have a fresh stock of reliable Seeds, and a full stock of all kinds of Field Seeds:

RED CLOVER, ALFALFA CLOVER, KENTUCKY BLUE GRASS, ORCHARD GRASS, ENGLISH BLUE GRASS, RED-TOP, MILLET, BROOM-CORN, CANE SEED.

SEED CORN PURE NORTHERN-GROWN 90-DAY CORN, SEED POTATOES, all kinds of useful Field and Garden Seeds, at Wholesale and Retail. Also a full line of GARDEN IMPLEMENTS. Send for Catalogue. Address

DOWN'S ELEVATOR & SEED CO.,
304 KANSAS AVENUE, TOPEKA, KANSAS.

THE LEADING
Furniture House
OF KANSAS.

It is to your interest to get our prices before you buy. Special inducements offered to out-of-town purchasers.
REED & SON, 510 Kansas Ave., Topeka.

Agricultural Books.

The following valuable books will be supplied to any of our readers by the publishers of the KANSAS FARMER. Any one or more of these standard books will be sent postage paid on receipt of the publisher's price, which is named against each book. The books are bound in handsome cloth, excepting those indicated thus—(paper):

FARM AND GARDEN.
Allen's New American Farm Book.....\$2.50
Barry's Fruit Garden.....2.00
Broome's and Broome's......50
Flax Culture (paper)......30
Fitz's Sweet Potato Culture......60
Henderson's Gardening for Profit.....2.00
Hop Culture (paper)......50
Onions: How to Raise Them Profitably (paper).20
Silos and Ensilage......50
Stewart's Irrigation for the Farm, Garden and Orchard.....1.50
Tobacco Culture: Full Practical Details......25

FRUITS AND FLOWERS.
Elliot's Hand-Book for Fruit-Growers.....1.00
Every Woman Her Own Flower Gardener.....1.00
Fuller's Small Fruit Culturist.....1.50
Fuller's Grape Culturist.....1.50
Henderson's Practical Floriculture.....1.50
Parsons on the Rose.....1.50

HORSES.
Dadd's Modern Horse Doctor.....1.50
Jennings' Horse Training Made Easy.....1.00
Horse-Breeding (Sanders).....2.00
Law's Veterinary Adviser.....3.00
Miles on the Horse's Feet......75
Woodruff's Trotting Horse of America.....2.50
Youatt & Spooner on the Horse.....1.50

CATTLE, SHEEP AND SWINE.
Allen's American Cattle.....2.50
Coburn's Swine Husbandry.....1.75
Dadd's American Cattle Doctor.....1.50
Harris on the Pig.....1.50
Jennings' Cattle and Their Diseases.....1.25
Jennings' Sheep, Swine and Poultry.....1.25
Randall's Sheep Husbandry.....1.50
Stewart's Shepherd's Manual.....1.50
The Breeds of Live Stock (Sanders).....3.00
Feeding Animals (Stewart).....2.00

MISCELLANEOUS.
American Standard of Excellence in Poultry.....1.00
Wright's Practical Poultry-Keeper.....2.00
American Bird Fancier......50
Quincy's New Bee-Keeping.....1.50
Dogs (by Richardson)......60
Atwood's Country Houses.....1.50
Barns, Plans and Out-buildings.....1.50
Arnold's American Dairying.....1.50
Fisher's Grain Tables (boards).....1.00
Fuller's Forest Tree Culturist.....1.00
Willard's Practical Butter Book.....1.00
Willard's Practical Dairy Husbandry.....3.00
Practical Forestry.....1.50
Household Conveniences.....1.50
Dodd's American Reform Horse Book.....2.50
Jennings on the Horse and His Diseases.....1.25
Profits in Poultry.....2.00
Frank Forrester's Manual for Young Sportsmen.....2.00
Hammond's Dog Training.....1.00
Farm Appliances.....1.00
Farm Conveniences.....1.50
Household Conveniences.....1.50
Husman's Grape-Growing.....1.50
Quinn's Money in the Garden.....1.50
Reed's Cottage Homes.....1.25
Dogs of Great Britain and America.....2.00
Allen's Domestic Animals.....1.50
Warington's Chemistry of the Farm.....1.00
Williams' Window Gardening.....1.50
Farm Talk (paper)......50
American Bird Fancier (paper)......50
Wheat Culture (paper)......50
Gregory's Onions—What Kind to Raise (paper).20
Gregory's Cabbages—How to Grow Them (paper).30
Our Farm of Four Acres (paper)......30
Cooked and Cooking Foods for Animals (paper).20
The Future by the Past, by J. C. H. Swann.....1.00

Address **KANSAS FARMER CO.,**
TOPEKA, KANSAS.

"Every Soldier's honorable discharge should be his pension certificate."

IS THE MOTTO OF THE

Weekly Knight & Soldier,

The official organ of the G. A. R., and its auxiliary societies,

Published by **M. O. FROST, Topeka, Kas.**

It is a genuine old soldier's paper, and fights for their rights. Terms, \$1 a year. Our readers are invited to subscribe. The Knight and Soldier and the Kansas Farmer, one year, for \$1.75. Now is the time to commence.

The Western School Journal

TOPEKA, -:- KANSAS.

It is the official organ of the State Superintendent, containing the monthly decisions of that office of the Attorney General, and the Supreme Court on all matters relating to schools.

It prints and answers the Quarterly Examination Questions of the State Board of Education.

Its official, editorial, contributed and selected matter make it indispensable to school officers and teachers. Persons expecting to teach should subscribe.

School officers are authorized to subscribe for their districts.

\$1.25 per year. Clubs of five or more, \$1 each. Agents wanted in every county. Write for Sample Copy.

HE KNOWS IT.

Wife, I am going to send a dollar to Topeka, and get one of

SWANN'S BOOKS.

Then I can farm with my eyes open as regards seasons and crops. Address

J. C. H. SWANN, Topeka, Kas.

THE ORIGINAL
Transcontinental Line

Carrying the United States Overland Mail for California, Australia, China and Japan.

ONE DAY SAVED
CROSSING THE CONTINENT
BY TAKING

"The Overland Flyer"
BETWEEN

Council Bluffs, Omaha, Kansas City and Portland, Sacramento, San Francisco and Los Angeles.

The Union Pacific Railway Company

Adds to its service everything that will in any manner contribute to the comfort of its patrons. Among other conveniences, its equipment includes

Modern Day Coaches, Elegant Pullman Palace Cars, and New Free Family Sleepers.

Baggage checked through from all Eastern points to destination.

Eating houses along the line are under the direct supervision of the Company, and the meals furnished by the Pacific Hotel Company are unsurpassed.

Instead of going abroad, why not visit some of the numerous health and pleasure resorts of the West, so widely noted for their curative springs and wonderful scenery. Among those reached by the UNION PACIFIC are:

Idaho Springs, Colorado, Guyer Hot Springs, Idaho, Georgetown, " Soda Springs, " Shoshone Falls, " Central City, " Yellowstone Nat'l Park, Boulder, " Wyoming, Garfield Beach, Utah, The Dalles of the Columbia, Utah Hot Springs, Utah, " blia, Oregon.

For folders, descriptive pamphlets, rates of fare, etc., call upon or address

F. A. LEWIS, Agent,
525 Kansas Ave., Topeka, Kansas.

JOHN B. FRAWLEY,
Travelling Passenger Agent,
Ninth and Broadway, Kansas City, Mo.

F. B. WHITNEY, General Ag't, Kansas City, Mo.

THOS. L. KIMBALL, E. L. LOMAX,
Acting Gen'l Manager. Ass't G. P. & T. Agt.

J. S. TEBBETS, Gen'l Pass. and Ticket Agent,
OMAHA, NEBRASKA.

Agricultural Matters.

FROM TEXAS--LET US JOIN HANDS.

(Concluded.)

EDITOR KANSAS FARMER:—We come now to consider the real merits of the greatest agricultural organization the civilized world has ever witnessed. It is useless to dwell longer on the fact that our organizers are in almost every State in the Union, and that thousands of noble men and women come in daily, swelling the immense tide beyond the expectation of the most sanguine of our order.

Without intention to cast reflection upon the plans of other organizations or to provoke unfair criticisms, we claim for the Farmers' Alliance and Co-operative Union principles equal to those of any labor or agricultural organization; while its great primary plan stands out as a "beacon light" to the poor, debt-ridden producer. The Grange, (the elder half brother of the Farmers' Alliance), has principles truly grand, but its plans were never fitted to the condition and circumstances of the farmer, and hence it is grand as its achievements were passing into history. To require a people to "pay as you go," without first relieving them of the burden of debt, is like requiring a child to walk and run before it is able to "stand alone!" The first thing then is to relieve ourselves of debt. To do this, we must produce on the farm as much as possible of that which we consume. Second—Purchase that which we consume at as near cost as practicable. Third—Dispose of our surplus products to the best advantage.

Please note that I am not an advocate of the idea that *extravagance* is one cause of our poverty-stricken condition—for upon no side can I find any display of extravagant expenditures of money on the farms of our country. So we take for granted that we are laboring diligently and living frugally, which settles the first proposition. To purchase at as near cost, our general supplies for the farm and household is next. It may be interposed right here that it is contrary to the interest of the Kansas farmer for the Texas cotton-raiser to buy flour at lower than present prices. This would be true, if the reduction had to come from the present price at which the Kansas farmer sells; but this is where the rub comes. We know the Kansas farmer is getting no more than a bare, scant living now, and we also know that almost every railway corporation in the United States is to-day paying an enormous interest on watered stock, and we know the excessive charges placed on the Kansas farmer's flour (and farm products in general) is where the money comes from with which to pay this enormous (interest) stealage! Therefore we cotton producers want to join hands with the Kansas grainman and by concert of action and co-operation in readjusting these matters, secure increased selling prices for the Kansas man, lower purchasing prices for the Texas cattle-raiser, and allow the loss to show up in a decrease of stealage on watered railroad stock! This is the key to the situation. We want to come face to face with our Kansas neighbor in exchanging our products, and if there is a great railway, banking or other corporate monopoly that comes between us, let us squeeze the very life out of it!—make it subservient to the great purposes of common carriers. Thus we can reduce the cost of our supplies without injury to our Kansas brother and enable him to consume a greater amount of the cotton and woolen products of our section at fairer prices. With our National Farmers' Alliance

Exchange upon a basis similar to our great Texas Farmers' Alliance Exchange, and the farmers of Kansas and the great Northwest within the ranks of our order, this natural exchange of products is made possible; and within a half decade it will be a grand and glorious realization! The Farmers' Alliance is no advocate of the credit system; but realizing that the transactions of the commercial world are and have ever been based upon the credit—the brain and muscle and acreage—of the producers, its plan is to turn this grand, central fact—not idea, for it is a fact—to account in carrying out our principles. And thus it is that the Farmers' Alliance has and is reaching down—if you allow me to so term it—her hand to the lowest of God's creatures, and bidding him rise up, take courage born of honest convictions and righteous plans, be a man, and with his brother Farmers' Alliance march to the victory which awaits a united effort of an honest yeomanry!

Brother! Where there is a unity of purpose, there also should we find a harmony of action. All labor is to-day crushed beneath the iron-wheel of accursed corporation organized, not for self-protection, but to "make money;" honestly if they can—but to make money. Let us meet organization with organization! Let us meet it with organization. Let us lay aside prejudice, born of the teachings of our enemies, and examine the principles, the purposes, and the plans of the Farmers' Alliance, and if we find them, as I feel sure we must, standing out pre-eminently fitted to the conditions, circumstances and surroundings of the agricultural classes, then with one accord let us come boldly forward, buckle on the armor and enlist for the war and send greeting to our brother farmers along the great line these tidings of great joy—"we too, are Farmers' Alliance." I am yours truly,

ANDREW J. CAROTHERS,
Giddings, Texas, July 7, 1888.

THE SMALL FARM.

A New York farmer, James L. Baird, recently prepared an interesting article on the subject above named for the *Rural World*. It is so suggestive by way of showing what may be done on a small area of land, that we give it entire to our readers. Mr. Baird says:

Perhaps the day is yet far in the future when large farms shall be from necessity, if from no other cause, reduced in size more in accord with the actual needs of men. At any rate the tendency seems to be in that direction. And as great natural changes are inevitable, and usually for the better, this change, in our opinion, can be but for the better. With most people, however, to have and hold in great abundance, is equivalent to greater income and prosperity; but in most things, especially so with farming, there is no greater mistake, than to be encumbered with more than can be well managed. There is more philosophy in the phrase, "a little with moderation and contentment" in the economy of life than most men dream of, and to no class of men does this more aptly apply than to the small farmer. Then if such gives more profit for the outlay, more contentment and ease of mind, with more leisure to live rightly, more time for improving the mind by reading good books and papers, and through them to see and learn much of the great outside world while yet within our own cosy homes, why then, by all means let us have the modest little farm—it is a boon.

But let us look at the matter a little more in detail. In the cultivation of the soil it is not always that the profits are to be measured by the extent of the land cultivated. The more skill that is brought to bear in the business the greater will be the yield from a small

area of ground. Some men, because of their superior skill, will produce from one acre as great profits as others will from fifty acres. Hence, it will be seen that skill is equivalent to so much extra land, and also stands in lieu of the labor that must be bestowed upon it to reach the same results.

But success in this almost universally intended calling, is not difficult for any intelligent, industrious man, who is not above asking for information, or who reads agricultural papers and books. As to the actual size of the farm it is immaterial, so that it is not too large for the force and means that are to be employed in its cultivation; for a family we will say for instance, ten or twenty acres, according to the laboring force the family can employ is sufficient. On this, small fruits, vegetables and poultry should be the chief products. Divide the farm, for instance, say of ten acres, into four lots, let the house and out-buildings stand on part of this, also poultry yard, stable lot and orchard. Instead of shade trees about the homestead plant fruit trees, especially about the poultry yard plant plum and cherry trees, and apple, pear, and peach trees about the house and stable. By so doing much ground that is usually profitless, so far as salable products are concerned, will be turned one year with another to great profit. Have a good stock of fowls, such as the farmer may find best suits his market.

Chickens are at par everywhere; fifty or a hundred of these are not too many and their yearly net profits are considerable, usually estimated at \$100 to the hundred fowls. Besides their service in destroying noxious insects, and the value of their droppings is considerable.

Another lot, two and a half acres—should be planted with small fruits, as strawberries, blackberries, raspberries, gooseberries, etc., these being the most profitable.

Now there is, of course, much in the manner of culture. We cannot here enter into this, for this we refer the reader to the perusal of farm papers; but we will here say, as touching the condition and preparation of the soil for all these fruits, it should be well enriched, well broken, with good after cultivation. Under such culture we may approximately give the values of the various products. By giving strawberries good hill culture very fine berries are produced which readily sell at from 15 to 25 cents a quart, and from 800 to 1,000 gallons may be produced on an acre. Blackberries and raspberries may be reasonably put at each from \$250 to \$300 to the acre. So then at a moderate estimation, we may put the aggregate amount of these fruits from the two and a half acres, at about \$1,200. On another lot of the same area should be cultivated standard vegetables, such as cabbage, potatoes, tomatoes, lettuce, onions, turnips, beets, etc., these being profitable products everywhere. With profitable management and cultivation, two crops of these may be produced in one season from the same ground. The yield moderately put of these crops, would amount to \$300. This added to that of the small fruits would amount to \$1,500. Out of this must come the cost of fertilizers, some extra labor, picking and marketing crops, one-third of the amount, \$500. And something more than this, unless the farmer uses the economy of making his own crates and boxes for marketing, which he may do during the winter months. We put in no charges here for rents, milk and butter, eggs and poultry, vegetables and fruits, so much comes to the family as perquisites, as it were, for so much of it comes from that, though good in itself, but not marketable. Excepting

the rents, only on the condition that the farm is owned or purchased, in the latter case the interest is to be met. Then for clothing, groceries, taxes, schooling, books, etc., the one thousand dollars must be drawn upon; and, by the way, how very many families are there that draw their yearly allowance from a far less amount. Now of course from a farm just started all this cannot be realized the first year, but much of it—at least half of it can, for while the small fruits are coming into bearing, which they would do the second year, vegetables can be grown between the rows, and thus make good, at least in part, what should be their yield.

There is still a two and a half acre lot remaining. This should be sown in grass and clover, and kept for a grazing pasture for the horse, and a cow or two and a run for the poultry. From this lot in this way great profits will be derived. By growing fodder crops, which can be done on portions of some one or other of the lots, together with the grazing of the lot in pasture, the horse and a cow or two can be kept the year round, certainly with the help to be derived from the waste of vegetables, such as pea vines, turnip tops, defective cabbages, etc. A hog or two could be reared almost on the wastes about the farm, especially after the orchard comes into bearing. But it were impossible to follow out all the details of such farming, but from the outline here attempted to be sketched it will not be difficult to fill out a plan by which any industrious family can derive at least a comfortable living from a small farm.

THE KANSAS FARMER

Is a twenty-page weekly journal devoted to the interests of Kansas agriculture. During the growing season—March to November—it publishes monthly crop and stock reports covering the entire State. It is the only Kansas paper of its class, having a general circulation, and its managers aim to make it reliable in all its departments. It is unquestionably the most representative Kansas paper published; it is a mirror in which the material interests of the State may be seen fresh every week. All departments of agriculture are represented in its columns—Field Work, Horticulture, Gardening, Stock-raising, Dairying, Poultry, Bees, etc., and two pages are devoted to miscellaneous reading matter for all members of the family.

The KANSAS FARMER is absolutely free from all parties, combinations and cliques; it discusses public questions from an advanced, independent standpoint fearlessly and in the interest of people who eat bread in the sweat of their faces.

Persons who want to keep posted as to the condition of Kansas and her people can do so by reading the KANSAS FARMER regularly.

TERMS: One dollar a year. Published by the KANSAS FARMER Company, Topeka, Kansas.

A correspondent of the New York *Tribune* says: "The best of all ways to keep crows from pulling corn is to sow corn broadcast before the planted corn comes up. One quart to the acre will be enough until it is gone, then sow more. Some soak corn, but I never do. The crows will pick up cut worms enough to pay for the corn and the labor of sowing. I have seen sows that would weigh a pound or more that the crows jerked over to get a worm."

The preparatory department of Campbell Normal University is the most thorough in the West.

The Stock Interest.

THOROUGHBRED STOCK SALES.

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

AUGUST 8.—H. M. Valle, Short-horns, Independence, Mo.

THE ENGLISH THOROUGHBRED.

Dr. Charles Cresswell, an eminent English veterinarian, recently published a history of the Thoroughbred English horse. We make a few extracts from a portion of the work, which we find copied in the *National Live Stock Journal*:

The evidence at our disposal, furnished mainly by the horseshoes which have been found in Roman and Saxon tumuli, leads to the conclusion that the equine race was originally represented in Great Britain by small ponies upwards of twelve hands high. The first animals which were crossed with this primitive race were those which were brought over from abroad by the different peoples which at various times invaded England—the Romans, the Danes, the Saxons, the Norwegians and so forth. The saddle seems to have been first used in the early part of the seventh century. So deeply impressed with the importance of horses was the early Saxon King, Athelstan, who reigned A. D. 925, that he made a law prohibiting the exportation of horses, and also introduced into England running horses from Germany, and also horses from Spain. The victory of William the Conqueror, at Hastings, is believed to have been in great measure due to the superiority of the cavalry, and the same monarch, after having ascended the throne of England, paid great heed to the rearing of horses. * * * Spanish horses have an Arabian strain; but the earliest direct importations of Oriental horses, Bards, Turks, Arabs and Persians were brought into England by the English warriors when they returned from the crusades.

They had been fascinated with the splendor and excellence of the horses of the Saracens, and it was no wonder that they should bring home some of these beautifully-proportioned steeds. These horses were about fourteen and a half hands high. Moreover, our English breeds were also improved by the importation of large-sized chargers from Lombardy and Flanders, not only by the Anglo-Normans, but also by the Plantagenets and Tudors.

The object held in view by those who imported these strong horses, was to provide powerful steeds suitable for the chase and the tournament, which latter chivalrous pastime commenced in England about sixty years after the conquest, and gradually began to wane in Queen Elizabeth's reign. The gradual intermixture of the various breeds in England led to an increased average height, viz., from a standard of about eleven hands to one of about fourteen and a half hands.

The English draft horse was improved by the importation of one hundred Flemish stallions by King John, who did much to benefit this breed of our horses. In the reign of Edward III., Spanish and Arab mares and stallions were brought to these shores. The splendid Spanish horse itself, as we have above implied, owes its excellence to a connection with the Arabian stock. About this time races were established, and enactments were made by different sovereigns, with the view of improving our breeds. In the reign of Queen Elizabeth the tournament began to decline in popularity, and the establishment of racing, conducted at first in private and afterwards in pub-

lic, gradually pushed into the background this ancient pastime. In the year 1580, in this sovereign's reign, the Earl of Arundel first introduced into England vehicles for carrying the people in, and this, together with the lessening of the amount of armor required in fighting, the neglect of the tournament, and especially the increasing favor extended to the race course, gradually led to the replacement of the ponderous charger by a lighter and more agile animal. * * * James I. took great interest in the turf, and he introduced into England a pure Arabian stallion. It was during his reign, also, that race horses were first recognized as a distinct class. With a view to the improvement of British breeds, James I.'s Arabian, D'Arcy's White Turk, the Selaby Turk of the Duke of Buckingham, and the Morocco Barb of Lord Fairfax were imported. * * *

In the period preceding the restoration, the prize for the winners of a horse race was a silver belt, and it was Charles II. who replaced this with a cup, now the object of the owner's and the rider's ambition. The same monarch established the course at Newmarket, built a palace and stables there, organized the meeting at Datchet Mead, near Windsor, and imported a great many Oriental horses. It was to Charles II. that, in 1667, the Duke of Newcastle dedicated his book on horsemanship, and it was in great part owing to the teaching contained in that book that the King and his courtiers sent out agents to distant countries to procure Oriental stallions and mares, Barbs, Turks, Persians and Arabians. Hence the occupants of the royal stables were the finest horses in the world, and there is no doubt that the newly-arrived animals were mated with English-bred horses and mares, and especially with the descendants of the racing stock of James I.'s time. These latter imparted to their offspring their size, while the Oriental horses imparted fleetness of limb. The Duke of Newcastle considered the Barbary horses superior to the Arabian. The Barbary mares, which Charles II. got possession of for the royal stables, were very splendid animals. As royal mares, they formed the foundation of the English Stud book, which, however, was not issued until George III.'s reign. In the year 1808, since which time a regular account has been kept of the Thoroughbreds. Previously half-bred horses had constantly appeared on the turf, but since the institution of the *Racing Calendar* there appearance is exceptional. At the time when Charles II. ascended the English throne the British racer was easily beaten by Oriental horses. These latter were, therefore, crossed with native horses, the new blood being rapidly introduced by the Turkish Barb and Arabian sires. The progeny, partly from royal mares (themselves certainly not all true-bred Arabians) and partly from native English mares, was constantly crossed and re-crossed, and hence arose the Thoroughbred. The continued mingling of the improved stock brought still greater benefits, and the result was a very advantageous one.

It was in 1715, the year after George I.'s accession to the English throne, that Darley purchased of his brother, then residing in Aleppo, the celebrated Darley Arabian, the sire of Flying Childers, the fastest horse over a long distance ever known. In 1825, two years before the close of George I.'s reign, the Godolphin Barb, commonly called Arabian, was brought into England. From these two horses our most renowned racers have sprung. The Godolphin was bought in Paris from a person who had him in a water-cart, and whether he was a Barb or an Ara-

bian is not known. At about the year 1750 the further use of Oriental blood, and the in-and-in breeding which went on seemed to be disadvantageous. The experience of the next twenty years confirmed this view, and at about the close of the eighteenth century very few Asiatic horses were imported.

The successors of James I. down to Queen Anne, who died in 1714, thus completing the sovereigns of the House of Stuart, were all the more or less strongly attached to the sport of horse racing. In the reign of Queen Anne the York plates were founded. Under George I.'s rule, the first sovereign of the House of Hanover, horse racing became more and more popular, and during the remainder of the century it grew still more important. The two most celebrated horses of that period were Flying Childers, foaled in 1715, and Eclipse, foaled in 1764. These two horses for a long time sustained the reputation of being the fleetest horses that ever ran; and from the latter many of our best horses descended. George IV., who reigned from 1820 to 1830, was devotedly fond of horse-racing. Owing to the powerful influence brought to bear on the sport at all times, the special breed of racers was zealously fostered, and the Thoroughbred consequently became a very valuable animal, while all other breeds of horses in the country also necessarily partook directly or indirectly of the improvements attained to. The crossing which has gone on betwixt Thoroughbreds and other horses has led to the production of good hunters, hacks, and carriage horses, but of late this inter-breeding was not practised sufficiently. During the close of the last century and the early part of this, the Thoroughbred was much utilized for the production of grand coach horses, hunters, and hacks, distinguished by their powers of endurance, well suited to that hard-riding time. The result was that men of all views appreciated and encouraged the sport of racing, if not for its own sake, at least for the sake of the effect it had in bringing about the production of a breed of grand horses, distinguished for their staying powers, a breed which reflected its value and lustre on all the breeds of horses in the country. The money now annually devoted to the Queen's plates was a direct bounty given by the nation for the purpose of encouraging the breed of horses and of evoking excellence. The sport has gradually gained the gigantic importance which it possesses in these days, as a consequence of the continued influence of the patronage of wealth and the aristocracy, and in great measure also it has been due to the natural love of sport ingrained in the hearts of all classes alike.

The distinctive features of the Thoroughbred may be said to consist chiefly in a certain characteristic symmetry and proportion of build, and a great and striking beauty of form. The muscles, and especially, perhaps, the structure composing the nervous system, possess a powerful, yet delicate and fine tone, in virtue of which the animals have great powers of speed, coupled with wonderful endurance over short distances. Possibly their staying qualities and fleetness may be due to an increased vascularity. The effect of habitual use, the rapid and intense exertion in which they have, after a long period of careful breeding, gradually become more and more accustomed, together with high feeding, and most careful selection for breeding purposes of the best survivors, may in some measure account for the exceptional qualities of the racer. The Arabian horses were centuries ago characterized by their speed, and this inherited power has

been as fully brought to a climax in these days by means of most careful breeding. Racing, as it was formerly practiced, viz., the running of matured horses over long distances, had very much to do with the gradual evolution of the racer. The early English race horses of James I.'s time possessed the qualifications of superior size and of good proportion of locomotive parts, and to these advantages the Oriental horses added their own peculiar features of forehead, quick organs of sense, beauty, and quickness of action, the nervous power, and perhaps a density of muscular fibre. The resulting animals are distinguished by their well-proportioned locomotive parts, by their inclined shoulders, their legs and joints accurately in proportion, their strong carcass, deep chest, and thighs well let down. It has been shown that the speed of the Thoroughbred and his general characteristics depend on his improved vascularity, or the increased circulatory power of the blood, therefore the extra speed demanded by this new order of things must be met by a still further increase in the size of the heart, the central pump of the circulatory system, and in the size also of the lungs. This gradually results in a condition of general enlargement of these organs, and of the muscles generally, known scientifically as hypertrophy of them. It is possible that the high feeding and the systematic attention to the health in the early life of the animal may render to some extent this state of things normal; but in many instances further changes ensue, known as degenerative changes, and these constitute organic disease. Already it is most common to find these changes, especially of the heart, a distinct feature in horses of four years old, and foals are born with the same tendency. Sufficient numbers of racers with the necessary stamina for long-distance races could not be bred to meet the demands of the time, and on the other hand, the structural alterations of the horse itself render it totally unfit to revert to the old order of things. Improved in speed, as the race horse undoubtedly is, yet beyond a certain pitch it is absolutely certain that liability to disease must advance in direct proportion to increased speed. Thus many causes are at work to augment the value of the Thoroughbred—viz., value of stakes, demand for greater number of races, greater speed required, and finally yearly advancing liability to hereditary disease of the heart. The sound survivor becomes more and more valuable, more isolated, and more out of touch with the ordinary breeds of hunters and carriage horses of the country. In former days the services of sound Thoroughbred stallions were at all times available for breeding purposes, as soundness was fairly assumed by the severe system of training and racing, and the ordinary prizes of turf were not of sufficient value to preclude the horse from the service of half-bred mares, when his racing career was done. Now the race horse, in consequence of his altered condition, is rapidly becoming an animal quite distinct from all other kinds, and when thorough soundness of heart and limbs survive, he attains a value quite prohibitive for ordinary breeding purposes.

