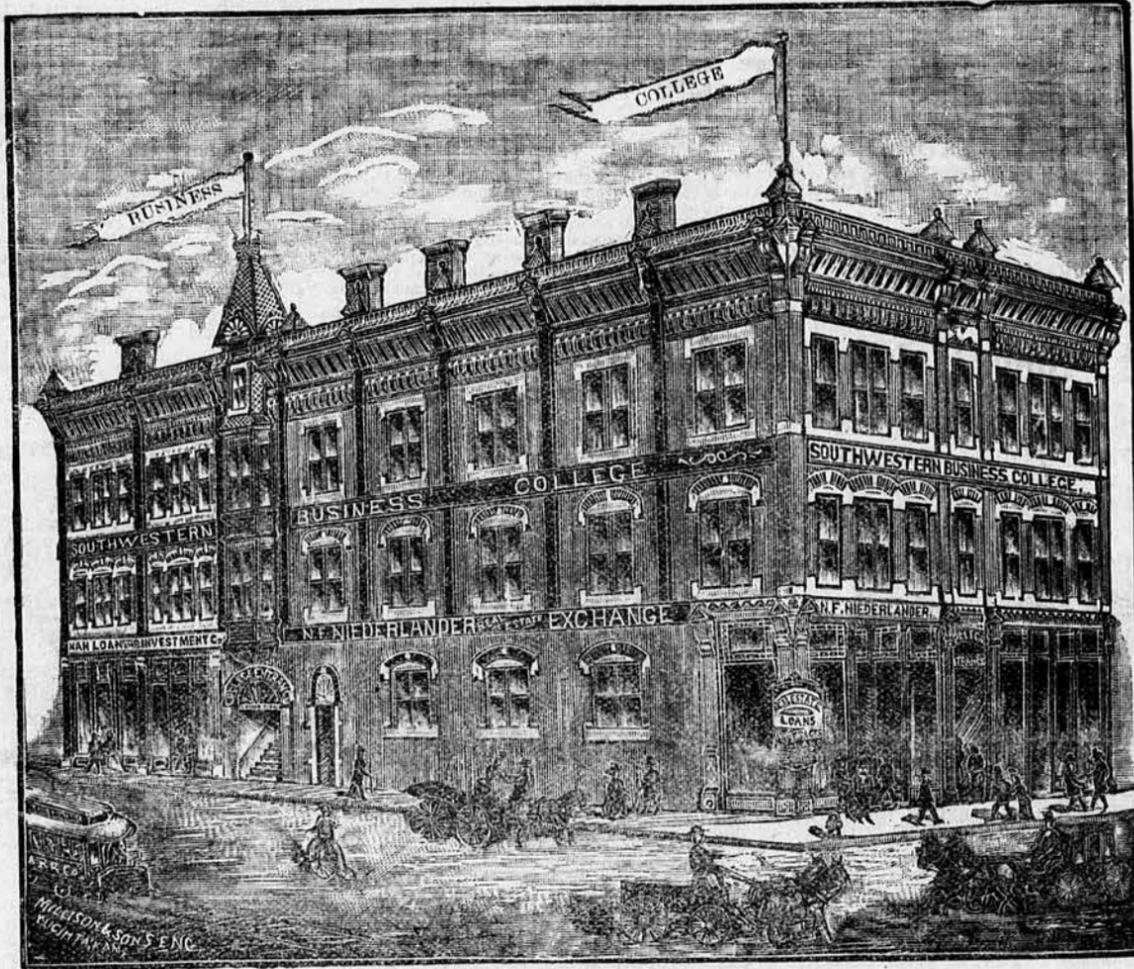




ESTABLISHED, 1863.
VOL. XXV, No. 36.

TOPEKA, KANSAS, THURSDAY, SEPTEMBER 8, 1887.

\$1.00 A YEAR.



SOUTHWESTERN BUSINESS COLLEGE, WICHITA, KANSAS.

[For Descriptive Article, see page 7.]

BREEDERS' DIRECTORY.

Cards of three lines or less, will be inserted in the Breeders' Directory for \$10.00 per year, or \$5.00 for six months; each additional line, \$2.00 per year. A copy of the paper will be sent to the advertiser during the continuance of the card.

HORSES.

PROSPECT FARM.—H. W. McAfee, Topeka, Kas., breeder of Thoroughbred CLYDESDALE HORSES and SHORT-HORN CATTLE. A number of choice bulls, also horses for sale now. Write or call.

M. D. COVELL, Wellington, Kas., fifteen years an importer and breeder of Stud Book Registered Percherons. Acclimated animals of all ages, both sexes, for sale.

CATTLE.

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

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

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

W. M. BROWN, Lawrence, Kas., breeder of A. J. C. C. Jersey and Holstein-Friesian Cattle. Stock for sale. Bulls, \$50 to \$100; Heifers and Cows, \$50 to \$150. Send for catalogue.

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.

CATTLE.

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

OAKWOOD HERD OF SHORT-HORN CATTLE.—All recorded. Choice-bred animals for sale. Prices low. Terms easy. Imported Earl of Gloster 74322 heads herd. C. S. Eichholtz, Box 1208, Wichita, 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.

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

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

CATTLE AND SWINE.

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

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

M. H. ALBERTY, Cherokee, Kas., breeder of Registered Holstein-Friesian Cattle and Poland-China Swine. Also Pekin Ducks, Wyandotte and Plymouth Rock fowls. Stock and eggs for sale.

C. H. HOLMES & CO., Grinnell, Iowa, breeders of Jersey Cattle and Duroc Jersey Swine. Prices to suit the times. Send for catalogue.

SWINE.

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.

SWINE.

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.

ELM GROVE HERD OF REGISTERED POLAND-CHINA Swine and Jayhawk strain of Plymouth Rock Fowls. Z. D. Smith, proprietor, Greenleaf, Washington Co., Kas. Pigs, and Sows bred, for sale. Satisfaction guaranteed. Eggs \$1.25 for 13; \$2.25 for 26.

WALNUT GROVE HERD OF POLAND-CHINAS. V. B. Howey, proprietor, box 103, Topeka, Kas. My hogs are strictly thoroughbred, of the finest strains in America. All breeders recorded in Ohio Poland-China Record. Chief Commander No. 6775 at head of herd. Pigs for sale, from 2 to 10 months, from \$10 to \$25.

J. M. McKEE, Wellington, Kas., breeder of Poland-China Hogs—A. P. C. R. Five kinds of Poultry. Choice pigs and fine fowls for sale. Prices low. Write.

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

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

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

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.

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

F. W. ARNOLD & CO., Osborne, Kas., breeders of pure-bred Poland-China Swine. Breeders all recorded in Ohio Record. Young stock for sale. Also Wyandotte and Langshan Fowls and Pekin Ducks. Eggs, \$1 per 13.

SWINE.

LEVI HURST, Oswego, Kas., breeder of thoroughbred Poland-China Swine. Eighteen years in the business. Pigs shipped C. O. D. to responsible parties.

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.

IMPROVED REGISTERED MERINO SHEEP, Poland-China Hogs, Light Brahmas, Plymouth Rocks and Bronze Turkeys—all of prize-winning strains, bred and for sale by R. T. McCulley & Bro., Lee's Summit, Jackson county, Mo.

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

H. V. PUGSLEY, Plattsburg, Mo., breeder of MERINO Sheep. Ewes averaged nearly 17 lbs., stock rams, 34 lbs. to 38 1/2 lbs. Extra rams and ewes for sale. Also Holstein Cattle.

POULTRY.

BROWN LEGHORN POULTRY YARDS.—Pure-bred S. C. Brown Leghorns a specialty. Best layers known to the poultry world. Single, male \$2.00; Trio, \$5.00. Mrs. Belle L. Sproul, Frankfort, Kas.

HIGH-BRED LIGHT BRAHMA CHICKENS.—After 1st of August. Eggs, \$2.00 per 13, in season. J. A. McMahan, Box 229, Clearwater, Sedgwick Co., Kas.

TOPEKA WYANDOTTE YARDS.—A. Gandy, proprietor, 624 Kansas avenue, Topeka, breeder of Golden, White and Silver Laced Wyandottes. Write for what you want.

IT WILL PAY YOU—To send for our beautiful Illustrated Circular, full of valuable information. Sent free to all. Address C. A. Emery, Lock box 239, Carthage, Mo.

COLLEGE HILL POULTRY YARDS.—Pure-bred Brown Leghorn and Houdan Fowls for sale. Also eggs for sale. Send for prices. W. J. Griffing, College Hill, Manhattan, Kas.

MRS. MINNIE YOUNG, Warrensburg, Mo., breeder of pure-bred Bronze Turkeys, White and Brown Leghorns, Light Brahmas, Pekin and Ronen Ducks. Eggs in season. Write for wants. No circular.

TOPEKA POULTRY YARDS.—Wm. A. Eaton, Topeka, Kas., breeder of Plymouth Rocks, Light Brahmas, Partridge and Black Cochins. Can furnish W. & B. Leghorns and W. F. B. Spanish. Eggs \$2.25 per 13.

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

MARMATON VALLEY POULTRY YARDS Mrs. ALICE E. MILBURN, (Lock box 1401), FORT SCOTT, Kas., breeder and shipper of thoroughbred Lt. Brahmas, P. Rocks, Wyandottes, B. Leghorns, B. Javas, B. Cochins, Mam. B. Turkeys, and P. Ducks. Fowls for sale at all times. Send for circular. Correspondence solicited and cheerfully acknowledged.

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

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

SHAWNEE POULTRY YARDS.—Jno. G. Hewitt, Prop'r, Topeka, Kas., breeder of choice varieties of Poultry. Wyandottes and P. Cochins a specialty. Eggs and chicks for sale.

MISCELLANEOUS.

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

VETERINARY SURGEON.—Prof. R. Riggs, Wichita, Kas. Castrating Ridgling Horses and Spaying Cattle a specialty.

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



Newton's improved **COW TIE** thousands in use. Pushes them back when standing, draws them forward when lying down, and keeps them clean. Circular free, if you mention this paper. E. O. NEWTON, Batavia, Ill.

La Veta, Huerfano County, Colorado--Its Surroundings, Resources and Future.

Special Correspondence Kansas Farmer:

This very favorably located town of La Veta is situated at an altitude of 7,000 feet, on the Denver & Rio Grande railway, seventy-one miles south of Pueblo and in the south-central part of Huerfano county. Its scenic surroundings cannot well be described by the visitor whose power of description is of the highest order or whose enthusiasm might lead him to unpardonable exaggeration. Situated as it is on the Cucharas river and bounded by the most majestic of mountains on either side whose foot-hills are twelve to twenty miles distant, presents one of the most beautiful and fertile valleys that I have ever had the pleasure of seeing in years and thousands of miles of sight-seeing and travel. To the south at a distance of twelve miles are the Spanish peaks, two grand and silent sentinels of ages that rear their silent optics to the height of 12,700 and 13,320 feet respectively. Just along the foot-hills of these peaks for a distance of twenty miles is the Wahatoya valley, whose checker-board of fields of growing grain and groves of woodland is the pride of the prosperous farmer and the universal admiration of the visitor and home-seeker. To the west beyond a small divide runs the Cucharas river. This valley for thirty miles produces very bountiful crops, while the foot-hills and mountain-sides afford a most excellent grazing ground for live stock. As we swing farther around to the west we come to Abetya valley, up which the Denver & Rio Grande railway runs to the summit of the range, or La Veta Pass, whose altitude is 9,392 feet above the level of the sea. Leaving the town of La Veta comfortably seated on an open flat-car, the trip for a distance of sixteen miles up to La Veta Pass is not excelled by any similar scene along any of the six continental lines of railroad across the American continent. The grade in places of 288 feet to the mile, the curves of 33 deg., the doubling back, as it were, around Mule-shoe curve on up to the crest of Dump mountain excites the imagination of the visitor to the highest degree of admiration. As the train on and on goes winding up towards the summit, the grandest of panoramic mountain scenes plays before the eye of the visitor. To the north is seen the Greenhorn mountains, whose foot-hills are twenty miles distant, and the country intervening is an undulating scope of mesa land—a rich soil and capable of being tilled by irrigation. On the west courses the Cucharas river. A valley capable of producing a ten times greater product than now of all the grains, vegetables, grasses and fruits common to this latitude. The resources of this section are yet but in their infancy and but little developed. There are within a radius of twelve miles fifteen gold and silver mines being developed. The coal field is twenty-five miles in width and extends one hundred miles from Canou City on the north to Trinidad on the south. Bituminous coal of a very excellent quality crops out on the surface within five miles of La Veta, and about twenty mines with veins running from four to eight feet in thickness have been opened up. At least 20,000 acres of good land along the valleys and foot-hills that can be had under the government land laws. The climate is cool in summer and mild in winter. The mineral springs near La Veta are coming rapidly into prominence. This water has effected some very remarkable cures, such as rheumatism, skin diseases and kidney troubles, and is pronounced by experts as one of the best mineral waters known anywhere. That strangers have confidence in the town, the mineral and agricultural resources of the country, I will state that last week while the visitors on the I. R. Holmes excursion were here, \$43,000 worth of town property and lots changed hands. I am indebted to Messrs. Ryus & Moore for favors extended during my week's pleasant visit here at La Veta.

PROVISO.

La Veta, Col., September 3, 1887.

The circulation of the blood was discovered by Michael Servitus, a French physician, in 1553, rediscovered by Cisalpinus in 1569, and more completely by Harvey, in 1628.

To take your family to Bismarck Grove during the week of Sept. 5-10, will be like a jolly picnic. But no where else would you find such a cool, shady and beautiful grove.

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:

SURGICAL

J. C. McCLINTOCK, M. D.,
CONSULTING AND OPERATING SURGEON,
330 Kansas avenue, Topeka, Kas.

C. E. JEWELL & CO.
Chattel Mortgage Loans
A SPECIALTY.

OFFICE:—North Room under First National Bank.
TOPEKA, KAS.

Mason & Hamlin
PIANOS & ORGANS.

Our Organs Always Unexcelled.
Our Pianos Better Than The Best.
(New method of strizzling.)
For prices, terms, etc., write
J. H. LYMAN & CO.,
805 Kansas avenue, Topeka, Kansas.

Bulbs! Bulbs! Bulbs!

Send for Fall Price List of the finest assortment of BULBS, PLANTS, SEEDS, Etc., now ready.
TOPEKA FLORAL COMPANY.
BRI-STOL SISTERS, Managers.
TOPEKA, KAS., 1887.

Engine and Boiler for Sale.

We offer our eight-horse-power Baxter Steam Engine and Boiler, now running our printing presses and other machinery, at a bargain for cash. Is in good condition. Our only reason for selling is that we can save money by using an electric motor. If you are interested, write.
DARLING & DOUGLASS,
TOPEKA, KANSAS.

DAVID E. DELONG. MARSHAL JOHNSON.

DELONG & JOHNSON,

Regular authorized DETECTIVES, and have a regular correspondence with the leading detective agencies, detectives and Sheriffs throughout the country. We investigate all kinds of civil and criminal cases throughout the United States, Canada and Europe, and do a general detective business in all its branches. We are prepared to print descriptive cards and photographs and mail same on short notice. A man at every train passing through the city. Business by mail or telegraph promptly attended to. Address DELONG & JOHNSON, Lock Box 103, NORTH TOPEKA.

IMPERIAL EGG FOOD.



A sure cure for Cholera, Roup and common ailments of fowls. Price, 2 1/2 pounds for \$1.00.
GROUND OYSTER SHELL,
Ten lbs., 50 cents; 25 lbs., \$1.00; 100 lbs., \$3.50.
For sale by A. GANDY, Topeka Wyandotte Yards, 624 Kansas avenue, Topeka, Kas.

W. W. CURDY

Cordially invites every farmer in the State of Kansas to visit his mammoth

MERCANTILE HOUSE

At 419 and 421 Kansas avenue, Topeka, Kansas, where everything can be found that is new and first-class in a general line of

DRY GOODS, SILKS, OLOAKS, OVERCOATS, CLOTHING, BOOTS, SHOES, HATS, CAPS, GLOVES, HOSIERY, CARPETS, CURTAINS, RUGS, UPHOLSTERING GOODS, ETC.

We carry the largest stock and make the lowest prices, and guarantee every dollar's worth of goods we sell just as represented.
ROOM—50x150 feet, first floor and basement.
New goods opening up every day in the year.
W. W. CURDY,
Dry Goods, Carpets, Clothing, Shoes, Hats, etc.
419 & 421 Kansas Ave., TOPEKA, KAS.

INCORPORATED 1874.

Capital, Paid Up, \$200,000.
Surplus,..... 25,000.

National Loan & Trust Co.

G. F. PARMALEE, PRESIDENT.
T. L. STRINGHAM, SECRETARY.

E. WILDER, VICE PRESIDENT.
E. S. SMITH, TREASURER.

This company offers its services to investors who desire Bonds or Mortgages well secured, bearing a reasonable rate of interest, and solicits correspondence from interested parties.

OUR PAMPHLETS contain much information and testimonials concerning them, and we will gladly send them to any address.

NATIONAL LOAN & TRUST CO.,
Topeka, Kansas.

SAFE DEPOSIT DEPARTMENT Open from 9 a. m. until 5 p. m.
SAFES FOR RENT.

VALUABLES STORED AT MODERATE COST.

ARE YOU INTERESTED IN THE SUBJECT OF INSURANCE?

When you hear that some Live Stock Insurance Company has proven unreliable, remember that was a counterfeit. When you hear that some Fire, Lightning or Tornado Insurance Company has secured business through dishonorable means, or reprehensible methods, remember its name, as that is a counterfeit.

When you want reliable indemnity, at the lowest possible cost; When you want to patronize a Kansas institution that can always be found when wanted; When you want to do your business with old citizens of Kansas, who have an unimpeachable record for strict integrity; When you want an agency for your vicinity, remember not to be misled by designing scoundrels who talk only of "the home company," but apply to

KANSAS HOME INSURANCE COMPANY,
AND TAKE NONE OTHER.
TOPEKA, KANSAS.

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, and 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.

Topeka - Business - College,

ODD FELLOWS' NEW BUILDING,
521-3 QUINCY ST., TOPEKA, KAS.,
As fine a location and building as can be found in the State.

ACTUAL BUSINESS TRANSACTIONS Throughout Business Course. SHORT-HAND AND TYPE-WRITING a prominent feature. Send for Catalogue. [Mention this paper.]

ROUDEBUSH BROS., Proprietors.

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.

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. Fall term begins September 14, 1887.
Address
PETER McVICAR, Pres.

Agricultural Matters.

LET US SOW WHEAT.

The KANSAS FARMER crop reports, published last week, show that of the eighty-five counties reporting forty-six will reduce the wheat average this fall and only eleven will increase it. Upon examination it is seen that the counties proposing an increase are mostly among the newer counties in the western part of the state, and those intending to diminish the wheat area are mostly among the older counties and those which in the good crop years astonished the world with their heavy wheat crops. As to the reason assigned for the proposed change to less rather than more wheat ground, there are two, and in most cases only one. The market price for wheat has been low a long time, and is lower now; that is one reason. The other, which is urged in every instance as the stronger reason, is the presence and destructiveness of insects. Is either of those reasons sufficient to justify a departure of such importance as this? Are the two together sufficient to turn the course of farmers in Kansas in a branch of agriculture for which their land is so well suited?

