

# KANSAS FARMER

ESTABLISHED, 1863.  
VOL. XXVI, No. 4.

TOPEKA, KANSAS, THURSDAY, JANUARY 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.

**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 (735).

**W. M. FINCH**, Importer and breeder of English Shire, Clydesdale and French Draft Horses. Stock for sale. Livery and sale stable, 916 Kansas avenue, North Topeka, Kas. Correspondence respectfully solicited.

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

**PROSPECT FARM**—H. W. McAfee, Topeka, Kas., breeder of Thoroughbred Clydesdale Horses and Short-Horn Cattle. A number of choice bulls, also horses for sale now. Write or call.

### CATTLE.

**W. M. BROWN**, Lawrence, Kas., breeder of Holstein-Friesian and A. J. C. C. Jersey Cattle. Onyx 3771 and Hepatica's Wayne 6300 and Golden Prize 11445 head herds. Write or come and see.

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

**M. S. BABCOCK**, Nortonville, Kas., breeder of Holstein-Friesian Cattle. Inspection and correspondence invited.

**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.

**OAKWOOD HERD OF SHORT-HORN CATTLE**—All recorded. Choice-bred animals for sale. Prices low. Terms easy. Imported Earl of Gloster 74522 head herd. C. S. Eichholtz, Box 1208, Wichita, Kas.

**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.

**W. E. GOULD**, Marshall, Mo., breeder of Thoroughbred and Grade Holstein-Friesian Cattle. Calumet 3532 H. H. B., heads herd—a choice butter-bred 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.

**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.

**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.

**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.

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

**D. R. W. 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.

**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.

### CATTLE AND SWINE.

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

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

### CATTLE AND SWINE.

**M. M. 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.

**H. S. FILLMORE**, Lawrence, Kas., proprietor of H. Green Lawn Fruit and Stock Place, breeder of Jersey Cattle and Poland-China Swine. Stock for sale.

### SWINE.

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

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

### SWINE.

**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.

### SHEEP.

**MERINO SHEEP, BERKSHIRE HOGS, SHORT-HORN CATTLE**, and thirty varieties of high-class Poultry. All breeding stock recorded. Eggs for sale in season. Write for wants and get prices. **HARRY McCULLOUGH**, Fayette, Mo.

**H. V. PUGSLEY**, Plattburg, Mo., breeder of Merino Sheep. Ewes averaged nearly 17 lbs.; stock rams, 34 lbs. to 85 lbs. Extra rams and ewes for sale. Also Holstein Cattle.

### POULTRY.

**EVERGREEN FRUIT FARM**—Leading varieties of Strawberry Plants, S. C. Brown Leghorn Fowls, Poland-China Swine. Send for prices. T. F. Sproul, Frankfort, Kas.

**MAMMOTH BRONZE TURKEYS**—\$1.25 apiece or \$3.00 per trio. Good stock. E. C. Ralls, Eldon, Miller Co., Mo.

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

### MISCELLANEOUS.

**TOPEKA TRANSPORTATION CO.**—Office, 517 Kansas Ave., Topeka, Kas. Telephone 179.

**SEVERAL GOOD JACKS FOR SALE OR TRADE**—At my stables, Ogden, Riley Co., Kas. Correspondence solicited. Theo. Weichselbaum.

**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.

"THE BEST IS THE CHEAPEST."

## The Challenge-Leader Planter

THE MUCH-TALKED-OF "GRAVITY" DROP.

The attention of all Kansas Farmers is called to this Matchless Planter with its wonderful Drop, which completes its own stroke with any Check-Rower. This Planter has also wrought axles—none broke in fifteen years—and the Planter runs as true and light as a buggy.

WE ARE SOUTHWESTERN HEADQUARTERS FOR

Garden City Plows, Square-Corner, Sulky and Gang Plows, Cultivators and Hay Rakes, Bradley Listers, Schuttler and LaBelle Farm Wagons, Buggies, Carriages, Spring Wagons, Farmers' Road Carts, Etc., Etc.

SEND FOR OUR FARMER'S HAND-BOOK OF USEFUL INFORMATION—FREE.

**Bradley Wheeler & Co.**  
107<sup>th</sup> & HICKORY STS.  
NEAR UNION DEPOT.  
Kansas City.

**V. B. HOWEY**, Topeka, Kas., (Box 108), breeder and shipper of the most fancy strains of Thoroughbred Poland-China Swine, Light Brahma and White Leghorn Chickens.

**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.

**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.

**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.

**W. M. PLUMMER**, Osage City, Kansas, breeder of Recorded Poland-China Swine. Also Light Brahma Chickens. Stock for sale at reasonable rates.

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

**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 Wyandotte and Langshan Fowls and Pekin Ducks. Eggs, \$1 per 13.

**BAHNTGE BROS.**, Winfield, Kas., breeders of Large English Berkshire Swine of prize-winning strains. None but the best. Prices as low as the lowest. Correspondence solicited.

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

**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.

**MRS. A. B. DILLE**, Edgerton, Kas., breeder and shipper of the finest strains of Wyandottes, Plymouth Rocks and Mammouth Bronze Turkeys. Stock for sale at all times and prices reasonable. Correspondence solicited and satisfaction guaranteed. Eggs in season.

**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, S. Prop'r, Topeka, Kas., breeder of choice varieties of Poultry. Wyandottes and P. Cochins a specialty. Eggs and chicks for sale.

**SUNFLOWER POULTRY YARDS**—T. S. Hawley, Topeka, Kansas, breeder of PURE-BRED POULTRY.

Leading varieties.

**JOHN C. SNYDER**, Constant, Cowley Co., Kansas, bred Plymouth Rocks exclusively. No stock for sale. Eggs in season. Write for wants or send for circular, and mention this paper.

**HOUDANS**—A few cockerels or pairs to spare. Pure blood. My fowls are from the noted "College Hill Poultry Farm" at Manhattan. Males \$1.50, pullets \$1. Eggs in their season. Mrs. G. D. Baker, Holton, Kas.

**EUREKA POULTRY YARDS**—L. E. Pitney, 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.

## MERINO PARK

**SAM'L JEWETT & SON**, Lawrence, Kas.,  
Breeders of Improved Spanish Merino Sheep.



As shown above, "high-flying" prices do not now prevail, as we now offer

150 Registered Rams for sale

As shown below at "hard-pan knock-down" prices. Satisfaction guaranteed.



[Mention Kansas Farmer.]

## Joseph Watson & Co.,

BEATRICE, NEBRASKA,

Importers of English Shire and Clydesdale Horses, have just received a fresh importation. We have in our stable Laughing Stock No. 3797, E. S. S. B., who took sweepstakes at the Nebraska State Fair in

1887, beating Blythe Ben, the great prize-winner of 1886. We have also the first-prize 2-year-old and second-prize 3-year old, same fair, besides the winners of several prizes in England. Parties desiring the best should not fail to inspect our stud, every horse of which is guaranteed a breeder. Prices reasonable and terms to suit. Visitors welcome. Correspondence solicited.

## 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

**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:

**AGRICULTURAL BOOKS!**

Sent postpaid on receipt of publishers' price.

**T. J. KELLAM,**  
Wholesale and Retail

Bookseller : and : Stationer,  
603 Kansas Ave., TOPEKA, KAS.

**SURGICAL**

**J. C. McCLINTOCK, M. D.,**

CONSULTING AND OPERATING SURGEON,  
330 Kansas Avenue, Topeka, Kas.

**HENRY W. ROBY, M. D.,**

**SURGEON.**

General Manager Kansas Surgical Hospital Association.

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

**A. W. KNOWLES & CO.,**

Dealers in

**Hardware, Stoves, Pumps, Etc.**

We also sell the St. Joseph Water Elevator and Purifying Pump.  
No. 114 East Sixth St., TOPEKA, KAS.

**W. P. HALL,**

813 KANSAS AVENUE,

**REAL ESTATE, LOAN, INSURANCE**  
and **COLLECTION Agent.**

Correspondence solicited and information cheerfully given.

**GEO. W. WATSON,**  
(Successor to Watson & Thrapp),

**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.

**HORSEMEN! NURSEYMEN!**

Others making arrangements for new catalogues will do well to correspond with us for estimates. We probably have the largest number of stock and trade cuts in the State, and will be pleased to send proofs of any certain line to parties who have work to be done. We make no charge for using these cuts in catalogue work.

**DARLING & DOUGLASS,**  
Fine Job Printers, Topeka, Kansas.

**TOPEKA**

**STEAM DENTAL ESTABLISHMENT.**

No. 729 KANSAS AVE., between 7th & 8th Sts.

Largest, best-equipped and cheapest dental establishment in the West.

Fine set of teeth on rubber, only ..... \$ 8.00  
Fine set, both upper and lower, only ..... 15.00  
Beautiful Celluloid, only ..... 10.00  
Beautiful Celluloid, upper and lower, only ..... 20.00

\$100 will be given every time it is shown we do not use the same material in our sets of teeth that other dentists use in their \$15 sets. All work warranted.

**WASHBURN :: COLLEGE**

TOPEKA, - - KANSAS.



FOR BOTH SEXES. Collegiate and Preparatory courses.—Classical, Scientific, Literary; also an English course, Vocal and Instrumental Music, Drawing and Painting, Oratory and Elocution. Fourteen Instructors. Facilities excellent. Expenses reasonable. Winter term opens January 4, 1888.

Address **PETER McVICAR, Pres.**

**HEADQUARTERS FOR KANSAS.****PIANO**

LEAD ALL OTHERS.

The Best in Quality. Reasonable in Price.

We offer special inducements to those wishing to buy for cash or on easy payments. Write to or call on

**E. M. MILLER & CO.,**

511 Kansas Avenue, TOPEKA, KAS.

**CENTRAL SCHOOL SUPPLY AGENCY**

TOPEKA, : : KANSAS.

SCHOOL FURNITURE, BLACKBOARDS, Etc.

and all school supplies at lowest rates.

SECOND-HAND BOOKS bought, sold and exchanged. Send for circulars.

**Designing and Draughting**

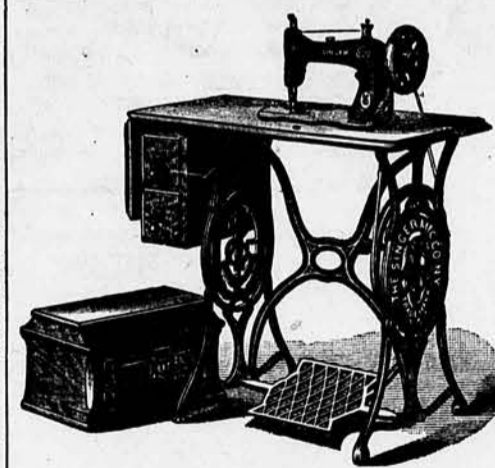
LIVE STOCK, BUILDING, NURSERYMEN'S WORK A SPECIALTY.

Also cuts for newspaper advertising. Address **THOS. F. PARRY,**  
Topeka, Kansas.

**SAMUEL T. HOWE,** President. **L. L. TURNER,** Vice President. **R. M. CRANE,** Cashier. **M. WADSWORTH,** Ass't Cashier.

**Kansas National Bank.**

The accounts of Individuals, Banks, Bankers, Merchants, Manufacturers, Firms and Incorporated Companies, solicited. Collections promptly attended to and all facilities of the banking business extended to our customers. It is our intention to serve patrons in the most liberal manner consistent with conservative banking.

**The Singer**

IMPROVED  
**FAMILY MACHINES.**

Noiseless, Light-Running, High Arm, Self-Setting Needle, Self-Threading Shuttle, Automatic Bobbin-Winder, Belt Switch, etc.

Sewing Machine Needles and supplies for all machines. Send for circular and price list.

AGENTS WANTED.

**THE SINGER MFG CO.,**  
805 Kansas Ave., Topeka, Kas.

**SMITH, BIGGS & CO.,**

—DEALERS IN—

**Hides, Wool, Tallow, Furs, Etc.**

—ALSO—

**Butchers' Tools and Supplies.**

Correspondence solicited. Send for Shipping Tags.

Office, 228 Kansas Ave., TOPEKA.

**RED STAR Real Estate and Loan AGENCY.**

Money to loan on first-class securities. Financial connections with Eastern capitalists. Extensive acquaintance throughout Kansas.

Choice Bargains in City, Farm, and Suburban 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,**  
110 West Sixth St., Topeka, Kas.

**P. I. BONEBRAKE,** President. **EDWIN KNOWLES,** Cashier.  
**A. S. JOHNSON,** Vice President. **E. M. BONEBRAKE,** Assistant Cashier.

**The Central National Bank,**

TOPEKA, -:- KANSAS,

DEALS IN UNITED STATES, STATE AND MUNICIPAL BONDS.

**DOES A GENERAL BANKING BUSINESS**

DIRECTORS:

**A. S. JOHNSON,** J. F. GODDARD, O. H. MANNING,  
**GEO. R. PECK,** THOS. A. OSBORN, W. A. SELLS,  
**H. P. DILLON,** EDWIN KNOWLES, P. I. BONEBRAKE.

**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 or Sample Copy.

**Bulbs! Bulbs! Bulbs!**

Send for Fall Price List of the finest assortment of BULBS, PLANTS, SEEDS, Etc., now ready.

**PAUL M. PIERSON,**  
(Successor to the BRISTOL SISTERS),  
Topeka, Kansas.

**Chicago, Kansas and Nebraska Railway.**

ST. JOSEPH & IOWA R. CO. L. E. S. E.  
**"Rock Island Route"**

Most Direct, Safest, Best, and Most Convenient

Means of inter-communication between all points in the States of KANSAS and NEBRASKA.

This great system presents the most comprehensive grouping of Central Lines in the United States, touching all principal localities in KANSAS, NEBRASKA, ILLINOIS, IOWA, MISSOURI, MINNESOTA and DAKOTA.

**The Chicago, Kansas & Nebraska Railway**

Joins the GREAT ROCK ISLAND ROUTE at KANSAS CITY and ST. JOSEPH FOR CHICAGO, and points EAST, and makes close connection with all the leading Railway Lines for ST. LOUIS and points EAST, SOUTH and SOUTHEAST; and with the famous ALBERT LEA ROUTE to ST. PAUL, MINNEAPOLIS, and points in the NORTHWEST.

By means of its central position, the substantial character of its construction, and its magnificent Passenger Equipment, consisting of restful RECLINING CHAIR CARS, magnificent PULLMAN PALACE SLEEPING CARS, AND ELEGANT DAY COACHES, THE CHICAGO, KANSAS AND NEBRASKA RAILWAY is enabled to offer superior advantages to its patrons, and to lead all of its competitors in time, security, comfort and accommodation.

**The Chicago, Kansas & Nebraska Railway,**

ARE:  
Wichita, St. Joseph, Kansas City, Clyde,  
Wellington, Nelson, Belleville, Clay Center,  
Caldwell, Topeka, Abilene, Manhattan,  
Canton, Holton, Salina, Alma,  
McPherson, Horton, Solomon City, White City,  
Hutchinson, Sabetha, Mankato, Herington,  
Pratt, Pawnee City, Smith Centre, Marion,  
Greensburg, Beatrice, Phillipsburg, Peabody,  
Dodge City, Hebron, Norton, Fairbury.

It is a line of modern construction, with the latest and best improvements, and traverses the most important portions of the States of KANSAS and NEBRASKA, where there are opportunities not found elsewhere for the Farmer, the Merchant, the Mechanic, the Laborer, the Professional Man, and all classes of business and industrial pursuits.

For tickets, maps, folders and other information, apply to your nearest Ticket Agent, or to

**C. W. FISHER,** General Manager. **JOHN SEBASTIAN,** Gen. Tkt. & Pass. Agt.

**W. D. MANN,** Asst. Gen. Tkt. & Pass. Agt.  
TOPEKA, KANSAS.

**UNION PACIFIC R.Y.****"THE OVERLAND ROUTE."**

The Only Line Carrying the United States Overland Mail.

Commencing Sunday, December 4, 1887, baggage will be checked through from eastern points to Pacific Coast, and through sleepers run on all trains between Council Bluffs, Omaha, San Francisco and Los Angeles; also between Kansas City and Ogden on "THE OVERLAND FLYER," saving one day to all California and Oregon points, running from Missouri River to the Pacific Coast in seventy-one hours. Elegant Pullman Palace Car Sleepers and modern day coaches on all through trains. Eating houses under supervision of the company and meals furnished by Pacific Hotel Company, unsurpassed. In complying with the wish of our patrons, night trains between Omaha, Council Bluffs and Kansas City have been changed to day trains. Chair cars to Beatrice free of charge. Third class passengers carried on regular through trains running free family sleepers.

To accommodate increased suburban business extra cars are attached to 6:30 a. m. and 5:55 p. m. trains between Omaha and South Omaha to carry packing house employees.

For further information address  
**J. S. TEBBETS,**  
General Passenger and Ticket Agent,  
OMAHA, NEB.

**SPECIAL CLUB OFFER**

As may be seen in another column, we club with a limited number of papers at very low rates, which are quite popular, but the demand for a great metropolitan twelve-page Weekly, the

Kansas City Weekly Times, is taking the lead. We send it with the KANSAS FARMER one year for only \$1.75.

**WESTERN AGRICULTURIST.**

THE WESTERN FARMER'S STOCK JOURNAL.  
THE DRAFT HORSE JOURNAL OF AMERICA.  
Established in 1868. 40 pages.  
National Circulation. Write for free sample copy; it speaks for itself. Agents wanted in every neighborhood. Liberal Cash Commissions.  
Subscription, \$1.10 a Year.  
**T. Butterworth, Publisher,**  
QUINCY, ILL.

## Agricultural Matters.

### About Sulky Plows.

EDITOR KANSAS FARMER:—I see in last FARMER an inquiry about sulky plows, which I think I can answer to some benefit to the inquirer. Several years ago when I bought my first sulky plow, I went round at the farmers of this county to note which was the favorite, and every one thought his particular one was the best, could accomplish the most work with least fatigue for his team; but I found by actual trial that the old "Gilpin" manufactured by the John Deere Company, of Moline, Ill., was the best two-wheeled sulky plow then in general use about here. It would do as much work and good work as any other with least fatigue to team. But the great defect of all two-wheeled sulky plows is that the tongue bears too hard on the neck of the horses. There were some plows where the seat could be shifted forward or backward in order to exactly balance the weight of the tongue by the driver's weight as long as the plow stood on the ground; but it would not help any when at work, as then, as in all other two-wheeled sulky plows, the whole weight of the furrow slice would rest on the tongue and consequently on the horses' necks. There was a three-wheeled plow, the "Flying Dutchman," manufactured by the Moline Plow Company, of Moline, Ill., which overcame this serious defect entirely, the whole weight of the plow and driver being carried on three wheels, the tongue being attached in such a way that it was of no more weight than the tongue of a wagon, no matter how deep or low shallow the plow was running. This plow filled the bill for me; I bought one and was very well satisfied with it, and I think two years or so ago there has been an improvement made by adding a fourth wheel in the rear, and a lever by which the coulter could be raised, and I would take this new, "Flying Dutchman" in preference of all sulky plows that I had the chance to examine.

But there is something I wish to say against all riding plows and it is this: When we used to plow with walking plows it was only natural for a man to rest a little at the end of a long furrow; men used to do this without mostly thinking that this rest was necessary to their teams. When the riding plows come in general use they were thought to be hard on the teams, and one reason of this was that as above, part of the weight of plow, furrow-slice and driver had to be carried on the horses necks; but another reason was that most people, being quite comfortable on their seat, did not think of stopping their teams occasionally to give their horses a breathing spell, and of course the plow was blamed as being hard on horses. Three years ago I saw advertised in your paper a plow—"New Deal," manufactured by John Deere Company, of Moline, Ill. I wrote to them and they sent me through their agent here a "New Deal" gang plow, and a "New Deal" sixteen-inch plow. The gang plow they claimed took three horses to work; it threw two furrows of twelve inches each and worked all right in shallow plowing; but in deeper plowing four horses were required, and as that was not a handy arrangement with me I discarded the plow. I then tried the sixteen-inch "New Deal." It is without tongue, raised or lowered by lever, very simple in construction, all steel and iron, the only wood being the handle on the lever. It has no seat; the plowman has to walk. There are no handles on the plow; all the man has to do after lowering the plow in the

furrow is to guide the horses. The plow is carried on two wheels and well balanced. It combines the advantages of a riding plow in being carried on wheels, with the advantages of a walking plow, in that there is no tongue and no seat. I was so much pleased with it that I sold my "Flying Dutchman" and bought a "New Deal" sixteen-inch plow. The manufacturers claimed it took only two horses to work it, and at shallow plowing two good horses will do, but at deep plowing three horses are required.

There are other sulky plows made without tongues, but they are provided with seats, which as I said before may become a nuisance, and all things considered I like the "New Deal" best of all.

Let me make a suggestion about plow shares; I found it not convenient to go to town always whenever the share needed sharpening, as it is certainly poor economy or poor farming to plow with a dull share. I had the blacksmith make me two more shares, so I did not need to go so often to have them sharpened, or if two were dull I could perhaps send them in with a neighbor, and still my plowing would go on.

We have had a fine fall and winter for stock so far. Last Friday and Saturday we had a bad storm, thermometer twenty degrees below zero, with some snow. Wheat was getting dry in some places, but what little snow we have had has done much good, and on the whole wheat looks better than since '83 to '84.

Please give us a live paper, even if you have to devote a little space to politics. It is high time that the farmers be waked up to see that the majority of them have always been used only as "voting cattle" to carry out the schemes of a few political rings, and that if the farmers only stand together as farmers and would abandon all party strife, they could not only rule their different states, but that then there would be "the greatest good for the greatest number." OSCAR VOIGTLANDER.  
Ellsworth, Kas.

### Broomcorn Culture--No. 3.

EDITOR KANSAS FARMER:—A good quality of barn boards with a groove three-eighths of an inch deep cut near each edge of the boards will make a good roof. Cut poles off the proper height. For roof support, use 2x4 scantling running lengthwise of building; set scantling in top of poles, one inch, make secure by nailing. Lay roof boards close together on scantling. Drive nails about two or three inches in from edge of boards, which will allow the boards to cup after being exposed to the sun a short time. It will be unnecessary to batten the cracks between roof boards as the amount of rain that will fall between them will do no harm to the curing brush. Allow roof to extend twelve or fifteen inches past shelving, at the ends of building. Midway between each row of poles—running lengthwise of the building,—set a row of four-inch fencing boards eight feet apart. Fasten top to the roof and bottom to a stake driven in the ground. Poles can be used just as well as the four-inch boards, but the boards answer the purpose very well, besides they economize in space. This gives a row of boards—or poles—every four feet, on which to nail strips to support the lath that the brush is spread on. These strips should be 1x2 of some good, stiff material. Good four-inch pine fencing ripped in two is the best, as pine will not warp, or sag and allow the bunches to fall together to heat and otherwise damage. Commence six inches above the ground and nail strips every six inches up to the roof, throughout the building. This

will give four-foot stalls, six-inch shelves, and a space between strips of four inches. Plastering, lath—every thing considered—is the best, and perhaps the cheapest material that can be had for shelving broomcorn brush on. They run even, both as to thickness and length. They are light and of sufficient strength to bear up all the brush that should go on a four-foot shelf. One thousand lath will shelve about three thousand pounds of brush—three pounds to the lath. Nine pounds to the shelf, or bunch, is very near right. The kinds of weather should govern the amount per shelf. Good drying weather ten pounds per four-foot shelf will cure all right, while in wet, and more especially—foggy weather, eight pounds would be the extreme limits. In case of brush heating, the bunches should be divided at once. Once in a while there will come a day when saltpeter will not save it; brush will mould outside and in, and spoil in spite of all you can do. That occurred with me only once in six years, and it was with freshly harvested brush that I had housed near a little creek. I thought perhaps the location had something to do with it. Anyhow three tons of brush was nearly a total loss. If lath is to be used, make stalls about three feet nine inches. That will give sufficient lap, besides allow something for the sag that will occur when green brush is first put on shelves. I rented lath of our lumber men for fifty cents per thousand, returning all good lath, paying for lath not returned. A. H. COX.

### Warm Water for Stock.

EDITOR KANSAS FARMER:—It is very desirable to have water for stock above the freezing point, but most of the appliances for heating water are too expensive and take too much time to be adopted by those with small herds. I have a tank eight feet long, four wide and two deep, made of two-inch plank. Pieces of 2x4 scantling were nailed lengthwise at the top and bottom, and short pieces at each end and in the middle perpendicular; then inch boards nailed on and the cracks batted. This was done all around the outside of the tank, banked the bottom up with earth, made two doors to fit on the top; this gave a space of dead air all around the tank. Only on the very coldest nights ice forms in the tank—a thin crust that a few barrels of water from the well brings above the freezing point. Have used it two years and it is a success.

WM. ROE.

Vineland, Douglas Co., Kas.

"The broomcorn industry is growing. There is a broom-corn exchange in Chicago, and it is said that Chicago is the largest broomcorn market in the world. The *American Elevator and Grain Trade*, reviewing the trade of 1887, said: The States which are the principal producers of this crop are Illinois, which this year has produced 8,000 tons; Kansas, 3,000 tons; Nebraska, 2,000 tons; Missouri, 1,000 tons; Ohio, 300 tons; Iowa, 200 tons; Tennessee, 150 tons, and New York, 250 tons. The total crop for the year is given at 15,000 tons, as against 30,000 tons last year, and 18,000 tons in 1885. In Kansas and Nebraska the causes which operated so heavily against other crops also affected this, and the drouth and chinch bug cut down the yield fully 75 per cent. and rendered the quality grown very inferior. On the contrary, that grown in Illinois and Missouri is usually fine. There is now about 25,000 tons of broomcorn used annually, and there is a good profit in raising it. This year the price in Illinois is from \$60 to \$75 per ton, and about 100 dozen brooms can be made to the ton. In Kansas and Mis-

souri it is selling from \$40 to \$50 per ton. An exchange says the largest factory in the world where brooms are made is in St. Louis, and the second and third largest are in Amsterdam. The second largest factory in the West is in Chicago. It is probable that owing to the shortage this year, prices in the bulk and in the manufactured article will advance."

### Weather Summary for 1887.

From the weather report of Prof. F. H. Snow, State University, Lawrence, we extract the following:

The year 1887 was marked by a cold winter and a warm spring, while the summer and autumn were of nearly the average temperatures. The total rainfall fell but little short of the average amount, but its distribution was unfavorable to corn and other mid-summer crops. A serious deficiency in July found the ground nearly destitute of moisture, on account of the eleven-inch deficiency of the year 1886, and in less than two weeks what promised to be the most abundant corn crop ever produced in the state was reduced to very small proportions. The abundant crops of oats, hay, potatoes and other spring and autumn products gave the state of Kansas a great advantage over some other states which suffered from a more serious drouth without similar compensations.

Other characteristics of the year were the small percentage of cloudiness, the moderate wind-velocity, and the astonishingly low barometer of February 31,—the lowest barometric reading on our 20 years record.

### TEMPERATURE.

Mean temperature of the year, 53.12 degrees, which is 0.20 deg. above the mean of the 19 preceding years. The highest temperature was 102 deg., on July 17th; the lowest was 20 deg. below zero, on the 10th of January, giving a range of 122 deg. Mean at 7 a. m., 47.56 deg.; at 2 p. m., 61.87 deg.; at 9 p. m., 51.52 deg.

Mean temperature of the winter months, 26.35 deg., which is 2.56 deg. below the average winter temperature; of the spring, 56.32 deg., which is 2.67 deg. above the average; of the summer, 75.77 deg., which is 0.11 deg. below the average; of the autumn, 64.04 deg., which is 0.09 deg. above the average.