LOST.—"I don't know where, I can't tell when, I don't see how—something of great value to me, and for the return of which I shall be truly thankful, viz.: a good appetite."

FOUND.—"Health and strength, pure blood, an appetite like that of a wolf, regular digestion, all by taking that popular and peculiar medicine, Hood's Sarsaparilla. I want everybody to try it this season." It is sold by all druggists. One hundred doses one dollar.

In the Dairy.

Nature's Milk Room.

EDITOR KANSAS FARMER:—At this time of year, when the thermometer is skirmishing around the 100 deg. mark, the ordinary farmer that keeps but few cows has a serious time in making good butter, unless he has a better place to keep milk than farmers usually have. Several years ago I read in the *American Cultivator* an article written by Geo. F. Nutting, of Randolph, Vt., on setting milk in a well. I cut it out and pasted in my scrap-book and forgot all about it until last summer, when it was so hot that I found it difficult to make butter good enough to suit our idea of what summer butter ought to be. So this spring I had some cans made of the shot-gun style, twenty inches deep and eight inches in diameter, with a bail made of strong wire forming a loop at the top, and hitched on a rope, with a common rope snap, and set the can in the well. The milk is skimmed at thirty-six hours, and the milk is perfectly sweet. We get 15 per cent. more butter than we did by shallow-setting when the weather was cool, and it is of good quality. The butter comes hard as in cold weather. The well is twenty-eight feet deep, and its temperature is about 58 deg. Any one having a well that the water is below 60 deg. will find it a good, cheap way of setting milk, as the temperature is always the same, and the milk requires no care after it is in the well until time to skim. It is cheaper and better than any of the patent creameries on that account, for to keep them at uniform temperature either requires a steady flow of water through them, or the use of ice.

The best way to put the cans into the well is to have a windlass with crank across the well curb—one for each can, and be sure the rope and attachments are strong enough so that the milk will not be dumped into the well. The ropes should hang far enough apart so the cans will not touch each other in lowering them into the well. A few holes bored in the windlass and a pin will keep the can from sinking too low.

Russell, Kas. J. G. McKEEN.

Providing Green Food for Dairy Cows.

The drouth which prevailed last year in many sections of the country should have impressed upon the minds of dairymen, who suffered loss on that account, the importance of providing a supply of green food with which to keep up the flow of milk when pastures fail. While there may be no need of this during the coming summer to the same extent as last year, still each season there is more or less scarcity of feed, and the only safe plan is to provide against it. The fodder, if not required for this purpose, can be preserved for winter use, and so nothing is lost. The dry season, unless provision is made as suggested, will check the flow of milk, and when this has been done the yield cannot be fully recovered. In many cases the loss amounts to fully one-third the yield for the year, and absorbs all the profit. Extra green food, such as oats, rye, Hungarian grass, clover or corn, will keep up the flow of milk during the dry period, until the later rains start the grass again. In this way a full flow may be kept up until late in the season, insuring profitable returns. The wise dairyman will never allow his cows to depend on scanty pasturage for even a few days, but will study to prevent any falling off whatever in the yield. Where he has not made sufficient provision in the way of green food, he should feed whatever grain may be needed to prevent shrinkage.

He can easily provide the necessary

rations of green food by sowing oats about sixty days before the dry weather comes, allowing about one-fourth of an acre for each cow kept. This makes the best food when in the milk, and it is a good plan to sow several pieces in succession, so there may be a supply all the while in the right condition for feeding. Although a smaller quantity than we have named may be sufficient, it is well to provide an ample supply, and then whatever is left may be harvested for winter use.

Variety is an important consideration in feeding dairy cows, and in order to supply that the other crops named may be sowed. In this way the rations can be changed from time to time, and the cows will by this means be induced to eat heartily, which will keep up and often increase the yield. When any falling off in the yield takes place it represents a loss to the dairyman, which by proper care and management may be prevented. Now is the time to make preparations in order to be ready for an unfavorable season, should it prove to be so.—*Exchange.*

Co-operative Creameries—Requisites for Farmers' Success.

Farmers may as well stand by each other as be "held up" by a speculator. If they will discard all jealousies and work for the interest of all there is no reason why they may not receive all the benefit of the co-operative creamery. They can hire good drivers and butter-makers, as well as any creamery man, and the profits of the latter then go to pay expenses, not running outlay in addition. The buyer often deducts from four to six cents from New York prices to pay for collecting, etc. In a small factory, with long routes, this might not be too much; but with the well-patronized factory it would be far too great. In other localities they propose to pay the same for "an inch" of cream that butter sells for at the store—less than half usually of what creamery butter sells for in New York or Chicago. Standard cream should have its value appraised at its worth for making the best creamery butter. It will hardly pay to start a creamery with less than 300 "pledged cows." The bane of the creamery system is: Its patrons pull off on all sorts of excuses, some of them thin as a shadow. The more good cows the better, as it does not cost proportionately more to collect and make from 600 or 1,000 cows than from 300; requires the same help and machinery; the extra expense is in collecting cream, packing, etc. In organizing a creamery on the co-operative plan the exact cost of building and equipping it (usually less than \$1,500) should be the capital stock. The stock company with \$7,000 to \$10,000 capital is usually sold at assignee's sale—which gives one party the money and the farmers the experience. Let such alone. Let the farmers conduct their own business of creamery management, through a manager and salesman selected from among their own numbers. Pay him a reasonable compensation for the time he devotes to the affairs of the creamery. Employ the best butter-maker to be had, even if you do pay him \$75 a month. Consign the butter each week to reliable commission men, and stay with them, and establish a reputation; that's what sells butter. Let unknown houses alone, who send out "sugar-coated" promises. The first thing is to decide upon some system, and formulate regulations that may be as nearly complied with as possible. This should be decided upon sufficiently early, that all patrons may be enabled to prepare in accordance with the rules. This is necessary so that as uniform a collection of cream may be had as pos-

sible; for the closer this is adhered to the better and more equitable to all will be the result, and there must be an observance of the rules throughout the season.

There should be uniform care and feeding of all the dairies of the patrons, to get cream of as equal density as possible, so that each patron may have his share of the butter made. The character of the feed has much to do, not only with the butter-fat contents of cream, but with its churnability. Sample lots of cream of exact like measurement from different dairies will not churn out uniform weights of butter; but if the cows are fed and cared for alike, the milk set as nearly alike as possible will give cream from each dairy that will fairly average when combined. There is much disagreement about the merits of deep-setting and the centrifuge for a creamery. With the centrifuge the milk must all be taken to the creamery to be separated, which limits the area of the creamery territory to a boundary of about four miles from the building. The freight is about twelve times more for the whole milk than for its cream. While there is no doubt that the centrifuge will get more butter out of 100 lbs. of milk, the question turns on this: Will the small per cent. of extra butter compensate for the extra freightage over the cream-gathering plan? The route of the cream-gatherer is almost unlimited. Creamery men here start often fifteen miles away from the creamery to collect. Two or three routes will concentrate eight or ten miles away, and one team will bring in the combined collections. All this lessens expense on a well organized route or routes, which cannot apply when milk is collected, as it must be at the creamery within two hours of milking. The expense of fitting out creameries by either system is not greatly different, as the separator in one case offsets the purchase of small cans in the other, while the fixtures of the two creameries will be otherwise alike. Butter from separator cream is as good as that from gravity cream, and keeps as well. Let the care of the cows, their feed, and care of the milk be as uniform as the cream-gathering system demands and the same result will obtain from either system. One advantage is that in the home-creaming of milk it is left on the farms perfectly sweet to feed when it has its best feeding value. The separator milk is transported to the factory, is warmed up to over 80 degrees to be separated; this warm milk is not either cooled down, nor heated up to 130 degrees as should be done, which in either case would insure its sweet condition for twenty-four hours. Put warm into the farmer's can, and the heat shut in, it usually sours before reaching home, especially if yesterday's buttermilk was added to the milk, and a loss is met with that might be remedied easily and put the two systems on nearer equality as regards the refuse milk.—*J. Gould, in Tribune.*

A correspondent of *Farm, Stock and Home* notes an instance where five dehorned steers caught cold and suffered a discharge from their horns for several weeks, each losing about 100 pounds of flesh.

The evils resulting from habitual costiveness are many and serious; but the use of harsh, drastic purgatives is quite as dangerous. In Ayer's pills, however, the patient has a mild but effective aperient, superior to all others, especially for family use.

According to the *American Agriculturist*, the United States census is very defective as regards the statistics of live stock. The horses, cows and swine, owned in cities, towns and villages have not been enumerated. It is estimated that one-fifth of the horses owned in the country are thus left out.

The Old Doctors

Drew blood, modern doctors cleanse it; hence the increased demand for Alteratives. It is now well known that most diseases are due, not to over-abundance, but to impurity, of the Blood; and it is equally well attested that no blood medicine is so efficacious as Ayer's Sarsaparilla.

"One of my children had a large sore break out on the leg. We applied simple remedies, for a while, thinking the sore would shortly heal. But it grew worse. We sought medical advice, and were told that an alterative medicine was necessary. Ayer's Sarsaparilla being

Recommended

above all others, we used it with marvelous results. The sore healed and health and strength rapidly returned."—J. J. Armstrong, Weimar, Texas.

"I find Ayer's Sarsaparilla to be an admirable remedy for the cure of blood diseases. I prescribe it, and it does the work every time."—E. L. Pater, M. D., Manhattan, Kansas.

"We have sold Ayer's Sarsaparilla here for over thirty years and always recommend it when asked to name the best blood-purifier."—W. T. McLean, Druggist, Augusta, Ohio.

"Ayer's medicines continue to be the standard remedies in spite of all competition."—T. W. Richmond, Bear Lake, Mich.

Ayer's Sarsaparilla,

PREPARED BY

Dr. J. C. Ayer & Co., Lowell, Mass.

Price \$1; six bottles, \$5. Worth \$5 a bottle.

A well-broken horse is a horse that can be trusted.

The Czar of Russia's private stables at Peterhof are said to contain 800 blooded stallions.

To gorge an animal with food only serves to overwork the stomach in the attempt to digest more than it is really able to, and as a result much is avoided by the animal, and goes to waste.

Sheep in Delaware county, N. Y., are suffering from the ravages of bugs. The pests measure from one-half to three-fourths of an inch in length, and look like the ordinary snapping bug. They burrow their way into the heads and brains of the sheep.

From the *Centropolis*, Kansas City, Mo., December 1, 1887: There is nothing so valuable to us as health, but we do not realize this until we are deprived of it. How many of our readers awake in the morning with dull pains in the back and head, and find it a hard task to perform daily duties? These are symptoms of Malaria, and we know from personal trial they may be completely eradicated by Shallenberger's Antidote for Malaria. It is a simple and effective remedy, and we advise our readers to try it.

WELLS, RICHARDSON & Co's

IMPROVED Butter Color.

EXCELS IN STRENGTH PURITY BRIGHTNESS

Always gives a bright natural color, never turns rancid. Will not color the Buttermilk. Used by thousands of the best Creameries and Dairies. Do not allow your dealer to convince you that some other kind is just as good. Tell him the BEST is what you want, and you must have Wells, Richardson & Co's Improved Butter Color. Three sizes, 25c, 50c, \$1.00. For sale everywhere. WELLS, RICHARDSON & CO. Burlington, Vt.

(33 Colors.) DIAMOND DYES

are the Purest, Cheapest, Strongest, and most Durable Dyes ever made. One 10c. package will color 1 to 4 pounds of Dress Goods, Garments, Yarns, Rags, etc. Unsuspected for Feathers, Ribbons, and all Fancy Dyeing. Also Diamond Paints, for Gilding, Bronzing, etc. Any color Dye or Paint, with full instructions and sample card mailed for 10 cents. At all Druggists WELLS, RICHARDSON & CO., BURLINGTON, VT.

Correspondence.

THE AMERICAN FARMER'S UNION AND PEOPLE'S INDUSTRIAL UNION.

A Government By the People to Supercede This Government of the Corporations.

EDITOR KANSAS FARMER:—The American Farmer's Union and People's Industrial Union are organizations grounded upon one foundation principle and for one fundamental object, which, tersely expressed, is to gain the popular voice of the people at any time desired upon any question desired, with the mechanism for centering this expression upon any object desired.

It is not my purpose in this letter to enter into a detailed explanation of this plan, but to assert its capacity for gaining the will of the majority and emphasize its power in making that will the ruling element. The steam engine was invented for the purpose of focusing the latent power in steam and the object was to utilize that power to drive the steamboat, draw the cars and propel machinery. The Farmer's Union and Industrial Union is for the purpose of gathering the latent power in the people and providing the necessary mechanism for its application to commercial, to political, to educational affairs. This places this plan upon a different plane of action from that of any organization of which I am acquainted. Even our representative government does not represent and needs a more cogent power to urge an expression of the voice of the people. One of the missions of the Alliance, Co-operative Union and Grange is to vote for men who will represent their interests in our legislative and representative halls; it is a prerogative of the Farmer's Union to express the majority will of the farmers in formulated law and to become a part of our governmental fabric through the power of its mechanism, the force of its will, the unequivocal demand of the majority. In this the Farmer's Union does not trespass upon the grounds of the organizations mentioned, but each acts its part distinctive from the other. The Farmer's Union must repose full faith in the majority of its members. To illustrate, I will assume that the people of the State of Kansas are in sentiment with the Legislature of the State of Nebraska and oppose railroad legislation in any form to benefit the people. In this case the Farmer's Union would compel its State Union to act in harmony with the railroad lobby, and with the devil on its side and the people at its back it could throttle any presuming legislator who would dare lift his voice in opposition to downtrodden (?) corporations. My design is to emphasize the fact that the realm of this plan is to voice the expression of the people regardless of consequences or results; so any man or woman who is tainted with an imperial aristocracy or moneyed oligarchy will not find food in this plan for happy reflection or continued support. It has been proven in mechanical affairs that the size of a machine does not retard the rapidity of its motion so long as its parts act without any unnecessary friction, so it is believed that the machinery of the Farmer's and Industrial Unions can work with such rapidity that its influence may be brought to bear for or against any law during its pendency before a legislative body by the time it is ready for its final passage.

For the purpose of answering some questions which have arisen since the appearance of this plan of organization in the FARMER of June 14, I refer chiefly to the political side of this Union. At the same time I wish it to be understood that this system is not exclusively for political purposes, but is given into the hands of the people to be utilized to their wants. Again, it cannot be partisan any more than the Constitution of your State can be partisan. The Farmer's Union and Industrial Union is a pure democracy. It necessarily must deal with principles and not men, with subject matters and not parties. It cannot define its course like the Alliance, by transmitting its prerogative to delegates who meet in convention and issue resolutions outlining its object. It cannot be directly or indirectly instrumental in electing untried men to office, but it will care for them after they are elected. Unlike the Grange, it is not constructed to establish

and define a code of brotherly love, symbolized and embellished in all its beauty by forms, degrees, time-honored lessons and incidental benefits. But its crowning mission is to wield the popular will against the usurpation of the few.

Our Republic as a government by the people has been established and perpetuated at much cost of life and treasure. Little is now retained but the dead forms. Intrusive wealth has reconstructed our heritage into a vast reservoir for personal and corporate aggrandizement. Yet the elements of self-government are still retained. The means to reclaim and intensify and perpetuate this boon is the underlying ground-work in this system of organization of which I write, and I trust it is worthy the thoughtful consideration of the people of one of the most aggressive and progressive States in this Union.

E. W. BELL.
Pawnee City, Neb.

LETTER FROM "HORACE."

Special Correspondence Kansas Farmer.

On arriving at Ottawa I went direct to the small fruit and gardening farm of T. M. Sellers, and after enjoying a profitable time with this successful culturist I proceeded to the Pleasant Valley Stock Farm, property of Samuel McCulloch, whose advertisement is found in this paper. This farm is situated three miles southwest of Ottawa, and is in every way adapted to the growing of choice Berkshires, of which this gentleman makes a specialty.

Fifteen years experience in breeding and raising hogs has given Mr. McCulloch great prestige in the discernment of that which best suits to advance the interest of his chosen calling. His aim and ambition is to own and produce the best, and never retain a sow or boar that would be discreditable; in fact, his herd contains representatives of the best families that have ever been produced, including prize-winners at the leading shows of this country, Canada and Great Britain.

In looking through his herd I was more than pleased to note such symmetrical perfection. No wonder for this, however, when I saw Patentee 14179, Young Carlisle II. 10295, and Clermont Duke 13837; and of sows Sallie Liverpool III. 10141, Belle Clermont 10137, Clermont Lass 11193, Carlisle's Clermont 11194, Belle Clermont III. 13838, Lena Clermont 13832, Royal Clermont 13836, Quinola 13253, Belle of Oxford II. 13833, and Royal Bride 13834. Royal Bride is indeed a model Berkshire—it would be a difficult task to draw a picture more complete than she is, and the same can be said of Patentee 14179.

From Mr. McCulloch's I went to the residence of Father Robinson, where were congregating members of the Franklin County Horticultural Society, preparatory to holding the July meeting of this progressive organization. In the early forenoon, in company with Mr. Robinson, I examined his vineyard, small fruits, raspberry and blackberry patches, and learned that he would have not one-fourth a crop of grapes, owing to the fact that since the June rains rot had set in and the grapes were daily falling from the clusters. Still in the many varieties to be found on his place there was one, the Ida, that was free from rot, in perfect health, growing thriftily and with the promise of an excellent crop. The Concord is suffering more than all others from the rot. Before the June rains his Kittatiny blackberry patch was literally covered with rust, and now no sign of rust is in the least visible. From this one would conclude that to avoid rust blackberries should be well irrigated. Mr. R. also showed me plum trees well laden with large, fine fruit and free from curculio. Each tree had been wrapped about the trunk and larger lower limbs with cotton batting, just prior to or about time of putting forth the blossom.

The meeting of the Society was called to order in due time, and after preliminary remarks the program of the day was carried out. A report from Mr. Robinson on vineyards was had, in which he said that the day of the Concord grape was past as a profitable fruit. It is going to prove almost an utter failure. Too easily affected with the rot. The Worden, a seedling from the Concord, seems to be less affected than the Concord and he thinks will supersede it. The Pocklington is a good grape, and also the Martha. The Niagara is a failure. Goslow on new varieties. Of white grapes, the Ida, Chandler, Josephine and Jefferson are all excellent and are giving good results.

Mr. N. M. Chandler has a decidedly prom-

ising grape seedling from the Worden which has proven thus far superior to any other grape. The Worden is superior to the Concord.

Dr. Newton said that he had watched with interest the Chandler grape, and in his opinion it was the coming grape. In regard to rot and other diseases of the grape he thought we had cultivated to gain certain results until an artificial constitution had been formed detrimental to a hardy grape.

Mr. Robinson thought the climate had more to do with disease of grapes than any other cause. No moisture nor heat in excess, then no rot. Rot is a disease resulting from climate, hence produce a grape that will stand the climate. It can be done, and will be done.

Next in order was a report from T. M. Sellers, delegate to the semi-annual meeting of the Kansas State Horticultural Society.

The subject of timber belts as a protection for orchards was next taken up and considered at some length. Some advocated a wind-break to the south and west of an orchard, and some to the north and west, while others believed it far better to have a suitable wind-break around the entire orchard. In this country fruit trees cannot be too well protected. Yet Mr. Kibbie deemed it best to not put out any wind-break, and he illustrated his opinion by a reference to his own orchard.

The Society then listened to an essay from Mrs. W. E. Kibbie on "Relation of Horticulturists' Wives to Horticulture." This paper was in every way excellent and to the point. It will appear in the KANSAS FARMER in due time.

Many other good things were said and done, but limited space forbids further report, except to say that all lovers of horticulture are cordially invited to attend these meetings and feel at home. The August meeting will be held at the residence of Mr. H. Kelsey, near Ottawa, and the program includes a history of horticulture in Franklin county. The meetings of this Society occur regularly on the second Wednesday of each month.

At the close of the Horticultural Society meeting I visited the home of Mr. I. L. Whipple, three and a half miles southeast of Ottawa. This gentleman is proprietor of the Ottawa Herd of Poland-China swine, of which he prides himself on having a part of the most fashionable strains west of the Mississippi river. And from a close inspection of the herd and from an examination of the records, I find that Mr. W. has even better individual animals than he has given himself credit for. His first purchase toward establishing this noted herd was made in 1873, from well-known breeders in the Miami valley; since that date he has been breeding and adding superior animals from the very best breeders of Ohio, Indiana, Illinois and Kansas. He does not claim superiority on one animal only, but on his entire herd, and each individual contained therein. He is not trying to breed for the largest hog possible, but rather for a medium-sized animal, one that can be fattened with profit any time after four months of age. After testing and seeing other breeds tested, he is convinced that for cheap production of pork, early maturity, docility, hardiness, prolificness and symmetry of form, Poland-Chinas are the superior of all other breeds, and for these reasons Mr. Whipple is making Poland-Chinas of the very best type a specialty. Look up the advertisement of the Ottawa Herd which appears in each issue of this paper.

In a recent trip through portions of Shawnee, Wabaunsee and Morris counties I found the prospects for that section of the State to be in better condition for the securing of a bountiful corn harvest than for many years past. Rains have been propitious and the farmer wears a smile of contentment. This harvest will be the means of helping to pay off minor mortgages and place the farmer in shape to live more comfortably in the future. Some of the farmers in Morris county I found to be great sufferers through the mortgage system of obtaining financial aid, and in many instances have lost their farms owing to inability to meet their obligations. Better do without than get in a position where it will be only a question of time when the farm will slip from under you and you become a tenant. The word mortgage is derived from two foreign words which signify "mort"—death, "gage"—to grip, and

both together meaning "mortgage," or the death-grip.

I visited the home of Mr. Charles Roswurm, breeder of Short-horn cattle, of which he has sixty-five head of thoroughbreds, besides scores of high-bred grades and other descendants from unpedigreed stock. His ranch consists of 1,000 acres of undulating prairie with Munkees creek passing diagonally through the entire tract, thus affording water and timber shelter to each subdivision of the ranch, an object greatly to be desired by all men engaged in stock growing. The ranch is well chosen for the purpose used, and is in a good state of cultivation. His corn now measures over thirteen and a half feet high, some of it, with two ears to the stalk. He will exhibit samples of this corn at the county and State Fair. Mr. Roswurm's herd of Short-horns includes specimens of the Cruickshanks, Josephines, Young Marys, Rose of Sharons and Bates—mostly Bates.

Permit me to illustrate the relative value of the common to that of the high-grade cattle. Mr. Roswurm recently shipped a carload of cattle to the Kansas City market, nine head of them being high-grade Short-horns, the gross weight of which was 11,180 pounds, bringing \$4.25 per hundred, and ten head being common cattle, the gross weight of which was 10,540 pounds, bringing \$2.25 per hundred—just \$2 a hundred less than the price realized for the grade cattle. The average weight of each grade steer was 1,242 pounds, and the average price realized was \$52.78; the average weight of each common steer was 1,054 pounds, and the price realized was \$23.70, representing an average difference in favor of the grade steer of \$24.08. It costs no more to grow a well-bred animal than it does to grow an inferior one, and not so much.

HORACE.

About Interest on Money.

EDITOR KANSAS FARMER:—Thousands of Kansans have read with approval your timely editorial in issue of the 12th inst. entitled "Interest on money." While the nation's heroes and statesmen are "monkeying" twelve months in the year with the questions of tariff and rebellion, thoughtful toilers are expected to silently toil on and meditate over questions of protection to home and family. You close your article with the query—Should we have interest laws?

To my mind this question admits of two answers. First—If the present interest laws upon our statute books are referred to, I would answer no. A law that frustrates and enslaves every productive home interest upon the one side, and fostering and pampering a lecherous interest upon the other side, is unworthy the name of law except for the purposes of legalized robbery and enslavement. Second—If free homes and domestic associations and prosperity are to be perpetuated as a national inheritance we should have interest laws, laws that will guarantee the use of money to the productive, legitimate business interests of the country, reasonably obtainable on the basis only of its productive value.

It is law only that creates what is known as money, under the pretense of an exchange of commodities and values. It is law only that permits money to become the merchandise of trusts and corporations, so rapidly absorbing every productive home interest—interests out of respect for which we are patriotically assembled together annually on the Fourth day of July to proclaim anew the independence, prosperity and stability of an American government. Money answers the echoes of the orator and says the products of your fields shall not be worth producing; your herds and flocks shall go to the shambles at a price below the cost of feed consumed; your home can only be retained by the protection of an interest-money-bearing mortgage; your taxes can only be paid by the accommodation of a 2-per-cent a-month money broker; your public and corporate improvements can only be erected by the aid of an interest-bearing bond.

But stop. Excuse me, dear FARMER. I sat down only to express my approval of the thread of your suggestion—that the chargeable use of money should be limited to its productive value, and all statistics establishes the fact throughout the civilized world that such value does not exceed 3 to 5 per cent.

I must ask you is it not a fact that upon

the concentration of the money power and its legalized subversion, every trust and combine is formed; that upon this power as a primary foundation rests the prosperity or bankruptcy of every productive and legitimate interest. Is it lawful or is it decent that this money power should (as it does) hold its \$200,000,000 mortgage grip upon Kansas farmer's homes? Is it lawful or is it decent that this same mortgage power does not pay the tax on \$1,000,000 in the State? Is it unlawful or is it indecent for a struggling citizen to cry aloud to partisan statesmen and servants? C. H. TAYLOR.
Esbridge, Wabunsee Co., Kas.

Number of Hogs in Kansas.

EDITOR KANSAS FARMER:—Three years ago the cholera wave commenced at the northern line of the State and was nearly a year in passing to the southern line, destroying about 1,000,000 hogs. This discouraged farmers. In 1886, the loss was less than one-twentieth of the year before. In 1887 they again decreased in nearly the same proportion. On account of the scarcity and high price of corn the number at present on hand is about 40 per cent. of the number two years ago. That is, where 100 hogs were then found only forty hogs can now be found, and the returns of many of the assessors, as shown by the full report of the County Clerks, show still less than the answers sent in reply to 500 circulars sent out for information by the pork packers. For instance, in Franklin county, there is only 28 per cent., and by actual count in one of the townships over 20 per cent. of the farmers do not own a single hog. These are facts taken from the statistical records and we have no other reliable way of getting information. What does this signify? It means a decrease in the wealth of the State of Kansas, thus: Value of swine in 1885, \$15,000,000; in 1886, \$11,000,000; in 1887, less than \$5,000,000, or a shrinkage of over \$10,000,000 in actual value of wealth to the farmers of Kansas, while disease is almost unknown and is not the present cause. What is the cause? The wide-awake, reading, thinking farmer who has been throwing away enough to keep one or two fine breeders and sees his oat crop ready to feed, is asking for cheap shoats; but he is astonished not to find them for sale. Everybody wants that kind of property now, yet many farmers are proverbially slow and cautious, and thousands are going to buy after a while. Give us a crop and we are going to start right next time. No more scrub hogs for us; they eat too much and do not fatten quickly enough to bring us the most profitable returns, and it costs no more trouble to raise pure-bred stock after I once get started than to behold an "ornery lot of second-grade hogs" as my annual product. Such is the tone of a large number of letters received, and suggests breed all first-class sows for fall pigs. Save the best, as the prices of such, under such circumstances, have always heretofore brought exceedingly high prices. Take time by the forelock and invest early, or you may get left. I hope you have learned that you don't need over one-half corn in order to produce the best results in feeding hogs; that oats, shorts, grass, etc., furnish better results. W. S. HANNA.
Ottawa, Kas.

