

# KANSAS FARMER

ESTABLISHED, 1863.  
VOL. XXVI, No. 20.

TOPEKA, KANSAS, THURSDAY, MAY 17, 1888.

TWENTY PAGES.  
\$1.00 A YEAR.

## BREEDERS' DIRECTORY.

Cards of four lines or less, will be inserted in the *Breeders' Directory* for \$5.00 per year, or \$3.00 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.

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

**M. D. COVELL**, Wellington, Kas., breeder of Registered Percherons. Acclimated animals, all ages and sexes. At head of stud, Theophile 2795 (8746), black, imported by M. W. Duham, and sired by his celebrated Brilliant 1271 (755).

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

**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.

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

### CATTLE.

**J. ANDERSON**, Dover, Shawnee Co., Kas., breeder of Holstein-Friesian Cattle. Thoroughbred bulls and heifers, also grade heifers, for sale at low prices.

**E. S. SHOCKEY**, Hereford Cattle, **SEE MY OFFER!** TOPEKA, KAS. Page 20 this week.

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

**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.

**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.

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

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

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

**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.

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

**OAKWOOD HERD OF SHORT-HORN CATTLE**—All records. Choice-bred animals for sale. Prices low. Terms easy. Imported Earl of Glister 74522 heads herd. C. S. Eichholtz, Box 1268, Wichita, Kas.

**DR. 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.

**W. E. GOULD**, Marshall, Mo., breeder of Thoroughbred and Grade Holstein-Friesian Cattle. Calumet 3563 H. B., heads herd—a choice butter-bred Netherlands bull. Have now in my herd imported cows and strains from Assgic, Texalar, Astrea, Duchess of York, Coronet and Barent. Choice young stock of both sexes 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.

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

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

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

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

### SWINE.

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

### SWINE.

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

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

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

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

### SHEEP.

**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.

**TOPEKA WYANDOTTE YARDS**—A. Gandy, 624 Kansas avenue, Topeka, Kas., breeder of White and Laced Wyandottes. White Wyandotte eggs, \$4 per 13; \$7 per 26. Laced Wyandotte eggs, \$8 per 13; \$5 per 26. My yards are located two miles south of State house, on six acres of ground. I have six pens of Wyandottes. My birds are as fine as anybody's and mated for the best results. I have a few cockerels for sale cheap.

**TOPEKA POULTRY YARDS**—L. E. Fitzley, Eu-rope, Kas., breeder of Wyandottes, B. B. R. Games, P. Rocks, B. and W. Leghorns, Buff Cockerins and Pekin Ducks. Eggs and birds in season. Write for what you want.

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

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

**E. E. FLORA**, Wellington, Kas., breeder of Part-ridge Cockerins, S. C. Brown and White Leghorns, Plymouth Rocks. Eggs, \$1 per 13; Pekin Duck eggs, \$1 per 10; M. B. Turkey eggs, 15 cents each.

**EGGS FOR HATCHING**—F. Rock and S. C. Brown Leghorn, \$1 for 13; Langshans, W. F. Black Span-ish and S. S. Hamburg, \$1.25 for 13. All choice stock. David Kerns, Leocompton, Douglas Co., Kas.

**GEO. H. HUGHES**, North Topeka, Kas., breeder of W. F. B. Spanish, L. Brahmas, Langshans, Buff Cockerins, Leghorns, P. Rocks and Fancy Pigeons.

**KAW VALLEY POULTRY FARM AND APIARY**—Rossville, Kas. L. E. Tatman, Prop'r, breeder of Buff Cockerins, Light Brahmas and Plymouth Rocks. Also, Italian Bees and Poland-China Swine. All breed-ers first-class—no better blood in existence. Eggs \$1 per setting.

**BALDWIN POULTRY YARD**—Wm. D. Kerns, Baldwin, Douglas Co., Kas. Eggs per setting: M. B. Turkeys, \$1.75; P. Rocks, S. C. B. Leghorns and Imp. Pekin Duck, \$1.

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

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

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

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

**IMPORTED BLACK MINORCAS**—Eggs \$2.50 per 13; L. Brahmas, Felch's strain, eggs \$2.00 per 13; Brown Leghorns, eggs \$1.50 per 13. Poultry supplies. Ad-dress J. W. White, 725 Kansas avenue, Topeka, Kas.

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

**MRS. EMMA BROSIUS**, Topeka, Kas., breeder of Thoroughbred Light Brahmas—Felch pedigree strain, the most popular known. Mammoth Bronze Turkeys and Imperial Pekin Ducks. Having the finest stock that time and money can secure (believ-ing the best the cheapest), am now prepared to fur-nish eggs at half the price Eastern breeders ask. Price of eggs: Light Brahmas, \$3 for 13, \$4 for 39; Mammoth Bronze turkeys, \$3 for 13 straight; Pekin ducks, \$2 for 11. No under-sized or inferior-shaped eggs sent out. Everything first-class; true value for money received.

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

## Walnut Hill Poultry Yards.

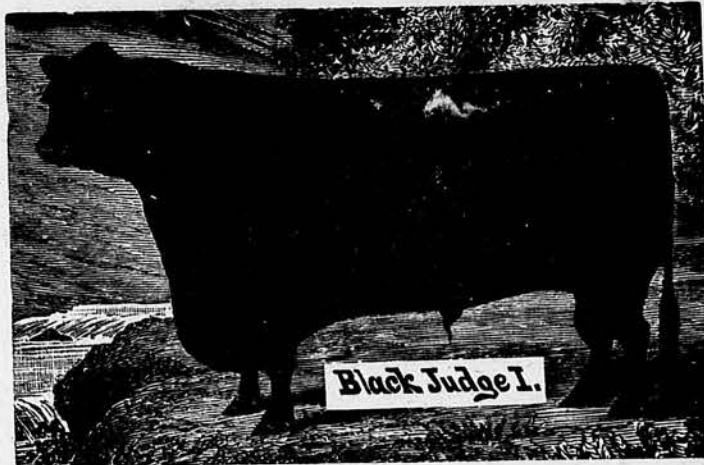
Wyandottes, two fine pens; Langshans, Rose-comb Brown Leghorns and Golden S. Ban-tams. My birds are of the best strains. Eggs for sale in season, \$1.50 per 15. Chicks for sale in fall. Prices reasonable. Write for wants to G. W. FRY, Corneau, Grundy Co., Mo.

### MISCELLANEOUS.

**PIC-EXTRACTOR**—To aid animals in giving birth. Circulars free. Send for it to Prof. Wm. Dullin, Avoca, Iowa.

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

## Dispersion of the Big Island Herd of Aberdeen-Angus Cattle.



This will be the opportunity of a lifetime to purchase Aberdeen-Angus cattle, as so large a number of highly-bred show animals has never before been offered at public sale. For Catalogue address J. W. & C. C. JUDY, Auctioneers.

Property of Mossom Boyd & Co., Bocabaygeon, Ontario. Auction sale

MAY 23 & 24.  
Dexter Park,  
CHICAGO

When 60 head of Polled Angus will be offered, including 40 females and 20 bulls of the Erica, Pride of Aberdeen, Queen Mother, Coquette, Kinnechry Blue Bell, Westertown Rose, Drumlin Lucy, Kennaird Fanny, and other highly-prized tribes. Cheapest offering of Aberdeen-Angus ever made in America.

MOSSOM BOYD & CO.,  
Bocabaygeon, Ontario.

### SWINE.

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

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

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

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

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

**H. H. GEORGE**, Burlingame, Kas., breeder of pure Essex Swine and S. C. Brown Leghorn Fowls. Eggs \$1.50 for 15. Stock for sale. Correspondence solicited.

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

**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.

**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.

### 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.

### POULTRY.

**BRONZE TURKEY EGGS**—For hatching from hens weighing 13 to 21 pounds each. Also Brown and White Leghorn, Plymouth Rock and Pekin duck eggs. Write for prices to Mrs. Emma Y. Foster, Aullville, Lafayette Co., Mo.

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

**D. O. BACON**, Fort Scott, Kas., breeder and shipper of standard thoroughbred Poultry—Plymouth Rocks, Langshans, S. C. Brown Leghorns and Champion strain of Pekin Ducks. Eggs and birds in season. Correspondence solicited.

**MRS. A. B. DILLE**, Edgerton, Kas., breeder and shipper of the finest strains of M. B. Turkeys, P. Rock and Wyandotte Chickens. My prices on eggs are as follows: M. B. Turkey eggs, \$2.00 per 11; P. Rock and Wyandotte eggs, \$1.25 per 15, —two or more settings, \$1.00 each. Satisfaction given or money refunded.

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

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



**TOPEKA : BUSINESS : INDEX**

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

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

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

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

**Rogers & White,**  
**CIVIL ENGINEERS AND SURVEYORS.**

All kinds of engineer work done on short notice. A specialty made of laying out and platting towns and additions. Lost corners and boundaries correctly established. Estimates furnished on all kinds of work. Office: 203 9th St., cor. 9th and Quincy, Topeka, Kas.

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

General Manager Kansas Surgical Hospital Association.

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

**MAGILL & THE FLORIST,**

Greenhouses: Office and Salesroom:  
Cor. Kansas and Euclid 110 West Eighth  
Avenues, Street,  
TOPEKA, KANSAS.

Premiums with all orders. Send for Price List.

**M. S. ALLDAFFER.** **W. H. ALLDAFFER.**

**ALLDAFFER & CO.,**  
**Real Estate and Loan Brokers**

Choice bargains in City, Farm, Suburban and Country Property.  
118 West Sixth St., Topeka, Kas.

**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.

**TOPEKA**  
**Investment & Loan Co.**  
**Farm Loans a Specialty!**

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

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

521 Kansas Ave., Topeka, Kansas.

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

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

**W. F. FILE, Manager.**

**FARM, AGRICULTURAL**  
**AND PASTURE**  
**LANDS**

For sale in different portions of Kansas.

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

**INVESTMENTS MADE FOR PARTIES.**

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

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

**WONDERFUL RUSH!****SUNFLOWER STATE**

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

LANDS IN THE FAMOUS

**Golden Belt of Kansas**

A SPECIALTY.

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

Write for lists or call at the

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

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

**STRICKLER, DANIELS & POUNDS,**  
515 KANSAS AVENUE, TOPEKA, KAS.

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

**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.,**  
332 Kansas Avenue, TOPEKA, KAS.

**DRS. MULVANE, MUNK & MULVANE,**

OF THE  
**TOPEKA**  
**Medical and Surgical**  
**INSTITUTE**

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

**WE CURE ALL FORMS OF CHRONIC DISEASES,**

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

Refer by permission to Bank of Topeka; John D. Knox & Co., Bankers, Topeka; Citizen's Bank, North Topeka; American Bank, North Topeka. Send for printed list of questions.

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

**JOB PRINTING**

FOR FARMERS! & FOR STOCKMEN!  
FOR NURSERYMEN!

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

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

**THE**  
**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 LEADING**  
**Furniture House**  
**OF KANSAS.**

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

**G. HAUSCHILD,**  
Topeka, Kas.  
Box 406.



**WEED-CUTTERS---ATTACH TO**  
**CULTIVATORS.**

For cleaning and weeding Corn, Potatoes, Cabbage, etc. The very thing to use while the plants are young. Will pay for itself manifold in a single season. Per set of four—two right and two left—\$5.00. Write for Descriptive Circular.

**O. N. McCLINTOCK & CO.,**

MANUFACTURERS' AND

**General Purchasing Agents**

TOPEKA, KANSAS.

We are State Agents for and keep stock and can fill large or small orders on short notice, of

**WHEELDON'S ADJUSTABLE SHADE FIXTURE, INDESTRUCTIBLE FUEL CARTRIDGE, AND PATENT SELF-LOCKING MAIL BOXES.**

**"The World" Type-Writer**

Guaranteed to do as good work as the high-priced type-writers, and only costs \$10.00. Sent to any address on receipt of price, or by sending \$1.00, to guarantee express charges, we will send one C.O.D.

**Cylindrical and Portable Letter Copying Press.**

Size—11 inches long, 3 inches diameter. Nickel plated Steel. Weight 2 pounds. Price \$5.00. Fifteen letters copied at a time on single sheets, using ordinary writing utensils, while such copies are adapted to all systems of filing. Use the PORTABLE, in traveling or at the desk.

**OBLINGER**  
**CHAMPION - HEAT - DISTRIBUTOR.**

It will save half your fuel. It costs only \$2.00 for size No. 6. It can be attached to any stove in fifteen minutes.

The Chicago Edwards' Oil Burner & Manuf'g. Co.'s Goods, consisting of PETROLIA HEATING STOVE, for Parlor or Office, and OIL BURNER FOR COOK STOVES AND RANGES. No dust, no ashes, no smell. Cheaper than Wood or Coal. Also OIL BURNERS FOR STEAM BOILERS. Also ECONOMICAL ASBESTUS FUEL CARTRIDGE AND FIRE KINDLER.

**ECONOMY WALL DESK.**—Everybody who has a home should have a Wall Desk. Cheap, handsome, convenient.

**"NEW ERA" HYDRAULIC CLOTHES WASHER**—On which the manufacturer offers \$1,000 to any person who will produce its equal. Agents wanted.

Correspondence solicited. Circulars on application.

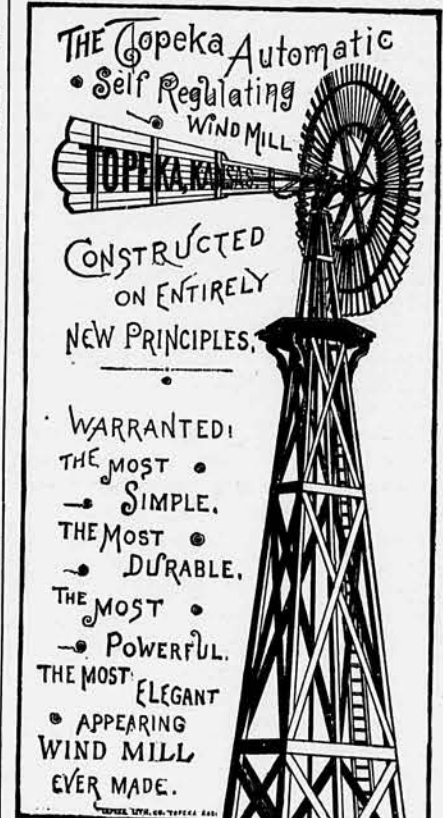
**O. N. McCLINTOCK & CO.,**  
Manufacturers' and General Purchasing Agents,  
No. 417 Kansas Ave., TOPEKA, KAS.  
(Rear Room Second Floor.)

**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, 1898. Address **PETER MCVICAR, Pres**



The Topeka Wind Mill Manufacturing Co., manufacturers of Solid and Sectional WIND MILLS; ALSO POWER MILLS OF ALL SIZES, PUMPS, TANKS, PIPE AND FITTINGS.

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

**TOPEKA WIND MILL MANUFACTURING CO.,**  
Topeka, Kansas.

**The Western School Journal**  
**TOPEKA, - - KANSAS.**

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

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

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

School officers are authorized to subscribe for their districts. \$1.25 per year. Clubs of five or more, \$1 each.

Agents wanted in every county. Write for Sample Copy.

"Every Soldier's honorable discharge should be his pension certificate," IS THE MOTTO OF THE

**Weekly Knight & Soldier,**

The official organ of the G. A. R., and its auxiliary societies,  
Published by **M. O. FROST, Topeka, Kas.**

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



## Agricultural Matters.

### Notes on Back Numbers.

EDITOR KANSAS FARMER:—Thanks to A. E. Jones for answer to questions at least of interest to the writer. This is one of the chief values of a farmer's paper—the interchange of methods and ideas. What may be a very familiar and settled question with one farmer in one locality may be a new and untried problem to another farmer in another or possibly in the same locality. In common with other thousands of farmers from other States untried in Kansas methods and crops, these everyday hints and suggestions are gladly perused.

On the other hand, we ask R. W. Anderson to "put yourself in his place" and see if you would not write differently instead of casting a sneer at those who write "strange and thoughtless questions," and when you "venture to say" "the fault is more in the man." Well that may be true, but it is humiliating enough to be ignorant so that questions have to be asked, and more so to be told of it.

It may seem very strange to the old and experienced grain farmer of Kansas that a stranger coming from an almost exclusively grass and stock country, though much older, better improved, thickly settled with wide-awake, progressive farmers, yet strange to the mind of a Kansan in a thirty years' residence, I never saw a grain drill at work.

But I believe yet my position in regard to a lack of knowledge on the part of many grain-raisers here as to the proper amount to sow per acre had good foundation in fact. I can show the gentlemen adjoining farms, and I have not been able to detect any difference as to quality of soil, in which it was as I said one sowed one and a half bushels per acre and the other three bushels. He says "all right, they should differ." I suppose the most ignorant farmer knows different kinds of soils, etc., require different quantities of seed, treatment, etc.; but that was not the question, as reference to the KANSAS FARMER of April 12 will show.

I beg to say we did not "take grain from the bin with sticks, pieces of weeds, straw and trash in it and dump it into the drill," but it was as well cleaned as the best fanning mill in the neighborhood would do it.

Statistics have shown that McPherson county was the banner wheat county and standing second as to oats, and I presume farmers are as well supplied with improved machinery as any part of the State, and the complaint mentioned as to drill I find almost universal, ever making all due allowance for quality of seed. Perfection has not been reached yet.

Fruit trees—borers. In this part of Mr. A.'s letter he is treading on familiar ground to us, and I cheerfully indorse what he says. After searching for borers I always left the soil as I had scraped it away from the trees for a few weeks and looks over them again, as by an oversight any might be left in the trees, they can easily be found by fresh borings. Let me urge those who are newcomers to become Kansans in the way of fruit-growing as in other ways. Do as successful fruit-raisers do, even if it is at entire variance with the way you were accustomed to do further east under very different climatic influences. Less than a year's experience here teaches me that with prevailing high winds and hot suns during some days even in winter, low tops are essential, and the favorite varieties give

place to the tried ones of the new home. Castor beans. Friend Shepherd, living as he does in the midst of the castor bean region, gives the mode as practiced by successful farmers as I found in vogue by a six months' residence in that State, except that generally it was planted in hills by an ordinary corn-planter the same distances apart as corn, and if need be thinned out so that only one stalk be left in the hill. A narrow one-horse sled with box was driven between each alternate row in gathering the crop. J. M. RICE.  
Conway, McPherson Co., Kas.

### Sweet Potato Planting.

EDITOR KANSAS FARMER:—I notice in the FARMER this week about sweet potatoes. I have a different view of the question asked and my answer would differ. Raising from seed (seed potatoes) is done in two ways, either by furnace heat, or by manure heat. I have always used the latter by putting in some eighteen inches of horse stable manure well mixed after in the bed, and on top of that some four inches of dirt, then split all large potatoes, laying the flat side down, then cover with light loam and sand mixed about two inches. Keep in good condition by covering and close watching. I have raised plants and potatoes for some thirty years and could be more precise and more lengthy; but let it suffice to say further that I would not put my rows less than six feet apart and sixteen inches in the row. GEORGE TENNEY.  
Lincoln, Lincoln Co., Kas.

### Growing Corn for Seed.

EDITOR KANSAS FARMER:—When any considerable quantity of corn is wanted for seed it will often pay to plant a plat on purpose for seed. In this way a purchase of a small quantity of seed can, with good management, be made to furnish a full supply the next season. It is difficult to estimate the value of a good supply of really first-class seed corn, and it is worth taking considerable pains to secure, and once well secured, it can readily be kept up by a careful selection early in the fall, thorough drying, and good storage during the winter. The soil in which corn intended for seed is to be planted should be rich, if naturally rich all the better; if not, use only well-rotted manure, and see that it is thoroughly incorporated with the soil. Fresh coarse manure should not be used, because it contains but a small per cent. of available plant food, and it deprives the soil of necessary moisture too essential to a good thrifty growth. While well-rotted and fined manure well incorporated with the soil aids to retain moisture, coarse, fresh manure has the opposite effect. Plow deep; this is necessary so as to loosen up the soil thoroughly. My plan of growing good corn is to plow deep and cultivate shallow. Harrow or drag until the soil is in good tilth; the more thoroughly this work is done before planting the crop the better and easier will the cultivation be after the crop has started to grow. Mark out the runs three and a half or four feet apart and drop a kernel every foot, cover well and press the soil down well upon the seed. Take good care to give clean cultivation; that is, keep down the weeds and keep the soil in as good a tilth as possible. Stirring the soil thoroughly will aid materially in securing a strong, vigorous growth, and this is what insures a good yield. Of course it is possible to cultivate too much, but this will only be in exceptional cases, and especially when the cultivation is shallow and only the surface is disturbed. Frequent stirring of the soil aids materially to retain the

moisture, and during the summer this is often very essential.

The best of what is raised will, under anything like ordinary conditions, make good seed corn if gathered early and properly stored. And such work can readily be made profitable because good seed corn is very important, and this is the best plan of receiving what you know to be good. N. J. SHEPHERD.  
Eldon, Miller Co., Mo.

### From Crawford County—Chinch Bugs.

EDITOR KANSAS FARMER:—I see your crop reports of last week's issue from all over the State are very favorable, and everything seems to encourage the farmer so far this spring. Prospects are fine in this part of the State so far. Have had plenty of rain all spring, and not too much at any time. Ground is well soaked with water; springs that haven't run for three years are now flowing again. Oats is in a healthy condition, but not growing very fast; are taking root all the while, so will soon run up when weather gets warm. Most of the corn is planted and a large per cent. of it large enough to cultivate; some have been cultivating for the past week. There are always some farmers that wouldn't get through planting till June if some one would plow their ground for them.

I see the KANSAS FARMER advises and urges the chinch bugs' destruction. I will ask the FARMER folks if they ever tried burning the little insignificant animals in wheat and oat fields. If they have not, try it once and publish your success. I have never tried it in Kansas, but you can't burn or drown a Missouri chinch bug. And I suppose the Kansas bug is of the same breed. There is only one destroyer for the little creatures that is a total success: Let the old ones alone and they will die a natural death, and lots of rain will destroy the eggs deposited. The old bugs that go through the winter deposit their eggs in May and then die. There are lots of them in the air now, but farmers feel jubilant over a big crop this year. SUBSCRIBER.  
Walnut, Crawford Co., Kas., May 7, 1888.

### About the Draft of Plows.

From Bulletin No. 32, Missouri Agricultural College Farm.

The importance of perfecting the plow in its little details of construction and use will be better apprehended in connection with a knowledge of its broad relations to our national agriculture.

There were in 1880, 4,008,907 farms in this country. The area annually plowed amounted in round numbers to 140,000,000 of acres. The number of plows made annually being 1,326,123. If we assume that a pair of horses can properly plow two acres per day, which is decidedly more than is done, it involves 140,000,000 days of horse-work to plow the tillage area of this country annually.

It is very easy to vary the draft of a plow 10 per cent., indeed between extremes of plows and practices of plowing a variation of 50 per cent. is doubtless made. Assuming 150 pounds, the accepted standard, as the average working or draft power of a horse, then a plow running seven inches deep and cutting a fourteen-inch furrow, would require at least about three horses to carry it comfortably. Only 10 per cent. change in draft would add forty-five pounds draft to a plow, or one-third of a horse's power to perform work. Such an addition to a team becomes a very serious burden when continued day after day, and when applied to the country, adds a great loss in a field where little excuse should exist for ignorance. This loss aggregates, on the basis

named of 10 per cent., 14,000,000 days of horse-work.

If it is stated in refutation or explanation of this view that this unnecessary force is simply added to existing terms, it resolves itself into a statement that our plow teams are overloaded, as they are, if a good furrow is plowed, and if such a furrow is not plowed then it resolves itself into a more unprofitable factor—poor plowing.

The force of the horse is derived from the food used, and the more force used the more food will be required for the horse. Thus loss is not evaded.

Any increased force required in plowing that comes from illy-adjusted plows is at the expense of the quality of work done and always at a greater exertion on the part of the plowman. It may be roughly and safely stated that if our plows draw 10 per cent. harder than they need to draw, that double the loss is really met than the sum computed, although not in horse power alone but in part in poor work.

I shall not attempt to discuss plows and the principles of plowing, but to set forth the results of tests made before the class in agriculture and to point out their bearings.

It is not uncommon to observe an improper harnessing of horses for the plow, due to two reasons. The first occurs when saddles are used with the harness to sustain the traces. When horses are changed from wagons to the plow the "double-tree" is attached at a lower point to the plow than it had been to the wagon. If the saddle is buckled up straight to the line of the trace from collar to axle, which under-tension forms a straight line, the dropping of the plow end of the trace, when changed from wagon to plow, will make an angle at the point where the back-strap is attached to the trace.

Such an angle is also formed by sustaining the traces by a strap over the back to hold it from the ground when turning at the ends of the furrow, in order to prevent the horse from stepping over it.

Of all the little errors that get a footing in practice I know of none involving at once so much of inexcusable ignorance or carelessness with so little gain accompanying a great loss. I saw perhaps twenty teams at work at once on a sugar plantation in Louisiana, while I was in attendance on the New Orleans exposition. These were all under a high-salaried manager, yet every team I believe, had a strap running over the hips to the traces to sustain them. Suspending a pair of balances over the backs of the horses as attachments to the traces, at an angle not nearly as sharp as I saw on the Louisiana teams, I found that the scales registered fifty pounds of the draft or nearly one-third of horse power. This lost force was not only at the expense of the horse and its owner, but was used to gall and irritate the horse.

By a law of physics—given the angle thus formed and the lost force can be computed.

This same law is not unfrequently broken on the farm.

The use of the wheel or truck under the end of the plow beam near the bridle is an old practice now mainly out of use. So far as these trucks out of use that our leading dealers in Columbia did not understand me when I inquired for a plow with a truck or wheel on it, consequently I had to make one for the trial to be related.

From theoretical principles trucks on a plow have been declared useless. Scotchmen, whom none excel with the plow, declare trucks to be an injury to the plowman who, depending upon them to regulate depth soon overlooks their proper adjustment.

A plow properly adjusted for its work will, when it rides in furrow, level and steady, without loss of force in draft and without inferior character of work, have its bridle at the point of attachment with the team, touch the straight line described from point of horses' shoulder, where the trace is attached, to the center of resistance on the furrow board, without forced deflection up or down. Now it is evident that if a truck prevents the plow from going deeper into the soil it will be because it holds the bridle above this straight line and at an angle to it. Such an angle would have the same influence as the angle formed in the test before described and cause an increase of draft which would be measured by the sharpness of the angle. If no such angle is formed, or plainly stated, if the truck does not hold the plow from going deeper, why put it on? The answer by the public is we will not put it on.