The warmest month of the year was July, with mean temperature 79.79 deg.; the warmest week was July 11th to 17th, mean 86.75 deg.; the warmest day was July 17th, mean 89.50 deg. The mercury reached or exceeded 90 deg. on 40 days, (just the average number) viz.: one in May, 5 in June, 18 in July, 10 in August, and 6 in September. There was only one day on which the temperature reached 100 deg.—July 17th.

The coldest month was January, with mean temperature 20.48 deg.; the coldest week was January 1st to 7th, mean temperature 4.36 deg. above zero; the coldest day was January 8th, mean 7.13 deg. below zero. The mercury fell below zero on 16 days, of which 9 were in January, 3 in February, and 4 in December.

The last hoar frost of spring was on April 24th; the first hoar frost of autumn was on October 12th; giving an interval of 171 days, or nearly 6 months, entirely without frost. This is 16 days longer than the average interval.

The last severe frost of spring was on April 4th; the first severe frost of autumn was on the 24th of October; giving an interval of 203 days, or nearly 7 months without severe frost. The average interval is 198 days. No frosts during spring and autumn caused damage to crops of grain and fruit, but the low temperatures of January were seriously destructive to the buds of budded varieties of peaches.

### RAIN.

The entire rainfall, including melted snow, was 33.84 inches, which is only 0.86 inch below the annual average. Either rain or snow, or both, in measurable quantities, fell on 91 days—13 less than the average. On 16 other days rain or snow fell in quantity too small for measurement.

The number of thunder showers was 23. There were but one light hail storm during the year.

### SNOW.

The entire depth of snow was 25 inches, which is 3.15 inches above the average. Of this amount 9 inches fell in January, 6 in March, one inch in November, and 3 inches in December. Snow fell on 28 days, of which the quantity was too small for measurement. The last snow of spring was on April 22d. The first snow of autumn was on November 23d,—15 days later than the average date.

## The Stock Interest.

### ABOUT PERCHERON HORSES.

The following article is copied from the Chicago Times of January 6, inst.

A correspondent of the Times telegraphed from Springfield yesterday some statements in reference to the status of the Percheron horse-breeding interests before the State Board of Agriculture that were erroneous. To do justice to an interest that is already very important in Illinois and destined to become more so, the Times gives this correct version of the matter:

A committee was appointed by the Illinois State Board of Agriculture in March last to investigate the question of the French breed of draft horses. The object was, if possible, to settle beyond controversy a question which, with each returning year for years past, has been brought up before the Board, and which seems to have perplexed the editors of many agricultural and live stock papers as well.

One party has claimed that the Percheron was a distinct and well-recognized breed in France, possessing a type peculiar to itself; that it had long been established and was recognized throughout France as the leading draft breed of that country; that it has been kept pure for very many years; that there was no great difficulty in procuring good and pure-bred specimens of this breed on the part of American importers if they were only disposed to pay the price asked for them. Those who have taken this view of the question have alleged that the reason their views had been opposed was mainly because of self-interest on the part of importers, who could buy miscellaneous-bred draft horses in France, or horses of other breeds than Percheron, at very much lower prices than that at which genuine Percherons could be obtained; and that consequently if they could induce the American public to believe that these horses were just as good as Percherons—that they were in fact substantially the same as Percherons—they could succeed in selling them to American buyers at the same prices as could be obtained for genuine Percherons, for which very much higher prices had been paid.

On the other hand, it has been alleged that all the draft horses of France were substantially of the same breed. Some of those who took this view alleged that French authors in using the term "breed" or "race" used it synonymously with our term "family," and that while there might be separate families of draft horses in France, yet they were all substantially of the same breed, and that whoever bought a draft horse in France, no matter what he might be called there, bought a horse substantially the same in blood as the so-called Percheron.

It was to settle this question and present the State Board of Illinois with authoritative utterances from disinterested persons who were supposed to be able to speak intelligently that this committee was appointed; and to get this information at first hands, without the intervention of interested parties on either side, Mr. Dysart, the President of the Board and chairman of the committee, decided to go to France in person and pursue the investigation there.

The questions prepared by the committee were framed with a view to bringing out answers to the controverted points; and the parties to whom they were addressed were Hon. Eugene Tisserand, Director General of Agriculture of France; Marquis de Dampierre, President de la Societe des Agriculteurs de France; Viscount de la Mott

Rouge, Inspector General of the Government Stud of France, and Charles du Hays, formerly master of the horse to Louis Napoleon, and at present editor of the government stud book for thoroughbred horses.

In the questions addressed to M. Tisserand the whole ground of the controversy was minutely and thoroughly set forth, and the positions taken by the various parties in this country were clearly stated, and he was asked to make distinct replies to each inquiry. This distinguished gentleman in his reply thoroughly met every point in the inquiry. After giving at considerable length his definition of the term "breed" or "race" as used in France when applied to horses, and showing conclusively that the term "race" as used there was substantially the same as understood in this country by the word "breed," he proceeds to answer the question as to whether there were distinct breeds of draft horses clearly defined and recognized as such in France by an emphatic yes; and adds that "the two most important breeds are the Boulonnais and the Percheron." Of the Percheron he says: "This breed is one of the most firmly fixed and well-established. It is as much so as the Clydesdale and Suffolk Punch;" and he proceeds at some length to give some account of its antiquity, and to describe its peculiarities. After doing this he adds: "It is the model draft horse; it was formerly the stage coach horse and the horse used on diligences. The Percheron is active, energetic, and a quick mover. It is the type of draft horse for carrying weight with great rapidity." And in winding up his description of the Percheron M. Tisserand refers to the stud book Percheronne of France as "a great guarantee for buyers." And he adds: "It is therefore in the country of the origin of the Percheron and Boulonnais breeds that you must go in order to procure reproducers, pure, and possessing guarantees. You must keep away from the doubtful producing districts. Trust to our older experience. It is by selection, by always procuring reproducers pure and guaranteed from the districts of origin that you will establish in your country draft breeds on which you can depend both for the present and the future."

Questions of a similar import, but involving some other points, were addressed to Viscount de la Mott Rouge, Inspector General of the Government Studs, who from his official capacity may fairly be assumed to speak authoritatively upon such matters. The answer received from this gentleman was equally as strong as that of M. Tisserand, and, fairly summarized, is to the effect that there are two distinct types of draft horses in France—to wit, the Boulonnais and the Percheron—although, to quote his exact words, he says: "We have in France three principal breeds of draft horses, easy to recognize by a practical eye—the Percheron, the Boulonnais, and the Breton;" but he adds, in parentheses: "When this latter is not crossed by Percheron blood"—he having previously alluded to the fact that it has been the policy of the French government and the French people to introduce Percheron stallions largely, for several years past, for the purpose of crossing upon the Breton to effect improvement in the latter. Speaking of the Percherons the Viscount says: "The most popular breed in France—the breed to which the French people have always given the supremacy—is the Percheron; and further on he says: "The Percheron horse has been at all times considered our best breed; therefore Percheron stallions have been introduced in many other districts of our

country for the purpose of improving the draft horse of the locality." He further says: "The Percheron, as compared with the Boulonnais, has more style and finish in form, more bone, stronger limbs, and a better color. The Boulonnais is more square in his hind quarters;" and he adds: "I will say that in my opinion it is a fair thing to give the supremacy to the Percheron breed." He also states that "it is the policy of the government to encourage the distinction of breeds," and that "none but registered Percheron stallions are bought by the government to be used in the Percheron breeding districts." In reply to a question as to the relative value of the various breeds, he states explicitly: "The Percheron stallion is sold at a much higher price;" and he says: "The best Percherons registered in the Percheron stud book will sell very easy for double the price realized by the best Boulonnais registered in the Boulonnais stud book."

The reply received from the veteran historian, Charles du Hays, if possible, still more strongly maintains the position of the partisans of the Percheron. He is even more emphatic in his expressions in favor of the Percheron than either of the other authors quoted, and says: "For me, since you have asked me to express my sentiments, the Percheron is the king of draft horses, and you should enact strict rules in America to preserve this breed pure from any foreign admixture."

The report of the committee concludes with a letter from the Marquis de Dampierre, President of the Societe des Agriculteurs de France, and copious extracts from a recently published work by Prof. Andre Sanson on "The Origin of the French Races of Horses." This letter and the extracts from Prof. Sanson are substantially of the same tenor as the letters previously referred to. The report states that these letters and the extracts accompanying them from Prof. Sanson's work include all the reliable information which the committee has been able to obtain upon the subject.

It will be seen that every claim made by the Percheron party has been fully substantiated by the eminent authorities from whom testimony has been sought, not only as to purity of breeding and fixity of race, but as to comparative value in that country. The champions of the other side to the controversy are driven to the necessity of "pleading the baby act" of ignorance, or else must stand convicted of a deliberate attempt at deceiving American buyers and American boards of agriculture to further their own selfish ends. One or the other of these horns of the dilemma must be taken, or else they must impeach and overthrow the positive testimony of M. Tisserand, Viscount de la Mott Rouge, Charles du Hays, and Prof. Sanson—a task which they will not dare to undertake."

When this report came before the Board, the fact that it so thoroughly sustained all that had been claimed by the Percheron party brought out the "Norman" or "French" draft horse party in force. In fact, all their "talent," whether in this State or elsewhere, was brought into requisition to combat and, if possible, break the force of the report. But their efforts were promptly met at every point by Messrs. Elwood, Dunham, Thompson and Sanders on the part of the Percheron association, and the result is a triumphant vindication of the position taken by the Percheron party and the establishment of a special class for Percherons by a decisive vote of the State Board. The result has settled, so far as this State is concerned, the purity, as well as the superiority, of the Percheron breed over all other breeds of French draft horses.

### The Impress of High Character.

In the general shape and expression of a cattle beast, no matter what the breed, an experienced eye at once detects the presence, in a high-bred beast, of the peculiar contour, expression, coat of hair, and carriage, found only, as a rule, in those families or strains of blood that are recognized as of especially rare breeding. As in specimens of work that come from the hands of an exceptionally skilled mechanic, or a master painter, it is not difficult to see that a master hand has been engaged in the undertaking. The attractive features to which we here refer may not be of especial importance in order that the animal may make good growth, fatten readily, and yield first-class beef. Those who have bred the Seventeens, Britannias, and others among the Short-horns—and the rule applies to all the beef breeds—having what are known as short pedigrees, have, through careful selections of sires with one object in view, built up herds possessing high merit as meat producers. Yet there is capital always in waiting to go a step farther, as it is always in waiting for investment in rare works of art, fancy driving horses, winners on the turf, or gilt-edged securities. There are forms that a mere beef animal may take that will not show when the hide and head are off and the quarters are upon the hooks, that while on its feet would be very far—taking all of its parts into consideration—from passing as an animal of select form. Yet all the essentials are there for profit when ready for slaughter, though, as mentioned, there is a species of demand that no merely plain yet profitable animal will meet.

Hence, it stands all breeders in hand to combine the highest symmetry with the merely profitable qualities, as shown when the carcass is put upon the block. The plain, short-legged female has now and then proved to be a superior foundation on the one side to build upon. This is largely owing to the fact that when a male of one of the strains known as fashionable—high-bred—is selected to cross upon a female of plainer breeding, there is likely to be an opportunity for a cross almost as decided as that which comes from the mixing of the blood of two distinct breeds. Starting, it is true, from the same parent origin a century or more ago, they have been kept distinct since, constitutional vigor having been fully maintained, and now, bringing these strange strains of blood together, all the conditions of health, climate and feed being favorable, it follows as a physiological sequence that in making such a cross there is quite likely to be brought out all of good there is on either side. That is, if there be no hereditary taint to weaken. In the plain-bred, strong, vigorous growing and kindly fattening cow, figuratively speaking, there is found a most excellent soil in which to plant, illustrated by the results secured from perfecting seed in a soil specially adapted to it, then planting this in land of a different and stronger nature. The results in such a case are rarely disappointing, as a plant of vigorous and symmetrical growth is likely to be obtained, so, as breeders have often observed, when what is known as a fashionable sire is crossed upon a strong, healthy female of plain breeding, there is secured in the progeny the combined vigor of both parents, with the added symmetry possessed by the fashionably-bred male.

Males deep-bred in either of the higher class of families that are recognized as of the fashionable sorts, if superior as individuals in every way, have the peculiar faculty of duplicating themselves when crossed upon the class of females referred to. Hence it

has become customary to estimate animals and herds in the ratio of the number of top crosses possessed from the higher classes of males, that is, making due allowance for individual excellence, estimating the latter at its apparent worth. There is nothing fictitious about this, as many have assumed, because many a plain herd has been regenerated and built up by the process here referred to. And while we deprecate the use of a male of scant fattening tendencies and possessed of moderate symmetry in his parts, still it has often been established that a bull thus lacking in merit upon his surface has, nevertheless, superlative power in getting shapely offspring from the kind of foundations named. The union seems, in many cases, to magnify the merits of both parents. This comes of that valuable and hidden quality to which we have heretofore referred in these columns, namely, nicking. This is something which cannot be foreseen or explained, yet the good sense of breeders should show them the importance of holding steadfastly to two animals of the opposite sex that have, even in one instance, shown this quality.—*National Live Stock Journal*.

## In the Dairy.

### Poor Little Jersey.

A writer in the *National Stockman* advocates the crossing of the Galloway and the Jersey, and laments the hard fate of the poor little Jersey in the following terms:

"It seems to me that the Jerseys in their present pure state have the hardest row of any breed of cattle that I know of. In their present form they have but one principal mission—that is butter, and this will not do. They must add beef and beef size, or forever remain in the comparatively dead state they are in now."

Since reading the above we have felt a great deal of sympathy for the lack of beef in the Jersey. Last spring we sold a little three-quarter grade Jersey cow for \$85, simply for milk and butter purposes. She only weighed 800 pounds. In just ninety days, or from January 23, 1887, to April 23, she gave 3,240 pounds of milk, or an average of eighteen quarts a day. The butter value of the milk was about one pound to twenty pounds of milk, or 16¢ pounds of butter in three months, worth as the market then stood 25 cents a pound, or \$40 50. This she did in three months.

Now if the poor little cow had only been one-half Galloway with an addition of about 300 pounds of meat to her carcass, does any one of good sense believe she would have given any more butter? Would not the Galloway blood by virtue of beefy temperament and tendency, just to that extent lessen the tendency of the Jersey blood to a less production of milk and butter? Will the addition of a couple hundred pounds of beefy tendency atone for the loss of milk and butter it will bring? Is not the mission of the Jersey—that of a large yield of butter in proportion to weight of carcass and food consumed—we say is not this mission enough? Is not butter as profitable as beef? Are not the butter farmers making as much money as the beef farmers? Are not the specific butter makers who keep a cow for what butter she will make and pay no attention to her value as beef, are they not making as much money as the "general-purpose" farmers? It is the money we are after, and if a man knows enough to handle a Jersey cow and be a specific dairyman for butter, she, or her sister the Guernsey, will bring him a great deal more money than the "general-pur-

pose" cow, and the more Jersey or Guernsey there is in her as a rule the more butter she will make.

But if a man does not propose to know enough to be a first-class dairyman and wants to get along with a cheaper cow, less knowledge and less money, of course he had better let the Jersey or Guernsey alone. The specific butter cow is not the cow for unthinking non-reading indifferent sort of farmers. She yields her product most to him who will handle it with intelligence and sell it to be consumed by intelligence. In the hands of the right kind of a man she will make double the money of any Galloway bred mixture.—*Hoard's Dairyman*.

### Starting Creamery.

In reply to an inquiry through the *Farmer's Review* as to the best mode of starting a creamery, of one hundred cows, five miles from the railroad, and fifty miles from market, Mr. J. N. Murcy replies as follows:

You can call it creamery or dairy. You will get creamery prices if you make creamery butter, unless you ship to some dishonest commission merchant. If dairy butter is made on the creamery plan it is creamery butter. One hundred average cows ought to give approximately 600 000 pounds per year. This is an average of 2,000 pounds per day. It is highly probable that they will not all be fresh at or near the same time. In my opinion the cheapest and best way to handle the milk is as follows:

Use the ordinary shot-gun unpatented can, 19 inches deep, 8 inches in diameter, holding about thirty-three pounds of milk. Set the milk direct from the cows in these cans in cold water and skim in thirty to thirty-six hours. Do not set longer. You need ninety cans at 50 cents each. Cool this milk quickly and have plenty of tank room. The tank ought to hold about 800 to 1,000 pounds of water. Use the ordinary box-churn, of 80 to 100 pounds capacity; churn once a day. A patent ventilator to allow the gases from the cream to escape when you first start the churn is very convenient, but not absolutely necessary. If you do not have such ventilator have a small hole bored in churn, and pull the plug every few times round for three or four minutes when you first start the churn. After the gas has escaped no further attention is necessary until the butter comes. About \$12 to \$20 ought to buy a good churn suitable for a 100-cow creamery. You need about three or four thirty-gallon cream cans, in which you can mix the sweet cream to sour. Always sour the cream. You get more and that of better keeping quality. Buy most any good hand-worker, having a capacity of sixty pounds. Work one tub at a time. If the tub hold sixty pounds you ought to weigh out sixty-four pounds. It will shrink in working from 6 to 8 per cent. Twelve or sixteen feet is large enough for the creamery proper. I think the ice-house should have a capacity of about fifty tons, providing you desire to use ice in the water to cool the milk. If you use a windmill to pump the water to cool the milk, a supply tank will be very important and save considerable ice. Usually the wind goes down at about 6 o'clock p. m., and does not rise until perhaps 8 p. m. Usually also there is very little wind in the morning before 8, so that with a large supply tank, protected from the sun, better results can be obtained than without one.

When the cow draws near to the end of the period of gestation she should be carefully watched, and from the moment that she gives evidence that the premonitory pains are upon her, especially if she be a young heifer with her first calf, she should be

never long out of sight or ought of mind—not that she is to be worried, examined, assisted, or anything of that kind. As a rule she should be left severely alone. There is nothing worse than unnecessary interference at such a time. Nature generally is the best midwife. But there are not infrequently accidents, and it is well to be on hand in such cases. Sometimes nature has to be assisted, but never interfere until it is imperatively necessary.

### Breaking Heifers.

Some cows may be naturally vicious, but nearly always viciousness is the result of ill treatment. Calving is a severe nervous strain and leaves the cow nervous and irritable. If the calf is her first one she is very much afraid that it will be injured; in this she is like all young mothers. Milking is an entirely new operation to her; likely drawing the milk from her udder gives her pain. Her condition, her fears, and the operation, all call for the exercise of the greatest patience and gentleness. But instead, her solicitude for her calf is resented; if she shows shyness when it is attempted to milk her—an operation which she knows nothing of, and which her instinct to nourish her offspring would cause her not to submit to readily—she is scolded; if the pain caused by the milk being drawn leads her to kick she is kicked in return. Thus her fright and nervousness are increased, and soon she is angered. If this treatment is continued she is made vicious; and we have never known of a heifer being "conquered" in this way. After her tormentor has worn himself out, she is yet ready to kick, or to use her horns, if need be. It does not do better to tie her head, or to put her between poles; this only frightens her the more. Her temper is ruined; and a cow, no matter how liberal a milker she may be, is fit for the shambles only, if she is vicious. It is no rare thing for a man to throw fifty dollars to the wind by striking a young cow.

Some years ago we bought five heifers, about to calve, and that had never been handled, and the plan we adopted has proven so satisfactory that we have made use of it on like occasions ever since. We built a high pen, ten feet square, of rails, driving a stake down outside of each corner to make the pen secure, and making a "slip gap" in one side. The calf, when a day old, was set in the pen, the gap being open. The mother at once followed the calf. Then the calf was taken out of the pen, and the gap closed. Next we entered the pen, speaking gently, all the time, to the cow. As soon as we laid our hand on her side, she started to run around the pen. We could keep our hand on her side, by moving in a much smaller circle, and soon she tired herself out and stopped. Then we patted her flank lightly, spoke to her gently, and soon could put our hand on any part of her body. But when we grasped a teat, the trip around the pen began, but soon we could handle her udder without remonstrance from her. When we tried to draw the milk, there was a third trip around the pen, and this terminated as the others had, and in half an hour after the cow had walked into the pen, she was milked clean, and without a harsh word or a blow. In three days the cow could be milked anywhere in the lot. We have broken (if broken is the proper term to use) upwards of a score of heifers since then, that gave evidence of being ripe for viciousness, and better dispositioned cows we never had. Of course, all heifers should be handled until they are quite gentle; yet very few will never have occasion to put to good use the plan above given.—*American Agriculturist*.

### Make a Start in Life

by taking hold of a live business of a live house. You do not have to put in capital, but are started free. Any one can do the work. Many make much more than \$1 per hour. No special ability or training needed. Let us show you all at once, and then if you don't take hold, why, no harm is done. Address Stinson & Co., Portland, Maine.

The pleasure in raising good horses is not one of the least considerations in the business.

The most clear profit in handling good horses lies in the fact that you have raised them yourself.

Do you suffer with catarrh? You can be cured if you take Hood's Sarsaparilla, the great blood purifier. Sold by all druggists.

Some of the leading veterinarians of France claim that French horses are liable to typhoid fever, and that they suffer very much the same as the human patient, and are cured by similar treatment.

### 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. C., 181 Pearl St., New York.

WELLS, RICHARDSON & Co's

IMPROVED  
**Butter  
Color.**

EXCELS  
IN STRENGTH  
PURITY  
BRIGHTNESS

NEVER TURNS RANCID.

Always gives a bright natural color, and 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.

**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.

## Correspondence.

### The Tariff Again.

EDITOR KANSAS FARMER:—I supposed the discussion of the tariff question, in your paper was closed, except you were going to favor us with a few articles in your editorial columns, showing that a protective tariff was to the farmer's interest; and that to reduce the per cent. of the present tariff would increase the revenue, etc; but it seems that I have been laboring under a mistake all round. I have read the article of Samuel McClellan in your paper of December 21, and also an article in a former number from your own pen, in which you complain of the suggestion of President Cleveland, that the tariff on wool be reduced, and you ask "why the farmer first." Mr. McClellan starts out in his article by endorsing your views and course in advocating, in your paper, a protective tariff, and then devotes two columns to complaints against the sugar manufacturers for not offering to pay the farmers more than \$2 a ton for their cane. Sugar has one of the highest, if not the highest, tariff on it of anything that is manufactured in the United States. If the tariff is to benefit the farmers, why don't this tariff on cane raise the price of cane?

We have heard a great deal of blowing about the tariff on wool being to the interest of the farmer. Let us see how that is. I believe the tariff on wool is 20 per cent. *ad valorem*. The average farmer, we will suppose, has about 200 pounds of wool to sell each year. Wool, we will say, is worth about 15 cents a pound without the tariff and to this add the 20 per cent. for tariff protection, and that will make 18 cents a pound, or an increase of \$6 the farmer will get for his wool on account of the tariff. The manufacturer takes this same wool and he makes it into a suit of clothes and sells it back to the farmer. The manufacturing of this suit, we will say, cost \$10. But the manufacturer is protected too. He then adds up in about this wise. Original cost of manufacturing, \$10; farmer's tariff, 20 per cent., \$2; manufacturer's tariff, 50 per cent., \$6; retail dealers profit, (that middle-man) \$4; total cost of suit of clothes back to the farmer is \$22. His family have not been considered at all; he has consumed his little \$6 protective tariff on himself alone, and paid \$6 out besides. I do not give these figures as exactly correct in amount, although they are not far wrong, but to illustrate what is being done every day with the farmers on this "tariff for protection." Every one admits that the tariff, or at least the revenues of the country, should be reduced, but the moment any one, from President Cleveland down, suggests a reduction on any of the common necessities of life used by every farmer in his family every day, some persons howl "free trade!" Who ever heard of a tariff for free trade? But it is contended that the present tariff helps the laboring man. That is, we will enrich the manufacturer and he will be able thereby to pay his employees increased wages. Do they do that? We have been making millionaires since the war, by the thousands, and has any of them opened their hearts and increased the wages of their laborers by reason of their increased wealth? Does any man hire laborers and pay them upon a basis of his own profits? Every man of the lowest order of intelligence even knows that all men sell for the highest price they can get, and buy where they can buy the cheapest, and hire hands in the same way. I have just read in the papers of where some of these same manufacturers are now on the road to this country from the eastern continent with 600 pauper laborers to take the place of our own laborers, who are now on a strike because our protected manufacturers won't pay them living wages. The honesty of any man who advocates a protective tariff, for the reason assigned, of increasing the wages of our laborers, may well be doubted. The tariff is not for the laboring man, but for the manufacturer, the millionaire, the capitalist.

But it is urged that our laborers receive better wages than in any other country. That may be; but the tariff has nothing to do with that; and besides, the wages paid to laborers is no criterion of their prosperity. In 1849 and '50 common laborers received from \$2.50 to \$5 per day in Cali-

fornia; but did you ever hear of one of them getting rich by daily labor? Other things were high there too. Flour was worth from \$10 to \$25 a hundred, and nearly everything else was in the same proportion. There are men to-day in the mines of California that cannot dig gold enough above their living expenses to buy them a decent suit of "overall ducking." The tariff has nothing to do with that. Some people prosper and others do not, the world over. This has always been, and always will be so, to the end of time.

There is one other dodge raised by the protectionists. They suggest that the tax be taken off of tobacco and whisky, and by that means reduce the surplus revenue? There is hardly a man in the country who uses tobacco and whisky that asks that. I wish to ask the editor of the KANSAS FARMER if it is to the interest of Kansas farmers to take the tax off of tobacco and whisky, and keep it on wool, sugar, woolen clothes to keep him warm in winter; cotton clothes to keep him cool in summer; the hoes, plows, and all other farming implements he uses, and is compelled to have to cultivate his land with. I know you will agree with me, and answer that question with an emphatic No. Then it is no wonder that the farmers are beginning to suspect that these long-winded articles in so-called farmers' (?) papers advocating a protective tariff are paid for (often) with the money of some protected eastern millionaire manufacturer. It was that same money that beat Mr. Wm. R. Morrison for Congress last fall, one year ago, and came near defeating Mr. Carlisle. Until this is remedied by educating our farmers up to voting for principles rather than party we cannot hope for relief. I have said, and I repeat, that it speaks very little for the intelligence of any man, for him to say, that he always voted the ticket straight.

New Santa Fe, Mo. E. B. GILL.

### Facts About the Wool Tariff.

EDITOR KANSAS FARMER:—In your paper of January 12, E. F. K. unloads himself of a lot of tariff talk full of misstatements or ignorance, whichever you may please to call it. He says: "The facts in the case are these—Under a high tariff the sheep men prospered and contributed to the prosperity of the country in general." It is not so. For six years previous to 1883 the value of wool steadily declined, and as a fact, known by more men than those who rush into print with brainless and bald-headed assertions, that the year after the slight reductions of the tariff on wool (1883) the sheep men got more money per pound for their wool than they did the year previous to the reduction. If protection is the panacea E. F. K. seems to think it is, why in the name of common sense are wool-growers not now benefited by the present protective tax?

"Protection maintains the price of the product, thus making it possible for the employer to pay higher wages." If so, I again ask why the present dilapidated state of the wool markets and of the woolen manufacturing plants of the East?

"Previous to the tariff reduction" (which was an average of about 3 cents per pound), E. F. K. says "but little revenue was collected from wool—about \$1,500 per annum; now more than \$5,000,000 per annum. Such ignorance or misstatements are not excusable. If one wishes to occupy as valuable space as that of the KANSAS FARMER, he should state facts or become posted. The amount paid for revenue in 1883 was \$9,000,000 in round numbers, and that of 1886 was \$7,000,000.