A Brave Correspondent.

August Rogy, a traveler of some note, has just sailed from New York on a tour around the world in the interest of agriculture and stock-raising, combined with a love of adventure. He proposes to make a comparison of agricultural methods and stock-raising in foreign lands with those of America, and has equipped himself for adventure in the jungles of Africa and among the wild tribes of Arabia, which latter country he will penetrate to the interior in search of history and origin of the noted Arabian steeds. Mr. Rogy will carry a battery comprising an elephant gun (a rifled and smooth-bore barrel), a 50-caliber express rifle, a double 12-gauge fowling piece, and two Smith & Wesson revolvers. He will also have a detective camera, which does its work instantaneously, and he has asserted with determination that he will take a photograph of a lion before killing the animal. The *American Farm News*, of Akron, Ohio, has commissioned Mr. Rogy for this gigantic enterprise, and will publish and illustrate all his letters.

Regular subscription price of the KANSAS FARMER is now \$1 a year, within reach of all.

WEATHER PREDICTIONS.

By Prof. C. C. Blake, Topeka.

[Correspondence and remittances for the KANSAS FARMER on account of this Weather Department should be directed to C. C. Blake, Topeka, Kas. See advertisement of Blake's Almanac on another page.]

KANSAS CLIMATE.

A correspondent asks us to state our views as to the effect of artificial ponds upon the rainfall.

In the KANSAS FARMER of June 21, we noticed an article by J. K. Hudson on the "Water Supply for Kansas." We endorse most of that article; but when the Major says "artificial ponds add to the climatic influences which bring rain, a good pond of water of one acre or more on every farm in Kansas would do more to bring seasonable weather than any other influence," we are disposed to ask in what sense he makes the statement. While we admit that the statement as made is strictly true, yet we maintain that it is not correct in the sense in which it was made by Mr. Hudson nor as understood by the general reader. We have a right to infer as to the sense in which he made the statement, as we know that he is not in the habit of trifling with his readers. The sense in which the Major made the statement was, that man by artificial means may increase the rainfall in Kansas perceptibly, and artificial ponds will do more to thus increase it than any other influence. In this sense we cannot admit that his statement is correct for the reason that we deny the assumption that man can do anything to perceptibly increase the rainfall. It might be stated syllogistically as follows: (Major premise.) A large number of small bodies of water increase the rainfall in a State by causing a greater amount of evaporation in that State. (Minor premise.) Man can construct in any State a large number of small ponds to hold water. (Conclusion.) Therefore man can increase the amount of rainfall in any State. We deny the conclusion because we deny the major premise. It was a favorite trick with the ancient metaphysicians to catch their opponents by an artful statement of the major premise, and thus force them to admit a conclusion which was false. When it is admitted that man can do anything to perceptibly increase the amount of rainfall in any State then we admit that the statement as made by Mr. Hudson is correct. We use the word "perceptibly" because we admit that a pint of water brought from Lake Michigan and emptied upon a Kansas farm will increase the rainfall imperceptibly.

More than 99 per cent. of the rain which falls in Kansas was evaporated on the oceans and the Gulf of Mexico. It is error to suppose that small bodies of inland water or even large bodies of inland water increase the rainfall perceptibly either near said bodies of water or far from them. While it is true that the Great Lakes frequently cause small local showers near them, yet it more frequently happens that these showers are over the lakes and frequently do not touch the land at all. The cause for this is plain, but would take a long article to fully explain it. That part of Michigan lying between Lakes Michigan and Huron is nearly surrounded by the largest bodies of inland water on the globe, and yet the average annual rainfall there is only 28 inches as shown by the Smithsonian Tables for a long series of years as discussed by Charles A. Schott, of the United States Coast Survey. But 200 miles south of there the average annual rainfall is 44 inches, while at Bowling Green, Kentucky, it is 52 inches, and in the same latitude, at Springfield, Missouri, it is 44 inches. There is a small strip along the east shore of the south end of Lake Michigan where the annual average rainfall is 40 inches. At all other points around the three Upper Lakes the annual average does not exceed 28 to 30 inches, except that it is 34 at Chicago and 32 in most of Wisconsin, while in Iowa it is 40 inches in the eastern half of the State. Statistics most unquestionably show that inland bodies of water do not increase the annual rainfall. It is not certain that the increased rainfall along the southeast shore of Lake Michigan is caused by the lake, as there is a strip 100 miles west of Dubuque, Iowa, where the annual average rainfall is 44 inches. If we take the three summer months, June, July and August, the discrepancy is fully as great. During those months the average for a long series of

years in that part of Michigan between the two lakes, Huron to Michigan, is 10 to 12 inches, while in Ontario, east of Lake Huron it is only 8 inches and during the same time the average rainfall in northern Iowa is 16 inches. During those three months, the crop growing season, there is no point around the five Great Lakes, where the average rainfall is over 12 inches, and in a majority of places it does not exceed 8 inches, while at Topeka the average for many years, and the same years as were taken at the lakes, is 12 inches for those three months. At Great Bend and Larned, Kansas, the average for those three months, during the same years, was also 12 inches.

We think of but two places where man can do anything to either increase or diminish the rainfall. One is at the Isthmus of Panama. If a canal were cut there so as to connect the two oceans at the sea level it would probably cause great climatic changes in both North and South America; and the influence upon the Gulf Stream and other ocean currents would be likely to change the climate of Europe and possibly other countries. Also the Great Desert of Sahara is 1,000 miles wide and more than 3,000 miles long, and is lower than the level of the ocean. Man can easily let the water of the Atlantic into it, making an inland sea much greater than the Mediterranean. It would be a pretty fair ocean extending from Europe to the Soudan, with a few islands on what is now the northern coast of Africa. This would change the climate of most of Africa, Europe and western Asia, with a wide margin for speculation as to what the effect would be in other countries. Either of these schemes could be executed by man, but they would be very hazardous experiments, as when once done they probably could not be undone, and whole continents might be rendered uninhabitable.

While it is undoubtedly true that we can neither increase nor diminish the rainfall in Kansas, or otherwise change the climate, the very practical question arises as to how we can use such climate as we have, so as to obtain the best results. This we discussed at length in our Almanac for 1887. (We will furnish copies of that Almanac for 10 cents each, or three for 25 cents.) In that Almanac we discussed all the causes that are relied on for an increase of rainfall; showed what caused the drouths, and what the rainfall and climate will be in years to come and how to use the climate to best advantage. Every man in Kansas could better afford to pay \$10 for that Almanac than to be without it. But as we explained in the Almanac, there is one thing that we can do that will greatly help to utilize the climate in the extreme western part of Kansas. If every inch of soil in Kansas was in cultivation and plowed 12 inches deep, it would not perceptibly increase the rainfall for reasons set forth in the Almanac, but it would enable us to raise much better crops for the following reasons: While the land is unbroken prairie most of the water that falls on it runs off into the streams; but if the land is plowed deep, then the loose soil will hold nearly all the rain that can fall in one storm, and it will soak down into the subsoil before another rain, and then this loose soil will be ready to be again refilled, like a sponge; so that most of the rain that falls will be held till it can soak into the subsoil, whereas if the plowing is only two to three inches deep, as is usually the case, it cannot hold much water during a sudden hard rain, and most of it will flow off into the streams, leaving the subsoil dry. But when all the 20 inches of rain which annually falls in western Kansas is thus held by deeply-plowed soil till it can sink down, it will so fill the subsoil that these very rich lands will endure any ordinary dry spells without showing the lack of moisture, as capillary attraction will bring the moisture up from below, so that a drouth of four to six weeks at a time will do no serious harm. It is very seldom that a drouth occurs in Kansas between May and September, that is more than 30 days long. The statistics as shown by the U. S. Army officers for more than fifty years show that the bulk of the annual rain on the Western Plains occurs in June, July and August, so that with deep plowing, where the soil is not naturally loose enough to absorb the rain as fast as it falls, we believe that every part of Kansas can be made a veritable garden, with very rare excep-

tions. But when astronomical calculations show that a long drouth is coming, so that there will be no rain to fill the subsoil, the cheapest and best course to pursue, is to store as much of the old crop as possible and then only try to raise such crops as can be grown with moderate surface rains, instead of going to great expense and risking all in trying to raise corn which takes about twenty weeks to mature and demands a large amount of moisture. This also applies to Illinois, and other States as well as to Kansas. But seven-eighths of the time the subsoil will be filled, and the corn crop assured, if the surface soil is loose enough to retain the rain as fast as it falls. It is too expensive to plow deep with one plow as it takes too much team. We have always succeeded in plowing deep enough to thoroughly open the subsoil, by letting a diamond plow with one strong horse follow the sulky plow, tearing the bottom of the furrow open to a depth of 8 to 10 inches, thus furnishing a soft place for the water to sink down. The corn roots then easily penetrate to permanent moisture instead of spreading out on top of a hardpan only two to three inches below the surface where they will wither and die during the first three weeks of dry weather; while the corn on the land that had the subsoil broken with a one-horse plow behind the sulky, shows no sign of weariness after a drouth of a month or more.

KANSAS WEEKLY WEATHER REPORT.

Furnished by the Kansas Weather Service. Abstract for the week ending Thursday, July 19:

Rainfall.—Good rains have visited all parts of the State except the extreme southeastern counties and an area commencing in Lincoln and extending northwest through Osborne and Smith, including the west half of Mitchell and Jewell, the eastern part of Rooks and the larger part of Phillips. The rain was heavy generally throughout the western half of the State, and heaviest in Scott, Wichita and Greeley. In the eastern half it was heaviest in Marshall and Washington. Severe hail storms in Hamilton, Greeley, Scott and Logan. Fifty-nine per cent. of the rain fell in the west half and 41 per cent. in the east half of the State.

Temperature and Sunshine.—In the northern counties the temperature has ranged high, while elsewhere it has generally been slightly below the normal. In the northern, eastern and southeastern counties there has been a large per cent. of sunshine; elsewhere it has been deficient.

Results.—The dry weather in Osborne has been continuous since the 1st and has placed the corn crop where the next two or three days will decide its fate. The conditions are not much better in Mitchell. In Rooks the early corn is badly injured, but the late corn is in good condition (most of their corn is late). In Cherokee, Labette and Montgomery, though the corn has a good color, yet a good soaking rain is needed to remove the farmers from the anxious seat. In all other sections the crops are doing well. In Stafford, Barton, Pawnee, Ness and Gove, the timely rains have revived the corn, potato and hay crops wonderfully. The heavy dews, which are general, are doing as much for vegetation as the rains. Wheat threshing is in general progress. Oat threshing has begun in the central and southern counties. Wheat and oats are threshing out a larger yield than anticipated. Chinch bugs (old ones) have reappeared in Woodson in greater numbers than in the spring; much of the early corn is out of their way but the late corn is not. They have about disappeared from the western and northern counties and many of the central counties. The weather for the past two weeks has brought the hay crop forward so that it is in better condition now than for the past two years.

T. B. JENNINGS,
Signal Corps, Asst. Director.

TOPEKA REPORT.

Abstract for the week ending Saturday, July 21, 1888:

Temperature.—Highest at 2 p. m., 91° on Sunday the 15th; lowest at same hour, 73° on Monday the 16th. Highest recorded during the week, 93° on the 15th; lowest, 59° on the 19th and 20th.

Rainfall.—Rain fell on two days. Total for the week, 1.26 inches.

Most of our readers will be interested in the new advertisement of A. C. Griesa & Bro., Lawrence, Kas., a pioneer nursery firm of the State. They make a specialty and have an unusually fine stock of standard and dwarf pear trees. This firm have been in the nursery business in Kansas for twenty years and deserve numerous orders. Write them for what you want.

For Sale.

For the benefit of the parties who circulate the story that I am out of the Hereford business, I now offer registered bulls at \$50 to \$100.
E. S. SHOCKEY, Topeka, Kas.

Send for a circular of the music department of Campbell Normal University, Holton, Kas.

The Home Circle.

To Correspondents.

The matter for the Home Circle is selected Wednesday of the week before the paper is printed. Manuscript received after that, almost invariably goes over to the next week, unless it is very short and very good. Correspondents will govern themselves accordingly.

Tides.

In my innermost soul is a deep, deep sea,
Never furrowed by stately ships;
Where many a pleasure, many a pain,
In their shotted shrouds for ages have lain
Where the sea-gull never dips.

There are tides to this sea which ebb and shift
At the wave of Memory's hand;
And I would I could close my eyes to the drift,
The waves with their cruel fingers lift,
And leave, in their flow on the sand!

There are memories buried fathoms deep,
Lying, all bare, on the beach.
There are withered flowers I thought I had
hurled
To the uttermost depths of that sunless world,
Where the plummet could never reach.

There are bundles of letters tied with blue,
Throbbing a faint perfume
Of love which the water could never drown,
Though it plunged their sunny sweetness
down
To a drear and flowerless tomb.

And the surges which break on that Lethæan
reach
Leave the seaweed writhing there;
But the seaweed that strands on that lovely
shore—
Sad flotsam from the nevermore—
Is wavy and brown—like hair.

Would God that the croon of this sea might
cease;
That its billows might sing instead;
That its tides might sleep forever—or yet,
From its sobbing caverns of dull regret,
The sea might give up its dead!

—Julius Dexter.

Sometime.

Within the chamber of our heart there lives
A silent joy that lends each life its aim.
And goods us on to goals of wealth and fame.
This flood of mellow, dreamy gladness drives
Through each dear soul a something which re-
vives

Dead hopes, and sends to pensive eyes a
gleam
Of golden sunshine filched from angel's
dream.

"Sometime" is the word whose utterance gives
This rush of tender feeling God calls hope,
And paints to longing eyes some far-off day
When each one's builded castle shall ap-
pear

Complete throughout its tessellated scope,
With all that fancy's magic can array
To steal one's thoughts from sorrow's
falling tear.

—Edward A. Oldham, in Norristown Herald.

CANNING CORN.

For illustration, cite the factory here in Bridgton, one of the largest, and under the charge of one of the oldest practical corn-canning men in New England, A. H. Burnham. This town and vicinity are a great corn-packing center, and not only the Winslow, but the factories of various other great houses abound, all of which are conducted on the same general principles, and all of whose products have wide and enormous sales. At the Bridgton factory in the fall of 1869—in which year an unusually large acreage was planted—were employed 800 hands, of whom 100 were huskers and 375 cutters; and 600,000 cans, the product of 834 acres, were put up. Since then hard labor has given place to machinery, except in husking, which is still done by a busy brigade of men and boys, from the octogenarian, sitting in a rustic chair, to the 8-year-old lad squatting on a low stool. This picturesque autumn spectacle, too, will soon be a thing of the past, as even now an ingenious husking machine is nearly perfected, and, in fact, is in practical use by some of the smaller firms.

Up to the year 1874 the corn was cut from the cob by hand, i. e., with a small bent knife, with a gauge, with which the manipulator rapidly pared off the corn by downward strokes, with the other hand steadying and turning the ear against the inside of a long tray. Now a machine does the work as well, one man doing as much as twelve men could by hand. The ear is simply placed in position by the left hand, while by an immediate lever stroke with the right it is forced through an ingenious arrangement of knives and longitudinal scrapers, which in an instant cut off the kernels clean, and, what was the most difficult obstacle to overcome, removes all the juice without taking any of the hull—a feat not always accomplished by hand under the old system. Two makes of machines are in use by the different factories. The fact that only five or six weeks out of the year are available for ex-

perimenting explains why it has taken so long a time to perfect the cutting and other corn-packing machinery.

"PRESSING," "SEALING" AND BOILING.

Then the "pressing." In other words, to measure and fill the can with a certain amount of corn and press it in through the small circular hole in the upper end, preparatory to sealing. Two improved kinds of machines have lately come into use, each of which does its three-fold work with a marvelous nicety and quickness. With the machine in use at the Bridgton factory an ordinary hand can press (which means measuring, filling and pressing), sixty cans a minute, or 3,600 in ten hours—more than three times as much as can be done by the old hand press by the quickest and stoutest man, with the aid of a boy.

Next "sealing." Which means to place a tin cap over the aperture and solder it on with a hot revolving iron. In this department, too, there have been improvements, though not so radical as in some other branches. The can itself was first made by cutting out with hand shears the round piece which forms the bottom. Then they got a machine called circular shears, and the piece of tin was put into it and turned round and cut out in that way. Afterward a die was used, which cuts the tin right through and cuts the piece out round. The next improvement was that, instead of punching the bottom out round and putting it into another die and turning up the edge, a machine was used which cut the bottom out whole and turned up the edge at the same time. In this line the evolutions have advanced from one man's making 180 cans a day—which was considered a good day's work—to the turning out of 720 cans, or four times as many, with the aid of machinery. The cans are four and five-eighths inches long, three and one-half inches in diameter, and weigh, when filled, twenty-three ounces.

The next process, that of boiling, likewise discloses the march of improvement. Until within a year or two the cans were subjected to immersion in tanks of boiling water over four hours; now they are belled in "wood baths" from twenty to thirty minutes, and finished by steaming in iron retorts about one hour; a great saving, not only of time, but in the number of men.

Last, lacquering, labeling, boxing and shipping. This done, and then, until the next corn season the factory is silent and deserted, save by two or three hands already at work making cans for another year, and the foreman, late general of a corn-packing brigade, now suddenly bereft of staff and men. But this ever-active general is at work once more laying his plans for another season's campaign.—*Cor. New York Tribune.*

Woman in the South.

The mother was the power in every household; indeed, it was literally her home, very often her property. A New England tourist expressed to the writer his surprise at a discovery he had made in the towns he had visited. Said he, "It is always Mrs. A's, Mrs. B's house. I am invited to Mrs. C's house; I never hear of the husband's house. I think I have found really the land of woman's rights after all; men have offices, stores and plantations, but the women have the homes." And the management of this home included every detail of domestic life, as the mistress looked well to the ways of her household; from breakfast the guests were dismissed to the library, drawing-room or out-door sports, while with her own hands she washed the best china and silver before she rejoined them. The necessities of children, the wants of slaves, the requirements of visitors, the attention due her husband, made her a guide, a counsellor, a legislator in one—the wise matron who sees and improves opportunity, the gentle Portia whose judgment and affection save both Shylock and Antonio. So, in no metaphor, but in plain prose was woman the vital breath of the Southern home. The idea, so prevalent among many who ought to know better, that she neither desired, nor was capable of, greater mental effort than was demanded for the comprehension and enjoyment of a sensational novel, appears sufficiently absurd when we realize that the supposed reasons for self-indulgence were themselves the prime causes of ceaseless anxiety and unremitting care.—*Zitella Cooke, in American Magazine.*

Send for a catalogue of Campbell Normal University, Holton, Kas.

Table Talk.

To be able to say the right thing at the right time is a gift bestowed by nature upon but few persons. It is, however, attainable in a greater or less degree by all. Nowhere is the tact and adaptability of one's words to the occasion put to severer test than at the dining table. Conversation there has a double weight, affecting the physical as well as the social man. "Eat, drink and be merry" has in its hackneyed embrace an important physiological law. The habitually cheerful, happy-hearted diner has no dyspeptic alarms to answer. Light, gay banter and trivial bric-a-brac of talk are nowhere so excusable, nor quite so fitting as at meal time.

The household that makes a practice of having a jolly season at eating time will always be found to live with less friction and more real enjoyment than that one where victuals are munched in stolid silence by all. I would venture soda biscuit, pie-crust and rich cakes in the system of ye jolly eater with less fear than I should trust the strictest dietetic foods in the stomach of a mournful discontent and flaw-finder.

The cares of a lifetime may seem often to spread over the day from entertaining a magnified cloud at breakfast with no counter current of badinage or comfort or cheer to scatter the storm into spray. There is, in fact, seldom a dining-room that is not a mission field for some one's deftness at turning the talk into agreeable, sunny channels.

It is not pleasant, and not often profitable for a guest, nor is it advisable for members of the family, to spend the dinner hour in discussing the food that is being put to a legitimate use. A lady presiding at her own table has been known to make her cooking, her methods, successes or experiments with one and another ingredient, the pivot on which she balanced almost the entire conversation of the meal. To follow such a course is to cultivate a profligate habit of conversation and to foster criticisms that might be better bestowed. Food finds its ultimatum of use in ministering to physical needs, and is out of its sphere when made a leading topic of frequent table talk.

Every-day table talk can be guided as the members of the family may elect, into profit, frivolousness, or loss. Many a boy and girl receives golden nuggets of information and insight into the current affairs of the day from entertaining conversations which parents lead during the meal hours.

A company of busy people, once boarding together, and having little time for reading or study, undertook a light method of turning to profit the three times daily that they met round the dining table. They chose to greet one another at breakfast each with a scripture text or other selection of a thoughtful character; at noon each brought some item from the business world, a current event, scientific fact, literary or art note or some observation of his own; and at the tea table, anecdotes, funny happenings of the day, stray witty sayings and all enlivening talk were in order. The plan quite effectually secured its most desired end which was the prevention of "shop talk," that most tiring theme among those already wearied with their work.

Somewhat more amusing than the experience of this club was the outcome of a similar scheme inaugurated by a table of college students. For a time each member displayed his or her familiarity with the learned and wise by reciting a quotation from their writings at the supper table. "Witticisms scintillated" and "a genial flow of spirits" resulted; but one evening the association of ideas became too vividly out of correspondence when a part of the company repeated, verse by verse, Gray's "Elegy in a Country Church Yard." The remaining members groaned most perceptibly and tea-table sentiments for a time were with them at a discount.—*Good Housekeeping.*

Fashion Notes.

It is becoming quite the thing with ultra fashionable ladies to carry a cane.

Wide collars and cuffs of embroidered crepe lisse are worn with dressy toilets.

Advices from the French capital state that short waists are again coming into vogue.

To be fashionable, the hosiery should match the costume with which it is worn.

Ashes of roses and similar shades of pinkish drab are in high favor for dressy wear. Straw round hats are most incongruously garnished with much point d'esprit, net and aligrettes and garlands of leaves and flowers. Crepe lisse is a popular material for para-

sol covers. It is gathered or laid on in full folds.

Black ribbon, over a color slightly broader, is the preferred sash for wear with black lace gowns.

Ribbons for bonnet strings are perceptibly wider and have plain edges, the pivot being hopelessly passe.

Black wraps are likely to prevail this summer, as but very few colored ones are shown by leading houses.

Vests of white pique, plain or embroidered in all over designs, appear upon tailor gowns of light rough woollens.

Thistle pods and the fluffy crown of the dandelion are a good second to the wheat ear in fashionable favor.

Some of the newest street jackets are fastened only at the collar, falling away below in a modified cutaway style.

Linen blue, a very soft shade, is a favorite for fancy wool stuffs, while buff is equally liked in the sheer cottons and lins.

Lace is beyond peradventure the garniture of the season, and the finer patterns of French lace among its best bargains.

A velvet gown with hand-wrought dragon flies, life size, draped sparsely over it, is among Worth's latest notable creations.

A Woman's Sweet Will.

She is prematurely deprived of her charms of face and form, and made unattractive by the wasting effects of ailments and irregularities peculiar to her sex. To check this drain upon, not only her strength and health, but upon her amiable qualities as well, is her first duty. This is safely and speedily accomplished by a course of self-treatment with Dr. Pierce's Favorite Prescription, a nerve and tonic of wonderful efficacy, and prepared especially for the alleviation of those suffering from "dragging-down" pains, sensations of nausea, and weakness incident to women—a boon to her sex. Druggists.

The farmer who feeds sour swill to his swine seldom realizes that it causes derangement of the digestive organs and gives them diarrhea.

Before you decide where to send your son or daughter to school, write to Washburn College, Topka, Kansas, for information about that excellent institution. The fall term begins September 12.

ROYAL BAKING POWDER Absolutely Pure.



This powder never varies. A marvel of purity, strength and wholesomeness. More economical than the ordinary kinds, and cannot be sold in competition with the multitude of low-test, short-weight alum or phosphate powders. Sold only in cans. ROYAL BAKING POWDER CO., 106 Wall street, New York.



LEWIS' 98% LYE

POWDERED AND PERFUMED (PATENTED)

The strongest and purest Lye made. Will make 10 lbs. of the best Perfumed Hard Soap in 20 minutes without boiling. It is the best for disinfecting sinks, closets, drains, etc. Photographers' and machinists' uses. Foundrymen, bolt and nut makers. For engineers as a boiler cleaner and anti-incrustator. For brewers and bottlers, for washing barrels, bottles, etc. For painters to remove old paints. For washing trees, etc., etc. PENNA. SALT MFG CO., Gen. Agts., Phila., Pa.

The Young Folks.

Written for the KANSAS FARMER.

Ad Astra Per Aspera.

BY H. THOMPSON ACKLEY.

O Kansas, prairie land,
By pleasant breezes fanned;
Thy harvests increase an hundred-fold the
sowing;
Autumn found thy granaries filled and o'er-
flowing.
Hills were crowned with wild grass;
On these the cattle fed *en masse*.
Myriads of herds and flocks o'er these prairies
ranged,
Year after year their course was unchal-
lenged and unchanged.
By aid of mem'ry sweet
This rustic scene I greet;
I seem to hear them, as I heard them then at
dawn—
The tramp of the hoofs when the corral bars
are drawn;
The rustle of the cattle,
Mingled with the rattle
Of the clashing sea of horns, which shine in
the light
Like unsheathed swords of cavalry shining
bright.
From hillside to hillside,
O'er hollow and divide,
Slowly moves the great panting, lowing, rest-
less herd,
Like some drifting ocean bark from its moor-
ings severed.
The herder on his steed
Lazily follows the lead,
Gently humming a cowboy tune not far away,
Or rounding in some roving steer inclined to
stray.
Along the well-worn trail
Comes a ship without sail;
'Tis a prairie schooner, or in less polite phrase,
A camp-wagon, whose inmates have the Kan-
sas craze.
Many more are steering
This way, and are nearing
Ev'ry day their port on Kansas' rich and fer-
tile shore.
On, O tide of Immigration! we love thy roar.
Ye people of the East!
Your welcome has not ceased.
The land, for whose liberty John Brown so
bravely fought,
Is calling you with gladness that with love is
fraught.
O Kansas, best of States,
How happy are our fates,
As on "To the stars by difficulties" we press,
Our faith in thee growing greater instead of
less.
Hartford, Kansas.

SHOT IN THE SADDLE.

There were rocks ahead—there was no doubt of that. For weeks we had heard whispers of an Indian rising, and now the redskins had us hemmed in on every side. The white settlers had long ago left the territory, and we were holding the fort in utter desperation. Dear old fort, what happy days we had spent in it! How brave and bright the hearts that beat there! It was picturesquely rough. The winding river could be seen a mile away, gliding and quivering through the trees like a huge serpent. The air was laden with the scent of the pine bloom, and the prairie round was soft as velvet. The high stockade that ran round the barracks made the position all but impregnable, and we kept the old flag floating over it to the last. But the day came when we had to leave it, flying for our lives. We were only a handful of men from the beginning. The captain had been murdered by the red devils three weeks before when parleying with one of the chiefs, and Bruce, his orderly, galloped back with an arrow in his lungs and died two days after. Scottie and Ford succumbed to typhoid fever and were buried behind the stables, and only six of the boys were left besides myself to see the end of it.

I was in charge after the captain's death, and when I saw them drag his mutilated body past the fort I felt sorely tempted to trust to luck and make one good old-fashioned charge at the dusky scoundrels. But I had great responsibility upon my shoulders then, and as I was only a non-commissioned officer I did not care to be too rash or to fool away my comrades' lives unnecessarily. A prairie trooper is not just the most refined character going; he does not move much in polished society, nor does he see many new

faces; but he loves his comrades all the more for that, and I knew there was not a man among us that would not die for the other if it came to a pinch.

So we kept on our weary watch, waiting for the help that was never to come.