## The Stock Interest.

### The Beef and Pork Combines.

Senator Plumb expressed himself strongly in the Senate last Thursday. He said that he knew of no worse combination in the country than that of the beef and pork packers. He said that for years the price of cattle to the producers had been going down. They had gone down he thought 50 per cent. In the same time prices of meat to consumers had gone up, and every single dollar of the difference had gone into the pockets of that combination. So perfect was their control, that they knew absolutely not only how many cattle were to arrive each day in Chicago but over what railroad they were to come, where they had been shipped from, their character, and the men who shipped them. When the cattle reached Chicago the syndicate's representative was sent to view and put a price upon them. And the price at which they had to be sold, unless it was made lower. No cattle commissioner dared to set up for himself in Chicago. His occupation would be immediately gone. Owing to the operation of this trust prices of cattle had declined unnecessarily and destructively. It was safe to say that on every car load of steers of 3 years old and upwards, raised west of the Mississippi river during the past five years, the market value had been, by this combination, reduced not less than \$10 a head. The damage to the State of Kansas alone during that period of time had been more than \$40,000,000, and the wealth of the syndicate had grown proportionately. They had a committee there now, having in their pockets the money of this "stock ring" to get Congress to give them control of the question of cattle quarantine. With that Chicago would be made "open water," and St. Louis could be quarantined against. Practically there was the same influence in St. Louis and Kansas City. This "combine" had allies in the railroad managers. They had allies in the railroads. They had made the railroad officials partners in their stock yards, partners in their feeding stations, and had given them "sops" out of all the profit derived by them from the time the cattle were shipped, until the cattle reached the abattoir in New York or elsewhere. Step by step they had come to the final condition where they had actually fixed the price of cattle, just as though they were the men who raised them and were the only persons in the world who did raise them. When he considered that they then proposed to have Congress rivet the final chain on the cattle industry in their behalf, he was lost between admiration and indignation at their audacity.

Senator Vest, of Missouri, spoke in the same vein. Referring to what he called the "Cattle Syndicate," he said the people were helpless and within its power. It was the most terrible tyranny ever exercised. There were five men or firms in the city of Chicago which regulated the price of cattle every day. They met every night and fixed the price for the next day. The Missouri farmers found from the market quotations that cattle were 3@3½ cents a pound. He shipped his cattle to Chicago, but when he got there he found that a syndicate had put beef down to 2@2½ cents. He could not store his cattle as they would be diminished every day in weight and quality, and so he was coerced to sell. He went to an agent of Armour's, and was told that the price was 2½. He went to another Armour agent and got the same answer. He was met all over the city with answers of 2½ a pound, and he had

to take it. So that these men owned the cattle-raisers' property, and confiscated it as if they possessed the right to take it from his farm without paying him one cent. Talk, said he, about trusts! Talk about pools! The cattle pool of Chicago is the most infamous tyranny that ever existed in the United States.

### The General-Purpose Sheep.

In your March number you ask the question, "Who has found the general-purpose sheep?" The Shropshire fills the bill. There is no question with those that have made a test of it. Why should there be? They will shear as much money per head as the so-called wool-producing breed; and when it comes to mutton, where is the wool-producing breed? They stand close herding, in large numbers, better than any sheep we ever owned. They are quiet, do not frighten easily in pasture or yard; very strong and healthy, scarcely ever have hoof-rot; require no extra care and no more feed; do not have to be housed in summer or anything of the kind, and that is what the general farmer wants—something that will give him the largest returns for the least trouble. The Shropshire wool is known as medium, delaine and half-combing wool; they shear on an average from nine to eighteen pounds, and their carcasses weigh from 170 to 400 pounds. We have one that sheared eighteen pounds and weighed 326 pounds at two years old. They are very prolific and will produce at least 50 per cent. of twins. Our ewes have commenced to drop their lambs, and out of sixteen ewes, so far, thirteen have had twins, and they are provided with milk enough for twins to keep them as they should be kept. It makes one laugh to see the lambs so strong, and as soon as they have dropped almost they get on their feet and there is no more trouble with them. Most of the farmers have become satisfied and will grade up their flocks with a Shropshire, and the general farmer will increase the pounds of wool per head besides the quality will be much better; in fact the three-fourths blood fleece, washed, brought 37½ cents in Michigan last year. In grading up a flock, one should use good rams, large, well-shaped and especially well woolled. No sir, there is no question but that the Shropshire is the general-purpose sheep of the country. The market lambs from this breed are harder and mature earlier than other breeds. To sum the thing up, we have it as the following: Merino, for wool only; coarse-wools, for mutton only; Shropshire, wool and mutton combined. No sir, dear Editor, you have got to ask us something harder than "who has found the general-purpose sheep?" or we shall guess it every time. We call the *Sheep Breeder and Wool Grower* a first-class paper, and it should be taken by every one that has sheep. We would take it if the price was \$3 a year. There is something to be learned in every number.—*Montague, in American Sheep Breeder.*

### Washing Wool.

The following extract from an article in the London *Live Stock Journal* is of interest to wool-growers. This expert asserts that it is an injury to the staple to have wool washed and dried before it passes into the hands of the scourer. The article says:

Be it understood—as a first glance at the railway station shows, and as the streets blocked with bale-laden wagons prove—Bradford does for the wool clip of the world much what the Bank of England does for the gold diggers' ingots. Bradford throws the wool into

a shape in which it passes readily from hand to hand. Hardly any questions are asked. Bradford "tops," Bradford "noils," and Bradford "shoddy" pass current everywhere among those who manufacture wool. Not very much, in comparison, of manufacture is done in Bradford. Its work is to clean, to classify, to put into available form all the wool which the world wants to dispose of. And, in virtue of this its function, it is, therefore, the best witness upon the question of sheep-washing, which the world can furnish. After passing through floors and floors—each bulging out with bales of wool—the first question elicited this fact. British wool-growers don't supply one-tenth of what Bradford every day has to deal with. Indeed, the British flock-owner was quickly spoken of as a respectable client in a small way, who has somewhere about 30,000,000 sheep to clip, while Montevideo has more than four times that quantity. New Zealand as many, and Australia a great deal more. "We don't do very much now in English wool here," said the manager of a huge establishment, where in thirteen rooms thousands of fleeces were every day combed and carded. "This is Montevideo 'half-bred,' that comes from New Zealand, and this is from the Cape." But what difference does it make to you about the washing? "Not a bit, in one respect," was the reply; "every ounce goes in there, and all is washed whether it has been washed before or not." Not a fleece but what passes through the troughs! In these troughs, in warm water, varying according to the wool from 80 deg. to 110 deg., and even 120 deg. in extreme cases, with a specially made soap, the fleeces are passed through an endless chain of forks keeping them moving along. At the end of one series of troughs the wool is lifted into fresh water, and passed through it, and so into a third, until the greasy, sticky fleeces came out at the end as white as snow, and are passed into another room to be carded, and combed and classified. "If you wash all afresh," was the question put, "where is the good of washing on the other side?" "Well," was the reply, "it saves carriage. We don't sometimes get more than four or five pounds of salable wool (tops, noils and shoddy) out of sixteen pounds of fleece." "Sixty per cent.," was the answer, "of matter which is not wool." "What on earth is the 60 per cent. made up of?" "Dirt and grease. They take out tons of matter—only useful for manure; and skim off grease enough to oil the wheels of all the locomotives in the world."

"So, then, I am to understand that carriage alone may make it economical to wash wool at the Cape or in Australia—for, by so doing nearly two-thirds of the carriage is saved?" "Yes," was the reply, "but at a great loss to the wool. It never cards and combs so well as when it comes fresh out of its first dip. You cannot restore the elasticity to wool which has been wetted and dried. It is more brittle; and yields less of top and more of waste than the same wool would have done if it had come to us in the grease." "So, then, your verdict is wholly on the side of not washing by the flockmaster?" was the next question—"but perhaps you find the grease profitable?" "Not so," was the reply; "the greasier the wool, the hotter the water has to be, and the more the soap will be required. The grease won't pay for these by £2,000 a year in this business." At all events, there was no mistake about the wool-washers. They, in the plainest terms, declare that, for their purposes, the wool is far better sent just as it grows.

### Parasites on Live Stock.

At the end of the winter, colts, calves, and older stock are very apt to be crowded with these objectionable parasites. They thrive best upon poor animals, and are supposed to be bred by old, worn-out, and miserable creatures. However this may be, there is no doubt that they find a suitable home in the dirty matted hair in the late winter or early spring months, and on a sunny day may be seen literally in millions, every hair having nits upon it. One reason of so much rubbish accompanying them is that in course of their development from the egg to the mature louse the skin is cast several times.

To get rid of them is not always easy, as the length of coat and accumulation of dandruff or scurf makes a waterproof covering that resists many remedies which in themselves are certain destroyers if only brought in contact with the parasites.

A sunny day should be chosen, and the early part of it, when a bountiful washing with soft soap and hot water should be undertaken, so as to clear the skin of grease and dirt before applying the remedy. Stavesacre is an effectual destroyer of lice if prepared by boiling one-half pound with a gallon of water and brushing well into the coat with a hard brush.

Tobacco juice is also much in request for the purpose, and can be procured from druggists at a very low rate, as it is imported now free of duty, or only a nominal duty, and the old expensive plan of boiling or infusing good shag tobacco is not necessary. By the way, very few people avail themselves of the governmental privileges of growing sufficient tobacco for this and fumigating purposes, though they might easily do so.

Paraffine is sometimes used, but is a very dangerous remedy, occasionally being absorbed and causing the death of the animal, and not infrequently causing a blister, and much unnecessary pain, and subsequent blemish.

There is another kind of louse from which horses suffer, which, if once seen can never be forgotten—we refer to poultry lousiness. It will sometimes happen that a horse stabled with fowls will become affected and literally tear himself to pieces with them unless promptly treated with one of the foregoing remedies, either of which is as effectual against these as against the ordinary louse.

In washing or applying any remedy, it should always be commenced near the eyes and worked backward, as if any other plan is adopted the besieged retreat into the mane and ears, and many escape altogether, like the rats that are left just to keep up the breed after the rat-catcher has gone.

It is always well to repeat the dressing and keep the animal moving about till dry, or they may lick off more lotion than is good for them, or stand about and get chilled.—*Chemist and Druggist.*

### Costiveness in Lambs.

It is generally connected with a dry and bare state of the pasture. The existence of it having been clearly ascertained—there not being, on the one hand, any mechanical obstruction from the wool of the tail being glued over the fundament; nor, on the other hand, any evacuation of small drops of liquid faeces, accompanied by violent straining; the case must be immediately attended to, for it will generally be connected with a degree of fever that may be exceedingly dangerous. Half-ounce doses of Epsom salts, in solution, should be administered every six hours until the bowels are well evacuated; after which the lamb and the mother should be turned into more succulent pasture.—*Youatt.*



## In the Dairy.

### IMPORTANT INFORMATION.

Special Correspondence Kansas Farmer.

As Secretary of the first annual meeting of the Kansas Dairy Association, I have received many letters of inquiry concerning the disastrous result of an explosion of a separator in the creamery located at Hazleton, Barber county, this State, through which Mr. G. M. Clark lost his life. And, invariably, all desired to know what make of separator it was, and the cause of explosion, in fact every point about said particular piece of dairy machinery.

To satisfy myself and those making inquiry, as well as the public in general, I wrote to parties at Hazleton whom I thought would furnish the desired information, but have not as yet received a line concerning the matter, and why this silence on their part I am unable to say. The present Secretary, Mr. R. T. Stokes, also wrote to the Hazleton parties for like information, but with the same stolid silence as myself received. It can't be possible that those who are interested in the sale of the separator exploded can have arranged, for money consideration, the utter silence of the parties in whose creamery the explosion took place? Yet it seems that a screw is loose somewhere, or else the information sought after from the Hazleton parties would have been forthcoming long before this.

To visit the place in question would incur considerable expense on my part, also upon the part of Mr. Stokes, hence as a last resort, taking it for granted that the separator was a Danish-Weston, Mr. Stokes wrote a letter of inquiry to Chas. P. Willard & Co., No. 236 Randolph street, Chicago, Illinois, receiving the following in reply:

CHICAGO, May 1, 1888.

R. T. Stokes, Esq., Garnett, Kas.:

DEAR SIR:—Replying to your favor of the 23d, would say, that after thorough investigation of the accident at the factory to G. M. Clark, Hazleton, Kansas, we find that the accident was due to running the separator at a greater speed than that licensed by the manufacturers. It had been driven by a pulley sixteen inches in diameter. To get increased capacity, Mr. Clark had removed that, or had bolted around it to make the pulley twenty-two inches in diameter. This, with the poor governor they had on their engine, drove the separator at such a speed as to burst it. In addition to this, it was an old-style machine, one of the very first made. The number of it was 21; the number of the present machines is something over 400. Separators are now made of one solid piece of steel, hammered without seam or weld. They are tested at a very high rate of speed, much higher than that at which they are licensed to run. The recently manufactured machines, as well as the early ones, will not explode if driven at the proper speed. All the separator explosions that have occurred are due to excessive speed. Respectfully yours,

CHAS. P. WILLARD & CO.  
HORACE.

### Facts and Figures Concerning the Dairy From a Farm Standpoint.

An address read by C. P. Goodrich, before the Fort Atkinson Farm Institute, March 16, 1888.

These facts and figures will be taken mainly from my own experience. In the year 1875 was my first attempt at anything like dairying. Previous to this I had depended mainly on grain-raising, with selling occasionally a little beef or pork, for my income.

For years I had been in the habit of keeping an account of the cost of different farm products, and in looking over my books I find that on an average, a bushel of wheat cost me more than I got for it; and in every instance but one a fat steer cost more than he sold for. By this way of farming I found I was gradually reducing the productiveness of my farm, in fact was slowly selling it off, a little at a time, with each load of grain hauled away, and consequently

my income was each year growing smaller till it was necessary to practice the most rigid economy to be able to meet my necessary expenses. A little figuring showed me that if I should sell my farm for what it would bring, put the money out at 5 per cent. interest, and work, myself, for the wages of a common farm hand, I could better provide for my family and work less hours than I was doing.

This was the situation when I commenced dairying with nine cows. At the end of the year the total proceeds footed up to \$348.66, or \$38.74 per cow. Men said I had done well. I thought I had taken good care of my cows and fed them well, and figured the cost of keeping at \$25 per cow. That left but \$13.74 for caring for and milking her and making up the product. Pretty small pay, I was certain.

The next year I determined to feed better; I put in some fodder corn and bought, in the fall, six and one-half tons bran at \$7 per ton—bran was cheap then, some said it was not better than sawdust—fed it with ground corn and oats, took better care of my cows, learned something about marketing butter, and at the end of the year found I had made 250 pounds of butter to the cow, and the total proceeds from the same nine cows was \$696.42, or \$77.33 each. I estimated the cost of keeping at \$33 per head, leaving \$44.33 to pay for the work, and the profit.

Since then I have been able to gradually increase the product per cow, and consequently the profit, until the present time. This has been accomplished by a better understanding of the business by reading dairy papers, especially *Hoard's Dairyman*, and attending dairy conventions and institutes, and thereby learning from the experience of others. And right here let me say that I should be doing a manifest injustice if I should fail to state that I have a partner in this dairy business to whom at least half the credit is due for whatever of success we may have attained. Her skill and fine sense and touch is as necessary in overseeing the management of the milk after it is brought to the milk house as it is for me to oversee the management of the cows.

When I first commenced feeding cows well, many old farmers said I would ruin my cows by high feeding; that I would "wear out the machine in a few years by crowding it so hard." But I thought that even if this were true, I could afford to wear out a machine in two or three years as long as I could make profit enough on it to buy two new ones. But I am satisfied that this is a mistake; that instead of wearing out the machine, her capacity for giving milk will increase with good feeding till she is eight years old, and hold good for several years longer. That in this way the tendency to give milk can be strengthened, educated as it were, by use, the same as the muscles of the blacksmith's arm grow stronger the more he wields the sledge. And not only this, she will in consequence transmit milk-giving qualities to her offspring, so that each generation will be an improvement on the preceding, even if no improved blood be added.

I shall never again buy a cow of a man who habitually starves his cattle. You might as well try to make a whistle of a pig's tail, as try to make a good milker of a cow that was starved when young and was descended from starved ancestors, no matter how good blood was in her.

So, I say, don't be afraid of hurting your cows by giving them good care, by protecting them from the inclemencies of the weather and sudden changes of temperature, and above all don't be

afraid of feeding them too good. They will not eat wheat bran enough even if it has some corn meal in it to hurt them if you give them all the good grass or hay they want. I used to think that good grass, and plenty of it, was as good feed as a cow could have, that it could not be improved upon. I always insisted that such was the case until less than two years ago, I became convinced of my mistake in the following manner:

In the spring of 1886 when I turned my cows out the grass was splendid. But not to make the change too sudden I continued the grain feed for awhile after they had grass. When they were having their grain ration with the grass they gave 400 pounds of milk and made eighteen pounds of butter a day. I gradually dropped off the grain feed, and when they had only grass, they still gave 400 pounds of milk, but made only fifteen pounds of butter a day. To try an experiment I then commenced feeding about ten pounds of bran daily to each cow that was giving a good flow of milk. The amount of butter soon came up again to eighteen pounds a day, though the amount of milk had remained practically unchanged during the whole time. I fed 100 pounds of bran a day, worth then about 60 cents, and immediately received for it three pounds of butter, worth 60 cents. I reasoned that if I got my pay as I went along I would, in the end, be the gainer, from the fact that the cows would be likely to keep up in better condition and do better the next fall and winter. I must say that my expectations have been more than realized, for the average product of my cows last year was fifty pounds of butter more than ever before. So that the half ton of extra bran feed brought me back more than twice its cost. Whenever I can invest one dollar where it will bring me back two as easy as that I shall take that chance every time.

To sum up this question of feeding, it stands about like this: A cow can be kept for \$20 a year, but she would be a remarkable one if you could get \$20 worth of product from her. Her business and her ambition would not be to give milk. During the winter her business would be to try to keep alive till spring. In the fore part of the summer when grass was good, her ambition would be to lay on a little flesh to help her tide over nine months more of pinching. In the fall her chief ambition would be to find a weak place in the fence where she could get into the corn field and help herself to what, of right, she ought to have. I never kept a cow so poor as that, but I did keep her for \$25 and got back for it and all the work connected with her \$38.47. I then gave her \$33 worth of keeping a year and got back \$77.33. Last year I estimated the cost of keeping my mature cows at \$43 each. They averaged 357 pounds of butter per cow, and the total proceeds were \$107.30. So, you see, the proceeds seem to run in an even increasing ratio to the feed as the amount of feed is increased till you reach a certain limit. What that limit is I do not know, but I do not believe I have reached it yet. Of course, I do not claim that the increased production is due solely to the extra feed. It is due partly to a better understanding of how to handle the cows and the milk, and market the butter; and partly to improvement in the cows caused by better feeding and handling, and by care in breeding and selecting and raising the heifers from the best cows. But good feeding is at the foundation of it all, for without that all the care and skill possible to bestow will avail but little.

I will now give you a copy of my dairy account for last year:

4,900 pounds butter (after deducting freight and commission) sold for.....	\$1,243.4
Butter, milk and cream used in family (estimated) equal to 400 pounds butter	100.00
84,500 pounds skim milk at 20 cents per cwt.....	169.00
8 calves sold.....	87.00
8 calves raised.....	40.90
<b>Total.....</b>	<b>\$1,600.45</b>

At the beginning of the year I had twelve mature cows and three heifers about two years and three months old. In the spring and fore part of the summer three more heifers came in, their ages ranging from eighteen to twenty months old. I estimate that the product of these three very young heifers that gave milk but little more than half the year added to that of the two-year-old heifers would make it about equal to that of three mature cows. That would make my herd equal to fifteen full cows and an average product of 357 pounds butter and total proceeds of \$107.30 per cow. I am very sure that the mature cows averaged that, and more, too.

The expense is as follows:

Estimated cost of keeping cows.....	\$680.00
Cost of butter packages.....	56.88
Cost of paper to line packages.....	4.50
Cost of salt and butter color.....	6.25
Cost of coal to warm milk room.....	20.00
<b>Total.....</b>	<b>\$767.63</b>

This leaves for labor and profit \$841.87. I estimate the work of caring for and milking the cows and making the butter at about equal to the labor of one good man, which is probably worth, including board, about \$300, or \$20 per cow. Deducting this amount leaves \$541.87 clear profit on an investment of \$1,087.58 in feed, labor, etc., or more than 50 per cent. in a year of excessive drouth when nearly all other farming operations were carried on at a loss.

I cannot close without once more recurring to the subject of good feeding; I mean high feeding of the right kind during the whole year, to develop and sustain the tendency to give a large amount of rich milk. In '85 I fed grain only during the winter and in the fall when the pastures were dry. The cows averaged 266 pounds butter. In '86, as I have said, I fed all summer and that year averaged 300 pounds. They went into the winter doing better and commenced the year '87 doing better, and continued doing better all that winter and up to the present time.

And now have I made the idea clear? It is that the more milk you manage to make a cow give, the more she is capable of giving, if you will but feed her well enough so that she can give it. I must liken her to the editor of *Hoard's Dairyman*. The more he talks dairying, and the more he feeds on dairy knowledge, the more he can talk and the richer his solids his talk becomes.

In reply to questions, Mr. Goodrich said his farm consisted of 120 acres, and that his total annual receipts were \$2,000. His cows are grade Jerseys, descended from one grade Ayrshire cow.—*Hoard's Dairyman*.

WELLS, RICHARDSON & CO'S

IMPROVED  
**Butter**  
Color.

EXCELS IN { STRENGTH  
PURITY  
BRIGHTNESS

Always gives a bright natural color, never turns rancid. Will not color the Buttermilk. Used by thousands of the best Creameries and Dairies. Do not allow your dealer to convince you that some other kind is just as good. Tell him the BEST is what you want, and you must have Wells, Richardson & Co's Improved Butter Color.

Three sizes, 25c. 50c. \$1.00. For sale everywhere.  
WELLS, RICHARDSON & CO., Burlington, Vt.

(33 Colors.) **DIAMOND DYES**

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



## Correspondence.

### The Tariff--Protection.

[This letter has been on file some weeks.—Editor.]

EDITOR KANSAS FARMER:—The tariff question is one that every producer and consumer ought to understand—that is whether protection is needed in America or not. Why is it that the Cobden club, of England, that is composed of dukes, lords, barons, etc., spend so much English gold annually in printing from 15,000 to 20,000 pamphlets and other books, bring them to America, and distribute them among our American citizens, to inform us, as they state, the benefit that free trade would be to us as American citizens? Why is it that England is so interested in educating American citizens in the belief of free trade? It is simply because she is strictly a manufacturing district. England is dependent on other nations for a market, and particularly upon America, to sell her pauper-made goods. England knows that she is doomed if she cannot get a free trade into the ports of other nations. I am astonished that you men of the west do not see through their motives. In proof of my position, and that of others like me, that favor protection to American industry, allow me to submit the evidence of a disinterested witness, as far as America is concerned, but naturally in favor of British interests. It is taken from an English paper published in London—*Pall Mall Gazette*. Referring to distress among the poor there, it says comparatively few of these demonstrative processions are, as we fancy, as honest and unintentioned as the speaker of the other day, who warned his comrades in distress or demonstrations that if he could get work the following day he would not appear under the shadow of the "Black Flag." The *Gazette* comments as follows: "We have here the reason why England is troubled; she fears that she cannot induce the United States to swallow down free trade, the bitter pill that would be death to American industries. She must find new markets, or the recruits for the 'Black Flag' will in a few years form an army that will threaten her with the fate that befell Rome at the hands of the savage hordes that burst through her gates, and trampled Roman civilization under their feet."

England knows full well that she must have the ports of other nations opened, and let her cargoes of pauper-made goods come in free, or she is starved. She has depressed her mechanics and manufacturing employees in wages to such an extent that they are bound to rebel, for starvation is staring them square in the face. The statistics of the United States shows conclusively that nine-tenths of our produce is consumed at home, and only one-tenth is shipped abroad. Then if we, as Americans, are not dependent on other nations to consume more than one-tenth of our staple commodities, can bid defiance to old England and her Cobden club that spends so much English gold here annually, in the shape of books and pamphlets, trying to educate Americans in her free trade doctrines.

Now, Mr. Editor, it is possible that England is spending her gold so lavishly in trying to educate American citizens to this free trade system, unless it is for the purpose of getting some benefit from it? It is for her own interests that she advocates free trade, not that she has any interest in the welfare of American citizens. Then away with your free trade theory; we want none of it for these United States. If England could succeed in her free trade policy with the United States, would it not break down our manufacturing interests. Then if this be true, pray tell me what are our free trade friends going to do with themselves and tens of thousands of American employees that are engaged in manufacturing. This is precisely the meaning of free trade. If free trade is such a paying institution, we say to our English friends come to America with your capital and go to manufacturing; then we will hear the tune turned; their interests will become identical with ours—a protective tariff.

We want the producers and consumers brought closer to each other in order to shorten the distance on the freight haul. But on the other hand, if England by the free trade policy succeeds, then I assert that our

market would be in Liverpool instead of the United States. Are the free trade advocates so blind as not to see that this is an indisputable fact. We, as American citizens, must protect ourselves; the people are the government; we stand in relation to this government as a man stands to his own household; he is in duty bound to provide for his own family. So we must provide for the maintenance of this, our government. If we do not, other nations cannot be expected to do that which belongs to us to do.

HENRY BUTLER.

Douglas, Butler county, Kas.

### Tax the Land!

EDITOR KANSAS FARMER:—In reply to E. D. Mosher, allow me to explain what is the paramount question with the rising generation.

We love our country too, not only for its resources, but for the people it contains, and for the reason too that we have planted a home herein. With a change in our system of taxation it would be possible, if not probable, for every man in the country to plant a home. The first article on this subject did not contend idle money was making an interest, but idle capital.