Let us talk about it a little, considering the two reasons assigned, first, price, second, insects. Prices of all manufactured articles have fallen on an average 25 per cent. in the last twenty-five or thirty years. The difference has been more apparent since the war period—say twenty years, taking no account of inflated prices when our currency was below par. Our statement is based upon values or prices rated in coin—gold and silver. The only exceptions worthy of mention that we now think of are sugar and leather. These two important articles are selling as high now as they did "before the war," though more of both of them is used now than ever before—more to the person of population.

The causes which have operated to reduce prices of manufactured articles generally, may be assumed to be invention and competition. Speaking in general terms, at least fifty per cent. of the labor employed in manufactures twenty-five years ago has been displaced by machinery. It has probably been much greater than that; it has been in some instances, assuredly. Where four men were required to perform a certain amount of work, one of them, or two, or three were displaced by one or more machines invented to do the work. That reduced the cost of the particular work and set one, two or three men adrift to go into the same kind of work in other establishments or to take up other lines of work. In the leading manufacturing nations of the old world, the change has not been so marked as it has been here, because there is more powerful prejudice there against innovations which change the customs of centuries. In Italy, Austria, Switzerland, France, Germany and England, a great deal of mechanical work is still done by hand. Many thousands of people live upon wages earned in work done at their homes for large factories which receive it and sell it in the market. A vast amount of hand-work is done in those countries which, if transferred to this country, would be displaced by machinery. The extent of the displacement in the United States is wonderful, not understood or thought about by the great mass of the people. We cannot here refer to it further than to say that there are not one-fourth enough men and women in this country to perform by hand the work which they could be so performed, but which is now done by machinery.

The same influences—invention and

competition, have operated in agricultural matters so as to very much interfere with old and long established methods in several important particulars, one of which is the production of grain. We have better plows, better harrows, better implements of the class formerly in use, and we have a great many new ones, not dreamed of half a century ago. We now have two to ten plows running where there was but one before, and they are drawn by steam when the draft is too heavy for four horses. Then we have machines to cut the standing grain and grass, machines to thresh wheat and to stack straw. It required the services of fourteen to sixteen persons to put twelve acres of good wheat in shock in one day, not many years ago; now three persons will do it with the help of a machine to cut and bind the grain. A certain result of this kind of proceeding is the cheapening of the cost of producing wheat, and that, naturally tends to stimulate production beyond the actual needs of the people. Prices must fall under the operation of such influences. Prices have fallen, and the causes which brought the fall will not cease to operate; therefore we may expect that unless some great change comes over natural forces in large areas of the earth's surface, market prices of wheat will never again reach the standard of years gone. And the same influences are at work in the whole field of mechanical energy. Wherever machinery can be used it will be used, sooner or later. For that reason, corn and oats—all the staple products of the farm are and will continue to be produced cheaper and more abundantly. It is not wise, then to abandon production merely because prices fall. Let us rather accommodate ourselves to the new conditions, and lessen the cost of production in our own individual cases. Let us put our lands in better condition and raise twice or three times as much wheat off the same ground as we did in the careless days.

As to insects, no man can reason within the domain of absolute certainty and reach conclusions that are of much value to the ordinary farmer, except in a general way. It is in that general way that we must walk when we come to discuss the problem of insect visitation and destruction. Some things seem to be conceded, however, even in such a case. It is known that insects, chinch bugs, for example, do more harm in dry seasons than they do in wet ones. It is also known as to all past times that dry years are not the rule in temperate latitudes, nor are wet years the rule, but that wet years and dry years follow each other with more or less distinctly marked characteristics. It is not intended to say that the change is in regular succession, a dry year, then a wet year; but that there are changes, in varied degrees, from one extreme to the other. It is not recorded in the history of this country that three dry years were ever brought together. Nor is it recorded that chinch bugs ever did much injury to crops in a wet season, or in a "good" season. Reasoning, then, from what we have seen and learned, we are encouraged to expect that the year 1898 will be a good crop year, and that we will have little if any trouble with chinch bugs.

Kansas is a first class wheat growing State. That has been demonstrated many times. The whole State is underlaid with clay and limestone. Sandstone appears on the surface in some localities, but the great body of Kansas land is limestone land modified by geographical and cosmical influences. We have the foundation, and it seems to us that we ought to build upon it. We do not believe in making a specialty

of wheat, nor of any other one thing; but we do believe in sowing good wheat seed on good and well prepared ground every year on every farm in Kansas. Don't spread it out over the whole farm; but change the ground every year, put it in the best possible condition and raise forty or fifty bushels to the acre on a small area of ground rather than ten or fifteen bushels to the acre on a larger tract.

Wheat is always in demand, and it is a cash article. Farmers will get far enough along after a while to have great warehouses and elevators of their own where they can store wheat and draw money on it in times when they prefer to wait a few weeks or months rather than sell at once. Let every farmer raise some wheat, some good wheat. He can do it if he tries nine years of every ten if seasons and insects are no worse than they were in past years.

Another thing: The ground is now in better condition for wheat seeding in Kansas than it was in '86 or '85. Rains have been very general all over the State; the ground is getting wetted well down. This is a good indication every way. It betokens the end of the "dry time," it heralds the coming of a good crop year in '88, and it indicates the end of the bug's reign. Everything points to a better season in '88 than we had in '87. Why, then, not act upon these favorable signs and put our lands to good use. Don't let good ground lie idle. Let us sow wheat.

A correspondent of the *National Stockman*, Pittsburg, Pa., asks "Why does the farmer on the sandy soil raise rye?" And then he goes on to answer it: "Because experience has taught him that the rye crop can be made to bring fertility to his soil. It can be pastured and plowed under in such a way that without losing the use of the land a single season, a green coat of manure may be given to the soil. In some respects rye is superior to clover in renovating or fertilizing lands. Sown in autumn it affords excellent pasturage up to the middle of the next summer season. Unlike other grains, it may be fed upon long and continuously by stock without injury to the root-bed. When the stock is removed, it will throw up a rank growth of top that may then be plowed under for fertilizing. It affords very early pasturage in spring when most needed. The feeding down of this by stock is no drain upon the soil to speak of. The small per cent. that goes into bone, flesh and milk produces a hardly perceptible effect upon the land, even during long terms of pasturage, so long as the droppings go back to the soil. Six or eight weeks of such pasturage is very nearly equal in value to a fair crop of almost any kind, and the heavy aftergrowth that can be plowed under in early autumn from the same field is worth as much as an ordinary coat of manure. The land will show the good effects of it for years afterward. It seems to put the land in the best kind of tilth, as well as to fertilize it. Rye roots penetrate down into the soil, and bring up stores of fertility for after plant growth, while the tops seem to do the same work in the atmosphere."

Kansas farmers ought to sow a great deal of rye this fall for pasture. It is sown just as wheat is, and about the same quantity of seed to the acre—a little less by measure will do. It grows fast and makes first-class pasture running into the winter. And it is among the first things to respond to the sunshiny weather of spring. It is as good for spring pasture as for fall pasture, and after grass comes, the rye may be left to grow for a crop of grain, or it

may be plowed under in time for millet or buckwheat, or sorghum or turnips or even late potatoes. Growing rye is a very good green manure. The grain makes good, wholesome bread. While young, the stalks and leaves make good pasture, and when matured the straw makes good rough feed. It is well to sow rye every year.

Farm Notes.

Late sown wheat escapes the Hessian fly, usually.

A few acres of rye pasture will come good late in the fall.

Manure is always worth the labor required in putting it on the land.

It is well to be laying out now the plans for next year's work on the farm.

It is much more profitable, as well as comfortable, to raise more grain on less land than our neighbors.

See to it that all trash about the farm is destroyed in some way, if it is not put into the compost heap.

An exchange gives this: In all farm work, nothing should be done half way, "Whatever is worth doing, is worth doing well."

Kansas farmers must learn, sooner or later, that the careless and slovenly methods of the early settlers will not do when land becomes valuable.

Slops should never be emptied out the back-door to settle around, as the effluvia arising from stagnant water pollutes the air and may cause sickness.

Learn to be neat about the farm and its attachments, for in this lies one of the great secrets of successful farming. Keep everything up in good "trim"—especially the fences.

The *Fredonia Citizen* mentions the case of a farmer who did well this year with "King of the Early" corn, and who urges the planting of early varieties of corn in Kansas.

If you have no garden spot prepared, do not longer delay the work. A garden is a very necessary part of the farm. Plow deep, drain well, make rich with well rotted vegetable matter and manure.

An Osage county farmer found in his corn fields a black ant that is very numerous and that committed great slaughter among the chinch bugs—eating up the eggs, destroying the young, and then attacking and killing the old ones.

Nothing gives a farm a more forlorn and dilapidated appearance than tottering old fences. The orchards, too, should be carefully trimmed up. This keeps the trees bearing well, and adds much to the beauty and value of a farm.

Where it is convenient to allow your boy to own a colt or two in his own right, and where the young fellow is sufficiently manly to appreciate the animal for what he is, and shows sufficient pride to want to make him all he can become, it is both sensible and profitable to "give the boy a chance."

Nothing is better calculated to develop enthusiasm in a boy for good stock than the ownership of a fine horse. Its beauty, its spirit, its intelligence, its susceptibility to training, its capacity for affection for its master—all appeal most strongly to those with whom such animals come in contact.

Personal ownership of fine stock, with an understanding of its value, will do more to develop in the youth (1) a liking for the farm and (2) a broad and progressive spirit in connection with farming than perhaps anything else. Even a liberal education will do less toward making an enthusiastic farmer, filled with the better side of his chosen business, unless it is accompanied by association with the higher types of domestic animals.

Prospective medical students should have a catalogue of the preparatory course in Campbell University.

A fashion writer says the next generation or two of women will abolish corsets. They will have to, or the next generation of corsets or two will abolish women.

The fall term of Pond's Business College, Topeka, Kas., reopens September 12. Business and short-hand courses excellent—no better east or west, north or south. Come.

The Stock Interest.

DATES CLAIMED FOR STOCK SALES.
OCTOBER 14.—W. T. Hearne and U. P. Bennett & Son, Short-horns, Lee's Summit, Mo.

About Making Pork.

There is no more common sense about attempting to make pork out of unhealthy hogs than there is in trying to get the work of a healthy horse out of one that is sick. It is of the utmost importance that hogs be kept healthy from the beginning to the end of their lives, and in order that the best possible health may be had and maintained, the farmer needs to study the business of hog-raising, just as merchants and men in other lines of trade study their business. The parent stock, the care of the sow during the period of pregnancy and while giving suck to her young, management of the pigs, their quarters, feed, etc., all these things need looking after in order to have healthy pigs. After we get pigs of that kind, then it is quite as important that they are so kept to the end in order to have good pork.

It is difficult to determine the most important item in the list of necessary things to be done in the management of hogs for pork, but we cannot get along at all without food of some kind. Let us begin with that, then. The first question asked is what is the best food for hogs, and in answer it may be said there is no best food except grass, and we cannot always have grass; if we could, we would need something else to "finish" on, if we would have the best pork. Oats and rye and wheat bran are good feed for pigs while they are young. It is better not to give corn to young pigs at all, unless it be in very cold weather, and then the quantity ought not to be large in comparison with other kinds of food. After a pig is half grown it ought to have a little corn daily, the quantity to be increased to the end of fattening. Millstuff is good hog food. Mixed with cornmeal it is excellent.

A successful New York farmer who found pork-making to be his most profitable business, and who kept constant and accurate account of all his operations, he made ten pounds of pork from fifty pounds of cornmeal, or one pound of pork from five pounds of meal. All the corn was ground and scalded, not cooked. He found the value of corn doubled by grinding and scalding. His practice was to pour ninety pounds of hot water on sixteen pounds of meal, and to allow it to stand in a covered tub from twelve to eighteen hours, according to the weather, before feeding. The whole swells and makes a thick mass. Cold water was not nearly so good in its effect. This was the fattening process in his case, and many other farmers, indeed most of them finish with corn. In the growing period most farmers use too much corn. It is not the best feed for growing animals of any kind. It is not as good for growing hogs as red clover and bran swill. Grass and substitutes for it, with a little oats, rye, millstuff, etc., until the hog is well grown, then add corn, and we have good feeding all along, and we get good, sweet, juicy meat.

Some men consider it a strong point in favor of a breed that is of ancient origin, but it is evident that in the hands of a few skillful breeders on the one hand, and manipulated by many that on the other hand are devoid of skill, many specimens will appear that are in nowise the equal, in rotundity and stamina, of some others that come from the hands of skilled breeders who have bred them staunch and strong through infusions of outside blood, judiciously used.

Cutting Fodder for Sheep.

Several readers inquire about the economy of cutting the winter fodder for sheep. One says that some flockmasters tell him that sheep grind almost as well as a burr-mill, and that cutting is useless for them. This opinion has often been expressed, but it is quite erroneous, nevertheless. Sheep are fond of fine, soft herbage, and, as is well known, will pick off the leaves and fine branches of the best cured clover, leaving the body of the stalk uneaten. And, of corn-fodder, they never eat more than the leaves, tassels, etc. They will pick over straw, but eat only the chaff and fine parts. But when hay is run through a cutter and cut very fine, they will eat it quite clean. Even straw, cut fine, will be mostly eaten by sheep. In a large experience in cutting fodder, we have found the saving in cutting for sheep even greater than for cattle. When the fodder is cut it is easy to mix with it ground feed or grain; and the sheep will then eat the cut fodder and grain together, insuring a remastication of the grain and its better digestion and assimilation.

In fattening sheep, cutting the coarse fodder will be found very advantageous; first, because much fodder will be saved and the grain better utilized; second, because the sheep can safely be crowded in fattening without danger of disease, when the grain is always eaten with coarse fodder. When sheep are fed heavily with grain alone, it is not raised and remasticated, and sometimes is likely to produce fever in the stomach; but when the grain is eaten with cut fodder it lies light and porous in the stomach, and is well acted upon by the gastric juice, which can circulate freely through the mass; the food is then readily digested, and passes through the system without creating any irritation. As coarse fodder is raised and remasticated, the grain mixed with it is also raised and remasticated. Using short-cut coarse fodder makes it most convenient to feed a great variety of food that sheep are very fond of—corn, oats, middlings, oil-cake, peas, unmarketable beans, barley, etc.

We have no doubt that cutting feed pays for all our farm stock, when feeding is carried on upon a considerable scale, for then the cutting will be done with ample power, which enables two tons of fodder to be cut per hour, but with only a few animals it is likely to cost more than the gain in fodder.—*National Live Stock Journal.*

Importance of the First Mating.

Whether there is anything in the particular and predominating and continuing influence of the male in the first mating with a female among animals, have often been discussed, but no universally satisfactory conclusion has yet been reached. A recent writer says he was confirmed in the belief that, as a rule, a "female once having had fruitful intercourse with a male, all her subsequent offspring is liable, in a greater or less degree, to be influenced by his physical characteristics."

His attention had been called to the subject frequently by farmers and special stock-raisers, and he was moved to investigate the subject with some care. In several instances farmers having procured thoroughbred bulls to serve their herd, were much disappointed in the results obtained, many of the calves not at all coming up to their expectations, and upon inquiry it was found that the calves from heifers sired by such bulls were almost uniformly better than the calves from older cows that had previously been bred to scrub bulls.

There is good reason why the tendency

should be as suggested, though it does not appear to be developed far enough to justify the laying down of a rule on the subject. Animals, like humans, differ in individual characteristics. A marked difference is observable in families as to "family likeness." In one family, all the children have marked resemblance to one another, while in others, no traces of likeness appear except to persons not well acquainted with the family. It is the same way among animals. Some females always breed after the sire, while others vary.

However the fact may be, the subject is important, and its bare suggestion to a farmer who had not before thought about it, ought to move him to adopt and maintain a rule to use the best males for breeders in all cases, and then he will be certain not to miss the young females.

Stock Notes.

During hot weather see that all kinds of stock get all the pure, cool water they want. Thirst is a fearful punishment to either man or beast.

Beans are rich in nitrogen and are good food for any sort of animals. Hogs may be fattened on them. There is nothing better for sheep, and they are just the thing for cows in milk.

Although the Merino is a small sheep, an advantage possessed by the breed is that a large number can be kept together in one flock more easily than can be done with some other breeds.

Unless the farm is very stony and the roads rough, steep and hard, take off the horses' shoes in plowing season and let the hoof get some natural growth. It is a waste of time and money to shoe a plow team or farm team in the summer.

There is nearly 3,000,000 bushels of flax seed annually grown in the State of Iowa, and the oil cake is largely exported. If it pays our English feeders to have oil cake shipped from Iowa to England to feed their stock, perhaps we do not fully appreciate its value as a food.

The dignity and popularity of agriculture has been increased by the improved stock on the farm and increased profits therefrom are a strong attraction to the farmer with a business turn of mind. The average business man of the city is ambitious to become a fine stock breeder.

We are never in a position to do the horse exact justice until we have found a key to his precise state under the greatly varying conditions that grow out of lack of tone in the digestive organs from indigestion—eating too much—or of the muscular and nervous systems from too much or too severe work.

Ill-fitting collars are the bane of farm teams; they divert the line of draft and bruise the shoulders; they set loosely and chafe the neck. Too often the collars are too long. In this case one of the zinc collar pads will shorten the collar and prevent bruising the neck.

Muddy legs irritate the skin and produce the pustular inflammation known as grease. Crude petroleum is antiseptic, emollient and healing, and thus prevents poisoning of the skin, softens it and prevents heating and inflammation and cures disease when want of care produces this too common result.

Friction with a woolen rubber, either dry or wet, as the case may be, is excellent for the skin, and fifteen minutes spent every day in rubbing down a horse will be well employed. For all kinds of vermin rub the hair, not the skin, with a brush or sponge, moistened with kerosene and glycerine in equal parts.

Taking the 2:20 list as a basis, says the *Spirit of the Times*, we find the most noted members are all horses standing not over sixteen hands. The famous Flora Temple stood under fifteen hands, and the trotting world never saw a more enduring or gamier harness horse. Goldsmith Maid is another of the same stripe, and no one ever doubted her campaigning abilities. Hannis is a small horse, yet he contrived to put in a number of years of active turf service, and always went into the best company. Nettle, the best daughter of Old Hambletonian,

stood under fifteen hands. Adelaide was the same size, and Hopeful, a great campaigner, with the best wagon record, made seven years ago, stands only fifteen hands. In this category are also Occident, Little Gipsy, Adele Gould, Buzz Medium, and a host of others with records well down in the twenties.

Sheep that are accustomed to a shed will run to it of their own accord when it rains, and it is well that they should, says a writer. Water never yet did a sheep good, externally administered. No sheep is the better for a wetting, but rather worse, no matter what the time of year. The wool in a man's coat is injured by rain, and so, only to a less degree, perhaps, is the living fiber on the sheep's back.