Dear old chums, how brave and patient they were. If I had been a general they could not have obeyed me better. I wonder if an odder squad of men were ever shaken together? Here was old Peter, the veteran, always talking of the "precarious times," but as game as a pebble in spite of his frosted head; and Frenchy, so called from the long goatee he insisted upon sporting as often as he could find an officer good-natured enough to tolerate it; there was the Parson, nicknamed on account of his never-ceasing profanity, but who was as tender-hearted as a woman; Ananias, always telling the most impossible yarns, and invariably ending with the solemn asseveration, "This is a true story;" Fatty, ever on the lookout for a meal, and, last of all, there was dear old handsome Curly—every one who knew him loved him. His voice was the loudest and his laugh the merriest everywhere. His heart was as big as a house, and he always had a smile and a kindly word for every poor wretch that ever needed one. He was a reckless dog, and oftener in scrapes than any man in the command; he received his reprimands and punishments in due course, and when they were over was again as bad as ever. The men adored him, and the officers thought nothing that was done was good enough or bad enough unless Curly had a hand in it too. How he used to laugh when an Indian came within range and how incessantly he used to pep at him, "just for fun!"

It was all hard enough work while it lasted, though we never knew from one moment to another when the enemy might storm us, and the horses were kept saddled day and night, in case of a surprise.

We had to keep our eyes skinned, you can bet on that. The Indians were round us, not 100 yards away, and seemed to divine how scarce our provisions and ammunition were.

For a week or two we had peppered them gayly; but it soon became too expensive an amusement, and we had to husband every cartridge we could count, against the day when they might mean men's lives. Right up the hills behind, right on to the river in front, they lay in wait for us; and the curling smoke from their teepee fires told us in what swarms they mustered.

Escape seemed quite impossible. The stores were all but finished, and half rations was the order of the day for man and beast. The horses had the worst of it, I think; deprived of exercise and stinted of their food, their legs began to swell, and the want of water made their coats rough and staring and their tempers vicious and uncertain.

Things went on like this for more than a month, and at last we had not more than three days' provisions left amongst us. The well had dried up completely, too, owing to the awful drought, and the men were beginning to be wild and desperate.

I had just dropped asleep one night after a long night watch when Frenchy woke me to say that a fresh detachment of Indians had crossed the river on a raft, which was moored close to the horses' old watering ground. This he had distinctly seen from the lookout tower on the old hospital roof, and he further added the alarming information that the newcomers had their "feathers" on and were dancing to the beat of the tom-tom.

This was as bad as could be, for the feathered heads and muffled beating betokened bloodshed. I was up in a moment, and every loophole in the corral was stopped as fast as willing hands could do it. The horses were led into the square, and the little squad, armed to the teeth, gathered together, prepared to defend their lives as only desperate men know how to do.

We had not long to wait. We saw the mob in front of us grow larger and heard the guttural yells that greeted the big chief's speech, and then they came toward us in a solid mass. Forty yards away they stopped, and forming a circle round the barracks, fired volley after volley at us, but their bullets struck harmlessly in the palisades or flew high above our heads.

Occasionally they would fire arrows in the air to which were attached burning rags,

with the evident intention of setting fire to our buildings.

For many hours this went on, the redskins knowing that they had us completely trapped, while we dared not waste our ammunition by the discharge of a single shot. At last they succeeded in firing the stables, and the old wood burned like tinder.

Fatty and Frenchy got up to the roof at once to try and save the place, but hardly had they shown themselves when there was a deafening gun fire, and Fatty fell dead at our feet, shot through the head.

We were determined that the Indians should not get his body to mutilate and disfigure, so we laid it in the thickest of the roaring fire to burn. There was no time then for leave-taking nor signs of sorrow, and what we had to do had to be done quickly.

From the stables the fire spread to the hospital, and we were getting scorched by the awful heat, while the horses were becoming unmanageable through fright and excitement.

The moment had come for action and could not be delayed. "Boys," I said, as I looked into the faces of the little group about me, "we've stuck to this old outfit long enough. We haven't another meal to eat nor a drop of water for the horses, and the place is on fire all round us. We needn't expect any mercy from these howling devils, and I'm not for asking it, either. But we must get away from here pretty quickly, that's certain, so I propose to make a dash for the river and the raft; if we can reach it safely we may save our skins, and if not we may as well be killed out there as burned like rats in here." To this there was a general assent, and that is how the sortie was arranged.

It takes a long time to tell, doesn't it! But it wasn't long of happening, I can tell you.

The horses' girths were overhauled and tightened, and each man slung his rifle on his back. Revolver in right hand and saber in left, we prepared to mount, with the understanding that we were to keep together pace for pace, straight out into the open for half a mile, and then strike to the left for the river.

One moment for a silent, rapid hand-shake, and we were all in the saddle but Curly, who stood at the gates to open them. I held his horse and saw him jump into his place, almost before the rusty hinges had ceased to creak.

The Indians saw our movement and headed for us immediately, but we were too quick for them and charged smash into them, riding down the nearest and shooting, and sabering right and left.

How distinctly I remember in the next few seconds the crimson blood, the thunder of the horses' hoofs, the moans and cries, and the deep, labored breathing as the heavy sabers rose and fell.

The firing, unfortunately, was a signal to the Indians near the river bank that we were moving, and we could see the gleam of their rifle barrels as they ran toward us. There must have been 300 of them about us, and we were only six. I don't know how the other fellows felt, but all my nerves seemed strung like wires as we galloped along. Here was a scene of glorious, mad intoxication that overcame all other feeling.

How the horses ran, half plunging, half in air, and how the lead hail whizzed on every side of us! We got well into the open, and "Left wheel," I shouted, and then we were making straight for the river.

A rattling volley from a little thicket we were nearing passed right amongst us, and I saw Curly's right arm fall limp and helpless by his side. The bright cheeks blanched, but he never uttered a sound, and I saw him let his pistol fall and put his sword between his teeth as he tore along.

The parson was swearing at the top of his voice and slashing like a butcher as he stood high in his stirrups, and we went on neck and neck, like a rolling wave. We were within half a mile of the water now, and the spurs were jammed hard and fast.

Oh, if we could only make it!

Another volley and Curly fell forward on his saddle, but was up again in a moment, ghastly white and with the blood pouring in torrents from his mouth. He staggered and swayed, but shook his brave head and smiled as if to say he was with us still.

"Hold on, Curly!" I cried. "Sit steady, man—for heaven's sake, sit steady! We are almost there."

In another moment we were at the raft,

Ananias was cutting at the ropes and I had Curly in my arms, while the others covered us against the yelling mob now fast overtaking us. The horses fled madly off as soon as we dismounted, and we could see the braves pursuing them already far away.

The rest is quickly told. We got afloat and dropped smartly down the stream, lying flat on our faces to lessen the danger of being hit by the shots the enemy kept dropping at us.

For hours they followed us down the bank, and every now and then when the river narrowed and brought us too close to them, we would give them a dose, dropping the nearest and scattering the rest. But when the evening came and the sun went down we saw the last of them and knew that we were safe.

Not a man was hurt but Curly. Why was it that he alone—the bravest and the best—should have been singled out for such a death? His arm was shattered and a bullet had gone in at his back between the shoulders. He was in agony, and we had not a comfort to offer him. We laid our tunics on the rough log knots, to make it softer for him, and the Parson pulled his shirt and socks off to make a pillow for him. Frenchy tore his shirt into strips for bandages, and Peter used his to cover up the poor cold feet.

Yes, Curly was dying. He groaned with pain, but he never complained, and although he could hardly speak he smiled at us to thank us for what we had tried to do for him. There were few words spoken as we drifted on, and when the great moon rose in a blaze of silver light she looked down on one hard sight that night—a little log raft dancing on the water, and on it six weary men, blood-stained, half naked, dust-begrimed, and one of them with glazing eyes fast traveling to the farther shore from which no man returns.

Just before midnight Curly spoke.

"Good-by," he said, and the boys knelt round him in a group and took his hands. The tears were trickling down their faces, who would themselves have died without a tremble. "I'm going, boys; good-by." And then he put his hand up to his neck and showed the little chain he always wore, and which he used to call his dog collar. "Give it to her by-and-by," he whispered. "Dear little Jeanie," and then he fell back exhausted. He was so white and still we thought him dead, but soon he spoke again. "How dark it is! Well done, Parson. Jeanie, come back to me! Steady, there. Dear little woman—"

And Curly's life went out forever.

When the stars gave way to the rose tints of the early dawn we landed in a little pine wood. With swords and hands we dug a grave and placed him tenderly in it, kissing his dead cold face. The Parson's shirt was still his pillow and Peter's red tunic his winding sheet. His sword and rifle and spurs were laid beside him, and dear old Curly was left alone.

Who Jeanie was we never knew, but the heart that loved her was as true as steel.

Did you ever care for him, oh, well-loved Jeanie? or was he less than nothing to you? Are you hoping still to hear his laugh and feel his strong arms round you? or have you long since ceased to think of him?

No monument is standing to tell his worth, no prayer was chanted over his mossy grave, but the pine trees wave all round it and the song birds sing above it, and Curly—dear old Curly, the lion-hearted, the best and truest of men—sleeps in it alone the sleep that knows no waking.—*New York Mercury.*

Purify the Blood.

We do not claim that Hood's Sarsaparilla is the only medicine deserving public confidence, but we believe that to purify the blood, to restore and renovate the whole system, it is absolutely unequalled. The influence of the blood upon the health cannot be over-estimated. If it becomes contaminated, the train of consequences by which the health is undermined is immeasurable. Loss of Appetite, Low Spirits, Headache, Dyspepsia, Debility, Nervousness and other "little (?) ailments" are the premonitions of more serious and often fatal results. Try

Hood's Sarsaparilla

Sold by all druggists. \$1; six for \$5. Made only by C. I. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

TANSY PILLS!
Safe and Sure. Send 4c. for "WOMAN'S SAFE GUARD." Wilcox Specific Co., Phila., Pa.

KANSAS FARMER.

ESTABLISHED IN 1893.

Published Every Thursday, by the
KANSAS FARMER COMPANY.OFFICE:
331 Kansas Avenue, Topeka, Kas.S. J. CRAWFORD, PRESIDENT.
J. B. MCAYRE, GENERAL AGENT.
H. A. HEATH, BUSINESS MANAGER.
W. A. PEPPER, MANAGING EDITOR.SUBSCRIPTION PRICE:
ONE DOLLAR A YEAR.

An extra copy free one year for a Club of six, at \$1.00 each.

Address KANSAS FARMER CO.,
Topeka, Kansas.

ADVERTISING RATES.

Reading notices 25 cents per line.
Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per line for one year.
Annual cards in the *Readers' Directory*, consisting of four lines or less, for \$15.00 per year, including a copy of the KANSAS FARMER free.
Responsible advertisers may contract for display advertising at the following rates:

| | One inch. | Two inches. | Quarter column. | Half column. | One column. |
|--------------------|-----------|-------------|-----------------|--------------|-------------|
| 1 week | \$ 2 00 | \$ 3 50 | \$ 6 50 | \$ 13 00 | \$ 20 00 |
| 1 month | 6 00 | 10 00 | 18 00 | 35 00 | 60 00 |
| 2 months | 10 00 | 18 00 | 30 00 | 55 00 | 100 00 |
| 3 months | 14 00 | 25 00 | 40 00 | 75 00 | 135 00 |
| 6 months | 25 00 | 45 00 | 75 00 | 135 00 | 225 00 |
| 1 year | 42 00 | 75 00 | 120 00 | 225 00 | 400 00 |

All advertising intended for the current week should reach this office not later than Monday.
Electros must have metal base.
Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.
To insure prompt publication of an advertisement send the 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.
Every advertiser will receive a copy of the paper free during the publication of the advertisement.
Address all orders,
KANSAS FARMER CO.,
Topeka, Kas.

Kansas State Fair, September 17 to 22, at Topeka.

Phillips county fair September 18 to 21. Let us go.

The Nebraska State Fair will be held at Lincoln, September 7 to 14.

A communication from Mr. Irvine, Oregon, Mo., is received. It will have attention.

The Western National Fair at Bismarck Grove, near Lawrence, Kas., September 3 to 8.

The Douglass (Butler county) sugar works expect to begin the work of sugar making about the 10th of August.

"Horace's" report of the proceedings of the last session of the Missouri Valley Horticultural Association is received, but too late for insertion this week.

The Central Kansas Dairy Association is organized. The next meeting is to be held at Salina, August 10, to further perfect the organization. In our Dairy department next week, Horace will tell about it.

A North Carolina Congressman, discussing the proposition to create a department of agriculture, referred to the farmers of the country as "this great host who have in their keeping every political possibility of this government." How true, and how suggestive.

Melville W. Fuller was confirmed as Chief Justice of the United States by the Senate last Saturday. There were twenty votes—all republican—against confirmation. We are pleased to note that Senator Plumb's name is not among them. Judge Fuller, we doubt not is quite as good a man as any of those who opposed his promotion. The people of Chicago, without regard to party, approved his nomination. Party spirit often becomes offensive.

ABOUT KING CORN.

Corn as a generic term, includes all the cereal grains. In that sense corn is king. Corn has builded Kansas and all the West; corn made the country. In a special sense, however, Kansas is peculiarly a subject of King Corn. At least 99 per cent. of her surface is tillable land, on every acre of which corn will grow as readily as grass. All there is of Kansas has grown with and from her fields of corn. Corn fed the pioneers and paid their trading bills; corn invited immigrants, corn fed the herds, built the cities, constructed the railroads, and furnished their traffic; corn erected school houses and educated the people; corn surfeited the grasshoppers and bridged over the dry years; corn builded a grand commonwealth on these fertile prairies, and the reign of King Corn is but begun. Let us build a monument in his honor, a monument at once suggestive and appropriate—a bridge of corn. Who will join the army of bridge builders? It will not require as many men nor as much time as did the great Pyramid in Egypt, nor will it serve as the tomb of monarchs; it will be a grander structure than any mausoleum, a silent teacher of the multitude, a tribute to truth and labor wrought in grain which the Father gave us for our toil.

By way of encouragement and stimulus, we call attention to the Sioux City Corn Palace for 1888. Last year the Sioux City people built an immense structure, using only maize (Indian corn) for finish. This year a similar effort is to be put forth and on a grander scale. It is to be open to the public on the 24th day of September, and will be closed October 4, following. In the circular letter announcing the event, the managers say they were so much encouraged by the people and particularly President Cleveland, Chauncey M. Depew, and other men of national reputation who visited and inspected the Palace last fall, that "the business men of Sioux City have formed a stock company for the purpose of repeating it on an immensely grander scale, intent upon making it one of the solid and enduring institutions of the country, and an attractive feature of Sioux City. In the light of valuable experience it is our determination that the Corn Palace of 1888 shall outrival in design, construction and beauty any building ever before erected; that it shall be in fact the eighth wonder of the world; a temple to Mondamin, surpassing any structure erected by pagan hands to any of their deities. The idea is unique and absolutely original. No other Corn Palace was ever before built, nor was the design therefor ever conceived in the brain of man. 'Tis the one new thing under the sun. Those who invented it 'builted even wiser than they knew,' for the marvelous creation exceeded in beauty, in magnitude, and in originality, all the wildest dreams of the originators. Hitherto the hand of man had erected palaces of stone, and marble, and ice, but the Sioux City Palace was like Victor Hugo's conception of Waterloo, 'a change of front of the universe,' an event that altered the course of empire and forever crowned Sioux City as 'The only Corn Palace City of the World.' It is the realization of an idea that fixes Sioux City for all time as the seat of empire for King Corn, the center of the great corn belt, with its illimitable resources, its tireless activities, with its unparalleled prosperity."

That our readers may see for themselves about how our Iowa neighbors'

minds are running, we append a picture showing the palace as it will appear when completed.



What half dozen big-hearted Kansans will take hold and help build the Bridge?

CORN ENLIGHTENING THE WORLD.

Kansas corn is worth talking about and writing about, for it is the foundation of the State. Professor Worrall, the Kansas genius who has wrought wonderful shapes in Kansas corn in other years, now proposes another and the grandest of his schemes—no less a project than to take Kansas corn to Cincinnati and with it there, in the midst of Ohio Valley's Centennial display, erect an exact duplicate of Liberty Enlightening the World.

Mr. Worrall has thought it all out in detail. He proposes to excavate a space in the ground where the foundation timbers for the pedestal shall be placed, and upon them to construct the shaft, which shall be illuminated by electric light. The entire facings will be made of cornstalks and corn ears, with lettering in different colors of the clean ears. Beneath the pedestal, and inside of it will be "Kansas at Home," that is to say, the office where the committee in charge will have headquarters and where Kansas people and their friends and visitors will meet to talk about Kansas.

This scheme has the hearty approval of the KANSAS FARMER. We hope to see it carried out in every detail, believing that it will bear fruit "an hundred fold" for Kansas. A committee consisting of the following named persons have consented to act in organizing the work and pushing it ahead to completion: W. A. Pepper, editor of the KANSAS FARMER; Hon. Martin Mohler, Secretary of the State Board of Agriculture, and Hon. J. S. Coddington, Potawatomi county.

Persons who will donate corn for this purpose, will please communicate with the editor of the KANSAS FARMER, stating the height and quality of his corn, the color of the ears, and how much of it he is willing to donate. He will in due time be notified what further, if anything, is required of him. The committee will bear expense of shipment, except where donors prefer to pay it themselves.

A Rice county man writes: "Go slow on big wheat stories," but "say that corn is simply grand in the valley."

The river and harbor bill now before the President for approval, appropriates \$23,000,000. He vetoed a similar bill last year which proposed to expend \$8,000,000 on rivers and harbors; but it is expected he will approve this one.

THE LEAVEN IS WORKING.

The KANSAS FARMER appreciates the many friendly and encouraging expressions of good will which come in from friends. Believing that a paper published in the interest of agriculture is in the widest field and one that requires most and most thorough culture, the management have undertaken to assist the people in the great work in hand. It is a mistake to suppose that a farmer's paper should look no farther than the routine work of the farm. That is not by any means all there is of a farmer's interest. Who pays most of the taxes? Whose labor does most to support every industry in the land? Whose land is taken for common roads and for railroads? Whose land is mortgaged to pay bonds and taxes? Aye, dear friend, the farmer of all men needs a paper that knows his interests and has the courage to advocate them earnestly.

Don't meddle in politics, one says. Well, why not? Don't you meddle in politics? And do you find everybody agreeing with you? Do you believe one-half of what your party paper tells you? If you do, do you believe anything which papers of opposite politics tell you? In truth, the man who objects to politics in his farm paper, has not yet grown to the full stature of a freeman. It should not be a party paper, but it must discuss questions which interest farmers or it is not worth the paper its matter is printed on; it might as well set up its advertisements, print them and stop at that.

The text for these suggestions is the freight which many letters are bearing to us. Here is a sample, which the author did not send for publication, but for encouragement. We want our friends to know that we are human and that good words do encourage us. This friend writes:

I have read with much satisfaction and interest over and over again the 10th and 11th pages of the KANSAS FARMER for July 12. The editorial matter of the FARMER is always fresh, wholesome, newsworthy, and of a substantial nature. I find more advanced thoughts in the FARMER than in any other one paper. I have reference to the FARMER as a farmer's paper, a paper whose interests seem to go out entirely to the producing class. Your course concerning taxation in the last number is certainly commendable. It brings to mind the fact that men in ordinary circumstances in the country are elected to county offices, and by close attention to the business of the office are enabled in the course of two or three terms to own the finest building and best furniture in the county seat. Why a man should receive so much more for from eight to ten hours in an office than he can possibly make on his farm by working from twelve to sixteen hours per day, is something that is not quite clear to me.

Professor Graham, of the Agricultural College, calls farmers' attention to the ox-eye-daisy, or as some call it, the white daisy. He says "of all noxious weeds with which the farmer has to contend, this is one of the worst, exceeding, in undesirable qualities, the cocklebur, the 'jimson,' the sandbur grass or the crab grass. It will probably prove a worse enemy to the farmer in his cultivation of the tame grasses than either hot winds or blizzards, and, as it is only beginning to spread here, now is the time when prompt action will count most towards exterminating it."

Ensilage is growing popular, and it is generally believed that the corn or grass which is ensilaged, is better for being cut before packing. We are in receipt of the Ames Plow Company's catalogue describing, among other machines, the New Doctor Bailey cutters for ensilage and dry fodder. Such of our readers as need cutters would do well to correspond with this company and get their catalogue and prices. Address Ames Plow Company, No. 53 Beekman St., New York city.

A DOLLAR IN SALARY.

It is precisely the same as a dollar in tax, a dollar in interest, a dollar in debt. Salaries are fixed sums of money prescribed in the laws, and they do not vary in amount any more than the laws vary in certainty. Salaries are paid by the people; wheat, corn, horses, cattle, beef, pork, hay, butter, cheese, eggs—everything which farmers raise, are mortgaged to pay salaries precisely in the same manner that they are held as security for the payment of any other obligation named in the law. This is all well enough; nobody is complaining about it. But is not the dollar in salaries, as well as the dollar in nearly every other statutory charge upon the people, too big? Is it not costing too much sweat and brawn, too much of the substance of the people?

We are touching a tender spot; that is understood and appreciated; but it must be touched. Salaries are the wages paid by the people to officers for services rendered, and they are as much and as properly subject for discussion as are wages paid by private individuals for work and labor performed for them. The consideration of the subject naturally divides itself into two lines of thought, the amount involved in salaries, and the number of salaries to be paid. As to the amount, let that pass for the present. How about the number? Are we not paying more salaries than we ought to pay? Do we really need as many officers as we are now employing? Go out among the people and look at the management of their affairs. Do business men now employ as many persons to perform the same amount of work that they did in years gone? Do railroad companies and other great corporations employ as many persons to do the same amount of work? Do farmers now employ as many men as they did once to do the same work? Is not machinery taking the place of men? Are not iron and steel supplanting flesh and blood as to a great many things? Have not short-hand writing and the type-writer superseded thousands of clerks? Is not the "cash boy" changed into a bit of wire and a hollow wooden ball in hemi-spheres? In short, do men not do a great deal more work now than they did in years gone and with even less manual effort expended? It will be answered yea, probably; but it may be urged that there is more work to do than formerly. Granted. Still, are we not employing too many persons to transact the public business? Are we not creating new officers every year, and are we not adding clerkships from year to year, in face of the fact that improvements in office work have increased the capacity of clerks quite as much as business has increased? Compare the work done—the amount of work, done by public officers with the amount of work done by persons of equal capacity in private life. Occasionally a hard working officer is found, one that works continuously and faithfully—just as he did or does when working for himself or for another in private matters; but that is not the rule. The rule in practice is to elect or appoint an officer and then furnish him clerks enough to do the work of the office.

This is a wide field and it needs working. It must be worked. The scramble for office every year is good evidence that there is some attraction in official service aside from honor merely. As these lines are written, and within a few rods of the writer, a large number of men are congregated at great expense, some of them candidates and some are friends of candidates, all engaged in a heated struggle to carry off the prizes—nominations to be awarded

at the convention this week. Governor, four years—\$12,000; Secretary of State, four years—\$8,000; Auditor of State, four years—\$8,000; Attorney General, four years—\$8,000, and so on. Eleven candidates for Governor, an equal number for each of the other places on the State ticket—seventy-five, about, every one of whom has a dozen special friends on the ground, besides other more leisurely workers—at least a thousand men now in Topeka working for the six State offices to be filled at the coming election.

In every one of the one hundred and six counties in the State a like commotion is coming on. Not in the memory of any man now living have the people been compelled to hunt up men who would accept office. Applicants are at hand always. And now politics is a profession. Men lay plans years ahead; they arrange, during one campaign, for the work of the next—in their own interest. It is time that this matter be probed.

What Will His Text Be?

We are at the opening of a political campaign and the people will be expected to "come out and hear the issues discussed." What will be the campaign speaker's text this year? Without being able to state with absolute certainty, there is little room for doubt that unless the people demand a different course, candidates and their friends will talk about a great many things which, like unpalatable food to a sick man, "do not reach the right spot." And this thing needs attention. The people foot all the bills; they ought to know everything which politicians propose to put on the political bulletin boards. Will the orator talk about public and private burdens? Will he talk about the public expenses, and will he suggest ways and means of diminishing them? Will he propose the reduction of expenses? Will his text be taxation? That is an interesting subject. Taxation in national affairs, taxation in State affairs, taxation in county and city affairs,—is the great text. It may be divided as far as to secondly, even unto ninety-ninthly. Its ramifications extend out among the people, reaching into the stables, the bins, the cellars of the farmers; into the shops of mechanics, into the cupboards of day laborers, into the stores of merchants, into the machinery of factories, along the lines of railways—everywhere does the matter of taxation touch the people. Nothing will be more directly interesting than discussions of this great subject. It involves vital matters, and it is wide enough to include all economic questions.

Let the people require at the hands of every person who undertakes to teach them from the platform,—that he gave due attention to things which pertain to their immediate interests. Let them suggest points for discussion; let them insist that public teachers shall themselves be taught; let the people select the text and direct the discussion, as they do with men and women whom they employ to teach their children.

The tariff bill passed the House last Saturday substantially as it was introduced. Mr. Mills, in closing the debate, said the average duty still left by the bill on dutiable articles will average 43 per cent., or to quote his exact figures 42.99 per cent. It puts wool, flax, lumber, salt, and some articles of minor importance on the free list, and leaves a duty of 43 per cent. on the balance; that is to say, though the rates vary a good deal, the general average is about that. The vote stood 162 for and 149 against the bill—a party vote. Messrs. Sowden, of Pennsylvania, and Greenman and

Bliss, of New York, Democrats, voted with the Republicans against the bill, and Mr. Fitch, of New York, and Mr. Nelson, of Minnesota, Republicans, voted with the Democrats for the bill. Mr. Randall, of Pennsylvania, was sick and unable to be present, but he requested an announcement on the floor of the House that he would vote against the bill if he were present.

The United Farmers' Association.

By courtesy of Milo Roberts, President, and G. P. Miller, Secretary of Plowman's Lodge No. 1, Garfield, Pawnee county, Kansas, we have a copy of constitution and by-laws of the United Farmers' Association of the State of Kansas. Section 2 of the constitution shows: "The object of this association shall be to alleviate that condition into which farmers have fallen, and to raise ourselves to that condition in society which we, as farmers, are justly entitled, and to place ourselves on a foundation sufficiently strong to secure us from further encroachments, and to elevate the moral, social and intellectual condition of every farmer in the country, and to the consummation of so desirable an object, we the members in convention assembled, do pledge ourselves to unceasing effort."

In the preamble it is asked and asserted: What position are we—the farm workers of America—to hold in society? Are we to receive an equivalent for our produce sufficient to maintain us in comparative independence and respectability; to procure the means with which to educate our children and qualify them to play their part in the world's drama; or must we be forced to bow the suppliant's knee to wealth, and earn by unprofitable toil a life too void of solace to confirm the chains that bind us to our doom? "In Union there is Strength," and in the formation of a United Farmer's Association, embracing every farmer in the country—a union founded upon a basis broad as the land in which we live—lies our only hope. Single-handed we can accomplish nothing, but united there is no power of wrong we may not openly defy. Let the farmers of such places as have not already moved in this matter, organize as quickly as possible and connect themselves with this association of farmers. Do not be humbugged with the idea that this thing cannot succeed. We are no theorists, but are eminently practicable. Nor can injustice be done to any one; no undue advantage can be taken of any of our farmers.

By addressing the Secretary at Garfield, a copy of the constitution and by-laws may be obtained.

The Kansas Grand Circuit association announce ninety-eight races, and \$100,000 in premiums. The places and dates of races are: Wichita, Kas., Aug. 27, 28, 29, 30, 31 and September 1; Winfield, Kas., September 4, 5, 6 and 7; Newton, Kas., September 11, 12, 13 and 14; Topeka, Kas., September 17, 18, 19, 20, 21 and 22; Salina, Kas., September 26, 27 and 28; Hutchinson, Kas., October 2, 3, 4 and 5.