Here in Anderson county we have a population of 14,000 souls; we also have not exceeding twelve men engaged in the infant industry of raising wool. Now I ask in all candor, is it just that the infants numbering twelve with an annual output of less than \$4,000 in wool (see agricultural report '85 and '86) should be kept in the business—if protection alone does that—by taxing the other 13,988 on an average of 50 per cent. for their woolen-wear? Imagine the amount paid out annually by the consumers of woolen goods for the benefit—so said—of a few infants in the sheep business. It is a question with me whether the sheep men of the West would not ultimately be better off if a reduction of the tariff would drive the men on \$50 and \$100 land out of the business. Doubtless a proportionate impetus would be given to the business in the West. However, I have doubts as to the present

high tax being necessary for the protection of the domestic industry. Nevertheless, the problem now is to afford the public the greatest possible relief without embarrassing any important industry, and should the present Congress put wool on the free list, in the end sheep men in the West will be the better for it.

J. H. MCCARTNEY,  
Colony, Kas. Wool-Grower.

### Tax the Land.

EDITOR KANSAS FARMER:—"A word about politics" in your last issue in 1887 opens a new plane for earnest voters. "Party crusts" are great hindrances to all thoughts calculated to advance civilization. To cite a case in which labor does not get its just dues, in which progression is retarded and in which one man or set of men are allowed, by law, ease and luxury at the expense of capital and labor, I need not leave my own neighborhood.

About ten years ago an Eastern company bought one hundred acres of land at \$3 per acre. Without arguing, at present, the justice of a high rate of interest on idle capital in land, take \$300, the cost price, compounded annually and reckoned at 10 per cent. per annum, amounts to \$778.11. Taxes for ten years at \$12.50 per year amount to \$125, and \$778.11, plus \$125, equals \$903.11. This land to-day is worth \$15 per acre, or \$1,500 for the whole one hundred acres, and the owners refuse to sell, which is all right so long as laws encourage idle capital without labor or active capital to accumulate wealth. The expenditure of active capital and labor all around this land throughout the State made it valuable; or in other words produced the \$596.89.

A company holding a deed in Illinois, or anywhere else, will not develop the resources of this country. Fifty or one hundred years ago the whole State of Kansas could have been granted to parties in Europe, and so long as the forerunners of civilization—men, and the exertions of man—capital, were not actively applied, Kansas would not have become valuable. The same causes work out the same effects to-day. The man and plow, the horse and cow, the railroad and home, the store and shop, the school house and office, are what made the land in Kansas valuable. We as voters ought not to allow civilization retarded by taking the just dues of active capital and labor. The man who holds a raw piece of land, be it city lot or quarter section, till it becomes valuable gets a return in dollars for which he gives naught but idle capital. If voters could see how silently and awfully land speculation ruins industry, they would arise with their ballots and make such powder of "party crusts" as would make the inner part of the bread of all parties very wholesome. Laws which cheapen land to a minimum price and raise wages to a maximum are the laws which will drive the great wheel of industry swiftly on to prosperity.

As it is low, tariff and other forms of tax reduce interest and wages to a minimum and raise land to a maximum. Think how a vacant city lot will absorb the products of active capital and labor by raising in value in a few years. Instances are on record in any of our prosperous cities where men have become wealthy by returns of idle capital in vacant city lots. In such cases no individual labor, or hired labor, either, are used. We pay a bonus to idleness when we make an idle investment pay interest and make profit besides. Is it right to do this? Every friend to advancing civilization will answer no.

The same causes are producing the same dire effects in all new agricultural places. In the older places of agriculture these causes have brought interest down to 6 and 8 per cent. and wages to a bare living for the laborer. These causes are also crippling our manufacturers; and in the face of all this we have legislators proclaiming protective tariff, revenue tariff and all other forms of tax on industry. If I build a nice dwelling in the city I am fined for it by being taxed. If I build a railroad I am fined for it—taxed. If I raise horses, cattle, hogs, grain or anything else, I have to pay a fine—a tax.

How are we to avoid these fines? Tax the land. Tax vacant city lots and idle land so high that the claimers—the term owners is misapplied if such land is valuable above the cost price—will be compelled to use such lands or relinquish their claims or titles to the government, cities, industry, life—the

people. Capital is but labor stamped upon matter and does not deserve remuneration when idle any more than an idle man does.

The best argument protective tariffers have, in my opinion, is that if free trade was established "it would cause a constant flow of gold from this to other countries for commodities cheaper there than here." This is quite weighty on first thought. A restriction like this would subvert all the harm, if any: Let a thousand dollars' worth of the productions of other countries come into our marts free of tax, provided one thousand dollars' worth of our surplus commodities are taken in return. This would give a double stimulus to trade—a cargo each way. This would be free trade in reality. We can foster manufactures much better than by protective tariff; and if this article finds favor in your columns I would like to give my views on the matter. T. F. SPROUL.  
Frankfort, Kas.

### Dehorning Cattle.

EDITOR KANSAS FARMER:—In the last FARMER you ask for the experience of those who have dehorned their cattle. Two months ago I took the horns off mine, over twenty head, the oldest eight years, down to calves a few weeks old. The operation is painful while it lasts, but when turned loose they went right to feeding. All are doing well. I have a good stable for my cattle. Before dehorning they were tied up; when one got loose it was soon abusing some of the rest. Now I put the feed in the manger and turn them in loose, and they feed as quietly as so many old ewes, moving around and lying down as they please. It is much easier keeping them clean. My cattle are recorded in the American Short-horn Herd Book, and I don't want to change to any other breed, but shall dehorn the calves as they come. Wm. ROE.  
Vinland, Douglas Co., Kas.

### Favors a Protective Tariff.

EDITOR KANSAS FARMER:—Enclosed find postal note for one dollar to renew my subscription for 1888.

I beg leave to go on record as a protective tariff man, for the following reasons: To build up large manufacturing cities, that will give employment to operatives who will help consume our over-production of grain, cattle and hogs. England is getting her wheat and corn from other countries, and no longer affords a good market for our corn-fed cattle. Hides are on the free list, and that reduces the value of cattle \$2 per head. Oleomargarine law to protect New York butter reduces the value of every corn-fed steer \$3 per head.

Our imports in 1887 exceeds our exports one hundred millions.

The United States is first in the production of cereals, and the value of live stock, and I believe that it is for the interest of farmers to have a good home market. With a protective tariff you would increase the manufacturing interests and the population who are bread and meat eaters. We are producing more food, as a nation, than we can consume. J. PITNEY.

### Letter From Pawnee County.

EDITOR KANSAS FARMER:—Enclosed find nine names of new subscribers to add to the list of names sent you at various times previous. Every one likes the KANSAS FARMER, and why should they not like it? It is the most perfect agricultural paper published. I hope to see it in every farmer's house in Kansas if I continue my rambles. It has but one equal in farmers' requirements or implements, and that is the Perkin's windmill.

We have been having some quite cold weather lately, but I have not heard of any injury to stock farmers, and stockmen are generally well prepared with feed and shedding. Stock of all kinds are looking well. In fact, farmers are coming through equally as well as their stock, and we all expect a good crop year coming and better times.

We are all waiting patiently to see what will be done with the tariff. President Cleveland has done himself a great injury by his tariff message both with the Democrats and Republicans. I cannot see what harm the accumulation of money in the Treasury could do when there is so much need of its distribution among the people in the shape of public buildings and other

improvements which would offset what is claimed to be their greater expense of living by means of the existing tariff. We hope there will be something done to check these robber bands calling themselves trust companies, syndicates, etc. We also want some alteration in the taxation of non-resident or speculators' land; it is a great burthen to settlers.

W. J. COLVIN.

Larned, Pawnee Co.

#### A., T. & S. F., Attention, Please.

EDITOR KANSAS FARMER:—The Atchison, Topeka & Santa Fe Railroad company owns the coal mines at Canon City, Col. Every coal-dealer along the route in southeastern Colorado and southwestern Kansas is simply an agent of the railroad. I have it on good authority that the company refuses to ship any other coal; at any rate no other coal comes into Coolidge or Syracuse. Now, the quality of the coal is first-class—better than any Kansas coal, and the price charged is not exorbitant—\$6.05 a ton in Syracuse, which is cheaper than \$3 for coal that I have burned elsewhere. The trouble is that occasionally something goes wrong at the mines and the supply runs short. Then the inhabitants of this vast treeless garden (with proper culture I consider it a garden) are left to the mercy of the elements. This happened a month ago. For three weeks no coal could be bought in Syracuse—it was as bad at other points east and west—and all that time men with teams were there waiting for coal; men who had wives and little children fifty miles away without fuel, and blizzards imminent. Those lives, in my humble opinion, are as valuable as any at the company's headquarters in Boston. There are no better people; industrious, law-abiding, sublime in patient courage, and with a refinement above any people in the world who occupy equal stations in life.

If no other coal could be obtained when Canon City fails to supply the demand, the railroad would be blameless. (I write this of the road because all dealers are really its agents.) But at Trinidad, Col., and other points not remote, are mines that furnish an abundance of black diamonds, which though somewhat inferior to the company's coal, are better than no coal at all. But the railroad does not own the Trinidad mines, and although its rails run to that city, it seems to be ignorant that they exist. With the people of southwestern Kansas it is Canon City coal or no fire.

I submit that whoever is to blame in this business it is a crime, and should not be allowed to continue. It has happened before. In the early part of last spring we were four weeks without coal, and appeals to the railroad company were not considered worthy of attention. However insignificant the subject may appear to Eastern capitalists, it is of vast importance to us. All that we hold dear on earth is here, and the pitiless storms of winter rage with peculiar fury on these open prairies. Is it possible that a great corporation, in the closing years of the nineteenth century, can be guilty of such inhumanity for so slight an advantage?

The A., T. & S. F. railroad has done great things for this section of country; it has advanced the settlement at least ten years ahead of what it would otherwise have been. It was largely instrumental in bringing to this region at least one-half of the people who are here. But that is no reason why it should leave them in their new homes fuelless, exposed in mid-winter to the fury of the angry winds.

The KANSAS FARMER has always looked after the interests and safety of settlers on the frontier. Perhaps this is the reason that so many people of late have requested me to write our grievances for its columns, believing that a publication of such evils is the speediest way to obtain a remedy. Corporations may be deaf to local alarms while they prefer to avoid the indignation of the public at large. SYLVESTER FOWLER, Stowell, Hamilton Co., Kas., Jan. 16.

#### Ringling Noises

In the ears, sometimes a roaring, buzzing sound, are caused by catarrh, that exceedingly disagreeable and very common disease. Loss of smell or hearing also result from catarrh. Hood's Sarsaparilla, the great blood purifier, is a peculiarly successful remedy for this disease, which it cures by purifying the blood. If you suffer from catarrh, try Hood's Sarsaparilla, the peculiar medicine.

#### Farm Loans.

Loans on farms in eastern Kansas, at moderate rate of interest, and no commission. Where title is perfect and security satisfactory no person has ever had to wait a day for money. Special low rates on large loans. Purchase money mortgages bought. T. E. BOWMAN & Co., Jones Building, 116 West Sixth street, Topeka, Kas.

I will exchange farm lands or Topeka city property or Garnett city property for dry goods or mixed stocks. J. H. DENNIS, 420 Kansas Avenue, Topeka, Kas.

#### Book Notices.

**WELL MACHINERY.**—An encyclopedia of well slaking appliances, by the American Well Works, Aurora, Ill. Sent to any interested person on application.

**UNDEVELOPED SOUTH.**—An interesting and instructive pamphlet setting forth the advantages of the southern section of this country for manufactures, agriculture and commerce. By George B. Cowlam, Louisville, Ky. Price, 10 cents.

**ALABAMA.**—Apropos of the recent agricultural development in north-east Alabama, the *Democrat* (Guntersville, Ala.) has issued an attractive supplement showing the wonderful resources of that favored section. Copies sent free on application.

**HAND BOOK OF NESS COUNTY.**—This is a neat pamphlet containing a description of Ness county, Kansas, giving information about the people, land, products, resources, etc. Profusely illustrated. Price, 20 cents. Published by C. S. Burch publishing company, Chicago, Ill.

**SEEDS AND PLANTS.**—J. M. McCullough's Sons catalogue for 1888 is out. They are seed merchants doing business at 134 Walnut street, Cincinnati; and do a general business in seeds of all kinds, plants, vines, bulbs, roots, implements, fertilizers, etc. Send for catalogue.

**VICK'S FLORAL GUIDE.**—Receipt of this old, familiar manual, reminds us that there is no better place in the country to get goods in the seed and plant time than at James Vick's Nursery, Rochester, N. Y. We have dealt many years with Vick and was never deceived or disappointed in any of the transactions.

**SYLVAN SCENES IN WINTER-SUMMER-LAND.**—This is a beautiful production of the printer's and engraver's arts, showing and describing the country and particular places and scenes along the line of the Missouri Pacific railroad. It is sent to persons on request by addressing H. C. Townsend, Gen. Ticket and Passenger agent, St. Louis, Mo.

**LITTLE MEN AND WOMEN.**—This is the name of a monthly publication for little folks, by D. Lothrop company, Boston, Mass. The aim of this magazine is to interest children just the time they begin to read for themselves and lead them along for a year or two with pictures and stories and pleasant tasks so as to make them forget the task part altogether. One dollar a year.

**BABYLAND.**—Published by D. Lothrop Company, Boston, Mass., is for quite young children, and comes at 50 cents a year. The publishers say: "Nothing in *Babyland* ever pleased more people than finger play rhymes and pictures. They have even been sought by kindergartners here in Boston and elsewhere; and the author has personally taught them. Six of the '88 *Babylands* will contain new finger-plays."

**COAL AND COKE.**—A pamphlet of 88 pages describing the coal mines of Pennsylvania, illustrated by many cuts, showing how men dig out the black diamonds below the surface of the earth. It is a neat, well-made, interesting and instructive book, intended to entertain and instruct young people chiefly, by the Chicago, Rock Island and Pacific Railway company. For a copy address E. A. Holbrook, Gen. Ticket and Passenger agent, Chicago, Ill.

**PERFECT BREAD.**—A well-known writer on culinary subjects says that she believes that thousands of women could earn a good living in this country by the manufacture and sale of home-made bread if they would thoroughly master the art, which they can easily do by purchasing that valuable little book, entitled, "Perfect Bread," which the publishers of the Springfield, Mass., *Good Housekeeping* are sending out by the thousands, post-paid to any address, on receipt of twenty-five cents.

**HISTORY AND MAPS.**—The New York *Tribune* has prepared a little book containing a vast amount of information in a very small space. The book can easily be carried in a man's pocket, yet it contains a brief history of the United States and a map of every State in the American Union, a map of every country on the earth, and a great deal of interesting matter relating to the people, climate, topography, productions, etc. This little encyclopedia is sent out as a premium with the *Tribune*. Write for particulars.

**PETER HENDERSON'S CATALOGUE FOR 1888** beats them all this year. It is the most complete, it is the neatest, prettiest, brightest that we have seen. Peter Henderson is now as well known as James Vick used to be. He is a lover of plants, and the neatness of his catalogue is simply a photograph of himself as he is devoted to his work. If you want anything in the way of seeds or plants—no matter what class or variety, send for Henderson's catalogue. Address Peter Henderson & Co., 35 Cortlandt street, N. Y.

#### Wire Fences.

In this week's issue appears the ad. of the Continental Wire Company of St. Louis, who desire the trade of the farmers and in a business way ask for patronage in

a straightforward way through our columns. They do so strictly upon the merits, quality and cheapness of their goods. They offer to sell their twisted wire cheaper than any other make. The company desire to call special attention to their "Eagle Parallel Barb Wire," the surface of which is twice as broad as the old style twisted wire. The barbs are placed every 2, 3, 5 or 6 inches, as may be desired by the customers. Any of our readers who expect to build any fence this season should look up their ad. and write for prices.

#### Gossip About Stock.

The total receipts of live stock at the Kansas City stock yards during 1887 were 67,752 cars, comprising 29,690 horses and mules, 209,956 sheep, 669,224 cattle and 2,423,262 hogs.

This office is in receipt of some choice draft horse literature which contains a great deal of information about Clydesdale, English Shire, Suffolk Punch, and Cleveland Bay horses in general; also particular information about ten importations made during 1887 by Messrs. Galbraith Bros., Janesville, Wis.

Mr. Richard Belton, Marion, Kansas, read the ad. of Jas. Houk, proprietor of the Locust Grove Herd of English Berkshires, Hartwell, Mo., and then bought a fine boar which arrived in good shape and gave good satisfaction. The best breeders in America patronize the KANSAS FARMER'S advertising columns.

The *Manhattan Mercury* reports that W. P. Higinbotham of that city has sold to Judge Mahan of Abilene the fine young Cruickshank Short horn bull, the 16th Grand Duke of Gloster, by Imp. Double Guster (47383) out of Roxanna's Rose 2d. This animal not yet two years old, weighs 1625 pounds and was a prize winner at the fairs last fall.

No Short-horn breeding establishment in America bears a better reputation in every way than the Linwood Herd of Short-horns, owned by Col. W. A. Harris, of Linwood, Kas. Attention is directed to his new card in this issue, and we have no hesitation in heartily recommending purchasers who desire the best Short-horn strictly upon their merits to patronize the Linwood Herd.

Score one more point for Kansas. Kansas is rapidly establishing itself as one of the leading fine stock states of the west. Her recent addition has been a son of the \$5,000 bull Price of St. Lambert, whose sire, Stoke Pogis III. got Mary Ann of St. Lamberts that has an official record of thirty-six pounds twelve ounces of butter in seven days. Wm. Brown of Lawrence, Kansas, is the lucky purchaser of this royal-bred youngster. This bull together with his Le Brocy prize bull Golden Prize 11455, will make a strong head for his Jersey herd.

A big horse-breeding establishment is the Topeka Horse Breeding and Land Company. The business is to be done at Topeka, and the horse establishment is located at Walnut Grove ranch, a ranch of fifteen hundred acres, thirty-five miles west of Topeka on the Union Pacific railway. A. N. Miller, formerly of Miller Bros., Junction City, Kansas, is the manager. The direct ors for 1888 are J. H. Broadus, Geo. F. Parmlee, P. G. Noel, O. E. Walker and T. L. Stringham of Topeka, and R. L. Strader and P. P. Johnston, Lexington, Ky. The amount of capital stock is \$250,000.

James Houk, proprietor of the Locust Grove Herd of Thoroughbred Berkshire Swine, writes: "My hogs never were in better shape at this season of the year. All my sows are bred for spring litters except two sows that are now suckling litters. Golden Duchess has a splendid litter of eight, six boars and two sows now about nine weeks old. She won last season, as a yearling, five first and two second-class premiums and three sweepstakes. Any age or breed, parties who are wanting first-class pigs could do no better than to correspond with me in regard to these pigs. They are by Lang Rang, that won five first and two second-class premiums; also headed herd of four sows and one boar both at Sedalia and Hixonsville, Mo., and I have an offer of \$100 for him now; also a litter out of Model by Golden Crown."

#### Catarrh Cured.

A clergyman, after years of suffering from that loathsome disease, catarrh, and vainly trying every known remedy, at last found a prescription which completely cured and him and saved him from death. Any sufferer from this dreadful disease sending a self addressed stamped envelope to Prof. J. A. Lawrence, 212 East 9th St., New York, will receive the receipt free of charge.

The National Board of Trade held a meeting at Washington and adopted several resolutions of important bearing. The board favors a revision of the nationalization laws. The question of a revision of the laws relating to banking was discussed and a resolution adopted favoring a revision and codification of the national banking laws, also a resolution advocating the refunding of the present 4 per cent. debt of the United States at a low rate of interest to be redeemable in annual installments from 1891 to 1921, with a view to the use of the new loans as security for the circulating notes of national banks. Also a resolution urging the repeal of the law providing for the compulsory purchase of silver bullion.

#### CREAM OF A WEEK'S NEWS.

Grandma Garfield died at Mentor, aged 88 years.

The next National Democratic convention will be held in New York city.

The Baltimore grain market is badly demoralized, but little grain going there lately.

The committee in the Carlisle-Thoebe contest case refused to reopen the case on application of Mr. Thoebe.

A committee of American and English gentlemen waited on the President and urged the adoption of arbitration to adjust all matters of difference between Great Britain and the United States.

Further reports show a terrible condition of things on the Northern prairies during the late storm. In Dakota the cold was intense, and the blinding storm bewildered people who were exposed.

The bulletin of the American Iron and Steel association says that the total production of pig iron in the United States in 1887 was 6,416,148 gross tons, and was much the largest in the history of the country.

A delegation composed of prominent citizens of North Carolina appointed by the Democratic State executive committee met the Democratic members of Congress and urged the repeal of the internal revenue laws.

A dispatch has reached the rooms of the American Board of Foreign Missions in east Turkey stating that 10,000 people are starving and calling for immediate relief. It is also reported that the famine at Adana in central Turkey still continues and the number who are suffering increases daily.

A St. Paul dispatch, dated January 18, says: An evening paper figures out a list of 217 deaths by the blizzard, and adds that the remains of many people who are reported missing may not be found until the snow thaws in the spring, the bodies being covered by the deep drifts that formed over them.

A special dispatch from Ennis, Texas, to the *News*, says: Seven persons were drowned today in Sand lake, about ten miles east of Ennis. Two young women, daughters of Wm. Williams, a farmer, and a young man named Babbitt were skating on the lake, when the ice gave way and they sunk in four and a half feet of water.

The Rolling Mill association of Philadelphia has decided upon a general reduction of wages in the mills represented in its organization, from a basis of 24 cents to 2 cents per bar, on account of the depression in the iron trade. Under the standard scale agreement the men will have to accept the reduction. About 120 skilled workmen in that city will be affected.

A dispatch from Fort Worth, Texas, dated January 18, says: Two reports of freezing to death were received here last night, in addition to those sent out Monday. A tramp was found frozen stiff near Henrietta. A negro named John Jackson and another colored man were frozen to death near Waco. No reports of loss of life among stock in the Panhandle have been received as yet, although the loss is known to be a great one.

Reports of iron production in the South show encouraging increase in Maryland, Virginia, West Virginia, Kentucky, North Carolina, Tennessee, Georgia, Alabama and Texas. The total output was 923,433 tons, an increase of 80 per cent. in two years, and represents one-eighth of the total production of the United States. The *Trademan* reports thirty-five blast furnaces now building in the South, twenty of which will go into blast this year, and estimates the total production of the South in 1888 at 1,154,896 tons.

The Canadian Pacific railroad expects to place several new steamers on its line between Vancouver and Yokohama, Japan, and has made arrangements with the imperial government for a large subsidy. The company has had a line of steamers in connection with the Canadian Pacific railway running to Japan since last June. The steamers are the old Cunarders, the *Abyssinia*, *Batavia*, and *Parthia*. It is now proposed to build several large steamers within a year on a par, perhaps, with the present Cunard liners. The route to Japan by way of the Canadian Pacific railroad and the steamship line is five or six days quicker from London than by the Suez canal route.

#### \$93 Sewing Machine Free!

We want one person in every village, town and township, to keep in their houses a line of our ART SAMPLES; to those who will keep and simply show these samples to those who call, we will send, free, the very best Sewing Machine manufactured in the world, with all the attachments. This machine is made after the SINGER patents, which have expired. Before the patents ran out, this style machine, with the attachments, was sold for \$13; it now sells for \$50. Reader, it may seem to you the most WONDERFUL THING ON EARTH, but you can secure one of these machines ABSOLUTELY FREE, provided your application comes in first, from your locality, and if you will keep in your home and show to those who call, a set of our elegant and unequalled art samples. We do not ask you to show these samples for more than two months, and then they become your own property. The art samples are sent to you ABSOLUTELY FREE of cost. How can we do all this?—easily enough! We often get as much as \$2,000 or \$3,000 in trade from even a small place, after our art samples have remained where they could be seen for a month or two. We need one person in each locality, all over the country, and take this means of securing them at once. Those who write to us at once, will secure, FREE, the very best Sewing Machine manufactured, and the finest general assortment of works of high art ever shown together in America. All particulars FREE by return mail. Write at once; a postal card on which to write to us will cost you but one cent, and after you know all, should you conclude to go no further, why no harm is done. Wonderful as it seems, you need no capital—all is free. Address at once, TRUE & CO., AUGUSTA, MAINE.

#### GRAND PRIZE OFFERS

\$25 in Prizes GIVEN AWAY.

Send 2-cent stamp for particulars. Address

SCHOOL GLEANER, Marion, Kansas.

**ORGANS & SEWING MACHINES.** 50 Styles. Cut Prices. Big Inducements. Goods sent on trial. New, perfect and warranted. Agents Wanted. Ask for Free Circulars at once. GEO. F. BEST, 291 Wabash Ave., Chicago.



## The Home Circle.

### The Ocean.

[By Mrs. S. B. Savage—read before the Douglas County Horticultural Society, at the December session, 1887.]

Wondrous, boundless, restless ocean,  
Rolling through ages past,  
With thy rising, falling motion,  
Beating time for centuries vast.

Thou hast conquered all the forces  
Which opposed thy sovereign sway,  
And hast quenched the molten surges  
That defied thee many a day.

Thou hast beaten down the bulwarks  
Of the mountain high and strong,  
Which thy onward march disputed  
With persistence fierce and long.

And hast scattered wide their legions  
Underneath thy chariot's tread,  
Dashing on in sullen splendor,  
O'er their silent moss-grown bed.

Tell me, O, mysterious ocean!  
Lapping through ages past,  
Whence thy rising, and thy falling,  
And thy angry billows roar?

Whither come thy crested surges  
Hastening up thy pebbly strand,  
And where hide thy ebbing waters  
When they leave the shining sand?

By what silent force attracted  
Dost thou follow day by day,  
And what law keeps thee in motion,  
In this grand majestic way?

Say, what treasures art thou hiding  
Neath thy heaving, throbbing breast?  
In unfathomed depths abiding  
Shall they thus forever rest?

Or shall some great change come o'er thee,  
And thy secrets be unsealed,  
And the gathered stores of ages  
To man's vision be revealed?

Yes, I love thee, dear old ocean,  
Grand and boundless, vast and free,  
Thou art to my thoughts an emblem  
Of time and eternity.

And I love to stand beside thee,  
Listening to thy ceaseless song,  
Sometimes sweet as childhood's laughter,  
Then like anthem loud and strong.

Love to see thy white-capped billows  
Beating inward to the shore,  
And to breast thy buoyant waters,  
Laving in them o'er and o'er.

Love to float upon thy bosom,  
Rocking gently, to and fro,  
Breathing in new inspiration,  
Strength and courage, as we go.

When the sun hangs low above thee,  
With its shining golden ray,  
Seeming like a shimmering pathway,  
To the land of "perfect day."

Then, I seem to hear the music,  
Far and sweet across the sea,  
Of the heavenly chorus chanting  
"Home, sweet home," to welcome me.

To the safe and quiet harbor,  
Lying just beyond our sight,  
Where no storms nor tempests gather,  
And no shadows bring the night.

And I long for angel pions  
To sustain my "wayworn" feet  
Across the sea that rolls between  
Me and that home of rest so "sweet."

### The Social Side of Farm Life.

Prepared for and read before the Wabunsee Farmers' Institute, held December 20th and 21st, 1887, by Mrs. C. Frowe.