No mill grinds more regularly, said the late Ben Perley Moore, than the stomach of a healthy pig; hence there must be great regularity in times of feeding, and great care that the quantity and quality of feed are suitable. The practice of compelling pigs to "root, little pig, or die," from two months old to the time when they are to be put up to fatten is not economical. Time and feed are lost in this practice, and the risks are increased.

The heart, the horse and man alike, is, says the *National Live Stock Journal*, the governor, and when this pulsates in the man about seventy-six and in the horse about forty times in the minute, we may know that, as a rule, there cannot be any serious disturbing influence in the system. Indigestion, accompanied by flatulence, sometimes quickens the pulse, but as frequently lowers it. Any great exertion accelerates the heart's action, but following this it quite often drops as much below the normal beat as it rises above, while the exertion continues. Now, we may at all times know the condition of this governor, if we will examine it direct, by placing the ear over the heart region, or indirectly by placing the finger upon the little artery which comes off the external carotid and comes within reach of the finger at the lower portion of the upper third of the jaw bone.

Save the Small Potatoes.

There are a great many small potatoes every year at raising time. They are more numerous in dry years, usually. They ought to be saved, every one of them, saved in good condition, for they are good food for stock. As an exchange suggested, some time ago, as to their value for milch cows, experiments have proven them to exceed that of almost every other root. And as a feed for calves they make one of the very best substitutes for milk, containing as they do 16 per cent. of starch in a natural state, and 60 per cent. in a dry state. They should be boiled as for table use, the skins removed, mashed thoroughly and put into milk. Calves eat them in this way greedily, and thrive remarkably well. They will not cause scours as grain feed does, and tend to keep the appetite regular.

For horses in winter time, the potato possesses rare qualities as a regulator; they may be given once or twice a week, say, in messes of a few quarts. For hogs, they should be boiled, mashed and mixed in the swill barrel with kitchen slops and milk, with a liberal quantity of wheat, bran, or cornmeal added. This makes one of the cheapest as well as one of the best feeds for swine, and puts them in a healthy and thriving condition for fattening, and wonderfully saves in pork-making, when compared with corn-feeding alone.

Potatoes are profitable as a spring feed for sheep, and especially for ewes raising lambs; they give strength, health and appetite, and produce milk abundantly. For sheep, they should be cut and fed raw once a day. One of the best methods is to cut fine and mix with wheat, bran or ground oats. As a choice, for breeding ewes in spring, we would prefer to have 50 per cent. of the feed potatoes, by weight, than to have the whole amount either corn or oats. Potatoes boiled, mashed and mixed

with cornmeal, and fed hot, are excellent for chickens in winter. We know a poultry dealer who always uses this mixture, and for health of fowls and production of eggs, no hennery, to our knowledge, excels his, according to the number of chickens kept.

A Good Many Sheep.

Here is the estimate as to countries reported:

Australia.....	80,000,000
South America.....	75,000,000
United States.....	63,000,000
Russia.....	48,000,000
Germany.....	30,000,000
United Kingdom.....	27,000,000
France.....	24,000,000
Austria-Hungary.....	20,000,000
Spain.....	18,000,000
South Africa.....	11,000,000
Italy.....	7,000,000
Canada.....	4,000,000
Norway and Sweden.....	4,000,000
Portugal and Greece.....	4,000,000
Total.....	415,000,000

In the Dairy.

How Fine Creamery Butter is Made.

The writer visited a creamery a few days ago, in the State of New York, where the finest kind of butter was made, butter that is eagerly sought after, and commands an extra price in market. A description of the process may perhaps be suggestive to the butter-makers, who find it difficult to make a fine grade of butter during hot weather.

At the creamery in question the water, though sweet and fresh, is too warm to cool the milk properly, and ice is required in its manipulation. The milk is set in a large vat, the outward appearance and size being similar to a common cheese vat. Its interior, however, was divided up in two milk compartments, the division running lengthwise of the vat. An ice trough was on the outside of each compartment, and a moveable or adjustable ice trough hung in the center of each compartment. They were deep enough to extend below the cream line when the compartments are filled with milk. Ice was broken up and placed in these ice troughs, which speedily cooled the milk, and caused all the cream to rise in twelve hours. There was an arrangement by which the skimmed milk could be drawn through a faucet at the lower part of the vat. The temperature of this milk as it was drawn after setting twelve hours, marked on the thermometer 48 deg. Fahr. The morning's milk sets twenty-four hours, and the evening's milk twelve hours. Under this arrangement twenty-six pounds of milk, from the "common cows of the country," yield one pound of butter, which is considered a good average for the forepart of August. The cream is allowed to turn slightly acid before going to the churn; its temperature for churning is about 56 deg. to 58 deg. Fahr. When it goes into the churn one ounce of Hansen's butter color is added to every 168 quarts of cream. The churn is the common box churn, rectangular in shape, and revolving on its smallest diameter. It has no inside fixtures, nothing but a small, smooth surface on the four sides and ends. This style of churn is popular in the West among the makers of fancy butter in Iowa, Illinois and Wisconsin, as it brings the butter in a nice granular shape, in the best condition for washing and freeing it from buttermilk. It is a very plain, simple affair, and no churn among the thousand patent devices for churning can make better butter. It may be remarked here that the elaborate and complicated churns of the past are now discarded by the advanced butter-maker. He now prefers the simplest kind of arrangement, like that of the box churn, with no inside paddles or fixtures to beat the cream and injure the grain of

the butter. Just before the butter begins to granulate ice is broken up and added to the mass in the churn, and when it has fairly come in granules like shot, the buttermilk is drawn, then water at a temperature of 50 deg. Fahr. is thrown into the churn, which is revolved several times, when the water is drawn off. This process is repeated two or three times, until the water comes off clear, and the buttermilk is thus expelled. The butter is now taken out and weighed in twelve and a half pound lumps. These lumps go immediately to the butter-worker, are flattened out, and each lump is sprinkled with ten ounces of the best fine English salt. The makers of fancy butter being very particular as to the quality and character of salt used. It must be of the best and from reliable and well-known brands.—*American Dairyman.*

Weaning Calves.

A calf, if left to itself and its mother, would never be weaned. If left in that way nobody would care whether it is weaned or not. But it is not left that way. Breeding calves is, as it ought to be, kept under control of persons interested in it, and that makes it important, even necessary, that calves should be weaned earlier or later as best suits the convenience or needs of the owner.

Weaning calves ought to be done with as little change of natural conditions as possible, so that the health of the animal may not be endangered. The mother's milk should be used for some days just as it comes from the teats, if the calf is to be weaned young, and that is the better way in most cases. The calf should be taught to drink, and that can be done easily and in a short time if the attendant is patient, good natured and persevering. Back the calf into a corner or into some narrow place where it cannot turn around, then get astride it, give it two of your fingers to suck; hold its neck between your thighs; raise its head in manner as if it were sucking from its mother; separate the fingers a little, pour milk into the opening between them while the calf sucks. After this pouring operation has been performed a few times, the calf's mouth may be lowered into the milk pail, keeping the fingers in place, and slightly apart, and it will soon learn to suck in that way. When it has learned this second lesson, the fingers may be gradually withdrawn from the mouth, and the drinking, though a little awkward at first, will soon become easy.

As above suggested, the mother's milk is best for a young calf; for, as suggested by an exchange, "the first milk, in its gradually changing conditions, is the most necessary food the young creature can have, and in its change during the first three or four days, it brings the digestive organs of the calf to a condition where it will be able to take stronger food." Scours, and other troublesome diseases, follow wrong practices in this respect. Death frequently ends the persistent efforts of some persons to force calves into unnatural habits.

The *American Agriculturist* says one objection to feeding a calf is that it will drink its ration so rapidly that there is no opportunity for mixing with it the saliva, and imperfect digestion follows. A calf-feeder (there is no better than Small's) compels the calf to slowly suck its food, and causes the same frothing at the mouth that is always noticed when a calf obtains his dinner in the natural way. This is simply the evidence of the action of the salivary glands in supplying what nature demands to be thoroughly mixed with all foods, whether solid or liquid, for their

easy and full assimilation. Where milk is scarce or expensive, calves are sometimes reared on hay tea and grain, but aside from the trouble of making this drink, it has not the qualities of milk and is not so readily assimilated.

Dairy Notes.

The size of the milk vessel is by no means an indication of the quantity of milk it will contain.

English dairymen are now almost unanimous in the opinion that ground oats are the best milk-producing grain ration known.

We have no statistics of results from apples fed to cows when making butter, but consider them quite as valuable for butter as for cheese production.

Dairy butter will always sell higher than that made at the creameries, provided it be of first quality. Creamery butter is usually more uniform, but as dairy butter is made by thousands of different persons, it is not easy to secure large quantities of the same grade.

Apples are just as good for cows as for pigs, but they cannot, like pigs, be permitted to help themselves *ad libitum*. They must be dealt out to them according to the judgment of the feeder. A half bushel per cow daily, in two feeds, would be used with advantage.

A correspondent says: "I sent a long distance to purchase an Alderney that had an udder so large as to interfere with her walking. She was by no means a deep milker, and her udder was mainly meat. Whereas, a small vessel, with tiny teats, will oftentimes go on milking until the pail runs over."

Feed early and late, and a few times during the day, keeping the cow mostly employed with slight feeds between the two principal rations, the night serving for rest. Begin the winter feed early, in order to avoid exposure to inclement weather, and to realize a late fall and early winter harvest of butter, for which a superior price is obtained.

The *New England Farmer* says: "About the most uncleanly thing we know of for a farmer to do is, after coming in from work at night and unharnessing his horses, to pick up a milk pail and go to milking before washing his hands. Too many men are guilty of this trick, and it is hard to see how they can drink with a relish milk that has washed off the horse dirt, harness grease, and sweat of their own hands."

There are two methods of milking—the one may be called stripping or catching the teat between the finger and thumb and stripping down the whole length of the teat. This plan is not to be recommended. The better way is to grasp the teats, one in each hand, diagonally across the bag and press on the milk—the second, third and fourth fingers doing the main work, while the upper portion of the hand and first finger prevents the milk from returning to the udder; the milk should be drawn rapidly, and the udder completely emptied of its contents.

A correspondent of the *National Live Stock Journal* says: "I have lately bought several cows that had 'lost quarters.' An intelligent cowman that I have one day called my attention to the fact that he had succeeded in recovering the flow of these choked teats. The mode he adopted was this: Just as the milk was beginning to spring in the udder, before calving, he kept gently drawing at the disordered teat, until gradually he got out a few pea-shaped bits of hard coagulation; then a sort of pith, like the inside of a rush followed, softer continually, until at last the fluid came. Now we know it, does it not stand to reason that it should be so?"

The aim in the treatment of milch cows in the winter should be to continue the conditions of summer as nearly as possible. This requires comfortable quarters, not only against the inclemency of the weather, but in all else that relates to the well-being of the cows—such as warm stables, but not too warm; ventilation, to control temperature and admit fresh air, but not directly

on the animals; floor well littered with fine vegetable material, to absorb fluids and odors, aided by plaster, thus securing a clean, dry, soft bed to lie and stand on; carding; plenty of good water, conveniently obtained; occasional out-door airing and exercise, without rash exposure to cold and wet, getting as much sunlight as possible and avoiding great changes of temperature; kind treatment, making the cow feel at home.

Road-making was reduced to a science by McAdam, during the latter part of the last century, and from him comes the word "macadamized" as applied to the road-making by using stones broken into irregular sizes.

"Men must work and women weep,
So runs the world away!"

But they need not weep so much if they use Dr. Pierce's "Favorite Prescription," which cures all the painful maladies peculiar to women. Sold by druggists.

Bermuda grass grows wherever it has been given a start in Texas, and is fast getting a hold on the good opinion of stock farmers. It has been largely confined to lawn purposes, but now its use as a pasture grass is commending it to all who have stock to graze.

"Blood Will Tell."

Yes, the old adage is right, but if the liver is disordered and the blood becomes thereby corrupted, the bad "blood will tell" in diseases of the skin and throat, in tumors and ulcers, and in tubercles in the lungs (first stages of consumption) even although the subject be descended in a straight line from Richard Cœur de Lion, or the noblest Roman of them all. For setting the liver in order no other medicine in the world equals Dr. Pierce's "Golden Medical Discovery." Try it, and your "blood will tell" the story of its wonderful efficacy.

Galton has pointed out some very curious facts concerning the children of professional men. He found, from a study of the heredity of the members of some of the largest scientific societies of London, that the legal profession presented the most eminent men and the fewest idiots. The medical profession came next, and lastly clergymen, who produced the smallest number of eminent men and the largest number of idiots and feeble-minded. The lawyers gave origin to six times as many eminent men as the clergy. The clergy gave origin to six times as many idiots and feeble-minded as the lawyers.

The annual catalogue of the Lawrence Business College and Academy of English and Classics is before us. It is a neat pamphlet of about sixty pages, neatly printed and illustrated with several elegant engravings. The Board of Directors is composed of prominent men well known throughout the State and West, among whom we find the names of ex-Chancellor James Marvin, D. D., L. L. D., Judge S. O. Thacher, ex-Gov. Chas. Robinson, etc. Eminent professors are numbered among the faculty, and many new and important features have been added to this justly popular school. The business, academic, music and art departments are sustained by first-class talent and rank second to none in the State. All who contemplate attending some business college, academy, music or art school should address Prof. E. L. McIlhavy, Lawrence, Kas., for a copy of the College catalogue and review.

Experiments show that when cut hay and ground grain are fed to stock the cost of feeding is lessened sufficiently to pay for the labor necessary to prepare the food and grind the grain, and that the increased growth of the stock is noticeable when compared with those fed upon whole grain and uncut hay.

Pick out your breeders, says the *Farm Journal*, the pigs with long bodies, broad backs and deep, round hams. Select a breed which has hair on it. A good coat of hair counts on a hog as well as any animal. It is a protection in summer and in winter.

Take your wife and family to the beautiful Bismarck Grove, Sept. 5-10.

UNRIVALLED ATTRACTIONS at Bismarck Grove, Sept. 5-10.

Correspondence.

From Pawnee County.

Kansas Farmer:

I am sorry to say that I have nothing very flattering to write or very encouraging to say. The fact is, our entire crop has been the most complete failure that I have ever known except one in California in 1862 and '63. The people all lived through that who did not die with disease, and I think we will live through this. I expect to get a drubbing from some of our real estate swindlers for writing what I know to be a fact, and probably it is not good policy to tell the truth at all times for fear it would frighten some Eastern man out of coming here. But he would be too great a fool to be of any use to us if he could not see for himself when he came. Where are the grain stacks or straw and hay stacks that used to line our farms and prairies? The fields of corn, broomcorn and cane that lined the roads on every side? Is it not better to admit the fact than lead men to believe that the country could or would not produce? There never was a better prospect for all crops in any State or county up till the first or middle of July, say the first of July. The tremendous soaking rains in June did us the first damage to the potato crop; then the dry July and August, first part, and the bugs, with the hot, drying south winds. Our corn made an excellent growth up to the middle of July, but could not ear, and the late rains have only benefited a few late crops. Grass was never better for grazing, because the growth was short, and very little hay will be put up. If rain destroys the bugs I think they are gone. There will be plenty of feed for the stock we have if farmers will cut up and save their fodder; but there is an immense sight going to waste that I think will be needed before spring.

My early rye is up and doing finely. I shall sow my corn ground to rye, as I think it pays better than wheat. It is a sure crop, as a rule. All the late broomcorn is doing finely. Hogs have taken a step down, owing to the failure of the corn crop, which was the greatest calamity that Kansas has known for many years. Still it will not do to stop; we must try again and keep on trying. Other States are as bad or even worse than we are. The corners on produce makes it still harder to bear. What little we have to sell is kept very low and a rise on most everything we have to buy. Rich companies can build railroads and the fool farmers will vote bonds because they are asked to do so to boom the towns for speculators to make money out of, and then borrow money at 2 per cent. per month to pay their taxes, and still there is no reduction in freights. This may be all right and I am away behind the times, but I do not believe it. I think Professor Hill, in the FARMER of August 18, is further behind than I am when he advocates the preservation of swamps and frog ponds for health. He must be an old fogey in good earnest. Such farmers are like the city lady who inquired which of the cows gave the butter. I think the *Western Rural* takes rather a clearer and more sensible view of the matter. The idea of irrigating from ponds with pipes, etc., would be rather expensive when wheat sells at 50 to 65 cents and corn at 25 cents or less. They would make better wallowing places for hogs and prevent more hog diseases than any other benefit we would derive from them. It is about as much as the majority of farmers can do to get sufficient water above ground to water their stock, let alone lakes for watering the land. I think a better plan is to plow or list in winter, do the work good and deep, and work it back in the spring, and then keep on working and trust to luck and Providence for the crop. When we get ahead and our land is worth one or two hundred dollars an acre, then we may build lakes or ponds on every hill-top and squirt the water up by steam or wind power. Whether trees or forests have any influence or not they are good to have and pay well for raising, if they do not draw rain. I do not think mine brought me a pint of rain-water this season, but I do think they saved my hogs, as I have not had a sick one since I commenced raising. Besides, I have had a good deal of fire wood from them. Plant trees and turn your hogs among them; it will benefit both hogs and trees. Sow a little grain among them and plow it in and the

hogs will take better care of the trees than you can.

I hear of a good many hogs dying in and about town, and from what I have seen I wonder that more do not die. Small pens on the south side of barns or sheds and little or no cover and less water even to drink. Everything else is healthy and so would be the hogs if they had the same chance.

Set out plenty of trees. Plant cane, rice corn, and sow rye; fence good large lots; raise plenty of good blooded hogs, and give them plenty of pure cool water. Kill and bacon your own pork and a large supply to sell. Save freight and commission; keep the market at home. If the chinch bugs come they may leave enough to fatten the hogs, and they will leave again as they have done. Sheep are the next best thing, when the speculators and the commission men get starved out, as they have starved out the sheep interest.

What steps can be taken to assist the present settlers against the land speculators, or in other words, what manner of taxation can be adopted to force the vacant land into market? About one-half or more of all the lands are held by non-residents, and the small tax on them is but a trifling benefit to the community, while the few settlers bear the burthen and develop the country for their benefit. Why not tax all land alike, the unimproved the same as the improved? Double the tax on unimproved lands and one-half less valuation on personal property. Make large land-holders and speculators assist in the development of the country. Let us hear from others on the subject.

W. J. C.

Larned, Pawnee Co., Kas.

The Missouri State Fair.