Messrs. Philbrook & Dean, 271 Dearborn street, Chicago, writes us: "Our firm, in connection with the leaders of the laboring men's organizations and Prohibition and Greenback parties, is to commence the organization of a political party, for the purpose of giving the people a candidate for the Presidency who will favor a change of the policy of the government for the benefit of such classes or propositions as they advocate, and your assistance is wanted in the good work." In response, permit us to say that in our judgment there are parties enough now; let us try to make them more responsive to the people's wishes.

Fourth of July Corn.

Acting on suggestions in the KANSAS FARMER, a good deal of corn was listed on wheat stubble this year. We have letters from different parts of the State mentioning the fact.

Last Saturday, Mr. Disney, whose farm lies on the Wakarusa, Douglas county, was in this office, and said that when he had finished cutting his wheat he started the lister; that he listed a field on the fourth day of July, and that his corn was two feet high when he left home—July 21st. Think of that—corn two feet high from the seed in seventeen days.

It has been common in Kansas, when circumstances made it necessary, to plant corn seed in July, and it usually brought a fair crop. In 1874—grass-hopper year—corn fields in the Verdigris and Fall river valleys—fields that had been seeded about the 4th of July, produced thirty to sixty bushels of corn to the acre. But a growth equal to this of Mr. Disney, we never saw equalled, unless it was the sprouting of turnip seed and young plants one-fourth of an inch high in forty-eight hours from its sowing. That occurred under our observation this year and this month, on the writer's own ground.

Farmers' Institute in McPherson.

Mr. A. J. Hartsock furnishes the following interesting information:

McPherson county has been scourged with chinch bugs, yet the timely rains have enabled the crops to grow finely. Corn promises an immense crop, yet we felt that we must do something to enable us to check the ravages of the bug; hence a farmers' meeting was held to consider the subject. Dr. Waugh was elected Chairman and A. J. Hartsock Secretary. The following resolutions were adopted: The farmers of McPherson county in convention assembled deplore the destruction of grain and grasses by that little pest, the chinch bug, and to guard against the further spread and continuance of the pest in our midst, request all farmers in our county to arrange their plans for growing crops that will not feed and harbor the chinch bug—that there be a combined effort to prevent wheat from being raised so far as practicable.

That we hereby request all township trustees to form township clubs to work to this end and protect the birds that feed upon the bugs in winter. To arrange to burn all stubble fields, grass land, and destroy all winter quarters of his bugship—clean out the hedges also to use all efforts to plow, harrow and roll all the land possible during fall late in the season.

We adjourned the meeting and organized a Farmers' Institute, to be permanent, to meet every two weeks. We believe that we can accomplish a good work. We have an excellent county and our farmers are energetic and intelligent.

At this meeting the following program for July 28 was adopted: On Market Reports, J. B. Ricketts; Entomology, W. Koanse; Diversified Agriculture, A. F. Waugh; Horticulture, Geo. Oliviant; Our Dairy Interests, A. J. Hartsock.

The Cowley county Fair and Driving Park association will hold a fair at Winfield September 3d to 7th inclusive. Preparations are in progress for a first-class exhibition.

Book Notices.

HARPER'S.—That the coming cow of America is to be of Dutch extraction has been foreshadowed of late by the increasing strength of the displays of the Holstein breed at many cattle shows in this country, and by the growing interest felt in the milk and butter records of imported Dutch cattle. Farmers, and, indeed, all persons who wish to be well informed, therefore, will peruse with attention the article on "Holstein-Friesian Cattle" by S. Hoxie, which appears in Harper's Magazine for August.

THE FORUM.—The Forum for August will contain the second of a number of articles by Edward Atkinson on "Problem of Wages and Production." In this article he shows the insular quality of British economic thought and marks out of the way for an American social science. He shows how, under republican institutions, production is gaining on consumption and the condition of the laboring class is constantly improving; and he insists that the part the human mind will play in increasing the food supply of the world has been left out of reckoning. This is a fatal fault in the Malthusian doctrine that population will increase faster than food production, and in Ricardo's theory of rent. The capacity of the earth's production under scientific treatment cannot even be conceived.

Horticulture.

APPLE TREES AND THEIR SOILS.

The following is one of a series of articles prepared by Prof. Hawn, of Leavenworth, and published in *Colman's Rural World*, under the head—"Among Diseased Apple Trees."

My observations, extending through several States, which probably were also corroborated by some of the readers of the *Rural World*, that wherever the soil was of a character as to require frequent appliances in keeping it up to an economical standard of fertility for agricultural purposes, there the most healthy orchards were found, and even on soils where that standard was not attainable, and when the temperature during the winter more often decreased to 20 and 25 deg. below zero.

On my first visit to the West in 1834, there were apple trees apparently one hundred years old, opposite to St. Louis on the Illinois side, then called "American Bottom." The extraordinary fertility of the soil there was proverbial. Healthy apple trees then are found on the poorest soils and on the richest; yet on equally rich soils of the uplands of Missouri and Kansas the trees forecast decay early in life, and often their value is destroyed in a score of years. There must be a cause for such discrepancies.

In a former article I referred to the different phases leading to the disintegration which is destroying the apple orchards in north Missouri, lower Iowa, southeastern Nebraska, and eastern Kansas, and that the cause of that encroachment was the freezing of the alburnum of the previous summer's growth; and the failure in converting this growth into solid wood was due to summer climatic conditions extending too far into the autumn, and that the deleterious effects described in my first article are mainly produced by, or very much aided by the trees taking deep root in the lake-marl, which was described in article 3, which deeply underlies the regions referred to, and consequently the roots in their deep beds were never in close sympathy with the atmospheric changes at the surface, and that these anomalous relations produced abnormal movements in the sap of the tree.

In evidence that trees and plants take deep root in this lake-marl, I would refer to Prof. Swallow's Second Annual Report on the Geology of Missouri 1854, p. 71. After describing this lake-marl, he observes: "And besides, green roots, both of the white oak (*Quercus alba*) and the poke weed (*Phytolacca decandra*) are found seventeen feet below the surface, in the perpendicular cut at section 8, taken in the city of Lexington, where a street or passage had been cut through this deposit."

The roots of trees were uncovered at nearly the same depth in this lake-marl, in cuts of street-grading in Leavenworth, and roots of strong-growing weeds, from four to six feet.

If any of your readers have ever grubbed up a well-grown apple tree on fertile uplands, they found the trunk and these roots were near one solid mass, down two feet or more below the surface of the ground, and then their roots projecting down at an angle that soon put them beyond their reach, and the smaller roots and their rootlets upon which the tree depends for sustenance, below all influences from the surface. These, however, may occur to varieties that develop their roots nearer the surface, under any condition. Among such, the healthiest trees would be found, if left free from empiric treatment.

The question might arise: Why were not the centenarian trees opposite St. Louis, on the American Bottom, on

their rich, alluvial soil, subjected to the same influences, as were those on equally fertile uplands?

It is a well-established principle that the roots of a tree will develop or grow in the direction where the most suitable conditions exist for its growth, and so definite is this instinct, that roots have been known to recoil from contact of a poor soil, and return to the richer in which they had their start.

Now, as it has previously been shown, that the surface soil contains all the elements in excess for the growth of the tree, but without sufficient moisture, those rich elements remain inert; consequently in protracted drouths their roots penetrate down into the lake-marl, where they find both moisture and sustenance, regardless of future consequences.

The roots of the apple trees on the American Bottom opposite St. Louis had no occasion for penetrating the ground below their normal depth, for either food or moisture. The former existed in abundance in the rich alluvium, in which they grew, and the latter was supplied by absorption from the annual rise in the Mississippi river, the maximum of which occurring just when the trees were making their most rapid growth; nor did the influence from this source cease, until the trees had thoroughly matured their wood, and attaining a condition to withstand the winter.

Those who have traveled on the Mississippi river in times past, when there were more forest trees along the stream than now, may call to mind how shallow their roots were below the surface as seen in the caving banks.

If the premises laid down are correct, we arrive at the following conclusions:

That the disintegration of our apple orchards, and also of other fruits, proceeds mainly from their deeply imbedded roots in the subsoil or lake-marl, and there they are not in close sympathy with the tree above the ground; and incidentally, the rapid and radical fall of temperatures in the winter.

The first may be avoided, mainly by selecting locations for planting, where the subsoil is thin above the rocks or shale, or perhaps by artificial means in flagging beneath the trees.

A gentleman informed me, that in the section of England in which he had resided, they flagged two and a half feet beneath the surface, in preparation for planting their apple trees, and in this way only, could they rear a healthy orchard. This is also the practice of some of the French-Germans in Switzerland and in other parts of continental Europe. I found among many Europeans a prejudice against the roots of fruit trees penetrating the subsoil. Their ideas were, that in that position, they collected elements deleterious to the health and productiveness of the trees.

The extreme changes of temperature may be modified by selecting northerly exposures, where the surface of the ground receives the rays of the sun more obliquely and thus imparting less heat, bringing the summer's growth of the tree to the earlier and more perfect maturity, and also reducing the chances of inciting in the roots, and the sap, premature or abnormal activity. Or where such locations are not attainable, something might be gained by grafting iron-clad varieties into seedling roots, and then at a suitable time, top-graft with such as may be desired, avoiding as much as possible southerly exposures, and heavy prunings, especially after the temperature in the previous winter had at any time descended much below zero. It might be well to observe this latter precaution under any circumstances.

In Kansas we have many erroneous

essays and discussions on soils. Notably the annual reports from an officer in charge of that department, though more harmless from their vapid incongruities, embodying such ridiculous phrases as "inorganic plants," and "animal vegetation."

Shades of the immortal Gray, hear the sage of Sumner on his new and wonderful discoveries, of orders of plants, allied to the mineral and the animal kingdoms.

One of his reports is embellished with an epic, with the following refrain:

"Kansas stands forth most favored of all lands
Where laboring brains, direct all laboring hands."

The report concluded: A Professor arose and remarked: "I am well pleased with the paper just read. The causes which have produced our soils are climatic, and have been formed through a gradual reduction of the rocks. This process can be illustrated by wetting a stone just at night, and when dried off a film will be discovered." Forgetting the ponderous, crushing, grinding forces and their effects on the rocks, during the glacial period, called the Almighty's plow, to prepare the earth for man, and the more recent deep lake sediment which constitutes our subsoil, rich in fertilizing elements, upon which grew and decayed annual crops of luxuriant vegetation, which were converted into humus, the organic elements of all surface soils. The residuum of these annual cycles of transformation, recurring during thousands of years, now constitutes the surface soil of Kansas, north Missouri, lower Iowa, and southeastern Nebraska, second only to the proverbial fertility of the valley of the Nile.

This twaddle about soils, received and recognized year after year, by an organization patronized by the State, is not assuring; especially as the soils had long since been placed on scientific basis; and more especially, by well-directed methods, had the Kansas State Agricultural Society demonstrated the great capacity and value of the soils, in economical resources of every part of the State. Yet these twaddlers would have us believe that the growth of the apple tree exhausts this deep and prolific soil to starvation point in twenty-five years.

Prof. Hawn, inclosing the foregoing to the KANSAS FARMER for our use, adds to it what follows:

Any association of men who may have read the biennial reports of the Board of Agriculture of the State, and come to the conclusion, as did the Douglas County Society at a recent meeting, must have been either superficial readers, or were vapid in their deductions, as the following might infer:

"Reference was made by Mr. Deming to an article written by Prof. Hawn, of Leavenworth, and published in the KANSAS FARMER, wherein he condemns the manuring of bearing orchards, claiming that there is sufficient fertility in the poorest soils of Kansas to produce good crops of apples for a hundred years, and that every load of manure hauled into the orchard is not only unnecessary, but a menace to the life of the tree. This the society considered so very heterodox and contrary to the experience of every one engaged in orchard culture, that a resolution condemning the article was unanimously passed."

Let the orchardist of Kansas beware of empiric expressions, but rather heed the fate of the fruit-growers of New Jersey, whereby the constant use of manures in their greed to obtain large crops, have shortened the life of the peach tree from fifty years to eight or

ten crops—the exact analogue of our apple orchards, except that in Kansas the deterioration proceeds from the natural exuberance of the soil. Moreover, by the excessive application of manures in New Jersey, they have evolved a contagious disease (yellows) in the peach tree, which is spreading devastation of that delicious fruit throughout the land.

This constant underrating of the capabilities of our soils discredits the great agricultural resources of the State, and the limited conception of it, as promulgated by the Douglas County Horticultural Society, will lead to practices disastrous to horticulture.

It will require the influence of the steady, discriminating intellect and practical hand of a Simms to produce adequate results connected with this subject.

F. HAWN.

Leavenworth, Kas., July 3, 1888

TIMBER CULTURE.

Essay read before the Franklin County Horticultural Society, at the June meeting, by W. E. Kibbie.

With our fathers and grandfathers the great problem which presented itself for a solution was how to get rid of the great oaks, beeches, maples, hemlocks, and the primeval forests which surrounded them, in the shortest time and in the easiest manner. This mighty crop of timber which nature had been centuries in raising had to be harvested with almost infinite toil and patience before the husbandman could sow his seed or the horticulturist plant his trees or flowers. Few of the present generation know anything but the merest A B C of labor so severe, so continuous, so back-aching, as did our ancestors in their awful struggles with the boundless forests. Muscle was king in those days, and the man who could fell the most trees, cut the most wood, split the most rails, and roll the largest log, was crowned the greatest hero. Our conditions and surroundings are almost an exact reversal of theirs. The first step towards civilization was to cut down a tree; ours is to set one out. Their mission was to create green fields, smiling farms, and contented homes out of the forests; and to-day great commonwealths and busy cities attest the success of their mission. Our mission is to change these great boundless plains of the West, where the buffalo, antelope and Indian have roamed since the morning stars first sang together, into farms and homes, with trees, groves, and orchards dotting the landscape with views of beauty and loveliness.

In responding, Mr. President, to the duty assigned me of preparing a paper on forestry and its artificial growth for domestic use, I will assume it as a settled question that trees will grow. This evidence is furnished on every hand and cannot be disputed, and the only things to be considered are what kinds to plant and will it pay to plant them. In considering the kinds to plant much information will be gained by noting that on our farms we have three great and ever present uses for timber, first, as fuel; second, stakes and poles; third, for fence posts. The first can be bought largely in the form of coal, if one prefers and has the money to buy with, and money will purchase the last; but the second cannot well be bought as a pine scantling is a very poor substitute for a pole.

The idea extensively prevails that a man who plants a forest tree plants for a future generation, but it is a grave mistake, a gross error in all its parts. Twenty years ago at this time I was engaged in building my house, and prairie was all around me with neither tree nor shrub, and every tree you see

on my farm has grown since the beginning of 1870. I assume it as a part of a farmer's business to raise everything he can with profit, whether it be a post, a patch of flax, or fuel. Ninety-nine farmers out of every one hundred have more acres than money, and also more time than money. Now if by putting this surplus time and acres together he can raise his fuel and save the twenty or thirty dollars spent annually for coal, I assume it as wisdom to do so, and if he can raise his posts on the farm, which he now has to buy by the hundred and thousand, and thus save the 10 or 15 cents which each one costs, is it not good business sense to do so? It is the little leaks that sink the greatest ships. It is the constant dropping, even of water, that wears away the hardest granite, so it is the continued buying that eats up a farmer's substance and put him in the hands of the usurer and face to face with the Sheriff. If there is a man on earth who ought to be independent and walk upright with high head it is the farmer and horticulturist; but it is not so. The complaint of hard times, scarcity of money, of syndicates and trusts, are well nigh universal among them.

I will relate some of my personal experience in practical timber culture. I am utterly unconcerned about coal or coal trusts as I have for some four years or more burned only my trimmings and thinnings for fuel, and I have now at least a year's supply of fuel ahead. In fact, I don't consume all my surplus wood. If I want to use a stake or pole of any size I have them in abundance from a fishing pole to a barn girl. If I want a post I have a plentiful supply grown and growing, of the very best kind, sufficient for my use for an indefinite time to come. I have a barn building covering nearly 3,000 square feet, with hardly a pine stick in the frame, and most of it of my own grown timber planted since 1870. I saved not far from \$150 in the barn frame by using home-grown timber, and can laugh at lumber syndicates and railroad magnates to that extent, at least, and I now have a building to keep my hay, grain, stock and tools from the destructive influence of our Kansas climate.

There is another important credit to be given to trees on the utility side, and that consists in the shade and cooling place for stock during the heat of summer, and protection from the winds and storms of winter. But there is another side, the value of which is difficult to measure, but no less real—the comfort and pleasure of shady grounds—and gold would not tempt me to cut down my trees. With all the various centripetal forces that line the pathway of the Kansas farmer, such as drouths; winds, hot and cold, bugs of many kinds and infinite in number, grasshoppers, etc., etc., all bid to make him and his family dislike, yes, hate farms and farm life. The strongest centrifugal force with me, stronger than all others combined, is my trees, planted and cared for by my own hand. I turn to them with genuine affection. I love my trees and were it not for them would doubtless have quit farming years ago!

I would not advise planting on a large scale; there would be no money in it for the average farmer; but every prairie farm could well afford to have from five to ten acres growing in timber, and it would pay more than any such ground in field crops. With the uncertainties of farming, the cash rental of good corn land, such as would be required for a

grove, would not be over \$2 per acre annually, and it would be a poor grove of five acres that would not pay \$25 each year in supplying farm needs, without taking into account the great enhancement of the value of the farm.

There are several valuable kinds of native timber that do well on the prairie and grow rapidly and readily. Walnut grows easily, but in general slowly, and it will take fifty years to become a walnut tree, yet some returns can be had from the nuts it bears. Honey locust is a fine growing tree and makes excellent fuel and tough, springy poles. Cottonwood is rapid in growth, makes good girts, can be planted closely, and in twenty to twenty-five years will make good saw timber for inside rough work. White oak is very easily grown, is a beautiful tree, good for everything and a middling rapid grower. Elm, both white and red, are beautiful trees; none better for shade and are good fuel. For an all-purpose tree the Osage orange is by far the most valuable. It can be grown as a hedge, but as such I abhor it; as a tree I cheerfully give it the crown. It is a rapid grower, beautiful in form and foliage, better than hickory; for fence posts, as durable as the best of cedar, and it has the very rare peculiarity of its heart wood being as durable in young growth as in the older tree. Its thorns never come but once and soon grow over, and it is then smooth and invaluable for posts, and its heart wood seems as firm and hard when green as when fully seasoned. I have turned the edge of the best ax in cutting even the green timber.

While nearly every one admires trees and may admit their utility, you see but very few new groves being planted on newly-improved farms. I think at least nine-tenths of the first trees of Franklin county were set out between the years 1865 and 1875. Ottawa, to her honor and praise, continues in the good work of planting trees, as her borders enlarge, but the lesser towns in the county are sadly deficient in this work. It would indeed be difficult to define the cause of this neglect, not only of the beautiful but of the useful. On this side of the tree growing may be mentioned the home they afford for the birds, these feathered friends of ours, God's most joyous and musical creation. How many times I have listened to their wondrous melodies. I have paid 50 cents to hear Gilmore's crashes of music and felt well repaid, but I have heard a thousand times rhyme, melody and song by the birds which far transcended any of his musical melodies, free of cost, thanks to my trees. I am a friend to the birds. I never shoot or permit any one else to shoot them, and as a consequence they nest in large numbers among my trees, and do me little harm compared with the good I receive.



How to Cure Skin & Scalp DISEASES with the CUTICURA REMEDIES.

THE MOST DISTRESSING FORMS OF SKIN and scalp diseases, with loss of hair, from infancy to old age, are speedily, economically and permanently cured by the CUTICURA REMEDIES, when all other remedies and methods fail.

CUTICURA, the great Skin Cure, and CUTICURA SOAP, an exquisite Skin Beautifier, prepared from it, externally, and CUTICURA RESOLVENT, the new Blood Purifier, internally, cure every form of skin and blood disease, from pimples to scrofula.

Sold everywhere. Price, CUTICURA, 50 cents; SOAP, 25 cents; RESOLVENT, \$1. Prepared by the POTTER DRUG AND CHEMICAL CO., BOSTON, MASS.

Send for "How to Cure Skin Diseases."

Pimples, blackheads, chapped and oily skin prevented by CUTICURA SOAP.

Relief in one minute, for all pains and weaknesses, in CUTICURA ANTI-PAIN PLASTER, the only pain-killing plaster. 25 cents.

M.M.L. MEXICAN MUSE-
TANG LINIMENT
is for Man & Beast.
Kills Pain. Rub it
in very vigorously!

M.M.L. MEXICAN MUSE-
TANG LINIMENT
is for Man & Beast.
Kills Pain. Rub it
in very vigorously!

The feet of big horses need more watching than those of lighter frame.

Jenks' Dream.

Jenks had a queer dream the other night. He thought he saw a prize-fighters' ring, and in the middle of it stood a doughty little champion who met and deliberately knocked over, one by one, a score or more of big, burly-looking fellows, as they advanced to the attack. Giants as they were in size, the valiant pigmy proved more than a match for them. It was all so funny that Jenks woke up laughing. He accounts for the dream by the fact that he had just come to the conclusion, after trying nearly every big, drastic pill on the market, that Pierce's tiny Purgative Pellets easily "knock out" and beat all the rest hollow!

For Old and Young.

Tutt's Liver Pills act as kindly on the child, the delicate female or infirm old age, as upon the vigorous man.

Tutt's Pills

give tone to the weak stomach, bowels, kidneys and bladder. To these organs their strengthening qualities are wonderful, causing them to perform their functions as in youth.

Sold Everywhere.

Office, 44 Murray St., New York.

HUMPHREYS'



DR. HUMPHREYS' BOOK
Cloth & Gold Binding
144 Pages, with Steel Engraving,
MAILED FREE.
Address, P. O. Box 1810, N. Y.

| LIST OF PRINCIPAL NOS. | CURES | PRICE |
|------------------------|---|-------|
| 1 | Fever, Congestion, Inflammations... | .25 |
| 2 | Worms, Worm Fever, Worm Colic... | .25 |
| 3 | Crying Colic, or Teething of Infants... | .25 |
| 4 | Diarrhea, of Children or Adults... | .25 |
| 5 | Dysentery, Griping, Bilious Colic... | .25 |
| 6 | Cholera Morbus, Vomiting... | .25 |
| 7 | Coughs, Cold, Bronchitis... | .25 |
| 8 | Neuralgia, Toothache, Faceache... | .25 |
| 9 | Headaches, Sick Headache, Vertigo... | .25 |

HOMEOPATHIC

| | | |
|----|---|------|
| 10 | Dyspepsia, Bilious Stomach... | .25 |
| 11 | Suppressed or Painful Periods... | .25 |
| 12 | Whites, too Profuse Periods... | .25 |
| 13 | Croup, Cough, Difficult Breathing... | .25 |
| 14 | Salt Rheum, Erysipelas, Eruptions... | .25 |
| 15 | Rheumatism, Rheumatic Pains... | .25 |
| 16 | Fever and Ague, Chills, Malaria... | .50 |
| 17 | Piles, Blind or Bleeding... | .50 |
| 18 | Catarrh, Influenza, Cold in the Head... | .50 |
| 19 | Whooping Cough, Violent Coughs... | .50 |
| 20 | General Debility, Physical Weakness... | .50 |
| 21 | Kidney Disease... | .50 |
| 22 | Nervous Debility... | .50 |
| 23 | Urinary Weakness, Watery Bed... | .50 |
| 24 | Diseases of the Heart, Palpitation... | 1.00 |

SPECIFICS.

Sold by Druggists, or sent postpaid on receipt of price.—HUMPHREYS' MEDICINE CO. 109 Fulton St. N. Y.

EMPORIA BUSINESS COLLEGE

—EMPORIA KANSAS.—

PROF. O. W. MILLER, : : : PRESIDENT.



BETHANY COLLEGE.

Under care of the Protestant Episcopal Church. For GIRLS and YOUNG LADIES, exclusively. Boarding and Day Pupils.

Twenty-six Officers and Teachers.

Faithful Maternal oversight for all entrusted to our care ALL BRANCHES TAUGHT—Primary, Intermediate, Grammar, and Collegiate; French, German, the Classics, Instrumental and Vocal Music, Elocution, Drawing, Painting.

THE MUSIC DEPARTMENT—Employs eight teachers, twenty-four pianos and three organs.

In the ART DEPARTMENT, the Studio is well equipped with casts, models and copies.

Send for Catalogue to T. C. VAIL, Bursar, or BISHOP P. VAIL, President, Topeka, Kansas.

M.M.L. MEXICAN MUS-
TANG LINIMENT
is for Man & Beast.
Kills Pain. Rub it
in very vigorously!

M.M.L. MEXICAN MUS-
TANG LINIMENT
is for Man & Beast.
Kills Pain. Rub it
in very vigorously!

M.M.L. MEXICAN MUS-
TANG LINIMENT
Should be kept in
stable, Kitchen, Fac-
tory, Store & Shop!

M.M.L. MEXICAN MUS-
TANG LINIMENT
Should be kept in
stable, Kitchen, Fac-
tory, Store & Shop!

UNION COLLEGE OF LAW.—Fall Term, September 19. For circular, address H. Booth, Chicago.

Lawrence Business College and Academy. Largest, Cheapest and Best. A 70-page illustrated catalogue sent free. Address E. L. McIlravy, Supt., Lawrence, Kas.

HOME STUDY Thorough and practical instruction given by MAIL in Book-keeping, Business Forms, Arithmetic, Penmanship, Short-hand, etc. Low rates. Distance no objection. Circulars sent free. BRYANT'S COLLEGE, 423 Main street, Buffalo, N. Y.

COMMERCIAL COLLEGE OF KY. UNIVERSITY, HIGHEST AWARD at World's Exposition. Book-keeping, Business, Short-hand, Type-Writing & Telegraphy taught. 1000 Students past year. 13 Teachers. 10,000 Graduates in Business. 67 Buses Now. WALTER R. SMITH, Pres. Lexington, Ky.

TELEGRAPHY. Never were the opportunities so frequent, or the demand so great for telegraph operators and railroad agents, as at present. Never were the financial inducements so great as now. The facilities are nowhere better than at the Central Iowa Telegraph and Railroad Institute, at Osgoda, Iowa. Circulars and all information, mailed upon receipt of postal. MABLEY & HALL, Osgoda, Ia.

State Agricultural College

Free Tuition. Expenses Light.

Endowment, \$500,000. Buildings, \$120,000. Grounds and Apparatus, \$100,000.

20 INSTRUCTORS. 500 STUDENTS.

Farmers' sons and daughters received from Common Schools to full or partial course in Science and Industrial Arts. Send for Catalogue to MANHATTAN, KANSAS.

The Ottawa University

Has a central location, healthful surroundings, improved facilities, a faculty of specialists; six courses of study; an efficient Preparatory Department; a Special Course for Teachers; Full Collegiate Courses; excellent Discipline; low expenses. For information, address G. SUTHERLAND, President of Ottawa University, OTTAWA, KAS.

THE STATE NORMAL SCHOOL

ENROLLS 875 PUPILS FOR THE YEAR.

82 Kansas Counties and 15 States and Territories Represented!

Teachers seeking a school in which to prepare themselves more fully for their work, will find unequalled opportunities at the State Normal School. Young men and women who may intend to teach can find no such facilities for obtaining a knowledge of all that is latest and best in appliances and methods, anywhere else in the State.

Parents desiring a school in which their children will receive a liberal education, and at the same time become thoroughly fitted for the honorable profession of teaching, are reminded that it can be accomplished here with less expense than at any other school in Kansas.

Railroad fare in excess of \$3 is refunded to all Kansas students. TUITION FREE.

Diploma, a life certificate to teach in Kansas.

For Catalogue and circulars, address

A. R. TAYLOR, PRESIDENT, EMPORIA, KANSAS.

Gossip About Stock.

Dr. Cundiff, of Pleasant Hill, Mo., announces a grand public sale of Short-horns on August 23.

Dairymen and farmers will notice the new advertisement of Holstein-Friesian cattle owned by John D. Pryor, Winfield, Kas.

Frank W. Truesdell, of Lyons, informs the FARMER that at present no meeting of the Association of Expert Swine Judges will be called.