To make clear what is meant by "Idle capital in land" and "Fictitious value of land," it is necessary to illustrate. We will suppose A came to Marshall county ten years ago and homesteaded one quarter section of land, the papers for which cost him \$16. Now, this quarter, by this exchange of title, was capitalized by the United States to the extent of \$16 worth of human exertion; and all the human exertion connected with this first capitalization was applied in locating and recording. Ten cents an acre, with the present purchasing power of the dollar, for surveying and recording, is not at all exorbitant. None can deny the justification of this \$16 capitalization, because the holder of the patent gets a return for this human exertion by having his land located, and the whole country is alike benefited by this first attempt at civilization as applied to lands. We will suppose A's object in getting the deed to this land was to make a farm, and with this aim in view breaks out the entire quarter at a cost of \$2 per acre; and as there is but very little return, if any, on sod with any kind of a crop, it is fair to say \$2 more per acre is applied. Now the land is capitalized by this, together with the first capitalization, to the extent of \$336. A next builds a \$500 house and a \$500 barn. Now the average barn and house throughout the county do not cost near this much, but let us allow as a matter of leniency that by these buildings the land has been further capitalized, making in all \$1,336. To this amount add \$400 more for necessary out-buildings and fences, and A will have a farm better equipped than the average quarter in Marshall county, and at a total cost of \$1,736. If A tends this farm year after year without applying more capital than that which is necessary in the production of crops, he does not increase its value; and unless he keeps the fertility of the land up to its first state, unless he keeps the buildings in as good repair as at first, his individual right decreases. The crop, produced annually, is interest and wages for the capital and labor used in its production. The comfort and shelter enjoyed by the use of the buildings is a return for what capital there was invested in these; so in reality, justice being strictly adhered to, A's right to the land has not increased above \$336, as this represents all the capital and labor applied to the land alone. As the buildings and improvements are of a stationary character it is justice that their value be bulked in with that part of the land which they occupy; so \$1,736 represents the actual capital in this land.

A farm like the one here described would sell for \$3,000. Is it not plain then that "stock," to use the anti-monopoly term, is watered in land-owning as well as in the operation of railroads? Thus it is that idle capital is drawing an interest in land-owning. Thus it is there is a fictitious individual value in land. This is so of city lots as well as other lands.

This value of land is not fictitious from a governmental point of view; and whatever value it has above that added by human exertion belongs solely to the government, the people, and this value should be drawn upon by a different system of taxation. It

is not politic to tax the industries of this and other countries as well as individual exertion when drawing upon this governmental value of land would make homes cheap and land-owning unremunerative to those claiming it, unless they made it produce to its full capacity.

What right has watered deeds to place a tribute on the lives of those yet unborn? Why is it not as just to water railroad stock as to water deeds? All the money applied to the deed for raw land above the cost of surveying and recording is a tribute to idleness; it is an individual usurpation legalized; it is what makes homes high and wages and interest low in our Eastern States; it is an outrage upon civilization; it is civilized cannibalism, enabling some to live by the exertions and lives of others; it is what makes it hard for the labor of this country to compete with the labor of other countries. In the face of all this we have great men (?) in Congress taxing, by tariff, the industries of other countries as well as the lives of those of our own country to support land speculation.

By justice no man can claim a right to any tract of land above the capital and labor applied to said land—capital applied to a deed does not increase the value of the land. This personal right so far as it represents human exertion, capital, can be bought and sold without doing injustice; but to grant the governmental right is to give some benefits of sunshine and air by excluding others.

T. F. SPROUL.

Frankfort, Kas.

### Weather Comparisons.

Special Correspondence Kansas Farmer:

Mr. Swann, the great atmospheric and elemental prognosticator states that every twenty years there is a similar showing of the weather and its result. Mr. J. M. Hargrave, of Anderson county, Kansas, has kept a record of the weather ever since and including the year 1860, and in looking over this record he finds that twenty years ago for the months of January, February and March the showing was as here given: January, pleasant days 7, cold days 21, snowy days 3, rainy days 0; February, pleasant days 19, cold 9, snowy 9, rainy 1; March, pleasant days 19, cold 8, snowy 0, rainy 4.

The first three months of the present year were: January, pleasant days 14, cold 15, snowy 1, rainy 1; February, pleasant days 13, cold 13, snowy 0, rainy 3; March, pleasant days 16, cold 11, snowy 3, rainy 4.

The season of '68 was very dry in Anderson county. Oats crop was short but good food. Fall wheat very fine but not a very large acreage. Hay good, but short. Corn was a failure owing to excessive dryness during the mid-summer. The latter part of August and during month of September had heavy rains, causing prairie grass to start anew and attain such growth as to furnish excellent grazing for stock late in the fall, so that they came through the entire season better than for years past, and in number one condition to go into winter quarters. Plenty of water except during mid-summer.

It is hoped that the year 1888 will not be in the main a repetition of the year '68. Indications thus far point to a prosperous year.

HORACE.

### Important to Investors.

Every capitalist and conservative investor is anxious for reliable information concerning absolutely safe and prompt-paying investments. To all such we commend the neat forty-five page pamphlet of "The Financial Situation in Topeka and the State of Kansas," which will be sent free to all investors who mention this paper, by the authors, Wm. C. Knox Guaranteed Eight Per Cent. Investment Company. This little book is a review of the growth and development of Topeka and the State of Kansas and facts regarding them as a field for investment.

The firm of Wm. C. Knox & Co. are doing a large amount of business for investors, east, west, north and south—in fact no firm is better equipped or possesses better facilities than this firm to handle investments in small or large sums. Every investor is guaranteed at least 8 per cent., and will unquestionably receive very much more. No State in the Union can compare with Kansas as a promising field for investments. A visit to Topeka and Kansas will convince the most skeptical. Write for this valuable book on the financial situation to Wm. C. Knox & Co., Topeka.

### A GROWING INSTITUTION.

It is with pride as well as pleasure that we call the attention of farmers, stock-raisers, and all readers of the KANSAS FARMER, to the advertisement of the Consolidated Barb Wire Company, of Lawrence, Kansas. This worthy institution is one of the pioneer manufacturing establishments of the State. It has grown from a small beginning to have a capacity of three carloads of wire per day, and is now crowded with orders from retail dealers in almost every city, town and village in Kansas, Colorado, New Mexico, Utah, Wyoming, and other Western States and Territories.

As all necessary, legitimate manufacturing establishments, with their large numbers of employees, create markets for farm products, the time has fully arrived when every Kansas farmer should—prices and everything else being equal—patronize home institutions, where a large per cent. of the money thus expended will again flow back to them, instead of increasing the great wealth of eastern capitalists and syndicates. Especially should this be true with such home establishments as the Consolidated Barb Wire Company, of Lawrence, whose wire is pronounced to be equal, if not superior, to that of any other make.

The two-point cattle wire made by this institution weighs only 15½ ounces per rod, therefore economical; has great strength, made of only the best steel wire, and great care given to its manufacture.

The fact that there is probably more of this wire sold and used in Kansas than all other kinds together, shows its rapidly growing popularity.

Again, we take pleasure in recommending the wire manufactured by this worthy Kansas establishment. See their advertisement elsewhere in this and subsequent issues of the KANSAS FARMER.

### Medieval Methods.

That was a fanciful conceit which endeavored to draw parallels between the gradual civilization and decay of nations and the life of man. Though the idea of making the small boy correspond with the savage and predatory era does not appear to be very far-fetched, both having one thing in common, a desire to cut their names and achievements on rocks, trees, etc., evidently realizing fully that pictures, however rude, easily convey ideas. In days when to be able to read was considered so great an accomplishment as to place a man above all laws excepting ecclesiastical, those who wished to inform others of their wants or wares were compelled to do it by the laborious bellowings of the public crier, or by standing at their store door and crying: "Good people what do you lack?" After a while one of those lazy persons to whom the world has been indebted for so many improvements, to save his lungs, painted what he had to sell on the outside of his house. Then to distinguish the different dealers in the same goods the heraldic devices of the nobility and gentry were used to signify that they were the patrons, and, no doubt, from that sense of gratitude which is a lively sense of favors to come, until by the middle of the eighteenth century the streets were rendered absolutely dangerous by reason of the immense and expensive sign-boards. Newspapers were then in their infancy, and the advertisements in them were more like those of the "want" column of the present day; it was not until the duty was taken off paper that advertising in newspapers became the enormous business that it is. The demand creates supply, and men hampered by other business were only too glad to be able to transfer the work of placing advertisements to agents who have now become so important a factor in the business transactions of the world. Chicago naturally has an agency of her own, which, if not actually the largest, is certainly one of the largest in the world. We allude to Messrs. Lord & Thomas, with branch offices in New York and St. Louis. A visit to the head office at Nos. 45, 47 and 49 Randolph street, bids fair soon to be as much a part of "doing" Chicago as Lincoln Park and the packing houses. It is extraordinary to witness the rapidity with which any one of the 14,000 papers in the country can be produced, owing to the systems of wire files. We can with confidence recommend any one of our readers who wish courteous treatment, or who need the benefit of the twenty years' experience possessed by this firm, to call on them and see for themselves how easily this most complicated business can be managed by competent men.

—Chicago Inter Ocean.



### THE PLANTATION SUGAR FACTORY.

The following communication to *Colman's Rural World* is worth reprinting in the *KANSAS FARMER*, because it contains some facts and suggestions made by a practical man on a subject of great interest to farmers in Kansas. We copy the letter entire, as follows:

EDITOR *RURAL WORLD*:—In your paper dated April 12, you published an article on "The Farmer and the Sugar Factory." The writer of that article says: "One or more of three plans will be followed. The most desirable plan for all concerned is that by which the farmers who own the land produce the cane and sell it to the men who own the factories at such prices as will afford a reasonable profit to both parties. The second plan is where, say seventy-five farmers produce the cane and jointly manufacture 1,500 acres of cane. The third and least desirable plan is that by which the sugar company buys a tract of land on which it builds a factory and produces its own cane."

We desire to ask the writer of that article to quote us some facts to prove that the most desirable plan is to buy cane from a hundred independent farmers, and also to quote us some facts to prove that the least desirable plan is for the company to erect its factory on its own land surrounded by its own cane fields.

The sugar business in the North is old enough to have learned that one cannot buy cane by the ton and manufacture sugar just as one buys logs and manufactures lumber, or buys wool and manufactures woolen, or buys wheat and manufactures flour. There is a marked difference between cane sugar manufacture and any other manufacture. To make sugar and sirup profitably requires that cane shall be properly planted at such times, and of such varieties as will give the factory as long a run as possible. It requires that the cane shall be well cared for and shall be cut and hauled to the factory in quantities, neither less nor more than the factory can handle. It requires that the object of the cane-hauler shall be to deliver the cane to the factory when it contains its highest percentage of sugar, and when the factory needs cane. It requires that if the factory has not men enough, or if its machinery gets out of order, that the men cutting cane and the men hauling cane shall slack work. It requires that when the factory needs cane, more men shall cut and more teams shall haul cane. This keeping step between the working of a costly factory and a hundred independent farmers, is simply practically impossible. It has been tried and it has failed; it will be tried again, and it will fail again. We remember a sugar factory which had a hundred men idle, waiting for farmers to bring more cane. We remember the manager sent men on horseback in all directions, urging farmers to haul cane. We remember one sugar factory which bought cane from farmers, and the next year it shipped thousands of tons of cane which was grown ten miles away to the factory by rail. We remember that company the next season bought 1,000 acres of land and it bought no more cane. We remember a sugar factory which bought cane from farmers one year, the next year the company bought 600 acres of land and produced part of its own cane, and bought part of its cane. When the farmers did not bring cane enough, the manager sent more teams to the factory's cane fields. But this method has disadvantages, the manager never knows how much cane a hundred farmers will bring in to-morrow, he never knows how much cane a hundred farmers will bring in this afternoon. We have seen a boiler need patching, the yard full of cane which was spoiling, and a hundred teams hauling more

cane. A factory which requires from 100 to 300 tons of cane per day cannot depend on the pleasure or the caprices of a hundred independent farmers. If experience proves anything, it proves that one skilled and experienced man should direct the cane-growing, the cane-cutting, the cane-hauling, and the cane manufacturing. If there are not cane-cutters enough, he should send more men to cut cane; if there are not cane-haulers enough, he should send teams after cane; if the factory is short of help, or if it is obliged to shut down for repairs, he should set his men and teams at caring for the seed or at some other work, until the factory needs more cane.

The theory of a central factory is a very pretty theory; it is only a very pretty theory. The sugar business is old in Louisiana, but there are no factories there which depend on independent farmers for cane. There are now no sugar factories North or South which buy all their cane from independent farmers. If any of the sugar or sirup factories now building operate on that "most desirable plan," they will learn, by irritating experience, the lesson which others have already learned by experience, that there is too much friction between the factory and the farmer.

The Sterling Sirup Works have been practically engaged in sorghum growing and manufacturing for six years. It has bought cane, and it has also produced its own cane. It has closely observed the progress of the industry and also observed the mistakes which have been made. It has a decided conviction that the sugar-maker will be obliged to control cane growing, and cane delivery, and cane manufacture. If some of his cane fields should be inferior owing to accidents of the season, he should not be obliged to submit to another loss in manufacturing it. If, owing to accidents, his factory is obliged to shut down for repairs, he should not be obliged to quarrel with a hundred cane-growers.

It costs the Sterling Sirup Works \$1 a ton to grow their own cane and deliver it at the factory. It costs 40 cents a ton to grow the cane by hired labor, and it costs 60 cents a ton to hire the cane cut and topped and hauled to the factory. This estimate is not based on one year's cane crop; it is based on six year's work. It may cost more to produce cane elsewhere, it may cost less in some localities, it costs \$1 a ton here at the factory. A sugar or a sirup factory can not buy cane from farmers for \$1 a ton. Why? A farmer can produce cane cheaper by his own labor than it can be produced by hired labor. It is because hauling cane to the factory is a heavy item of expense; the farmers haul cane from scattered farms, they haul cane miles, where the factory teams should only haul cane a few rods. In wet weather cane can often be hauled a short distance, when it can not be hauled long distances over miry roads. It is the belief of the Sterling Sirup Works that the factory should own a tract of land, and build in the center of the tract, and have cane fields all around it. But "this is the least desirable plan," according to the writer of the article—"The Farmer and the Sugar Factory."

Mr. Hughes, of Rio Grande, proposes to compromise the difficulty by giving each farmer who brings cane to the factory a financial interest in the success of the factory, by giving him half of the product of a ton of cane, half of the seed, half of the sugar and molasses for his cane. The factory can grow its own cane at less cost, and even this division of product will not suit all cane-growers. Still another plan is for seventy-five farmers to produce 1,500 tons of

cane and manufacture it in a co-operative factory. The average Western man has considerable genius, but it shows itself rather in individual effort than in co-operative effort. When one such institution has been satisfactorily run for two years we will go to see how it was done.

We have alluded to these points at some length because we think it a grave mistake to locate a sugar or sirup factory in a city and depend on distant and independent farmers to haul cane miles away to the factory. It is a mistake for a sugar factory to pay city taxes on its valuation, and to pay an excessive tax for hauling cane from far-off fields.

It is said the factory can, after it is built, grow its own cane, if it chooses, instead of buying cane from farmers. This is correct, if the factory controls farm lands around the factory, otherwise it is incorrect.

It was said years ago by the owner of a sugar factory, that the time would come when cane would be bought and sold as wheat is bought and sold, for what it was worth, as it would grade. Cane, rich in sugar, would sell higher than cane poor in sugar. The prediction has not proven true. The reason is simple; cane does not show its value by external characteristics. Small and inferior cane may be very rich in sugar. Large and handsome canes may be very poor in sugar. The farmer who receives less for fine-looking canes than another receives for inferior-looking canes, regards the polariscope and the sugar-maker as ingenious swindlers.

We believe in the time-honored, weather-worn sugar plantation system, in which picked men find steady work the year around, growing cane, delivering cane to the factory, manufacturing cane, saving and cleaning cane seed, shipping seed, sugar and molasses, etc. In Louisiana, as soon as sugar-making ends, the plantation work begins. A city sugar factory which buys its cane, runs forty days, and is idle forty weeks. It disbands its force, and rests until the sun has made its annual circuit.

W. P. CLEMENT.

### Inquiries Answered.

**ALFALFA.**—A correspondent wants the experience of some practical farmer with alfalfa as a pasture for hogs.

**TRESSPASSING HOGS.**—Would it be legal to shoot trespassing hogs when the owners won't keep them off after being notified to do so?

—No. Take them up and post them as strays, or hold them until reasonable damages are paid. [See article 7 of stock law.]

**A QUESTION IN TRADE.**—Please give the address of some reliable Kansas City firm which sells dry goods and groceries direct to consumers.

—Any merchant will do that. We do not know, however, any house in Kansas City engaged specially in that character of trade.

**TRESSPASS BY SCHOOL CHILDREN.**—If small school children wander outside of school house yard and destroy property, who is responsible in damages?

—In all such matters which do not come under the criminal laws, parents are held responsible for injuries wilfully caused by their children.

**SORE FEET OF HOGS.**—I have pigs from 2 months to 1 year old that have very sore feet and legs. The disease looks like scratches on horses. Their hoofs get sore and sometimes come off. They get very lame and poor and some die. They also have a cough. My hogs had the same disease last fall. I have them on rye pasture with plenty of water. Can you tell me what ails them and what to do for them?

—It may have been caused by freezing, or by standing in filthy water. There is no cure for it, but it may be avoided in future by careful treatment as to cleanliness, food and shelter.

Kemp's Double-Cam Hay Press is advertised in this issue of our paper. It has merits which others do not possess. Send for circulars.

This paper is now reduced in price to \$1 a year.

# 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.

### Disposal of Sewage.

From time to time some local quid nunc rushes into print with the advice that Chicago should follow the foreign practice, and instead of seeking to dispose of her sewage by water carriage should utilize it for fertilizing purposes, "as they do in England and France." Such wisecracks may be interesting to learn that a steamship costing nearly \$16,000 has been constructed to carry 1,000 tons at each voyage of the solid residuum of the London sewage out to the North sea from the Barking creek sewage works. Four or five more such ships will be required to deal with the entire quantity.—*Chicago News.*

Dorset sheep have been recommended for raising in the Southern States, principally for the reason that they breed twice a year. In the east of England the lambs dropped in the fall are sold at high prices during the midwinter holidays, and are a source of great profit to the farmers. Obviously there would be no profit in fall lambs with winters as cold as they are in the Northern States.

Any soil upon which water does not remain during winter, says a writer in *Vick's Magazine*, can be made to grow small fruits; in fact, any soil which will produce weeds will grow them; but as there are few soils which can produce two crops at the same time, it is better not to try to grow a crop of weeds and a crop of strawberries on the same soil together.

## That Tired Feeling

The warm weather has a debilitating effect, especially upon those who are within doors most of the time. The peculiar, yet common, complaint known as "that tired feeling," is the result. This feeling can be entirely overcome by taking Hood's Sarsaparilla, which gives new life and strength to all the functions of the body.

"I could not sleep; had no appetite. I took Hood's Sarsaparilla and soon began to sleep soundly; could get up without that tired and languid feeling; and my appetite improved." R. A. SANFORD, Kent, Ohio.

### Strengthen the System

Hood's Sarsaparilla is characterized by three peculiarities: 1st, the combination of remedial agents; 2d, the proportion; 3d, the process of securing the active medicinal qualities. The result is a medicine of unusual strength, effecting cures hitherto unknown. Send for book containing additional evidence.

"Hood's Sarsaparilla tones up my system, purifies my blood, sharpens my appetite, and seems to make me over." J. P. THOMPSON, Register of Deeds, Lowell, Mass.

"Hood's Sarsaparilla beats all others, and is worth its weight in gold." I. BARRINGTON, 130 Bank Street, New York City.

### Hood's Sarsaparilla

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

**100 Doses One Dollar.**



## The Home Circle.

### To Correspondents.

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

### The Farmer's Song.

[Written by a Kansas girl of thirteen years.]

Plow the ground good, boys,  
Put the corn in well;  
Do not stop till noontime  
When you hear the bell.

Turn the sunflowers under,  
Bury their heads deep;  
Do not stop for thunder  
Till the clouds begin to weep.

Rise early in the morning, boys,  
Ere the sun is in the sky;  
Every moment now is counting  
For the summer's drawing nigh.

And girls rise early, too,  
Waken with the birds,  
Have the breakfast ready  
Ere the boys have fed the herds.

Then hurry with the dishes,  
Sweep the floors clean and neat,  
Get something good for dinner,  
For the hungry boys to eat.

Oh! the joy of going walking,  
While the blooms are on the trees,  
Or, of in the garden hoeing  
The long green rows of peas.

And then we'll sup at sunset,  
And say the day is blest;  
And soon in grateful slumber  
We'll take our nightly rest.

When we get our corn put in  
Then we will wish for rain;  
Then in the coming autumn  
We'll gather the golden grain.

Niles, Kas., May 3, 1888.

—L. E. G.

### The Little White School House.

In the little white school house just under the hill,  
Half hid by the maples, and close to the mill,  
Whose wide spreading branches afforded sweet shade  
As we listened to the music the old mill-wheel made  
With its buzz and whirr, its clatter and din,  
It marshalled us out, it ushered us in.

A pleasanter resting place could ne'er have been found,  
Than this roomy and airy old pleasure ground,  
With its carpet of green and walls of old trees,  
And glimpses of sky shining blue through the leaves,  
Making picture so pleasing on memory's wall,  
That the stoutest heart softens as those days they recall.

The signal for entering now falls on the ear,  
'Tis the old school bell ringing, in tones loud and clear,  
To hasten the loiterer that lags by the way,  
And bids the busy ones cease from their play,  
Refrain from their mischief, laughter and fun,  
Be earnest and studious for school has begun.

On through the entrance that leads to the room,  
With never a sunbeam to lighten the gloom,  
We enter the school room so narrow and low,  
Through the wide-open windows the summer winds blow;  
And the murmur of voices floats out on the air,  
As they answer the roll-call, or join in the prayer.

On the rough wooden benches, narrow and low,  
Are bright faces shining with health's ruddy glow,  
Over exercise poring, some are earnest, intent,  
While an occasional urchin on mischief is bent;  
Fearing the penalty of being detained after school,  
Or committing to memory some unpleasant rule.

We gaze at the old desks grimy and black,  
And a host of fond memories carry us back  
To the bright days of childhood so happy and gay,  
Ere sorrow or trouble could drive them away;  
Reluctant to leave it, I pause on the sill,  
Breathe a prayer for the school house just under the hill.

—Good Housekeeping.

Onion sets are produced by sowing the seed thickly in the rows, so as to allow them but little room for growth. Sow the seed as soon as the ground will permit.

It is not thought that the practice of spraying orchard trees with arsenical solutions will affect the bees which gather nectar from the bloom, if the spraying is done at the proper time, that is, just after the blossoms have fallen. The application before that time is injudicious at best, as the larva enters the fruit after the young apple has formed.

## POETRY AND LIFE.

[Extracts from a sermon by Prof. David Swing, Chicago, delivered recently.]

It is now evident that the theological fathers could not attach a poetic element to any story in which man entered as a character. When they read in the Bible that the trees held a convention and asked the olive tree to be king or queen, they would declare the account poetic because it was evident upon the face of the story that trees could not hold a convention, could not make speeches and decline office, but when a man, an Adam, or a Jonah, or a Joshua, appeared in a narrative, then all poetry was impossible, because man was a self-evident reality, and thus he made the whole story as real as himself. The presence of a man, or woman, or boy in a narrative always made the tale all literal. If an ass had spoken to some other dumb brute the whole declaration would be confessed a fable, but the element of Balaam excludes the poetic idea, and bestows upon the dumb beast the gifts of real reason and verbal eloquence.

### THE POETIC FEELING

was so weak in our forefathers that a real man was able to confer his own reality upon the stopping of the sun or the going back of a shadow upon the dial of Ahaz.

Causes sometimes arise to weaken or suppress for a whole land and for an age the poetic power and passion. The mind becomes hard and didactic. The poetry written in the first two centuries of American history was little else than cold argument set to rhyme. A poem differed but little from a Puritan's sermon. There was nothing of Virgil's sweetness and breadth; nothing of Dante and Milton's lofty imagination. It is probable that the church's hatred of the classics, its ill-will toward the world, its awful God and awful hell, and the cruelty of Catholics and Protestants toward each other, made the old intellectual garden of Asia, Greece and Rome into a plain grain-field upon which men attempted to grow only the necessities of a mere existence. This zone of hot sun and barren sand reached from the fifth century to the fifteenth without letting much dew fall upon the gentle plants of Christianity. Poor times those in which to interpret the holy, old books of religion.

When the human race has followed without restraint its innate genius, it has always made its first language highly imaginative. As a child loves images of horse, dog, soldier, or little baby, or image of dish or boat, so the first age of a race deals in images, and enjoys more giants and dwarfs, fairies, talismans, magical cures, and amazing adventures than can ever be confirmed in the subsequent and more advanced years of the same people. The Greek people came along singing the marvelous exploits of Homer, the Latins were prevented by Greece from having a literary childhood, but their early history reads like the Arabian Nights. German literature, and all the Northern literatures came in all the exuberance of fancy, while the English language sprang up in the fabrications of Chaucer, Spenser and Shakespeare, hundreds of years away from the style of John Stuart Mill or Mr. Gladstone.

Thus came the Bible to us with its divine truths all wrapped up in the beautiful garments of poetry. Those old and rather glorious times were not capable of making the general statement that God made the world and man. They must picture the scene. They must see God in His workshop in the act of making the first man. As no material was more plentiful than earth He formed man out of that substance; and when He had finished the clay image they saw the Lord breathe into the image the breath of life. In order to have woman a part of man God gave her a rib from man; all else came from clay, and from clay by influence came the animals one by one. Nor could God be an invisible spirit because early races do not have invisible personages. Ghosts are seen. Angels are liable to dine with one unawares. Therefore God had many a conversation with Adam and came in the evening to see how the first beings in the world were getting along in their garden plot. Thus was reality adorned with fiction.

Thus runs all the way along the Bible story, with the imagination making music for each great and useful utterance. When the world grew very wicked a flood rolled all over it; one family was righteous and was saved; when a giddy woman did not feel willing to perform any duties she became a pillar of salt; the wicked city behind her would not make a good pillar of salt, but it would make a good conflagration.

Thus the obligations of duty pass along before us all painted out in literature just as Angelo long afterwards painted holy subjects on the Sistine walls. Writer, painter, sculptor and musician, all ply one and the same art, only with different colorings; the one aim of all is to beautify or make eloquent some lesson of life.

It should not be amazing that all the old books have come laden with these decorations of the imagination, for since the human heart loves all this parade of figures the writers must also reveal this human fondness for the attractive. For the writer is as human as the reader. The fig tree must bear figs, the vine grapes. Literature, therefore, sacred or profane, must be only the picture of the human soul. The Bible falls

into its language and stories because it came from the great human heart. That vine will bear only grapes. No theologian will ever at last shake figs down from its trailing body and tendrils.