Special Correspondence Kansas Farmer:

The eighth annual exhibition of the Missouri State Fair association, held at Sedalia, 15-20 inclusive, was the most successful meeting ever held in central Missouri. The weather was exceedingly fine and attendance good, leaving the association in better shape financially than at any previous time. Every department was replete with choice things. Messrs. W. A. Powell and Powell Bros., of Lee's Summit, Mo., exhibited one of the finest show herds of Short-horns to be found in the West, and upon same secured five first premiums and sweepstakes for best bull any age or breed; ditto cow, and sweepstakes for best herd of one bull and four cows, all of one breed and owned by exhibitor. The Short-horns were more numerous than any other class, and besides the above exhibitors there were Frank Craycroft, of Sedalia, Ragsdale & Son, of Paris, Mo., and Franklin Bros., of Great Bend, Kas. In the Jerseys was an exhibit by A. W. Wuzenberg, in which was his Duke of Magnolia 2d 4865, that captured first prize at the Kansas City fair last fall in class; also his cow, Duke's Anarena 39091 A. J. C. C. The swine display was indeed excellent, and among the exhibitors were James Houk, of Hartwell, Mo., J. M. & F. A. Scott, of Huntsville, Mo., Laney & Pfaff, of Green Ridge, Mo., and J. A. Hughes & Son. In the sheep department were exhibits from J. M. & F. A. Scott, N. H. Gentry, J. W. Cole, Mrs. H. McCulloch and D. W. McQuitty, consisting of Merinos, Cotswolds, Shropshires and South-downs. On middle-wool sheep D. W. McQuitty got three first premiums and one special prize. Mrs. Harry McCulloch got on fine-wool four first and three second premiums and sweepstakes on best buck and five ewes. The display of poultry was exceptionally large and very choice. Mrs. Harry McCulloch captured in this department twenty-one first prizes and special award for best exhibition of poultry. Mrs. Dan McQuitty also showed many fine birds, and secured twelve first premiums and special for best display of poultry by resident of Pettis county.

HORACE.

The Holden Fair.

Special Correspondence Kansas Farmer:

Propitious weather and a good attendance has made the fifth annual fair of the Johnson County (Mo.) Agricultural Society a complete success. The city of Holden is blessed by being located in one of the finest agricultural and stock-producing counties of the great and growing State of Missouri, and her productions were displayed to good advantage at the fair held at Holden. This section of the State is provided with an abundant crop of choice corn, well-developed

and in fine condition; in fact, all of the parts traversed by me within the past month contains equally as good a showing as manifested in this county. The different classes at this fair were very well filled, especially so in the Short-horn cattle display. In this showing was the herd of W. A. Powell and Powell Bros., Lee's Summit, Mo., who succeeded in getting five first and one second premiums, beside the herd prize and sweepstakes on best herd of any age or breed. Col. H. D. Smithson, of Holden, had a fine exhibit of Short-horns, too, and on same got first on bull 3 years and over and second on best herd. This gentleman is building up a good herd, and will soon represent the same by a neat advertisement.

HORACE.

Concordia Fair.

Special Correspondence Kansas Farmer:

The exhibition was in many of the departments very creditable. The corn from the valley of the Republican and its tributaries was a fine display. It was the best of the land, of course, but it was as good as is ever seen, and that should suffice in a year of drouth. The fruit and vegetable display was small but sufficiently large and varied to illustrate the possibilities of the region. The fine arts, the mercantile and the machinery display was almost a failure, indicating that the ladies and the business men of Cloud county had not, from some cause, been enlisted among the supporters of the association. The live stock exhibition was not large, but many fine animals of the various kinds and breeds were in the ring. The center of the attraction was the speed ring. A glance at the premium list explained this, as a very large proportion of the premiums were given to the fleet steppers. The attendance was good and would have been very much larger but for the threatening weather. The Indian maiden, composed entirely of farm products and adorned with the jewelry and warlike accoutrements of the savage, was the object of much comment. It was the work of Mr. Sylvester Clemens.

The KANSAS FARMER representative acknowledges courteous treatment, and carried away a list of Cloud county farmers who will be more prosperous than ever for its help.

AGATE.

Gossip About Stock.

Messrs. J. M. & F. A. Scott, Huntsville, Mo.—new advertisers, report that they captured eight first prizes with their Berkshire swine and South-down sheep at Moberly, Mo., last week.

M. E. Moore, of Cameron, Mo., comes before the public with an advertisement of his celebrated Holstein-Friesian cattle. Look it up and write him. He will be at Topeka during the State fair, and it will pay you to examine his herd.

E. S. Shockey, Secretary of the Early Dawn Hereford Herd at Maple Hill, Kas., writes: "As an advertisement in Kansas, we are going to offer farmers about fifteen head of choice young Hereford bulls at lower prices than can be given elsewhere."

Prof. R. Riggs, horse trainer and veterinary surgeon, formerly of Wichita, has removed to his stock farm at Norwich, Kingman county, Kas., from which place he will attend to all orders for his services. He states that crops are fair and that that portion of the State will stand more drouth than any other part of Kansas which he has visited.

The breeders of Marshall county, Kansas, have organized a corporation under the laws of the State for the purpose of introducing and encouraging the more general use of thoroughbred sires, under the name of "The Thorough and Standard-Bred Stock Association of Marshall County, Kansas." The directors are Thompson Smith, Oketo; Wm. Paul, Blue Rapids; Wm. A. Morgan, Irving; E. L. Wilson and F. F. Thompson, Marysville.

F. W. Truesdell, Lyons, Kas., one of our regular advertisers, has been called to Des Moines to act as expert swine judge at the Iowa State Fair this week, after which time he will visit the best Poland-China establishments in the East. He will then fill orders as usual. Mr. T. says: "We have had plenty of rain for the past two weeks; it has been raining now continuously for thirty-six hours and still raining. The late corn will be a fair crop, but the drouth of July hurt the early-planted corn. But put Rice county

down for at least one-half a corn crop through the entire county; some fields will make fifty bushels per acre."

C. H. Holmes, Secretary of the Duroc-Jersey Swine Breeders' Association, Grinnell, Iowa, criticizes the State Fair Association for not giving the Reds a place in the premium list. The entries for Volume 2 closed with male number 1400, females 4000, and over 300 entries for Vol. 3. Mr. Holmes also sends a list of additions to his Jersey herd, calves dropped this season rich in Stoke Pogis and St. Lambert blood. Kansas breeders should send for his catalogue.

Mr. Craycroft, breeder of Short-horns, Sedalia, Mo., comes before the KANSAS FARMER readers with a new advertisement. Through his kindness the writer was permitted to visit his herd recently and personally inspect the cattle comprising same. It is composed of such strains as Marys, Kirklevingtons, Bates, Roses of Sharon, Josephines and Young Phyllis. Duke of Rothwald heads the herd. He made an exhibit at the recent State fair and captured several prizes.

Elsewhere appears the new advertisement of H. V. Pugsley, breeder of Holstein-Friesian cattle, Plattsburg, Mo. This herd contains many noted individuals, and is headed by Mink 3d's Mercedes Prince (2361 H. F. H. B.), a very choice animal, having won first prize at Minneapolis fair over twenty-nine competitors, and first in ring of twelve at Des Moines in 1886. Among his cows are Antrim 2d (246), Ambra (587), Jellum (5500), Katy K. (5466), and others equally as choice. These have a milk record respectively of 86, 89, 75 and 75½ pounds of milk per day.

A RARE OPPORTUNITY FOR PROFIT.

The Tortilita Mines.

(From the Boston Globe.)

The soundest, greatest and best mining enterprise in America to-day, whose shares are on the market, is the Tortilita. The property comprises twelve developed mines in profitable operation, located in Pinal county, Arizona, on the mother lode. Over \$150,000 in bullion has already been taken out of the three mines now being worked, and the permanency of the mines has been demonstrated. The capital stock of the company is \$1,000,000, based on property worth \$15,000,000, shares \$2 each, at which price they can be purchased by subscription through any banker or broker, or by letter, telegraph or in person from the president of the company, Mr. Joseph H. Reall, President American Agricultural association, 57 Broadway, New York. The stock is being largely taken for private investment by bankers, merchants and farmers, and an early dividend is promised. Subscription may be made for from one share to 5,000. The price is likely to advance materially. The Tortilita is second only to the famous Comstock in its output and promise.

Agent—Is the lady of the house in? Servant Maid—There are two of us. Which do you want to see?

Omaha rejoices and is glad. The city water is now thin enough to run down hill.—*San Francisco Alta.*

The Emporia Business College gives thorough instruction in book-keeping, penmanship, short-hand, type-writing, English studies, telegraphy, German and music. Competent teachers employed.

The Trumbull Picture Frame Factory is complimented in securing a fine marine painting, executed by Wesley Webber. Price \$500. For a rich treat see this picture. They also have a large variety of mouldings in natural wood, bronze and gilt; also a full line of etchings, steel engravings, and student's easels and brackets at reasonable prices. 702 Ks. Ave., Topeka, Kas.

Our readers' attention is called to the advertisement of A. C. Griesa & Bro., of the Mt. Hope Nurseries, Lawrence, Kas. We have had an acquaintance of some years with these gentlemen. Some of the best and oldest orchards in Douglas county came from their nurseries. Their large and constantly increasing trade is the best index of their reliability and standing as business men, and those who contemplate planting new orchards and wish reliable stock and fair treatment should send for their catalogue.

CREAM OF A WEEK'S NEWS.

The output of the Minneapolis flour mills last week was 147,000 barrels.

Bishop Harris, of the Methodist church, died in New York city the 2d inst.

Receipts of the national treasury amount to more than a million dollars a day.

There is to be a meeting of the National Prohibition committee at Chicago March 30.

Heavy rains are reported in parts of Texas, doing damage, overflowing lands, washing out bridges, etc.

A 19-year old bank clerk at Saco, Maine, got off with bonds and money amounting to more than \$100,000.

Officers of the custom house at Havana, Cuba, are charged with malfeasance, embezzling moneys, etc.

It is proposed to have a reunion of the survivors of the old Walker Nicaraguan filibustering expedition of 1855.

A band of regulators, calling themselves "whitecaps," are causing a great deal of trouble in Southern Indiana.

Suits for damages amounting to about \$150,000 have been commenced by sufferers from the Chatsworth railroad disaster.

The Baltimore & Ohio railroad is reported sold absolutely to a syndicate composed of London and New York capitalists.

Thursday morning at 9 o'clock, Sept. 1, a heavy earthquake shock was felt at Tucson, Ari., lasting seven seconds. The oscillations were northwest to southeast.

An unsuccessful attempt to wreck a passenger train was made near Lebanon, Ohio. The obstructions, rails, ties, etc., were discovered in time to prevent serious trouble.

The Ohio Oil company has been organized at Lima, Ohio. It intends to market its own product and cut loose from the Oil company in that regard. The capital is \$500,000.

It is announced that T. V. Powderly, general master workman of the Knights of Labor, will proceed to Ireland in October, to take an active part in the national movement.

Evicting Irish tenants has again begun. One case is reported, that of a widow who, with some friends, were well armed with paving stones and boiling water, and both were showered upon the bailiffs with such telling effect that they were repulsed four times.

While some men were threshing on the farm of Lyman Curtis, five miles east of Detroit, Mich., the grain stack caught fire, and while the men were fighting the fire the steam boiler exploded, killing one man and injuring several persons, among whom were two young ladies.

The officers of the Hudson Building and Loan association, of Wisconsin, have just discovered shortage of nearly \$10,000 in the accounts of the late T. H. Harvey, who was secretary of the association. The stockholders are for the most part working people, clerks and teachers.

A couple of drunken rowdies, near Lancaster, Ky., fired upon a quiet, sober citizen who happened to be armed and to know how to use his weapon. One of the villains was killed immediately, and the other one nearly so. The quiet man then went and delivered himself to the officers of the law.

A petition has been filed in the general land office by citizens of White Pine county, Nevada, accompanied by resolutions passed at a public meeting, asking the intervention of the land department to protect settlers against the unlawful appropriation of the public domain by foreign sheep raisers.

The total coinage executed at the mints of the United States during the month of August was 9,282,000 pieces of the value of \$3,303,300. Of this amount \$60,000 were half eagles, \$2,970,000 standard silver dollars \$175,000 in dimes, and \$78,300 in minor coin. The total gold coinage was \$60,000 and the total silver \$3,185,000.

At Petersburg, Va., last week, a negro was fined \$50 and sent to jail for striking a white woman. On Friday, Dr. Hinton, a prominent physician, struck a colored girl. He was arrested and his case continued. The negroes demand that the doctor receive the same punishment as that inflicted on the negro. Haven't heard the rest.

The attorneys of the Cook county (Chicago) hoodlums claim to have made a startling discovery, a vital error in the recent trial totally invalidating the finding. One of the lawyers said that it was nothing less than that the Illinois conspiracy statute was illegal. This is the law under which the anarchists as well as the hoodlums were convicted.

Forest fires are doing damage in Michigan, in the region of Koehler. The prevailing drought is the worst known for years. Not a drop of rain has fallen since July 4, and the ground is terribly parched. A large meadow owned by H. L. Koehler caught fire about six

weeks ago and is still burning. The soil is rich, black muck, and holes two or three feet deep have been burned into it and all efforts to put the fire out have been fruitless. All vegetation is scorched and late crops are a total failure.

Near Logansport, Ind., a man was blowing up stumps with dynamite, or thought he was. He had in his possession about fifty cartridges, and by some unknown means they exploded, and the man was blown to pieces. Parts of his body were found over a hundred yards distant. His breastbone was suspended in a tree about fifty feet high, while his tongue was found near where the explosion occurred.

It is reported that black diphtheria is raging at Lockport, Pa., a small town of 200 inhabitants, situated on the Pennsylvania railroad, about sixty miles from Pittsburg. Nearly half of the population are reported down with the disease and thirteen deaths have occurred within the past few days. Recently an old viaduct which formed a part of the state canal, was destroyed by dynamite at that point, leaving stagnant pools of water, which it is believed caused the epidemic. The victims are seized with black vomit and usually die in two or three days.

The Iowa Greenback convention at Des Moines, August 1, closed its proceedings by an address to the farmers and laboring people of Iowa, in which they charge the republicans of Iowa with failing to pass a number of bills at the last session of the legislature, and with having annually violated their word. The address recommends the farmers and laboring men to call immediately a state convention and nominate state officers, and pledges support to the ticket if the names suit the greenback state committee. The address indorses the union labor platform adopted in February.

The Southwestern Business College, of Wichita,

again appears before you, and presents to you in a brief manner its facilities for imparting a thorough business education. After neting carefully the facts herein set forth—every one of which will bear a most thorough investigation—it begs to receive unprejudiced judgment and desires to be placed in the rank which it merits. Self-praise is odious, and the Southwestern differs greatly from other similar institutions, because it does not proclaim its own superiority. During the past month there have been observed about twenty business colleges each one of which asserts to be the best in the country. At least nineteen out of the twenty must be prevaricating; and if they misrepresent in one particular they are very likely to do so in another. The Southwestern does claim, however, a larger attendance and a more rapid increase of students than any other business college in the West, as shown by the statement at the close of this article.

During the past three months the Southwestern has made the following changes: Additional well-lighted and well-ventilated rooms, a revision of the course of study and a remodeling of the banking and actual business departments. These changes create envy among sister institutions, and with its new and improved methods it climbs above reproach of the business community, by which all business college graduates will be more or less, sooner or later, rated and remunerated.

On account of many so-called business colleges which teach superficial courses, business colleges in general have been censured by the business community because of their impracticable text-book principles. Yet these institutions aver that they are conducting actual business departments. So they may; but their actual business practice is based upon previously acquired text-book principles, and these are the principles which embarrass you when you attempt to conduct a set of books for your employer. The first and fundamental principles must be thorough and practical, or else, when the large invoices with the various per cent. off, together with orders, bills of exchange and other bills of every description come pouring in upon you, you will be engulfed by the flood, and no actual business practice based upon text-book principles will be able to carry you out.

The Southwestern is the only business college west of St. Louis that does not use text books in its course of instruction. Students begin with practical work immediately upon entering the course, and thus are enabled to comprehend more quickly and with much less difficulty. All text books on book-keeping are designed for self-instruction and

adopted by business colleges to lessen the labor of teachers, while the student's progress is not much more rapid than if he were pursuing the course at home according to the rules laid down in the text book. This is the reason why so many young men and women, after completing a course at a business college, find themselves completely outdone when they attempt to conduct a set of books in actual business. The work performed by the student at the Southwestern corresponds exactly with that performed by the book-keeper behind the desk of the largest retail, wholesale, banking, commission or manufacturing establishment. We guarantee that when a student completes a course at the Southwestern he is able to successfully conduct any set of books, no matter how complicated they may be.

The Southwestern extends a most hearty invitation to all interested in a business education, and entreats them to examine the course of study. In the future, as in the past, the most courteous attention will be paid to ladies and gentlemen who honor us with frequent calls and thus stimulate efforts. Those who contemplate a thorough business course are earnestly invited to visit our various departments, and if they have found or can find a better located, better equipped, more thorough and more prosperous business college anywhere, their railroad fare will be paid from Wichita to that institution, as well as the tuition for a full commercial course.

The Southwestern opened its quarters to students on Monday morning, June 8, 1885. The following is the number enrolled during the first scholastic year, or from June 8, 1885, to June 1, 1886:

Commercial department.....	187
Penmanship.....	73
Total.....	260
Number of students counted twice.....	30

Total number in attendance during the year.....230

The following is the number enrolled during the second scholastic year, or from June 1, 1886, to June 1, 1887:

Commercial department.....	328
Penmanship.....	148
Short-hand.....	68
Type-writing.....	21
Total.....	558
Number of students counted twice on account of being enrolled in two departments.....	108

Total number in attendance during the year.....452

Increase per cent. over first year 96%.

Should the same increase be experienced this year, the total number would be 1,093; number counted twice, 210; total number in attendance during the year, 883.

Write for circular.

Visitor—How much your hair is like your mother's! Little Girl—Oh, no it isn't! Mamma's comes off and mine don't!

The many remarkable cures Hood's Sarsaparilla accomplishes are sufficient proof that it does possess peculiar curative powers.

A man recently astonished his wife by coming home with two black eyes. "What have you been doing?" said she. "Getting a pair of socks," he replied.

If you have chapped hands or rough skin, use Stewart's Healing Cream. Only 15 cents a bottle. Gentlemen who suffer from a tender face after shaving are delighted with it. We only ask a trial. Stewart Healing Powder Co., St. Louis.

Many weeds may be used profitably as food for hogs. The narrow leaved plantain possesses nearly the same nutritive value as timothy, while lamb's quarter and pig weed are both highly relished by swine. It is best not to allow any weeds to grow; yet they should be utilized as much as possible in case they have made growth.

The Lane & Bodley Co., Cincinnati, Ohio, established 1850, are the oldest and most extensive manufacturers of engines and saw mills in this country. The excellent quality of their work, fair dealing and a liberal use of printers' ink has given their goods a reputation and sale throughout the entire civilized world. We take pleasure in referring our readers to their announcement in another column of this issue.

A visit to Bismarck Grove Sept. 5-10, will not only be a pleasant trip, but a delightful and profitable one.

Book Notices.

PANSY.—Our *Pansy* has come with its forty pages of boy and girl stories and pictures. We wish we could lend it to all the young people we know. But, what is better, send to D. Lothrop Company, Boston, for it. The subscription price is \$1 a year; but they will send you one number for five cents—it may be a back number. Every body takes *Pansy*.

CATTLE AND DAIRYING.—This a volume of 855 pages, including the index, being a compilation of Consular reports from different foreign countries on the general subject of cattle and dairying. Mr. Secretary Bayard, in his letter presenting the reports, says they contain a "mass of information such as has never before been compiled and published in any country, and must prove of great value to the cattlemen and dairy farmers of the United States." The only way to obtain a copy is through a member of congress or from the Department of State, Washington.