Readers needing Poland-Chinas need not hesitate in writing to F. M. Lall, Marshall, Mo. He is a reliable and responsible breeder of first-class stock.

Remember that we can supply "Haaff's Practical Dehorner," the best book on the subject ever published, for only \$1.25, or we will send it and the KANSAS FARMER one year for only \$2.

Cuthbert Powell, of Kansas City, will close out a number of nicely-bred Short-horns at Independence, Mo., at the close of H. M. Valle's sale. See advertisement of "A Snap in Short-horns."

Remember the great Bates Short-horn sale at Independence, Mo., August 8, by Hon. H. M. Valle. The great representative offering of this fashionable strain of Short-horn blood. Send for catalogue.

Kansas City stock yards receipts for 1888 to Saturday, the 21st inst., are 358,912 cattle, 1,205,672 hogs and 164,908 sheep, showing a gain of 88,965 cattle, 127,554 hogs loss, and a gain of 49,003 sheep compared with 1887.

If any of our readers have any need to advertise and want extra good measure, we would suggest that they forward their orders soon, as we are preparing to issue nearly 100,000 sample copies for our own use in securing new subscribers. Extra editions will be published each week. It will cost nothing extra to secure the benefit of these mammoth editions. See rates on page 10 of the paper.

Wire Fence Guards.

On our first page this week we illustrate a steel stay guard for wire fences which will attract the attention of nearly every reader of the KANSAS FARMER as one of the most useful devices of the kind now in the market. It will do more to popularize wire fences than anything else, and the use of these guards is more likely to save the entire cost in a single season by the prevention of mutilation or loss of animals. Another advantage is that by the use of these guards plain or smooth twisted wire can be used. The large sales now being made in the West attests its practical value to all. Send for full particulars, mentioning this paper, to Wire Fence Improvement Co., 325 Dearborn street, Chicago.

Thirty Miles Disappear.

Thirty miles of journey is a big thing to disappear, but this distance has been dropped out between Kansas City and Chicago. How it happened is thus figured: The Chicago, Santa Fe & California railway is completed between Kansas City and Chicago, and the distance between the two cities is only 458 miles, measuring from Union Depot, Kansas City, to Dearborn Station, Chicago. This is exactly thirty miles less than by any of the old lines, so you have to travel thirty miles less, your freight has to be hauled thirty miles less, and practically the Santa Fe has made thirty miles disappear. A few years at this rate and Kansas will be in New England.

A Through Sleeper to Chicago.

Every afternoon at 3:55 o'clock, upon arrival of trains from the West, a magnificent Pullman Sleeping Car leaves Topeka for Chicago via the GREAT ROCK ISLAND ROUTE, making close connection with the famous "limited flyer" running through without change, arriving at Chicago the following morning. This is certainly the quickest and most convenient means of transportation between points in Kansas and the city of Chicago.

For accommodations in this car, please notify your local agent, and he will be glad to make such reservations as you may require by telegraph.

A correspondent of the Indiana Farmer says that in all his observation for fifty years on the farm, he cannot call to mind

the name of any one who has been successful in his farm calling that is not a reader of farm literature and periodicals.

Inquiries Answered.

SORGHUM FODDER.—An inquirer asks us: Will you please ask through your paper the best way to take care of sorghum sown broadcast for fodder, when to cut and how to cure?

TO KILL SPROUTS.—Our sprout correspondent wants to know what particular days in August are right ones on which to remove sprouts from stumps in order to prevent the coming of another crop of sprouts next year. Who can inform him?

SMUT IN OATS.—Will the same treatment kill smut in oats which is known to kill it in wheat? If not, is there any remedy known for smut in oats and what is it?

—We never had any smut in oats to deal with, so we cannot answer satisfactorily. Who can?

DEWBERRIES.—Please state through the columns of your next issue whether dewberries can be cultivated here or not, and where a person can obtain seed or plants?

—Dewberries will do well in Kansas. Correspond with our small fruit advertisers about seed or plants.

TIMOTHY.—I wish to ask through the FARMER if some one who has had experience in raising timothy, will give his opinion as to whether it would be well to fit oat stubble ground with a cut-away disc harrow before sowing timothy. There is some "barn grass" among the oats which the harrow would destroy, but the soil would be loosened to a depth of three inches; would that be well for the timothy?

FISTULA.—Please answer through FARMER a remedy for fistula. I would like to have something to make a sure cure.

—Fistula can be cured only by getting the place clean of decomposing matter, whether of bone or muscle. It must be cut open down to the very bottom, and a dependent orifice, that is, an opening low enough to allow the pus to run out freely, must be made and kept open. The sore must be washed frequently, and if the bones are affected the loose pieces must be removed. If proud flesh forms it must be destroyed by powdered alum.

THATCHING.—Could I get directions through your paper for thatching a roof?

—Yes. Make thatch by tying long straw (rye is best) or grass in little bundles near the butts, divide the bundle in halves and turn them—one top under, the other top over—so as to have band crossed between the two halves, and the thatch will then be flat instead of round. Cut off the butts neatly, then tie the thatch on wall or roof, shingle fashion, in any way you choose. The old way was to tie with bands made from the thatch itself, twisting the band of one already fastened into the new band for the next thatch, and so on. Good twine, we suppose, would be more easily handled, but no better. The thatch are fastened to light strips of wood on the posts or rafters. Wire would do in place of wood where it is more convenient.

MAKING PICKLES.—In response to our recent suggestion, Mrs. E. W. Brown sends us a clipping from the KANSAS FARMER, August 9, 1888, which is a recipe prepared by herself and forwarded for the use of our readers. Here it is: "Cucumber Pickles.—In gathering cucumbers for pickles, cut them with a pair of scissors as near the middle of the stem as possible: it is better for the pickles as well as the vines. The early morning is the time for this work, the earlier the better, if you want tender pickles. If you have the white-skin, or the common long green, gather when about four inches long, not longer; if they are the extra long green cucumber they must be left till six inches in length, as they are very slim and have no seeds till they are quite large; save one hill for seed. Pick as soon as they are large enough, if there is but one on each vine; have ready a jar or cask, fill about one-third full of pure cider vinegar; dig up some of the large roots of horseradish, wash clean and cut in slices about one-fourth of an inch thick, put about two dozen of these slices together with a dozen cayenne or cherry peppers with each gallon of cucumbers, put these in the cask of vinegar just before the cucumbers are put in, or they may be put in at the same time, but do not let the cucumbers remain in the vinegar even twenty-four hours without them; cover and set away in a cellar or other moderately cool place. When the cask is full the vinegar must fully cover the pickles, and on the top strew a handful of slices of horseradish root. I can warrant pickles put up in this way to keep for two years, and are always ready for use.

Thousands have been relieved of indigestion and loss of appetite by a single bottle of Ayer's Sarsaparilla. The use of this medicine, by giving tone and strength to the assimilative organs, has made innumerable cures of chronic dyspepsia. Price \$1. Worth \$5 a bottle.

Farm Loans.

Ready money, lowest rates, and every accommodation on real estate loans; one to five years time as best suits borrower.

T. E. BOWMAN & Co.,

116 W. Sixth street, Topeka, Kas.

\$110 will pay for board, room and tuition for forty weeks at Campbell Normal University. Board in the family of the President.

PEPPER'S TARIFF MANUAL.

A NON-PARTISAN statement of facts and figures showing what the Tariff is, what its use, object and effect, its origin and history, with definitions of terms explaining the operation of specific and *ad valorem* duties, and giving the difference between a Revenue Tariff and a Protective Tariff; together with facts about wool, sugar, lumber, salt and coal, and statistical matter convenient for reference as to all matters usually considered in Tariff discussions; also the Tariff planks of all the platforms of the Democratic, Whig and Republican parties from 1840 to 1888. It is the whole subject in one little volume the size of an ordinary pocket-book. It is a compendium of pertinent facts for all classes of people to study for themselves as helps, then they may form their own conclusions in their own way. A great deal of hard labor was expended in its preparation; it is sent out as reliable and without party bias, by Judge W. A. Pepper, editor of the KANSAS FARMER. Price, 25 cents for a single copy; five copies to one address for \$1; sixteen copies to one address for \$2; 100 copies to one address for \$10. Postage paid in all cases. Address H. A. Heath, KANSAS FARMER office, Topeka.

Stock breeders should raise a few roots—beets for the cattle and carrots for the colts and horses. They are healthy and appetizing.

People with thin heads of hair should use Hall's Vegetable Scliffan Hair Renewer to make the hair grow out thick, healthy and strong.

Most bee-keepers prefer to ship honey as freight rather than by express; the rapid handling and tossing from one man to another breaks the comb.

Are you busy? Are you making money? If so, stick to it, you are fortunate. If you are not, then our advice is that you write at once to B. F. Johnson & Co., 1009 Main St., Richmond, Va. They can show you how to enter quickly upon a profitable work.

Creameries and Dairies.

D. W. Willson, Elgin, Ill., makes a specialty of furnishing plans and specifications for building and operating creameries and dairies on the whole milk or gathered cream systems. Centrifugal separators, setting cans, and all machinery and implements furnished. Correspondence answered. Address, D. W. WILLSON, Elgin, Ill.

Consumption Surely Cured.

TO THE EDITOR:—Please inform your readers that I have a positive remedy for the above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy FREE to any of your readers who have consumption if they will send me their Express and P. O. Address. Respectfully, T. A. Slocum, M. D. 181 Pearl St., New York.

10,000 AGENTS WANTED TO SELL OUR CAMPAIGN BIOGRAPHIES

Will be first out. BEST, CHEAPEST, and go like wildfire. Secure territory at once. Address HUBBARD BROS., Kansas City, Mo.

Best Steel Wire
WIRE ROPE SELVAGE
MCMULLEN'S
80c. to \$2 per rod.
All sizes and widths. Sold by us or any dealer in this line of goods. FREIGHT PAID. Information free.
Write The MCMULLEN WOVEN WIRE FENCE CO., N. Market & Ontario Sts., CHICAGO, Illinois.

RIVERVIEW

The Prettiest Young City of the Smoky Valley.

Beautiful Springs, Lake, and also, what the name implies,

RIVERVIEW.

Buy a home in or farm adjoining Riverview. Call on or address

THOS. E. FULGHUM,
Hays City, Kansas.

Much for Little is true of JOLLY TAR CHEWING TOBACCO

It's GOOD AND It's CHEAP.

Ask your dealer for JOLLY TAR Everybody uses it. Everybody likes it.

JOHN FINZER & BROS.,
LOUISVILLE, KY.

THE FRUIT GROWERS JOURNAL

An eight-page forty-eight column paper, published Semi-Monthly at Cobden, Union Co., Ill., the fruit-growing center of the Western States. It is devoted primarily and chiefly to

Fruit-Growing and Marketing.

It is not published in the interest of any Nursery or Association whatever, but is devoted to Fruit and Vegetable Growers only.

TERMS:—One Year, \$1; six months, 50 cents.

A. M. DUBOIS, Editor and Publisher.

HOW TO KEEP COOL

—TAKE THE—
St. Joseph & Grand Island R.R.
(UNION PACIFIC ROUTE)

And visit the Pleasure Resorts of Colorado, Utah, Washington Territory, or the Famous Yellowstone Park.

Pullman Palace Sleepers, Modern Day Coaches and Free Family Sleepers, go to make up an equipment which is unexcelled.

NOW IS THE TIME TO GO,

As cheap Tourist Tickets are on sale at all offices. Through Tickets at lowest rates. Sold to all points in United States and Canada.

For full information regarding rates, time, etc., call on or address
G. M. CUMMING, FRANK MILLIGAN,
General Manager. G. F. & P. A.
ST. JOSEPH, MO.

This paper is now a twenty-page weekly and only costs \$1 a year. Compare it with any farm journal in America.

THE MARKETS.

By Telegraph, July 23, 1888.

LIVE STOCK MARKETS.

St. Louis.

CATTLE—Receipts 800, shipments 2,000. Market quoted firmer and steady. Choice heavy native steers \$5 05a5 50, fair to good native steers \$4 00a4 50, medium to choice butchers' steers \$3 90a4 50, fair to good stockers and feeders \$3 40a3 80, common to good rangiers \$2 15a2 20.

HOGS—Receipts 400, shipments 100. Market steady and higher. Choice heavy and butchers' selections \$6 10a6 20, medium to prime packing \$5 95a6 10, ordinary to best light grades \$5 25a5 35.

SHEEP—Receipts 200, shipments 200. Market firm. Common to good sheep, \$2 60a4 00.

Chicago.

The Drovers' Journal reports:

CATTLE—Receipts 10,000, shipments 4,000. Market steady on good natives; tops at \$6 15 for natives; Texans lower at \$2 75a3 10. Choice steers, \$5 60a6 15; good, \$5 10a5 50; medium, \$4 60a5 00; common, \$4 00a4 50; stockers, \$2 50a3 25; feeders, \$3 25a3 90; bulls, \$1 75a3 00; cows, \$1 25a3 40; range steers, \$2 75a4 10.

HOGS—Receipts 14,000. Market steady. Mixed, \$5 90a6 30; heavy, \$5 95a6 35; light, \$5 80a6 05; skips, \$4 00a5 75.

SHEEP—Receipts 3,000. Market stronger. Native muttons, \$2 75a4 50; Texan, \$2 50a4 00; lambs, per cwt., \$4 75a6 25.

Kansas City.

CATTLE—The supply of cattle was again heavy and nearly all Texans. Among the natives feeders and cows predominated. The market was lower all around, but active at the decline; 3,000 were sold at noon. Dressed beef men were free operators, and order buyers did a pretty good business for Eastern markets. Speculators were hardly so active as usual. General prices 10a15c lower. Trade was necessarily light. The best here sold at \$4 50a4 60, and common 1,100 to 1,200 styles at \$3 75a4 10 that were little better than feeders.

HOGS—Four home and two Eastern packers bought packing styles. The tops sold at \$6 05 were fancy heavy and had a conditional bid of \$6 05 on them. Saturday top sales were \$6 00. The bulk sold at \$5 90a6 00.

SHEEP—The receipts were large and included several loads billed through and several direct to Swift & Co. The supply of muttons on sale was moderate, and sold readily at firm prices. Stockers and rough sheep were dull. \$3 60a3 25.

PRODUCE MARKETS.

New York.

WHEAT—No. 2 red, 89 $\frac{1}{2}$ a89 $\frac{1}{2}$ c elevator, 91 $\frac{1}{2}$ c delivered.

CORN—No. 2, 57c store, 58c delivered.

St. Louis.

FLOUR—Quiet and unchanged.

WHEAT—No. 2 red, cash, 78 $\frac{1}{2}$ a79 $\frac{1}{2}$ c; July, 79c.

CORN—Cash, 45 $\frac{1}{2}$ a45 $\frac{1}{2}$ c.

OATS—Cash, 29a30c.

RYE—Very quiet. No. 3 sold at 44c.

BARLEY—No market.

Chicago.

Cash quotations were as follows:

FLOUR—Dull and unchanged.

WHEAT—No. 2 spring, 81a81 $\frac{1}{2}$ c; No. 2 red, 81 $\frac{1}{2}$ c.

CORN—No. 2, 46 $\frac{1}{2}$ c.

OATS—No. 2, 30 $\frac{1}{2}$ c.

RYE—No. 2, 47 $\frac{1}{2}$ c.

BARLEY—No. 2, 62a63c.

FLAXSEED—No. 1, \$1 14 bid.

TIMOTHY—Prime, \$2 40.

PORK—\$13 70a13 75.

LARD—\$5 52 $\frac{1}{2}$ c.

BUTTER—Fancy in good demand, medium grades slow. Creamery, 14 $\frac{1}{2}$ a17c; dairy, 13a16c.

EGGS—Firm. Fresh candied, 14 $\frac{1}{2}$ a15c.

Kansas City.

WHEAT—Receipts at regular elevators since last report 4,906 bushels; withdrawals, 1,096 bushels, leaving stock in store as reported to the Board of Trade to-day, 38,582 bushels.

No. 2 red winter, cash, no bids, 60c asked. No. 3 red winter, cash, no bids nor offerings. No. 2 soft winter, cash, 67 $\frac{1}{2}$ c bid, 69c asked.

CORN—Receipts at regular elevators since last report, 3,313 bushels; withdrawals, 3,870 bushels, leaving stock in store as reported to the Board of Trade to-day, 63,288 bushels.

No. 2, cash, no bids, 41 $\frac{1}{2}$ c asked. No. 2 white, cash, 45c bid, no offerings.

OATS—No. 2 cash, no bids nor offerings.

RYE—No. 2 cash, no bids nor offerings.

HAY—Receipts 40 cars. Market weak. New, \$5 50.

SEEDS—We quote: Flaxseed, 83a95c per bu. on a basis of pure; castor beans, \$1 00 for prime.

OIL-CAKE—Per 100 lbs. sacked, f. o. b., \$1 25; \$11 00 per 1,000 lbs.; \$21 00 per ton; car lots, \$19 00 per ten.

FLOUR—Quiet. There is good inquiry for new top grades, but transactions limited for want of supply; low grades are almost unsal-

able. Sales: 1 car by sample at \$1 22. Quotations are for unestablished brands in car lots, per $\frac{1}{2}$ bbl. in sacks, as follows: XX, 90c; XXX, \$1 00a1 65; family, \$1 05a1 15; choice, \$1 40a1 45; fancy, \$1 55a1 60; extra fancy, \$1 65a1 70; patent, \$2 10a2 15; rye, \$1 40a1 60. New is 50c per bbl. less.

BUTTER—Firm. We quote: Creamery, fancy, 18a20c; good, 16c; dairy, 15c; good to choice, 12a13c; store-packed, choice, 11c.

CHEESE—We quote: Full cream, twins, 10c; full cream, Young America, 11c.

EGGS—Receipts fair and market weak at 11c per dozen for strictly fresh.

BROOMCORN—Dull and weak. We quote: Green self-working, 4c; green hurl, 4c; green inside and covers, 2 $\frac{1}{2}$ a3c; red-tipped and common self-working, 2c; crooked, 1c.

PROVISIONS—Following quotations are for round lots. Job lots usually $\frac{1}{2}$ higher. Sugar-cured meats (canned or plain): Hams 12 $\frac{1}{2}$ c, breakfast bacon 10 $\frac{1}{2}$ c, dried beef 9c. Dry salt meats: clear rib sides \$7 90, long clear sides \$7 80, shoulders \$6 50, short clear sides \$8 35. Smoked meats: clear rib sides \$8 65, long clear sides \$8 55, shoulders \$7 25, short clear sides \$9 10. Barrel meats: mess pork \$13 75. Choice tierce lard, \$7 50.

Topeka Markets.

PRODUCE AND PROVISIONS—Corrected weekly by W. W. Manspeaker & Co., 711 Kansas avenue. (Wholesale price.)

Butter, per lb. 9 a 11
Eggs (fresh) per doz. 10
Beans, white-navy, H. P., per bus 2 65
Potatoes (new) " " 25 a 65
Beets " " 25 a

Hardware for Farmers.

D. A. Mulvane & Co., 713 Kansas avenue, Topeka, always keep a full line of hardware, and especially desire the patronage of every farmer, who will find it to his interest to inspect our complete stock of hardware of every description, including the cheapest and best line of gasoline stoves, refrigerators, barbed wire, screen doors, tinware, ladders, wheelbarrows, etc.

Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellow-men. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. NOYSE, 149 Power's Block, Rochester, N. Y.

GOLD. Live at home and make more money working for us than at anything else in the world. Either sex. Costly outfit FREE. Terms FREE. Address, TRUE & CO., Augusta, Maine.

\$65 A MONTH & BOARD for 3 Bright Young Men or Ladies in each county. P. W. ZIEGLER & CO., CHICAGO, ILL.

\$75.00 to \$250.00 A MONTH can be made working for us. Agents preferred who can furnish a horse and give their whole time to the business. Spare moments may be profitably employed also. A few vacancies in towns and cities. B. F. JOHNSON & CO., 1009 Main St., Richmond, Va.

"THE OPEN COURT."

Nos. 43 and 44 contain an essay by Dr. Paul Carus, "AGNOSTICISM AND RELIGION, A Discussion of the FIELD-INGERSOLL Controversy and of Mr. GLADSTONE'S remarks upon the same." Sample copies free on application. Box F, CHICAGO.

COLLEGE HOME FOR YOUNG LADIES. ILLINOIS FEMALE COLLEGE.

Unsurpassed facilities in location and buildings. Pupils receive whatever is NEW and VALUABLE in IDEAS and METHODS in all branches of SOLID and ORNAMENTAL culture.

Filled to full capacity last year. Only a few unengaged rooms now remaining. Address

W. F. SHORT, D. D. President, Jacksonville, Ill.

REFERENCE TO PATRONS:
GEN. J. C. WILSON, Denver, Colorado.
MR. A. M. JONES, " "
MR. W. KEELING, Pueblo, " "
MR. T. J. TEMPLE, Hutchinson, Kansas.
MR. N. R. BAKER, Topeka, " "
MR. GEO. W. FULLER, Kansas City, Missouri.

BLAKE'S ALMANAC

Weather Predictions,

From June 1, 1888, to June 1, 1889,

According to Mathematical Calculations based on Astronomical Laws, is now ready for mailing. Price One Dollar per Copy. Direct to C. C. BLAKE, Topeka, Kas.

This Almanac gives the predictions for each month separately, and for June, July, August and September the predictions are made for each half month. The temperature, rainfall and kind of weather are given each month for all the different sections of the United States, including the Pacific coast, Canada and Europe. Separate calculations have been made, showing what the temperature and precipitation will be in each locality, each month, which has required a vast amount of calculating. It gives many suggestions as to what crops to plant and when. Nearly every one who has had our former Almanacs has ordered this one. They are almost unanimous in saying our Almanac is the best-paying investment they have made. Address C. C. BLAKE, Topeka, Kansas.

Consolidated Barb Wire COMPANY,

MANUFACTURERS OF

BARB WIRE

Fencing Staples, ETC.

Sold more largely in Kansas than all other kinds together, because it is the

MOST POPULAR, COMMON-SENSE, EVERY-DAY WIRE MADE.

Ask your dealer for Lawrence Wire. Every spool warranted.

OFFICE AND WORKS: Lawrence, Kansas.

The Burlington System

Of nearly 6,000 miles of steel rail, well-ballasted, with iron and steel bridges, an equipment unexcelled with over 300 passenger trains daily, traversing the great States of Missouri, Illinois, Nebraska, Iowa, Kansas, Colorado, Minnesota and the Territories, with trains made up of Pullman Palace Sleeping Cars, the Burlington's Celebrated Dining Cars, and Improved Modern Free Chair Cars, is unquestionably the Route for travelers to take going East, West or North.

Three Daily Fast Trains between Kansas City, St. Joseph, Atchison, Leavenworth and Quincy, Burlington, Peoria and Chicago without change.

Two Daily Fast Trains between Kansas City, Council Bluffs, Omaha, Sioux City, Des Moines, Minneapolis and St. Paul, with no change.

Two Fast Daily Trains between Kansas City, St. Joseph, Atchison and Denver without change.

The line carrying the government fast mail between the East and far West. Any ticket agent can give you maps and time table of this well-known route, or you can address

H. C. ORE, Gen'l Southwestern Passenger Agent, Kansas City, Mo.
Or A. G. DAWES, Kansas City, Mo.
Gen'l Passenger and Ticket Agent, St. Joseph, Mo.

WINTER TURNIP SEED.

Large white, 4 to 8 pounds, fine table or stock turnip. Will stand all winter in patch and guaranteed not to freeze or spoil if ground freezes five feet deep. Extra early fine spring salad. Now is the time to prepare well, rich soil, to sow July to October—earlier the better. \$1 per pound; $\frac{1}{2}$ pound, 50 cents; $\frac{1}{4}$ pound, 25 cents. Postage prepaid. LARGE QUANTITY AT REDUCED RATE. Send P. O. Orders on Memphis, Tenn., Postal Note or Express to Knoxville, Tenn. B. E. DALE, Knoxville, Shelby Co., Tenn.

HAGEY & WILHELM,

WOOL COMMISSION MERCHANTS

ST. LOUIS, MO.

REFERENCES:—KANSAS FARMER CO., Topeka, Kas.; Boatmen's Bank, St. Louis; Dunn's Mercantile Reporter, St. Louis; First National Bank, Beloit, Kas.

GENERAL AGENTS FOR COOPER'S SHEEP DIP.

We guarantee sale and full returns inside of TEN DAYS from receipt of shipment.

Kansas City Stock Yards,

KANSAS CITY, MISSOURI,

ARE BY FAR THE

Most Commodious and Best Appointed in the Missouri Valley,

With ample capacity for feeding, weighing and shipping cattle, hogs, sheep, horses and mules. They are planked throughout, no yards are better watered and in none is there a better system of drainage. The fact that

Higher Prices are Realized Here than in the Markets East,

Is due to the location at these Yards of EIGHT PACKING HOUSES, with an aggregate daily capacity of 3,300 cattle, and 27,200 hogs, and the regular attendance and sharp competitive buyers for the Packing Houses of Omaha, Chicago, St. Louis, Indianapolis, Cincinnati, New York and Boston. All the thirteen roads running into Kansas City have direct connection with the Yards, affording the best accommodations for stock coming from the great grazing grounds of all the Western States and Territories, and also for stock destined for Eastern markets.

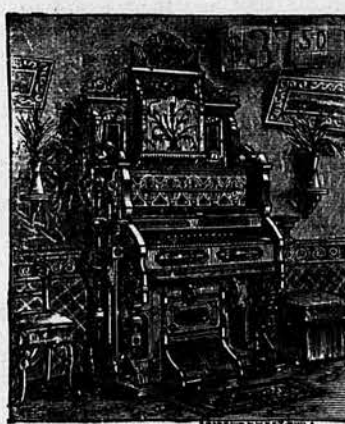
The business of the Yards is done systematically, and with the utmost promptness, so that there is no delay and no clashing, and stockmen have found here, and will continue to find, that they get all their stock is worth, with the least possible delay.

O. F. MORSE,
General Manager.

E. E. RICHARDSON,
Secretary and Treasurer.

H. P. CHILD,
Superintendent.

GREAT OFFER!



T. SWOGER & SON, Fine Church and Parlor ORGANS.

DIRECT FROM THE FACTORY AT MANUFACTURERS PRICES. No Such Offers Ever Made.

EVERY MAN HIS OWN AGENT. BOXED IN THE FACTORY.

OPENED AT YOUR HOME NO MIDDLEMEN.

NO WHOLESALE DEALERS. NO AGENTS.

NO RETAIL DEALERS. NO CANVASSERS.

WRITE FOR PARTICULARS, ADDRESS T. SWOGER & SON, ORGANS, Beaver Falls, Pa., U. S. A.

10,000 AGENTS WANTED to supply FIFTY MILLIONS people with THE LIFE OF

BEN HARRISON BEN HUR.

Gen. Lew Wallace, the eminent Author, Statesman, Diplomat, and Life-long friend of Gen. Harrison, is writing the only authorized Biography. "No man living more competent."—Ex-Gov. Porter, of Ind. Millions have read Ben Hur and want Ben Harrison by same author. Selling immensely. By mail \$2.00. Greatest Money Making book yet. Outfits 50 cts. HUBBARD BROS., Kansas City, Mo.

The Veterinarian.

[The paragraphs in this department are gathered from our exchanges.—ED. FARMER.]

PROBABLY FRACTURED BONES.—A bay mare, nine years old, was kicked about six weeks ago on the hock, about where a spavin would come. I had a veterinary surgeon put her in a swing. She does not seem to improve, her hip is sweeneying, and we cannot get her to make any use of the injured leg. [We are inclined to believe the animal suffered a fracture to one or more bones of the hock. If our opinion is correct the result will probably be a stiff joint. Would advise blistering the part at intervals of two or three weeks.]