Farmers' homes are of necessity separated from one another by the intervening broad acres, and to the industrious farmer (and his wife as well) there is always something which needs doing. But as Solomon says there is a time for everything, we think every farmer and his family should take time for needed recreation and social enjoyment. Is it necessary for farmers to give up society entirely and bend all the energies of body and soul towards accumulating enough money to buy a few more acres, when in the majority of cases they have too much already to farm profitably? Farm life loses its attractiveness in such cases we think, where sons and daughters are not allowed a day now and then to entertain a friend, because there is too much to do, and they must not go out evenings because their parents are afraid they will not feel so much like working the next day. Is it any wonder there are so many discontented farmers, and so many farmers' sons going to the cities to seek employment, and so many farmers' daughters wanting to marry professional men, where such a state of things exist?

Farming is a pleasant and profitable occupation if conducted properly; but we think most farmers undertake too much, and when they do, it is not only going to fail to be any financial benefit to them, but it is doing themselves and families injustice by not allowing them time and opportunity for social and mental improvement. The nature which our Maker has given us call

for more than mere physical development; our mental and social faculties need cultivating as well. And if we don't find time for it, it is either because we are undertaking too much, or because we do not direct our efforts in the most intelligent manner to accomplish what we have to do. We know farmers have a great deal of hard work to do, and work which requires close watching, for by a little neglect at the proper time, the profit of a whole year's hard work may be cut short. And it is just because their business requires such arduous labor and such close application that we think they should make more of an effort than most of them do to have a change occasionally. And they will be better fitted while they are at work for their business. Who has not felt after weeks of hard work that if they could only have a little rest and go and see a neighbor, or perhaps have a neighborhood gathering of some kind, they could go home and do better work? For they would have gotten new ideas, and would have gotten out of the treadmill of hard work and feel as though they were men and women and not mere machines. We become discouraged when we apply ourselves too closely to business; we lose interest in our neighbors and our neighbors lose interest in us; we lose interest in public affairs. Sometimes the men are too busy to take time to go to the polls to vote; then the affairs of our community are allowed to suffer, and we lose our influence for good in that direction if we have any, and of course all good farmers vote right. There is a beautiful poem which runs thus:

O, do not deem that it matters not  
How you live your life below;  
It matters much to the heedless crowd  
That you see go to and fro;  
For all that is noble and high and good  
Has its influence on the rest,  
And the world is better for every one  
Who is living at his best.

How can we live our best when we have allowed our lives to become dwarfed and absorbed entirely in our home interests and our love for gain, which will not allow us to mingle with our fellow men and receive help from them and lend our influence in helping others? We have seen it stated that the largest proportion of the inmates of our insane asylums were farmers' wives. Why is it? We think it each individual case were inquired into, it would not be those whose social advantages had been good, but those who went through with the regular routine of monotonous housework and the care of small children, day after day, and week after week, year in and year out, who never took time for any social recreation—thought she could not. But nature could not endure the strain. Then her family were obliged to do without her. Are we living our best when we allow ourselves to work on, and on, and take no time for needed recreation? We are doing our families an injustice and surely not living up to the standard our Maker designed for us. He wants us to use these bodies of ours so that we can be a help to those around us in every way, and we cannot do this by constant application to business, ignoring the wants of our social natures entirely. Our home duties necessarily require most of our time; but we think by intelligent and well applied effort we can make our homes happier, our lives more useful, and farm life more attractive, by taking time for needed social enjoyment.

### Care of House Plants.

Prepared for and read before the Wabunsee Farmers' Institute, held December 20th and 21st, 1887, by Mrs. A. J. St. John.

When requested to prepare a paper on the "Care of House Plants" for our Farmers' Institute I was, at first, minded to refuse, utterly feeling that some one who has been more successful in that line than I, should be called upon, but when your committee would not take no for an answer, and when I was assured that they did not want anything "very scientific," nothing at all elaborate, in fact merely something to call out discussion, I yielded to the demand, because somebody must fill the position, and not at all because I thought I could instruct the ladies of Wabunsee in plant lore, many of whom have been very successful in that line. It has occurred to me to consider the subject from two standpoints, viz: How to succeed in the care of plants, and—Does it pay? First, then, to succeed, in this as in any other undertaking, a love for the business is an important element. True, there are some plants of so hardy a nature that,

if given any chance at all—a sunny window, or, with some, even a shady one, they will thrive with very little care and be a continual joy to the possessor. Still, I think there are but few that will not do better if watched with loving interest, that their habits may be noted, their needs and requirements ascertained either by observation or study, and, as far as may be, supplied. For instance, nearly all, if not quite all plants require a season of rest at some time of the year. So they tell us, that if we wish geraniums to bloom in winter we must pinch off all blossom-buds through the summer, and I have not always succeeded in getting many winter blossoms then. Perhaps some one who has been more successful can tell us why. Some plants require more sunshine, and some more water than others. Judgment must be used, and better too little water than too much. It is safe to say that geraniums and those of like habits should not be watered till the top of their soil is dry. I suspect that the air of most of our sitting-rooms, especially where coal is used, is too dry for the best results; also, that dust allowed to collect and remain on the leaves is a great detriment to success. It is said that plants should be taken once a week to a sink or tub and thoroughly showered, not only to remove the dust, but as a safe-guard against insects, which are liable to infest them.

Doubtless, the one who has the most time to devote to plants, if aided by an "enlightened common sense," will see the best results. If one has only a common window to devote to plants, it is better to confine one's self to a very few plants, selecting something really pretty and best adapted to the situation, as one thrifty plant will give more satisfaction than a dozen sickly ones.

Granted, then, that to succeed with house plants requires time, skill, thoughtful care, and in our capricious climate, watchfulness and pains-taking, lest the icy breath of winter shall wither them, does it pay?

I suspect that many, especially among our sterner brethren, will answer nay. Possibly, if shown a plant in bloom they may enquire of what use it is. But I protest against making the "almighty dollar" the only standard of value. Since the all-wise Father has seen fit to decorate our earth with such a profusion of blooming plants, shall we presume to esteem them as of little worth?

It has been proven that healthy plants contribute to our health by purifying the air we breathe, to say nothing of the air of cheerfulness, (and is not cheerfulness health-producing?) which they communicate to an apartment when icy, dreary winter reigns without. "A thing of beauty is a joy forever."

### Bread-Making.

Read before the Wabunsee County Farmers' Institute, December 20-21, 1887, by Miss V. Bangs, of Wamego.

Swift tells us "that bread is the staff of life," and so we find it; for let the staff be weak and crooked, and how soon mankind lops over and gets twisted out of shape. In other words, let the bread be heavy, sour, under done, and with a crust so thick and tough that it defies the sharpest molars, how soon the members of the family will become cross, irritable, and—I was going to say—almost unbearable, simply because Mary or Susan failed in some particular in their bread-making.

But stop! Is it simply a matter of taste? How about dyspepsia and headache they are called on to bear? Are they conducive to happiness or good temper? On the other hand, let the bread be good. I do not mean that it shall only be light, fine grained and white; but let it also be sweet, tender and thin-crust, such bread that you can eat dry and enjoy it, then the unnatural craving for cake, pies and pastry of all kinds will be diminished. Do not misunderstand me. I do not say that a person fed on such bread will never care for the dainties; but they will not feel that they are essential to a good meal. You sometimes hear a lady say—"I cannot tell what ails my bread; I made it exactly like I always do, but it is a total failure." This reminds me of the problems I used to solve. When I did not get the correct answer, I would assure my teacher I had done everything correctly, that the fault was in the problem, not in me, until convinced by her that I had failed to add, subtract or multiply correctly. So if the fault is not in the flour or yeast it must be in the

bread-maker. She may have put her yeast into the sponge while it was too hot and so destroyed the life of the yeast, or, after mixing, allowed the dough to stand in a draught and get chilled, or it may be too hot; she has at least failed in some way to give the needed care or attention. My mother has always taught me that if a thing is worth doing at all it is worth doing well, and I find it especially true in regard to bread-making. You cannot throw it together haphazard and succeed.

Some persons make their bread with buttermilk; others make salt rising bread; but I prefer to take three quarts of sifted flour, and four good-sized potatoes well mashed, scald all thoroughly with the potato water; when milk-warm add a cooking spoonful of salt and a small cup of jug yeast or a cake of dry yeast dissolved in a little water; cover the sponge so that it will keep an even temperature, and let it rise. When light beat it down with a spoon; mix dough stiff enough not to need flour on the board to work; it (unless your flour is runny) and work until your flour blisters; then put into pan, cover with another pan, wrap in bread blanket, and when light enough for final moulding, the dough will spin out as you raise the upper pan until it looks like lace work. Mould and put in pans; but here, too, the cover is needed to avoid a thick crust. When light enough to show slight signs of cracking around the upper edge of the pan, put it into a moderately warm oven and let it heat through as the oven heats, and then keep a steady fire. The question then arises—how are we to know when it is done? A great many bake according to time; but that is not a very reliable way, as poor flour, or bread that is not sufficiently raised, takes longer to bake than good flour or very light bread. Experience is one of the best teachers. One soon learns to know by the smell of bread when it is done. It also feels light when you handle it; and last but not least, when pressed with the finger it will spring back into shape. If possible, avoid breaking the loaves apart. As a final touch wrap well in bread-cloth, and as a result (if your figuring is all correct) your bread will be such that you will feel your labor was not in vain.

### Crowded Out.

What a busy world this is! Whether in city or country, for most people there is plenty to do. To be sure, there are idle ones, who find no occasion to stir themselves; but for willing hands the hours come laden with employment. Old Father Time counts off the seconds, the moments, the hours, so rapidly that before we are aware some of the matters which may, can, or must be attended to, are crowded out. The youth and maiden, thoughtlessly intent on the pleasures of the passing hour, spend their days in busy idleness, and when mature years bring burdens that call for wisdom and experience, they look regretfully back to the golden opportunities for learning and improvement which were crowded out. Many men in their eager pursuit of wealth are indifferent to other claims. Under the pressure of circumstances they think, "By and by I shall find time for rest and the engagements of home and social life." But the moments lengthen into hours, and, too soon for their plans, "Time, for them, shall be no more." The true joy of living has been crowded out. The busy wife and mother, toiling for the comfort of her family often is heard to say: "I have no time to read, no time for lectures or concerts." All these are crowded out until advancing age finds her not an intelligent companion for husband and family, but only a slave to their whims and caprices.

It is certainly true that we cannot do everything. We are too apt to rush from one thing to another engaging at haphazard in whatever most interests us for the present moment. Let us stop and think, use a little forethought as to what will most profit us in the long run. For the young let there be less excitement and frivolity, a more steadfast purpose and a higher aim. For the mother more help and sympathy from those whose comfort has been her burden; and plainer dress and more simple living all around. Let the mind once become aroused to the value of time, and the importance of so regulating the duties and pleasures of life as to secure the best results in the development of character, and we shall learn, that in order to secure the



## KANSAS FARMER.

ESTABLISHED IN 1893.

Published Every Thursday, by the  
KANSAS FARMER COMPANY.OFFICE:  
821 Kansas Avenue, Topeka, Kas.  
S. J. CRAWFORD, - - - PRESIDENT.  
J. B. MCALPHEE, - - - GENERAL AGENT.  
H. A. HEATH, - - - BUSINESS MANAGER.  
W. A. PEPPER, - - - MANAGING EDITOR.SUBSCRIPTION PRICE:  
ONE DOLLAR A YEAR.An extra copy per 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 *Breeders' 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	\$ 12.00	\$ 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	125.00
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 no later than Monday.  
Electrons 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.

Isaac F. Tillinghost, La Plume, Pa., is out with his seed catalogue for 1888.

D. S. Grimes, Denver, Colorado, advertises Rocky mountain evergreens for sale.

In a letter from father L. D. Smith, of Republic county, dated the 19th inst., he says: "The snow is one foot deep, all at one fall, the largest we have had at one time."

Information from Louisiana, is to the effect that the latest results at the government diffusion experiment station at ex-Governor Warmouth's Magnolia plantation, show that the diffusion process is a great success, producing thirty pounds more sugar per ton of cane than is produced by the most advanced milling process.

We are in receipt of the catalogue and price list of the La Cygne, Kas., nursery—owned and conducted by Messrs. Cozad &amp; Litson. It shows that these enterprising gentlemen are prepared, as usual, to furnish immense quantities of good, Kansas-grown stock—fruit, forest and ornamental trees—to their customers at prices to suit the times. They have seeds and nuts for planting, and also, some early yellow ninety-day field corn, which they say is just what it is represented to be, and they are reliable men. Send for their catalogue.

A dispatch from Hutchinson, Kas., conveys information that a contract was let there for the erection of buildings for the Hutchinson salt works. The well has been sunk, a rich deposit found, which has been analyzed by the State chemists of Kansas, Wisconsin, Pennsylvania and New York, and they all report it to be the purest deposit ever found in the United States. As soon as the material is on the ground a large force will be put to work, so that the works may be put in running order as soon as possible. Over 120,000 brick have already been contracted for.

## THE FARMER AND HIS WOOL.

Among the strange things in political affairs nothing is more difficult for us to understand than the selecting of the farmer and his wool for the purpose of illustrating the alleged iniquities of tariff laws. One writer charges the evil to the account of a protective tariff, while another makes no distinction, but says trade must be free. They both, however, take the farmer and his wool to expose the robbery as they call it. Several correspondents of this paper have discussed the subject and they undertook to show that the farmer not only does not profit by the tariff on foreign wool, but that he actually loses by it. They assert that the difference against him in the cost of his clothing is much greater than any profit he may have on his wool by reason of a protective tariff. One writer, this week, handles that subject—Mr. Gill, and we commend his letter to the careful perusal of every reader of the paper. It is curious to see how he figures out a loss, and especially so when he mistakes the law as to duties on foreign wool.

Going still further into the subject, we have been told by two or three correspondents that woolen factories are being broken up by the tariff. One writer says: "The woolen mills all over the country are closed or running on half time, or bankrupt. Why? Simply because of the tariff on wool." And then he proceeds to give the reason for it. "Fine wools which are mixed with our home product to make cloths and other woolen goods," he says, "are not raised in this country, and the tariff on Australian and other fine wools is so high that woolen goods cannot be made here at a profit." As a remedy for this he proposes "freedom of trade."

Without stopping now to consider the effect of free wool, let us look at facts as they do actually exist. In the first place, instead of our own manufacturers being unable to obtain foreign wools, they bought more of it in the last two years than ever before in any other two years; and, although our woolen mills have not been prosperous recently, instead of their being closed or bankrupt, or running on half time, "all over the country," they worked up more wool in the last two years than they ever did in any other two years.

The Treasury department, through its bureau of statistics, recently issued a book entitled "Wool and Manufactures of Wool," in which a great deal of very useful information is given. Here are the figures it gives showing the quantity of wool in pounds consumed in the United States in the years named:

Year.	Home product.	Foreign.	Retained for home consumption.
1880.....	240,000,000	128,131,147	368,131,147
1881.....	272,000,000	55,961,236	327,961,236
1882.....	290,000,000	67,861,744	357,861,744
1883.....	300,000,000	70,575,478	370,575,478
1884.....	308,000,000	78,350,651	386,350,651
1885.....	312,000,000	70,500,170	382,500,170
1886.....	285,000,000	129,004,058	414,004,058
1887.....	285,000,000	114,038,030	399,038,030

Here are the figures showing the grades of foreign wool imported and entered for consumption in the years mentioned.

Year.	Clothing.	Combining.	Carpet.
1880.....	26,785,172	13,296,856	59,320,412
1881.....	20,604,707	4,421,491	42,395,709
1882.....	13,489,923	2,318,671	47,218,175
1883.....	11,546,530	1,373,114	40,130,323
1884.....	20,703,843	4,474,396	62,525,692
1885.....	13,472,432	3,891,914	50,782,316
1886.....	23,321,759	4,872,739	79,716,052

For 1887, the figures showing the classification are not all given—only the entries at Boston, New York and Philadelphia, and they show—

Year.	Clothing.	Combining.	Carpet.
1887.....	15,064,650	10,183,344	83,472,499

The total receipts at those three ports amounted to 108,705,502 pounds, which was but little short of the receipts for the entire country—114,038,030.

It appears from these figures that our

imported wools are principally of the coarser kinds—carpet wools, and that 1880 was the only year in which our imports of fine wools exceeded the quantities of the same grades imported in 1886 or 1887. It is a mistake, then, to suppose that our imports of either class—fine or coarse—is decreasing, or that American factories are not working up as much wool as they ever did. It is a mistake, also, to suppose that American farmers do not raise as fine wools as are grown anywhere. It is not fineness, but character rather, that is meant in referring to certain fine wools not grown here, but which are desirable in making up particular styles of fine cloths and dress goods. Wool is affected in its character by local influences not yet well understood. Wool grown on limestone land, differs from other wool grown on granite soil, or sand or loam. So, too, there is a difference in wools grown on high or low lands, on level or hilly ground, in cloudy or clear atmosphere, and so as to other differences of climate, altitude or soil. The breed may be the same, and the texture and strength and fineness of the staple the same, but there is a something in some wools of the same grade which imparts a peculiar luster to the cloth that is not found in other samples; and it is that something which is found only in a few localities—not in this country. It is important, however, only in "the finest goods which fashion demands from France and England." Mr. Bond says: "Without the same wools that are used there these goods cannot be made here." As to all classes of wool goods used by the masses, and even for the very best goods, (except only as to the peculiar "finish" referred to) we raise as good wool in the United States as is grown in any other country.

Now, how much is the American farmer out by reason of the tariff on wool? The total consumption of wool in the country—392,000,000 pounds last year—is about six and a half pounds to the person, which would be thirty-two and a half pounds to the average family. The tariff duties on foreign wool are: Class 1—Clothing wool, 10 cents a pound on wool valued at 30 cents or less per pound, and 12 cents if the value is more than 30 cents a pound. Class 2—Combining wool, same as class 1. Class 3—Carpet wools, 2½ cents a pound on wool valued at 12 cents a pound or less, and 5 cents if the value is more than 12 cents a pound. These rates apply to raw wool. If the wools are washed, duties are doubled; if scoured, duties are trebled.

An examination of the figures in the tables above given shows that the average annual consumption of wool in the United States, the last eight years, is about 370,000,000, and that our own farmers produced 232,000,000 of that amount, or 76 per cent., while foreigners brought us 89,000,000 pounds, 24 per cent. The home product, being so much larger than the imported, it naturally exerts a much greater influence upon the price than the foreign article does. It is not at all probable that there would be a change of more than two or three cents a pound in the price of wool in our markets if wool duties were wholly removed, provided that our farmers would try to hold the market and work for it as they did the fifteen years before the last change in the wool tariff. The price of wool here is largely regulated by our home production. And that applies more particularly to the higher grades, for our imports are mostly of the coarser kinds. The price of our higher grades is really very little affected by the tariff; and as to carpet wools, we do not raise enough of those grades to affect the price.

The truth appears to be, then, that so

far as American wool is concerned, when the farmer gets it in a coat, there is very little tariff in it unless it got in through the mill; and, if he is satisfied with such goods as our mills make best and which they make most largely and cheaply, he gets as good a suit, as heavy, strong and well made, as he would get for the same price in England, or very nearly so. All wool suits, and good ones—not of fine brilliant cloth—but good, strong, heavy and warm suits, are made by the thousand at our great factories and sold at \$5.50 to \$7.50 each. The writer of this is now wearing a \$12 suit—just the thing for this cold weather, and his overcoat—a great, heavy, warm garment, cost \$10 in season at retail in Topeka, early last winter.

What the American farmer will lose by free trade in wool is the American market. The market price for wool is another matter. Here are figures showing average prices of wool in New York city in October of the years named:

	Fine.	Medium.	Coarse.
1840 to 1849—ten years.....	41.43.	31.4a.	24.4c.
1850 to 1859—ten years.....	51.4c.	42.5c.	33.9c.
1877 to 1886—ten years.....	39.7c.	41.0c.	34.8c.

It appears that the wool market was better in the middle period—from 1850 to 1859, and it is a fact of history that tariff duties were lowest during that period. Under the act of 1846, the tariff on wool was 30 per cent. *ad valorem*, reduced in 1857 to 24 per cent. on all wools above the value of 12 cents per pound, and from the rest (that valued at 12 cents or less per pound) duties were removed wholly. Twelve-cent wool and under that was free. If the tariff, high or low, regulates prices, wool would have been lower then than it has been under the higher rates of duty imposed more recently. It is true, however, that our wool-growers made more money out of their wool during the years when the act of 1867 was in operation than they did under the acts of 1846 and 1857, even though prices ruled lower on a gold basis. How is that to be explained? It is true that the number of sheep greatly increased immediately after the passage of the act of 1867, and it is equally true that the grade of sheep was much improved, that better wool was grown, and that the weight of the fleece was soon doubled, so that farmers had better wool and twice as much of it from the same number of sheep.

It appears, further, that although duties were raised soon after the war and were maintained until 1883, when a slight reduction was made, the proportionate importation of wool continued about as it had been before the war. In 1839, the amount of wool imported was 21.7 per cent. of our total consumption; in 1849, it was 26.3 per cent.; in 1859, it was 30.4 per cent. Since the war, beginning with 1866, the proportion has ranged from 9.4 per cent. in 1866 to 44.9 per cent. in 1871, the average for the twenty-one years from 1866 to 1886 being 22.8 per cent. We have not the figures for any of the years before the war except the three above given—'39, '49, and '59, and the average for them is 26.1 per cent.

Under higher rates of duty the percentage of imported wool does not materially decrease, imports of manufactured wool do not decrease either absolutely or relatively, and yet, all kinds of woolen goods have fallen in price 20 to 25 per cent. on an average. The farmer's clothing costs him less under the higher tariff rates than it did under the lower tariff rates if he uses the same grade and quality. It is true, then, that whatever may be the effect of high tariff or low tariff on trade, American farmers did not lose anything by reason of the wool tariff of 1867; but, on the contrary, the sheep industry and the wool interest were greatly benefited. These things being true, it is impossible to figure out a gain to the farmers by removing the duties from foreign wool.

## FARMERS' INSTITUTE.

Special Correspondence Kansas Farmer:

A successful Farmers' Institute was held at Oak Grange Hall, Mission township, Shawnee county, the 19th and 20th inst.

The meeting was held under the auspices of the faculty of the Agricultural college at Manhattan. President Fairchild and Professors Popenoe and Lantz gave their presence and voice to make the meeting interesting and successful.

It will be entirely proper before giving a description of the meeting to mention the fact that Oak Grange is one of the oldest and strongest of the subordinate granges in the State. Through thick and thin its membership have held to the principles of the order, and their success in everything that pertains to intelligent management of farm matters and kindred interests is their best monument.

The reader will not be surprised at this when he knows that the gentlemen and ladies who compose it are among the most intelligent in the State, many of the names on its muster roll are as familiar as household words. Major and Mrs. Sims, Captain Thomas White, D. I. Furbeck, John Sims, Mr. Higgins, Mr. McCracken, H. R. Clark, and others, with their wives, are but a few of those who have during the better part of fifteen years been co-laborers in the good work of building up the interests of the farmers.

There is, perhaps, no country community that approaches nearer the ideal of farm life than this. The homes of the members are models; the farms are well kept, and the stock the best to be had. Here ample provision is made for the religious, mental, moral and social matters of the neighborhood. The hall in which the meetings are held is a tasty two-story frame building 24x50 feet, and is supplied with every convenience for holding public meetings. It is owned by the Grange, and they do not owe a cent on it. The grounds as well as the house are well kept. Shade trees are growing, sheds for the protection of teams have been erected. The hall is used for all purposes, and meetings of a religious and social order in which the entire community take part, besides the regular meetings of the order. But I must proceed to a description of the meeting and ask the readers to visit Oak Grange Hall on such an occasion as this, and they will see for themselves the most prosperous and harmonious community in the county.

On the assembling of the people on Thursday evening, Major Sims was chosen President. The excellent choir of the Grange rendered some very acceptable music and then the work of the meeting was begun. Mr. P. J. Spreng read a paper—"Essential Requisites to the Management of the Farm." It was well prepared and contained many sensible suggestions, the result of his experience and observation.

"Wayside Notes," by Prof. Lantz, was a model lecture, which delighted the audience by its beautiful and truthful statements. It was a pleasant feature, and the audience will always remember kindly the Professor.

Home talent was laid under frequent contribution in making up the program, and the next essay was by Mrs. Agnes Westwood on "The Model Farm Home." It was full of suggestion and truth, which indicated that the subject had occupied a prominent place in the mind and heart of the writer. With this paper the proceedings of the meeting was concluded.

## FRIDAY SESSIONS.

The bitter cold and the "northwester" that was blowing did not deter the people from coming. Major Sims soon

had the house to order and announced that there would be such a variation of the program as to allow those who might be required to leave before the evening session to present their subjects. Among these was Hon. J. B. McAfee, who was down for a paper on "Improved Stock." He came forward, and in a brief paper presented an array of facts that was almost astonishing, but the figures were not fanciful, they were the result of his own experience. The paper received much favorable comment.

Mr. H. R. Clark discussed in a clear and forcible manner "The Inter-State Commerce Law and the Western Farmer," and his conclusions were that the law is a good one and ought to remain in force, and that the commissioners should not have power to suspend any of its sections. This was freely discussed, and the sentiments of the meeting were quite generally on the side of the writer.

At the conclusion of the discussion a recess was taken for dinner, when the ladies of Oak Grange spread before the hungry multitude a bountiful dinner composed of all of the good things that the larder affords. This was a very important feature of the meeting.

After dinner Judge Peffer, editor of the KANSAS FARMER, delivered an address—"The Farmer and the Tariff." This is a subject on which not only farmers but the great majority of voters are ignorant. The subject was handled in an admirable manner and many of the difficulties that surround it removed.

President Fairchild took for the subject of a most pleasing and instructive talk—"The Farm a Machine," and though no one could guess how this could be made out before the address, yet when he took his seat we could understand what an intricate and wonderful machine we have to do with when we undertake to manage a farm.

Prof. Popenoe's address was characteristic of him. It revealed the danger to the orchard there is in the innocent looking little insect, and pointed out simple and effective remedies and gave interesting experiments in their destruction. His case of moths, beetles, and caterpillars, was a center of attraction and was useful in other ways than as illustrations of the lecture.

The ladies were on hand again with their bounteously filled baskets, and ample justice was done their contents, after which Mrs. M. C. Clark read a well prepared paper on "The Advantages of Farm Life." It called out some pleasant remarks from President Fairchild.

"The Law and the Management of Hogs," was a paper by Captain Thomas White. Captain White has been a pioneer in the breeding of improved stock in this line, and has made the subject a study for many years. He took it for granted that the best breeds were to be dealt with, and hence confined his paper to the feeding. It was full of good thought and was lucidly set forth.

"The Farmer and the Common Schools," was presented by Mrs. R. J. McCracken, one of the best and most experienced teachers in the county. She was thoroughly in sympathy with her subject and her thoughts abounded in fine sentiment.

Mr. Peter Heil and O. W. Sidwell read papers on the subject of sorghum. These called out considerable discussion and the value of this crop as a forage and as a probable sugar crop was discussed. The sentiment of the meeting was that the price offered for cane for sugar-making is too low.

D. W. White presented an extract from a leading journal on the Presi-

dent's message and the wool industry, and the inconsistencies of the document were shown up to the disadvantage of the Chief Executive.

Major Sims read an admirable paper entitled "Tame Grasses and Their Culture." This was one of the most practical papers that the farmers of this county have been permitted to listen to.

The Institute passed resolutions of thanks to the faculty of the Agricultural college for their presence and words of cheer and instruction, to Captain White for originating the Institute, and to the ladies for their hospitality. Thus closed a most successful and pleasant gathering of the farmers of Mission township.