BEE-KEEPING.—The "A B C of Bee-Keeping," by A. I. Root, editor of *Gleanings in Bee Culture*, Medina, Ohio. This is a revised and enlarged edition, profusely illustrated. It is made up in peculiar form, the various subjects and divisions of subjects arranged in alphabetical order, so that when the reader wishes to "read up" on any particular matter, he does not have to read the whole book, but merely refers to the particular thing desired, under its appropriate heading and he reads that. To use the language of the title page, it is "a cyclopaedia of everything pertaining to the care of the honey bee—bees, honey, hives, implements, honey plants, etc., facts gleaned from the experience of thousands of bee keepers all over our land." Mr. Root is a competent person to write on this subject. He is a practical bee keeper of many years experience.

ARTISTIC HORSE-SHOEING.—A practical and scientific treatise, giving methods of shoeing, with special directions for shaping shoes to cure different diseases of the foot, and for the correction of faulty action in trotters, pacers, etc. Prof. Geo. E. Rich. Illustrated. Price \$1. M. T. Richardson, publisher, 57 Rose street, New York City. This is the title of a new work on horse-shoeing which has just been published. It is, by all odds, one of the most important contributions to the subject that has ever come to our notice. There are numerous illustrations of shoes designed to cure different diseases of the feet, and to correct improper action in trotters, pacers, etc. Prof. Rich makes in all fifty-three different shaped shoes for different purposes, and the most important of these shoes are illustrated in this book. Prof. Rich is a practical horse-shoer himself, having worked at the business all his life, and the directions which he gives, therefore, for shoeing horses and making shoes, are thoroughly reliable in all respects.

As man and wife are one, the husband, when seated with his wife, must be beside himself.

Don't forget the date of the only great exposition and fair in Kansas this year—Sept. 5-10, at Bismarck Grove.

A bright story in grammar is told of a little school girl. "Quarrel," she parsed, "is plural." "Why?" "Because—why it takes two to make one."

Short-horn Bulls for Sale.
A number of choice young thoroughbred Short-horn bulls for sale at low prices and on satisfactory terms to purchasers. Address, at once, J. B. McARKE, Topeka, Kas.

One grape vine of the Mission variety in Santa Barbara county, Cal., two years ago produced four tons of grapes. It covers over 100 feet square, and the trunk is five feet ten inches in circumference at the butt. It is said to be the largest grape vine in the world.

For Sale.
By a grandson of Stoke Pogis 3d 2238, out of highly bred imported cows, an in-bred Coomassie bull. Also some choice cows with good butter records. Bulls ready for service and will be sold very low, if taken at once. Address S. B. Bohn, Newton, Kas.

The Home Circle.

The Midnight Hour.

BY PHOEBE PARMALEE.

The hands of the clock point the midnight hour;
The sound rings out clear in the silent room;
The last stroke is dying away, and away,
Only echoes of sound are left in the gloom.
Yet once I remember, and soft died the sound,
The clock had just told of a world all asleep—
When gently and low as the echo of song,
Came love's serenade, in tones rich and deep.
They swelled into music that made the heart ache;
They triumphed above the silence of night;
As gently again they died into space,
The singer and song had taken their flight.
And once when the city had rested at last
From toil and confusion in the quiet of night,
And footsteps of passers no more could be heard,
A harsh note of warning burst forth as in fright.
Ah! then was a clamor and fierce cries of fear,
A hurrying onward of multitudes where
Destroying demons of flame held their sway,
And midnight was changed to a dread lurid glare.
Mysterious and strange was the midnight hour
When the watchers passed softly to and fro,
When at last through the silence a tiny voice
Told a life begun, a new joy here below.
Bearing hope for the future to hearts full of love
The soft little voice of the new child came.
Such visions there were in that midnight hour—
A nobly grown man, such wisdom, such fame!
A gentle and solemn passing to rest;
Life's day was waiting another short space
To vanish with midnight, and so end the day
With peace and repose, after life's toilsome race.
Going out into silence unending? Oh, no!
Night ends with the birth of another glad day.
And so the last hour of life here will be
But the moment that opens the gates of
"alway."

Baby's Grave.

In a quiet English churchyard
Baby sleeps,
While the wind from wood and meadow
Softly creeps
O'er the little mound we made him;
God knows best
With what aching hearts we laid him
Down to rest!
Many summers, many winters
He has slept,
While we lived and loved and suffered,
Smiled and wept;
All the fears we cannot number,
All the woe;
Baby, in his tranquil slumber,
Does not know. —The Quiver.

Woman's Specialty.

This brings us to an important practical subject which we may as well pause to consider. We all want a solution of the vexed problem of woman's industrial status. She wants to know how best to make her living. In the great scheme of mutual helpfulness which constitutes the subject-matter of economic science, she wants her best possible place, as we all want ours. And we, in turn, aside from sympathy for her, are interested in having such industrial capacities as she possesses, and is in a position to exercise, made the most of. I have stated as a general and vital economic truth that "the better living others make the more they help us to make ours." And yet half the population belongs to a sex which feels that it is denied, either by prejudice or some other cause, or both, the privilege of making the best living of which it is capable. If this be true, the first step toward reform is to find out why it is true. If we incidentally discover, in taking this first step, that reform is difficult or even impossible, none the less must we take it; for it will save us the waste of toilsome, futile steps in wrong directions.
A painstaking inquiry into the relations subsisting between specialization, heredity and special aptitudes can not fail to furnish us a clue to some part of the trouble. We often speak of the various differences, mental and otherwise, between man and woman. Among them all there is none more striking

than this, that man's work has been highly specialized, while woman's has not. True, several specialties have been evolved out of her original specialty—as weaving, spinning, baking, etc. But these new specialties have mostly been given to men, not women. To all intents and purposes woman has now, as always, one specialty—house-keeping.

Hence the intense heredity of it. It is bred in the bone. The carpenter's son may fail to develop a special aptitude for working in wood; but the son of a long line of carpenters, whose male ancestors on his mother's side were also carpenters, would be sure to. This case never occurs. Masculine specialties are numerous. Male ancestors are also numerous. Their specialties are not one, but many. Now, if it happens that one of these ancestors had a specialty particularly adapted to transmission, which had become a part of his nature before his children were born, his posterity may have inherited his special aptitude regardless of the occupations of their immediate male parents. But, of course, it would all the time be diluted by its mixture with aptitudes inherited through other strains.

In the case of woman, every circumstance conspires to make the special aptitude intensely hereditary. It is acquired before the birth of children, hence is always transmitted. It has been transmitted, undiluted, from the female side, through countless generations. In a certain sense woman inherits masculine aptitudes from her male ancestors, but almost her only use of them is to transmit them to her sons.—*Popular Science Monthly.*

Cooking Vegetables.

The cooking of vegetables is an art of no mean pretensions, requiring, like other cooking, close attention. A little heart as well as art must needs go into the oven or the kettle, or a delicate taste will discern the lack of it. All kinds of green vegetables need to be examined with great care before washing, to see that nothing lurks underneath the leaves. Distinctly impressed upon my memory is the horror with which I found that my fork had bisected a large insect boiled with the cauliflower served at an elegant dinner-party, which discovery spoiled the remainder of the entertainment for me,—an insignificant occurrence, perhaps, but one which is always connected in my mind with the charming dining-room of the hostess.

Lettuce, spinach and cauliflower need to be washed in several waters, and left in ice-cold water a few moments before draining. The use of these greens is very apparent to one who studies the chemistry of food. By them slight indispositions are often removed, and very likely grave disorders obviated. Almost every kind of vegetable has its specific effect. Celery, it is well known, is a nervous sedative, and acts favorably upon rheumatism and neuralgia; lettuce and cucumbers, with the acid that is used in dressing them, are cooling during the early heat of summer; asparagus is an admirable blood purifier; tomatoes stimulate the action of the stomach and liver; onions are a remedy for sleeplessness, and are very wholesome; beets and turnips furnish waste material, while peas and beans are nutritious and strengthening in a high degree.

Contrary to the old opinion, it is now believed by many of the best scientists of the present day that vegetables and cereals furnish all substances needed for the nourishment and maintenance of the body. However that may be, fruits, grains and vegetables largely preponderate over meat in the dietary, and we cannot over-estimate the necessity of preparing them so as to be at the same time appetizing and strengthening.

In boiling vegetables it is much better to use soft water than hard. This is no fancy, but has been and may be demonstrated. The housewife who is dependent upon her cistern for soft water may dislike to use it in cooking, but a home-made filter will make cistern water palatable: A tight wooden keg with pebbles in the bottom, a layer of sand above, and coarsely powdered charcoal over that, with a faucet to draw off the water; this any farmer's boy can set up for his mother in the corner of the back kitchen. In some portions of the country where lime is abundant, such a filter for drinking and cooking water ought to be indispensable. Occasionally a sensitive per-

son cannot use alkaline water without injury.

All vessels used in cooking vegetables ought to be so clean that they would not soil a white cloth. After draining, either steam them—a way not sufficiently popular—or plunge in water that has just come to the boiling point. Drain and dish the moment they are done.—*Good Housekeeping.*

Notes and Recipes.

Oil of lavender will drive away flies.

Good fresh buttermilk made from sweet cream is a serviceable drink in diabetes.

The best thing to polish eye-glasses and spectacles with is a bit of newspaper. Moisten the glasses and rub dry.

To pack a trunk, fold each article flat without wrinkles. More can be pressed into a trunk flat than in bundles.

Colored and black stockings, if washed before wearing in water in which has been put a little beef's gall, will not fade by washing.

It is said that if a little bag of mustard be laid on the top of the pickle jar it will prevent the vinegar from moulding, if the vinegar has not been boiled.

A refreshing and nourishing drink for an invalid: Stir the yellow of an egg into a glass of lemonade. If this is too rich use more lemonade and drink part at a time.

Boiled potatoes ought to be laid out on a plate, and are then as good for frying or mashing as if they were freshly cooked. If left heaped up they will often spoil in one night.

A lump of soda laid upon the drain pipe down which waste water passes will prevent the clogging of the pipe with grease, especially if the pipe is flooded every week with boiling water.

Buttermilk Muffins.—Beat two eggs well, stir them into a quart of buttermilk; stir in flour to make a thick batter, about a quart, and lastly a teaspoonful of salt and the same of carbonate of soda. Bake in a hot oven on well greased tins. Muffins of all kinds should be pulled open with the fingers.

A correspondent of the *Popular Science News* highly recommends common washing soda as an antidote for ivy-poisoning, to which he is extremely susceptible. He makes the application by saturating a slice of bread with water, covering one side of it with the soda, then applying the soda-covered side to the flesh. When the bread becomes dry he drops water on the outside to moisten it and re-dissolve the soda crystals. This is better than washing or bathing with soda in solution. Half an hour will usually remove the pain.

Stale Bread.—Economic housewives please take notice. Stale but perfectly sweet home-made bread can be disposed of in this way: Soak it in milk or water till soft, then mix it with your sponge. Squeeze the milk or water from it before adding to the sponge; its presence will never be perceived in the new bread. A somewhat similar economy can be practiced in regard to buckwheat cakes; take those left from breakfast, break them in small pieces and put them in the fresh batter; they will soon be assimilated, and the cakes will be even better for having them in the batter; they will be of a more decided brown, and have a smoother surface.

Some housewives contend that the chief art in making jelly is to boil it continuously, slowly and gently, for half an hour, while others aver that the best jellies are boiled but five minutes. It is hard for the housewife having such rules before her to know which to follow, and the most sensible thing for her to do is to follow neither. There can be no rule as to the boiling time of jellies, as it must depend upon what kind of fruit is used. The juice of some fruit, such as the quince, coagulates in much less time than the juice of others, consequently it requires less boiling. Then, again, some housekeepers use more sugar than others, which also makes a difference in the time of boiling. The only reliable rule to follow, and one that never fails, is the old-fashioned molasses-candy test, of dropping a spoonful into cold water, or upon a plate, and if it "jells" it is done, but if it doesn't it requires more boiling.

Perfection is attained by Dr. Sage's Catarrh Remedy.

Lemon Juice.

Lemonade made from the juice of the lemon is, according to the *People's Friend*, one of the best and safest drinks for any person, whether in health or not. It is suitable for all stomach diseases, excellent in sickness, in cases of jaundice, gravel, liver complaints, inflammation of the bowels and fevers. It is a specific against worms and skin complaints. The pippins crushed may be used with water and sugar and taken as a drink. Lemon juice is the best anti-scorbutic remedy known. It not only cures this disease, but prevents it. Sailors make daily use of it for this purpose. I advise everyone to rub their gums with lemon juice, to keep them in a healthy condition. The hands and nails are also kept clean, white, soft and supple by the daily use of lemon instead of soap. It also prevents chilblains. Lemon is used in intermittent fevers, mixed with strong, hot, black coffee without sugar. Neuralgia may be cured by rubbing the part affected with a cut lemon. It is valuable also to cure warts, and to destroy dandruff on the head by rubbing the roots of the hair with it. It will alleviate and finally cure coughs and colds, and heal diseased lungs, if taken hot on going to bed at night. Its uses are manifold, and the more we employ it internally and externally the better we shall enjoy ourselves. Lemon juice, according to a writer in *Good Health*, is anti-scorbutic, useful in removing tartar from the teeth, anti-febrile, etc. A doctor in Rome is trying it experimentally in malarial fevers with great success, and thinks it will in time supersede quinine.

Boiling Milk for Children.

While milk is kept on ice, in the milkman's can or in the domestic refrigerator, it is constantly receiving the germs, becoming more and more infected with the germs of decomposition. The practical lesson from all this is the necessity of boiling milk or other artificial food for children shortly before it is given as nourishment. This can not be too strongly impressed upon the minds of all concerned in the welfare of children, and the younger the child the greater the importance of observing the rule.

In the earliest months of life a feeding bottle of some sort is a necessity, but it should be discarded as soon as possible. A child may be taught to drink from a glass or cup at quite an early age, and the earlier the better. The construction of the nursing bottle is such that great care, constantly observed, will alone insure safety. The simpler the form of the bottle the easier it will be to keep it clean. Two of them should be in use, one in a strong solution of bicarbonate of soda, after thorough scalding, while the other contains the food for immediate feeding. Carelessness in the management of the feeding bottle is the cause of death in numberless instances every summer. The presence of decomposing food in the digestive tract of a child acts as a powerful irritant, probably by reason of poisons developed from the undigested articles of food by the process of putrefaction. Pure sugar, than which nothing can be less harmful, when decomposed by the growth of the yeast plant, produces alcohol and carbonic acid gas, both powerful poisons to the higher grades of life, and in considerable quantity destructive to the very agents (the plants) which produced them. In the same way all food stuffs, when decomposed, produce deadly poisons. Some of them act something like croton oil and the other irritant vegetable poisons, and cause profuse watery evacuations from the bowels—"summer complaint." Others resemble opium or morphine—cause stupor and convulsions.—*St. Louis Globe-Democrat.*

Fashion Notes.

Cream-white felt hats, in sailor and Spanish gypsy shapes, are just now in high vogue, and promise to be very popular through the autumn season. These hats are in high fashion at many of the fashionable resorts abroad.

Five or six short heavy curls of hair are again worn in the nape of the neck. Around these are usually a soft braid or coil, but frequently, where more curls are added; they are held in place by a jewel-headed pin or arrow.

For wear with dresses open at the throat are chemisettes of plaited muslin, with a lawn tie like those worn by gentlemen in evening dress. These are basted to the chemisette, which opens behind. These supersede the linen collars and pique four-in-hand scarfs.

KANSAS FARMER.

ESTABLISHED IN 1868.

Published Every Thursday, by the
KANSAS FARMER COMPANY.

OFFICE:
221 Kansas Avenue, Topeka, Kas.
S. J. CRAWFORD, - - - PRESIDENT.
J. B. MCAPPEE, - - - GENERAL AGENT.
H. A. HEATH, - - - BUSINESS MANAGER.
W. A. PEPPER, - - - MANAGING EDITOR.

SUBSCRIPTION PRICE:
ONE DOLLAR A YEAR.

An extra copy free one year for a Club of eight, at \$1.00 each.
Address **KANSAS FARMER CO.,**
Topeka, Kansas.

Iola, Kas., is crowing over a "big gas well."

The First National bank at Manhattan is authorized. Capital \$50,000.

The corn crop of the South this year will exceed that of any former year.

La Crosse is reported to have been duly elected as the county seat of Rush county.

The Southern Kansas Methodist conference met last week in Freeman's Grove, near Iola.

The New York Democratic State convention is called for the 27th inst. at Saratoga Springs.

Morris county fair will be held at Council Grove, the 13th to 16th days of the present month.

Complaint is made in the Territories that railroad builders are stripping the public lands of timber unlawfully.

Franklin County Agricultural Society will hold its fair at Ottawa beginning September 27 and ending October 1.

Leavenworth wants a direct railroad line to Denver, and the people of that city are devising ways and means to secure it.

It is openly charged in New York papers that a recent sale of condemned government property in Brooklyn was largely fraudulent.

The second annual fair of the Ford District Agricultural Association will be held on Wednesday, Thursday and Friday, October 5, 6 and 7, 1887, at Ford, Ford county.

An army officer was dismissed the other day for drunkenness. That was right. Whenever a man gets drunk in any employment he ought to be dismissed at once.

Negotiations are in progress looking to a final settlement of the fisheries question, and Mr. Secretary Bayard is reported as saying that prospects of success are good.

The Illinois State Railroad Commissioners are catechizing the railway managers of the State on the subject of making freight rates within the State correspond with those of inter-State traffic.

Wild grass is growing well now and pasturage is good. Rains have been copious—good, heavy rains that have gone to the roots of the grass and beyond them. The August rainfall was above the August average.

Robert T. Lincoln is reported as saying: "I regret the use of my name in connection with any public office whatever. It seems difficult for the average American to understand that it is possible for any one not to desire the Presidency, but I most certainly do not. I have seen too much of it."

PROSPECTUS OF THE KANSAS FARMER.

Having taken a step ahead by enlarging the paper to TWENTY pages—80 columns, and reducing the subscription price to even ONE DOLLAR a year, the management of the KANSAS FARMER deem it appropriate to say a word to their friends concerning the course of the paper. There will be changes in three important particulars.

1. There will be more original matter. The editor will classify his work, dividing it among the different departments of the paper, devoting more attention than ever before to special features.

2. The quantity of reading matter will be increased about 15 per cent., and its arrangement will be more artistic. Several changes will be made in this respect. One new department is added, entitled "Agricultural Matters," the scope of which will appear upon inspection of page 3 of this or any subsequent issue. The object is to further classify the matter and condense it, so as to have at least one original article in each one of the leading departments, to be followed by letters, paragraphs, clippings, etc.

3. More attention will be paid to current news and to the discussion of public questions, the object being to keep our readers informed as to the general news of the time, and to keep them thinking upon those matters of public concern which farmers are called upon to approve or condemn and in which farmers are very much interested, as taxation, administrative reform, transportation, tariff, etc. The party papers publish a great deal of matter on these and other public questions, but it is usually more or less colored by party prejudices, just as an object takes color from the glass through which it is seen. The KANSAS FARMER is free from all party associations absolutely; so that it can, and it will speak with perfect freedom upon every matter discussed. It will not be personal except in cases where that is necessary in the public interest.