What a volume of truths the most useful and impressive the human race ever had. Moses was as real a personage as Alexander Hamilton or George Washington. He must have urged and secured the exodus of the Israelites, and must have helped them to found their state; must have led them in their first migration.

But while you are contemplating this mighty leader, and are comparing him with Socrates, Plato, Orange and Washington, the old writers, from fear that you will not realize how magnificent he was in mind and person, make the Red Sea open before him; they make manna fall from heaven at his wish; they make a voice speak from a burning bush, saying, "This is holy ground;" they make Mount Sinai tremble with thunder and lightning while their leader is up in the clouds closeted with the Almighty; when he is again seen his face is all radiant, and in his hands, carved on stone, are the laws of Jehovah. Thus an indisputable fact of intellectual and moral greatness in Moses took up all his 120 years, and left nothing common and unadorned in any single season of that majestic sweep of time. A princess of Egypt found him as an infant, kings reared him, God adopted him, and when he came to his dying, his tomb was too good for any earthly churchyard, and so all of the lonely mountains became his sepulcher, with angels for the pall-bearers of his body and the escort of his soul.

In such a page of sacred biography we must not see the poetry expressing nothing but literal facts, but we must see it as trying to adorn a truth, in order to arouse the soul to some conception of the mental and moral worth contained in the word Moses.

It is to this day feared by all who tell a tale that the listener will not rise to the interest of the speaker. Hence, literature, oratory, and conversation are all full of the earnest effort to awaken in other hearts the sentiments they have reached. Thus our Moses, our Platos, Cæsars and Napoleons are made to be most wonderful from cradle to tomb. As a result real literature, real art, real oratory are awakening forces, making the mind pass from sleep to enthusiasm. This is the relation of poetry to life. It makes man's days more powerful, his mind more acute, his heart less dull, his slow feet more like wings. As when sweet music is playing all life and nature are enhanced in value, the blue sky of night and the blue waters being made more full of God's glory by a song or hymn heard from afar, so when poetry touches a Moses or an Abraham it becomes more easy for the mind to realize the real dignity of those characters.

The mass of decoration in the Bible is wonderful, and equally wonderful its quality.

### THE RIVER IN GENESIS

divided into four channels so as to make eight banks, eight times the quantity of tree, grass, blossom, and bud; and the river in the last book of the Bible had an island in the middle of it, its trees bore fruit every month, and the entire stream rolled forth from under God's throne. The whole moves like a symphony in music. Noah had his raven, his dove, the olive branch in the dove's mouth, and his rainbow; Abraham entertained angels unawares; the Israelites left Egypt with awful plagues helping them off, with the sea parting its flood before them and guided by pillars of fire and cloud; Elijah was taken up from earth in a sparkling chariot which divine horses drew; and with his mantle which had fallen back to the ground Elisha smote the Jordan and made its waters stop and part. Thus play the sunlight and moonlight of beauty upon all that wide zone in which lived and died the framers and historians of our religion.

It is often impossible now to determine the point at which the poetry ends and the history begins, but it is seldom that any harm is done by these few points of obscurity. If decoration has obscured some ideas it has made ample amends by causing most of the moral and gospel truth to stand up in more of power. No truths can touch the heart more deeply or cling to the memory longer than those which are sung into it by musical voices.

### THE BIBLE IS NOT AN ARCTIC ZONE

in the world's thought; it is a glorious world, half tropics and half paradise.

Much of the long and destructive theological debate which is now dying out in our better age had its origin in the attempt to make the language of poetry express an absolute fact. The fall of Adam and Eve in Eden was the adequate basis for the doctrine of total depravity and total inability. Out of that highly pictured story came the inexorable decree of a church that "all mankind by their fall lost communion with God, are under His wrath, and so made liable to all miseries in this life, to death itself, and to the pains of hell forever;" out of the figures of fire and brimstone came the hell of literal flames which has now glowed like a furnace for eighteen centuries. Thus each figure of speech was embalmed by some one of the sects as an exact doctrine, and thus came a hundred sects and a hundred battle-fields.

But two great reforms have come—the one in the resolve not to force poetry into an exact dogma, the other not to fight over a religious dogma, even if found in the plainest prose. Our age transcends in good all before it in that it can read the valuable lessons in

words and faith which are carried along by the angelic hands of decoration.

### IT FINDS A DEPRIVITY OF MAN

widespread and great, and finds a human will weak indeed, and needing great persuasion, but it cares not to decide or say this depravity is total, the will powerless forever. It perceives great works to be done in the present. It would rather help the sinner than deface his disease, as it would rather worship and trust God than spend time in the useless effort to fathom His being. Poetry adorns doctrine but cannot make.

Thus should come man in his religion, politics, and domestic life and say, all my forms of beauty must enhance my church, myself, my state, my home. They must take up the church and make its God so loving and attractive that no child can hate Him and no sinner fear to bow at his altar; must make the state so grand and noble that all will love it and none hope to destroy it; must make home so alluring that all members of that circle will leave it in sadness and return only in inexpressible joy. In this last task nature comes to the help of the noble man, for while it requires vast sums of money to make attractive a saloon or a gambling den, a cottage can be decorated by a few vines, a few ornaments, a little music. It is easy to ornament one of God's sweet truths, it is difficult to make attractive a destructive lie. In the saloon the real fact is at war with the decoration, in the home the ornament and the fact are eternal friends.

### FOR A YOUNG MAN

or a young woman having the field of life all before the heart, no one tenet of philosophy will prove more valuable than the idea of pouring rich colors upon all those institutions which may add to the welfare of self and mankind. This principle will serve as a key to true art. Man should not make beauty decorate vice and vulgarity. The vine said: "Shall I leave my grapes and wave my leaves away from all such excellence?" The fig tree said: "Shall I leave my rich figs?" Thus says art: "I must never turn aside from the deep interests of mankind to lend my power to those things which ought to live in ugly weakness and be left to die young and in dishonor."

This principle will also help one meet the popular pessimism of our times, and will cheer the heart onward toward the daily task of illuminating the days and years of society as the old Scribes illuminated the pages of their volumes, sacred and profane; will help the soul dispel every black cloud, and to realize that this universal and deep sentiment of beauty is a form of proof in itself that there is a sublime truth in the home, the man, the soul, the God, and the heaven upon which it has long toiled with delightful and untiring zeal. The high office of the sentiment agrees in favor of the reality of those ideas which it fills with power.

### The Weekly Washing Made Easy.

To the average housekeeper the weekly washing is the greatest obstacle to overcome. The old-fashioned washboard has done more to destroy the constitution than anything else that could have been invented. The Grecian-bend position, with hands submerged in hot suds, has literally destroyed the life of thousands of women. Of the many machines that have been invented there are a few that have been a real blessing, as any rubbing by hand is entirely avoided, and ought to be found in every house. A cheap and easy way to do the washing is the idea that the progressive housekeeper entertains. Perhaps to save the expense of a machine and to find an easy way of washing, some one began the use of kerosene by putting the oil in a boiler of strong suds. But rubbing by hand even a little is hard. I have experimented with various methods of doing the washing. I have used borax, sal soda, and all the washing crystals that I ever heard of. Some of them have proved injurious to the clothing. I have also tried the kerosene according to the general directions given, but find, as I expected, that it is not unlike any other oil; it deadens the suds, and nearly double the amount of soap must be used to counteract the effect of the oil. It is the soap, not the oil, that cleanses the clothes. Another item to be considered, only the very best of soap should be used. Ivory is the best; all the cheaper yellow soaps contain resin, which, partaking of the nature of turpentine, is relaxing to those who use it, and is in no way effective in cleaning the clothes. If fresh rainwater is used, less soap is required, as rainwater contains ammonia, a useful ingredient in cleansing, but any attempt in using ammonia with hard water will not be satisfactory. I have found that common cooking soda has given the best results when hard water is used; it aids in making a suds and in removing grease from the clothes, and does not injure the most delicate fabric. The amount required varies with the amount of lime found in the water, but a tablespoonful to each pailful of water is an average quantity. It should not be put in the water till it is hot enough for use. One and one-half bars of soap cut fine and dissolved in a kettle of water will be sufficient to do the washing for a family of ten or twelve, covering perhaps 400 feet of line. In the machine put as much hot water as will be required to wash easily, enough of the melted soap to make a strong suds; from



ten to twenty minutes are required for washing each machine full; turn often while washing, and add hot water and soap every time dry clothes are put in; use a good wringer; put the clothes through a second water, which should be hot but without soap; wring and put through the blue water, and when wrung from that they are ready for the reel. I seldom have clothes that require to be washed through a second suds before putting through the last two waters. I have found this an easy, quick, and effectual method of cleansing clothes. They are certainly clean and very clear when treated in this manner.

Vining, Kas.

## The Young Folks.

### A Legend.

A milkmaid climbed her one-leg'd stool,  
And planted her pail on the ground;  
The brindle cow gave her tail a flirt  
And slyly looked around.

And thus she mused: "I'll surprise this maid,  
By a twist of my off hind hoof.  
I'll hoist the three, stool, pail and miss,  
To the earth's celestial roof."

"For where there's a cow there's always a whey,  
And although not much of a butter,  
I get in my kick quite awfully quick,  
With a result that's utterly utter."

The fair young maid, with her mind on milk,  
Little dreamed of her fate to come,  
And steadily flowed the milken stream  
In her bucket flaked with foam.

The crisis came, from earth she flew  
With the stool and pail *en train*,  
The milk went too—now this we know,  
For search for it was vain.

And last when seen, maid, stool and pail,  
Were traveling at no expense—  
Winging their way with rapid flight  
To the ethereal unknown whence.

Now heavenward turn, and use your eyes,  
Else doubt the legend you may,  
But if you think with me you'll know  
How to account for the milky way.

And those who on the heaven gaze,  
See in her locks Berenice's hair,  
And also in the starry maze,  
Her stool in Cassiopeia's chair.

—Paul Pilgrim, in *Meriden (Kas.) Report*.

### Do the Meek Inherit the Earth?

The eagle plucks the raven,  
And the raven plucks the jay,  
To whose voracious craving  
The cricket falls a prey.

The big fish dines at leisure  
Upon the smaller fry,  
And the minnow eats with pleasure,  
The poor unconscious fly.

The miser skins his neighbor,  
And the neighbor skins the poor,  
And the poor man, doomed to labor,  
Spurns the beggar from his door.

And thus the world is preying,  
The strong upon the weak,  
Despite the precious saying,  
"The earth is for the meek."

### DANCES OF THE DAKOTAHS.

FORT TOTTEN, DEVIL'S LAKE AGENCY, D. T., Nov. 27.—The Indians of the Sioux or Dakotah nation are supposed to number about 25,000. They are scattered over an immense territory, extending from the Mississippi river on the east to the Black hills on the west, and from the mouth of the Big Sioux river on the south to Devil's lake (Hudson bay territory) on the north.

During my acquaintance with the Dakotahs I have learned something about their dances and the significance they bear. The study has been an interesting one to me, and I have here set down a few memoranda of two of the more important. They are really weighty ceremonies in tribal life.

#### THE MEDICINE DANCE.

The waukan waci (sacred or medicine dance) is in fact the religion of the Dakotahs. After selecting a suitable spot on a smooth prairie, notched sticks about three feet long are driven a little way into the ground at intervals of about ten feet, forming an elliptical inclosure. Upon these they lay saplings or rails, over which canvas tents are thrown. At each end of the inclosure a tent is pitched. One is occupied by the chief medicine men or high priests, who are always chiefs of the tribe, and the other by the "soldiers." The meetings of the council are held in the medicine tent, and there the medicine or pazuhita waukan is kept. The soldiers' duty is to preserve order, wait upon the dancers, prevent outsiders from intruding or even leaning upon the barricade, procure needed articles, etc. When needed tents they are allowed to throw down any tent and take it. Should an owner grumble, the tent taken is either burned or otherwise rendered unfit for future use. Those who wish to see the dance may do so by standing and looking over the barricade, but they must not touch it. Should any one lean upon the barricade who is not a member of the dance, he is struck one blow (no more) by a soldier with his stick—not of

sufficient force to injure one, but a gentle reminder. Be he a chief or white man it is all the same, and woe is his if he seek to resent the blow. Immediately in front of the soldiers' tent a large fire is built, where during the dance buffalo and ox meat and wild turkeys are cooked. Should a dog come into the ring during the ceremonies, the poor brute is immediately killed, the body painted yellow and allowed to remain in that state to appease the Deity.

The medicine chiefs having taken their places and the soldiers theirs, the members come in by families, and standing in a line facing the chiefs, in unison throw up their hands and cry, "Brother, have mercy on me!" Then they relate when and where they were initiated into the mysteries of the "holy order." (Each dance, it should be understood, is the ceremony of some religious or other order.) They then intone a sort of chant to the high priest, at the same time holding their medicine bags in their left hands with arms stretched across their breasts; the right hand is meanwhile raised as when an oath is taken. In this the members of each family follow the motions of its head, then in single file they trot around the circle crying "Have mercy on me, friend and brother," until they reach the starting place, when they intone another chant, this time to the Great Spirit (Waukantanka) and with their medicine bags point to the four points of the compass. They then seat themselves on the ground against the barricade, facing the circle. A chief who has been appointed to the office of high priest now takes his seat inside the medicine tent, where he preaches and sings, after appointing four assistants from among the members. To one is given a small drum, to the second a pillow and stick, to the third a gourd and rattle; the fourth assists in singing. These all sit around the high priest. They have also a large drum, usually a cowhide stretched over a cheese box or a wash tub, on which seven or eight drummers constantly drum, singing the while without cessation. The priest now exhorts his hearers to good deeds, and speaks of the holy dance as an institution founded centuries ago. When he is done all the members rise and dance by alternately raising the feet with a sidewise motion of the body, at intervals crying as at the beginning, "Brother, have mercy on me!" The officiating chief then takes the drum and leaves the tent, followed by his assistants. Commencing slowly, then faster and faster, they trot around the circle again. All stop in front of the soldiers' tent, facing the west, when the chief brags some more of the antiquity of the rite, and the power of the medicine, declaring that he can at will thrust a bird's claw or a stone from the river into the body of any one he wills, thus producing instant death. To prove this, elaborate ceremonies are gone through with. Afterward, at a signal, all congregate around the big drum and dance and sing a monotonous kind of a chant, the women, on the outside of a ring formed by the men, imitating the peculiar call of the female swan, the men chanting in a sepulchral tone, which seems to lose itself in their throats. The combination is not entirely ununsual.

When a candidate is to be initiated into the order he is first taken into the medicine tent for instructions, which are secret. There he is stripped, painted black from head to foot, and a red spot is painted between the shoulder blades.

When the candidate comes out of the medicine tent he is clad only in a breech-clout, very small apron and moccasins. Four preachers in turn exhort the candidate, recite the history of the dance and the order, adding that should he be a good member his medicine will be strong. He must give a feast once a year; if not he will be unfortunate and will meet with sickness and death. If he is good, the Great Spirit will have mercy on him; if not, the Great Spirit will be angry and expulsion from the order will follow. After this the candidate receives the holy claw or a stone from one appointed to cast it, who takes his medicine bag and with it traces the course of the sun, and turns to the four quarters and says: "Now prepare yourself. I am going to transfer to you what I have in my medicine bag;" and thrusting his bag toward the candidate says: "How! There goes the spirit!" (Sometimes this is called "shooting" the candidate.) At these words the candidate, who is kneeling on a blanket, falls prone upon the ground, to all appearance dead. The friends and members of the candidate's family and those wishing to make offerings to the spirit, now congregate around the fallen man and throw on his body blankets, robes, skins, and ornaments—anything they wish to give—until he is entirely covered up. The priest now dances around the supposed corpse, the assistants rattle gourds, and rattle and beat the pillow until the priest says: "I will now show how powerful my medicine is to bring him back to life." Then the candidate commences to move. Finally, resting on his hands and knees, he vomits up a mass of froth and blood, in the center of which is found the claw or stone with which he has been "shot." He is now presented with a medicine bag, and is recognized as a member of the order. The candidate must attend the three succeeding meetings in the same costume (naked) and painted in the same manner; then he is allowed to appear as he wishes.

They also initiate the spirits of dead Indians, "to set them right to travel straight." They won't say where the spirit goes, but after initiation in the holy dance it will go straight to its destination. After the ceremonies are over, the soldiers take the food and lay it near the medicine tent where it is distributed. The cutting and distributing form the principal attraction to the

members, and the kettles are continually replenished during the performance. They always commence the dance at midnight, keeping it up until the following evening at sundown. Should any one known to have committed a crime enter the ring the leaders notify the soldiers, and expulsion of the guilty one follows. Should he repent, he relates the nature of the crime, pays a heavy fine and is reinstated. Should any member divulge the secrets of the order his life is forfeited in a way that none know the instigator or perpetrator. They have secrets, and, it is supposed, have signs by which one may know another in the dark as well as in the day. During the initiation and again just at daybreak, something is whispered to the candidate.

#### CIRCLING CROW DANCE.

The Pa-gi-nu-hi-na-ki wa-ci-pi, or the circling crow dance, is called by the Americans straw or grass dance. Only members of the order participate in this dance, and its councils are secret. It is controlled by three men selected at the starting of the lodge from among the more influential members of the tribe, who at death or upon resigning their office select their own successors. The regalia belonging to the three by virtue of their office is peculiar, consisting of a kind of tunic falling from the waist down behind, attached to a broad band around the waist, and composed entirely of feathers of the eagle and crow, with bead-work, porcupine quills and jingling bells. Exactly in the center and resting in the hollow of the back (fastened to the belt) projects a slender piece of wood about eight inches long, wrapped with porcupine quills, to the end of which eagle and crow feathers and small bells are attached with long strings—every motion of the wearer causing these sticks to vibrate and the bells to jingle. This is an emblem of rank, and when invested with it one usually gives away a horse. There are four drummers. Each one is provided with a stick about three feet long, one end notched and wrapped around with quills and beads, the other end sharpened. These are stuck into the ground, and drums with corresponding loops are hung on to them. The dancers seat themselves in a ring on the ground, wrapped in their blankets, the drummers on one side chanting and beating their drums. At a signal all jump up, and, throwing their arms aloft, chant with uncouth gestures and an occasional whoop; dance for a few moments, when all but one seat themselves. This one, standing in the ring, keeps on with gestures, wildly waving his tomahawk. Of a sudden he will seat himself, and in a low, monotonous chant recite his exploits of war and chase, after which all will jump up, dance and yell, and the same performances are again gone through with. This is kept up for several days at a time, or until all the provisions have been exhausted. During this dance, if any member desires a divorce from his wife he gets up and proclaims that she is no longer his wife, or that he has been deputized by

some one not a member (naming him) to say that he has "thrown away" his wife. An outsider by payment can deputize a member to do this. In their own eyes this makes him a brave man and a big chief.

The dance is arranged for in this way: A steward is appointed to collect provisions, and no one dares refuse him. After collecting sufficient to last several days he notifies the leaders. They call in the lodge and form arrangements for the dance, and then the village crier goes around and proclaims that the dance will take place about such a time. If any questions are to be decided the head men discuss them, after which it is put to a vote. One deputized, goes to each member present and asks him for his decision, the result showing whether the question is carried or lost. Then the council is closed, outsiders are allowed to enter, and the dance begins. An old woman invited the leader of the straw dance to dance in her teepee, cooking everything she had for that purpose and stating her poverty. He immediately sent the crier around the camp, and in a few hours all the members were present, as they will drop any work or pleasure they may have to attend these dances. After consulting in secret, all were invited in. The leader then commenced whirling around very much like the whirling dervishes, stating the cause of the meeting to aid and assist this old woman. The result was thirteen blankets, calico, fine cloth, skins, flour and pork.

When any question of importance is brought before the order there are many councils and much pow-wowing. Often another lodge will be called in to help make the decision, which, once arrived at, is always carried out. This society is of late date, but is the most powerful among the Indians. No member will undertake to be a spokesman for an outsider unless bribed by a present, generally a gun or a horse, so the more influential gain from 40 to 100 horses during the year, but they have to give away many to retain their influence. Women are not admitted to this order.

PAUL BECKWITH.

## State Agricultural College

Free Tuition. Expenses Light.

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

26 INSTRUCTORS. 500 STUDENTS.

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

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

## EMPORIA BUSINESS COLLEGE

—EMPORIA, KANSAS.—


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

## TOPEKA STATE SCHOOL OF ORATORY.

Fall Term Opens October 3. Summer Session Begins June 20.

Send for Catalogue.

Address C. H. PUFFER, Topeka.



COLLEGE OF THE SISTERS OF BETHANY.  
TOPEKA  
KANSAS

**BETHANY COLLEGE.**

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

Twenty-six Officers and Teachers.

Faithful Maternal oversight for all entrusted to our care

ALL BRANCHES TAUGHT—Primary, Intermediate, Grammar, and Collegiate; French, German, the Classics, Instrumental and Vocal Music, Elocution, Drawing, Painting.

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

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

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

**Wonderfully Popular. The Crowning Life Work of the late BEN PERLEY POORE (Memorial Edition.) AGENTS WANTED**

Spicy Reminiscences of 60 years' life among the Brilliant Men and Proud Ladies of the nation's capital. Eminent critics say of it: "Full of interest."—Hon. John Sherman, "Charming in every line."—Hon. H. L. Dawes. "A running river of lively anecdote."—N. Y. Tribune. "Extremely amusing."—Toledo Blade. "He wields a pen sharp as a bayonet."—Christian Advocate. "Brim full of humor."—Herald. "Full of racy gossip."—Chicago Times.

Apply for BIG TERMS to HUBBARD BROS., Kansas City, Mo.



## KANSAS FARMER.

ESTABLISHED IN 1888.

Published Every Thursday, by the  
KANSAS FARMER COMPANY.

## OFFICE:

321 Kansas Avenue, Topeka, Kas.

S. J. CRAWFORD, . . . . . PRESIDENT.  
J. B. MCAFEE, . . . . . GENERAL AGENT.  
H. A. HEATH, . . . . . BUSINESS MANAGER.  
W. A. PFEFFER, . . . . . MANAGING EDITOR.

## SUBSCRIPTION PRICE:

ONE DOLLAR A YEAR.

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

Address KANSAS FARMER CO.,  
Topeka, Kansas.

## ADVERTISING RATES.

Reading notices 25 cents per line.  
Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per line for one year.  
Annual cards in the *Breeder's 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	135.00
6 months . . .	25.00	45.00	75.00	135.00	225.00
1 year . . . .	42.00	75.00	130.00	225.00	400.00

All advertising intended for the current week should reach this office not later than Monday.  
Electros must have metal base.  
Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.  
To insure prompt publication of an advertisement send the cash with the order, however monthly or quarterly payments may be arranged by parties who are well known to the publishers or when acceptable references are given.  
Every advertiser will receive a copy of the paper free during the publication of the advertisement.  
Address all orders,  
KANSAS FARMER CO.,  
Topeka, Kas.

Our information is that a great deal of rain has fallen in Kansas during the last seven days, and that chinch bug work is very much impeded.

Horace brought in a sample of Hutchinson (Kas.) salt, the other day. He says the product of the Hutchinson works analyses 96 to 98½ pure salt. That is good. It is better for Kansas people to have their salt made within their own State than to send four thousand miles away for it.

The Stock Breeder's Directory is just out. It contains names and addresses of the breeders of cattle, horses, sheep, swine, poultry and pet stock, also lists of importers, of ranchmen, of live stock companies, shows and associations, of officers and their addresses, dates and places of meeting—about 40,000 names in all. Published by the Troeger-Perry company, 226, La Salle St. Chicago.

Report of the Missouri State Board of Agriculture, dated May 4, says: The returns for May 1 are very full, representing every section of the State, and of uniform tenor. Very cold weather has prevailed for April, throughout the State, being broken only in the last days of the month. On the 28th an inadequate rain covered our State. The rains of the winter have not compensated for the past two years of severe drouth, leaving the soil with a deficiency of water at the opening of the season. We must look upon the further continuance of the drouth as a very serious matter to the farm interests. Rainfall for April, at Columbia, three-fourths inches. Chinch bugs have never, during the six years of this crop report system, been so complained of. This complaint is very nearly universal in the State and unquestionably represents a real danger of large proportions to at least our wheat crop. Pastures are very short. Frosts from the 16th to the 20th are reported as damaging fruit prospects—peaches, plums, etc.

## THE DRESSED MEAT COMBINATION.

In our Stock Department this week the reader will find two extracts from speeches delivered in the Senate of the United States by Senators Plumb, of Kansas, and Vest, of Missouri, in which they attacked the combination of dressed meat men at Chicago and other points. Farmers and stock-growers will feel the force of these words coming from high places. It is often said that the Senate is hard to move and that it moves slowly when it does move. Without discussing that proposition, it is gratifying to know that at least two Senators, and they the best equipped for a war of the kind projected, have bared their arms for a fight on that gigantic monopoly. Farmers have been feeling its influence several years; they have protested, but until recently they had no champions in Congress. Funston, of Kansas, called attention to the operations of the beef combine a year ago, and now, at the first favorable opportunity in the Senate Messrs. Plumb and Vest lay bare the great fraud. The public men who will enter in an earnest and persistent war against this and all other like schemes to build up powerful organizations for money-making at the expense of the farmers will soon see themselves at the head of the largest army ever marshalled, for every farmer and every worker will join in a war like that.

Cattle and hogs are low, but beef and pork have not fallen in markets where the consumer buys. The packers sell dressed carcasses along railway lines at prices lower than local butchers can prepare them, and thus destroy the local market for live animals, forcing farmers to ship their fat stock to Chicago or Kansas City, or other great markets, and from those points distribute dressed beef to the people. The farmers lose and the railroads gain the cost of transportation both ways, the packers get pay for slaughtering, saving large profits, while consumers receive no benefits. To illustrate: Butchers at Atchison, this State, do not now purchase fat animals from neighboring farmers; they get their dressed carcasses from the packing houses at Kansas City. That compels the farmers of Atchison county to ship their animals to the great packing houses over railroads that bring back the dressed meat to the butchers who cut it up and sell it to the people at the same old rates current a year or two years ago. The farmer sells his cattle and hogs for less money than he did, but the people who use the meat pay as much for it as they did when cattle and hogs were higher; the packers gets the difference.

These great combinations operating in farm produce of any kind do not benefit consumers; they are not formed for that purpose. They are organized to make money for the members, to make money out of existing conditions, and the only possible way to attain the object is to reduce prices on the farm; that is the beginning. It is an infamy that demands immediate attention. Every man who engages in a scheme of that kind ought to be in the penitentiary; he is a criminal worse than the highwayman who demands money or life, for this villain will immediately hide himself to escape punishment; but the other villain faces the world in broadcloth and gold, and moves in open daylight among respectable people. It is time that these fellows have light turned on them.