P. S.—Some of the papers read at this Institute will be printed in the KANSAS FARMER SOON.—EDITOR.

## AN OLD MAN'S ADVICE.

An old farmer who is now passing through the 67th winter sends us a list of eighteen names—subscribers to the KANSAS FARMER, and says he works for the good of the people in this matter, for he believes the paper is worth a great deal more to every farmer than the little it costs. He thinks that if some men would "chew less tobacco" and apply the difference to subscription for the KANSAS FARMER, they would profit greatly by the change. He asks us to urge all subscribers to renew and help swell the list for 1888. He says: "Tell them kindly they had better try it one year more; times will be better."

Our venerable friend has our thanks for his good-will and for his substantial encouragement. Eighteen subscribers from one old man. What would the KANSAS FARMER be by the first day of next May, (when it will be twenty-five years old) if every subscriber of 1887 had done as much for it as this man who was born ten years before there was a railway train run in this country. Give us a circulation of forty thousand in Kansas and we can get anything from the State Legislature or from Congress which the farmers of Kansas need in the way of legislation.

## Galloway and Aberdeen-Angus.

EDITOR KANSAS FARMER:—I am much pleased with your impartial and carefully-prepared editorial in your issue of January 19 regarding the Angus and the Galloway cattle. The authorities you quote, with one exception, give to both breeds a standing separate and distinct from each other, and I believe this is correct. It is true that both the Angus and the Galloway used one herd book in early times, but this was a matter of convenience, and each breed was kept distinct, the Galloways being marked with a star (\*), and no cross-bred animal was ever recognized as entitled to registry. The authorities quoted also sustain my position that the Galloway breeders claim extreme hardness for their breed; that they are in a true state of nature. The Angus does not claim this. It claims to be an improved breed, the same as the Her-fords and Short-horns; and my understanding of "improvement" is that the aim is to secure an animal which, with reasonable care will, in the shortest time, make the largest amount of meat of the best quality at the smallest outlay of feed—in other words, that will "do the most good" with its feed in the shortest possible time. This the Angus does, in my opinion, better than any other breed. As to the improvement of the "Angus cattle" (and by that term I simply mean "Americanized" the proper name of the breed—the Polled Aberdeen-Angus cattle) by Short-horn blood, I wish simply to add this: The Short-horns were the first breed to be improved in the hands of careful breeders and the improvement was so marked that other breeds were compelled to follow a like course or be crowded out, and of course modeled to a greater or less extent after the only pattern then before them—not by breeding to Short-horns, but by careful selections in their own breeds.

I have repeatedly heard Short-horn men claim that the Angus cattle owed their excellence to Short-horn blood. They could not deny the merit, but wanted the credit for their own breed. A short time ago I had occasion to visit England, and having some two weeks leisure I determined to visit Scotland and learn the truth from first sources; for if the breed really was indebted to the Short-horns it surely could not owe a better debt. It was my privilege to

visit Thomas Ferguson, of Knochtry, who got the foundation for his present herd of cattle from William Watson in 1835, being for twenty-five years a neighbor of Mr. Watson, and who has been breeding "Doddies" for over fifty years, patronizing McCombie, of Tillfour, for sires to breed to the Watson females. Mr. Ferguson assured me positively that neither Watson, of Kellor, nor McCombie, of Tillfour, would ever allow a bull of any other breed but the Aberdeen-Angus on the same farms with their pure-bred females, although each handled large numbers of cattle of all kinds in the way of business. At Ballindalloch, in the north, I heard the same thing from Sir George Macpherson Grant, that the breed was improved and was still being improved by judicious selection within its own proper limits; and Grant of Adria, Robertson of Aberlour, Wilken of Waterside, and others, all gave me the same statements. In England, Clement Stevenson, who has again this past year swept the championship prizes with an Angus Doddie, both at Birmingham and Smithfield, gave me the same information. They knew I was a breeder of the Doddies and knew that I wanted the true inwardness so as to be able to protect myself from making any blunders in advancing the claims of the Angus. It was a case where concealment would only result in defeat, and I believe there not only was no concealment, but that there is nothing to conceal in regard to the early breeding of the Angus; that the "Scotties" who were handling the Doddies were as "canny" as their English brothers in the land of the Durhams and builded wholly with their own material a breed which to-day stands in the foremost rank of beef-producing cattle. Both the English and the Scotch had the same result in view: each followed about the same course, and, leaving out of consideration the accidentals of climate, color and lack of horns, it is not strange that the two breeds should resemble each other in the main characteristics, and that without recourse of one to the other for help.

JOHN S. GOODWIN.

## Inquiries Answered.

MAKING SUGAR.—Please give me a good receipt for making sugar from sorghum cane; also a good thing to clean or purify molasses.

—The best thing we can do is to ask our correspondent to study the method pursued at Fort Scott, as published in the KANSAS FARMER. There is no certainty about obtaining sugar from sorghum cane under the old-fashioned way of boiling the juice. Good sirup may be made out of good cane well ripened every time, but sugar may or it may not come. The best clarifying substance we ever used in such cases is lime water. Strain the juice well before boiling, and mix with it a small per cent. of clear lime water. Skim frequently while boiling. The cane should be worked up immediately after cutting. Great care is required to prevent scorching the sirup on the bottom of the kettle or pan.

THE SOUTHERN PEA.—What do you know about the Southern pea as a forage plant for Kansas? Will it do well in this highland part of Kansas? How does it compare with sorghum for cattle? Is it fed with pea in straw or must it be threshed and the pea ground? How should it be planted and when?

—We have had no experience with the Southern pea. The common field pea is an excellent forage plant—about equal to clover, and we do not know of any good reason why that would not do well in Kansas. The seed is drilled in at the rate of about two and a half bushels per acre. The ground must be in good condition, and the seeding may be done in the spring as soon as the ground is in condition to work. Who knows anything about the Southern pea?

APPLE TREES.—As I want to plant a small orchard, or rather an addition to my orchard, and not knowing exactly what to plant, I concluded to turn to the KANSAS FARMER for advice, knowing that practical fruit-growers both edit and read your paper. The land I want to plant is upland prairie, a somewhat sandy loam of about eighteen inches depth underlaid by a clayey subsoil. The plot is sheltered on the south and east by a timber belt, on the west is a young orchard, on the north is exposed. The land has a slight southern slope. I want to plant it to winter apples and but one or two varieties. Ben Davis excluded. Would like to plant Willow Twig if the tree is very hardy and profitable. Please advise me which are the hardest and most profitable varieties. As the thermometer on the morning of January 15 registered 38 deg. below zero, I am strongly impressed with the idea that it is useless to plant any trees but the hardest.—(F. S., Milo, Lincoln Co., Kas.)

—The State Horticultural Society recommends the following in the order named for the northern district of Kansas, including Lincoln county: Winesap, Ben Davis, Rawle's Genet, Jonathan, Missouri Pippin, Willow Twig, White Winter Pearmain, Rome Beauty, Smith's Cider, Gilpin. The last two winters have been hard on the Winesap in some localities.

## Topeka Weather Report.

Sergeant T. B. Jennings, of the Signal Service, furnishes the KANSAS FARMER weekly with detailed weather reports. We make an abstract for publication and file the copy for reference, should we ever need details.

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

Temperature.—Highest at 2 p. m., 21° on Wednesday the 18th; lowest at same hour, 5° below zero, Friday the 20th. Highest recorded during the week, 30° on Thursday the 19th; lowest, 20 below on Sunday the 15th.

Rainfall.—Traces of snow the 17th and 20th.

## Horticulture.

### THE STATE HORTICULTURAL MEETING.

Special Correspondence Kansas Farmer.  
(Continued from last week.)

The evening meeting convened at the usual hour on Wednesday, December 14, with Mr. Martin in the chair. The report of the committee on orchards was taken up at this juncture, and an excellent report was made by George Olivant, of Conway, and J. W. Robison, of Towanda, both of which may appear at an early date in the columns of this paper.

The following discussion took place after the foregoing reports were made:

Mr. Fulcomer, of Belleville: I prefer a northeast slope, and lay off the ground by plowing a deep furrow where each row of trees are to stand. With a hoe prepare the place for tree, placing the mellow rich earth at the bottom.

A. Willis, of Ottawa: Some parts of the report are not practical. It is impossible for nurserymen to become personally acquainted with all their customers.

J. W. Robison, of Towanda: It is best for planters to get their trees from nurseries near by if one can be found that is reliable. It is not to be supposed that all nurserymen are personally acquainted with their patrons, but that each nursery should have a known reputation for square dealing.

J. D. Jacobus, of Marion: Almost every county has one or more nurseries, prepared to furnish home demands.

J. M. Shepherd, of Abilene: When I selected my farm I did so with a view to securing a good site for an orchard. My orchard is planted on a northwest slope, and this year I gathered a good crop of apples, while many of my neighbors had scarcely any. I would advise communities to organize—consolidate their orders, and send an agent to the nursery to purchase.

George Olivant, of Conway: Some planters will not be satisfied with varieties suited to Kansas, and no argument will change their prejudices. Some planters are careless, and from it meet with failures and charge the cause on to nurserymen.

Wm. Cutter, of Junction City: It is an old saying that "an honest man is the noblest work of God." Honesty has spoiled many orchards. The honest nurseryman sells to the planter just what he calls for, and in some instances what he knows is not the best to plant. But the planter thinks he knows, and so orders, and does not discover his ignorance until later on. If the selection had been left to the nurseryman the result would have been more pleasing.

The report of the committee on geology and soils, by Hon. L. A. Simmons, of Wellington, was of great value, and its length only keeps us from giving it place in the KANSAS FARMER. Adjourned to 8 a. m., December 15, 1887.

HORACE.

(To be continued.)

#### Current Culture.

EDITOR KANSAS FARMER:—One of your correspondents asks if red currants succeed in Kansas, and by what means they are made most successful.

With me they have succeeded admirably. I have the Red Dutch variety. They are planted in rows east and west. On the south side of the rows, about eighteen inches from the currants, I have set posts one rod apart and strung three wires, the top one being five feet high. Beneath the bottom wire, every four feet, I have planted cuttings of woodbine, or Virginia creeper, which grows canes from ten to twelve feet long in a season, and are covered with

heavy green foliage, making a good protection from the sun, and after the second year affords good protection from the warm winds. The vine is perfectly hardy, and should be lightly pruned each fall or winter. Deriving most of its nourishment from the atmosphere, by absorption through the leaves, it does not rob the currant of its needful moisture below. Keep the laterals carefully trained upon the wires, mulch your currant bushes in the fall, and properly prune them, and you are as sure to have a crop of currants as you are of sand burs or jimson weed. Woodbine is easily obtained—in fact, is indigenous to many parts of Kansas—and readily propagated by cutting.

Interest in fruit-growing is rapidly increasing in this county, as year after year demonstrates its success. One river bottom plantation of sixty-five acres will be planted to small fruits in the spring. Am pleased to see the FARMER devoting more attention to this important Kansas industry.

A. L. SEARS.

Beloit, Mitchell Co., Kas.

### ORCHARD CULTURE, OR HOW TO GROW A PRODUCTIVE ORCHARD.

Paper read by J. W. Robison, before the State Horticultural Society, at the December meeting, 1887.

To grow an orchard profitably requires an eligible site and a suitable soil. While some differ as to the desirability of elevated or lower lands, and shelter or exposed sites, it is no longer a question in dispute that an orchard should be grown on well-drained land. Wet feet is no more conducive to health in an orchard than in the human family, and it should be guarded against in both. In a soil saturated with water, a tree in a windy country will be liable to whip around and get loose at the root and assume a leaning posture to the northward, exposing the south side of trunk to the attacks of the flat-headed borer, one of the very injurious insects to the Kansas fruit-grower.

#### SELECTION OF TREES AND VARIETIES.

The planter should carefully consider this question, keeping in view the prospective distance to market, whether the market is likely to be a local one or to require long shipment, or perhaps an export market. A well-grown, stocky Kansas tree of two years old is a suitable age, and if grown near where it is to be planted by a known, reliable grower, all the better. Trees should be bought of reliable growers only, and not planted if known to have passed through the hands of strangers or unreliable known persons who might have an interest in labeling cheap trees with labels belonging to trees of higher price and more difficult to obtain. On the selection of trees and varieties will largely depend the profit or loss of an orchard. Orchards are often seen in which certain rows are loaded with bushels of fine fruit, while other rows of like age and of the same culture, are conspicuous only by the entire absence of fruit, or only a few specimens to be seen. If grown for a distant market, the varieties most largely planted should be of kinds hardy, productive, medium to large in size, high colored, firm in texture, and fair to good in keeping qualities. The list need not be a long one, but it should include some summer and fall varieties. To best decide what these shall be, a careful investigation and inquiry in and near the place of planting should be made. Few varieties do well on all the varied soils of a single county, much less of an entire State; some kinds thriving and producing best on rich alluvial soil, such as our richest uplands and the best bottom lands. There they find a congenial home, and they richly repay for

their care in abundance and fine quality of their fruit. Some of these kinds would fail on higher lands of a different soil, where another variety would do well. The kinds most likely to succeed on upland or lands of a clayey nature, are often those that would prove to be tardy or sparse bearers on the richer low lands; and again, the varieties inclined to overbear and produce fruit of under size on higher and thinner land, may be found to thrive finely on the richer lands. Much of the profit of the future orchard will depend on the varieties planted, and valuable information on this subject may be found in the voted list of the Kansas Horticultural Society as published from year to year. This list is not published as absolutely perfect for all kinds of soil, but it can be studied with great profit in making out a list to plant.

A family orchard should perhaps contain a greater number of varieties. As it is not planted so much as a matter of profit in dollars and cents as to fill a need of every family living on a farm, it should contain varieties ripening from the beginning to the end of the season, sweet, sour, and sub-acid. Varieties too tender to bear long shipment and these too tardy or sparse bearers to pay in the commercial orchard, may be grown on account of their high or peculiar qualities desired by the grower; but in no case should the family orchard be without a goodly number of the standard hardy and productive varieties grown in the commercial orchard.

#### TIME TO PROCURE THE TREES.

Late in the fall after the trees have shed most of their leaves of their own accord is probably the best time to procure them, and to pit them in a good dry place, covering both roots and branches with good mellow earth. See that the earth fills all spaces in and about the roots; allow no water to stand about the trees, nor any trash or litter that might be a harbor for mice, rats or gophers, for they will do serious injury to the trees if they find a harbor. They should be looked after occasionally to see no harm is being done.

#### PLANTING.

The ground should be plowed thoroughly and deep in the fall or winter, so it may be clean and mellow to set the trees in. Stakes should be set from one and a half to two rods apart for apples, and about half that distance for peach, plum, and pears. It is necessary to have these stakes in line to give the trees in rows a symmetrical appearance. When ready to dig the holes, the man should provide himself with a small board in the shape of a lath or fence picket; cut a notch in one side midway from the ends, also a notch in each end; place this planting board with notch in its middle against the stake; stick a small stake in notches in ends of board; take up board and center stake; dig hole, and when ready to plant tree, place it in hole, drop the board back in place with end notches to stakes; the tree now can be placed in middle notch and set, and it will be exactly where the original stake stood. This will save time in setting, as it requires no sighting to get trees in line. The holes should be of ample size to receive the roots spread around as evenly as possible, and tree set slightly deeper than it grew in nursery. The earth should be well worked in among and about the roots and well pressed down firmly with the foot, but should not be filled up quite to the level of surrounding ground. This will secure better moisture about the roots and more favorable conditions to growth than if filled up to or above the ground level. The young tree should be set leaning toward the one o'clock sun at an angle

of thirty or forty degrees from a perpendicular. This position is desirable, especially to accomplish two purposes: First, to prevent sun-scald and a too congenial home for the flat-headed borer; and secondly, to more evenly balance the future top of tree, as our prevailing wind from the southwest carries the tree and inclines the top to grow to the northeastward. The tendency of growth in this direction can in part be remedied by judicious pruning and shortening in of growth on north side; but in no case should the branches on southwest side be cut away so as to expose trunk of tree, but should be left to shade the trunk and even up the balance of head of tree. A single stem or trunk of tree two to three feet in height should be encouraged so as to be convenient to wrap or wash to prevent mice and rabbits from gnawing. The young trees will require to be wrapped or whitewashed with some mixture offensive to them for eight or ten years. A mixture of a bushel of slacked lime, one or two pounds of copperas, and two pounds of glue, put on with a brush, is probably as effectual as any. Each should be dissolved in water and afterward mixed, and thinned with water to a consistency of whitewash when applied.

The after-culture of an orchard need not differ materially from any other tilled crop, such as potatoes, beans or corn. It should be thorough and clean, and especially so near the young trees, and should not be continued later in the summer than is necessary to keep the weeds in subjection. A corn crop is probably as well in an orchard as any, but the hills of corn should not grow so near the young tree as to shade it. Most trees require the full benefit of the sun and dew to maintain a healthful and vigorous growth.

The after-care of an orchard will mainly consist in seeing it has clean culture, protection from mice and rabbits; destroying round-headed borers in the roots and the flat-headed fellows in the trunks, and seeing that the canker worms and caterpillars do not too seriously injure the foliage; and during the growing season frequently clipping in or cutting off a too rampant, superfluous, or unnecessary limb, always having in view a well-balanced top of a few years hence.

An occasional spraying with liquid poison by force pump, applied soon after blooming time, both before and after the bearing stage of the orchard, is desirable. In the large commercial orchards the spraying with poison will be found to be absolutely necessary to abundant crops of fair fruit, free from blemishes by insects and the insects themselves.

In the above remarks nothing new is claimed, only the most practical methods demonstrated by past experience. Eternal vigilance, and lots of it, will be found to be the price of a good, profitable orchard.

#### Blessed is the Man That Planteth Many Trees.

EDITOR KANSAS FARMER:—The subject of tree-planting has been to me, and still is, of deep and increasing interest. There are thousands of newcomers in our State who are asking the question, "What kind of trees, both forest and fruit, to plant, and when and how to plant to be the most successful?"

These are questions, judging from my own experience when first coming to Kansas over fifteen years ago, will be among the first questions to claim our consideration. An intelligent solution can only be reached by long years of trial, or the results of some one else whose experiments, tests, and trials, through a series of years, has decided

which are the best kinds of both forest and fruit trees, the best methods and time of planting, cultivating, etc.

Of the two ways above indicated, every intelligent man would prefer to profit by the experience of others, and especially in regard to tree-planting is this true. Mistakes made here are frequently not known for years afterwards; hence, he who is planning to plant should obtain the most reliable information that is to be had; and if I could reach the ear with my voice, or his eye through the agency of my Faber, I should most certainly say take the KANSAS FARMER as being the most reliable, the most accessible and cheapest means by which, any one, be he a new or an old settler, may be the most successful, either in farming, stock-raising, or tree culture. He who fails to take advantage of the information that is given weekly through the columns of the FARMER is standing in his own light.

The annual destruction of our natural forests for railroad construction and lumber is tremendous, and unless something is done to check this wholesale destruction and to encourage the planting of artificial forests, it will only be a question of time until a large part of our country will be as barren as some of the older countries that passed through the same experience in the destruction of their forests. In some of our Eastern States where springs and creeks were once abundant, are now known and remembered as things of the past. Walnut lumber that I have known to sell for \$8 and \$10 per 1,000 feet is now worth in some of the Eastern markets \$200 per 1,000 feet, and scarce at that price. The time is coming, and it is not very far distant, when black walnut furniture will not be in the market, except at a high figure. Forest timber does not occupy the position it did before the era of railroads in the question of fuel. Then, unless coal could be had at local banks it could not be used for fuel; and if timber was scarce, like it is here in Kansas, no one could live in a country so situated. The building of railroads has changed this materially. The facilities afforded for the transportation of coal all over our country, making it possible for people to live in a country comparatively devoid of timber, similar to a large portion of our own State. Who were to blame for the condition of the coal trade I am unable to say; whether it was the fault of the railroads or coal dealers, or both, I do not know. Every farmer should take heed to the lesson taught by this winter's coal famine; and if he has not already done so, to plant trees for fuel and wind-breaks; not a few rows only, but several acres, so that in the future he may be independent of coal famines and their originators.

Contrast the farm home that is surrounded by beautiful groves of evergreen and forest trees, a nicely-kept orchard, shrubs, and rose bushes, with one that is too frequently seen, not a tree of any kind on it, barbed wire fence around the barnyard and feed lots. Pass such a place as this while a full-fledged northerner is in progress, the wind blowing at the rate of forty to sixty miles an hour, with the thermometer at or below zero, the owner of such a desolate place at the time attempting to feed his freezing stock, and the wind, as if to punish him for his negligence, slapping him against the wire fence, his hat leaving its

shallow resting place, darts across the barnyard striking the south line of fence, fluttering for a few moments, then loosened from the barbed wire it starts at railroad speed over the boundless, billowy prairie to return again perhaps when the wind changes, while the luckless owner trying to let go of the wire fence with which he collided, curses the country, and resolves to sell out and go back to his wife's folks. And that is what he ought to do, having no more thought or interest in his own comfort and welfare and that of the poor dumb brutes, whom the Devil by misplaced confidence confided to his care. The above scene is sufficient without adding the discomforts that the good wife and children must necessarily put up with under such adverse circumstances.

Now go with me to the next house, while this same blizzard is in full force. The owner of this place came to Kansas to stay; he has a nicely-arranged front yard seeded to blue grass, with shrubs and evergreens scattered here and there, forming a fine contrast to the snow that lies around between and beneath them, while the tall, symmetrical cedars seem to say as they sway to and fro by the force of the wind—"come and seek shelter behind the thick dense foliage of my swaying branches." Not far from the house is a fine orchard of apple, peach, plum, pear, cherry, and a fair selection of small fruits, grapes, etc. The whole farm is inclosed and fenced into a number of fields by hedge, forming in winter a fine wind-break, and in summer to any one who is in love with nature, the finest landscape scenery that an artist or any one else could wish to look at, when seen from the tower of a windmill. Good wind-break north of the barn and feed lots, his stock is not shivering behind the fence posts trying to get out of the wind; and as the owner throws over the feed to his stock you can hear him merrily whistling—"Over the hills and far away," while from the home of this humane and provident man the ringing laughter of merry children is heard, mingled with the voice of the happy and contented wife singing the "Sweet by and by." In passing a farm home like this out on these broad treeless prairies, you are led to exclaim mentally, if not orally, "Blessed is the man that planteth many trees."

G. W. BAILEY.

Wellington, Kas.

There is nothing more intolerable than headache; no derangement of the system which so unites one for social enjoyment or the most simple duties of life. If it comes every day at nearly the same time, you may safely charge it to malaria, and Shallenberger's Antidote will immediately relieve you. Don't allow prejudice to prolong your suffering. Get the medicine, and be cured.

Years ago it was predicted that some day the farmers would long for a return of the luxuriant blue-stem sod, which covered all of central Kansas at that time. Far-seeing agriculturists said that it would some day be reckoned among the most valuable farm crops if properly weeded, cut, and cured. That time is rapidly approaching. It is coming sooner than most of us expected it. It is almost here.—Prof. Walters.

#### 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. NOYES, 149 Power's Block, Rochester, N. Y.

## The Poultry Yard.

### POULTRY FARMING.

By W. H. Rudd, of the Orono Egg Farm.  
Written for the Poultry World.

(Continued from last week.)

The only difficulty in answering the second part of your question, "What breed is the best," is, if we name one as, in our opinion the best, we directly say that a dozen or twenty other kinds carefully bred all over the country are not as good, which is discourteous to our brother breeders. We can therefore only say that after twelve years of carefully experimenting and noting results, we have, as already intimated, selected the "Plymouth Rock" as the best adapted to our requirements, and keep no other; but you must select the breed which suits you the best. Your income at first is to be derived from eggs and poultry. You must raise your own pullets or buy somebody's leavings, which will be your ruin, and raising pullets involves also chickens—but whatever breed you select, be sure it be a good laying strain of that breed—a strain which has been carefully bred for years with this particular quality in view, or you make a fatal mistake at the outset. As this idea is the foundation and corner stone of success, and ignoring it is the rock on which you are most in danger of shipwreck, we wish to dwell upon it at some length. We purchase a heifer whose mother was a large milker, and came from a family of deep milkers, because we suppose she will inherit these qualities, and usually are not disappointed. We pay \$50 to \$100 for the service of a stallion, because we expect the colt will inherit the valuable qualities of its sire; but no less certain is it that a carefully bred strain of prolific laying fowls will transmit these laying qualities of their progeny.

The skillful and successful breeder who makes market eggs his specialty, breeds year after year from his earliest laying and best laying fowls, and by persisting in this course, establishes a strain of layers far superior to the general average of ordinary flocks of the same breed he is working upon, but which have not been thus carefully bred; and for laying purposes as well as for early maturing, we should infinitely prefer an inferior penciled fock bred, as above stated, from a long line of reliable ancestry, to a flock with a much higher average score, but of whose pedigree we knew nothing. Do not understand us as undervaluing the "points of excellence" in fowls. We are constantly striving to improve and perfect our poultry, and are aiming for the highest average score which can possibly be attained, but with this we are also aiming to combine every useful quality, that our fowls shall be of some value beside to look at. Having selected your breed, the next step is to "proceed to business." The best season of the year to commence is early in the year while spring is yet before you. Several courses might be pursued, but to get under full headway and secure an income by the next fall, and with a limited capital, you must study economy, and be your own judge as to what constitutes economy. To purchase enough good breeding fowls for your purpose, would be difficult very early in the year, except at a greater outlay than you perhaps feel able to make. Let us suggest another plan. You can by looking over the advertisements in the Poultry Yard, probably find some large breeder who keeps only thoroughbred poultry of the kind you have chosen, and who, after having selected and separated his breeding stock, markets the eggs from his flocks at large, and will doubtless sell you eggs at a comparatively very low figure, which, for your purpose—that of raising good laying pullets—are just as good in every respect, as from his best fowls at \$1.50 or \$2 per setting. Further, as his crowsers are, of course, all of them high-class birds, you are likely, and in fact almost certain to get

some handsome chickens in spite of his culling, so that, if you wish, you can gradually work into "fancy stock." We do not wish to anticipate the subject of incubation at this point; but if you have not much time to lose, you should try to get out what chickens you can, during March and April, to obtain good prices for early broilers, and secure laying pullets in the fall, when eggs are scarce and high—although if you decide on some quick maturing breed, they will do very well if hatched as late as the first of June. We will therefore say, you can no doubt buy setting hens from neighbors for \$1 each, and after they have weaned their chickens, can sell them again, for two-thirds their cost, or more, which will make your expense of hatching a small affair. You can hardly make an important mistake in setting your hens. A barrel sawed in the middle will give you two tubs; one will, of course, be bottomless, but no worse on that account, and you cannot easily find anything better or cheaper or more readily procured to make nests in, as they allow ample breathing room for the hen after being securely covered up, as hens thus set should be, and taken off every second day, whether they wish or not.