The intention is to make the paper useful as well as representative; to cover the whole field of agriculture, from the family and the farm through the State and its laws, to the nation and its policy. We want to publish a paper that will be helpful to our readers and a power in the land.

Special Fair Editions.

It is customary with some newspapers to put out special editions for the fairs, like some people put on their best clothes to attend the theater or church. That is none of our business, of course, and we mention it only as a text for the following short sermon:

The KANSAS FARMER does not get out special fair editions; it goes out in the same dress every week, putting on no extra touches to captivate or allure the stranger. Any one issue of the KANSAS FARMER is a fair sample of all its issues, except that when we publish special crop reports, we have more of that kind of matter than usual. This week we send out 20 pages—80 columns; that will be our regular size right along

every week all this year and next year, and when we conclude to alter our size it will be to add four more pages permanently. The KANSAS FARMER does not swell up for the fairs to catch subscribers, and then thin down again after catching them. Our habits are steady, and onward.

What an Agricultural Paper Ought to Be.

First, and before all things else, it ought to be sincerely devoted to the interests of agriculture. And that means a great deal. Agriculture is the foundation of all business. The farmer feeds the world; he furnishes wool and cotton for the people's clothing and the leather for their shoes, and he hires carriers to transport his products to market and to bring back in return supplies for his family and his farm. Farmers own nearly all the settled portions of the country; they pay more than one-half the taxes; they build three-fourths of the school houses, and they furnish nearly one-half the votes. Farmers are interested in everything that tends to promote the general welfare of the people; not only in plowing and planting, but in business, education, law and religion. The pulse of the country beats responsive to the hearts of the farmers. The farmer ought to be the best informed man in the community. But how shall he inform himself if there be no literature devoted to his interests, or if those so pretending are insincere or unworthy from any cause?

Every trade, every profession, every line of business, has its regularly published journals, and they are supported because of their educating character. Everything is running to class now. The farmer must accommodate himself to the drift. He cannot help himself in that respect. He has been drifting away from his ancient moorings steadily until he is wholly unlike himself of thirty or forty years ago. He is carried along by the wind, as it were, and nobody says to him so much as—"By your leave." The time is here when he must take care of himself, or he will be left as a mere hewer of wood and drawer of water for those that are taking care of themselves. His help must come largely from agricultural journals. They must do for him what he has not time to do for himself. They must keep him informed of current events of importance, more especially those which affect his interests in any way; they must watch at the fountains of political information and warn him of dangers in advance; they must point out interesting legal enactments and court decisions; they must represent his interests in every field of discussion; they must make themselves a power that will be felt in political conventions and in legislatures and courts of justice; in short, they must be competent, and they must be free to state facts and express opinions; they must be independent, broad-gauged, wide-shouldered and strong-armed, so as to be neighborly, able to bear heavy burdens for their friends and strike heavy blows upon their enemies; they must be one of the sources of public opinion, while at the same time, they must studiously, persistently, and intelligently teach all the rudiments of farming in all its various departments and in all its details, infusing throughout the whole groundwork, the simplicity of a well-ordered home, the steadiness of a well-ordered life, and the purity of that atmosphere which perpetually hovers about the dwellings of the farmers.

There is a good deal of interest felt among people of Georgia in the charges made against lessees of the prison labor. Convicts' labor is let on contract, and it is said the contractors practice inhuman treatment of the prisoners.

Be Sure You Are Right; Then Go Ahead.

That is what David Crocket said. So say we. The KANSAS FARMER believes in practicing what it preaches. It believes that energy, tact and perseverance are essential in any calling if success is to be attained, and it believes that when shadows begin to fall across the path our eyes must be opened wider and our nerves strengthened with renewed courage. This has not been a prosperous year for many of our readers. Their misfortunes reflect back on us, because our business runs together. When the farmer is down nobody is up. But the thing to do in such a case is to get up; we must help one another.

We are doing our part at this end of the line. A few weeks ago we announced a reduction of the subscription price of the paper from \$1.50 to \$1 even—33 1/3 per cent. This week we greet our readers with a 20-page paper, four additional pages—25 per cent. larger than ever before, with more original matter and a better arrangement in the make-up of the paper. We are sure we are right in this matter and we are going ahead. Twenty pages will be our size until we grow big enough to need more room, and that, we expect, will not be many years. Such other improvements as are to follow will be limited for a time to the mechanical department, type and other printing material, paper, stitching, etc. We are sure we are right and we are going ahead to the end. The KANSAS FARMER will be in the lead among Western agricultural journals.

This is meeting our readers and friends more than half way, and we expect to be encouraged by their hearty responses. A paper the size and character of the KANSAS FARMER for one dollar is very cheap. Take this number as a sample; study its contents; look over the range of its matter, see what a fund of information lies in its nearly fifty columns of reading; then multiply that by 52 and you have an idea of what will be obtained for one dollar. Our reading matter is all prepared or selected or edited in the office. We do not use plates nor ready-printed sheets. The editor sees every paragraph, every clipping, every letter before it is put on the "copy hook" for the printers. We want to make the paper serviceable to our readers and useful as a social factor.

We expect our readers, every one of them, to help us "go ahead." We want 25,000 subscribers and we are going to have them. After we get that many it will be easier to extend the circulation than it is now. Every reader of the paper can obtain at least one subscriber, and he can do it without inconvenience; and more than that; if he will take the trouble to gather up the names of half a dozen subscribers, including his own, and will send them and five dollars to us, we will send them each a copy of the paper one year from time of receiving the money, to one or more postoffices as desired.

The Secretary of the Interior has directed the opening of railroad lands to settlement, and the companies interested are talking sweetly to him asking him to go slowly in the matter lest he go wrong. Those land grant railroad men are strict monopolists.

By reliable authority it is stated that the number of miles of new road constructed in the United States during 1887 will be about 12,000. This figure is the greatest on record; it has never been approached except in 1882, when the total was 11,568 miles. Track-laying for 1887 up to September aggregates 6,462 miles. Kansas still continues far in lead over the other States in the work of railway construction.

A County in a Store-Box.

Kansas reeds the benefits which will flow from a fair and just representation of her products this year. Her progress has been wonderful, so much so as to arouse suspicions and jealousies. Men in other States are even now writing and speaking that Kansas raised nothing this year; that she is utterly burned out and that her people are on the borders of starvation. Such things hurt us among people who do not know the truth, and for that reason it is important that every county in the State be represented at one or more public places where strangers can see what we have done and can talk face to face to the people who lived and worked where the "hot wind" withered the corn tassel and where the chinch bug took half the wheat.

Farmers in Kansas had peculiar experience this year; some of them did well as usual, some made but little, and other some made absolutely nothing on part of their fields; but there is nothing now like the situation in 1874 when some persons did in fact suffer great hardships. There has been great deficiency some places, still, the wheat saved in the State will amount to considerably more than enough to bread the people and supply all the farmers with seed. The corn raised in the State is much more than the people would use in a good crop year. It is not well distributed, but it will be. The quantity of hay and corn-fodder saved is enormous. Grass pastures are now growing vigorously, and many farmers are sowing rye for late fall and early spring pastures. Some people are now seeing hard times, but the State as a whole is not crippled.

These are facts and the people of the State owe it to themselves to prove them. It can be done for a trifle. Every county in the State can be represented at the State Fair in Topeka at an actual money outlay not to exceed FIFTY DOLLARS. Ten men can unite, or five men, or two men, and send one of their number up with a box of samples. If it does not seem practicable in the newer counties to get up concerted action in time, let one man undertake it. It is surprising what one man can do when he sets out to do it. A box four feet long, two feet wide and two feet deep, would hold samples of all the grains and grasses grown in a county, and they could be displayed in a space five by ten feet in the hall, showing what was grown in the particular county as well as ten times the quantity. A farmer living in Stevens county passed through Topeka last week on his way to Iowa to arrange for final removal from that State to this. He had with him some samples of grain and vegetables grown in Stevens county this year—some on sod broken last spring, some last fall's breaking. He had wheat, corn, rice corn, sorghum, broom corn, different varieties of grasses, several varieties of Irish potatoes and sweet potatoes. He left a few samples with us and they are now suspended in this office, occupying but little space. That man has Stevens county represented in a store-box. He took a claim in the new regions southwest, he passed through this trying year and saw and felt its peculiarities and hardships, still, he raised some corn, some wheat, some of all the various crops; so did most of his neighbors, and they are not ashamed of what they did. Think of that man's energy, people of Kansas, and do likewise. Put a county in store-box and bring it to the State Fair, that the world may know we can raise enough in Kansas, even in such a year as this, to feed all our own people and have a little left.

As to expense: The railroads carry

exhibitors and visitors for one fare the round trip, and freight charges on articles for exhibition will pay but one way. Where one man puts his county in a store-box he can economize space, call his box his trunk and take it along as baggage. Probably there is not a county in the State that could not reach Topeka inside of 300 miles. Put the distance from Morton and Cheyenne, the corner counties southwest and northwest, at 300 miles—600 miles the round trip. That would cost \$18 railroad fare for one person. Expenses at the fair one week need not exceed \$15. There is not one active, go-ahead man in any of the new counties, whether he be a farmer or a business man, that cannot afford to spend fifty dollars for a truthful representation of his county and a fair exhibit of its products.

And besides the mere display to prove that we have raised something, there would be a live man present to answer questions of strangers concerning his part of the State. It appears to us that an honest exhibit would be worth vastly more than it costs even to the few individuals who would undertake the work. The writer of this frequently performed such work, so that he knows what it means and how valuable it is to the community interested. Put your county in a store-box and come up, and the KANSAS FARMER will call on you and report what you show and where you live and all about it in the interest of the good people of Kansas.

Anderson County Fair.

We have a flattering report of the Anderson county fair, but it did not reach the office in time for this issue, very much to our regret. It shows that the Anderson county farmers raised good crops and proved it by exhibiting samples in great profusion at the fair last week.

Thick Corn Planting.

A correspondent writes us: "I have travelled over a good portion of Pottawatomie, Nemaha and Jackson counties inside of two weeks and find that where the corn was planted rather thin it is a fair crop. It would be well to advise the farmers against thick planting, for according to my observations it has reduced the yield nearly or probably as much as either the chinch bugs or dry weather."

Everything Green.

The KANSAS FARMER has advices from nearly every part of the State, and the testimony is, that a wonderful change has come over the landscape, that pastures are greatly improved, that wild grass is growing vigorously, that late corn is maturing well—that "everything is green," as expressed by one of our special correspondents who had just completed a circuit of a dozen counties or more. The whole face of the country is changed from a mixture of green and gray a few weeks ago, to a complete green now.

Cattle are doing well all over the State; so are hogs and sheep. Immense quantities of feed are being put up by the farmers. Everything betokens good health and thrift since the August rains came.

There is a society known among its members as the Universal Peace Union. It held a meeting at New London, Conn., a few days ago and passed resolutions looking to the establishment of arbitration instead of war among the nations of the earth, favoring general disarmament, and the substitution of international courts for the military system. The resolutions also favor woman suffrage, prohibition, justice for Ireland, conciliatory policy with the

Indians, and denounces capital punishment. If the resolutions do no good, they will not do any harm.

August Weather.

From the weather report of Prof. Snow for August, we take the following: In the past twenty years seven Augusts have been cooler and twelve have been warmer than the month just closed. The rainfall was nearly 40 per cent. above the average, and has been exceeded only in five Augusts on our record. But the ground is not yet thoroughly moistened. There has been a rain deficiency in seventeen of the past twenty-three months, and the ground has become dry to an unusual depth. The long drouth, however, seems now to be thoroughly broken, and excess rather than deficiency will doubtless be the rule rather than the exception during the next twenty-three months.

Mean Temperature—Seventy-three and sixty-two hundredths deg., which is 2.04 deg. below the August average. The week from the 23d to 29th inclusive was the coldest August week and the 23d and 25th were the coldest two August days on our entire record. The highest temperature was 99 deg., on the 10th; the lowest was 49 deg., on the 24th, giving a range of 50 deg. The mercury reached 90 deg. ten times. Mean at 7 a. m., 68.69 deg.; at 2 p. m., 82.87 deg.; at 9 p. m., 71.45 deg.

Rainfall—Four and eighty-eight hundredths inches, which is 1.85 inches above the August average. Rain in measurable quantities fell on twelve days. There were five thunder showers. The entire rainfall for the eight months of 1887 now completed has been 20.80 inches, which is 3.80 inches below the average for the same months in the preceding nineteen years.

August Weather at Topeka.

Sergeant Jennings kindly furnishes the KANSAS FARMER with a copy of his "Condensed Weather Report" for August, from which we quote:

The normal temperature for August is 75 deg., the mean for August, 1887, was 73 deg. The highest temperature was 104 deg., on the 13th. The highest recorded August temperature is 107 deg. in 1886; the next highest was 106 deg. in 1881. The lowest temperature was 46 deg., on the 24th, the lowest for any August on our record.

The normal rainfall for August is 3.11 inches; total rainfall for August, 1887, 5.39 inches, being an excess of 2.28 inches, and is the largest August rainfall on our record, the next largest being 5.36 inches in 1884. The heaviest rainfall occurred the nights of the 4th and 5th when 2.22 inches fell.

The most useful rains fell on the 21st and from 24th to 26th.

Topeka Weather Reports.

By courtesy of the officers (Prof. J. T. Lovewell, director, and Sergeant T. B. Jennings, assistant director and observer), of the Kansas State Weather Service, we are permitted to publish weekly an abstract of weather observations for Topeka, taken three times daily—6 a. m., 2 p. m., and 9 p. m., at Washburne College. We give only the highest and lowest temperatures as shown by the 2 o'clock observations, the mean temperature for the week, taking all of the twenty-one observations for data, the heaviest rainfall during the week, and the aggregate rainfall.

Abstract for the week ending Sept. 3, 1887.

Temperature.—Highest 86 deg. Thursday, Sept. 1; lowest 64 deg. Monday, Aug. 29; average daily mean 71.857 deg.

Rainfall.—Heaviest 1.09 inches, Monday, Aug. 29; total for the week 1.84 inches.

"A toad who disgraces his own warts," is what one Mississippi editor says in alluding to one of his colleagues.

Inquiries Answered.

WARTS ON COWS.—A few grains of chromic acid rubbed on the wart with a stick, will render it hard and insensible in a few days, when it can be pared off with a knife, and another application made.

WANTS AN ADDRESS.—Will you please give me in your next issue of the KANSAS FARMER the full address of Taylor, the potato specialist? I think he lives in the east part of the state.

—Edwin Taylor's address is Edwardsville, Wyandette county, Kas.

NEEDLES AND THREAD.—The needles used by veterinary surgeons can be had from surgical instrument makers at fifteen cents each, or for one dollar and fifty cents a dozen, assorted sizes. The best thread is strong braided silk, costing fifty cents a card, of eight yards. Barbed wire or other wounds should be thoroughly cleansed and as soon as possible the lips of the wound should be brought together and stitched by what is termed the interrupted suture—that is by passing the needle through the skin at each edge of the wound, and tying the end of the thread in a knot. The stitches should be about three-fourths of an inch apart, and an opening should be left at the most dependent part of the wound for the escape of pus. The wound should be cleansed at least once daily, and dressed with a mild solution of carbolic acid.

JAPAN CLOVER.—We do not recommend this plant to the farmers of Kansas. It has not given satisfaction this far north. In the southern states it does well. It is valuable mainly for grazing, as only on the richest lands does it grow tall enough for hay. It is vigorous and fresh from the early summer till frost, which kills it. The Texas *Farm and Forest* says it was introduced in the South Atlantic States accidentally about forty years ago—just how, nobody knows. During the war it spread very rapidly and is found more or less abundantly in every Southern and many Western states. In Arkansas, where it has sprung up entirely since the war, it is found very widely scattered. It grows luxuriantly along road sides, in the woods and in the old fields, affording fair grazing for the few cattle of that country. It is believed that it will prove highly valuable in reclaiming worn out southern soils.

LEARNING TO FARM.—A man advised another, not a farmer, to rent land to a tenant who is a farmer, and learn from him how to farm, stating that "any one can learn farming in one year under the instruction of a tenant." Please give us your opinion of this.

—Farming requires the best kind of skilled labor. The best farmers are they who have been engaged in that business all their lives and are still learning. The man who expects to learn in one year how to farm will discover the magnitude of his mistake in time, perhaps, to begin again and serve a longer apprenticeship. Farming is an art requiring skill, tact, energy, and good business qualification. A good farmer can tell a good plow almost at sight, and he knows how to take a plow apart and put it together; he knows how to "run a furrow," he understands draining, banking, ditching, manuring; he knows how to put land in good condition and keep it so; he knows how to raise and handle stock; he knows how to "lay off" farms and fields; how to place and cultivate orchards and vineyards; he knows how to arrange houses and barns, wells, ponds and water basins; in short, a good farmer knows more than he could tell in one year. A good farmer is a well posted man.

CLOVER AND TIMOTHY.—When is the best time to sow timothy seed and red clover; how much seed to the acre, and what is the best after treatment?

—Timothy seed ought to be sown in the early fall on ground which is in the best possible condition; that is, finely pulverized, rich ground moist enough to work well. Sow thickly, twenty to twenty-five pounds to the acre; sow broadcast at a time when there is no wind; cover with a light harrow, and then, if the ground is light and very loose, roll it immediately. Don't sow any grain with it unless the grain crop is removed early in the spring. Red clover is usually sown in early spring; that was always our practice, though we do not know any good reason why clover seed sown in the fall would not do as well as any other perennial plant seed. Nature always sows her clover seed in the fall. It should be treated the same as timothy seed—sown on well prepared ground and covered in the same manner. Sow twelve to fifteen pounds of seed to the acre. The quantities of seed we name are larger than would be recommended for eastern soils. Experience and observation in Kansas have satisfied us that it is better to sow grass seed plentifully. Our surface soil soon dries out and some of the seed almost invariably fails to "catch." Timothy and clover do well together, if the crop is cut before either of them is ripe. The mixture is often better than either alone. Timothy is much easier cured than clover, and it helps to keep the grass loose after cutting, so as to admit the air among the stalks. The seed may be sown together, or the clover seed may be sown on the timothy ground in the early spring and the ground rolled afterwards.

Horticulture.

Effect of Shade on Lawn Grass.

If the reader will run back in memory to meetings of people in groves during warm weather, he will recall instances which will illustrate the central idea of this article as it is developed. Perhaps every reader of the KANSAS FARMER has observed and noted important differences in the quantity, quality and appearance of grass in different lawns on farms and on city lots. Soil may be exactly alike, seed procured from the same lot, sowed and covered the same way, yet on one part of the premises grass is vigorous, broad-leaved and of a bright dark color, while on another part near the grass is thin, the leaves spindling and of a light, palish color. Why there is or should be such and so much difference has been a query to many an inquiring person.

Then, persons, in opening up a new place, if they are enthusiastic, industrious and hopeful, intending to add charms to the home, will plant trees abundantly and shrubs and flowering plants. Of course they soon have a thick, bright, healthy-looking sward. But in a few years the grass looks sickly and in spots dies out. Other persons, having more ground, perhaps, planting different varieties of trees, perhaps, setting out fewer shrubs, setting his trees farther apart maybe, has good grass every year, growing right up to the trees just as it did in the beginning, and just as it does in the beginning in every lawn.