SPINAL DISEASE.—Some of the shoats in this section get stiff and lose the use of their hind legs and cannot get up; they drink well, but do not eat, and lie around and die. Give us all the information you can and what to do. [Give the diseased swine a good warm sty by themselves, omit corn, feed slop and roots, and give in the slop a large tablespoonful of the following powders to each of the sick three times a day: Common salt, 1 lb.; pulverized sulphate of iron, 8 oz.; pulverized yellow bark, 8 oz.; and saltpeter, 8 oz.; mixed well together. Rub the back along the spine with spirits of turpentine once a day.]

SHEATH TROUBLE.—I have a horse whose sheath swells on one side, and very badly when left without exercise more than one day; looks like he had been scratched by barb-wire. He has been in that condition three years. He is well cared for and fed a ration of two parts oats and one part middlings with some oil cake; and he is in good condition, with a glossy coat of hair. One horse doctor wanted to blister, and another to rowel. [Give careful and regular exercise and stop feeding oil meal. Call in a qualified veterinary surgeon, as I am of the opinion that a simple operation will be necessary in addition to internal treatment.]

BARREN COW.—I have a full-blooded Short-horn cow, 11 years old, that has failed to breed for the last two years. She is dry and in good flesh. As she is a valuable cow, I dislike to part with her. She comes in heat from four to eight weeks apart. Is there anything that can be done to cause her to breed again? [Taking into consideration the age of the barren animal, it is not advisable to breed her. As she is in good condition, better fit and sell her to the butcher. However, should you decide to breed her, change her surroundings and her diet. Give her a few doses of the following drench, night and morning: Bicarbonate of potassium, 1/2 oz.; bicarbonate of sodium, 1/2 oz.; nitrate of potassium, 1/2 oz.; mixed with water.]

SWELLING OF THE THROAT IN A BULL.—I sent some time ago an inquiry in regard to my bull. There is now some swelling about the throat and a hard lump that seems to be on the upper end of the windpipe. He breathes hard, much like one snoring in sleep. After swallowing a bite of grass he is apt to stand with his tongue out until he coughs. He coughs frequently in his stall, in fact, and his throat appears to be closing up. Will his drinking at the trough with other cattle be liable to affect them? [When ordinary treatment fails to remove soreness of the throat, and when breathing becomes difficult and it is evident that a swelling is forming in the tissues in and around the larynx, it is very probably owing to the development of tubercle in the affected tissues, and with the increasing bulk of the growth the case will become more and more serious. It is not advisable

CHICAGO.

KANSAS CITY.

ST. LOUIS.

JAMES H. CAMPBELL & CO.. Live Stock Commission Merchants, FOR THE SALE OF CATTLE, HOGS AND SHEEP.

Rooms 23 and 24, Exchange Building,
KANSAS CITY STOCK YARDS.

Unequaled facilities for handling consignments of stock in either of the above cities. Correspondence invited. Market reports furnished free. Refer to Publishers KANSAS FARMER.

that the bull should drink at the same trough with the other cattle, as tuberculosis is contagious. He should not be used for breeding, and if the animal's carcass can be utilized it is best to slaughter him at as early a stage of the disease as possible.]

A Bloody Affair

Is often the result of "bad blood" in a family or community, but nowhere is bad blood more destructive of happiness and health than in the human system. When the life current is foul and sluggish with impurities, and is slowly distributing its poisons to every part of the body, the peril to health, and life even, is imminent. Early symptoms are dull and drowsy feelings, severe headaches, coated tongue, poor appetite, indigestion and general lassitude. Delay in treatment may entail the most serious consequences. Don't let disease get a strong hold on your constitution, but treat yourself by using Dr. Pierce's Golden Medical Discovery, and be restored to the blessings of health. All druggists.

Big horses sell best, small horses are the most useful.

Plant some peas for the swine and young stock. They are a rich, nitrogenous food, and especially valuable as a butter feed.

Maple Grove Duroc-Jerseys.

We use only the choicest animals of the most approved pedigree, hence our herd is bred to a very high state of perfection. Pigs in pairs not akin. Stock of all ages and sows bred for sale at all seasons. Prices reasonable and quality of stock second to none.

J. M. BROWNING, Perry, Pike Co., Ill.

F. M. LAIL, MARSHALL, MO.,

Breeder of the very best
POLAND-CHINA
HOGS.
Pigs from ten first-class boars for the season's trade.

LANEY & PFAFF,
GREEN RIDGE, MISSOURI.

THOROUGHbred
POLAND-CHINA HOGS
FOR SALE.

No poor pigs sent out. [Mention KANSAS FARMER.]

OTTAWA HERD

OF POLAND-CHINA
and Duroc-Jersey
Hogs. Twenty head of first-class boars from four to nine months old. Also seventy-five head of sows of same age, sired by Bruce 4695, C. R., Leek's Gilt Edge 2887, C. R., Whipple's Stemwinder 4701, Daisy's Corwin 4697. Dams—Mazy 2d 6214, Zaida 3d 8250, Maggie's Perfection 8210, Vone's Perfection 9424, Fay's Gold Drop 11676, Jay's Dimple 12172, Eureka Mayo 12176, and many other equally as well bred, and fine as can be produced by any one. Part of sows bred to gilt-edge boars of the most popular strains. Will sell at prices to suit the times. Never had any cholera in the herd. Write for prices.
I. L. WHIPPLE, Box 270, Ottawa, Kas.

Gold Dust Herd of Poland-Chinas.

J. M. MCKEE, WELLINGTON, KANSAS.
Tom Corwin 3d 5293 A. P. C. R. at head of herd. Strains representing Model, Give or Take, Gold Dust, Black Bess and Black Beauty. Have some choice male pigs for sale. Also eggs of P. Rock, Brown Leghorn and Light Brahmas, \$1.25 per 13; Toulouse Geese, 15c.; Pekin Duck 10c. each. Write; no catalogue.

THE GOLDEN BELT HERD OF Thoroughbred Poland-Chinas

This herd comprises the richest blood to be found in the United States, and in uniformity and style has no superior in this country. Choice animals of all ages and either sex for sale. Stock shipped from here over either the A. T. & S. F., Mo. Pacific or St. Louis & San Francisco R. R. All breeders registered in American P.-C. Record. Pedigree with each sale.
F. W. TRUEDELL, Lyons, Kas.

Poland-Chinas 100 PIGS FOR SALE!

NEW BOARS:—Young America 3811, C. R., noted show hog and breeder; nine sweepstakes; sire of sweepstakes hog at Chicago fat stock show. Lord Corwin 4th, 1851; daisy show hog, of the highest premium blood. Lampe's Tom Corwin 6207; gilt-edge premium pedigree. SOWS:—Black Rosas, Gold Dust, Double Corwins, Black Bess, Black Beautys, Buckeyes, Dimples, Stemwinders, etc. Royal blood, gilt-edge pedigree.
Shipped to fifteen States and thirty-three counties in Kansas.
W. S. HANNA, OTTAWA, KANSAS.

MAINS' HERD OF POLAND-CHINAS.

Jas. Mains, Oskaloosa, (Jefferson Co.), Kas., is located two and a half miles southeast of Oskaloosa, on Maple Hill Stock Farm. All hogs eligible to Ohio Poland-China Record. A fine lot of spring pigs now ready, for sale at prices that will suit the times. Also some fall sows now ready to breed or will be bred if desired. Personal inspection solicited.

For Berkshire Swine and Southdown Sheep that are first-class, or money refunded, call on or address J. M. & F. A. SCOTT, Box 11, Huntsville, Mo.
[Mention KANSAS FARMER.]

ORDERS TAKEN NOW

For SPRING PIGS sired by

ROYAL GRANITE 10105,
The best BERKSHIRE boar ever owned at "HAW HILL," and several other first-class sires. Enclose stamp for catalogue and prices.
SPRINGER BROS., Springfield, Ill.

Sunflower Stock Farm.

Stars/Maid 3562 C.P.R.
We are breeding Poland-Chinas, the Improved Chester Whites, Berkshires, Small Yorkshires and Duroc-Jersey Swine, and have secured more premiums than any other breeder in the State—last season getting 120 first and sweepstakes and 15 second. We breed from the very best strains, hence our remarkable satisfaction. Of Poultry we breed ten leading varieties, the best to be found in the West; also Toulouse Geese, Bronze and White Holland Turkeys. Eggs in season. Hogs all eligible to record. Reasonable prices. Write your wants. Address H. G. FARMER & SONS, Garnett, Kas.

PLEASANT VALLEY HERD OF Pure-bred Berkshire Swine.

I have thirty breeding sows, all matured animals and of the very best strains of blood. I am using three splendid imported boars, headed by the splendid prize-winner Plantagenet 2919, winner of five first prizes and gold medal at the leading shows in Canada in 1881. I am now prepared to fill orders for pigs of either sex not akin, or for matured animals. Prices reasonable. Satisfaction guaranteed. Send for catalogue and price list, free.
S. McCULLOUGH,
Ottawa, Kansas.

ENGLISH BERKSHIRES.

THE WELLINGTON HERD consists of twenty matured brood sows of the best families of home-bred and imported stock, headed by the celebrated HOPEFUL JOE 4889, and has no superior in size and quality nor in strain of Berkshire blood. Also Plymouth Rock Chickens. Your patronage solicited. Write. [Mention this paper.]
M. B. KEAGY, Wellington, Kas.
P. S.—Yearling sows, already bred, for sale.

LOCUST & GROVE & HERD

OF
LARGE ENGLISH BERKSHIRE SWINE.

Nothing sent out but what is a credit to Locust Grove Herd. Individual excellence combined with purity of breeding, is my motto. Prices to suit the quality of stock offered. Correspondence and inspection solicited. Orders booked now for spring pigs. Address as below, or better, come and see.

JAMES HOUK, Prop'r,
Hartwell, Henry Co., Missouri.

SELECT HERD OF LARGE BERKSHIRES!

G. W. BERRY,
BERRYTON, Shawnee Co., KANSAS.

My sows represent the Royal Duchess, Sallie, Hillside Belle, Charmer, Stumpy, and other families. These Swanwick and Humfrey families are larger, thicker-fleshed, set on shorter legs, and possess finer qualities than other hogs. Herd headed by British Champion III, 1881 and Danvers 17417. My aim is to produce a type of Berkshires comparable to the Select Herd and the breed. Correspondence in regard to spring pigs invited.

BERRYTON is located nine miles southeast of Topeka, on the K., N. & D. R. R. Farm adjoins station.

ELY'S CATARRH

CREAM BALM
Cleanses the Nasal Passages
--Allays Pain
and Inflammation, Heals the Sores, Restores the Senses of Taste & Smell.

TRY the CURE.
A particle is applied into each nostril and is agreeable. Price 50 cents at Druggists; by mail, registered, 60 cts. ELY BROS., 56 Warren St., New York.

DR. OWEN'S BODY BATTERY!

FOR MAN & WOMAN. Contains 10 degrees of strength. Current can be increased, decreased, reversed or detached at will, and applied to any part of the body or limbs by whole family. Cures General, Nervous and Chronic Diseases. It is light, simple and superior to all others. Guaranteed for one year. Our Large Illustrated PAMPHLET giving prices, testimonials, mechanism, and simple application for the cure of disease will be sent FREE to any address.
DR. OWEN BELT CO., 191 State St., Chicago.

Devon Cattle!

We are the largest breeders of this hardy, easy-keeping breed, one of the best for the West. Stock for sale singly or car lots.

RUMSEY BROS. & CO.,
EMPORIA, KANSAS.

Thoroughbred Cattle and Poultry

JOHN T. VOSS, GIRARD, KAS.,

BREEDER OF

THOROUGHbred SHORT-HORN AND
JERSEY CATTLE.

Stock for sale. Also FIFTEEN VARIETIES
OF LAND AND WATER FOWLS of the very
choicest stains. Send for Price Lists.

Inspection and correspondence invited.

Address JOHN T. VOSS, Girard, Kas.

Holstein - Friesian Cattle

Of European Herd Book Registry.



The sweepstakes bull PRINCE OF ALTJDERK (61 M. R.) at head of herd, has no superior. Cows and heifers in this herd with weekly butter records from 14 pounds to 19 pounds 10 1/4 ounces; milk records, 50 to 80 pounds daily. The sweepstakes herd. Write for catalogue. M. E. MOORE, Cameron, Mo.
(Mention this paper.)

SHANNON HILL STOCK FARM.



G. W. GLICK, Proprietor,
Atchison, Kansas.

Breeds and has for sale Bates
and Bates-topped

SHORT-HORNS

Including representatives of

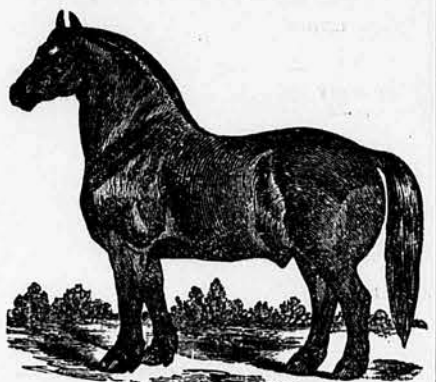
Kirklevingtons, Filberts, Craggs, Prin-
cesses, Gwynnes, Lady Janes, and
other fashionable fam-
ilies.

The Grand Bates Bulls,

8th Duke of Kirklevington No. 41798,
Waterloo Duke of Shannon Hill No. 89879,
At head of herd.

Fifteen choice young Bulls for sale
now.

Correspondence and inspection of herd so-
lited, as we have just what you want and at
fair prices.



The Imported CLYDESDALE Stallion

KNIGHT OF HARRIS 995

(2211),

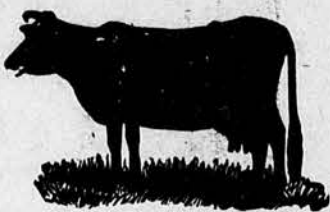
The property of H. W. McAFEE, will make
the season at Prospect Farm, three miles west
of Topeka, Sixth street road.

Take care of your Horses and Cattle by
using Dr. S. P. Cregar's

STOCK CAKE & ANTI-WORM REMEDY.

a cathartic stimulant for HORSES, CATTLE and
other LIVE STOCK. This Stock Cake removes worms,
purifies the blood and water, loosens the hide, acts
upon the kidneys, regulates the system and puts the
animals in healthy, thriving condition. Also is a
Preventive Against Pleuro-Pneumonia
in Cattle. Price 15 cents per cake.
Dr. S. P. Cregar, 1464 Wabash Ave. Chicago.

SHERWOOD & ROHRER STOCK FARM



Home of HASSELMAN'S BROWNIE 28777.
Tested on Island of Jersey at rate of
33 pounds 12 ounces in seven days.

BREEDERS OF A. J. C. C. JERSEY CATTLE,

Offer a few choice-bred Bull Calves by such noted sires as the St. Lambert Duke 76 bull, ST. VAL-
ENTINE'S DAY 15278, whose sire was a son of Stoke Pogis 3d 2238, and a grandson of Victor Hugo 187;
dam a daughter of the great prize bull, Duke P. 76 C.; and the in-bred Coomassie bull, HAPPY GOLD
COAST 14718.

Several of these Bulls are old enough for service, and are out of tested cows. To responsible par-
ties, will give time or exchange for cows or heifers.

SHERWOOD & ROHRER, VALLEY CENTER, KANSAS.

LINWOOD SHORT-HORNS

W. A. HARRIS, PROP'R, LINWOOD, LEAVENWORTH Co., KAS.

Substance, flesh, early maturity and good feeding quality the objects sought. The
largest herd of Scotch Short-horns in the West, consisting of Cruickshank Victorias, Lavenders,
Vilets, Secrets, Brawith Buds, Kinellar Golden Drops, etc., headed by Imp. Baron Victor 42824,
a prize-winner and sire of prize-winners.
LINWOOD—Is twenty-seven miles from Kansas City, on Kansas Division Union Pacific R. R. Farm
joins station. Inspection invited. Catalogue on application.

Kansas Hereford Cattle Co.,

(PAID IN CAPITAL \$100,000.)

IMPORTERS AND BREEDERS OF

HEREFORD CATTLE.

—BREEDING HERD AT GROVE PARK,—

2 1-2 Miles Northeast of Lawrence, Kas., on U. P. R. R.

Known as the "Gibb Farm."

W. D. EWART, Pres't.,
A. D. DANA, Treas.,
Chicago, Ill.

F. P. CRANE, Manager,
J. GORDON GIBB, Ass't Mgr.,
Lawrence, Kas.

Address all communications to Lawrence, Kas.

E. Bennett & Son,

TOPEKA, - KANSAS,

The Leading Western Importers of

CLYDESDALE,
PERCHERON,
CLEVELAND BAY

—AND—
French Coach Horses.

AN IMPORTATION OF 125 HEAD,

Selected by a member of the firm, just re-
ceived.

Terms to Suit Purchasers. Send for illus-
trated catalogue. Stables in town.

E. BENNETT & SON.

IMPORTERS AND BREEDERS OF ENGLISH SHIRE AND SUFFOLK PUNCH HORSES

—AND—

RED POLLED CATTLE.



STERLING.
4713.

We have on hand a very
choice collection, includ-
ing a recent importation of
horses, several of which
have won many prizes in
England, which is a special
guarantee of their soundness
and superiority of form and
action. Our stock is se-
lected with great care by G. M. SEXTON, Auctioneer to the Shire Horse Society of England.
Prices low and terms easy. Send for catalogues to



Peter Piper (717).

lected with great care by G. M. SEXTON, Auctioneer to the Shire Horse Society of England.
Prices low and terms easy. Send for catalogues to

SEXTON, WARREN & OFFORD, Maple Hill, Kansas.

COTSWOLD AND SHROPSHIRE SHEEP.

Imported and home-bred, of different ages—the farmer's general-purpose sheep. Spring
crop of lambs, both breeds, very promising.

Also Merino Sheep for sale—To settle the estate of R. T. McCulley—L. Bennett, admin-
istrator, who is authorized to sell at private sale, in numbers to suit purchaser.

Short-horns—Choice young animals, of both sexes, by Renick Rose of Sharon sires.
Bronze Turkeys and Plymouth Rock Chickens, pure breeds.
Also Berkshire Hogs.—For prices or catalogue, address

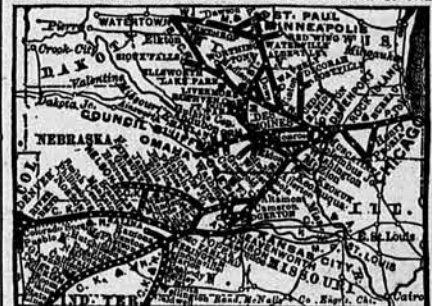
U. P. BENNETT & SON, Lee's Summit, Mo.

HAAFF'S NEW PRACTICAL DE-
HORNER. Fifty illus-
trations. New Tools. Cattle Tags. New Water-
heater. Send for circular. Agents wanted. Mention
H. H. HAAFF,
Box 193, Chicago, Ill.

ORGANS & SEWING MACHINES.
50 Styles. Cut Prices. Big In-
ducements. Goods sent on trial.
New, perfect and warranted 5
years. Agents Wanted. Ask
for Free Circulars at once. GEO.
F. BENT, 551 Wabash Ave., Chicago.

A MAN

UNACQUAINTED WITH THE GEOGRAPHY OF THE COUNTRY, WILL
OBTAIN MUCH INFORMATION FROM A STUDY OF THIS MAP OF THE



Chicago, Kansas & Nebraska R'y
(GREAT ROCK ISLAND ROUTE.)

It affords the best facilities of communication
between all important points in KANSAS, NE-
BRASKA, COLORADO, NEW MEXICO, the IN-
DIAN TERRITORY, TEXAS, and beyond. Its
Main Lines and Branches include ST. JOSEPH,
KANSAS CITY, NELSON, NORFOLK, BELLE-
VILLE, HORTON, TOPEKA, HERRINGTON,
WICHITA, HUTCHINSON, CALDWELL, DEN-
VER, COLORADO SPRINGS, PUEBLO, and hun-
dreds of other flourishing cities and towns.

The Vast Area of Fertile Country
tributary thereto offers rare inducements to farm-
ers, stock growers, and intending settlers of every
class. Lands cheap and farms on easy terms.
Traverses the famous "GOLDEN BELT" whose
varied products and herds of cattle, horses and
swine are the admiration of the world.

Prompt and Convenient Connections

at Kansas City and St. Joseph for Chicago, St.
Louis and all points East, South and Southeast;
with FAST LIMITED TRAINS OF GREAT ROCK
ISLAND ROUTE for Davenport, Rock Island, Des
Moines, Peoria and Chicago; with ALBERT LEA
ROUTE for Spirit Lake, Watertown, Sioux Falls,
Minneapolis, St. Paul, and points North and
Northwest, and with connecting lines South and
Southwest to Texas and Pacific Coast States and
Territories.

Splendid Passenger Equipment

Strictly First Class, entirely new, with latest
improvements, expressly manufactured for this
service, leading all competitors in the comfort and
luxury of its accommodations. Elegant Day
Coaches, Restful Reclining Chair Cars and Palace
Sleeping Cars. Solidly ballasted steel track; iron
and stone bridges, commodious stations, and
Union Depots at terminal points.

For Tickets, Maps, Folders, or desired infor-
mation, apply to nearest Coupon Ticket Agent,
or address at Topeka, Kansas,

H. A. PARKER, JNO. SEBASTIAN,
Vice-Pres. & Gen. Mgr. Gen. Tkt. & Pass. Agt.

Memphis Route,

KANSAS CITY, FT. SCOTT & MEMPHIS R. R.

(Formerly Gulf Route—Kansas City,
Fort Scott & Gulf R. R.)

Offers you the most pleasant and desirable
route to Kansas City and all points East, North
and West; to Memphis and all points South.

At Kansas City, connections are made at
Union Depot with all through trains for Chi-
cago, St. Louis and the East; to St. Paul, Den-
ver, San Francisco, Portland, and the West
and Northwest. Via this line, entire train
with Free Reclining Chair Car and Pullman
Buffet Sleeping Car runs through to Memphis,
Tenn.; through coach Kansas City to Bristol
via Chattanooga and Knoxville. There is no
other direct route from the West to Jackson-
ville, Pensacola, Nashville, Chattanooga, and
all Southern cities.

This route, via Hoxie, is over one hundred
miles the shortest line to Little Rock, Hot
Springs, and points in Arkansas.

Write for large map and time-tables, show-
ing through connections.

Before purchasing your ticket, call upon a
ticket agent of this Company, or write to the
undersigned for rates. Special rates and ar-
rangements for parties and their movables,
going South to locate.

Send for a copy of the Missouri and Kansas
Farmer, giving full information relative to the
cheap lands of Southwest Missouri. Mailed
free.

J. E. LOCKWOOD,
Gen'l Passenger and Ticket Agent,
KANSAS CITY, MO.

Wants to Come West!

157 acres in Indiana; two miles from county
seat; no house; celebrated Wabash bottom
land; 75 acres raises 60 to 80 bushels corn per
acre; rents for one-third delivered in town.
Prospect excellent for owner to get \$500 for
his share this year. Will trade for good Kan-
sas improved farm.

Address A. F. RAMSEY,
Crawfordsville, Indiana.

THE STRAY LIST.

HOW TO POST A STRAY.

THE FEES, FINES AND PENALTIES FOR NOT POSTING.

BY AN ACT of the Legislature, approved February 27, 1884, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker-up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice.

And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper, free of cost, to every County Clerk in the State, to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5.00 to \$50.00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the FARMER for a violation of this law.

Broken animals can be taken up at any time in the year.

Unbroken animals can only be taken up between the first day of November and the first day of April, except when found in the lawful enclosure of the taker-up.

No persons, except citizens and householders, can take up a stray.

If an animal liable to be taken up, shall come upon the premises of any person, and he fails for ten days, after being notified in writing of the fact, any other citizen and householder may take up the same.

Any person taking up an estray, must immediately advertise the same by posting three written notices in as many places in the township giving a correct description of such stray, and he must at the same time deliver a copy of said notice to the County Clerk of his county, who shall post the same on a bill-board in his office thirty days.

If such stray is not proven up at the expiration of ten days, the taker-up shall go before any Justice of the Peace of the township, and file an affidavit stating that such stray was taken up on his premises, that he did not drive nor cause it to be driven there, that he has advertised it for ten days, that the marks and brands have not been altered; also he shall give a full description of the same and its cash value. He shall also give a bond to the State of double the value of such stray.

The Justice of the Peace shall within twenty days from the time such stray was taken up (ten days after posting), make out and return to the County Clerk, a certified copy of the description and value of such stray.

If such stray shall be valued at more than ten dollars, it shall be advertised in the KANSAS FARMER in three successive numbers.

The owner of any stray may, within twelve months from the time of taking up, prove the same by evidence before any Justice of the Peace of the county, having first notified the taker-up of the time when, and the Justice before whom proof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of all charges and costs.

If the owner of a stray fails to prove ownership within twelve months after the time of taking, a complete title shall vest in the taker-up.

At the end of a year after a stray is taken up, the Justice of the Peace shall issue a summons to three householders to appear and appraise such stray, summons to be served by the taker-up; said appraisers, or two of them, shall in all respects describe and truly value said stray, and make a sworn return of the same to the Justice.

They shall also determine the cost of keeping, and the benefits the taker-up may have had, and report the same on their appraisal.

In all cases where the title vests in the taker-up, he shall pay into the County Treasury, deducting all costs of taking up, posting and taking care of the stray, one-half of the remainder of the value of such stray.

Any person who shall sell or dispose of a stray, or take the same out of the State before the title shall have vested in him, shall be guilty of a misdemeanor and shall forfeit double the value of such stray and be subject to a fine of twenty dollars.

FOR WEEK ENDING JULY 12, 1888.

Butler county—T. O. Castle, clerk.

2 COLTS—Taken up by C. F. Ayres, in Fairmount tp., May 9, 1888, two bay mare colts, 2 years old, no marks or brands; valued at \$20 each.

FOR WEEK ENDING JULY 19, 1888.

Davis county—P. V. Trovinger, clerk.

MARE—Taken up by R. Waters, in Liberty tp., May 17, 1888, one sorrel mare, 13 hands high, 3 years old, weight about 750 pounds, small blaze in face, no marks or brands; valued at \$30.

MARE—Taken up by R. B. Hampton, in Liberty tp., June 6, 1888, one roan mare, 13 hands high, 6 years old, one white front foot, white face, Spanish brand on left hip; valued at \$40.

Pratt county—J. J. Waggoner, clerk.

MULE—Taken up by A. P. Ome, in Richland tp., May 11, 1888, one iron gray horse mule, 14 hands high, no marks or brands; valued at \$35.

Johnson county—W. M. Adams, clerk.

MARE—Taken up by A. L. Grass, in Shawnee tp., (P. O. Shawnee), June 21, 1888, one black mare, 16½ hands high, heavy mane and tail, no shoes on, travels very lame, scar on right hip near the tail, left hock cut; valued at \$30.

Crawford county—J. C. Gove, clerk.

HEIFER—Taken up by J. A. Briggs, in Washington tp., May 18, 1888, one dark red heifer, branded C on right hip; valued at \$10.

Nemaha county—W. E. Young, clerk.

STEER—Taken up by Conrad Meyer, in Washington tp., (P. O. Bazel), April 27, 1888, one red and white spotted steer, some white in forehead, no other marks or brands; valued at \$16.

Marion county—E. J. Walton, clerk.

COLT—Taken up by Jacob Funk, Jr., (P. O. Hillsboro), May 9, 1888, one 1-year-old black colt, medium size, no marks or brands.

Washington county—John E. Pickard, clerk.

STEER—Taken up by R. Pruitt, in Grant tp., one pale red 1-year-old steer, split in right ear; valued at \$10.

FOR WEEK ENDING JULY 26, 1888.

Johnson county—W. M. Adams, clerk.

HORSE—Taken up by W. Haverly, in Oxford tp., (P. O. Olathe), July 5, 1888, one sorrel horse, star in forehead, 12 years old; valued at \$50.

Cherokee county—J. C. Atkinson, clerk.

HORSE—Taken up by Jos. Bryan, in Spring Valley tp., one bright bay horse, 7 or 8 years old, branded on left hip T. I. R., saddle marks on back.