Another good way is to make a nest in a barrel placed on the ground in a sheltered locality, or in a shed or unused corner of the barn, and securely blocked to prevent rolling, having a coop in front, to which later in the season, the hen may have free access to obtain food and drink at pleasure, but in cold weather, especially if out of doors, a board cover will be required in front of barrel, and held in place by the coop, as a protection from cold and storm. Keep the hens on nest eggs until satisfied they mean business, before giving them valuable eggs. It is a poor plan to set only one hen at once, as she will probably hatch too small a family to waste her time in raising. If you have seven hens, for instance, and hatch sixty chickens, it is not very bad for early March. You can give the chickens to five hens, and place fresh eggs under the other two hens, renewing their nests a little, and by that time you may have found three or four more setting hens to set with them and so on. We should not set a hen more than six weeks, as she will lose vitality; nor would we give chickens to a hen which had set much over three weeks, not only for the same reason, but because she will be likely to wean them too soon. Feed your setting hens on nothing but corn and water to guard against loosening of the bowels, and consequent destruction of eggs. We would advise that you aim for 200 pullets next fall, and this, as before remarked, implies aiming also for 400 chickens this spring, and after deducting losses and crowsers, and doing some necessary culling in the fall, you will probably not have many, if any, over 200 pullets left. If a good proportion of your chickens are hatched early, the sale of crowsers for broilers, etc., will very largely aid in paying the expense of your pullets, and we have often in this way raised pullets to maturity for considerably less than nothing; but as ready money is required to do even this, we would suggest appropriating say \$200, for buying your eggs and raising your chickens; for the larger they grow, the heavier drafts they of course make on the grain bin, and consequently on the wallet. But if you find in November that you have 200 laying pullets, and that your \$200 or a large portion of it has returned to you, it will do you no harm and even if they have cost you the whole of it, they are well worth it at that season of the year, with eggs at 40 cents and upwards per dozen. If you have many over 200 we would cull down to about that number and not cramp yourself with too heavy a load. Your necessary buildings we should call \$200 more; for although you may build them for \$100, or even less, we should in our own case prefer to have them more expensive, and think the fowls will do better in them, while the extra convenience in caring for them is no small consideration. Your remaining \$100 we should receive for working capital, to enable you to operate to best advantage, such as buying your winter's grain in fall, etc., or a superior bird occasionally, if opportunity presents.

## Mustang Liniment

MEXICAN MUSTANG LINIMENT applied vigorously to death throes, Wind Colic & Sore Backs!

## Mustang Liniment

MEXICAN MUSTANG LINIMENT, for MAN and BEAST. Greatest Curative discovery ever made.

## Mustang Liniment

MEXICAN MUSTANG LINIMENT cures all ailments of HORSES, MULES and CATTLE. Outward treatment.

## Mustang Liniment

MEXICAN MUSTANG LINIMENT should always be kept in HOUSE, STABLE and FACTORY. Saves loss!

## THE MARKETS.

By Telegraph, January 23, 1898.

## LIVE STOCK MARKETS.

## St. Louis.

**CATTLE**—Receipts 2,300, shipments 800. Market steady. Choice heavy native steers \$4 40a 52c fair to good native steers \$1 90a 4 50, medium to choice butchers steers \$1 15a 4 10, fair to good stockers and feeders \$2 00a 3 25, ordinary to good range \$2 20a 4 25.

**HOGS**—Receipts 3,700, shipments 700. Market active and stronger. Choice heavy and butchers selections \$5 40a 5 80, medium to prime packing \$5 10a 5 45, ordinary to good light grades \$4 90a 5 15.

**SHEEP**—Receipts 700, shipments 400. Market strong. Fair to choice \$3 60a 5 20.

## Chicago.

The Drovers' Journal reports:

**CATTLE**—Receipts 12,000, shipments 4,000. Market dull and generally lower. Steers \$3 00a 5 10; stockers and feeders, \$2 00a 3 40; cows, bulls and mixed, \$1 75a 3 15; Texas cattle, \$1 80a 3 00.

**HOGS**—Receipts 15,000, shipments 6,000. Market strong and 5c higher. Mixed, \$5 10a 5 50; heavy, \$5 40a 5 75; light, \$4 85a 5 35; skips, \$3 50a 4 75.

**SHEEP**—Receipts 500, shipments 1,000. Market steady. Natives, \$3 00a 5 50; Western, \$1 50a 5 10; Texans, \$2 00a 4 00; lambs, \$5 00a 5 25.

## Kansas City.

**CATTLE**—Receipts since Saturday 1,178. Market steady to weak for best quality, while common was weak to 10c lower. Trading was slow. Choice cows steady; common 5a 10c lower. Stockers and feeding steers firm, ranged \$3 60a 4 20 for shipping and butcher steers.

**HOGS**—Receipts since Saturday 2,184. Market strong and active with values 5a 10c higher. Extreme range of sales \$3 75a 5 45; bulk at \$5 15 and above.

**SHEEP**—Receipts since Saturday 290. Market strong and active. Sales at \$2 25a 4 05.

## PRODUCE MARKETS.

## Chicago.

Cash quotations were as follows:

**FLOUR**—Dull and unchanged.

**WHEAT**—No. 2 spring, 76a 77c; No. 3 spring, 73a 76c; No. 2 red, 83a 84c.

**CORN**—No. 2, 48c.

**OATS**—No. 2, 30a 31c.

**RYE**—No. 2, 63c.

**BARLEY**—No. 2, 84a 85c.

**FLAXSEED**—No. 1, \$1 40a 1 44.

**TIMOTHY**—Prime, \$2 46.

**PORK**—\$18 85a 13 90.

**LARD**—\$7 35.

**BUTTER**—Steady, promising increased activity. Creamery, 22a 23c; dairy, 17a 25c.

**EGGS**—21a 23c.

## Kansas City.

**WHEAT**—Receipts at regular elevators since last report, 4,000 bushels; withdrawals, 3,000 bushels, leaving stock in store as reported to the Board of Trade to-day, 350,888 bushels. There was a quiet and merely nominal market to-day on 'change, with no sales on the call of any of the different grades, either for cash or future delivery. No. 2 red winter wheat, none on the market. No. 2 soft winter, cash, no bids, 81c asked. On track by sample: No. 2 soft, cash, 81c.

**CORN**—Receipts at regular elevators since last report, 1,515 bushels; withdrawals, 1,515 bushels, leaving stock in store as reported to the Board of Trade to-day, 141,857 bushels. The market on 'change to-day was weak with no sales on the call except No. 2 May at 40c against 47c bid Saturday when 47c was asked. On track by sample: No. 2 cash, 44c.

**OATS**—No. 2 cash, 30c bid special, no offerings. On track by sample: No. 2 mixed, cash, 31c; No. 2 white, cash, 32c.

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

**HAY**—Receipts 18 cars. Strictly fancy is firm at \$10 00 for small baled; large baled, \$9 50; wire-bound 50c less; medium and poor stock steady.

**OIL-CAKE**—Per 100 lbs. sacked, f. o. b., \$1 25; \$1 00 per 1,000 lbs.; \$30 00 per ton; car lots, \$19 00 per ton.

**SEEDS**—We quote: Flaxseed, \$1 25 per bu. on a basis of pure; castor beans, \$1 00 for prime.

**FLOUR**—Market fairly active and firm. Sales: 3 cars by sample at 95c. Quotations are for unestablished brands in car lots, per 44 bbl. in sacks, as follows: XX, 90c; XXX, \$1 00; family, \$1 15a 1 25; choice, \$1 50a 1 60; fancy, \$1 65a 1 70; extra fancy, \$1 75a 1 80; patent, \$3 05a 3 10; rye, \$1 40a 1 60. From city mills, 25c higher.

**BUTTER**—Receipts of roll light and market steady. We quote: Creamery, fancy, 27c; good, 22a 25c; fine dairy in single package lots, 16a 20c; storepacked, do., 14a 16c for choice; poor and low grade, 9a 10c; roll, good to choice 14a 17c.

**CHEESE**—We quote: Full cream, twins, 13c; full cream, Young America, 13c.

**EGGS**—Receipts light and market firm, at 20c per dozen for fresh.

**PROVISIONS**—Following quotations are for round lots, job lots usually 1/2c higher: hams, 11c; breakfast bacon, 11c; dried beef, 9c; dry salt should be \$1 05; long clear, \$7 40; clear, \$7 50; short clear, \$7 75; smoked should be \$8 50; long clear, \$8 15; clear, \$8 25; short clear, \$8 50; pork, \$14 00; lard, \$6 37c.

## Topeka Markets.

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

Butter, per lb. .... \$ 20a 25c  
Eggs (fresh) per doz. .... 26c  
Beans, white navy, H. P. .... per bus 2 60  
Sweet potatoes. .... 60a 75c  
Apples. .... 1 00a 1 20  
Potatoes. .... 60a 90c  
Onions. .... 1 00a 1 50  
Beets. .... 40a  
Turnips. .... 25a 30c

## J. L. STRANAHAN,

## Broom Corn!

Commission. Liberal advances on consignments.  
Reference.—Hide & Leather National Bank, Chicago.  
194 Kinzie street, CHICAGO, ILL.

HUGH E. THOMPSON,  
BROOMCORN

Commission and dealer in Broom-Makers' Supplies. Reference.—National Bank of Commerce.  
1412 & 1414 Liberty St., Kansas City, Mo.

## 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.

## J. STURGIS, M. D.,

Breeder of first-class PLYMOUTH ROCK and LIGHT BRAHMA Chickens, Premium PEKIN DUCKS and Mammoth BRONZE TURKEYS.

## PERRIN, MISSOURI.

Correspondence and inspection invited.  
(Mention KANSAS FARMER.)

The Fanciers' Review,  
CHATHAM, N. Y.

A 16-page, 64-column poultry journal. Only 25 cents a year! The Fancier's paper! The Farmer's paper! Pithy and practical! Send for sample copy. Stamps taken.

## START RIGHT!

If you want to make a success with crops trees and grasses hereafter, get one of

## SWANN'S BOOKS.

It will not fail you. Address, enclosing \$1.00,  
NEIL WILKIE'S BANK,  
Douglass, Butler Co., Kansas.

## Kansas Box and Basket Co.,

MANUFACTURERS OF

Grape Baskets, Egg Cases, Berry Boxes and Crates, Peach Boxes, Tree Wrappers, Veneering, and Packing Boxes.

(Telephone 1,033.) WYANDOTTE, KAS.

## STOCK FARM FOR SALE

Stock Farm of 800 acres, 3 1/2 miles from Railroad Station, 10 miles from center of Winfield, the county seat of Cowley county, Kansas well timbered and watered. Three good pastures, fenced, with timber and water in each; 120 acres under cultivation—3 fields; fenced. For particulars address  
PRYOR & YOUNG,  
General Real Estate Agents, Winfield, Kas.

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

## STOCK CAKE &amp; 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 Preventive Against Pleuro-Pneumonia in Cattle. Price 15 cents per cake.

Dr. S. P. Cregar, 1464 Wabash Ave., Chicago

\$25! PER ACRE! \$25!

## TOO CHEAP

I WILL SELL OR TRADE

## 80 ACRES OF NICE LAND

adjoining the town of Wilnot, Kas. Will trade for Cattle or Sheep. Farm well improved all under fence, in good condition.

Also a nice stock of

## HARDWARE and LUMBER.

Goods all new and in splendid condition. Will sell or trade as above mentioned.  
Address Box 9, Wilnot, Kas.

## PEARCE'S IMPROVED CAHOON

BROAD-CAST SEED SOWER

Sows all kinds of Grain and GRASS SEED. 4 acres Wheat sown by walking 1 mile. Will do 5 times as much work as can be done by hand, and better work than by any other means. Sold in all parts of the world. Warranted to save their cost in less time than any other farm implement yet introduced. Price \$5.00. Send for circular.

GOODSELL CO., Sole Manuf'rs. ANTRIM, N. H.

FOR SALE BY  
L. M. RUMSEY MFG. CO., St. Louis.

## 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 27,700 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.

HAGEY & WILHELM,  
WOOL AND BROOMCORN  
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.

We do not speculate, but sell exclusively on commission.

Over 6,000,000 PEOPLE USE  
FERRY'S SEEDS

D.M. FERRY &amp; CO.

are admitted to be

The LARGEST

SEEDSMEN

in the world.

D.M. FERRY &amp; CO.'s

Illustrated, Descriptive Price

SEED

ANNUAL

For 1898

will be mailed

FREE OF ALL

application, and to

last season's custo-

mers without ordering it.

Invaluable to all. Every one

growing Garden, Field or Flower Seeds should send for

Address D. M. FERRY &amp; CO., Detroit, Mich.

BIG Extra Early Black Cap CARMAN. All

the best new and old sorts of plants and trees at

free prices for pedigree stock. Catalogue

free. Sale Bros. So. Glastonbury, Conn.

KY BLUE AND SEEDS

P. CARROLL, LEXINGTON, KY.

AND MORPHINE HABIT CURED

in 10 to 20 days. No pay, until cured. Address

DR. JAS. J. HOLDFORD, WILLIAMSBURG, VA.

UNNY SOUTH Good land, near the sea, cheap.

Fine climate, excellent markets.

Circulars free. E. C. Lindsay &amp; Co., Norfolk, Va.

Buys our DAISY HAWKINS, worth at retail \$25

Sent to examine and return at our ex-

pense. Catalogue free. CHICAGO HAWKINS CO.,

Wholesale Mfg., 375 Wabash Ave., Chicago, Ill.

WANT AGENTS for best BASH LOCK

ever invented. Excellent ventilator. Stops

rattling. Big pay. Sample &amp; terms to agents

15 25a SAFETY LOCK NO. 108 CANAL ST. NEW YORK

BREEDER'S LOWEST RATES ON ALL

(MANUAL FREE)

NEWSPAPER ADVERTISING OBTAINED THRO'

OUR AGENCY COMINGS BREARLEY Rockford Ill.

A GRAND GIFT. To introduce our won-

derful Self-operating

washing Machine we will GIVE ONE away in

every town. Beat in the World. No labor or

rubbing. SEN: FOR ONE to be

National Co., 23 Dey St., New York.

ORGANS &amp; SEWING MACHINES.

\$12.00 up. 30 styles. Sent on trial.

New and perfect. Warranted 5

years. Buy direct and save half.

Circular with 10,000 testimonials

Free. GEO. PAYNE &amp; CO.,

125 S. Clinton Street, Chicago, Ill.

NEW BUSINESS CENTERS.—The

building of rail-

roads in a new

and fertile country creates many new towns,

affording excellent business opportunities.

Particulars regarding such opportunities in

Montana, Minnesota and Dakota will be sent

upon application to C. H. WARREN, Gen.

Pass. Agt., St. Paul, Minn.

GUNS  
Single Breech Loaders, \$3.75, \$5.50 and  
\$11. Double, \$8, \$10.75, \$13.50 and up-  
wards. Fishing Tackle, Pocket Cutlery  
and General Sporting Goods. Send for 163-page Ill.  
Catalogue. CHARLES B. PROUTY & CO.,  
63 & 65 Washington Street, Chicago, Ill.

## AGENTS LOOK

and farmers with no experience make \$2.50 an hour during spare time. J. V. Kenyon, Glen Falls, N. Y., made \$18 one day, \$77.50 one week. So can you. Proofs and catalogue free.

J. E. SHEPARD & Co., Cincinnati, O.

## I CURE FITS!

When I say cure I do not mean merely to stop them for a time and then have them return again. I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life-long steady, I warrant my remedy to cure the worst cases. Edw. J. Root has failed in no reason for not now receiving a cure. Send at once for a treatise and a Free Bottle of my infallible remedy. Give Express and Post Office.

I. G. ROOT, M. C., 183 Pearl St. New York.

CHICHESTER'S ENGLISH  
PENNYROYAL

ORIGINAL ONLY GENUINE  
SAFE ALWAYS TO LADIES INDETERMINABLE  
RELIABLE NEVER FAIL

ENGLISH DIAMOND BRAND TAKEN OUT OF  
OR INCLUDE 4 PARTICULARS RETURN MAIL

CHICHESTER CHEMICAL CO. MADISON SQ. PHILA. PA.

UNSOLICITED WRITTEN TESTIMONIALS.

5,000 LADIES WHO HAVE USED THEM.

## TO WEAK MEN

Suffering from the effects of youthful errors, early decay, wasting weakness, lost manhood, etc., I will send a valuable treatise (sealed) containing full particulars for home cure. FREE of charge. A splendid medical work; should be read by every man who is nervous and debilitated. Address,  
Prof. F. C. FOWLER, Modus, Conn.

## ELY'S CATARRH

CREAM BALM

when applied into the

nostrils, will be ab-

sorbed, effectually

cleansing the head of

catarrhal virus, caus-

ing healthy secretions

it allays inflammation,

protects the membrane

of the nasal passages

from additional colds,

completely heals the

sores and restores

sense of taste and

smell.

Not a Liquid or Snuff

Try the Cure.

A particle is applied into each nostril and is agree-

able. Price 50 cents at Druggists; by mail, registered,

60 cts. ELY BROS., 285 Greenwich St., New York.

## 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, 1886, 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, 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 a stray, 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 JAN. 12, 1888.

##### Elk county—J. S. Johnson, clerk.

STEER—Taken up by E. C. Sanger, January 3, 1888, one steer, 3 years old, red, with some white on belly, flank and face, brand on left hip, and not distinguishable; valued at \$20.

##### Jackson county—E. E. Birkett, clerk.

STEER—Taken up by Nicholas Reddy, in Washington tp., November 15, 1887, one red 2-year-old steer, with white face, white under belly, brand on right hip, short tail, no other marks visible; valued at \$15.

##### Wyandotte county—Wm. E. Connelley, clk.

COW—Taken up by F. W. Dreger, in Shawnee tp., December 7, 1887, one cow, about 10 years old, red sides, back and belly white, tips of horns sawed off, and blind in right eye.

##### Allen county—R. W. Duffy, clerk.

COW—Taken up by W. T. Woods, in Carlyle tp., December 27, 1887, one red roan cow, 6 years old, clip off right ear, blind in left eye; valued at \$18.

#### FOR WEEK ENDING JAN. 19, 1888.

##### Lyon county—Roland Lakin, clerk.

STEER—Taken up by James W. Dickson, in Jackson tp., January 4, 1888, one dark red steer, a little white in face, on belly and end of tail, swallow fork or bit in right ear, small under-bit in same, branded with what seems to be two letters about three inches square on right hip, 1 year old; valued at \$12.00.

STEER—Taken up by William D. Owen, in Emporia tp., November 1, 1887, one light red steer, 3 years old, branded Mo. on right hip; valued at \$18.

STEER—By same, one red steer, 3 years old, white face, swallow-fork in left ear, under-bit in right ear; valued at \$12.

COW AND CALF—Taken up by Park Morse, in Emporia tp., December 7, 1887, one spotted cow, 7 years old, branded JV on left horn, under-bit in each ear, 6-months-old heifer calf at side; valued at \$18.

##### Stanton county—M. F. Banburg, clerk.

HEIFER—Taken up by L. H. Kreigh, in Stanton tp., (P. O. Johnson City), December 26, 1887, one red and white spotted 2-year-old heifer, branded W on left hip and side, ears under-sloped; valued at \$8.

8 HEIFERS—By same, three 1-year-old heifers, dark red and white spotted, crop off left ear and under-bit in right ear; valued at \$18.

2 CALVES—By same, two red 8-months-old heifer calves, (one has white in face), swallow-fork in left ear, crop off left ear, under-slope in right ear; valued at \$10.

##### Crawford county—J. C. Gove, clerk.

STEER—Taken up by D. J. Williams, in Sheridan tp., January 10, 1888, one white and red spotted yearling steer, crop ad split in left ear. (P. O. Farlington).

##### Montgomery county—G. W. Fulmer, clerk.

HORSE—Taken up by J. H. Hand, in Cherokee tp., one light iron-gray horse, about 10 years old, 14½ hands high, a cut in left ear about an inch and a half from tip, lame in left hind leg with large scar on inside of hock-joint, collar marks.

##### Labette county—W. J. Millikin, clerk.

COLT—Taken up by L. C. Kivett, in Howard tp., December 12, 1887, one iron-gray horse colt, 2 years old, W on left shoulder; valued at \$15.

MARE—By same, one gray mare, about 10 years old, W on left shoulder, under-bit in each ear, about 14½ hands high; valued at \$25.

COLT—By same, one iron-gray mare colt, 8 years old, W on left shoulder.

##### Nemaha county—W. E. Young, clerk.

STEER—Taken up by James Nelli, in Adams tp., (P. O. Oneida), December 12, 1887, one calf or short yearling steer, black and white, no marks or brands; valued at \$12.

##### Allen county—R. W. Duffy, clerk.

BOAR—Taken up by W. D. Jewell, in Salem tp., November 19, 1887, one Poland-China boar, both fore feet white, left hind foot white, end of nose white, weight between 400 and 500 pounds.

##### Wichita county—H. A. Platt, clerk.

PONY—Taken up by W. L. Lane, (P. O. Leoti), December 18, 1887, one iron-gray horse pony, 54 inches high, three white feet and white face, branded J. H.; valued at \$25.

PONY—By same, one sorrel pony, two white feet and white face, 54 inches high, branded L. S.; valued at \$25.

##### Wyandotte county—Frank Mapes, clerk.

CALF—Taken up by John Brown, one bay calf, about 6 months old.

##### Coffey county—H. B. Cheney, clerk.

HEIFER—Taken up by M. H. Beard, in Spring Creek tp., one dark red-roan 2-year-old heifer, white belly, under half of right ear cut off, no other marks or brands; valued at \$12.50.

STEER—Taken up by W. S. Wheeler, in Liberty tp., one red yearling steer, indistinct brand on right hip; valued at \$12.

STEER—Taken up by A. H. Patterson, in Liberty tp., one red and white 1-year-old steer, no marks or brands; valued at \$18.

HORSE—Taken up by Chas. Proebsting, in Burlington tp., one sorrel horse, 9 years old, blaze face, thin tail, heavy mane, about 15½ hands high, no marks or brands; valued at \$25.

##### Chase county—J. J. Massey, clerk.

STEER—Taken up by James Martin, in Bazaar tp., (P. O. Matfield Green), December 10, 1887, one roan 1-year-old steer, branded GE on right hip; valued at \$12.

##### Bourbon county—J. R. Smith, clerk.

HEIFER—Taken up by C. A. McCollem, in Marion tp., December 23, 1887, one roan 2-year-old heifer with brindle neck, branded J on left side; valued at \$12.

PONY—Taken up by A. J. Kough, in Marion tp., (P. O. Matfield Green), December 23, 1887, one bay horse pony, about 10 years old, heavy-set, three white feet, white strip in forehead, no other marks or brands.

#### FOR WEEK ENDING JAN. 26, 1888.

##### Osage county—R. H. McClair, clerk.

COW—Taken up by Adam Groff, in Olivet tp., November 25, 1887, one 3-year-old red-roan cow, no marks or brands; valued at \$15.

COW AND CALF—Taken up by John Lewis, in Lincoln tp., December 21, 1887, one red and white spotted cow about 7 years old, (with red heifer calf), cross on right hip, left horn turns up, right horn turns down; valued at \$20.

STEER—Taken up by Benjamin Clark, in Junction tp., November 15, 1887, one 2-year-old red steer, slit in right ear; valued at \$12.

##### Republic county—H. O. Studley, clerk.

COW—Taken up by Thomas Cogswell, of Big Bend, January 11, 1888, one medium-sized red and white cow, 4 years old, no marks or brands; valued at \$15.

##### Finney county—O. V. Folsom, clerk.

MULE—Taken up by A. F. Lee, in Sherlock tp., (P. O. Deerfield, Kearney Co.), December 24, 1887, one brown mare mule, 14 hands high, white collar marks; valued at \$35.

##### Wabunsee county—G. W. French, clerk.

HEIFER—Taken up by Christian Miller, in Washington tp., (P. O. Alma), one red and white spotted heifer, about 18 months old, above medium size, no marks or brands visible; valued at \$12.

##### Coffey county—H. B. Cheney, clerk.

COW AND CALF—Taken up by D. K. Jones, in Lincoln tp., January 18, 1888, one cow and calf, dim brand on left hip; valued at \$14.

##### Jefferson county—E. L. Worswick, clerk.

COW—Taken up by John Frazier, in Delaware tp., (P. O. Valley Falls), January 3, 1888, one white cow, tag in left ear, branded A. Smith, Valley Falls.

##### Greenwood county—J. W. Kenner, clerk.

STEER—Taken up by C. H. Burris, in Madison tp., December 13, 1887, one 2-year-old red and white spotted steer, with splotch brand on left hip, no other marks or brands visible; valued at \$15.

STEER—Taken up by James Spain, in Salem tp., December 25, 1887, one pale red or brindle 2-year-old steer, no marks or brands visible; valued at \$20.

COW AND CALF—Taken up by John Willis, in Bachelor tp., one white cow, 2 years old, marked with crop off left ear, roan steer calf; valued at \$17.

COW AND CALF—By same, same horse and place, one pale red cow, 2 years old, branded IX on left hip, blotch brand on right hip, roan heifer calf; valued at \$17.

STEER—Taken up by Adam Dixon, Jr., in Janesville tp., January 11, 1888, one 1-year-old red steer, hole in each ear and each ear split from the hole outwards, indistinct brand on right hip; valued at \$15.

STEER—Taken up by E. D. Ailes, in Lane tp., December 21, 1887, one muley steer, red and white spotted, 2 years old, rounding crop in right ear; valued at \$12.

HEIFER—Taken up by L. T. Dean, in Lane tp., January 6, 1888, one roan heifer, 2 years old, a circle on right hip, upright bar on left hip, smooth crop off right ear; valued at \$14.

STEER—Taken up by E. D. Martindale, in Madison tp., December 20, 1887, one red and white steer, 3 years old, under-crop in both ears; valued at \$20.

##### Nemaha county—W. E. Young, clerk.

STEER—Taken up by F. Kruger, of Seneca, January 9, 1888, one red-roan 2-year-old steer, no marks or brands; valued at \$17.

##### Bourbon county—J. R. Smith, clerk.

MARE AND COLT—Taken up by J. R. Smith, in Frank tp., December 13, 1887, one bay mare, white strip in forehead, stiff in shoulders, bunch on one side, about 14½ hands high, sorrel colt about 3 months old.

COW—Taken up by Samuel Wray, in Freedom tp., December 2, 1887, one red 3-year-old cow, under-bit in right ear, no other marks or brands; valued at \$13.

#### Too Late to Classify.

MAMMOTH CUBAN CORN.—This corn will mature in twenty days and will yield twenty to thirty bushels more than other varieties. In 1886 it yielded eighty bushels per acre. Price, half bushel, \$1.25; one bushel, \$2.25; two bushels, \$4. Buy included. Address John Shoup, Whiting, Jackson Co., Kas.

Remember the FARMER is now \$1 a year.

## CREAMERY PACKAGE

× MFG. CO., ×

MANUFACTURERS AND JOBBERS OF

## Butter Tubs, Egg Cases,

AND GENERAL

## CREAMER

AND DAIRY

## SUPPLIES.

We carry a Large Stock of Butter Tubs and Egg Cases in our Warehouse, and can Fill Large Orders Promptly.

We carry a Full Line of Cans, Butter Boxes, Butter Printers, Workers, Churns, Pails, Salts, Coloring, and Everything that is needed in Creameries or Small Dairies.

Our Large Catalogue for 1888, will be out March 15th. All parties that are in the butter and egg business or dairying, will do well to send us their address, and we will forward you our Catalogue when it is out.

## Creamery Package Mf'g. Co.

1408 & 1410 West 11th St.,

KANSAS CITY, MO.

## CONTINENTAL WIRE CO.,

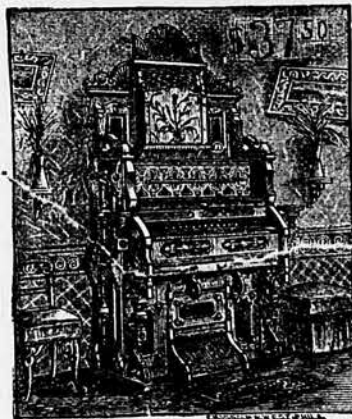
ST. LOUIS, MISSOURI,

—Sole Manufacturers of—

## Eagle Parallel Barb Wire,

Best wire known for protecting stock, presenting a surface twice as broad as old-style twisted wire, and Barbed regularly every 2, 3, 5 or 6 inches, as ordered. Ask your dealer for it. We also make the most perfect twisted Barb Wire that has ever been made. Take none but the "EAGLE" Brand. Licensed under U. S. Letters Patent No. 350,413.