Many causes operate to effect the growth of grass, but the particular cause in mind here is shade. Fifty years ago in south-central Pennsylvania a great many farmers planted seed of the thorn bush for hedges. In a few years the hedges were so high as to cast a deep shade on either side, and from that and the effect of the lateral roots upon the soil, came a wide strip of waste land on both sides of the hedge. In course of time the thorn hedges were removed. It was not the shade, however, which prevented grass from growing close to the hedges, for we all know that some kinds of grass, under certain conditions, grows close to houses and tight fences. The writer of this, when he went out to secure Kansas blue grass to send to the Centennial Exposition at Philadelphia, found the best samples growing on the north side of a fence that inclosed a peach orchard on high ground. We all know of thousands of instances where blue grass and white clover, and orchard grass have grown and are growing right up to the very boards of high fences and house or barn walls, and on the shady side, too.

But we all know of thousands of instances where grass has disappeared when there did not appear to be any reasonable cause except that of shade. While it is not often the case that shade alone destroys grass, it does sometimes happen, and in all such cases it is either the density of the shade or the nearness to the ground of the objects which cause the shade. Some of the most beautiful lawns have a great deal of shade, so much that it affords pleasure and comfort to persons resting in it; but in such cases the objects from which the shadows descend are high above the ground, as large, tall trees, or high roofs supported by long columns. When a farmer undertakes to clean up a young forest and seed it to grass, he finds considerable difficulty the first few years in getting the grass to catch except in the more open places. As the trees grow higher and he clears away the under branches, or as they fall off of their own accord, so as to make more open space

between the tree-tops and the ground, the grass thickens, grows more vigorously, and becomes of brighter color.

So, on the other hand, in cases where trees are close together and they are low and their branches lie near the ground, the grass dies. The shade is too dense for it, and the atmosphere is not pure. Recurring to the picnic or camp-meeting groves again, the reader has noticed that where the trees were low and close together, while the shade was perfect, the air was "stifling," close, sultry, uncomfortable, while under great, large trees, standing far apart yet with a width of top that afforded shade, with just enough streaks of sunshine to give everything a bright and pleasing appearance, there was pleasure, there was comfort, there was grass.

To secure a good growth of lawn grass and keep it there, one of the necessary things is to keep the trees far enough apart and their tops far enough from the ground to allow free access to the moving air, and to prevent that density of shade that invites mosquitoes and spiders and "all manner of creeping things." Have plenty of light and air always on the grass, though the sun need not shine directly on it at any time. It must have all benefit of sunlight, but the light may come mingled with shadows.

Raise Black Walnut Trees.

The KANSAS FARMER urges upon its readers the propriety of planting black walnuts and raise walnut tree groves. They grow well in Kansas. We have some now growing from nuts planted a year ago last fall. The tallest of the trees is about eight feet now. As to methods of sowing seed and of planting them and of caring for the trees afterwards, our readers will have something next week. In the meantime we present a volume on the subject in the following paragraph which first appeared in the Washington (Kas.) Register:

"After procuring three or four bushels of walnut bureau seeds, we commenced the labor of love with a hoe and an axe. Our young bride carried the basket of furniture germs, and deposited them in the places we chopped and hoed out of the sod. Years rolled by, and to this day we have never seen a sign of a walnut tree on that place, and guess we never shall. A little fool boy just up the road ran a furrow in the edge of his father's plowed ground, dropped in a few walnuts and covered them, and today there are walnut trees there as big as our body. From experience we can say that a walnut, in order to become any great source of wealth to your posterity or pleasure to yourself, has got to be properly located and kindly cared for until it gets old enough to shift for itself."

To Preserve Fence Posts.

A correspondent of the *Country Gentleman* recommends saturating fence posts with crude petroleum by boring a half dozen holes into them obliquely near the butt, with a three-quarter inch bit, then filling with petroleum, and plugging to prevent waste. After the operation the posts should lie in piles a week or ten days, when the pores of the wood will be completely saturated as high up as they are liable to decay. A paint composed of raw linseed oil and pulverized charcoal is then spread freely over the lower end of the posts, and six inches above the surface line when set. White oak posts cut in February, and sawed four by four at the butts and four by two at the top, and prepared as directed, are claimed to be good for any man's lifetime if occasionally covered with a fresh coat of cheap paint. A four inch wide strip one inch thick should be nailed on for a top rail, and

the posts then sawed off square, when a five-inch strip nailed to top of posts and edge of the four-inch strip, will keep water from getting into the tops of the posts and rotting them. Two strands of barbed wire below the top strips will make a fence that will turn cattle and look well. The wire should be put on in warm weather to secure the proper tension, and one or more additional strands should be used if sheep or swine are to be pastured.

Horticultural Notes.

The habit of the grape is, to fruit upon wood of the current year growing from a last year's growth.

It often happens that all the good fruit not wanted for the use of the family will pay better when evaporated than when sold green.

There is a medium quality of apples between those merchantable and those which generally go for cider, that are worth more for evaporating than for feed.

If the tomatoes be of heavy growth and the vine fallen stake the vines and trim out the dense foliage. The vines blossom and ripen fruit all the season up to the time for frost.

Gather your cucumbers while they are small and green. There is no advantage in having large pickles. Cut them off the vines with a knife instead of pulling them, which is liable to injure the vines.

The quince bears its fruit upon a shoot of the current year, often of considerable length, springing from a bud formed the previous year; and the fruit usually takes the place of a terminal bud.

Apparatus for drying fruit is now so cheap and convenient, and operates with so much facility and ease, that it pays those who have apples pretty plenty to procure a small evaporator and dry the fruit on the farm.

The apple, pear, peach, apricot, cherry, plum and crab, form fruit, and leaf or wood buds only upon wood of the current year's growth. No buds, having once produced either foliage or bloom, will repeat the process in a subsequent year, except upon an elongation, and from a newly-formed bud.

Both classes of raspberries, together with blackberries and dew berries bear their fruit upon shoots, of considerable length, the growth of the current year, springing from the shoots of the previous year. Many varieties, by cutting back severely, may be forced to produce a late or autumnal crop of fruit.

Fruit is a great promoter of temperance. The need of refreshments is felt by all "bread winners," especially in summer, when it is consequent upon the exhaustion occasioned by heat and fatigue. Fruit is then found to answer the double purpose of quenching thirst and recruiting exhausted animal nature in the most perfect manner.

An old woodsman of Australia, who used to catch snakes for pastime, says that raw onion bruised and applied as soon as possible to the wound is a certain cure for the bite of all the venomous serpents of that country, except the death adder, which he admits is so poisonous, and its poison is so quick in acting, that there is no known remedy for it.

The *Washington Star* says: That the onion is a specific for the stings of poisonous insects of all kinds, has long been known to the writer of this paragraph, who, when a boy, invariably carried one on expeditions with companions against hornets' nests, etc. It was found that the application of onion juice would instantly allay the pain caused by the stinging of hornets, yellow-jackets, wasps, bees, etc.

The McPherson (Kas.) *Republican* says: Theodore Boggs has the finest timber claim that we know of. It is on section 19, northwest of town. It was raw prairie in 1878. Some trees were set out in 1879, but the most in 1880. He has 1,000 allanths, 6,000 catalpa, 10,000 walnut, 2,000 black locust, 5,000 Osage, 1,000 ash and 1,000 maple. These are from one to six inches in diameter, and from ten to thirty feet high. The rapidity of growth is in the order named. The last two are comparatively of slow growth, but some of the maples are failures. He has in addition 300 grape vines which

have made an excellent growth; one sprout that we noticed had grown more than sixteen feet this year. He has 100 heavy apple trees, 300 peach trees and small fruits. This shows what can be done with raw prairie in five or six years.

The main street of Plymouth, Mass., is, without doubt, one of the most beautifully shaded avenues in this country. Great elms, wonderful for their age and vigor, arch over the street at a height of forty feet above the ground. The shade during the hot summer is perfect, while the view from one end of the street is delightful. A village improvement society has done much to keep these grand elms in vigorous health. Up to the present time the great preventive used against insect enemies has been moist printer's ink smeared on cloth or paper and tied about the trees. This year the Paris green solution has been found effective on the smaller trees, but with the larger trees much difficulty is experienced in drenching every part. It has been proposed to use an old-fashioned, hand-pumping fire engine to throw a spray to the top of the trees.

Stewart's Healing Cream, for chapped hands, face, or gentlemen to use after shaving. The cheapest and best article for the purpose in the world. Please try it. Only 15 cents a bottle at drug stores.



Gone where the Woodbine Twineth. Rats are smart, but "ROUGH ON RATS" beats them. Clears out Rats, Mice, Roaches, Water Bugs, Flies, Beetles, Moths, Ants, Mosquitoes, Bed-bugs, Insects, Potato Bugs, Sparrows, Skunks, Weasel, Gophers, Chipmunks, Moles, Muskrat Rats, Jack Rabbits, Squirrels. 1c. & 25c.

HEN LICE.

"ROUGH ON RATS" is a complete preventive and destroyer of Hen Lice. Mix a 25c. box of "ROUGH ON RATS" to a pail of whitewash, keep it well stirred up while applying. White-wash the whole interior of the Hennerly; inside and outside of the nests, or after hens have set a week, sprinkle the "ROUGH ON RATS" dry powder, lightly over the eggs and nest bed. The cure is radical and complete.

POTATO BUGS

For Potato Bugs, Insects on Vines, Shrubs, Trees, 1 pound or half the contents of a \$1.00 box of "ROUGH ON RATS" (Agricultural Size) to be thoroughly mixed with one to two barrels of plaster, or what is better air slacked lime. Much depends upon thorough mixing, so as to completely distribute the poison. Sprinkle it on plants, trees or shrubs when damp or wet, and is quite effective when mixed with lime, dusted on without moisture. While in its concentrated state it is the most active and strongest of all Bug Poisons; when mixed as above is comparatively harmless to animals or persons, in any quantity they would take. If preferred to use in liquid form, a tablespoonful of the full strength "ROUGH ON RATS" Powder, well shaken, in a keg of water and applied with a sprinkling pot, spray syringe or whisk broom, will be found very effective. Keep it well stirred up while using. Sold by all Druggists and Storekeepers. 15c., 25c. & \$1. E. S. WELLS, Chemist, Jersey City, N. J.

Tutt's Pills

Is an invaluable remedy for
**SICK HEADACHE, TORPID
LIVER, DYSPEPSIA, PILES,
MALARIA, COSTIVENESS,
AND ALL BILIOUS DISEASES.**
Sold Everywhere.

MAKE YOUR OWN BITTERS.

One package of STEKETEE'S DRY BITTERS will make one gallon of the best Bitters known, which will cure Indigestion, Pains in the Stomach, Fever and Ague, and acts upon the Kidney's and Bladder, and is the best Tonic known. Can be used with or without spirits. Its far the cheapest remedy known. Full directions on each package. Sold by Druggists or sent by mail, postage prepaid, Price only 25 cents. U. S. Stamps taken in payment. Address GEO. G. STEKETEE, Grand Rapids, Mich.

This paper will say it is safe to send me money.

The Poultry Yard.

Fowl vs. Pork.

There are at least two prominent lines of comparison between the meat of poultry and the meat of hogs. One is the value of the meat, all things considered; the other is the cost of producing the meat. As to merits of the meat as food, pork is worth more in some instances and fowl is worth more in other instances. Farmers can derive much benefit from the use of poultry meat at odd times, but probably not one farmer in a thousand would raise poultry exclusively for meat if he had opportunity to raise anything else. As between pork and fowl for food all farmers would raise pork. And so it would be in case of all people who earn their living by hard manual labor. But that does not settle the matter, for every farmer and every farmer's family prefer fowl sometimes, before everything else in the way of meat, and so it happens that on every farm may be seen more or less chickens. Workmen in any calling, day laborers, mechanics, and others, often want poultry meat as a change from the coarser meats. They want it, too, largely for its healthful effects. The change is good in a sanitary way.

There is, however, a continuous and general demand for the finer meat of poultry among mechanics of the lighter sort, those whose labor is not so exacting physically, — as cabinet makers, workers in leather and brass, silversmiths, etc., and among clerks, merchants, business men generally, and professional men, and among women and children of all classes. This demand is always strong enough to give to poultry a market value higher, pound for pound, than that of pork, beef or mutton. It rarely happens in our market that dressed chickens fall below 12½ cents a pound, and an entire carcass of mutton, beef or pork can be purchased at half. It would be a very low estimate that would place the difference at that proportion all the time, for poultry often sells for four times as much per pound as pork does. And the demand is always active. Good, fat, well dressed chickens always find a ready market at high prices.

As to cost of producing the meat, opinions and estimates differ. There is good ground for the difference, too; because one person may be well situated for raising poultry, and the cost will be very little—hardly felt, while another person, differently and less favorably situated may find it burdensome to raise fowls. It is the same way with the raising of hogs or any other animals. It costs more in some cases than it does in others. It costs more to raise some boys and girls than it does to raise others. So, we must average the amount. It is conceded generally and on general principles, that chicken is more expensive than pork, pound for pound, and that the figures showing the relative cost are 3 and 4; that is, if it cost 3 cents a pound to raise pork, a pound of chicken, at the same time cost 4 cents; or to make it still plainer, if the cost of producing three pounds of chicken be 24 cents, the cost of producing an equal weight of pork, at the same time, would be 18 cents. That puts the difference at 33½ per cent. in favor of the pork.

Taking those figures as standard, the net profit in market is greatly in favor of fowl; for, as said above, the difference is at least fifty per cent. on the poultry side. Concede that 300 pounds of pork cost \$18 and that 300 pounds of chicken cost \$24, in market, if the pork sell for \$24 the chicken would sell for

\$48. Then the account would stand thus:

	PORK.	CHICKEN.
300 lbs. sell for.....	\$24 00	\$48 00
300 lbs. cost.....	18 00	24 00
Profit.....	\$ 6 00	\$24 00

Poultry Notes.

A tablespoonful of solution of copperas in the drinking water for a dozen fowls is sufficient, and as it is cheap in price, the expense of its use is but a trifle.

A handful of nails, or old pieces of refuse iron, iron filings, or even iron cinders, if placed in the vessel containing the water, will more or less afford iron to the poultry.

Iron is invigorating, stimulating, and assists in guarding the system from disease. Iron is in the blood of every living creature and any deficiency thereof causes weakness or debility.

If an old iron pot is used in which to keep the drinking water, the general oxidation of the iron by the water will cause particles of oxide of iron to be given off, which will be taken up by the fowls when drinking.

Iron in any shape is beneficial to fowls. Copperas is sulphate of iron, and if a little copperas is added to the drinking water, or ground fine and mixed with their food, the benefit will soon be seen in the reddened combs and healthy look.

After the fowl begins to molt they should be given ground bone once every day and a meal of meat at least three times a week, as the shedding of the new feathers is a severe tax on them. If the hens be well cared for while molting they will begin to lay before winter. Sell off the surplus cockerels and do not retain the late hatched pullets, as they will not lay before spring.

It is said that fowls supplied with fine-cut rowen hay never contract the habit of pulling feathers. The hay probably satisfies the craving for a bulky diet that is not without reason supposed to lead to feather-pulling, and also furnishes employment to the fowls in the days of enforced idleness. It certainly is worth a trial, especially as it costs next to nothing and is a valuable addition to the diet. Clover is an excellent "egg-food," supplying many of the elements which are found in the egg.



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

TORTURING, DISFIGURING, ITCHING, scaly and pimply diseases of the skin, scalp, and blood with loss of hair, from infancy to old age, are cured by the CUTICURA REMEDIES. CUTICURA RESOLVENT, the New Blood Purifier, cleanses the blood and perspiration of disease-sustaining elements, and thus removes the cause. CUTICURA, the great Skin Cure, instantly allays itching and inflammation, clears the skin and scalp of crusts, scales and sores, and restores the hair. CUTICURA SOAP, an exquisite Skin Beautifier, is indispensable in treating skin diseases, baby humors, skin blemishes, chapped and oily skin. CUTICURA REMEDIES are the great skin beautifiers. Sold everywhere. Price, CUTICURA, 50c.; SOAP, 25c.; RESOLVENT, \$1. Prepared by the POTTER DRUG AND CHEMICAL CO., BOSTON, MASS.

Send for "How to Cure Skin Diseases."

TINTED with the loveliest delicacy is the skin bathed with CUTICURA MEDICATED SOAP.

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

General Manager Kansas Surgical Hospital Association. OFFICE:—118 Sixth Avenue W., TOPEKA, KAS.

RUPTURE RELIEVED AND CURED

Without any operation or detention from business, by my treatment, or money refunded. Send stamp for Circular, and if not as represented will pay railroad fare and hotel expenses both ways to parlee coming here for treatment. DR. D. L. SNEDIKER, Emporia, Kas.

SURE cure for epilepsy or fits in 24 hours Free to poor. Dr. Kruse, M.C., 2336 Hickory St., St. Louis, Mo.



TOPEKA Medical and Surgical INSTITUTE

This institution was Established Fourteen Years Ago, and is incorporated under the State laws of Kansas. During this time it has done a flourishing business and made many remarkable cures. The Institute is provided with the very best facilities for treating every kind of physical deformity, such as Hip-Joint Disease, Club Foot, Wry Neck and Spinal Curvature, having a skilled workman who makes every appliance required in arthroplastic surgery. Incipient Cancer cured, and all kinds of Tumors removed. Private Diseases and Diseases of the Blood and Nervous System successfully treated. Nose, Throat and Lung Diseases, if curable, yield readily to specific treatment as here employed. All diseases of the Anus and Rectum, including Piles, Fissure, Fistula, Prolapsus and Ulceration, cured by a new and painless method. All forms of Female Weakness relieved. Tape-Worm removed in from one to four hours. All Chronic and Surgical Diseases scientifically and successfully treated.

PATIENTS TREATED AT HOME. Correspondence solicited. Consultation free. Send for circular and private list of questions. DRS. MULVANE, MUNK & MULVANE, No. 114 West Sixth street, TOPEKA, KAS.

J. L. STRANAHAN & CO., BROOMCORN - COMMISSION - HOUSE.

References:—P. B. Weare Commission Co. and Hide & Leather National Bank, Chicago. 194 Kinzie street, CHICAGO, ILL.

KANSAS HOME NURSERY

BEST HOME-GROWN TREES. Choice Fruit and Ornamental Trees of real merit for the Western Tree-Planters. Also best Fruit and Flower Plants. Water-proof. Samples by mail, 10 cents each; \$6.00 per 100, by express. A. H. GRIESA, Drawer 28, Lawrence, Kas.

Hart Pioneer Nurseries OF FORT SCOTT, KANSAS.

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

THE LAMAR NURSERIES.

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

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



BUY NORTHERN GROWN SEEDS.

WANTED:—The Names of 100,000 Farmers and Gardeners to mail them Our Fall Catalogue of GRASS AND CLOVER SEEDS, ETC. Largest and most Complete Stock of Flowers, Vegetables and Farm Seeds in America. JOHN A. SALZER, Seed Grower, Box F. La Crosse, Wis.