The *Leader*, prohibition paper of Kansas, is now printed and published at Topeka. A copy of the first Topeka issue is on our table, a neat, clean, lively paper. It is published weekly, Lee H. Dowling, editor. Subscription

one dollar a year. The *Leader* is engaged in a good, grand work. There is nothing more needed at this time than vigorous, ceaseless war on the dramshop. It is the strongest and wickedest bad influence in American politics at this hour. It must be utterly wiped out.

## BLAKE'S WEATHER PREDICTIONS.

The KANSAS FARMER has made arrangements with Prof. C. C. Blake, late editor and publisher of *The Future*, a weather journal, to prepare his regular weather predictions weekly, and at least a month in advance, for the use of the FARMER readers. The arrangement is a simple one, and we want our readers to know just what it is. A great many people want these weather predictions, but not enough to justify the publication of a paper devoted exclusively to weather; hence it was agreed that the predictions should be published regularly in the KANSAS FARMER and that Prof Blake should receive as compensation for his services a percentage on subscriptions which he or his work will bring to the paper.

Prof. Blake is not a crank. He is an educated man who works by mathematical rules. He has been many years studying meteorology and the effect of planetary influences on the climate and weather of the earth. He notes every important change of weather reported in every quarter of the globe; his field is the explored universe. He believes he has discovered the real causes of our climatic conditions and changes, and that these things may be foretold with as much certainty as the times of tides and eclipses. What the result of his calculations show, that he takes to be the truth and so publishes it. He does not, however, assume that he knows all about it, and that there is nothing further to be learned. He studies as carefully and earnestly now as ever. His weather predictions have attracted very general attention among scientific men as well as among practical people. We believe that his weather predictions and meteorological notes will be generally regarded as at least an interesting feature of the KANSAS FARMER. The last half of May is treated this week; June will have attention next week, and from that on, the predictions will be at least one month in advance of the time referred to.

## IMPORTANT TO ALL KANSANS.

On the 14th of next November there will convene at Topeka the National Farmers' Congress, also the National Grange, as well as representatives from all the States in the Mississippi Valley. The assemblage of such a number of representative farmers from every State and Territory in the Union at that time is of the utmost importance to Kansas—a State that bids fair from present prospects to become the acknowledged banner agricultural State of the Union—that there should be on exhibition at Topeka during the several days' session, a creditable display of Kansas agricultural products that will impress every visitor with the wonderful and varied resources of the State.

In view of the foregoing, and in order that Kansas as a whole State may be duly advertised, Capital Grange of Topeka has taken initiatory steps toward such an exhibition by appointing a permanent committee, consisting of Wm. Sims, Master of the Kansas State Grange and ex-Secretary State Board of Agriculture; J. G. Otis, President of the Kansas State Dairy Association; Martin Mohler, Secretary of the State Board of Agriculture; H. A. Heath, Business Manager KANSAS FARMER, and John Armstrong, one of the suc-

cessful pioneer agricultural exhibitors of Kansas.

The committee held their first meeting this week and have begun their preliminary work in earnest. They desire the co-operation of every citizen of the State who can in any way contribute to the success of the display of the best products of Kansas.

The State never has had such an opportunity before to advertise itself at home as this occasion will afford. The committee decided that they would not admit of any competitive county displays, but make one grand aggregated Kansas display for the benefit of the whole State.

Any person desiring to communicate with the committee will address Hon. Wm. Sims, President, Topeka.

## Haaff's Book on Dehorning.

We have received a copy of "HAAFF'S PRACTICAL DEHORNER," a book of 180 pages, with nearly sixty illustrations, intended to be a complete treatise on the now popular subject of removing horns from cattle safely and neatly. In an accompanying letter, Mr. Haaff says: "It (the book) was delayed a month for new matter and three new cuts and all are gainers by the delay. This book makes dehorning so simple and plain that any one can dehorn his own cattle. Haaff's new chute is given, so that any one can build it, and it will be patented, but will be free to all who buy my tools and new book. It leaves nothing to be desired in the matter of dehorning cattle."

This book is a great improvement on the first edition. It contains more and better illustrations, showing the bones and horns of cattle's heads and the most improved and approved methods of holding the animals while removing the horns. The book is well worth the price to any farmer, even though he care nothing about the principal subject treated, for the author treats of other practical farm matters.

The great merit of the book is in its pictures and explanations, showing farmers how to proceed themselves without special risks, and without expense of hiring other persons to do or help to do what can as well be done without them. The study, experience and observation of Mr. Haaff, especially when accompanied and made plain by accurate illustrations, are surely worth one dollar and a quarter. The book may be obtained, postage paid, on receipt of price, direct from Mr. H. H. Haaff, P. O. Box 193, Chicago, Ill., or by remittance (\$1.25) to the KANSAS FARMER office. If ordered through us, direct carefully to "Business Manager KANSAS FARMER, Topeka, Kas.," writing name and postoffice address plainly.

## Imports for Nine Months.

The report of Col. Wm. F. Switzler, showing the value of imports for nine months ending March 31, 1888, puts the total value of all commodities imported during that time at \$539,727,934, an increase of \$30,887,422 over the same period last year. Of this total value, \$360,921,617 paid duty, and \$178,806,317 came free of duty.

An interesting feature of the report is that which classifies the goods and shows the proportion which each class bears to the whole. Of the free goods 41½ per cent. consist of (1) "articles of food and live animals"; 48½ per cent. consist of (2) "articles in crude condition which enter into the various processes of domestic industry" (raw materials); 4½ per cent. are made up of (3) "articles wholly or partially manufactured, for use as materials in the manufactures and mechanic arts, 4½ per cent. are composed of (4) "articles manufactured, ready for consumption; 1.79 per cent. are (5) "articles of voluntary use, luxuries, etc. Nearly 90 per cent. of the free list is made up of food, live animals, and raw materials for manufacture, and only a little more than 1½ per cent. consists of luxuries.

Of the dutiable articles, the same classes, numbered as above show the following rates per cent.: (1) 22; (2) 12½; (3) 15½; (4) 29½; (5) 20½.



## METEOROLOGY:

Including Weather Predictions Based on Astronomical Mathematics--By Prof. C. O. Blake, Formerly Editor of "The Future."

## OUR PROGRAMME.

We have made arrangements with the KANSAS FARMER to take charge of this department of the paper. We shall publish an article each week on meteorology and give the result of our calculations, showing what the weather will be for each month in advance.

We send a copy of the KANSAS FARMER this week to each of the former subscribers to *The Future*, as well as many sample copies to others. *The Future* was discontinued when we moved from Richland to Topeka last year.

We receive a per cent. on all subscriptions which are sent to the KANSAS FARMER on account of our department, hence we ask our old subscribers and other friends who subscribe on account of our *Weather Predictions* to so state when they remit, or else remit direct to C. O. Blake, Topeka, Kas.

## OUR ALMANAC.

We have also been at work during the past winter making calculations for our Almanac, which is now ready for mailing. It gives our Weather Predictions from the 1st of June, 1888, to the 1st of June, 1889, together with suggestions as to sowing winter wheat this fall and as to what crops it is desirable to plant next spring, and as to what will be the best times for planting the various crops.

Farmers and many others desire to know what the weather will be for many months in advance so as to make their plans. This information we give in the Almanac, while the more minute details as to the weather for a month in advance will be given in the KANSAS FARMER. Recently the orders for our Predictions have been coming in, unsolicited, much more rapidly than when we were working for patronage. Nearly every one who had our Almanac last year has ordered it this spring, and most of them say they must have it at any cost, that the predictions proved to be correct, and that if we have not printed an Almanac this year they will pay an extra price for a manuscript copy of the results of our calculations. We could publish many extracts from letters which we have received, showing how highly our efforts are prized by the people and how accurate they think our predictions have been, but as we published hundreds of such extracts in *The Future* it is unnecessary to use up our space with them now. The present Almanac also contains a long article on "Tornadoes," giving the laws by which they are produced. The price of the Almanac is \$1. It will be mailed to such as have remitted therefor as soon as we have finished mailing this paper.

## VERIFICATION.

While we had been at work on planetary meteorology for more than twenty years, we had attained no substantial success till 1875. From that time to this we have calculated all the marked changes in the weather and for most of the time we have published them for twelve months in advance. We predicted all the severe winters and all the mild and open ones, all the wet summers and the drouths, as shown by the Almanacs we published in 1876 and following years. In 1885 we started *The Future* and predicted all the marked changes in the weather. In the fall of 1885 we first commenced telling of the drouth which we have had for the past two years. While our warnings saved many people from serious loss and suffering, yet if each one to whom we sent a sample copy had invested a dollar by subscribing for *The Future* the saving to the American people would have amounted to millions, and much of the present "hard times" would have been averted.

It will be remembered that for two years we gave persistent advice in regard to economizing and storing corn preparatory for the drouth which we have had for the last two years. Most people laughed at us at the time, but facts have terribly borne out our predictions and fully justified the warnings we then gave. Speculation and expansion was going at such a fearful rate that had it not been for the warnings we had repeatedly given for two years, we fully believe that the fearful tide of speculation would have proceeded till into the early all of 1887, when the great fact of the heavy

shortage in the crops in nearly all the States on account of the drouth would have precipitated a financial panic.

C. O. BLAKE.

Topeka, Kas., May 15, 1888.

## WEATHER PREDICTIONS.

By Prof. C. O. Blake, Topeka.

FOR THE LAST HALF OF MAY, 1888.

The weather in the United States for the last half of May will be about as good as we could reasonably ask for. The first part of said period will produce much fair and warm weather, while the last part of May will be a little cooler and more stormy. During the last ten days of May there will be some frosts in the more northern part of the United States, but we do not think they will be severe enough or extend south far enough to do serious damage. We cannot give the exact localities where the rains will be heaviest, but we think they will be pretty well distributed, and taking the fair weather, storms and cooler weather all together, will make the last half of May desirable weather. All clear and warm weather might be best for the young corn for the two weeks, but that would also be favorable for the development of chinch bugs, while cool and wet weather part of the time will destroy part of these pests and prevent the survivors from doing much damage, so that on the whole we think the weather in most places will be about what we need. In next week's paper we will give the weather for June.

On the Pacific coast there will be a little more rain than is usual there for the last half of May.

In England the weather will average wet, and on the European continent the rainfall will be rather more than the average for the last half of May.

The winter which is now approaching in the southern part of South America will be much warmer than usual there, and the same will be true for Australia.

## KANSAS WEEKLY WEATHER REPORT.

Furnished by the Kansas Weather Service.

Abstract for the week ending Friday, May 11, 1888:

**Precipitation.**—During the past week an average fall of rain has occurred in Sumner, Sedgwick, Saline and Mitchell counties, an excess in Cloud, Ottawa, Lincoln, Russell, Ellsworth, Marshall, Clay and Barton counties, while a deficiency generally exists throughout the rest of the State, being most marked in the southeastern and extreme western counties. A heavy hailstorm occurred in Cloud county on the night of the 10th.

**Temperature and Sunshine.**—The week has been cool and more or less cloudy; but one warm day—the 10th—during the entire week.

**Results.**—The hailstorm in Cloud county did much damage to gardens, shrubbery and buildings. Corn is about all planted now, and is generally up, but the continued cool weather is retarding its growth materially. Grass in many sections is still backward, but in the south-central and western counties it is in excellent condition. Wheat is in fine condition and is heading out in the central and southern counties. Oats are doing finely. Chinch bugs are damaging wheat and oats to some extent in the central counties. Seed corn from Iowa has failed to do well in the southern counties. Excepting corn and grass, all reports show vegetation to be advancing very rapidly. Home strawberries are being marketed in the southern counties. There probably never was a time in Kansas when young trees showed to better advantage.

## TOPEKA REPORT.

For the week ending Saturday, May 12, 1888:

**Temperature.**—Highest at 2 p. m., 84° Thursday the 10th; lowest at same hour, 53° Tuesday the 8th. Highest recorded during the week, 85° the 10th.

**Rainfall.**—Rain fell on four different days, but in small quantities; total for the week, 48-100 of an inch.

## Patents to Kansas People.

The following list is prepared for the week ending Saturday, May 5, 1888, from the official records of the Patent office by Washington correspondent. A printed copy of any patent here named can be had for 25 cents.

Check-row attachment for planters—Isaac Jackson, Kingman.  
Thill coupling—Aaron B. Perine, Topeka.  
Heating drum—Walter Markle, Tonganoxie.  
Watch chain attachment—Henry M. Stroud, Chase.  
Hay rack—DeWitt C. Roby, Eureka.

One dollar is all that we now ask for this paper one year.

## DAIRY MEETING AT GARNETT.

Special Correspondence Kansas Farmer.

A meeting of those interested in the manufacture of butter and cheese and its promotion to a higher plane in the dairy world, was held in the court room at Garnett last Saturday, with a good attendance. The meeting was called to order by Mr. R. T. Stokes, who briefly stated the purpose for which they had convened. A temporary organization was perfected by electing Mr. Stokes Chairman and Mrs. Eva H. Neville as Secretary.

Mayor Houston welcomed those present to the city in well-selected remarks, which were responded to by Miss Mary Marshall in a short yet remarkably fine and appropriate address.

After this came an address from Mr. Stokes, then a paper on "Perfect Butter-Making," by Mrs. Neville. This paper showed that the author was thoroughly posted in the art of making butter, and those present will doubtless profit by her suggestions.

"Horace," of the KANSAS FARMER, addressed the meeting on the importance of the dairy interest in the State of Kansas, giving statistical facts in relation thereto as reported through the Biennial Report of the State Board of Agriculture for 1885-6. There were in the State 627,481 milch cows, valued at \$15,687,025; and the butter product aggregated 25,495,836 pounds, at a value of \$3,824,375.40, while the cheese product amounted to 442,724 pounds, at a value of \$53,128.08. The value of milk sold other than for butter and cheese amounted to \$376,057. Kansas has an area of 82,144 square miles, or 52,572,160 acres, and on this area there was, in 1886, a population of 1,406,738 people, or 17.13 persons to the square mile. Anderson county has an area of 576 square miles, or 368,640 acres, and a population of 13,955, or 24.23 persons to the square mile. The number of milch cows within her borders is 9,534, valued at \$238,350, with a butter product of 277,325 pounds, at a value of \$41,598.75. The cheese produced aggregated 3,070 pounds, valued at \$368.40, and the value of milk sold other than for butter and cheese was \$1,812. With this array of figures it is easily discernible that the dairy interests of the State of Kansas have not as yet more than begun to assume shape—merely in its infancy.

Mr. P. I. McEchron, of Richmond, read an excellent paper on the Holstein-Friesian cattle and their importance as a dairy and beef animal combined. This was followed by Mr. I. S. Barnes, of Blue Mound, with a paper on the same subject. Then came short talks on experience and methods of butter and cheese-making. Walter Latimer made a few terse remarks in favor of the Short-horns, claiming in strong words that the Short-horn was a milk producer as well as a beef animal, referring to the fact that of all the fine-blooded animals used for dairy purposes, the Short-horns outnumbered all other breeds put together, two to one.

Mr. J. M. Neville read a paper on the subject of gathering cream from the process of deep setting.

Mr. Stokes followed with an article from John Gould on silos and ensilage and their advantage and profit as compared with other modes of preparing and preserving food.

Mr. James Bell was the next speaker, following whom some thirty or more handed in their names as members of a County Dairy Association to work conjointly with the State organization.

The following committee was appointed to draft a constitution and by-laws and to report for permanent organization: R. T. Stokes, F. Hobert, Geo. Brown, M. H. Cleveland and J. M. Neville.

Mr. Bell in his remarks said: "When I came to Kansas looking for a place to locate, I found a vast area of grass or open prairie known as the commons. I was told that it was not necessary to have more than forty acres of land—just enough for a home, as all the grass and hay any one wanted could be had without buying, or having to pay taxes on extra lands. Everywhere was the raw material—grass, standing ready to be manufactured into the separate products of the farm for the markets, beef, mutton, pork, butter, cheese, horses, mules and other commodities. I find further that a farmer is not only a laborer, but that he is a mechanic, a manufacturer and a capitalist; that he manufactures the raw material or product into the most profitable shape or form ready

for the market. Our object in coming together to-day is to devise plans for the promotion of the dairy industry of Anderson county and how to best advance that interest so as to better our condition and that of those depending on us? Mr. Turrall has said "It is an easy thing to make good butter if you know how," and Mr. Neville has read an article on the principle of raising cream from deep setting. Both gentlemen direct our attention to this fact, that there must be cleanly surroundings, that everything must be done at the proper time and in the best possible way in order to make good butter; in fact, the discipline of the mind is an important factor and one not to be neglected nor ignored. In Holland, where the greatest milk-producing animals on earth originated, and a country noted for lowlands and a luxuriant, nutritious growth, they have passed from butter to cheese, and their supply is so great that they have to send off their surplus products to a foreign market. We here in Kansas are in a transit from beef to butter and cheese, and the creamery and cheese factory will soon take the place of the small way of dairying on the farm, so that all surplus can be more speedily utilized in producing that which the public demands than now can be made on the average farm, to-wit: a good article. We are progressing, and the individual, community or nation that takes a position to stand still, that people or nation has commenced to die. I find that land which has been properly subdued and put into tame grasses does well, and the timothy meadows in this county are necessary to successful dairy work—"a fountain of wealth in time of need."

The meeting adjourned to convene again on Thursday, June 24, at 1 p. m., at which time a permanent organization will be perfected.

HORACE.

## Who Are Farmers?

A friend raises this question in a letter to the editor, as follows:

I notice that in your remarks as reported, made at the recent farmers' convention at Topeka, you said there were only two members of the Kansas delegation in Congress who are farmers. If you apply the term "farmer" to a man who actually lives on a farm and with his own hands labors in the cultivation of the soil, I do not see where you find more than one. If, on the other hand, you account a man a farmer who owns a farm, but who has it operated for him by tenants or employees, then I think you will have to extend the list somewhat. Certainly I know that in the latter sense Senator Plumb is a farmer, and I think Mr. Anderson is also. My impression is that Mr. Morrill also does farming at more or less long range. This is not a matter of any importance, but I had a curiosity to know in what sense you used the term "farmer."

The word "farmer" was used according to its usual application, meaning a person whose home is on a farm and whose principal business is farming. Men who own farms and have them tilled by renters or employees, but who, themselves, live in towns and follow other callings as their chief business, are hardly ever regarded as farmers. If a man lives on his farm, and if farming is his regular and principal occupation, he is a farmer, and is so accepted universally, even though he do nothing more than to direct the labor. A great many men, living in towns and engaged in law, medicine, trade, manufactures, banking, etc., have lands in the country tilled by renters or hired men, but the owners do not catalogue themselves as farmers.

Our correspondent's letter suggested a look into the Congressional directory where every member and Senator states for himself what record he cares to show. As to the Kansas Senators, there is nothing in the directory to show that either of them is a farmer. Mr. Morrill "is a banker," the book says; Mr. Funston "located in Kansas on a prairie farm in 1867, on which he resides at present." There is nothing in the directory to show that any of the other five members is a farmer, though we had understood that Mr. Turner was living on his farm when at home. If we were mistaken as to his residence, then, as our correspondent suggests, there is only one farmer among the nine men who represent Kansas at the national capital.

A communication, in reply to our "Two Dollars a Ton for Cane," is on file. It came too late for use this week. It will appear in our next issue.



## Horticulture.

### AMONG DISEASED APPLE TREES.

Under the above heading, Prof. F. Hawn, Leavenworth, has written a good deal of interesting matter for *Colman's Rural World*. His article No. 3 is as follows:

In my last article I proposed that in a subsequent contribution I would give the origin, extent and composition of the marl or subsoil to which more frequent reference will be made, which also exerts a very important influence on branches of husbandry other than horticulture. Prof. G. C. Swallow, in the report of the Geological Survey of Kansas, published December, 1866, p. 72, in referring to the recent geological history, makes these remarks:

"In the process of time, valleys and ravines were worn out by the action of the surface waters and streams, leaving the present ridges and mound-like hills and ravines, with their sides and slopes somewhat more abrupt than they are at the present time."

"We know but little of the history of this period of denudation, save that the waters must have been abundant and the streams powerful, to have worn such deep, broad valleys, and borne away the materials. Subsequently, this whole region, eastern Kansas and Nebraska, Illinois, Indiana, Ohio, Missouri, and parts of Kentucky, was covered by a vast fresh water lake."

"The history of these times is found in the petrified wood, and shells and bones, of trees and animals of these days, carefully laid away in the marl beds, tell the history of this lake and its shores."

"By some change of the succeeding ages, the lake was drained away, exposing the surface of the earth somewhat changed. The marls deposited in the lake had, for the most part, covered up the limestones and sandstones, rendered the slopes more gentle, and smoothed up the rugged and precipitous hillsides, presenting a contour of surface of valley and hill substantially, as it has remained to the present time."

"It, (the late marl, F. H.), is well developed along the bluffs of the Missouri and Kansas, and underlies the soils in nearly all the country between the Missouri and the Blue, north of the Kansas, and south of the divide between the waters of the Missouri and Arkansas. It is 100 feet deep at Wyandotte, and 75 feet deep at Leavenworth, (p. 37.)"

In Prof. Swallow's Second Annual Geological Report of Missouri, 1854, p. 73, he says: "So far as my own observations extend, this formation (lake marl, F. H.) caps all the bluffs of the Missouri, from Council Bluffs to its mouth, and those of the Mississippi from the mouth of the Des Moines to the Ohio, and forms the upper stratum beneath the soil of all the highland, both timber and prairie, of all the counties north of the Osage and Missouri, and also St. Louis and other Mississippi counties on the south. Its greatest development in this State is in the counties on the Missouri, from the Iowa line to Boonville, thence to St. Louis it is not so thick. In some places it is two hundred feet thick. At St. Joseph it is one hundred and forty; at Boonville one hundred; and at St. Louis in George's quarry and the Big Mound it is about fifty feet, while its greatest thickness observed in Marion county was only thirty."

The composition of this lake marl differs but little in different localities. The following table shows about the average analysis of specimens from

several widely-separated localities in Missouri and Kansas:

Silica.....	77.02
Alumina and protoxide of iron.....	11.05
Lime.....	8.25
Potasse.....	1.05
Magnesia.....	1.63
Soda.....	A trace
Carbonic acid.....	2.83
Water.....	2.43
Loss.....	.74
Total.....	100.00

In continuing the quotations from Prof. Swallow's Missouri Reports, p. 150, he remarks: "The soil is best where the bluff (lake marl, F. H.) is well developed, pulverulent, of a brownish ash color. \* \* \* The area covered by this, the best of all soils is very large. It includes the greater part of LaFayette, Jackson, Clay, Platte and Andrew, and some portions of Howard, Marion, Saline, Buchanan, Holt and Atchison, and probably of several other counties which I have not yet visited."

The character of such a soil may be learned from the following analysis of specimens taken in my presence from a farm in the vicinity of Weston, Platte county, in the fall of 1852:

"Soil No. 1, A," 8 inches below the surface, and "No. 1, B," 18 inches below the surface. Of 100 parts, dried at 100 C., it contains:

	Soil No. 1, A.	Soil No. 1, B.
Organic matter and water.....	5.0470	4.2936
Insoluble in acid, silica, etc.....	88.1600	84.2900
Chlorine.....	0.0075	0.0050
Sulphuric acid.....	0.0000	0.0300
Silica.....	0.3131	0.2940
Peroxide of iron.....	2.5135	4.6680
Alumina.....	2.5309	4.5908
Lime.....	0.6205	0.5153
Magnesia.....	0.5262	0.7875
Alkalies as chlorides.....	0.6670	0.8705
Phosphoric acid.....	1.1985	0.1817

The farm from which these specimens were taken had been in cultivation for ten years in hemp, corn, wheat and tobacco, no top-dressing of any kind had ever been applied to it. The same system of cultivation and cropping had been continued up to ten years ago, thirty-six years without any dressing except the stubble and weeds turned under by the plow, yet the crops were remunerative.

Simultaneous with the first cropping the apple orchard was planted which flourished with prodigal luxuriance for a time, but its vitality became impaired by disease superinduced by a stimulated growth, and finally yielded up its usefulness in twenty-five and thirty years, while the soil yet yielded crops of thirty and forty bushels of corn to the acre.

Under precisely the same conditions of soil in eastern Kansas were the first orchards planted. The growth of the trees was the admiration of the horticulturist. When they came into bearing their fruit was extolled everywhere. The first premiums were awarded them at exhibitions in Boston, New York, Richmond, Va., and at the Centennial, against the world, never defeated anywhere. Missouri stood no chance at these exhibitions, their trees being older, though reared on an equally fertile soil. Soon the Kansas trees that had produced this extraordinary fruit began to overbear, sure indications of a decreasing vitality, and now at this day, when they should be in the prime of life, those that are still alive produce fruit such as no one would think of exhibiting at a cross-road fair. Yet the fruit of the more recent plantings sustains the reputation of the earlier periods of their predecessors. What is the cause of this decline? Horticultural doctors say it is starvation, "supply them with a sufficient quantity of manure is the remedy." It would be equally rational for a physician to prescribe luxurious fare for his gouty patient.

The suggestion that an apple orchard deteriorates for the want of nourishment on a soil that produces thirty bushels of corn from an acre is pre-

posterous, yet we quote from a recent popular address before the Kansas State Horticultural Society, thus:

"The only way to continue bearing apple trees healthy, vigorous and fruitful, is by giving them full possession of the land, good cultivation, and supplying a sufficient quantity of manure to keep up the fertility of the soil. The neglect to meet the requirements is, in my opinion, the main cause of the premature decay of many of our orchards."

This refers to a region in Kansas where every load of manure carted into the orchard would hasten its destruction.

Also, recently a prominent officer of the Horticultural Society of your State, reported that "bearing orchards in Missouri were suffering and decaying for the want of cultivation and fertility." Even should the soil become exhausted the lake marl or subsoil within reach of the roots of the tree, as we have seen in the analytical table, contains an inexhaustible store of fertilizing elements that would sustain an apple tree in vigor for a thousand years, if its functions would permit it to live that long.