## 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.

## Solid GOLD WATCHES and GENUINE DIAMOND RINGS FREE!

To enable us to get our list of popular low-priced Books into the hands of as many people as possible and thereby increase our sales, we make the following liberal offer which will hold good until May 1st. For the first 50 correct answers to the question **What is the longest verse in the Bible?** we will give the following valuable presents: For the first correct answer a Gentleman's (or Lady's) Hunting Case Solid Gold Watch and Chain worth \$7.50 for the second, a Genuine Diamond Ring worth \$5.00 for the third, a Solid Gold Watch (open face) worth \$4.00 for the fourth, a Genuine Diamond Ring worth \$2.50, and for each of the next 48 correct answers (if there be so many), an elegantly bound volume of Poems. With your answer enclose 25c. (stamps, postal note or silver), for which we will send you, post-paid, our Grand Combination Package, containing a list of our popular low-priced Books and all the following Cards, Games, &c.: 1 pack Courtship Cards, (25 styles), pack Conversation Cards (25 styles), pack New Acquaintance Cards, pack Love Cards, pack Nose Poking Cards, pack Comic Flirtation Cards, pack Escort Cards, pack Invitation Cards, pack Overakers (lots of fun), pack O B Cautious Cards, pack Popping Question Cards, the Standard Bean Catcher, 1 Sheet Parlor Magic, 20 Best Conundrums, 20 Choice Games for Parties, Komical Konversation, The Game of Fortune, The Game of Fox and Geese, The Game of Nine Men Morris, The Album Writer's Friend, The Great Animal Puzzle, The Game of Forfeits, 100 Choice Album Verses, The Great Eureka Prize Puzzle, How to tell a lady's age, 1 Fortune Telling Tablet, &c. We guarantee this package to more than satisfy every purchaser or will refund the money paid for it. Be sure to give your full name and address. Address **HOWARD PUBLISHING CO., Wallingford, Conn.**

## The Veterinarian.

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

**SPASM OF MUSCLES.**—I wrote you about one of my colts during the summer, stating that she acted as though she might be contracting string-halt. For about a month and a half since then she has appeared all right, but the last week is worse than ever. Every second or third morning she will come out of the stable with her right hind leg stiff and foot turned back, swinging the limb out from the other, and it seems to take a good deal of effort to make it work. She will go stiff for three or four steps, then, with a sudden jerk, the hock will bend and she will jump clear off of both hind feet and set them down where they belong. She will go all right for three or four steps and then repeat the performance; when she comes in from the pasture at night she seems all right. She did poorly last winter, had worms and lice, but we cured her of both. Her hair turned the wrong way over her kidneys and along her loins, stayed that way until date. She is in fair winter fix and eats well. I am feeding my colts (two-year-olds) corn this winter.

**Reply.**—The symptoms in the case you describe are intermittent and we consider that the disease is of a nervous nature, and the colt will ultimately recover completely from it. We have found it of benefit in such cases to give a dose of purgative medicine, so as to have eight or ten passages, which should be quite thin and watery. Also get six ounces of spirits of nitric ether and give an ounce three times a week in half a pint of water. We would further recommend the rubbing in daily of a liniment around the stifle extending to about eight or ten inches above it on the front and outside. (Liniment: Chloroform, one ounce; fluid extract of belladonna, one ounce; camphorated spirit, six ounces.)

**LAMENESS.**—Upon the subject of lameness Law says that the patient should be approached quietly and when you are certain he is free from all exciting causes. If resting on all four limbs, the pastern of the lame one will usually be more upright than the others. One fore foot advanced eight or ten inches in front of the other suggests some tenderness of the heel or the structures in the posterior region of the lower part of the limb. Bending of the knee and fetlock and resting of the foot on the toe, without any advance in front of the other, usually implies disease of the shoulder or elbow. The advance of both fore feet, the rest being taken on the heels, and the hind limbs brought well forward under the body, should direct attention to the front of the feet. Resting of one foot more frequently and for longer periods than its fellow is suspicious. An inclination to lie down, and remain so, is to be similarly regarded. If the animal remains down persistently, we may infer great suffering, fractures or much weakness.

Lameness may be shown in the walk, but better in the slow, easy trot, the animal being led in hand with about three feet of free rein and without noise or other cause of excitement. Some horses manifest a bridle lameness from the mere leading, but if the leader goes first on the left side and then on the right, the drooping of the head will correspond first to the one foot and then to the other, showing it to be only a feint. In all cases of lameness in a single limb the foot is rested on the ground with less weight and is rested as quickly as possible. There is therefore not only the visible halting on that limb, but a lower sound made by striking the ground and thus the ear comes to assist the eye in detecting the ailing member. If one fore limb is affected, the head and anterior part of the body are elevated when its foot comes to the ground, but drop firmly when the sound foot is planted. A depression of the opposite hind limb accompanying the elevation of the head, when the failing fore limb comes to the ground, must not lead to the suspicion of lameness behind.

In single lameness behind, the gait resembles that seen in lameness before, the haunch on the diseased side being raised when the foot is planted and allowed to drop thereafter until the opposite foot reaches the ground. In some, the elevation is the prominent feature, in others the depression, but in all the rising and falling are greater

CHICAGO.

KANSAS CITY.

ST. LOUIS.

JAMES H. CAMPBELL &amp; 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.

than in the opposite quarter. With lameness in both fore limbs the step is short, the stroke on the ground weak, the rest of each foot on the ground shortened, the shoulders are carried upright and stiff, the head is raised, the loins are arched, the croup droops, and the hind limbs are brought unnaturally forward beneath the belly. Lameness in the two limbs on the same side determines a gait approaching the amble or rack, with the firm planting of the opposite members. Lameness of one fore and the opposite hind produces a simple exaggeration of the gait caused by disease in one of these limbs. When the cause of lameness exists in more than one limb it is difficult to make the animal keep the trot. In all cases it is well to have the animal driven or ridden so as to heat him, and then keep him perfectly still for half an hour to cool, before completing the examination, as many lamenesses will disappear when the subject is warmed by exercise.

## Scrofula

Probably no form of disease is so generally distributed among our whole population as scrofula. Almost every individual has this latent poison coursing his veins. The terrible sufferings endured by those afflicted with scrofulous sores cannot be understood by others, and their gratitude on finding a remedy that cures them, astonishes a well person. The wonderful power of

## Hood's Sarsaparilla

in eradicating every form of Scrofula has been so clearly and fully demonstrated that it leaves no doubt that it is the greatest medical discovery of this generation. It is made by C. I. HOOD & CO., Lowell, Mass., and is sold by all druggists.

100 Doses One Dollar

LANEY & PFAFF,  
GREEN RIDGE, MISSOURI.

THOROUGHbred

POLAND-CHINA HOGS

FOR SALE.

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

THE GOLDEN BELT HERD OF  
Thoroughbred Poland-Chinas

A few sows in pig to "Thorndale" (Vol. 9), at \$25 each. Also thirty-five fall pigs, of both sexes, at \$12 each, delivered free by express within 100 miles of Lyons up to February 10, 1898. Stock shipped from here over either the A. T. & S. F. Mo. Pacific or St. Louis & San Francisco R. R. All breeders registered. Pedigree with each sale. Order at once.

F. W. TRUEDELL, Lyons, Kas.

OTTAWA HERD



OF POLAND-CHINA and Duroc-Jersey Hogs. Twenty head of first-class sows from four to nine months old. Also seventy-five head of sows of same age, bred by Bruce Stemwinder 4701, Daisy's Corwin 4697. Dams—Mazy 24 6214, Zeida 34 8250, Maggie's Perfection 8210, Yone's Perfection 9424, Fay's Gold Drop 11676, Jay's Dimp 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.

FOUR BOARS. TWENTY SOWS.

IMPROVED

Poland-Chinas

W. S. HANNA,

OTTAWA, - - - KANSAS.

Have shipped to fourteen States, and twenty-six counties in Kansas, and headed nearly fifty herds of pure-breeds.

SEND FOR CIRCULAR. Describe exactly what you want.

T. A. HUBBARD,  
WELLINGTON, - - KANSAS,

BREEDER OF

POLAND-CHINAS

—AND—

LARGE ENGLISH BERKSHIRE HOGS



See list of boars used on herd:

**POLAND-CHINAS**—Challenge 4999, by Success 1999; Cleveland 6807, by Corn's Victor 85'3; Tom Corwin 12853, by Cleveland 68'7; Gilt Edg 11451, by Ohio King 5'99; Dandy 11139, by Cleveland 6807; Chip, by Tecumseh's 110211. **BERKSHIRES**—Jumbo 12771, by British Champion 4495; Royat Duke 12928, by Sovereign 2d 1547; Stumpy Duke VI, 16169, by Duke of Monmouth 11361; Fancy Boy 13329, by Jumbo 12771; Champion 18975, by British Champion 4495; Joker, by Royal Peerless 17153.

My Poland sows are of the most fancy strains, such as—Corwins, Black Bess, I. X. L., U. S., Gold Dust, Morsish Maid, Perfections, Gracefuls, etc. My Berkshires—British Champions, Salices, Bell-Dunnas, Robin Hoods, Duchesses, Duke, etc. I have now on hand about twenty boars, weighing from 200 to 300 pounds and a few gilt-edge, dandy fellows. Also about twenty-five young sows bred to Chip and Joker, the latter being the sweepstakes Berkshire boar at the late Kansas State Fair. The sows being out of my sweepstakes herd. My hogs are in fine condition. Pigs of all ages for sale.

FIRST-CLASS HOGS WITH INDIVIDUAL MERIT.

POLAND-CHINA PIGS!

135 FOR SALE.



Sired by six first-class boars, for season's trade. My herd is headed by STEM WINDER 7971.

Address F. M. LAIL, Marshall, Mo.  
[Mention KANSAS FARMER.]

Gold Dust Herd of Poland-Chinas.



J. M. McKEE, WELLINGTON, KANSAS.

My herd is composed of such strains as Black Bess Gilt or Take, Tom Corwin, Gold Dust and U. S. I sell nothing but first-class hogs of individual merit and gilt-edge pedigree. Choice pigs a specialty. Plymouth Rock Chickens of superior quality. Correspondence invited. Mention KANSAS FARMER.

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.



Send stamp for Circular and Price List.

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



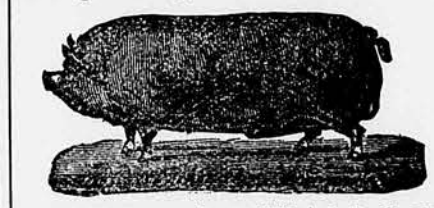
ROYAL GRANITE 10105,

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.

SELECT HERD OF LARGE BERKSHIRES!

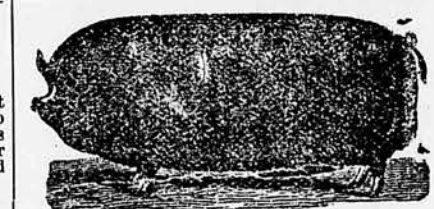
G. W. BERRY, PROP'R, TOPEKA, KAS.

My breeders have been selected, regardless of expense, from the leading herds of the United States; are bred from the best stock ever imported, and represent seven different families. Healthy pigs from prize-winning stock for sale. Write for circular and prices or come and see. [Mention this paper.]

LOOUST GROVE HERD OF  
Large English Berkshires

Headed by GOLDEN CROWN 14823, A. B. R. CHOICE PIGS FOR SALE, either sex. Everything as represented. Write me, and please mention this paper. Address JAMES HOUK, HARTWELL, HENRY Co., Mo.

ENGLISH BERKSHIRES.



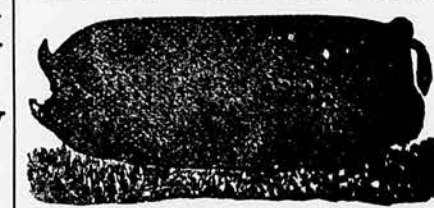
THE WELLINGTON HERD consists of twenty matured brood sows of the best families of home-bred and imported stock, headed by the celebrated HOPEFUL JOE 4889, and has no superior in size and quality nor in strain of Berkshire blood. Also Plymouth Rock Chickens. Your patronage solicited. Write. [Mention this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

M. B. KEAGY, Wellington, Kas.

P. S.—Yearling sows, already bred, for sale.

PLEASANT VALLEY HERD

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.



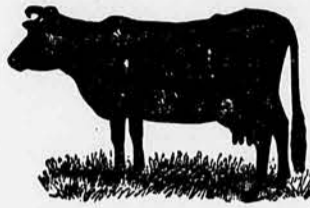
C. W. JONES, Richland, Mich.

Breeding stock all recorded in both the American and Ohio Poland-China Records.

## EARLY DAWN HERD HEREFORDS

The quality and breeding of our large herd challenges comparison in the show ring and breeding pen. We sell better cattle for the money and protect our customers. Inspect our herd before buying elsewhere. New catalogue containing valuable information sent on application. E. S. SHOCKEY, Sec'y.  
Maple Hill, Wabaunsee Co., Kas.

**Sherwood & Rohrer Stock Farm,**  
VALLEY CENTER, KANSAS.



Breeders of  
A. J. C. C.  
H. R.

**JERSEY  
CATTLE.**

The herd is headed by the Stoke Pogis Victor Hugo Duke bull, St. Valentine's Day 1527, and the Coimassie bull, Happy Gold Coast 14713. Sons and daughters by above bulls, out of highly-bred cows, for sale for next ten days. SHERWOOD & ROHRER.

## BRIGHTWOOD HERD OF SHORT-HORNS



Bates and Standard Families, including  
**PURE KIRKLEVINGTONS,**

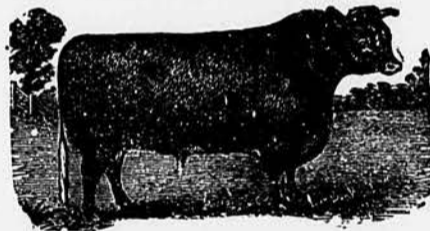
Places, Harts, Craggs, Roses of Sharon, Young Marys and Josephines.

Have extra well-bred young bulls, ready to head herds, for sale now at terms to suit.

Also two handsome, rangy,  
FINELY-BRED TROTTER STALLIONS  
for sale.

R. K. THOMSON, Slater, Mo.

## SUNNY SIDE HERD OF SHORT-HORNS.



Is composed of such strains as MARYS, KIRKLEVINGTONS, BATES, ROSE OF SHARON, JOSEPHINES, YOUNG PHYLLIS, and other noted families. DUKE OF RATHWOLD - heads the herd. Animals of good individual merit and pedigree for sale on terms to suit purchasers. Address FRANK CRAYCROFT, SEDALIA MO.



**H. V. PUGSLEY,**  
PLATTSBURG, MO.,

Breeder of Holstein-Friesian Cattle, of the Mercedes, Helmtje, Katy K., and other noted families. Herd headed by the prize bull MINK BO'S MERCEDES PRINCE 2361. Have Merino Sheep. Catalogues free. [Mention this paper.]

## Holstein - Friesian Cattle

Of European Herd Book Registry.



The sweepstakes bull PRINCE OF ALTIJDWERE (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 1/2 ounces; milk records, 50 to 80 pounds daily. The sweepstakes herd. Write for catalogue. M. E. MOORE, Cameron, Mo.  
[Mention this paper.]

## Cherokee Hereford Cattle Co.,

Importers, Breeders and Owners of

### THE GROVE PARK HERD.



300 HEAD, representing Grove 3d, Wilton, Horace, Anxiety and Sir Thomas strains, combined with great individual merit. Headed by the imported prize-winning Grove 3d Bull PLUTARCH 14410, HORACE 5th 12524, WILTON DUKE 11851. Animals of both sexes and all ages for sale. Fair prices. Liberal terms.

CATALOGUES ON APPLICATION.

F. P. CRANE, Manager, } Topeka, Kas.  
C. E. CURRAN, Secretary, }

L. G. DANA, Superintendent,  
Columbus, Kas.

## E. Bennett & Son,

TOPEKA, - KANSAS,

The Leading Western Importers of

**CLYDESDALE,  
PERCHERON,  
CLEVELAND BAY**

French Coach Horses.

AN IMPORTATION OF 125 HEAD,  
Selected by a member of the firm, just received.

Terms to Suit Purchasers. Send for illustrated 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, including 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 selected 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 (TM).

Selected 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,  
314 West Fifth Ave., Topeka, or Maple Hill, Kansas.

## PERCHERON HORSES. FRENCH COACH HORSES.

More Imported and Bred than by any other Eight Establishments.

**511 PURE-BREDS Now Actually on Hand.**

Experience and Facilities Combined for Furnishing Best Stock of Both Breeds at Reasonable Prices.

Separate Catalogues for each breed, with history of same. Say which is wanted. Address  
**M. W. DUNHAM, WAYNE, DU PAGE CO., ILLINOIS.**



## JOHN CARSON,

Pleasant View Farm,  
Winchester, Jefferson Co., Kansas,



IMPORTER AND BREEDER OF

**Clydesdale, Percheron-Norman & Cleveland Bay HORSES.**

Have now on hand for sale horses of each breed, thoroughly acclimated. Stock guaranteed. Inspection and correspondence invited.

## ISLAND HOME STOCK FARM



Percheron Horses.  
French Coach Horses.  
Savage & Farum, Importers and Breeders of Percheron and French Coach Horses, Island Home Stock Farm, Grosse Isle, Wayne County Mich. We offer a very large stud of horses to select from, we guarantee our stock, make prices reasonable and sell on easy terms. Visitors always welcome. Large catalogue free. Address  
Savage & Farum,  
DETROIT MICH.

Recorded Percheron and French Coach Horses.



Two importations this year. Nearly 20 of these popular breeds on hand. Every animal recorded with extended pedigree in their respective stud books. Choicest breeding and individual excellence combined. Coach stallions all purchased before the French Government made its selection. Do not buy coarse, lousy horses, unsuited to your section, but come and see large, fine horses, with the test of action. They will cost you no more. Send for illustrated Catalogue.  
JOHN W. AKIN, Scipio, Cayuga Co., N. Y.

## RIVERSIDE STOCK FARM!



**DEGEN BROS., OTTAWA, ILL.,**  
Importers and breeders of Percheron, Belgian Draft, and French Coach Horses. We have now over 150 head of imported Percheron stallions and mares on hand. Our importations this year have been selected from the best breeding districts of France. Our Belgian Draft horses are all prize-winners and recorded in Belgium and America. Our stock is all recorded in France and in America. Our French Coach horses are the best that could be found in France. We will be pleased to show our stock to visitors. Correspondence invited and promptly answered.

THE HOME AND HEADQUARTERS

FOR ALL KINDS OF

## BRITISH HORSES.

Royal Society Winners in Each Breed.

**CALBRAITH BROS.,**

OF JANESVILLE, WIS., have imported during the present season over 200 STALLIONS including CLYDESDALE, ENGLISH SHIRE, SUFFOLK PUNCH, HACKNEY AND CLEVELAND BAY HORSES.

More prize winning, high class stock, imported by us than any three firms in America. Superior horses, fashionable pedigrees and all guaranteed good breeders. Prices and terms to suit everybody. Visitors cordially invited. Send for Catalogue.

**CALBRAITH BROS.,**  
Janesville, - Wisconsin.

LATE

**GEARY BROS. CO.,**

BOTHWELL, CANADA.

**POLLED ABERDEEN-ANGUS CATTLE,**

English Shire Stallions and Mares.

THOROUGHBRED

Yorkshire Coach and Trotting Stallions.

We have just received a new importation of Horses and Cattle, and have now an unrivaled herd of cattle and a grand stud of Horses and Mares of the above breeds to show our friends. Having more importations to arrive soon and our herd increasing largely, we are in a position to suit all customers and are obliged to sell for the double purpose of raising money to carry on our business and make room for new arrivals. Write or come and get bargains.  
G. & J. GEARY, Brookfield, Missouri.

## 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.



Dana's White Metallic Ear Marking Label, stamped to order with name, or name and address and numbers. It is reliable, cheap and convenient. Sells at eight and gives perfect satisfaction. Illustrated Price-List and samples free. Agents wanted.  
C. H. DANA, West Lebanon, N. H.

## THE PROFIT FARM BOILER

With Dumping Caldron. Ground feed can be cooked in a box by dumping in boiling water, stirring in the meal, and covering tightly. Also make dairy and laundry Stoves, Water Jacket Kettles to warm milk without scalding, and all sizes of Caldrons and Kettles.  
D. R. Sperry & Co., Batavia, Ill.

## THE COOLEY CREAMER

The first invented, never yet equalled, and the only one that uses the patented submerged process, which gives it its great value over all others. Where there are no agents, will sell one at wholesale price. Send for circular.

**JOHN BOYD, Mfr.,**  
199 Lake St., CHICAGO

**777777** Strawberry Plants for sale. 100 varieties. Strawberries, Raspberries, Blackberries. Fine plants. Low prices for large orders. Price list free.  
B. F. SMITH, P. O. Box 6, LAWRENCE, KANSAS.

**SEED SWEET POTATOES** I have on hand a large stock of seed sweet potatoes and every variety that is in the market. 1 to 6 bu., \$1.10 per bu.; over this amount, \$1 per bu.  
JUNIOUS UNDERWOOD, Grower and Dealer, 342 Maine St., Lawrence, Kas.

## KANSAS HOME NURSERY

**BEST HOME-GROWN TREES.** Choice Fruit and Ornamental Trees of real merit for the West. In Tree-Planters. Also best Fruit and Flower Plants. Water-proof. Samples by mail, 10 cents each; \$6 per 100, by express.  
A. H. GRIESA, Drawer 23, Lawrence, Kas.

## Hart Pioneer Nurseries

**OF FORT SCOTT, KANSAS.**  
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.

## Western Home Nurseries,

**DETROIT, - - - KANSAS.**  
Originator of SEEDLESS and CORELESS PEAR, the best pear grown. Has never shown any blight, whatever; as hardy as an oak; the pear tree is a heavy and annual bearer of nice large pear of finest quality. Price very reasonable. Also all kinds of Fruit Trees, Vines and Berries, Evergreen and Forest Trees. No travelling agents. Correspondence solicited. Send for Price List.  
E. EICHOLTZ.

## A NEW BOOK ON CABBAGE AND CELERY.

ISAAC F. TILLINGHAST, La Plume, Lack'a Co., Pa.

## Forest Tree Seedlings and Apple Trees

**AT VERY LOW PRICES.**  
Send for our low prices on General Nursery Stock before placing your order.  
KANSAS CITY NURSERIES, Blair & Kaufman, Prop'rs, 100 West 9th St., Kansas City, Mo.

## 500 BUSHELS White-Cap Seed Corn

For sale. Will mature in 90 days. Small fodder, large ears, easy to husk. Shelled, sacked and delivered at R. R. on receipt of prices—two bushels, \$4.00; one bushel, \$2.50; half bushel, \$1.50; peck, \$1.00; sample, 10 cents.  
W. T. DANIEL, Spring Hills, Ohio.

## Mount Hope Nurseries

**ESTABLISHED 1869.**  
Offer for Spring of 1888. Fruit and Ornamental Trees, Grape Vines, Small Fruit and Shrubbery. All the old established sorts, and the desirable new ones. Best rock prices. Quality of stock unsurpassed. We solicit club orders and by the carload. Shipping facilities best in the State. Send for Wholesale Price Catalogue.  
A. C. GRIESA & BRO., Drawer 13, Lawrence, Kas.

## Forest Trees!

**TIMBER CLAIMS.**  
An immense stock of Fruit, Forest and Ornamental Trees, Shrubs and Climbers, at hard-time prices.  
118 One-Dollar Sets, per mail, post paid.  
13 Grape Vines.....\$1.00  
150 Russian Mulberry.....1.00  
6 Russian Apricots.....1.00  
A paper devoted to fruit-growing free for one year to all who buy \$1.00 worth of stock. Send at once for our Price List.  
CARPENTER & GAGE, Jefferson Co., Fairbury, Nebraska.

## 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.

**SEEDS** All tested, the best. Prices Fair and Just. Catalogue free. SEED POTATOES 180 varieties. Grapes, Plants and TREES, everything WANTED garden. The largest, best, most prolific and worm-proof current "CHANDLER" should be tried BY ALL.  
FRANK FORD & SONS, - Ravenna, Ohio.

**SIBLEY'S TESTED SEEDS**  
CATALOGUE FREE! Containing all the latest novelties and standard varieties of Garden, Field and Flower Seeds. Gardeners everywhere should consult it before purchasing. Stocks pure and fresh, prices reasonable. Address: Hiram Sibley & Co., Rochester, N. Y., or Chicago, Illa.

## SEEDS GARDEN FIELD AND FLOWER

Always Fresh and Reliable. Everywhere acknowledged the Best. Headquarters American Grass Seeds. Orders with Cash filled at lowest market price. Send for Catalogue. (Estab. 1838.) J. M. McCullough's Sons, Cincinnati, O.

## 800 ACRES. 13 GREENHOUSES. TREES AND PLANTS

We offer for the Spring trade a large and fine stock of every description of FRUIT and Ornamental TREES, Shrubs, Roses, Vines, SMALL FRUIT, Hedge Plants, Fruit Tree Seedlings and Forest Tree Seedlings. Priced Catalogue, Spring of 1888, mailed free. Established 1852.  
BLOOMINGTON (PHENIX) NURSERY  
SIDNEY TUTTLE & CO., Proprietors, BLOOMINGTON, ILL.

## SMITH'S SEED CATALOGUE

**FOR 1888—NOW READY. MAILED FREE TO ALL APPLICANTS.**  
Upon receipt of price, the following Collections will be mailed POST PAID:—  
Free Flowering Annuals, 8 packets 25c., 16 packets 50c., 36 packets (New Moon Flower included) \$1.00; Vegetable Seeds, 12 packets 50c., 25 packets (New Golden Cluster and New Pole Beans included) \$1.00; 12 Choice Summer Flowering Bulbs (Golden Banded Lily of Japan included) \$1.00. The Above Our Own Selection, but All Different Varieties. Mention paper.  
WM. H. SMITH, SEEDSMAN, 1018 Market St., PHILADELPHIA, PA.

## LOOK HERE WANTED,

The name and address of every farmer and gardener who reads this to send for my 1888 catalogue of

## FIRE DRIED SEED CORN,

Wheat, oats, potatoes and garden seed. It contains my article, "How to Grow Potatoes" and other valuable information FREE. I have won more prizes than any other man in the state at fairs and corn shows. Send name and address on postal card. Mention this paper.  
JAS. W. BOUK, Box 28, Greenwood, Neb.

## White Pine Seedlings!

## EVERGREENS

OF ALL KINDS CHEAP.

Send for FREE Price List, giving the experience and knowledge gained by extensive planting and handling for thirty-one years. [Mention "Kansas Farmer."]  
E. F. BROCKWAY, Ainsworth, Iowa.

## 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-foot, 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.

**FREE FOR 1888!** Our Illustrated Catalogue of Field, Garden and Flower Seeds should be in every home. We offer large Premiums to all those who buy Seeds of us. We test all Seeds on our own grounds before sending any out, by which we are able to guarantee Purity and Quality. The U. S. mail brings our Seeds free to every man's door. Send for our FREE CATALOGUE and make your selections. Address GARDNER BROTHERS, Freeport, Illinois

## FINEST FRUIT TREES

Apple, budded and grafted; 70,000 Pear, fine 3 yrs.; 50,000 Cherry, fine 3 yrs.; 60,000 Plum on plum, 30,000 on peach; 40,000 new named Russ. Apricot—400 acres; 54th year. PIKE CO. NURSERIES, LOUISIANA, MISSOURI.