Bourbon county—J. R. Smith, clerk.

2 MARES—Taken up by L. L. Cox, of Osage tp., two mares—one gray mare, 14 hands high, about 6 or 7 years old, small scar on the left hind leg near the ankle; the other one is a bay, about 9 years old, 13 hands high, white spot in forehead, scar on right

shoulder-blade, long hair on the legs, no other marks or brands visible; valued at \$110.

Brown county—N. E. Chapman, clerk.

STEER—Taken up by M. B. Dickinson, in Washington tp., one red steer, 1 year old, no marks or brands; valued at \$10.

STEER—By same, one red and white steer, 1 year old, no marks; valued at \$10.

STEER—Taken up by A. Kesler, in Walnut tp., one blue and white steer, 1 year old, branded S on right hip; valued at \$20.

Miami county—H. A. Floyd, clerk.

STEER—Taken up by G. L. Knoche, in Middle Creek tp., June 21, 1888, one red and white spotted steer, 1 year old past, no marks or brands visible; valued at \$12.

Atchison county—Chas. H. Krebs, clerk.

MULE—Taken up by Willie Smith, in Lancaster tp., (P. O. Huron), June 13, 1888, one dark bay mare mule, about 16 hands high, small knot on right jaw, shod on three feet, about 12 years old; valued at \$25.

Too Late to Classify.

FOR SALE—Registered Jersey Cow, 4 years old, with fine bull calf. Would exchange for Holstein. Call at 1024 Harrison street, Topeka.

ANNOUNCEMENT.—A. B. Quinton is a candidate for re-election to the office of Probate Judge of Shawnee county.

SMALL FRUIT PLANTS FOR SALE

Forty acres in Small Fruits. 100,000 plants sold this year. 900,000 to sell in fall of 1888 and spring of 1889. To those who desire to plant small fruits, my 1888 Small Fruit Manual will be sent free. B. F. SMITH, Box 6, Lawrence, Kas.

KANSAS HOME NURSERY

BEST HOME-GROWN TREES. Choice Fruit and Ornamental Trees of real merit for the Western Tree-Planters. Also best Fruit and Flower Plants. Water-proof. Samples by mail, 10 cents each; \$5 per 100, by express. A. H. GRIESA, Drawer 28, Lawrence, Kas.

Hart Pioneer Nurseries

A full line of Nursery Stock, Ornamental Trees, Roses and Shrubbery. We have no substitution clause in our orders, and deliver everything as specified. 220 Acres in Nursery Stock. Reference: Bank of Fort Scott. Catalogue Free on application. Established 1857.

Mount Hope Nurseries

ESTABLISHED 1869. Offer special inducements to the Trade and large Planters. A full stock of everything. A heavy stock of Standard and Dwarf Pear Trees and Cherry Trees. Quality unsurpassed, and all home-grown. Nurserymen and Dealers supplied at lowest rates. Best of shipping facilities. Let all who want nursery stock correspond with us. State your wants. A. C. GRIESA & BRO., Drawer 13, Lawrence, Kansas.

THE LAMAR NURSERIES.

Headquarters for Fine Nursery Stock Which is Offered at HARD - TIME PRICES!

Dealers and Nurserymen supplied at lowest wholesale rates.

Parties desiring to buy in large or small quantities will save money by purchasing our stock.

We have Apple, Peach, Pear, Plum, Cherry and Evergreen Trees. Grape Vines in all varieties, and FOREST TREES a specialty. Osage Hedge Plants and Russian Mulberry in any quantity. Write for Prices.

C. H. FINK & SON, LAMAR, MO.

LA CYGNE NURSERY.

MILLIONS

Fruit Trees, Shade Trees, Small Fruits. Vines, Ornamental Trees, Etc.

TEN MILLION FOREST TREE SEEDLINGS.

ONE MILLION HEDGE PLANTS.

ONE HUNDRED THOUSAND TWO-YEAR APPLE TREES—Grown from whole root grafts.

FIVE THOUSAND IRISH JUNIPERS—Two-feet, SPLENDID WALNUTS, and other forest tree seeds and nuts, prime and fresh.

Full instructions sent with every order, and perfect satisfaction guaranteed. Send for full list and prices. Address

D. W. COZAD Box 25, LACYGNE, LINN CO., KANSAS.

A SNAP IN SHORT-HORNS



A few nicely-bred things to be sold cheap, at

INDEPENDENCE, MO.,

Wednesday, August 8, 1888,

At the close of COL. H. M. VAILE'S sale of HIGH-BRED SHORT-HORNS,

Six head of Young Mary, Young Phyllis, Alice Maude, and Loudon Duchess. Catalogues now ready.

Address

CUTHBERT POWELL, 412 Journal Building, Kansas City, Mo.

AUCTION SALE! OF 70 HEAD OF HOLSTEIN FRIESIANS

The entire herd. We have disposed of our farm, and will sell our cattle without reserve at Rockefeller, On the Wisconsin Central R. R., July 18th, at 1:30 P. M. 33 Miles Northwest of Chicago.

The herd has been bred with great care and not an animal has been sold out of it consequently we do not offer a lot of culls. 20 head bear the NETHERLAND name, and most of the others are descendants of ECHO, AAGGIE, and other noted families. This is a splendid chance to buy MAGNIFICENT FOUNDATION STOCK. For particulars and illustrated Catalogue write

BUCHANAN BROS., 225 Dearborn Street, Chicago.

A Grand Public Sale of Short-horn Cattle!

AT INDEPENDENCE, MO., WEDNESDAY, AUGUST 8, 1888,

By H. M. VAILE, who will sell thirty-seven head of Bates-bred Short-horns—twenty-one Waterloos and Wild Eyes, five Peris, ten Gazelles and one Princess. For catalogues address

H. M. VAILE, Independence, Mo.

COL. L. P. MUIR, Auctioneer, or Live Stock Record, Kansas City, Mo.

ATTENTION, FARMERS!

You no doubt are aware of the fact that the dairy business is the most remunerative part of farming, and that there is no reason in the world why Kansas should not rank foremost in the creamery interests.

Kansas Creamery Butter

to-day is selling at the highest market prices in Denver and the West, but there is not enough butter made in Kansas to supply this great Western demand. Colorado has to buy her creamery butter in Iowa and Illinois, and these States are getting all of this good money that should go to our

Kansas Farmers.

Every town of six hundred inhabitants and upwards should have a CREAMERY, which they can procure at a VERY SMALL COST.

We are so situated that we can furnish all necessary Machinery and Apparatus, and give full instructions for erecting the building, which we will be glad to do at any time.

Let some enterprising farmer take hold of this, and work up a small stock company, and correspond with us.

We will be very glad to hear from anybody regarding this great industry.

OUR CATALOGUE FOR 1888 is now out. Send 2-cent stamp for same. Respectfully,

Creamery Package Mf'g. Co. KANSAS CITY, MO.

OPIUM AND MORPHINE HABIT CURED in 10 to 20 days. No pay until cured. Address DR. J. J. HOLMES, WYLLIAMSBURG, VA.

OPIUM Morphine Habit Cured in 10 to 20 days. No pay until cured. Dr. J. Stephens, Lebanon, Ohio.

GIVEN AWAY. I will give my Double Cam HAY PRESS away if it will not fill the demand of my circulars. Send for Circulars and Price to the Manufacturer, JAS. KEMP, Kempton, Ill.

CHEAPEST & BEST MILL
SATISFACTION GUARANTEED
WARRANTED TO GRIND FASTER, FINER & BETTER THAN ANY MILL MADE
4 SIZES: 16, 20, 24 & 30 INCH.
CHAS. KAESTNER & CO.
303-311 SO. CANAL ST. CHICAGO
CIRCULAR FREE

DAVID BRADLEY MFG. CO.
CHICAGO, ILL.

BUY THE MORRISON PLOW
BEST USE
ELEVATOR SPRING
CULTIVATOR
12 YEAR OLD BOY
ADDRESS MORRISON MFG. CO.
FORT MADISON IOWA

COOK FEED FOR YOUR STOCK
With the TRIUMPH STEAM GENERATOR and save 1/2 to 3/4 of your feed. Also ENGINES & BOILERS, GRINDING MILLS, FEED CUTTERS and CORN SHELLERS. Send for Catalogue A and state what you want.
RICH & WHITACE MFG. CO.
42 & 44 W. Monroe St., Chicago.

LIGHTNING WELL-SINKING MACHINERY.
Our ENCYCLOPEDIA contains 700 Engravings, describing all the tools and machinery used in the art of Well-Sinking, Prospecting Machinery, Diamond Pointed Rock Drills, and all manner of Artesian Pumping Appliances. Encyclopedia free, 25 cts. for mailing.
The American Well Works,
AURORA, ILLS., U. S. A.

THE ROSS
Celebrated ENSILAGE AND Fodder Cutters.
Send for our Illustrated Catalogue and Treatise on Ensilage and Silos. **E. W. ROSS & CO.,**
SPRINGFIELD, OHIO, U. S. A.

STAR X CANE X MILL,
STUBBS' EVAPORATOR AND Sugar-Makers' Supplies.
For the next 60 days we will sell this celebrated machinery at greatly reduced prices, regardless of profit. Those desiring bargains should send for circular to **J. A. FIELD & CO.,**
8th and Howard Sts., St. Louis, Mo., U. S. A.



Halladay Wind Mill.

PUMPS, PIPE, WATER TANKS, FEED MILLS, ETC.

Write for catalogue. Address **U. S. WIND ENGINE & PUMP CO.,**
1311 West 12th St., KANSAS CITY, MO.

Lightning Hay Press.



Full circle. Steel. Most rapid and powerful. Address **K. C. Hay Press Co.,**
Kansas City, Mo.

THE LANE & BODLEY CO., CINCINNATI.



MANUFACTURERS OF SAW MILLS AND ENGINES

for all purposes. An experience of thirty years permits us to offer the best. Good work at low prices. Send for circular.

THE NEW DOCTOR BAILEY CUTTER.
For Ensilage and Dry Forage. Six sizes, for hand, horse and steam power. Only machine made with a drawing and shearing cut. Great saving of power and increase of capacity. Made only by **AMES PLOW CO.,**
Send for circulars and catalogue. Boston and New York.

DELAWARE COUNTY CREAMERY
—We will pay Freight.— Write for our wholesale offer to first purchaser. Address **Delaware County Creamery Co.,**
BENTON HARBOR, MICH.

The BEST Lock-Lever Rake in the Market.
Has double coil steel teeth, with spring temper.
"BRADLEY No. 2"
IS MADE 8 or 12 Feet Wide, with Shafts or Poles.
Axles TRUSSED on two sides.
Send for Description and Prices.

DAVID BRADLEY MFG. CO.
CHICAGO, ILL.

BRANCH HOUSES:
DAVID BRADLEY MFG. CO., St. Louis, Mo.
DAVID BRADLEY & CO., Minneapolis, Minn.
DAVID BRADLEY & CO., Council Bluffs, Ia.
BRADLEY, WHEELER & CO., Kansas City, Mo.
BRADLEY, HOLTON & CO., Indianapolis, Ind.

BUCKEYE GRAIN DRILL
PERFECT FORCE FEED FOR Grain and Grass Seed
CENTER GEAR.
Ratchets in ground Wheel, so that either wheel drives the Grain Feed, making continuous feed in turning corners or drilling around corn shocks.
New LEVER for shifting the HOES. One-half the hoes forward and the other half back. This drill has no equal on the market and can not fall to be appreciated by any farmer who sees it.
Branch Houses: Philadelphia, Pa.; Peoria, Ill.; St. Paul, Minn.; Kansas City, Mo.; San Francisco, Cal.
Send for Circular to either of the above firms or to **P. P. MAST & CO.,** SPRINGFIELD, OHIO.

Also Manufacturers of Buckeye Fertilizer Drills, Buckeye Riding and Walking Cultivators, Buckeye Seeders, Buckeye Cider Mills and Hay Rakes.

WHITMAN'S Continuous Hay Straw Press



Write for Catalogue, Prices and Terms. **WEIR PLOW CO.,** Kansas City, Mo., State Agents for Kansas.

CHICAGO VETERINARY COLLEGE.
INCORPORATED 1883.
FACILITIES FOR TEACHING AND CLINICAL ADVANTAGES UNSURPASSED. Session of 1888-9 commences October 1st. For Catalogue and further information, address the Secretary, **JOSEPH HUGHES, M. R. C. V. S.,**
2537 and 2539 State Street, Chicago.

Some Valuable Papers CLUBBED WITH KANSAS FARMER:
The Breeder's Gazette, price \$3.00—both..... \$3.00
The Topeka Weekly Capital, price \$1.00—both..... 1.50
The Topeka Weekly Commonwealth, price \$1.00—both..... 1.50
The Weekly Kansas City Times, price \$1.00—both 1.75
Scribner's Magazine, price \$3.00—both..... 3.50

THE DAIN AUTOMATIC Hay Stacker and Gatherers

WILL SAVE MORE MONEY AND MORE HARD LABOR THAN ANY FARM MACHINERY EVER INTRODUCED.

It is simple and well made.
It will outlast any three stackers of other makes.
Only Stacker operated and moved from place to place on an ordinary farm wagon.
No weights, springs, complicated levers or rollers to get out of order.
The only Stacker that will throw the hay ALWAYS on the stack and not scatter it.
Only stacker a farmer will buy after examining it thoroughly in comparison with others.
The DAIN is the only Stacker that will answer for loading upon wagons, as it is mounted and can be moved quickly, and the hay can be thrown directly upon the wagons.

Manufactured by—
T., R. & A. MFG. CO., KANSAS CITY, MISSOURI.



TWO-CENT COLUMN.

"For Sale," "Wanted," "For Exchange," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order.

Special.—All orders received for this column from subscribers, for a limited time, will be accepted at one-half the above rates—cash with the order. It will pay you! Try it!!

TO EXCHANGE—Prize herd of Jersey Cattle for horses, sheep or farming land. Address Irving A. Sibley, South Bend, Ind.

TO LET—320 acres, twelve cows and Jersey bull, or will hire. P. M., Bird Nest, Kas.

FARM FOR SALE OR TRADE.—120 acres, four miles from Americus, choice land, new house, good cellar, two never-falling wells and creek, good young orchard. School house and church at corner of farm. Six acres timber detached. Title perfect. No incumbrance. Or will trade for a good improved forty acres near some good town in eastern Kansas. Address L. W. Blumberg, Box 149, Americus, Lyon Co., Kas.

RED CEDARS A SPECIALTY. G. W. Tinscher, Topeka, Kas.

S. BARNES—Blue Mound, Kas., has for sale registered Holsteins. Terms to suit.

WILL EXCHANGE—Extra fine Bull Calf, registered Short-horn. Also two for sale. C. V. N. House, Spring Hill, Johnson Co., Kas.

WRITE US FOR PRICES—Of Seed Buckwheat, Rye, Turnip Seed, and anything in the seed line. Trumbull, Reynolds & Allen, Kansas City, Mo.

FOR SALE—All kinds of Turnip Seed. Raise turnips to feed your stock. Trumbull, Reynolds & Allen, Kansas City, Mo.

WANTED—To lease a good furnished farm, by one who understands farming. Good reference given. Geo. F. Myer, Parsons, Kas.

FOR SALE OR EXCHANGE—A stock of Millinery in first-class order and fresh new goods, with all fixtures, very low, for cash, or unincumbered land in good locality, or lots in Topeka. Owner wishes to go out of business on account of health. Address E. C. M., Kansas Farmer office, Topeka.

FOR TRADE—Farm of 160 acres, close to county seat of Kiowa county, Kas., to trade for stock—steers preferred. Address Box 096, Greensburg, Kas.

WANTED—Live Agents to sell "The History of Tariff Laws," by R. W. Thompson, (Ex-Secretary U. S. Navy). The only complete work on this great subject. Address R. S. Peale & Co., Chicago, Ill.

FOR SALE OR TRADE—A two-horse Sorghum Mill, L. Squire's No. 2 Pearl, with Smouse's self-skinning evaporator. Address H. D. Rice, Topeka, Kas.

FOR SALE—About 1,200 head of good Grade Merino Sheep, all young and in good condition, and thirteen thoroughbred Bucks. Price per head, \$1.75 for sheep, \$5.00 for bucks. Address J. Simon, Newton, Kas.

PATENTS.—J. C. Higdon, Solicitor of Patents, Kansas City, Mo. Sample copy patent, instructions, references, free. Reliable associate at Washington.

FOR SALE.—Four high-grade Holstein Milch Cows and eleven two-year-old Holstein Heifers. Price low if sold in a bunch. Address J. Simon, Newton, Kas.

FOR SALE—A six-horse-power Engine. Price \$125. Good as new. Address Geo. H. McMillan, 505 Kansas Ave., Topeka.

STOLEN—On Friday evening, June 1, from Topeka Avenue, between Sixth and Seventh streets, Topeka, a bay mare, 7 years old, and a new open business spindle buggy and harness. \$50 reward for horse and thief. Address Jas. Seery, Topeka, Kas.

FOR SALE AT A BARGAIN—The best improved 320-acre farm in Rawlins county, Kansas, together with stock, crops and machinery, on account of health of owner. Address H. J. Browne, Atwood, Kas.

FANCY BOX OF FINE NOTE PAPER AND ENVELOPES, gold plate ring, collar-button and scarf-pin, one sheet scrap-book pictures, sample of latest cards, and picture of Mrs. Cleveland, all 10 cents. Card Works, Grand Island, Nebraska.

STRAYED—From Martin Finney, Fourth and Jefferson streets, Topeka, a light roan mare, with silver tail and mane, shod in front and branded on left hip. Liberal reward.

FOR SALE—Pure Plymouth Rock eggs. J. D. Jencks, 411 Polk street, North Topeka.

FOR SALE—Light Brahma, Langshan and Wyandotte Cockerels and Pullets. Cheap for quality of stock. Express rates low. M. D. Mulford, Guide Rock, Neb.

WANTED—To crop with some farmer to raise Broomcorn and manufacture into brooms, or will rent small farm; everything furnished; no crop will pay as well. S. Pottenger, Kankakee, Ill.

HOLSTEIN-FRIESIAN—Registered Cattle for sale. Wm. A. Travis & Co., North Topeka, Kas.

FOR SALE—160 Acres; all fenced and cross-fenced; two good barns, horse stable, granary will hold 2,000 bushels, carriage house, corn crib; a large variety of fruit trees in bearing; six-room house, nearly new. Four and a half miles from Stafford. Price \$4,500—\$700 four years at 7 per cent. C. G. McNeil, Stafford, Kas.

FOR SALE—A fine young Holstein Bull, 16 months old, from imported dam; finely marked. Address C. A. Tyler, Burrton, Kas.

J. M. SLONAKER—Garnett, Kas., has for sale one J. Renick Rose of Sharon and one Bloom Bull, both richly bred. Write for pedigree and terms.

FOR SALE OR TRADE—Eighty acres of land in Woodson county, within ten and a half miles of Toronto; sixty-five acres under cultivation. For particulars address Robert Ritchie, Peabody, Kas.

WE SELL—Only warranted goods. Any society badge, 62 cents; charin, 87 cents; collar-button, 28 cents. Standard gold plate. Charles H. Williams & Co., Manufacturing Jewelers, Attleboro, Mass.

FOR TRADE—Farm of 159 acres; 50 acres under cultivation; 145 acres tillable; in Cowley Co., Kas. Will trade for blooded horses—Norman or Cleveland Bays preferred. Address B. L. Wilson, Atlanta, Kas.

BARTHOLOMEW & CO., Real Estate and Loan Brokers, 139 Kansas avenue, Topeka, Kas. Write them for information about Topeka, the capital of the State, or lands, farms or city property.

TWO-CENT COLUMN—(Continued.)

WANTED—All farmer boys who are thinking of attending some good business college this fall or winter, to write to Pond's Business College, Topeka, Kas., for circulars. Fall term begins September 8.

FARM FOR SALE—160 acres, with 50 acres under cultivation. Has grove, orchard, houses and other improvements. Located eight miles from Council Grove. Address Box 26, Boling, Kas.

HAY LAND TO LET.—Nine miles southeast of Alta Vista. Two-thirds will be given for harvesting. Address S. S. Cartwright, Topeka, Kas.

DEHORNING CATTLE.—Tools \$1.50 prepaid. 28-page book particulars 10c. I. J. Wicks, Colorado Springs, Colorado.

FOR SALE—Jersey and Holstein-Friesian registered Bulls, 1 year old, or will exchange for saddle mare, color chestnut or black, 15½ hands high. Address John Milburn, Fort Scott, Kas.

FOR SALE—Great bargains in Boynton's addition to Topeka. Parties are doubling their money buying lots in this addition. The cotton factory is going up fast. Call on D. S. Boynton, 626 Kansas avenue, room 5.

FOR SALE—Five-room house at slaughter prices, for half what it is worth. If you wish to make money, call on D. J. Boynton, 626 Kansas avenue, room 5.

STRAYED—On March 31, 1888, from Pinkerton place, south of Elevator school house, one bay three-year-old filly, a sock on left hind leg, and had halter on. Also one-year-old brown horse colt. A liberal reward for their recovery. S. W. McKnight, Topeka, Kas.

100,000 THIRD-CLASS HEDGE PLANTS for sale. Nice, healthy plants. Fifty cents per 1,000. 10,000 Catalpa, 12 to 24 inches, \$2.25 per 1,000. Boxed free. Douglas County Nurseries, Box 33, Lawrence, Kas.

100,000 THREE BEST SORTS TIMBER—Claim Trees for sale by Martin Allen, Hays City, Kas.

FOR TRADE FOR STOCK—Two good improved Creek Bottom Farms, with timber and water. Address A. M. Mason, Neodesha, Wilson Co., Kas.

CHOICE LOTS—In Boynton's addition to Topeka to exchange for a farm. West Side circle railway runs through the addition. Convenient to cotton factory, sugar mill and creamery. D. J. Boynton, 626 Kansas avenue, room 5, Topeka.

ANNOUNCEMENTS.

ANNOUNCEMENT.—I am a candidate for the office of Clerk of the District Court, subject to the Republican county convention of Shawnee county. E. W. BRUBAKER.

ANNOUNCEMENT.—I hereby announce myself as a candidate for re-election to the office of Clerk of the District Court, subject to the decision of the Republican county convention, to be held August 4, 1888. W. E. STERN.

ANNOUNCEMENT.—I hereby announce myself as a candidate for the office of County Superintendent of Public Instruction, subject to the decision of the Shawnee County Republican convention. JOSEPH JORDAN.

ANNOUNCEMENT.—I am a candidate for the office of County Superintendent of Public Instruction, subject to the decision of the Shawnee County Republican convention. E. G. SHULL.

ANNOUNCEMENT.—I hereby announce myself as a candidate for the office of County Attorney, subject to the decision of the Shawnee County Republican convention. R. B. WELCH.

HIGH-CLASS

Jersey Bulls
FOR SALE CHEAP.

DUKE OF WELLWOOD 14919—Three years old; solid color; black points. First prize at the St. Louis Fair, 1886; first prize and sweepstakes at Iowa State Fair, 1886; first prize at Kansas State Fair, 1887, and sweepstakes over all dairy bulls at Nebraska State Fair in 1887. He is the only bull known to his owner whose blood lines close up trace to the three greatest of all Jersey bulls—judged by the butter records of their daughters, viz.: Mercury, Stoke Pogis 3d and Rex. Price \$100.

SIGNAL BOY 18178—Two years old; fawn-some white on legs and tail. Tracing to twenty butter tests, close up, ranging from 18 pounds to 23 pounds 8 ounces in seven days. No better blood. Individually fine. Sold for no faults—right every way. In good condition, but owner has no use for them. Price \$75.

Will take one-half cash down, balance in six months.

Also, a few Yearling Heifers in calf, at \$75 to \$100. Must be sold.

Address
CHAS. H. HOLMES,
Beatrice, Nebraska.

Grass for Sale

500 ACRES OF GOOD GRASS, FOUR miles from Railroad Depot at Paxico, Wabunsee Co.
Address
L. RONSSSE,
St. Marys, Kas.

HUGH E. THOMPSON,
BROOMCORN

Commission and Dealer in Broom-Makers' Supplies. Reference:—National Bank of Commerce.
1412 & 1414 Liberty St., Kansas City, Mo.

SEEDS

J. C. PEPPARD, 1220 UNION AVENUE,
(One block from Union Depot)
KANSAS CITY, MO.
MILLET A SPECIALTY.
Red, White, Alfalfa & Alsike Clovers.
Timothy, Blue Grass, Orchard Grass, Red Top,
Onion Sets, Tree Seeds, Cane Seed, Etc.

SIXTH ANNUAL
KANSAS STATE FAIR!

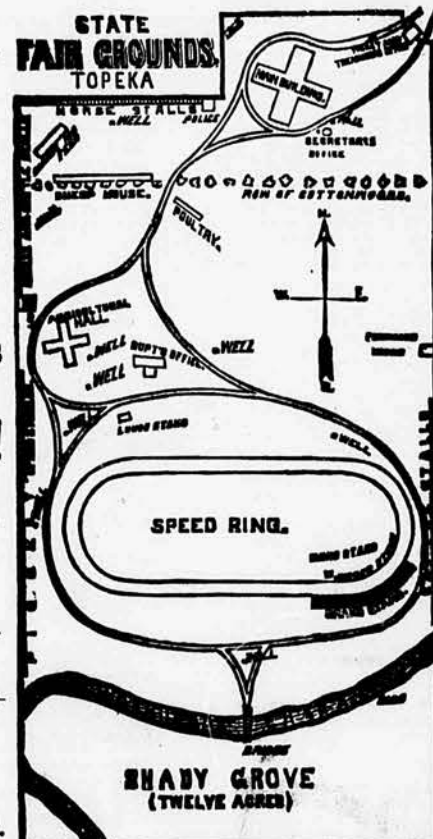
—TO BE HELD AT—

TOPEKA, KANSAS,
SEPTEMBER 17, 18, 19, 20, 21 and 22, 1888.

\$25,000 IN PREMIUMS.

THE
GREATEST
SHOW
OF
1888!
—
REPRESENTING
THE
PRODUCTS
OF AN
EMPIRE!

The Whole
STATE
OF
KANSAS.
—
More and Greater At-
tractions than
ever.
—
REDUCED
R. R. FARE.



\$25,000.00
FOR
Fair Ground
IMPROVEMENTS.
—
CITY WATER SER-
VICE.
—
Electric Light!
—
NEW
HORSE BARN,
CATTLE BARN,
ART HALL
Machinery Hall,
Amphitheater.
—
Finest Fair Ground
and Speed Ring
IN THE WEST

For information and Premium Lists, address **E. G. MOON, Secretary,**
TOPEKA, KANSAS.

× NINTH ANNUAL ×
Western × National × Fair!

—AT—

Bismarck Grove, Lawrence, Kas.,
SEPTEMBER 3, 4, 5, 6, 7 and 8, 1888.

\$20,000 IN PREMIUMS!

The LARGEST and BEST FAIR ever held on the grounds. Attractions of every kind. Everything to interest and amuse the people. A fine display of Cattle, Horses, Hogs and Sheep, and special show of Poultry. Splendid TROT-TING and PACING.

Reduced rates of fares on all railroads.
For information, privileges and Premium Lists, address
I. N. VAN HOESSEN, Lawrence, Kansas.

J. L. STRANAHAN,
DEALER IN
BROOMCORN
And all BROOM MATERIALS AND MACHINERY.

Twenty-five years experience as a Manufacturer and Wholesale Dealer. Liberal advances on consignments.
References:—Hide & Leather Nat'l Bank, Chicago. 194 Kinzie St., Chicago, Ill.

CONSIGN YOUR CATTLE, HOGS & SHEEP TO
Larimer, Smith & Bridgeford,
LIVE STOCK COMMISSION MERCHANTS,
Kansas City Stock Yards, Kansas City, Kansas.

Highest market prices realized and satisfaction guaranteed. Market reports furnished free to ship-pers and feeders. Correspondence solicited. Reference:—The National Bank of Commerce, Kansas City.