As previously cited from official geological reports, such are the conditions of at least the upper half of your State, and more particularly so in north Missouri. From personal knowledge obtained through official duty, I can affirm that with the exception of the abrupt slopes and oak ridges, there is not an area of land amounting to a quarter section in extent in that region; on which an apple tree would "decay" in a hundred years "for the want of fertility." Yet we learn that there, too, the trees are stricken by disease, particularly in the counties on both sides of the Missouri river, including those of Nebraska and Kansas, where the soil is the most prolific.

The subject, in brief, amounts to this. The soil in most instances in regions cited in Missouri, Nebraska and Kansas, is too prolific, and the subsoil (lake marl) is too deep and rich in the mineral elements of plant growth to produce a healthy tree, and the result of the efforts is a plethoric growth, an early decline and premature death, often hastened by misdirected appliances. This deterioration has been more extensive and fatal since the six past hard winters.

The apple tree under favorable conditions is long-lived. I have the history of an orchard in Schoharie county, New York, planted in 1713, which was yet prolific after one hundred and forty years. This, too, where a dressing of our lake marl would have been a salutary contribution.

New Jersey fruit-growers have shortened the life of their trees from fifty years to eight or ten crops by too free use of fertilizers and other stimulants. Moreover by these abnormal means a fatal contagious disease of the tree (yellows) has been evolved, which is carrying destruction over the land of that popular fruit.

In the introduction to Prof. Swallow's second annual report on the geology of Missouri, p. 47, submitted thirty-four years ago, this paragraph occurs:

"Our sons are taught to trace the root of a word up through the French, Italian, Latin, Greek and the Sanscrit to discover its meaning; but who of them can trace the root of a potato beneath the soil and discover the food it seeks there?"

It might be inferred from the loose generalization and the illy-digested propositions which too often gain credence in the attempt to solve problems that constantly arise in horticulture that the Agricultural colleges

have not improved on the teachings of the masters of the past generation.

It is to be regretted that Prof. Swallow's valuable Geological Reports are out of print.

F. HAWN.  
Leavenworth Co., Kas., March 15, 1888.

### Spraying Fruit Trees.

Mr. A. C. Hammond, Secretary of the Illinois Horticultural Society, in relation to the best medium for throwing insecticides upon trees, says: "A year ago I determined to experiment in the spring with arsenical poisons, but the bloom was so light that I hesitated to incur the expense, finally concluding to treat one orchard at least. I therefore ordered a Lewis combination force pump and a quantity of London purple for the purpose. I then took the heads out of two fifty-gallon barrels, and after boring a large hole in each of them, in which I kept a stick for stirring the mixture, put them in for floats. I then placed the barrels in a wagon and filled them as nearly full of water as practicable, say about forty gallons in each. A pound of London purple was then thoroughly mixed in a pail of water and divided between the two barrels and stirred until the poison was well mixed with the water. I found that two men were needed for the work (a man and a boy), one to drive and keep the pail or tub in which the pump worked filled, and the other to use the pump. The driver was directed to drive very slowly along one side of the row, and back the other, and the man with the pump, which throws a fine spray fifteen or twenty feet high, to use great caution, and see that every part of the tree was so thoroughly wet that the water would drip from the leaves.

"The first spraying was done the 1st and 2d of June, when the apples were about as large as a half-grown cherry, but I think it should have been done a week earlier, just after the bloom had dropped. The second application was made ten days later. From these sprayed trees, about 300 in number, I gathered 500 bushels of apples, from 60 to 75 per cent. of which were perfect, and 85 per cent. marketable, while from the same number of trees in adjoining orchards I did not gather a peck of perfect fruit. The result was astonishing to me, and I have hesitated to publish it, knowing how dangerous it is to form hasty conclusions, but as there is not in all probability another orchard in the country that has produced so much perfect fruit, there must be some cause for it, and after carefully looking over the ground, I have concluded that London purple saved the fruit. The mixture that I used was too strong and scorched the leaves somewhat. Next year I shall use a pound of London purple to three barrels of water (about 100 gallons), and am inclined to think that even a weaker mixture would do.

"With the cheap pump that I used, two men can go over a ten-acre orchard in a day. It therefore seems to be unnecessary for the ordinary orchardist to invest in high-priced machinery for the purpose. Some of our scientific men tell us that applications of this kind cannot possibly kill the curculio; be this as it may, the apples in this orchard have for several years been badly stung with this pest, but this season they injured them but very little, and when asked if the London purple killed them, I can only answer, I don't know. If it did not, why did this orchard show so much less of their work than others? This experiment has been tried in various parts of the State, and, as far as I know, with unvarying success. Hon. B. Pullen, of Centralia, writes: 'On account of delay in receiving the pump, I was only able to experiment in a small way; I should have



been at work two weeks earlier, but the result was very satisfactory. I used one pound of London purple to eighty gallons of water, and a large spoonful of Paris green. This was too strong and burned the leaves to some extent. I shall use hereafter about a pound to 150 gallons of water, and no Paris green. The only marketable fall and winter fruit that I had came from sprayed trees, and late as it was, and light as the crop promised to be, I am sure that it would have been worth at least \$400, had I completed the work, but I was compelled to quit, to pick strawberries."

#### Grafting the Grape.

Grafting is a very easy method of rapidly propagating new or desirable varieties, or changing undesirable ones into something better. It can be successfully done at any time after the frost is out of the ground, and until the vines are in full leaf. Probably the best time is just as the buds are swelling.

Take particular care to use none but live buds on sound wood. Where one has the wood to be used for cions growing on the place, the safest way is to lay it down in the fall, and cover enough to keep it on the ground. When the buds have just begun to swell, so that the live ones are easily recognized, cut the cions, and graft. If the cions are to come from a distance, procure them in the fall, and keep in cellar, in damp moss or sawdust, or bury in the ground.

To graft the vine, cut it off underground and split for the cion as in cleft-grafting. If the vine is less than one inch in diameter it can be done with the knife, but care should be used to do it in such a manner that the cut shall be smooth and without rough edges. If the stock is large, it is best to open it with a line-tooth saw. I used to cut the edges smooth with the knife, but find it is not necessary. Cut the cion to a wedge with a straight sloping cut on each side, as in ordinary cleft-grafting, without shoulder, insert the cion so the inner barks will fit as well as may be. If the stock is large, use two cions. If the stock will hold the cions firmly, no tie is needed. If not, tie with unwaxed string so as to hold the cion in place. I usually use two or three ply jute twine. Use no kind of wax, but press the earth firmly about the union, and fill up clear to the upper bud. Then mulch with sawdust, chaff, or some other such suitable material. The latter is very essential and should not be neglected or delayed. Watch for suckers from the stock and remove them, and when the cion grows, keep it well tied up. If this graft does not grow as soon as you think it should let it alone. They often start as late as July or August, and make a good growth.—R., in *Orchard and Garden*, for April, 1888.

#### It is a Curious Fact

That the body is now more susceptible to benefit from medicine than at any other season. Hence the importance of taking Hood's Sarsaparilla now when it will do you the most good. It is really wonderful for purifying and enriching the blood, creating an appetite, and giving a healthy tone to the whole system. Be sure to get Hood's Sarsaparilla, which is peculiar to itself.

The ground for carrots and parsnips should be free from small stones. The best soil is a light sandy loam. The roots would grow forked and irregular if they should meet with obstructions in the soil.

The Summer Normal Institute of the Lawrence (Kas.) Business College and Academy of English and Classics begins June 12. Send for circulars. Address E. L. McILRAVY, Lawrence, Kas.

## The Poultry Yard.

### Description of a Hen-House.

EDITOR KANSAS FARMER:—I will give the description of a simple hen-house on my place, and perhaps it will be of some use to others. It has three compartments, the center one is ten feet east and west and eight feet wide. There is a door in each end three feet wide and six feet high near the north wall. These doors are provided with wire screens for summer. In each end there is also a window, and they are likewise protected by wire screens and made to slide back and forth. From door to door is a free passage way three feet wide; the rest is used for roosting; it contains nine roosts five feet long and will accommodate ninety fowls in cold weather, provided they have the run of the farm in the day time. These roosts are made on the bedstead plan, and just twelve inches under them is a tight floor to catch the droppings. This is two feet above the floor, and the space between it and the floor serves for a dusting place. The nests are on the outside on the ends, and are approached from the inside by the fowls; the eggs are gathered from the outside.

On the north side of this house is a lean-to, seven by ten feet with board floor, screen and board door, rat-fight, and no window. This has two rows of boxes, twelve in all, each box having a door of its own. This is my sitting-house, and when closed is quite dark. The hens are driven out of the main building early each morning and the sitters let in there to dust by means of a small door. Here they wallow and eat corn, gravel, scraps of meat, and drink, for fifteen minutes.

On the south side of the main building is another lean-to, seven by ten feet, with door in one end and window in the other. On the south side of this room are five coops, two feet every way, with board floor, movable lath front to slide up and down, and sliding board partitions. Above these coops is a roost, ten feet long and four inches wide, for the weaned chicks, the roof of the coops serving as a dropping-board.

The hatching-house turns out about 100 chicks every three weeks, and these are given to five hens in the five coops just mentioned. Each coop has an outside run, two by four feet, with one-fourth of the slanting roof made of board and the rest movable lath doors. Each run has a tight door between the coop and run, and also has three cans hung on nails just above the ground, containing oats, wheat and cracked corn. These are always kept full. A trough twelve inches long and one deep furnishes water for two coops and is staked down just outside of the runs in easy reach of hens and chicks. The large chicks and grown fowls are kept away from these runs by means of a lath fence sixteen by ten feet. Corn and oats, also water, are kept in this pen all the time, and when a chick gets too large to pass between the laths, he is large enough to "rustle" and get his own living. When the young chicks are three weeks old the hens are taken away and another batch takes their place, while they occupy the main part of the lean-to. Everything is mouse-tight, yet well ventilated, and in a covered box under the door a trap is kept set every night. When a chick gets so large he cannot get through the lath door to this room, he takes to the trees to roost. When cold weather comes the

old fowls are all marketed and the chicks made to roost in the house.

C. J. NORTON.

### Blue Grass Poultry Yards.

#### Guinea Fowls.

We have often in the past advocated the keeping of a few Guinea hens with the flock. They are the most watchful of birds, giving their loud warning note at the first appearance of hawks or other danger. This is sure to follow at night as well by day. They must not be allowed to hatch sooner than June, as although the old birds are perfectly hardy the young chicks are fully as tender for the first six weeks of their life as young turkeys. The eggs and the flesh of the fowls are quite equal to that of ordinary barn-yard fowls. The young need chopped boiled yolk of egg and bread crumbs, until they can run about to eat cracked grain and eat insects of which they are indefatigable hunters. If you can find an ant's nest, give them some sods filled with the insects and eggs by all means. Sixteen eggs about the right number for a clutch. As to the care of these fowls the following common sense directions, by a expert fancier is correct, which we give as follows:

Once reared the birds are not expensive to keep, as they roam far afield and partially feed themselves; they eat a great many insects, and without any special fattening are always nice and plump in spring. They come into season when game goes out, and are generally killed between the middle of February and the middle of April. In a private establishment they are most useful as a substitute for game when the only other birds to be had are expensive quails or partmigan tasting like turpentine. Although nominally in season only in spring, they may really be eaten at any time. The cocks that I do not intend to keep, I kill as soon as they are no longer required, instead of waiting for them to be six months older and proportionately tougher. It is also well to have them out of the way, as they are rather quarrelsome and inclined to peck the common hens. The Guinea hens no longer needed for breeding, I kill in the winter, when they have quite recovered from laying. All birds no longer quite young must be hung before eating as long as ever the weather will permit. All Guinea fowls, it must be remembered, should be well-larded, or they will be dry when roasted; whereas, if properly prepared, they are tender and juicy. Ignorance as to the right method of cooking them has led many people to discontinue using them, on the ground of their being thought to be dry and tasteless. Anybody who wishes to start keeping these pretty and useful fowls would do well to buy a sitting of eggs as soon as possible—two sittings from different places would be better still, as then unrelated birds could be mated. One cannot safely buy birds before they are full-grown because the sex is so difficult to distinguish. There is no difference except that the wattles of the cock are slightly larger than those of the hen, and that he makes a sort of "chittering" noise, whereas she calls "come back, come back." One can sometimes domesticate full-grown birds, as I have shown above, but those which are hatched on the place, and have always been accustomed to associate with hens and chickens, will be much more likely not to stray.—*Homestead*.

### Poultry Notes.

The White and Brown Leghorn fowls begin to lay when only five months old. They are non-sitters, lay white eggs, and rank very high as egg-producers. They are, however, rather small in size, and do not answer as well for market as do the larger breeds.

Apples are good for laying hens—good raw or cooked and mixed with bran or meal, just as you would potatoes, and the small ones, that are not good for anything else except cider, will do just as well as better ones. So says the small apples for the hens next winter.

The little red mites will infest the hen-house in countless numbers on the approach of warmer weather. The cheapest and most effective method of getting rid of the vermin is to add a quart of kerosene oil to three gallons of strong soapuds and sprinkle the mixture wherever it can be applied. If forced into the cracks and crevices with a hand force-pump it would be all the better.

When about to kill a fowl, says a poultry-fancier in the *Mirror*, do not forget that the poor bird undergoes all the terrors incident to such a proceeding, and the work should be done as quickly as possible. It is very cruel to slowly bleed the bird to death. First destroy all consciousness by striking the bird a quick blow on the head with a stick; then use the knife. Wringing the neck is barbarous and cruel in the extreme, and any one so doing should be punished. It is not agreeable to have to kill the birds, but if it must be done, let the work be devoid of cruelty.

Mr. J. I. Grinsley, who has for twenty years kept an average of fifty fowls, and never had a hen-house louse in his hen-house, tells the *Weekly Tribune* of this simple preventive: Deposit all your dry coal ashes in your hen-house. At intervals of eight or ten days scatter a few shovelfuls upon the droppings. The movements of the fowls will scatter the ashes, and they will be found in every crevice. By this process, too, the droppings will be in the finest condition for use any time; no need then of reducing them to this condition by driving and pounding.

### Snug Little Fortunes

May be had by all who are sufficiently intelligent and enterprising to embrace the opportunities which occasionally are offered them. Hallett & Co., Portland, Maine, have something new to offer in the line of work which you can do for them, and live at home, wherever you are located. Profits immense and every worker is sure of over \$5 a day; several have made over \$50 in a single day. All ages; both sexes. Capital not required; you are started free; all particulars free. You had better write to them at once.

### Vestibule Trains to Chicago.

The Vestibule train is a new factor in Western railroad transportation. It is claimed for these trains that on account of their being connected by steel hoods all danger of telescoping in case of accident is removed, the train being practically one long car. It is certain that the oscillation of the cars is greatly reduced, and it is also certain that the vestibule trains afford the greatest comfort yet known to travelers. The adoption of this style of train by the Chicago, Santa Fe & California Railway between Kansas City and Chicago is a strong bid for the passenger traffic between the West and Chicago. This new road is in many particulars ahead of any of its older competitors, and will undoubtedly be the popular road to Chicago.

The productiveness of the native blackberry may be considerably increased by dwarfing the plant by reducing its exuberant growth of wood.

There are three channels which carry away most or all of the profits of business, unless carefully hemmed in—personal expenses, family expenses, useless business expenses. They must be determinedly limited, if a secure financial position is hoped for.

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

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

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

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



## The Busy Bee.

### Different Methods of Introducing Queens.

There are quite a variety of methods of introducing queens, each followed by its share of success and failure. A plan that is with some a success is with others a failure. If you have a plan that you succeed with, that is the plan to follow. The removal of the old queen and the caging process of the new queen is in the majority of cases practiced by all. It is claimed by some that to succeed we should introduce immediately upon the removal of the old queen, so as not to allow the colony time to become aware of the queenless situation; while others would not offer to introduce until the colony became aware of their queenless condition and began the work of constructing queen cells. We have tried almost every plan that we have heard of, having introduced many very valuable queens in our apiary, and having exercised the very best of precaution and care. We have come to the conclusion that much attentiveness and frequent looking after the welfare of the queen is not the best policy. Our manner of introducing of late years, since we raise the greater part of our own queens, and have no scarcity of numbers to draw on, is simply to take one out and put another in without any further ceremony; and our per cent. of loss does not far exceed any other process we have practiced. But to those who purchase their queens, and have but the required number at hand needed, it seems rather a rash manner. We believe the greatest secret of success in any method is after the queen is once introduced, to allow the colony to be undisturbed for five or six days. We think that the majority of queens that are lost are on account of opening the hive too soon after introduction. A queen after being thus handled is easily excited for a length of time, and on opening the hive she becomes scared and will make a hasty retreat over the combs. This appears contrary to the will of the bees, and in most cases they will attack her, or, as apiarists term it, "ball her." The attack made upon the queen by bees is very singular. It is quite different from that made upon one of the number, or anything else. They will gather around her in the shape of a ball, sometimes as large as a base ball, in a very compact form, apparently squeezing the life out of her. Occasionally in opening any hive the bees will ball their own queen, and nothing but caging will save her life.—*National Stockman.*

The best dollar investment in the world is for any reader of this paper to send us \$1 for the KANSAS FARMER one year.

Some bee-keepers are claiming that buckwheat honey don't pay. It is dark and unattractive in appearance, and not a favorite in market. First-class honey seems to be that from basswood and clover only.

The *Bee Journal* figures that the annual honey product of North America is about 100,000,000 pounds, and its value is nearly \$15,000,000. The annual wax product is about half a million pounds, and its value is more than \$100,000. There are about 300,000 persons keeping bees in North America.

See the broomcorn advertisement on our market page of J. L. Stranahan, who has come to stay. This gentleman has been a regular patron of ours for the past three years, and we take pleasure in saying that our readers will find him uniformly square and honorable in his dealing. He has had twenty-five years' experience as a broom manufacturer and wholesale dealer in broomcorn and broom materials, and knows more in a minute about such things than some dealers could tell you in a week.

### Gossip About Stock.

Mr. W. E. Sage, of Sumner county, has a field of wheat now averaging forty inches in height. It is of the May variety, and will do to harvest in about ten days.

The people of Anderson, Franklin, Linn and Miami counties are agitating the question of forming a district fair, to be held at Greeley, an attractive city of the third class situated near the junction of the four counties named.

In the counties of Franklin, Anderson and Neosho, the wheat is suffering materially from an onslaught of chinch bugs. Many plans have been tried looking toward exterminating these worst of pests; but all failed, and they, chuckling each other, say—"We've got 'em."

Read the new advertisements found in this and subsequent issues of the KANSAS FARMER, and when in need of the many choice articles and stock they represent, why write them. In fact, all those who place advertisements in this paper, whether old or new patrons, can be relied upon to furnish the best of whatever represented.

J. M. McKee, of Wellington, Kas., reports success in the sale of his favored stock—the fine Poland-China swine. He has over fifty well-developed, symmetrically-formed, hardy pigs of recent birth which will in a short time be ready for those desirous of procuring something valuable for the formation of a herd or to head a herd already formed. This gentleman is a zealous worker and deserves the prosperity now upon him and yet to come. His Pekin ducks, Toulouse geese and Plymouth Rock poultry are indeed fine.

The time is when the best of every commodity is sought after regardless of what it may cost, provided no exorbitant price is asked. This is to a certainty true, on general principles, when it comes to purchasing that which would better improve and enhance the value of live stock. No farmer or stockman that is expecting to keep abreast of the times can afford to do otherwise than procure and propagate the best, let it be what it may. It don't pay to keep an animal worth only \$25 when the same food will grow an \$80 product.

M. B. Keagy, the Large English Berkshire swine breeder, Wellington, Kas., reports several excellent sales and prospects bright for a profitable business throughout the season. He has now fifty-three choice pigs and more to follow. Any one wanting one or more of these gems of the sty should send in their orders at once, and they will be booked, to be filled as soon as the pigs attain suitable age for proper shipment. First come, first served. His Plymouth Rocks are doing remarkably well, and the hatch so far shows clearly the value of poultry as a remunerative investment.

The best live stock advertisers are realizing the fact that the KANSAS FARMER is unquestionably the best medium in the West to make sales for them. Hon. T. W. Harvey, in remitting for his great Angus sale, writes: "I recognize the value of your paper as an advertising medium. We will surely place with you an advertisement for our next sale, as we feel and know that the money invested in an advertisement with you has paid well." Another advertiser writes: "Your paper has done me more good than all the others combined." The rates of advertising in the FARMER are lower, circulation considered, than any other weekly in the West.

Mossom Boyd & Co., Bobcaygeon, Ontario, write as follows regarding the illustration on our first page: Black Judge 6612 has been in the show ring every year since 1883 inclusive, and has never been beaten. In that year he was first as a calf at the Toronto Industrial Exhibition; in 1884 he was first prize yearling at the same show; in 1885, at both the Toronto Industrial and at the combined Dominion and Provincial Exhibition held at London, he was first in the two-year-old class and won the medal and diploma for best bull of any age; in 1886, at the Toronto Industrial, he was again first, in his class as best bull of any age, and in 1887, at the Provincial Exhibition held at Ottawa, he won the same honors. Black Judge will be offered at our auction sale at Dexter Park on May 23 and 24.

Blake's weather predictions adds 5,000 to our list this week. Advertisers will please take notice.

To produce comb honey in abundance, says W. Z. Hutchinson, bees must be strong in numbers at the beginning of the honey harvest, and to secure this desirable condition, feeding must be carried on uninterruptedly for at least two months previous to the opening of the honey harvest. Aside from food in abundance, warmth is the great requisite for breeding. A colony of bees generates sufficient heat, but very much of it is lost by radiation. Warm, beautiful spring weather is sometimes followed by severe freezes, which chill some of the brood.

George Hillton, one of Michigan's best known bee-keepers, has an apiary of ninety colonies at Fremont. His average crop of honey, for the past eight years, has been seventy-five pounds per colony. He has kept bees since 1877, beginning with one colony, which was given to him as a present.—*Michigan Farmer.*



**INFANTILE**  
Skin & Scalp  
DISEASES  
Cured by  
**CUTICURA**  
Remedies.

FOR CLEANSING, PURIFYING AND beautifying the skin of children and infants and curing torturing, disfiguring, itching, scaly and pimply diseases of the skin, scalp and blood, with loss of hair, from infancy to old age, the CUTICURA REMEDIES are infallible.

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

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

Send for "How to Cure Skin Diseases." Baby's Skin and Scalp preserved and beautified by CUTICURA SOAP.

KIDNEY PAINS, Backache and Weakness cured by CUTICURA ANTI-PAIN PLASTER, an instantaneous pain-subduing plaster. 25 cts.

## HUMPHREYS'

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

LIST OF PRINCIPAL NOS.	CURES	PRICE.
1	Fever, Cough, Inflammation, etc.	.25
2	Whooping Cough, Whooping Cough, etc.	.25
3	Croup, Cough, Whooping Cough, etc.	.25
4	Diarrhea, of Children or Adults, etc.	.25
5	Dysentery, Griping, Bilious Colic, etc.	.25
6	Cholera Morbus, Vomiting, etc.	.25
7	Coughs, Cold, Bronchitis, etc.	.25
8	Neuralgia, Toothache, Earache, etc.	.25
9	Headaches, Sick Headache, Vertigo, etc.	.25

## HOMEOPATHIC

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

## SPECIFICS.

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

**LEWIS' 98% LYE**  
POWDERED AND PERFUMED  
(PATENTED)  
The strongest and purest Lye made. Will make 10 lbs. of the best Perfumed Hard Soap in 20 minutes without boiling. It is the best for disinfecting sinks, closets, drains, etc. Photographers' and machinists' uses. Foundrymen, bolt and nut makers. For engineers as a boiler cleaner and anti-incrustator. For brewers and bottlers, for washing barrels, bottles, etc. For painters to remove old paints. For washing trees, etc. etc. PENNA. SALT MFG. CO., Gen. Agts., Phila., Pa.

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

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

Remember the FARMER is now \$1 a year.

## 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.)

## Pure-bred Short-horn Bulls FOR SALE.

Sired by Imp. Cruickshank bull, Knight Templar 66658 (51908). Address

THOMAS CAIN, Burlingame, Kas.

(Farm three miles west of town.)

## WANTED - TEXAS - WANTED

We have several bodies of Farming Land in Northwest Texas, with rich and productive soil. We wish to arrange with responsible parties to make a business of settling these lands with a substantial class of settlers. We must be satisfied with the character and responsibility of parties with whom we contract. For further information address MEADE & BOMAR, Real Estate and Investment Brokers, Ft. Worth, Texas.

## Oregon and Washington FARMS FOR SALE

At reasonable prices and on easy terms.

Address WM. MACMASTER, 40 Second St., PORTLAND, OREGON.

## 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

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

**ORGANS & SEWING MACHINES.**  
50 Styles. Cut Prices. Big Inducements. Goods sent on trial. New, perfect and warranted 5 years. Agents Wanted. Ask for Free Circulars at once. GEO. F. BENT, 251 Wabash Ave., Chicago.

**AGENTS WANTED**, either sex, to sell our new book, *EARTH, SEA and SKY*; 324 pp., 32 Illustrations. (Eng. or German print.) Good pay. Experience unnecessary. Success certain. Headquarters for Bibles, Albums and Gift Books. E. P. JORDAN & CO., Pub., St. Louis, Mo.

**ORGANS AND SEWING MACHINES**  
\$3.00 up. 30 styles. Sent on trial; new and perfect; warranted 5 years. Buy direct and save half. Circular with 10,000 testimonials FREE. GEO. FAYNE & CO., M'Frs, 125 S. Clinton St., Chicago, Ill.

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

## CHICAGO VETERINARY COLLEGE.

INCORPORATED 1883.

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

## HOG LAW

An illustrated copy of the ANCIENT HOG LAWS of the Years 1543, 1638, 1705 and '86, mailed Free. Of interest to all Hog Raisers. Address postal to H. W. HILL & CO., Decatur, Illinois, 36 Church Street.

The BUYERS' GUIDE is issued March and Sept., each year. It is an encyclopedia of useful information for all who purchase the luxuries or the necessities of life. We can clothe you and furnish you with all the necessary and unnecessary appliances to ride, walk, dance, sleep, eat, fish, hunt, work, go to church, or stay at home, and in various sizes, styles and quantities. Just figure out what is required to do all these things COMFORTABLY, and you can make a fair estimate of the value of the BUYERS' GUIDE, which will be sent upon receipt of 10 cents to pay postage, MONTGOMERY WARD & CO., 111-114 Michigan Avenue, Chicago, Ill.