## 150,000 GRAPE VINES

100 Varieties. Also Small Fruits. Quality unsurpassed. Warranted true. Very cheap. Sample vines mailed for 15c. Descriptive price list free. LEWIS ROESCH, Fredonia, N. Y.

**FREE** To All Seed Buyers Our complete illustrated Catalogue of Tested Seeds, Bulbs, Tools, etc., tells all about seeds and gardening. Colored Plates. A. W. LIVINGSTON'S SONS. **DO YOU WANT SEEDS?** Prices low for reliable seeds. Sold last season to thousands of Farmers and Gardeners and no complaints. We are Growers as well as Dealers. Originators of Acme Favorite and BEAUTY Tomatoes, &c. Box 254, Columbus, O.

## SEEDS BULBS, PLANTS, SUPERIOR NORTHERN GROWN.

CURRIE BROS., 108 Wisconsin Street and 312 Broadway, Milwaukee, Wis.

## SEEDS BUY NORTHERN GROWN SEEDS

Do you want the finest Flower, Vegetable and Crops in your market, and make \$250 per acre on Early Cabbage, Potatoes, Peas, etc., and get rousing farm crops? If so, plant SALZER'S SEEDS! 56 Packages Earliest Vegetable Novelties on trial, postpaid, \$1.00. 100,000 Roses and Plants! Tremendous stock of Grass and Farm Seeds. Floor area, 1 1/2 acres! Potato Cellar, 36,000 bu. CHEAP FREIGHTS. Send 2c stamps for sample Bonanza Oats (200 bu. per acre) and get finest catalogue ever published. JOHN A. SALZER, Seed Grower, LaCrosse, Wis.

**Warranted Seed.** I have founded my business on the belief that the public are anxious to get their seed directly from the grower. Raising a large proportion of my seed enables me to warrant its freshness and purity, as see my Vegetable and Flower Seed Catalogue for 1888, FREE to every son and daughter of Adam. It is liberally illustrated with engravings made directly from photographs of vegetables grown on my seed farms. Besides an immense variety of standard seed, you will find in it some valuable new vegetables not found in any other catalogue. As the original introducer of the Eclipse Beet, Burbank and Early Ohio Potatoes, Hubbard Squash, Doanhead Cabbage, Cory Corn, and a score of other valuable vegetables, I invite the patronage of the public.  
JAMES J. H. GREGORY, Marblehead, Mass.

## 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.

## SALZER'S WHITE BONANZA OATS

OVER 80,000 customers testify that they increase, yes, often double their yield by sowing Salzer's Northern Crown SEEDS. They are so superior because they are full of life, vigor, vitality, and are absolutely the EARLIEST.  
**OATS--WHITE BONANZA!**  
Grandest Oats ever sown; this is strong you say—but give it one trial and you'll say not HALF STRONG ENOUGH. It's a White Oats, weighs 44 to 54 lbs. per bu., strong straw, rust proof—EXTREMELY EARLY—wonderfully prolific—testing on Dakota farm 200 BU. PER ACRE. Send 8c for a Good Sample (which amount deduct when you order).  
**OUR CUSTOMERS SAY:**—"Early fine, grand—120 bu. per acre."—Neb. "210 bu. was my best."—Iowa. "30 bu. from one peck of seed is good enough for me."—Iowa. "White Bonanza is the farmers' Bonanza Silver Mine; sowed 10 acres and thrashed 1380 bu."—Dak. J. F. D. Syracuse: "Yielded 168 measured bu. (equal to 150 by weight). Ripened in 72 days. Took first premium at Otse County Fair." Thousands of other testimonials.  
Our seeds give you on Barley, 64 bu.; Wheat, 46 bu.; Corn, 100 bu. and Potatoes, 600 bu. per acre. Now, such yields pay; do they not? You can have them by sowing Salzer's Seeds. 26 Packages EARLIEST VEGETABLE NOVELTIES postpaid \$1.00. 100,000 Roses and Plants! Many new Early Vegetables and Flower Seeds. Tremendous Stocks of Farm, Vegetable, Grass and Clover Seeds. Floor area of Warehouse over 1 1/2 acres; Potato Cellar capacity 36,000 bu. Will save you money on seeds every time. Don't buy till you see Superbly Illustrated Catalogue with Colored Plates. Send stamps for same. Cheap freight rates.  
JOHN A. SALZER, Seed Grower, LaCrosse, Wis.

**FREE** Prettiest BOOK ever Printed. Thousands of Engravings. Best SEED and cheapest ever grown. Pkts 3c Cheap as dirt by oz. & lb. 100,000 pkts. new sorts divided FREE to Customers. I give away more than some firms sell. Send for my Catalogue. R. H. SHUMWAY, Rockford, Ill.

## SORGHUM

A LITTLE book that every farmer ought to have is the "Sorghum Hand Book" for 1888, which may be had free, by addressing The Blymyer Iron Works Co., of Cincinnati, O. Sorghum is a very valuable crop for syrup-making, feed, and fodder, and this pamphlet gives full information about the different species, best modes of cultivation, etc. Send and get it and read it.

**SEEDS SENT FREE.** Warranted, Fresh, Reliable. Tested seeds cheap. Illustrated Catalogue sent free. Prices lowest. Packets 3c. Gardeners say our seeds are the best. Thousands of choice packets given away. Special wholesale price sent to Market Gardeners.  
ALNEER BROS., Rockford, Ill.

**FOREST TREES.** Catalpa Speciosa, White Ash, European Larch, Pines, Spruces, Arbor Vitae, etc., etc. Catalpa Speciosa Seed, Forest and Evergreen Seeds.  
R. DOUGLAS & SON, Waukegan, Ill.

**MATTHEWS' SEED DRILL**

The Standard of America. Admitted by leading Seedsmen and Market Gardeners everywhere to be the most perfect and reliable Drill in use.

Made only by AMES PLOW COMPANY, Boston and New York. Send for circulars and 1888 72-page catalogue.

**THE LITTLE WONDER Fence Machine!**

Excels them all. Simple, strong, practical, cheap and durable. Can be worked by man or boy. Stumps, brush, mounds and hollows do not interfere with its work. Will work where no other machine can. Agents Wanted. Particulars free. Address FRANK W. BINFORD, Grant City, Worth Co., Mo.

**MORRISON'S CULTIVATORS**

SURE TO BE LEADERS WHERE SOLD

WHY? Because they have patented improvements that every farmer WANTS.

SEND FOR PRICES & TERMS MORRISON, MFG. CO. FT. MADISON, I.A.

**BURR STONE 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.

**IMPROVED EXCELSIOR INCUBATOR**

Simple, Perfect and Self-regulating.

Hundreds in successful operation. Guaranteed to hatch as large percentage of fertile eggs as any other hatcher. Send 6c. for new illustrated Catalogue.

Circulars Free.

GEO. H. STAHL, Patentee and Sole Manufacturer, QUINCY, ILLINOIS.

Lowest priced first-class Hatcher made.

**DAN BRADLEY MFG. CO.**

SUCCESSORS TO FURST & BRADLEY MFG. CO.

MAKERS OF RELIABLE PLOWS, CULTIVATORS, RAKES ETC.

CHICAGO ILL. U.S.A.

**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.

RICE & WHITACE, MFG. CO. 42 & 44 W. Monroe St., Chicago.

**Our CHAMPION STEEL-WALKING CULTIVATOR.**

Pride of the East. King of the West, and Monarch of all. Thousands in use giving satisfaction. The best shovel beam spring regulating device ever invented. Shovel beams holated and held up by springs, alone.

Agents wanted. Catalogue free. Bonch & Dromgold, York, Pa.

**BUY THE MORRISON PLOW**

BEST USE

GLEBE'S SPRING 12 YEAR Old Boy

CULTIVATOR

MORRISON MFG. CO. 2

FORT MADISON IOWA

WORK WITH EASE SEND FOR PICTURE CARDS

**DELAWARE COUNTY CREAMERY**

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

**CLARK'S CUTAWAY HARROW**

ENTIRELY NEW.

Supersedes the plow; beats the world; ground made into a perfect seed bed; has a seeding attachment for sowing all kinds of grain. Send for new circular with full description, FREE. Address HIGGANUM MFG. CO., Higganum, Conn. or 189 and 191 Water Street, New York.

**THE VANELESS MONITOR.**

—IS—  
**UNEQUALED**  
—AS A—  
**FARM MILL.**



Has the only successful Rotary Power in the World

**SEARLES BROTHERS**

GENERAL AGENTS,  
No. 621 Commercial St., ATCHISON, KAN.

**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 KNIFE**

This OLD and RELIABLE KNIFE continues to gain in public estimation, and is POSITIVELY THE BEST

Hay Knife known for cutting HAY and STRAW from the Mow, Stack or Bundle. It is a rapid, easy cutter, the blade of the best quality of cast steel, spring tempered, and it is easily sharpened by grinding on the corner of a common grindstone. The invention patented by WYNN CUTLER is a sword-shaped blade provided with operating handles, the edge of the sword blade being provided with knife-edged serrations or teeth. We hereby CAUTION all persons interested against buying or selling knives bearing above description, other than the genuine "Lightning," as we shall prosecute all infringement to the full extent of our ability and the law.

For sale by the Hardware trade generally.

**THE HIRAM HOLT COMPANY,**  
EAST WILTON, ME.—Oct. 1, 1887.

**ARTESIAN AND TUBULAR WELL MACHINERY AND TOOLS**

FOR EVERY KNOWN PROCESS.

Send for Catalogue.

NEEDHAM & RUPP.  
66 W. LAKE ST.  
CHICAGO ILLINOIS.

**LIGHTNING WELL MACHINE MAKERS.**

We are the largest Manufacturers—have sunk 529 ft. in 10 hours. Our Encyclopedia of 800 engravings of Well, Wind-Mill, Prospecting Pumping and Diamond Pointed Rock Drilling Machinery, or our treatise on Natural Gas will be mailed for 25 cts. Are seeking parties who advertise to make Hydraulic machinery, and their customers for using.

**THE AMERICAN WELL WORKS,**  
AURORA, ILL.,  
U. S. A.

**NEW BUCKEYE SUNBEAM CULTIVATOR**

MANUFACTURED BY **P. P. MAST & CO.**  
SPRINGFIELD, OHIO.  
Established 1854.



WITH **PIVOTED PARALLEL BEAMS.**

With **METAL WHEELS and SPRINGS** at Ends of BEAMS.

This Cultivator has the rear ends of the Shovel Standards are attached and a front, and to the Cross-head in the rear, by axle, whatever may be the position of them in being moved sideways. The springs at the front end of the beams supports them when in use, and enables the operator to move them easily from side to side and assists in raising when he wishes to hook them up, while turning at the end of the row. We attach these Beams also to our Riding and Tongueless Cultivators. This Cultivator has no equal in the market, and can not fail to be appreciated by any farmer who sees it. We also manufacture the **BUCKEYE DRILL, BUCKEYE SEEDER, BUCKEYE CIDER MILLS and HAY RAKES.**

Branch Houses:—Philadelphia, Pa.; Peoria, Ill.; St. Paul, Minn.; Kansas City, Mo.; and San Francisco, Cal. Send for Circular to either of the above firms or to

**P. P. MAST & CO., SPRINGFIELD, OHIO.**

**THOMPSON'S WHEELBARROW SEEDER**

THE ORIGINAL OF ALL. NEVER EQUALED.

Sows Clover, Timothy, Red Top and all kinds of Grass Seeds, ANY AMOUNT TO THE ACRE, EVENLY and ACCURATELY. 20 to 40 Acres can be sown in a day. LIGHT. STRONG. SIMPLE. Weighs 35 lbs. complete.

**O. E. THOMPSON,**  
YPSILANTI, MICH.

WINDY WEATHER DOES NOT AFFECT SEEDING.

TRUMBULL, REYNOLDS & ALLEN, General Agents, Kansas City, Mo.

**ASPINWALL POTATO PLANTER.**

Absolute Guarantee given to do PERFECT and RAPID WORK.

Write for illustrated circular, Mention this paper.

**BETTER THAN EVER.**

PLANTS CORN Distributes Fertilizers

**ASPINWALL MFG. CO.**  
THREE RIVERS, MICHIGAN.

**SMALL'S CALF FEEDER**

Supplies a Want never before successfully met by invention. The calf SUCKS its food SLOWLY, in a natural way, thriving as well as when fed on its mother. Now used in every State and Territory in the Union. Worth many times its cost. Satisfaction guaranteed or money refunded. Try it.

**J. B. Small & Co.,** 21 So. Market St., Boston, Mass

**DEREDICK'S HAY PRESSES.**

are sent any where on trial to operate against all other presses.

the customer keeping the one that suits best.

Order on trial, address for circular and location of Western and Southern Storehouses and Agents.

**P. K. DEDERICK & CO.,** Albany, N. Y.

**Well Drills**

FOR EVERY PURPOSE. SOLD ON TRIAL.

Investment small, profits large. Send 20c. for mailing large illustrated Catalogue with full particulars.

Manufactured by **GOULDS & AUSTIN,**  
167 & 169 LAKE ST.  
CHICAGO, ILLINOIS.

**THE LANE & BODLEY CO.,**  
CINCINNATI.

**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 Line selected by the U. S. Gov't to carry the Fast Mail.

**Burlington Route**

H. & ST. J. & C. B. R. R.

5,000 MILES IN THE SYSTEM, With Elegant Through Trains containing Pullman Palace Sleeping, Dining and Chair Cars, between the following prominent cities without change:

**CHICAGO, PEORIA, KANSAS CITY, ST. LOUIS, DENVER, OMAHA, ST. JOSEPH, QUINCY, BURLINGTON, HANNIBAL, KEOKUK, DES MOINES, ROCK ISLAND, LINCOLN, COUNCIL BLUFFS, ATCHISON, TOPEKA, LEAVENWORTH, SIOUX CITY, ST. PAUL, MINNEAPOLIS.**

Over 400 Elegantly Equipped Passenger Trains running daily over this perfect system, passing into and through the important Cities and Towns in the great States of

**ILLINOIS, IOWA, MISSOURI, KANSAS, NEBRASKA, COLORADO, MINNESOTA.**

Connecting in Union Depots for all points in the States and Territories, EAST, WEST, NORTH, SOUTH. No matter where you are going, purchase your ticket via the

**"BURLINGTON ROUTE"**

Daily Trains via this Line between KANSAS CITY, LEAVENWORTH, ATCHISON, ST. JOSEPH and DES MOINES, COUNCIL BLUFFS, OMAHA, SIOUX CITY, ST. PAUL and MINNEAPOLIS.

KANSAS CITY, ATCHISON, ST. JOSEPH and QUINCY, HANNIBAL and CHICAGO, Without Change.

J. F. BARNARD, GEN'L MGR., K. C., ST. J. & C. B. and H. & ST. J., ST. JOSEPH.

A. C. DAWES, GEN'L PASS. AGT., K. C., ST. J. & C. B. and H. & ST. J., ST. JOSEPH.

## 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!!

**HOLSTEIN-FRIESIAN BULLS**—Registered, for sale. Address E. Harpole, Ottawa, Kas.

**STALLIONS FOR SALE**—Three Clydes and one Norman. Acclimated and good breeders; broken to drive. Will give time if desired. Every stallion guaranteed as represented. R. I. Blackledge, Salina, Kas.

**FOR SALE**—Two Stallion Colts, coming 2 years old. Sired by imported Cleveland Bay stallion President, out of trotting-bred mares. No. 1, 15½ hands, weight 1,130 pounds; No. 2, 15½ hands, weight 950 pounds. Both bays. Also one Stallion—three-fourths Clyde; 16 hands; weight 1,500 pounds; bay, coming 3 years old. Address Wm. Roe, Vinland, Douglas Co., Kas.

**FOR SALE**—One Percheron Stallion, 8 years old, weight 1,600 pounds, bright bay. One Jack (Mammoth), 10 years old. Good breeders. Jacob Martin, Coffeyville, Kas.

**FOR SALE OR TRADE**—One Norman Stallion; weighs 2,000 pounds; brought from Illinois. Also five young Stallions; also about twenty horses and mules. Will sell cheap or exchange for Western deeded land. William Hess, Shannon, Atchison Co., Kas.

**FOR SALE**—Half-blood Cleveland Bay Stallion Colt; by imported Cleveland Bay horse, dam by Thoroughbred; weight at twenty and a half months, 1,085 pounds; 15½ hands high. Gee. Roe, Vinland, Douglas Co., Kas.

**FOR SALE**—One A. J. C. Jersey Bull; solid color; 5 years old. For particulars write I. W. Arnold, Louisville, Kas.

**IMPORTED CLYDESDALE STALLION FOR SALE**—low, or will trade for land or stock. W. H. Vanatta, Nortonville, Jefferson Co., Kas.

**FOR SALE**—One hundred tons of Baled Prairie Hay. Rogers & Son, Harper, Kas.

**FOR SALE OR EXCHANGE**—Two fine young stallions. Address M. C. Hemenway, Hope, Kas.

**WANTED**—A good Jack. Address Jesse W. Cook, Leoti, Wichita Co., Kas.

**STEAYED**—A bay mare, 14½ hands high, star in forehead, branded 333 on hind quarter and 8 on cheek; has one white hind foot. Mare has been gone four months. Address C. Chivers, 415 Kansas Ave., Topeka.

**FOR SALE OR TRADE**—For property or land a No. 1 millinery business in a first-class location in Topeka, a well-established trade of years, and fresh stock and fixtures. Keenness for selling, wish to retire on account of health. Inquire at this office.

**FOR RENT**—A small farm with conveniences for dairying. Also, similar place suitable for small fruit and gardening. J. U. Hughes, North Topeka, Kas.

**WE HAVE CONCLUDED**—To turn our attention to the breeding of SMALL YORKSHIRES ONLY, consequently we are selling off all our Berkshires at about what they are worth for pork. We have a splendid lot of young sows and boars out of the very best families. Those wanting first-class Berkshires, now is the time. All eligible to record. Wm. Booth & Son, Winchester, Kas.

**KANSAS ECONOMY INCUBATOR**—Capacity of 250 eggs, sold for only \$20. My new Book reduced to only 25 cents. It tells how to make and use the incubators, how to make a good Brooder to mother the chicks and how to manage the chicks until ready for market; also, how to make hens lay all winter; also, how to cure Roup and Cholera. Langshan eggs sold for \$2.50 for 13. Address Jacob Yost, Topeka.

**FOUR YOUNG STALLIONS FOR SALE**—Three and 4 years old; standard-bred roadsters of Messenger and Black Hawk blood; partly broken to drive and ready for service. Also will sell three good Jacks; also a registered Aberdeen-Angus Bull, 5 years old, a sure breeder, offered at a bargain. Address D. H. Hartsock, Marshall, Mo.

**FOR SALE**—Light Brahma Chickens of the celebrated *Faith* strain. Call on or address Mrs. Emma Brosius, Topeka, Kas.

**200,000 RUSSIAN MULBERRY SEEDLINGS**—One-half to one foot, per 1,000, \$1.50; one to two feet, per 1,000, \$4; two to three feet, per 1,000, \$10. Also Catalpa, Ash and other forest trees, one or two years. B. F. Hanan & Co., Arlington, (on C., K. & N. R. R.), Reno Co., Kas.

**WANTED**—The address of 500 farmers who want to improve their poultry by the use of thoroughbred males. M. D. Mulford, Guide Rock, Neb.

**MAMMOTH BRONZE TURKEYS**—\$1.50 apiece, if taken soon. J. H. Taylor, Pearl, Dickinson Co., Kas.

**WANTED**—Cane, Millet, Timothy, Clover and other seeds. F. Barteldes & Co., Lawrence, Kas.

**TRY IT!**—This column for cheap advertising. It is worth five times the price asked.

**I NOW OFFER FOR SALE**—A very fine lot of two-year-old Apple Trees at Willis' Nursery, Ottawa, Kas., of best varieties, packed carefully, in lots to suit customers, and delivered on board the cars or at the express office, at very low prices. A. Willis, Ottawa, Kas.

**BARTHOLOMEW & CO.**, Real Estate and Loan Brokers, 189 Kansas avenue, Topeka, Kas. Write them for information about Topeka, the capital of the State, or lands, farms or city property.

**FOR SALE**—Good healthy Trees and Plants. Varieties most profitable in Kansas. Send list of wants for prices. J. S. Gaylord, Muscotah, Atchison Co., Kas.

**FOR TRADE FOR STOCK**—Two good Improved Creek Bottom Farms, with timber and water. Address A. M. Mason, Neodesha, Wilson Co., Kas.

**FOR SALE OR TRADE**—Three hundred and twenty acres of land in western Kansas. Under high state of cultivation. Box 284, Coronado, Kas.

**FOR SALE**—Two yards Wyandotte Chickens, one yard Partridge Cochins. One cock and five hens each. I will sell cheap. Extra good stock. Jno. I. Hewitt, Tenth street east, Topeka.

## TWO-CENT COLUMN—(Continued.)

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

**FOR SALE**—Holstein-Friesian Cattle. Ten young Bulls, 7 to 20 months old. Terms to suit purchasers. P. I. McEchorn, Richmond, Kas.

**50 NEW SAMPLE CARDS**—For '88 and big outfit free. Card Works, Grand Island, Neb.

**I AM ALWAYS IN THE MARKET**—To buy Common or German Millet, Clover, Timothy, Cane Seed or Onion Sets, and have a full line of Grass, Cane and Tree Seed to offer. Correspondence solicited. J. G. Peppard, 1220 Union avenue, Kansas City, Mo.

**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 \$1,500—\$700 four years at 7 per cent. C. G. McNeil, Stafford, Kas.

**PATENTS**—Instructions, references, sample copy patent from J. J. Higdon, Solicitor of Patents, Kansas City, Mo. Reliable associate at Washington.

**WANTED**—75,000 readers of the FARMER to read this column each week for great bargains.

**FOR EXCHANGE**—A year's subscription to the KANSAS FARMER, or a twenty-word advertisement in this column five weeks, for \$1. Address Kansas Farmer Co., Topeka.

**DO BUSINESS**—By advertising in this column any wants, trades or sales you wish to make.

**FOR SALE OR TRADE**—One Norman Stallion; weighs 1,600 pounds; 7 years old; fine style and action and a splendid mover. Has taken leading premiums wherever shown. A bargain to some one if taken soon. Robert Ritchie, Peabody, Marion Co., Kas.

## 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 these standard books will be sent postage paid on receipt of the publisher's price, which 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.....	2.50
Broomcorn and Brooms (paper).....	.75
Flax Culture (paper).....	.30
Fitz's Sweet Potato Culture (paper).....	.40
Henderson's Gardening for Profit.....	2.00
Hop Culture (paper).....	.30
Onions: How to Raise Them Profitably (paper).....	.30
Silos and Ensilage.....	.50
Stewart's Irrigation for the Farm, Garden and Orchard.....	1.50
Tobacco Culture: Full Practical Details.....	.25
FRUITS AND FLOWERS.	
Elliott's Hand-Book for Fruit-Growers.....	1.00
Every Woman's Own Flower Garden.....	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.....	1.25
Horse-Breeding (Sanders).....	2.00
Law's Veterinary Adviser.....	3.00
Miles on the Horse's Foot.....	.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.....	1.75
Jennings' Sheep, Swine and Poultry.....	1.75
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-Keeping.....	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 Dairyming.....	1.50
Fisher's Grain Tables (boards).....	.40
Fuller's Forest Tree Culturist.....	1.00
Willard's Practical Butter Book.....	1.00
Willard's Practical Dairy Husbandry.....	1.50
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.....	1.00
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
Hussman's Grape-Growing.....	1.50
Quinn's Money in the Garden.....	1.25
Reed's Cottage Homes.....	2.00
Dogs of Great Britain and America.....	1.00
Allen's Domestic Animals.....	1.00
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

Address KANSAS FARMER CO., TOPEKA, KANSAS.

## For Sale.

A pure-bred Red SHORT-HORN BULL, four years old—Bassanio 68295; a good individual and sure and excellent getter.

Price \$60.

Address E. M. SHELTON, Sup't College Farm, Manhattan, Kas.

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



KAFFIR CORN.

## Fresh Kansas Seeds

GROWN AND SOLD BY

## KANSAS SEED HOUSE

F. BARTELDES & CO.,

Lawrence, -:- Kansas.

## EVERYTHING IN THE SEED LINE

Send for our fine Illustrated Catalogue, which is mailed FREE on application.

We are buyers of MILLET, SORGHUM, TIMOTHY, CLOVER, FLAX, HEMP, and other Grass and Field Seeds. If any to offer, correspond with us.

KANSAS SEED HOUSE,

Lawrence, Kansas.

## TRUMBULL, REYNOLDS &amp; ALLEN,

1426-1428 St. Louis Ave.,

## KANSAS CITY, MO.,

DEALERS IN—

## SEEDS CLOVER, MILLET, TIMOTHY, BLUE GRASS, ORCHARD GRASS, RED TOP, MEADOW FESCUE, ENGLISH RYE GRASS, JOHNSON GRASS, TALL MEADOW, OAT GRASS, SORGHUM SEED, BROOMCORN SEED, CASTOR BEANS, FLAX SEED, BUCKWHEAT, SEED OATS, SEED CORN, FANCY GRASSES, ETC., ETC.

## TREE SEEDS A SPECIALTY.

## Use None but T. R. &amp; A.'s Pure Bulk Garden Seeds.

If your dealers haven't them, write us direct. Also T. R. & A.'s Pure Mixed Bird Seed and Mixed Lawn Grass Seed.

## ALL OUR SEEDS ARE NEW. HAVE NO OLD SEEDS TO OFFER.

We carry full lines of the popular PLANET, JR., FARM AND GARDEN TOOLS, DAISY GARDEN PLOWS, TRIUMPH STEAM GENERATORS, all kinds of SEED SOWERS.

## LAND PLASTER. WRITE FOR PRICE. Send for 1888 CATALOGUE.

## SEEDS J. C. PEPPARD, 1220 UNION AVENUE, (One block from Union Depot) KANSAS CITY, MO. MILLET A SPECIALTY. Red, White, Alfalfa &amp; Alsike Clovers, Timothy, Blue Grass, Orchard Grass, Red Top, Onion Sets, Tree Seeds, Cane Seed, Etc.

## 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 *Crickshank Victorias*, *Lavenders*, *Videts*, *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.

## POMEROY COAL CO.

## COAL x COAL

Wholesale and Retail.

612 KANSAS AVE.

Topeka, - - Kansas.

A. D. FERRY & CO., Commission Dealers in

BROOMCORN 225 & 227 Kinzie St., CHICAGO. Refer to Fort Dearborn National Bank and Lincoln National Bank, Chicago. Liberal advances on consignments.

## For Sale!

Registered Berkshire Pigs and young Sows bred, and from prize-winners. Foundation stock Duchess and Windsor Castle families. Largest and best in England or America. Premium Langshan and Wyandotte Chickens. Eggs in season. Write for catalogue and price list before purchasing. J. L. BUCHANAN, Belle River, Ill.

## WANTED!

\$10 Per Day--For Good Men--\$10 Per Day! One hundred good responsible men wanted to engage in a New Enterprise. Light, easy work, that can be done right where you are located. No capital required. Work that can be performed by any man or boy who has the push. Address for further particulars, enclosing two stamps for reply, Mount City Mfg Co., Mount City, Kas

## PURE GERMAN CARP FOR SALE.

For stocking ponds. All sizes, from 2 to 10 inches. Prices on application. J. J. MEASER, Hutchinson, Kansas.