**Creameries and Dairies.**

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

**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.

**Hardware for Farmers.**

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

**To Nervous Men.**

If you will send us your address, we will mail you our illustrated pamphlet explaining all about Dr. Dye's Celebrated Electro-Voltaic Belt and Appliances, and their charming effects upon the nervous debilitated system, and how they will quickly restore you to vigor, manhood and health. If you are thus afflicted, we will send you a Belt and Appliances on trial. VOLTAIC BELT CO., Marshall, Mich.

**Short-Horn Bulls for Sale.**

Five extra good registered Short-horn bulls for sale cheap—on long time, if desired. J. B. McAFEE, Topeka, Kas.

Teachers can enter Campbell Normal University (Holton, Kas.) any week.

**THE MARKETS.**

By Telegraph, May 14, 1888.

**LIVE STOCK MARKETS.****St. Louis.**

**CATTLE**—Receipts 200, shipments 700. Market steady. Choice heavy native steers \$4 40a 5 00, fair to good native steers \$4 00a 5 00, fair to choice butchers' steers \$3 10a 4 20, stockers and feeders \$2 20a 3 50, ordinary to good rangiers \$2 40a 4 10.

**HOGS**—Receipts 3,500, shipments 1,200. Market firm. Choice heavy and butchers selections \$5 50a 5 65, medium to prime packing \$5 30 a 5 50, ordinary to best light grades \$5 10a 5 40.

**SHEEP**—Receipts 2,900, shipments 4,800. Market dull. Fair to fancy, \$4 00a 6 10.

**Chicago.**

The Drovers' Journal reports: **CATTLE**—Receipts 12,000, shipments .... Market strong. Beeves, \$4 00a 5 00; stockers and feeders, \$2 40a 3 75; cows, bulls and mixed, \$1 75a 3 50.

**HOGS**—Receipts 28,000, shipments 9,000. Market 5c lower. Mixed, \$5 30a 6 60; heavy, \$5 50a 7 00; light, \$5 30a 5 60; skips, \$3 90a 5 10.

**SHEEP**—Receipts 6,000, shipments 2,000. Market weak. Woolled \$6 25, Western shorn \$5 85, inferior \$3 50a 5 00.

**Kansas City.**

**CATTLE**—Receipts to-day 351. The receipts were not sufficient to make a market. Values on such as sold steady to strong. Sales ranged \$3 40 for butchers steers to \$4 65 for dressed beef and shipping.

**HOGS**—Receipts since Saturday 3,851. The receipts of hogs were also too light to afford much competition. Market steady to strong. Extreme range of sales \$4 75a 5 52½, bulk at \$5 25a 5 40.

**SHEEP**—Receipts since Saturday 1,901. Market strong with demand for good muttons. Sales: 130 clipped muttons av. 81 lbs. at \$5 25, 13 do. av. 85 lbs. at \$4 00.

**PRODUCE MARKETS.****New York.**

**WHEAT**—Dull and nominal. No. 2 red, \$1 01 a 1 01½ in elevator, \$1 02a 1 03 delivered.

**CORN**—Opened firm, but closed dull and heavy. No. 2, 69a 69½c in elevator.

**St. Louis.**

**FLOUR**—Very strong and higher, ranging from \$2 80a 4 60.

**WHEAT**—No. 2 red, cash, 91a 91½c.

**CORN**—Cash, 54½c.

**Chicago.**

Cash quotations were as follows:  
**FLOUR**—Quiet but firm.  
**WHEAT**—No. 2 spring, 87½a 87¾c; No. 3 spring, ....; No. 2 red, 92½a 93c.  
**CORN**—No. 2, 59¾c.  
**OATS**—No. 2, 34½a 35c.  
**RYE**—No. 2, 64½c.  
**BARLEY**—No. 2, 75a 77c.  
**FLAXSEED**—No. 1, \$1 45.  
**TIMOTHY**—Prime, \$2 50.  
**PORK**—\$14 25.  
**LARD**—\$3 47½.  
**SUGARS**—Granulated, 07c, standard A 08½c.  
**BUTTER**—Creamery, 20a 24c; dairy, 16½a 23c.  
**EGGS**—12½a 13.

**Kansas City.**

**WHEAT**—Receipts at regular elevators since last report, .... bushels; withdrawals, .... bushels, leaving stock in store as reported to the Board of Trade to-day, 55,741 bushels. On track by sample: No. 2 soft, cash, 85c.

**CORN**—Receipts at regular elevators since last report, 1,838 bushels; withdrawals, 2,375 bushels, leaving stock in store as reported to the Board of Trade to-day, 38,196 bushels. On track by sample: No. 2 mixed, cash, 52½c; No. 2 white, cash, 54c.

**OATS**—No. 2 cash, 32c bid special, 32½c asked regular. May, no bids, 32c asked; June, no bids, 32½c asked. On track by sample: No. 2 mixed, cash, 83c; No. 2 white, cash, 86c.

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

**HAY**—Receipts .. cars. Market firm; fancy, \$10 50 for small baled; large baled, \$10 00; wire-bound 50c less; medium, \$8 00a 9 00; poor stock, \$5 00a 6 00.

**SEEDS**—We quote: Flaxseed, \$1 10 per bu. on a basis of pure; castor beans, \$1 00 for prime.

**OIL-CAKE**—Per 100 lbs. soaked, f. o. b., \$1 25; \$1 10 per 1,000 lbs.; \$21 00 per ton; car lots, \$20 00 per ton.

**FLOUR**—Firm. Quotations are for unestablished brands in car lots, per ½ bbl. in sacks, as follows: XX, 90c; XXX, \$1 00a 1 05; family, \$1 15a 1 25; choice, \$1 50a 1 60; fancy, \$1 65a 1 70; extra fancy, \$1 75a 1 80; patent, \$2 05a 2 10; rye, \$1 40a 1 60. From city mills, 25c higher.

**BUTTER**—Receipts large and market weak. We quote: Creamery, fancy, 29c; good, 18c; dairy, 13c; storepacked, choice, 12c. Shippers are taking a large part of the storepacked.

**CHEESE**—We quote: Full cream, twins, 12c; full cream, Young America, 13½c.

**EGGS**—Receipts light and market firm at 11½c per dozen for strictly fresh. Goose eggs no sale.

**POTATOES**—Irish, home-grown, 75c per bus.; Colorado and Utah, \$1 20 per bus. Sweet potatoes, yellow, 75a 90c per bus.

**BROOMCORN**—Dull and weak. We quote: Green self-working, 4c; green hurl, 4c; green inside and covers, 2½a 3c; red-tipped and common self-working, 2c; crooked, 1c.

**PROVISIONS**—Following quotations are for round lots. Job lots usually ½c higher. Sugar-cured meats (canned or plain): Ham, 11c, breakfast bacon 9½c, dried beef 9c. Dry salt meats: clear rib sides \$7 70, long clear sides \$7 60, shoulders \$6 00, short clear sides \$8 10. Barrel meats: mess pork \$14 50. Choice tierce lard, \$7 50.

**Topeka Markets.**

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

Butter, per lb.	18a 22
Eggs (fresh) per doz.	11
Beans, white navy, H. P., per bus	2 90
Sweet potatoes	1 10
Apples	1 00a 1 25
Potatoes	90a 1 30
Onions	2 00
Beets	40a
Turnips	25

**RIVERVIEW**

The Prettiest Young City of the Smoky Valley.

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

**RIVER VIEW.**

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

THOS. E. FULGHUM,  
Hays City, Kansas.

HUGH E. THOMPSON,

**BROOMCORN**

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

**Wonderful :: Puget :: Sound.****THE HAPPY HOME OF THE KANSAS COLONY.**

Mild Climate, Productive Lands, Fine Fruit, Grand Timber, Beautiful Lakes and Rivers. For information send \$1 and receive the newspaper six months. Sample copy, 10 cents. Address

WEEKLY REVELLE, Whatcom, Washington Territory.

**HAGEY & WILHELM, COMMISSION MERCHANTS**

ST. LOUIS, MO.

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

**GENERAL AGENTS FOR COOPER'S SHEEP DIP.**

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

**J. L. STRANAHAN,**

DEALER IN—

**BROOMCORN**

And all BROOM MATERIALS AND MACHINERY.

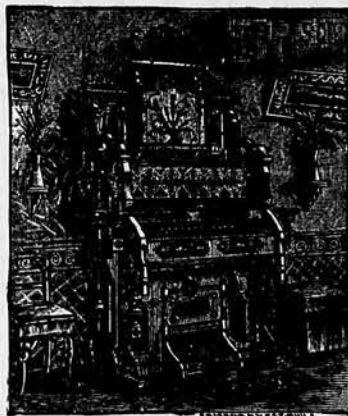
Twenty-five years experience as a Manufacturer and Wholesale Dealer. Liberal advances on consignments. References:—Hide & Leather Nat'l Bank, Chicago. 194 Kinzie St., Chicago, Ill.

CONSIGN YOUR CATTLE, HOGS & SHEEP TO

**Larimer, Smith & Bridgeford, LIVE STOCK COMMISSION MERCHANTS,**

Kansas City Stock Yards, Kansas City, Kansas.

Highest market prices realized and satisfaction guaranteed. Market reports furnished free to shippers and feeders. Correspondence solicited. Reference:—The National Bank of Commerce, Kansas City.

**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.

**GOLD WATCH FOR YOU!**

to the brim of just the sort of reading you do not get in any other shape.

To introduce "THE HOUSEHOLD TREASURE"

A new family story paper, in every place, for the next few months, we make the following great offer: Send us 28c. for six months subscription and we will send you free, post-paid, the following goods (provided you agree to show the paper to your friends and induce them to subscribe): 2 skeins each Red and White embroidery cotton, 2 reads Dorcas Mending Cotton, 1 package White Feather Edge Braid, 1 package of Rick-rack Braid, 1 paper Needles, 1 paper Hair Pins, 1 skein Embroidery Silk. These cannot be bought at retail for the money therefore you get double value. Remember you get The Household Treasure for 6 months and the above assortment of goods for only 28c. To any one old or young, who will send us 60 subscribers, within the next six months, we will give a Gold Watch. Need not all be sent at one time. "They can do little, who can't do that." Address, THE TREASURE PUBLISHING CO., CLINTONVILLE, CONN.

**POLYGAMY UNVEILED****THE MORMON'S DAUGHTER.**

A romantic and entrancing story of Inner Life among the Latter Day Saints, has just commenced in the May number of THE HOUSEHOLD TREASURE. Written while living in Utah. THIS IS NOT ALL IT contains by any means, it being a beautifully printed and handsomely illustrated family paper, full

**Cheap! Cheap! Cheap!**

20 YOUNG BULLS.

REGISTERED SHORT-HORNS.

Fifteen to twenty-six months old. Same breeding and quality that we have heretofore always sold at from \$75 to \$150 per head. "First come, first served." Come and buy all or your choice at one-half price. Six to nine months time, with bankable paper. We are compelled to make this offer on account of sickness, being confined to the house with neuralgia, and have been for several weeks.

T. M. MARCY & SON,  
Wakarusa, Kas.

**FRUIT EVAPORATORS**

Secure Agency Now. Catalogue FREE. ZIMMERMAN MACH. CO., Cincinnati, O.

OPIMUM AND MORPHINE HABIT CURED in 10 to 30 days. No pay until cured. Address DR. J. F. HOLDBE, WILMINGTON, O.



## The Veterinarian.

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

**SWINE LAMENESS.**—I have a sow that raised four pigs last summer, and was taken down with lameness in small of back. She would eat grass on her haunches and crawl along; appetite very poor then. I fed her small doses of arsenic. She improved in appetite and lameness but is not well. One of her pigs since August, ten months old, is taking same disease, if disease it can be called. What should I do for same? [Would advise you to give one of the following powders night and morning in the feed: Epsom salts, two ounces; Jamaica ginger powder, one ounce. Mix and divide into six powders. Then give one of the following twice a day: Nux vomica powdered, one-half ounce; ground flax seed, two ounces. Mix and divide into sixteen powders. Rub the affected limbs and back two or three times a day with Jennings' Veterinary Liniment.]

**DISEASED ANKLES.**—I have a Clydesdale stallion, three years old, that has something wrong with his ankles. The ankles have small scabs or pimples behind, from the pastern down to the heel. The hind one appears to be stiff or drawn back so that he walks on his toes when the ground is soft, and can hardly place the foot down solid on hard ground, and are swelled so that the heels almost meet the pasterns, and are hot and tender to the touch. I have tried to wash them, but there is so much hair I cannot get at them. The horse feels well and is in fine condition. I am afraid that when the mud comes I can't do anything with him. [Would advise you to clip the hair from the affected parts, close to the skin as is possible, then apply a flaxseed meal poultice twice a day for three days. Then wash off with castile soap and warm water, dry off and apply the following night and morning: Glycerine, eight ounces; carbolic acid, one-half ounce; water, one and one-half pints. In order to tone up the general system give a tablespoonful of Jennings' Condition Powder three times a day. Without removing the hair as above, it will be almost impossible to perfect a cure.]

**BLOOD-WART—URINARY TROUBLE.**—(1) What will remove blood-warts on horses? (2) I have a horse colt, two years old, that cannot hold his urine. Once in three or four minutes a tablespoonful will run out. He is that way all the time. He is doing well, though he has been in that fix over a year. I found him sick one morning last winter and that was the beginning of this disease. (1) Run a needle with a strong thread through the center of the wart close to skin; draw the thread through double, and tie each half of the wart separate, and so tight as to cut off the circulation from the wart. The next morning, cut the wart in four quarters, taking care not to cut the string, and apply with a small brush the following mixture night and morning: tincture of iron, two ounces; common salt, one drachm. After three days cut off the wart and apply fresh lard once a day. (2) Place the animal in a comfortable loose box, kept dry and free from manure; give linseed tea, about a quart a day; feed wholesome food, such as bran and oats and a few carrots. Do not feed burnt oats nor musty hay, as these are often the cause of the disease; groom the animal well and blanket all the time during cold weather. Give iodide of iron, one drachm, mixed with molasses and linseed meal to form a ball, every other day for about two weeks. Give in the drinking water

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.

night and morning phosphoric acid, one-half ounce. This treatment may be kept up for two or three weeks.]

### 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.

O. Hendeshot, Livingston county, Illinois, writes to the *Prairie Farmer*: "In answer to A. B. H., Phillips county, Kansas, who wants to know how to feed twelve pigs that average 100 pounds, so as to make them weigh 200 pounds as soon as possible, I would advise placing them in a small pen and giving them all the mush made of shorts they will eat, and the same of corn. Give the mush milk-warm. They will weigh 200 pounds in fifty days."

### 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 fellows. 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. Noves, 149 Power's Block, Rochester, N.Y.

## Tutt's Pills

stimulates the torpid liver, strengthens the digestive organs, regulates the bowels, and are unequalled as an

### ANTI-BILIOUS MEDICINE.

In malarial districts their virtues are widely recognized, as they possess peculiar properties in freeing the system from that poison. Elegantly sugar coated. Dose small. Price, 25cts.

### Sold Everywhere.

Office, 44 Murray St., New York.

## 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.

## 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.]

## 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

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

## OTTAWA HERD

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

I. L. WHIPPLE, Box 270, Ottawa, Kas.

## 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-breds.

SEND FOR CIRCULAR. Describe exactly what you want.

## Gold Dust Herd of Poland-Chinas.



J. M. MCKEE, WELLINGTON, KANSAS.

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

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.]

## LOCUST x GROVE x 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.

## ORDERS TAKEN NOW

For SPRING PIGS sired by

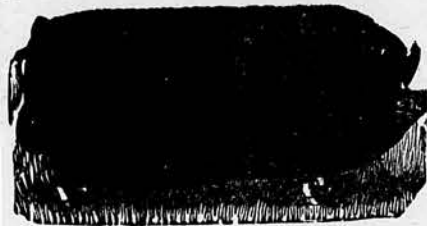


ROYAL GRANITE 10105,

The best BERKSHIRE boar ever owned at "HAW HILL," and several other first-class sires. Enclose stamp for catalogue and prices.

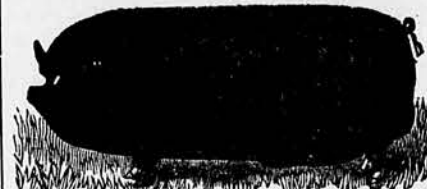
SPRINGER BROS., Springfield, Ill.

## PLEASANT VALLEY HERD OF Pure-bred Berkshire Swine.



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

## ENGLISH BERKSHIRES.



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

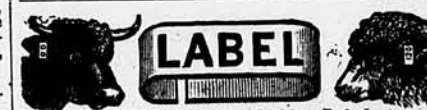
M. B. KEAGY, Wellington, Kas.

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

## SELECT HERD OF LARGE BERKSHIRES!

G. W. BERRY, Prop'r, TOPEKA, KAS.

My sows represent the Royal Duchess, Sallie, Hillside Belle, Charmer, Stumpy, and other families. These Swanwick and Humfrey families are larger, thicker-fleshed, set on shorter legs, and possess finer qualities than other hogs. Herd headed by British Champion 11. 13481 and Bauntless 17417. My aim is to produce a type of Berkshires honorable to the Select Herd and the breed. Correspondence in regard to spring pigs invited.



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 sight and gives perfect satisfaction. Illustrated Price-List and samples free. Agents wanted. C. H. DANA, West Lebanon, N. H.

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

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

NOTHING IS SO GOOD FOR

## CHILDREN

SUFFERING FROM Cold in Head SNUFFLES OR CATARRH



A particle is applied into each nostril and is agreeable. Price 50 cents at Druggists; by mail, registered, 60 cts. ELY BROS., 235 Greenwich St., New York.

PATENTS THOMAS P. SIMPSON, Washington, D. C. No attorney's fee until Patent is obtained. Write for Inventor's Guide.

FLORIDA If reliable information regarding Florida is desired, send stamp and address. E. B. VAN DEMAN, Gen'l Agt. Florida Immigration Assoc'n, Jacksonville, Fla.



# Devon Cattle! LINWOOD SHORT-HORNS

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

RUMSEY BROS. & CO.,  
EMPORIA, KANSAS.

## Thoroughbred Cattle and Poultry

JOHN T. VOSS, GIRARD, KAS.,

BREEDER OF

THOROUGHbred SHORT-HORN AND JERSEY CATTLE.

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

Inspection and correspondence invited.  
Address JOHN T. VOSS, Girard, Kas.

Sherwood & Rohrer Stock Farm,  
VALLEY CENTER, KANSAS,



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

JERSEY  
CATTLE.

The herd  
is headed  
by the Stoke  
Fogis Victor

Hugo Duke bull, St. Valentine's Day 1827, and the Coomassie bull, Happy Gold Coast 14718. Sons and daughters by above bulls, out of highly-bred cows, for sale for next ten days. SHERWOOD & ROHRER.

## A BARGAIN High-bred Short-horns



For the next  
month I will  
offer  
LOW

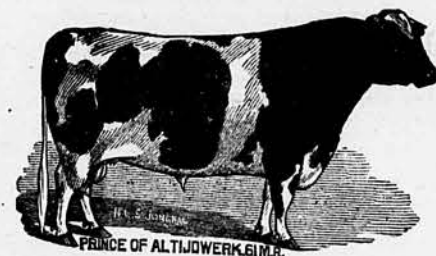
Three Bulls and four Cows and Heifers of the Young Mary, Young Phyllis and Miss Hudson families.

Will stand the Healy test.

OUTHERBERT POWELL,  
Journal Building, KANSAS CITY, MO.

## Holstein - Friesian Cattle

Of European Herd Book Registry.



The sweepstakes bull PRINCE OF ALTIJWERK (61 M. B.) 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.]

## SHANNON HILL STOCK FARM.



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

Breeds and has for sale Bates and Bates-topped

## SHORT-HORNS

Including representatives of

Kirklevingtons, Filberts, Craggs, Princesses, Gwynnes, Lady Janes, and other fashionable families.

The Grand Bates Bulls,

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

Fifteen choice young Bulls for sale now.

Correspondence and inspection of herd solicited, as we have just what you want and at fair prices. Address

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

Substance, flesh, early maturity and good feeding quality the objects sought. The largest herd of Scotch Short-horns in the West, consisting of Cruickshank Victorias, Lavenders, Vilets, Secrets, Bravoth Buds, Kinellar Golden Drops, etc., headed by Imp. Baron Victor 42823, a prize-winner and sire of prize-winners.  
LINWOOD—Is twenty-seven miles from Kansas City, on Kansas Division Union Pacific R. R. Farm joins station. Inspection invited. Catalogue on application.

## Kansas Hereford Cattle Co.,

(PAID IN CAPITAL \$100,000.)

IMPORTERS AND BREEDERS OF

## HEREFORD CATTLE.

BREEDING HERD AT GROVE PARK,

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

Known as the "Gibb Farm."



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

Address all communications to Lawrence, Kas.

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

## E. Bennett & Son,

TOPEKA, - KANSAS,

The Leading Western Importers of

CLYDESDALE,  
PERCHERON,  
CLEVELAND BAY

—AND—

French Coach Horses.

AN IMPORTATION OF 125 HEAD,

Selected by a member of the firm, just 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

SEXTON, WARREN & OFFORD, Maple Hill, Kansas.



Peter Piper (717).

## EVANS Brothers



Hartford, Ks. Fred Barnaby (5011) 8446

We have a choice collection of Imported Clydesdale and Percheron Stallions that for style, action and quality, combined with choice Pedigrees, defy competition. All good colors, two to six years old. Each Stallion guaranteed a breeder.

TERMS EASY.

Hartford is situated 20 miles southeast of Emporia on the Kansas City & Emporia R.R.

**HOARD'S DAIRYMAN**  
4 weeks to any Farmer

**1 FREE! 1**

Send your address to  
**W. D. HOARD,**  
Fort Atkinson, Wis., U. S.

**HAAFF'S** NEW PRACTICAL DEHORNER. Fifty illustrations. New Tools. Cattle Tags. New Water-heater. Send for circular. Agents wanted. Mention this paper.  
H. H. HAAFF,  
Box 193, Chicago, Ill.

## DEHORNING CATTLE

BY SCIENTIFIC PROCESS. 22-page book of particulars, 10 cents. Instruments, \$3.00, prepaid.  
I. J. WICKS, Box 1695, Colorado Springs, Col.

## ≈ CHEAP ≈ EXCURSIONS!

THE UNION PACIFIC will make a rate of one limited first-class fare for the round trip, from all stations to the following

POINTS:

NATIONAL REPUBLICAN CONVENTION AT CHICAGO. — Good going June 16 to 19, inclusive, and returning until June 25.

NATIONAL DEMOCRATIC CONVENTION AT ST. LOUIS. — Good going June 3 to 5, inclusive, and returning until June 11.

MEETING SUPREME LODGE KNIGHTS OF PYTHIAS AT CINCINNATI. — Good going June 8 to 13, and returning till June 19.

DUNKARDS' MEETING AT NORTH MANCHESTER, IND. — Good going May 17 to 24, and returning until June 5.

These rates are open to all. Secure your tickets of F. A. LEWIS, City Ticket Agt., 525 Kansas Ave., or of J. F. GWIN, at Depot, Topeka, Kas.

## Chicago. Kansas and Nebraska Railway.

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.

Among the numerous Cities and Towns on

### 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, Rebron, 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.

### The Burlington System

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

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

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

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

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

H. C. ORR, Gen'l Southwestern Passenger Agent,

Or A. C. DAWES, Kansas City, Mo.

Gen'l Passenger and Ticket Agent, St. Joseph, Mo.

### EXCURSIONS

To Southwest Missouri and Arkansas -- To Florida, Alabama, Mississippi, and the Southeast.

A series of Half-Rate Excursions to South and Southwest Missouri and Arkansas have been arranged for via the GULF ROUTE, KANSAS CITY, FORT SCOTT & GULF R. R. to leave Kansas City on March 7th and 21st, April 4th and 25th, May 9th and 23d, and June 6th. Tickets good sixty days for return, and good to stop off at all stations on this line, going and returning. For Birmingham, Jackson Miss., Lake Charles and Jennings, La.: March 7th and 21st, April 4th and 25th, May 9th and 23d, and June 6th. For Jacksonville, Fla., and all points South and Southeast, on March 12th and 26th, and April 9th and 23d.

Maps and Excursion Bills, giving full information, mailed promptly to any address.

J. E. LOCKWOOD,  
G. P. & T. A., KANSAS CITY, Mo.

## 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, Moodus, Conn.

### ON 30 DAYS' TRIAL.

THIS NEW

### ELASTIC TRUSS

Has a Pad different from all others, is easy to wear, with self-adjusting Ball, center, adapts itself to all positions of the body while the Ball in the cup presses back the intestines just as a person lies down. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free.  
EGGLESTON TRUSS CO., Chicago, Ill.



## 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 appraisement, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker-up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice.

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

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

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

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

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

Any person taking up an estray, must immediately advertise the same by posting three written notices in 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 appraisement.

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 MAY 3, 1888.

Clay county—W. P. Anthony, clerk.

5 CALVES—Taken up by Nelson McGinnis, in Blaine tp., April 13, 1888, four heifer calves, red and white, 1 year old; valued at \$5 each; also one red and white 1-year-old steer; valued at \$6.

Crawford county—J. C. Gove, clerk.

COLT—Taken up by S. D. Taylor, in Lincoln tp., April 10, 1888, one chestnut sorrel horse colt, 2 years old, split in right ear; valued at \$30.

### FOR WEEK ENDING MAY 10, 1888.

Cherokee county—J. C. Atkinson, clerk.

HORSE—Taken up by G. M. Swanson, in Ross tp., April 17, 1888, one dark bay horse, about 12 years old, 15 hands high, gray in forehead; valued at \$40.

MARE—By same, one roan mare, about 11 years old, half circle on right shoulder, and bad sore on right hind leg; valued at \$10.

PONY—Taken up by J. H. Stanley, in Spring Valley tp., April 25, 1888, one roan mare pony, 5 or 6 years old, branded M. C. on left shoulder; valued at \$30.

Crawford county—J. C. Gove, clerk.

MARE—Taken up by J. A. Everett, in Washington tp., (P. O. Pittsburg), April 17, 1888, one light sorrel mare, 14½ hands high, three white feet, blaze in face, white spot on root of tail; valued at \$35.

Atchison county—Chas. H. Krebs, clerk.

HORSE—Taken up by Fred Kuhn, in Center tp., (P. O. Lancaster), April 18, 1888, one brown horse, white star on forehead, saddle marks, four feet shod, about 9 years old; valued at \$40.

HORSE—Also one bay horse, white star in forehead, speck in left eye, harness marks, four feet shod, about 20 years old; valued at \$15.

### FOR WEEK ENDING MAY 17, 1888.

Stevens county—Chas. Moore, clerk.

HORSE—Taken up by S. P. Galloway, in Center, Lincoln tp., March 24, 1888, one bay horse, marked HD; valued at \$20.

Shawnee county—D. N. Burdge, clerk.

HOGS—Taken up by N. H. Brosius, (P. O. Topeka), May 7, 1888, two black sows and one pig, round hole in left ear of each; valued at \$7.50 each.

Wilson county—D. N. Willits, clerk.

MARE—Taken up by John F. Spellman, in Talleyrand tp., May 5, 1888, one dun mare, about 14 hands high, 4 or 5 years old, saddle or harness marks; valued at \$15.

Osage county—R. H. McClair, clerk.

MARE—Taken up by John Hooper, in Valley Brook tp., (P. O. Lyndon), December 31, 1887, one bay mare, branded D. L. S. on left hip and S. M. S. on right shoulder.

MARE AND COLT—By same, one bay mare with sucking colt, branded D. L. S. on left hip; all of the value of \$50.

Russell county—J. B. Himes, clerk.

2 COLTS—Taken up by Jasper M. Boston, in Fair-

field, April 28, 1888, one sorrel colt, 2 years old, blaze face, and one sorrel colt, 1 year old, blaze face, no marks or brands; valued at \$60.

Morris county—G. E. Irvin, clerk.

2 HORSES—Taken up by E. C. Hannah, of Warren tp., April 28, 1888, two bay horses, supposed to be about 4 years old, marked as follows: One has small star in forehead and white snip on nose; the other has white left hind foot; neither has harness marks, and are about 16 hands high.

HEADQUARTERS FOR Jersey Yellow and Nansmond Sweet Potato Plants. \$1.50 per 1,000 in May and \$1.00 in June.  
FREEMAN HURFF, Swedesboro, N. J.

## Kansas Box and Basket Co.,

MANUFACTURERS OF

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

(Telephone 1,008.) WYANDOTTE, KAS.

## HE KNOWS IT.

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

### SWANN'S BOOKS.

Then I can farm with my eyes open as regards seasons and crops. Address  
J. C. H. SWANN, Topeka, Kas.

## Wants to Come West!

157 acres in Indiana; two miles from county seat; no house; celebrated Wabash bottom land; 75 acres raises 80 to 80 bushels corn per acre; rents for one-third delivered in town. Prospect excellent for owner to get \$800 for his share this year. Will trade for good Kansas improved farm.

Address  
A. F. RAMSEY,  
Crawfordsville, Indiana.

## COLORADO SHORT LINE

## Mo. Pacific Railway Co.

BETWEEN

ST. LOUIS, KANSAS CITY, PUEBLO, AND DENVER.

Daily Trains equipped with Pullman Buffet Sleeping Cars.

THROUGH WITHOUT CHANGE.

Tourist Tickets at reduced rates now on sale at all ticket offices.

For further information apply to

H. C. TOWNSEND, Gen'l Pass. & Ticket Agent, St. Louis, Mo.  
J. H. LYON, Western Pass. Agent, 533 Main St., Kansas City, Mo.

## Consolidated Barb Wire COMPANY,

MANUFACTURERS OF



## BARB WIRE

### Fencing Staples,

ETC.

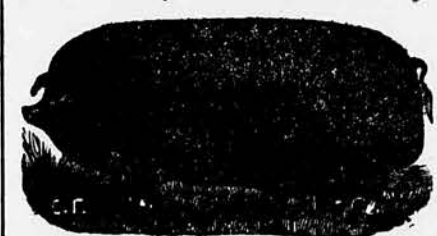
Sold more largely in Kansas than all other kinds together, because it is the

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

Ask your dealer for Lawrence Wire. Every spool warranted.

OFFICE AND WORKS:  
Lawrence, Kansas.

## MAINS' HERD OF POLAND-CHINAS.



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

# ATTENTION, FARMERS!

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

## Kansas Creamery Butter

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

## KANSAS FARMERS.

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

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

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

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

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

## Creamery Package Mf'g. Co.

KANSAS CITY, MO.

## 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 plank throughout, no yards are better watered and in none is there a better system of drainage. The fact that

## Higher Prices are Realized Here than in the Markets East,

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

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

O. F. MORSE, General Manager. E. E. RICHARDSON, Secretary and Treasurer. H. P. CHILD, Superintendent.

<b>FARMERS!</b>		SAVE MONEY BY BUYING YOUR GROCERIES OF <b>H. R. EAGLE &amp; CO.,</b> 68 WABASH AVE., CHICAGO.	
RETAIL GROCERIES —AT— WHOLESALE PRICES.	John Clark, Jr.'s Cotton Thread, Spool...\$0.04 Kingsford's Silver Gloss Starch per lb.. .05 Price's Baking Powder per lb.. .32 Churches Arm and Hammer Soda per lb. .03 1 Dozen Good Lead Pencils for..... .05 60 Bars Laundry Soap for..... 1.00 30 lbs. Rice for..... 1.00 4 lbs. very fine Uncolored Japan Tea for 1.00 All Grades of Teas 25 to 40 per cent lower than the cheapest retail dealers.	ALL GOODS Guaranteed TO BE First-Class.	ONE TRIAL WILL SATISFY YOU.
Send for Price List at once to <b>H. R. EAGLE &amp; CO.,</b> 68 Wabash Avenue, Chicago.		<b>SAVE MONEY!</b>	



## 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.



**CHEAPEST & BEST MILL**  
SATISFACTION GUARANTEED  
WARRANTED TO GRIND BETTER  
AND FASTER THAN ANY MILL  
MADE  
CHAS. KESTNER & CO.  
303-311 SO. CANAL ST. CHICAGO  
GRINDING MILL

**BUY THE MORRISON PLOW**  
BEST OF USE  
12 YEAR OLD BOY  
ADDRESS  
MORRISON MFG. CO.  
FORT MADISON IOWA

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

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

## 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.,  
189 Lake St., CHICAGO.

**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.  
GOODELL CO., Sole Manuf'rs. ANTIM. N. H.

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

## 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.

MANUFACTURED BY  
CARLIN & CRENDORFF  
CANTON ILL.  
SEND FOR CIRCULARS  
BEST & NEATEST  
MARKS

## THE VANELESS MONITOR.

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



Has the  
only suc-  
cessful Ro-  
tary Power  
in the World

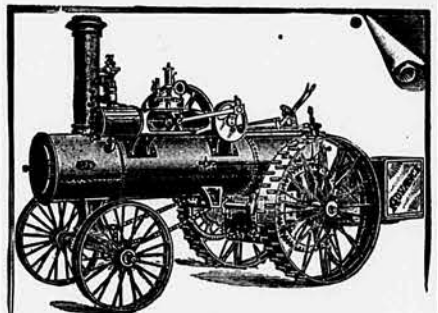
**SEARLES BROTHERS**  
GENERAL AGENTS,  
No. 621 Commercial St., ATCHISON, KAS.



## Halladay Wind Mill.

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

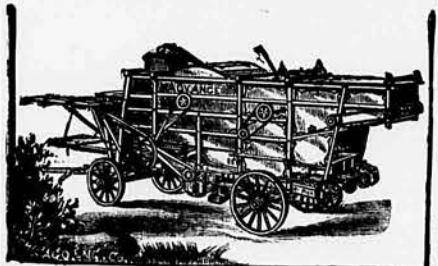
Write for catalogue. Address  
U. S. WIND ENGINE & PUMP CO.,  
1811 West 12th St., KANSAS CITY, MO.



## ADVANCE

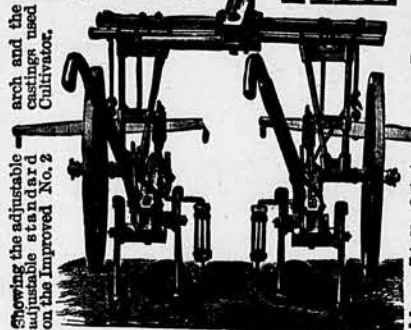
Traction Engines, Separators, Horse Powers,  
Wagon-Loaders, Baggers.

Great improvements in Threshing Machinery.  
Write for illustrated catalogue. Address  
ADVANCE THRESHER CO.,  
Battle Creek, Mich.  
Or 10th & Hickory St., Kansas City, Mo.



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

## REAR VIEW.



## HAMILTON

Adjustable-Arch RIDING, WALKING AND TONGUELESS

## CULTIVATORS

With the Bar-Shares and Coulters used only on these Cultivators  
the farmer can plow 6 to 10 days earlier, and deep thorough work  
can be done very close to young plants without injury.  
The Hitch is Direct, Draft Equal, Plows Deep, Runs  
Steady, is Easily Handled. The Adjustable Arch and  
Adjustable Standard Castings render any kind of work pos-  
sible and easy. Avoid Imitations.

**THE LONG & ALLSTATTER CO.,  
HAMILTON, OHIO.**

## BUCKEYE HAY RAKES

No RATCHETS or  
COG WHEELS  
to Get out of Order

## PRACTICALLY A Self-Dump Rake



**HIGH WHEELS** with  
Tires bolted on. **TEETH**  
are long and adjustable. Made  
of Crucible Steel with Oil  
Temper. Has a Lock Lever  
and Swinging Cleaner-Bar.  
We make both the COIL and  
DROP TOOTH.

We also manufacture Buckeye  
Grain Drills, Buckeye Cider  
Mills, Buckeye Riding and  
Walking Cultivators, Buck-  
eye Seeders, Lubin Pulver-  
izer and Clog Crushers.

Branch Houses: Philadelphia,  
Pa.; Peoria, Ill.; St. Paul, Minn.;  
Kansas City, Mo.; and San Fran-  
cisco, Cal. Send for Circular to  
either of the above firms or to  
**P.P. MAST & CO., Springfield, O.**

NOT EXCELLED  
BY ANY RAKE IN THE MARKET.



## The "BRADLEY" PARALLEL T Cultivator MOVEMENT BEAMS,

WHICH CAN BE  
Used on any of our Walking Cultivators.

These Beams keep the shovels at right angles with the row at all  
times.

## THEY EXCEL ALL OTHERS!

Each beam has a double connection with cross-head to which  
the shovel-shanks attach, consequently has double bearings, which  
give less play than would a single connection and bearing. The  
wear comes on thimbles which pass through, and extend a little  
above and below the cross-bar. (Patented.) Any wear can be  
quickly taken up by means of a nut, and the thimbles can be  
cheaply replaced.

## USED WITH THE CELEBRATED "BRADLEY" SPRINGS and COUPLINGS,

They have no equal. Don't buy until you see them. Ask your  
dealer for circular, or send to us, or to one of our Branch Houses  
for one. DON'T BE PERSUADED TO TAKE AN INFERIOR ARTICLE.

**MOSELEY'S  
OCCIDENT CREAMERY  
AND REFRIGERATOR.**  
Quantity INCREASED. Quality IMPROVED.  
No sediment with either milk or cream.  
Sold Strictly on Merit. One at  
wholesale where we have no Agent.  
MOSELEY & FRITCHARD MFG. CO.  
Send for circular. Clinton, Iowa.

**AGENTS WANTED**  
LIGHT  
Legitimate  
Work at Home  
Salary or Commission.  
Exclusive Territory  
GOODS NEW AND NOVEL.  
Send 12 cents in Stamps for Terms to Agents.  
DAVIDSON NOVELTY CO., Nashville Tenn.

## THE WILLIAMS

Grain Threshers, Horse Powers & Engines



For full particulars address  
ST. JOHNSVILLE AGRIC. WORKS,  
St. Johnsville, Montgomery Co., New York.  
J. M. ELLIOTT, General Agent,  
Marysville, Kansas.

## Best Steel Wire WOVEN WIRE FENCING Wire Rope Selvage



80c. to \$2 per rod.  
All sizes and widths. Sold by us or any dealer in this line of  
goods. FREIGHT PAID. Information free.  
Write The McMULLEN WOVEN WIRE FENCE CO.  
N. Market & Ontario St., CHICAGO, Illinois.

## GIVEN AWAY.

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

## BINDER TWINE

OF BEST GRADES.

## DUCK HARVESTER

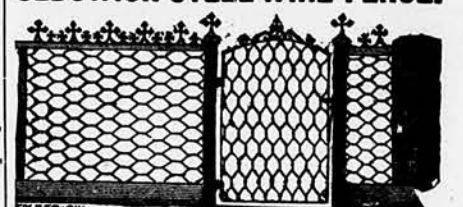
## Binder Covers

## Hay Caps & Stack Covers.

GEO. B. CARPENTER & CO.,  
202 to 208 South Water St., CHICAGO.

202 to 208 South Water St., CHICAGO.

## SEDGWICK STEEL WIRE FENCE.



The best Farm, Garden, Poultry Yard, Lawn,  
School Lot, Park and Cemetery Fences and Gates,  
Perfect Automatic Gate. Cheapest and Neatest  
Iron Fences. Iron and wire Summer Houses, Lawn  
Furniture, and other wire work. Best Wire Stretch-  
er and Plier. Ask dealers in hardware, or address,  
**SEDGWICK BROS., RICHMOND, IND.**

## FENCES FOR FARMERS

PRETTIEST,  
CHEAPEST,  
MOST  
DURABLE.

## SOMETHING NEW.

Any one can make it at home and clear  
\$10 to \$25 per day. Full particulars with  
testimonials. Illustrated Catalogue Free.  
**STANDARD MFG. CO. Cincinnati, O.**



## 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!

**GOOD FARM FOR SALE.**—171 acres, well improved; three miles south of State University. Also good house and ten lots in Lawrence, near the University (good location). Either of these at a sacrifice if sold before June 25. Inquire of G. W. White, Box 55, Lawrence, Kas.

**BRILLIANT GLOSS FOR SCALP AND SKIN.**—Will remove dandruff, pimples and black-heads. Will also prevent hair from falling out. In order to introduce this into new territories, I will send two 75-cent bottles for only \$1. This offer good ninety days. Address W. M. Groce, Haydenville, Ohio.

**FOR SALE.**—Five Red Short-horn Bulls, 5 to 12 months old. Prospect Herd. J. M. Taylor, Pearl, Kas.

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

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

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

**SWEET POTATO PLANTS.**—In large or small quantities, for sale. Orders filled at once at reasonable prices. Address T. M. Sellers, Ottawa, Kas.

**IMPORTED SHIRE STALLIONS.**—For sale or trade. Uncle Tom (2202), by R. I. Blackledge, Salina, Kas.

**SWEET POTATO PLANTS.**—200,000, of all varieties, for sale at "bed-rock" prices, and carefully shipped. Terms furnished on application. Stephen Cox, Box 64, Lawrence, Kas.

**STRAYED—TWO COLTS.**—One brown mare, 3 years old, both left feet white, white spot on right fore leg above the knee, and curl on neck. One bay horse colt, 1 year old, feet white, some white on belly, small star in forehead. Any person taking up such colts will confer a favor by addressing J. J. Nation, Myra, Woodson Co., Kas.

**HEREFORD CATTLE TO EXCHANGE FOR IMPROVED PROPERTY.**—Write full particulars, give town, range and section of farms. J. S. Hawes, Colony, Kas.

**COMMON-SENSE CALF-WEANER.**—Endorsed by stockmen and farmers. 150,000 sold in three months. Large profits. Small capital secures monopoly. Stamp for particulars. Reed & Co., 1123 Arch St., Philadelphia, Pa.

**BEEES, HIVES, ETC., CHEAP.**—Write! St. Joseph Apiary, St. Joe, Mo. Conger's Plymouth Rock eggs, 13 for \$1. Fine!

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

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

**DEHORNING AND SPAYING PIGS.**—By Frank Jordan, Drawer B, Topeka, Kas.

**FOR SALE OR TRADE FOR STOCK OR LAND.**—A complete civil engineer's outfit. M. J. Wells, G. E., Woodston, Kas.

**A. WHITCOMB & SON, FLORISTS.**—Lawrence, Kas. Catalogues free; send for one.

**FOR SALE.**—Or will trade for a young Holstein bull, Galloway Bull "Kansas" 2453, calved January 1, 1893. James Dunlap, Detroit, Kas.

**TREES!**—Fruit, Forest, Shade and Ornamental Trees and Shrubbery. Great variety, excellent quality. Write for prices. Roubush & Smyth, 816 Kansas Avenue, Topeka, Kas.

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

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

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

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

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

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

**STRAYED.**—On March 31, 1893, from Pinkerton place, south of Elevator school house, one bay three-year-old filly, a scar on left hind leg, and had halter on. Also a one-year-old brown horse colt. A liberal reward for their recovery. S. W. McKnight, Topeka, Kas.

**100,000 THIRD-CLASS HEDGE PLANTS** for sale. Nice, healthy plants. Fifty cents per 1,000. 10,000 Catalpa, 12 to 24 inches, \$2.25 per 1,000. Boxed free. Douglas County Nurseries, Box 53, Lawrence, Kas.

**100,000 THREE BEST SORTS TIMBER.**—Claim Trees for sale by Martin Allen, Hays City, Kas.

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

**FOR TRADE.**—Farm of 150 acres; 50 acres under cultivation; 145 acres tillable; in Cowley Co., Kas. Will trade for blooded horses—Norman or Cleveland Bays preferred. Address B. L. Wilson, Atlanta, Kas.

**WE SELL.**—Only warranted goods. Any society badge, 62 cents; charm, 37 cents; collar-button, 28 cents. Standard gold plate. Charles H. Williams & Co., Manufacturing Jewelers, Attleboro, Mass.

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

## TWO-CENT COLUMN—(Continued.)

**FOR SALE OR TRADE FOR CATTLE.**—One bay Clydesdale and Morgan Stallion; weight about 1,500 pounds; is a good breeder. P. J. Eychaner, Oketo, Kas.

**POLAND-CHINA BOAR PIGS.**—Sire and dams from Duffield's Fountain Head Herd, at farmers' prices. Perry Brown, Valley Falls, Kas.

**25 COLEUS, GERANIUMS, VERBENAS, ETC.,** assorted, \$1 by mail or express; \$4 per 100. Cabbage, Tomato and Sweet Potato Plants, 25 cents per 100; \$2 per 1,000—by express. Bonner Springs Nursery, Bonner Springs, Kas.

**J. B. FERGUS, GARNETT, KANSAS.**—Makes a J. specialty of Pure Mammoth Bronze Turkeys. Eggs for sale. Write.

**EGGS FOR SALE.**—From choice pens of Light Brahmas, Langshans and Silver Wyandottes, at \$2 for 13, or \$3 for 39. Satisfaction guaranteed. M. D. Mulford, Guide Rock, Neb.

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

**WILL TRADE.**—House and lots in Topeka for young cows and steers. Property worth \$900, with \$250 incumbrances. Address L. T. Rice, Hallfax, Kas.

**SWEET POTATOES.**—Sent out to be sprouted on shares. No experience required. Directions for sprouting free. T. J. Skinner, Columbus, Kas.

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

**BARTHOLOMEW & CO.** Real Estate and Loan Brokers, 138 Kansas Avenue, Topeka, Kas. Write them for information about Topeka, the capital of the State, or lands, farms or city property.

## Agricultural Books.

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

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

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

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

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

**MISCELLANEOUS.**  
American Standard of Excellence in Poultry.....1.00  
Wright's Practical Poultry-Keeper.....2.00  
American Bird Fancier......50  
Quincy's New Bee-Keeping.....1.50  
Dogs (by Richardson).....1.50  
Atwood's Country Houses.....1.50  
Barns, Plans and Out-buildings.....1.50  
Arnold's American Dairying.....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.....3.00  
Practical Forestry.....1.50  
Household Conveniences.....1.50  
Dodd's American Reform Horse Book.....2.50  
Jennings on the Horse and His Diseases.....1.25  
Profits in Poultry.....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  
Husman's Grape-Growing.....1.50  
Quinn's Money in the Garden.....1.50  
Reed's Cottage Homes.....1.25  
Dogs of Great Britain and America.....2.00  
Allen's Domestic Animals.....1.00  
Warrington's Chemistry of the Farm.....1.50  
Williams' Window Gardening......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 Coking Foods for Animals (paper)......20  
The Future by the Past, by J. C. H. Swann.....1.00

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

## For Sale!

Registered Berkshire Pigs from prize-winners. Foundation stock Duchess and Windsor Castle families. Largest and best in England or America.

Premium Langshan and Wyandotte Chickens. Eggs, \$2 for thirteen.

Write for catalogue and price list before purchasing. J. L. BUCHANAN, Belle Rive, Ill.

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

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

**BAKER & GROSSE,** 211 & 213 E. 5th St., KANSAS CITY, MO. **Field and Garden Seeds** **FARM & GARDEN IMPLEMENTS.** Agents for Per Oxide of Silicates. Sure death to Cabbage Worms.

**SPLENDID OVER 1500 DIFFERENT VARIETIES** **FLOWERS** All strong Plants, each labeled, delivered safely by mail. Largest Assortment. Low Prices. In business 18 years. Guaranteed satisfaction. Stock comprises all desirable varieties. Only mature plants sent. My new Illustrated Catalogue sent FREE before sending. All lovers of flowers, DON'T PURCHASE PLANTS ELSEWHERE for my NEW CATALOGUE. Every buyer of cheap plants should have it. Everyone waiting new and choice PLANTS should send for it. Everyone who has a garden should have a copy of my catalogue of SEEDS. All the new and standard varieties. Valuable books on Floriculture given to purchasers. **CHARLES A. REESER, (INNISFALLEN GREENHOUSES) SPRINGFIELD, OHIO.**

**TOPEKA SEED HOUSE.** Established 1878.

All Kinds of Field, Garden and Flower Seeds.

We have a fresh stock of reliable Seeds, and a full stock of all kinds of Field Seeds: **RED CLOVER, ALFALFA CLOVER, KENTUCKY BLUE GRASS, ORCHARD GRASS, ENGLISH BLUE GRASS, RED-TOP, MILLET, BROOM-CORN, CANE SEED.**

**SEED CORN** PURE NORTHERN-GROWN 90-DAY CORN, SEED POTATOES, all kinds of useful Field and Garden Seeds, at Wholesale and Retail. Also a full line of GARDEN IMPLEMENTS. Send for Catalogue. Address **DOWN'S ELEVATOR & SEED CO.,** 304 KANSAS AVENUE, TOPEKA, KANSAS.

—THE— **KANSAS HOME NURSERY** OFFERS

**BEST HOME-GROWN TREES.** Choice Fruit and Ornamental Trees of real merit for the Western Tree-Planters. Also best Fruit and Flower Plants. Water-proof. Samples by mail, 10 cents each; \$5 per 100, by express. A. H. GRISEA, Drawer 23, Lawrence, Kas.

**Hart Pioneer Nurseries** OF FORT SCOTT, KANSAS.

A full line of Nursery Stock, Ornamental Trees, Roses and Shrubby. We have no substitution clause in our orders, and deliver everything as specified. 320 Acres in Nursery Stock. Reference: Bank of Fort Scott. Catalogue Free on application. Established 1857.

**Mount Hope Nurseries** ESTABLISHED 1869.

Offer for Spring of 1893, Fruit and Ornamental Trees, Grape Vines, Small Fruit and Shrubby. All the old established sorts, and the desirable new ones. Red-rock prices. Quality of stock unsurpassed. We solicit club orders and by the carload. Shipping facilities best in the State. We are not publishing prices, but send us a list of your wants and we will price them to your satisfaction. A. C. GRISEA & BRO., Drawer 13, Lawrence, Kansas.

**THE LAMAR NURSERIES.** Headquarters for Fine Nursery Stock Which is Offered at

**HARD-TIME PRICES!** Dealers and Nurserymen supplied at lowest wholesale rates.

Parties desiring to buy in large or small quantities will save money by purchasing our stock. We have Apple, Peach, Pear, Plum, Cherry and Evergreen Trees. Grape Vines in all varieties, and FOREST TREES a specialty. Osage Hedge Plants and Russian Mulberry in any quantity. Write for Prices. O. H. FINK & SON, LAMAR, MO.

**LA CYGNE NURSERY.** MILLIONS

—OF— **Fruit Trees, Shade Trees, Small Fruits.** Vines. Ornamental Trees, Etc.

**TEN MILLION FOREST TREE SEEDLINGS.** ONE MILLION HEDGE PLANTS.

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

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

Full instructions sent with every order, and perfect satisfaction guaranteed. Send for full list and prices. Address **D. W. COZAD** Box 25, LACYGNE, LINN CO., KANSAS.

**SWEET POTATO PLANTS** 3,000,000 All the leading kinds, at lowest prices. By mail or express. Packed to go any distance. Send for circular. **W. W. RATHBONE,** Marietta, Ohio.

**SWEET POTATO PLANTS.** E. Golden, Bermuda, S. Queen, Yellow and Red Nansemond. 30 cents per 100; \$2.50 per 1,000; 5,000 or more, \$2 per M. Full count and well packed. Farm clubs and secure lowest rates. Order at once. Address **B. R. WESCOTT,** Eureka, Kas.

**HEREFORD CATTLE.** I have 12 Thoroughbred Hereford Bulls and a few Young Cows with calves at foot, to sell at reasonable prices and on easy terms. They are of the best blood of the breed and individually first-class.

Farm, four miles south of Topeka postoffice building, on Burlingame wagon road. [Mention FARMER.] **E. S. SHOCKEY,** TOPEKA, KANSAS.

**HIGH-CLASS Jersey Bulls** FOR SALE CHEAP.

**DUKE OF WELLWOOD 14918.**—Three years old; solid color; black points. First prize at the St. Louis Fair, 1886; first prize and sweepstakes at Iowa State Fair, 1886; first prize at Kansas State Fair, 1887, and sweepstakes over all dairy bulls at Nebraska State Fair in 1887. He is the only bull known to his owner whose blood lines close up trace to the three greatest of all Jersey bulls—judged by the butter records of their daughters, viz.: Mercury, Stoke Pogis 3d and Rex. Price \$100.

**SIGNAL BOY 16178.**—Two years old; fawn—some white on legs and tail. Tracing to twenty butter tests, close up, ranging from 16 pounds to 22 pounds 8 ounces in seven days. No better blood. Individually fine. Sold for no faults—right every way. In good condition, but owner has no use for them. Price \$75.

Will take one-half cash down, balance in six months. Also, a few Yearling Heifers in Calif, at \$75 to \$100. Must be sold. Address **CHAS. H. HOLMES,** Beatrice, Nebraska.

**THE STANDARD BERRY PACKAGE OF THE WORLD.** MANUFACTURED BY **R. T. PIERCE & CO.,** SOUTH HAVEN, MICH.