Nurserymen, Dealers, Planters!

FARMERS, get up clubs and buy at wholesale, at headquarters. We have the largest and best assortment of Fruit Trees in the West. This is HOME-GROWN stock, acclimated and suited to the West. APPLE TREES, STANDARD PEAR, DWARF PEAR, CHERRY, PLUM, RUSSIAN APRICOT, QUINCE, GRAPE VINES, CURRANTS, GOOSEBERRIES, STRAWBERRIES, RASPBERRIES, ORNAMENTAL TREES, SHRUBS, ROSES, and FOREST TREE SEEDLINGS. We have the best of shipping and packing facilities. Send for Catalogue of New and Standard Fruits. Especial inducements to Nurserymen and Dealers. Correspondence or a personal examination of our stock solicited before making your Fall and Spring contracts. Send for Wholesale Catalogue. Office and Packing Grounds on Mt. Hope Ave., West Lawrence. A. C. GRIESA & BRO., Lawrence, Kansas.

Seed Wheat!

ALL THE LEADING VARIETIES that have gained a reputation for hardiness, large yields and high milling qualities, all have been tested throughout the country. EVERETT'S HIGH GRADE yields 10 bu. more per acre than FULTZ. Red grain, beardless, ½ bu. 75c., ¼ bu. \$1.25, 1 bu. \$2.25, 5 bu. at \$2.25. DEWEE-LONGBERRY. The best longberry wheat in the country. Immense yields. Red grain, beardless, ½ bu. 75c., ¼ bu. \$1.25, 1 bu. \$2.25, 5 bu. at \$2.25. HYBRID MEDITERRANEAN. Pleases everybody. Red grain, bearded, ½ bu. 60c., ¼ bu. \$1.10, 1 bu. \$1.50, 5 bu. at \$1.40. MARTIN AMBER has made the largest yields of any wheat ever introduced. Light amber grains, smooth head, 3 pecks seed enough for 1 acre; ¼ bu. 60c., ½ bu. \$1.25, 1 bu. \$1.50, 2 bu. \$2.00, 5 bu. at \$1.40. TRANSPORTATION charges must be paid by purchaser. RATES from Indianapolis are cheaper than from any other place. WILL SEND BY MAIL, Post Paid, 1 lb. 40c., 3 lbs., one or more kinds, \$1; 4 lbs. \$1.25, except New Monarch, 1 lb. 75c., 3 lbs. \$1.50, 4 lbs. \$2.00. SAMPLES to intending purchasers, 6 kinds, 1 lb. We are introducers of Everett's High Grade and Martin Amber. Catalogue free. J. A. EVERITT & CO., Seedsmen, 141 W. Wash. St., Indianapolis, Ind.

600 ACRES; 13 GREENHOUSES. TREES AND PLANTS

We offer for the Fall trade a large and fine stock of every description of FRUIT and Ornamental TREES, Shrubs, Roses, Vines, SMALL FRUITS, Hedge Plants, Fruit Tree Seedlings and Forest Tree Seedlings. Priced Catalogue, Fall of 1887, mailed free. Established 1862. BLOOMINGTON (PHENIX) NURSERY SIDNEY TUTTLE & CO. Proprietors, BLOOMINGTON, ILL.

SEED::SEED

Trumbull, Reynolds & Allen, KANSAS CITY, MO., Now in the Market for TIMOTHY, CLOVER, RYE, Etc., Etc. Write us for prices.

LA CYGNE NURSERY. MILLIONS

Fruit Trees, Shade Trees, Small Fruits, Vines, Ornamental Trees, Etc. TEN MILLION FOREST TREE SEEDLINGS. ONE MILLION HEDGE PLANTS. ONE HUNDRED THOUSAND TWO-YEAR APPLE TREES—Grown from whole root grafts. FIVE THOUSAND IRISH JUNIPERS—Two-foot, SPLENDID WALNUTS, and other forest tree seeds and nuts, prime and fresh. Full instructions sent with every order, and perfect satisfaction guaranteed. Send for full list and prices. Address D. W. COZAD, Box 25, LACYGNE, LINN CO., KANSAS.

Hedge Plants by the 1,000,000

KANSAS STATE NURSERY, North Topeka, Kas.

FAMILY CANNING.

MUDGE PATENT APPARATUS received from the Bismarck Fair Committee this award: "That it possesses great merit in simple and permanent preservation of fruits and vegetables." It gives woman an independence for her work, as with this apparatus she cans thirty-two quarts per hour, and all the fine flavors of the fruits, are retained as if fresh-gathered from the garden. Cooking perfect, with great saving of labor. Prices—Of 1-quart Cannery, \$5.00; 1½-quart Cannery, \$7.50; 2-quart Cannery, \$10.00. Will pay its first cost in one day's work. Agents wanted in every county. County rights for sale. Special inducements given to any one who will secure fifty customers in one county. For terms, etc., address CHAS. F. MUDGE, Eskridge, Kansas.

Mr. George's Land Theory.

Henry George, the acknowledged leader of the United Labor party, has been and still is a persistent advocate of what he calls land reform, the foundation stone of his philosophy being that land, like air and water, is the common birth-right of man, and that no person can lawfully have or hold any property in it. From that he argues that no man has any right to occupy more land than is sufficient to maintain him and those dependent upon him. He would, therefore, divide land according to that theory, holding that the taking of surplus lands from any person is not wrong because he has no right to it—his pretended purchase of it is void because no man can own a foot of land, he may only use it and that to the extent of his personal needs. And further, Mr. George believes and teaches that land-rent should be paid to the government; that every person who uses land should pay land rent, that land rent should be paid and used as taxes, and that such rent should be the only taxes required of the people. Mr. George believes that a revolution to reach such a state of affairs as he thinks ought to exist could be effected peaceably, honorably and wisely. In the advocacy of this land reform doctrine, Mr. George has achieved distinction. He is a gentleman of excellent private character and carries with him the personal respect of all people who know him. His language, his manner, his life is clean and manly. But what shall we say of his doctrine? Nothing, perhaps, except that while abstractly considered there may be nothing to condemn in it, the world and its affairs have been running in certain grooves so long that to derail them now would be to revolutionize the laws of business and of society the world over. Theorists navigate the air, but practical people have not got beyond land and water, they still follow methods that are so old that their beginning is lost in the ages past. Age is not, of itself, an argument. But some old things are very simple, and among them is the ownership of land. If a reform cyclone were to sweep over the earth destroying existing conditions, wiping out treaties, constitutions, laws, contracts and traditions, so that after the wreck had been cleared away all things would be new and men everywhere permitted to stake out their claims, Mr. George's doctrine might be applicable then, if he could get it into practice before the people had adopted practices of their own. In this country, there are nearly five million farms, and 75 per cent. of them are tilled by their owners. The census figures of 1880 show over four million farms, ranging from three acres to one thousand acres and upward, the general average being 184 acres, and 74 per cent. of them were owned by the persons that worked them. There were seven different classes of farms reported, classified according to size, thus: From 3 to 10 acres; from 10 to 20 acres; from 20 to 50 acres; from 50 to 100 acres; from 100 to 500 acres; from 500 to 1,000 acres; from 1,000 acres upward. The numbers of farms in the different classes were as follows: Class one, 134,889; two, 254,749; three, 781,474; four, 1,032,910; five, 1,695,983; six, 75,972; seven, 23,579. It will be seen that of 4,000,000 farms, all but about 100,000, or 39 of every 40, contained less than 500 acres, and that more than three-fourths of them ranged between 20 acres and 500 acres. It appears that a quarter million, or, to be exact, 254,749 farmers got along with 10 to 20 acres each; also, that more than one-eighth of a million (134,889) farmers used only 3 to 10 acres each. How would Mr. George make a division in such a case and do no injustice? If

we assume that farms ranging from 3 to 10 acres are large enough to afford a living to the owner, then, according to the census figures of 1880, there were 3,874,018 farms in this country which were from five times to five hundred times too large, and they would have to be cut down to a supporting size, giving the rest to other people who had no land.

There are some delightful theories which, like some dreams, one almost wishes were true and safe to follow. This land reform of Mr. George is one of them. What a perfect state of society we should have when the Indian would be content with a few acres of ground and the white man content to let him keep and enjoy it, and when all other men would peaceably, quietly, willingly, joyfully stay upon their diminutive farms and do nothing but "love one another."

Notes From Southern Colorado--Tourist City and Huerfano County.

Special Correspondence Kansas Farmer:

There is, in all probability, no State in the Union that is making a greater and a more rapid development of its mineral and agricultural resources than is the State of Colorado. The fact that it is but eleven years since it was admitted into the sisterhood of States, and knowing something of the immense tide of emigration that is pouring into the eastern and southern parts of the State, I concluded to take advantage of the exceedingly low rates offered by the I. R. Holmes midsummer excursions to Colorado from Kansas and accordingly joined on the 22d inst. at Garden City a party of over 600 en route over the Santa Fe and the Denver & Rio Grande via Pueblo to Tourist City, fifty-five miles south of Pueblo. At many places along the Santa Fe west of Garden City and at Pueblo the numerous accessions to the excursion party increased so that by the time Tourist City was reached Tuesday about one thousand persons left the train to arrange for a week's visit investigating the resources adjacent Tourist City and in Huerfano county. The new town, Tourist City, joins the old town Walsenburg, the county seat, but they are now practically one and the same town, containing over 1,000 busy, bustling and go-aheaditive people. The area of the county is about 3,000 square miles, of which nearly one-half is agricultural land whose soil has no superior anywhere. Over one-half million acres are open to settlement under the United States land laws, and are being rapidly taken up by people who are coming to stay and build up homes for themselves and their posterity. Among the many inducements, I will state the showing of mineral and agricultural products cannot be properly described in one short letter, neither could one do the subject that justice the field presents and merits were he to try, as every day brings forth additional evidence of the richness of the minerals found within the county. Thousands of acres are underlaid with the best of bituminous coal, and the mountains forming western and northwestern rim of the county abounds in rich mines of gold, silver, copper, lead and iron that awaits capital only to further develop it. One mile west of Tourist City 600 tons of coal is now being taken out daily by a force of over 400 men. The pay-rolls of the Colorado Coal and Iron company averages \$20,000 per month. The trade of this point exceeds that of any other within a radius of thirty miles, and is bound to increase as the country is settled up and mining interests develop. That the soil is rich and does produce the home-seeker has only to make a visit. All the grains and garden vegetables grow to a degree of perfection that surprise even the "old Kansan," and it can be truthfully said that potatoes, wheat and all kinds of fruit excels that grown in Kansas. The altitude being from 5,000 to 7,000 feet above the sea makes the climate one of the best in the world. One and a half miles from Tourist City are the Spanish mineral springs, whose waters are white sulphur and iron and have been analyzed by expert chemists of high standing and pronounced among the best in the world. That the newcomer has faith in Tourist City and Huerfano county is best evidenced by the fact that on June 15, '87, \$42,200 worth of lots

were sold, and during this week nearly \$25,000 more were disposed of by the Tourist City Town company. Building is going on rapidly and nearly all the lumber used is that procured from the large tracts of excellent pine on the mountain slopes. There is no country that has so many natural advantages and is so varied that the expression "ten acres enough" comes so near being the truth of truths. As this is already longer than I had intended, I will refer the reader to the newspaper called the Cactus, published at Tourist City. By sending for a sample copy further and more definite information may be had. PROVISIO.

Tourist City, Huerfano Co., Col., Aug. 27.

Tea was brought to Europe by the Dutch in 1610.

Farmers and dairymen will do well to call and see our new Creamery Cans, for sale at J. J. Floreth & Co.'s, 713 Kansas avenue, Topeka.

The commercial department of Campbell University has had very flattering success. Whole expense for five months need not exceed \$75.

The Lawrence Business College and Academy of English and Classics, Lawrence, Kas., is the best in the branch of business and academic education in the West, and takes a front rank among the leading institutions of the country.

THE MARKETS.

By Telegraph, September 5, 1887.

LIVE STOCK MARKETS.

St. Louis.

CATTLE—Receipts 600, shipments 1,100. Market strong and a shade higher. Fair to choice heavy native steers 4 00a4 80, fair to choice butchers steers 3 40a4 10, fair to good feeders 2 75a3 20, grass Texans and Indians 2 25 a3 40.

HOGS—Receipts 900, shipments 800. Market strong. Choice heavy and butchers selections 5 25a5 40, medium to choice packing and yorkers 5 10a5 20, common to good pigs 4 00a4 80, mixed 4 90a 5 15.

SHEEP—Receipts 200, shipments 2,600. Market firm. Fair to choice 3 20a4 15, lambs 3 75a4 50, common 2 00a3 75.

Chicago.

The Drovers' Journal reports:

CATTLE—Receipts 11,000, shipments ... Market unevenly lower. Choice steers 4 70a 5 00, good 4 30a4 65, medium 3 70a4 20, common 3 00a3 50, stockers 2 00a2 50, feeders 2 50a3 00, bulls 1 50a3 00, cows 1 25a3 00, Texas cattle, 1 70 a3 30.

HOGS—Receipts 10,000, shipments ... Market about 5c higher. Rough and mixed 4 90a 5 20, packing and shipping 5 20a5 55, light 4 90a a5 45, skips 3 00 a4 75.

SHEEP—Receipts 4,000, shipments ... Market steady. Natives 3 00a4 40, Western 3 00a 3 75, Texans 3 00a3 90, lambs 4 25a5 25 per owt.

Kansas City.

Received from 5 p. m. Saturday to 12 m. today, 3,256 cattle, 2,170 hogs and 492 sheep. Held over, 500 cattle, 1,743 hogs and 1,060 sheep. Total, 3,756 cattle, 3,913 hogs and 1,552 sheep.

CATTLE—As illustrating the unevenness in the declines on choice and medium or greenish cattle, a buyer bought some 1,180-lb. steers today at 3 55, which he said he could not have bought ten days ago under 4 00, while he paid 4 50 for some ripe pony cattle that would not have brought over 4 60a4 65 the highest time week before last. Prime cattle are wanted and green to medium cattle are over-plenty and slow.

HOGS—The general market was strong and 5c higher. Quotations among traders were 5a 10c higher. The average was nearer 5c than 10c. The Mexican buyers shipped about 3,000 hogs Saturday and were out of the market today. Boston did nothing on heavy hogs, and tops sold at 5 35 against better hogs Saturday at 5 35.

SHEEP—Some fancy Missouri sheep and lambs sold well and high to-day, but the bulk

of the supply was light stuff that sold at 2 25a 2 40. Prices quoted steady.

PRODUCE MARKETS.

St. Louis.

WHEAT—No. 2 red, cash, 69 1/2c. CORN—Very strong. Cash, 38 3/4a39 1/2c. OATS—Steady and weak. Cash, 24c. RYE—Steady at 49c bid.

Chicago.

Cash quotations were as follows: WHEAT—No. 2 spring, 69 1/2c; No. 3 spring, 66c; No. 2 red, 69 1/2c. CORN—No. 2, 40 1/2c. OATS—No. 2, 24c. RYE—No. 2, 44 1/2c. BARLEY—No. 2, 60c. PORK—15 00a15 25. LARD—6 40a6 42 1/2c.

Kansas City.

*WHEAT—Receipts at regular elevators since last report 9,132 bus., withdrawals 2,000 bus., leaving stock in store as reported to the Board of Trade to-day 330,967 bus. No. 2 soft winter, cash, 64c bid, 66c asked.

CORN—Receipts at regular elevators since last report 654 bus., and withdrawals 4,005 bus., leaving stock in store as reported to the Board of Trade to-day 72,974 bus. There was a steady market to-day on 'change. On track by sample: No. 2 cash, 37c.

OATS—No. 2 cash, 22 1/2c bid special, 22 1/2c asked. On track by sample: No. 2 mixed, cash, 23 1/2c; No. 2 white, cash, 25 1/2c.

RYE—No bids nor offerings.

HAY—Receipts 24 cars. Market steady. New, fancy, small baled, 9 00; large baled, 8 50; wire-bound 50c less.

OIL-CAKE—Per 100 lbs. sacked, 1 25; 2000 per ton, free on board cars; car lots, 18 00 per ton.

SEEDS—We quote: Flaxseed, 85a87c per bus. on a basis of pure. Castor beans, 90a1 00 for prime.

BUTTER—Market weak and slow for all grades. We quote: Creamery, fancy, 23c; good, 20c; fine dairy in single package lots, 15c; storepacked, do., 12a14c for choice; poor and low grade, 9c.

CHEESE—We quote: Full cream, twins, 12c; full cream, Young America, 12 1/2c.

EGGS—Receipts large and market dull at 12c per dozen for fresh.

POTATOES—Home-grown, 50c per bus.

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

PROVISIONS—Following quotations are for round lots. Job lots usually 1/2c higher. Sugar-cured meats (canned or plain): Hams 12c, breakfast bacon 12c, dried beef 12c. Dry salt meats: clear rib sides 8 25, long clear sides 8 10, shoulders 5 25, short clear sides 8 50. Smoked meats: clear rib sides 8 85, long clear sides 8 75, shoulders 8 30, short clear sides 9 10. Barrel meats: mess pork 15 00. Choice tierce lard 6 25.

Topeka Markets.

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

Table listing various produce items and their prices, including Butter, Eggs, Beans, Sweet potatoes, Apples, Peaches, Potatoes, Onions, Beets, Turnips, Tomatoes, Cabbage, Pumpkins, and Squash.

St. Louis Wool Market.

(Reported by Hagey & Wilhelm.)

Market active and firm throughout and all grades in demand and quick sale. Dark, earthy, heavy, mixed grades, 12a19c. Light, shrinkage, bright and classified sell as follows:

KANSAS AND NEBRASKA.

Table listing wool grades and prices, including Choice 1/4 and 3/8-blood, Medium, Fine medium, Low medium, Light fine, Heavy fine, Bucks and heavy Merino, Carpet, Common, Pulled, and Sheep pelts, fallen stock.

HAGEY & WILHELM, WOOL AND BROOMCORN Commission Merchants, —ST. LOUIS, MO.—

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

We do not speculate, but sell exclusively on commission.

1887.

The Busy Bee.

Bee Notes.

Mr. Miller, of Marengo, Ill., says he never regretted taking bees out of the cellar too late in the spring, though he has regretted taking them out too early more than once. He now takes them out when the soft maple are in bloom, and even then sometimes finds it too early.

California must literally be the land flowing with honey, if not with milk, for an apiarist in the southern part of the State who failed to get even 2 1/2 cents per pound for fine white sage extracted honey, is reported to have begun feeding it to his swine! Another, who has a large stock without commercial value, mixes it with his cows' feed.

Bees are the only farm stock that give a valuable product, and yet cost nothing for keep beyond providing shelter. What they eat comes from the field, would be of no use unless they gathered it, and therefore costs nothing. It is true, bee-keepers sometimes purchase food for their stock, but it is only to replace the honey taken from them with something less expensive. With good management and good locality and seasons, bees will more than double in numbers every year, and this is so much clear gain.

There are many ways of rendering beeswax, among which are the wax extractors of different forms and makes. The process of rendering it by steam is probably the most rapid and successful, but as the most of us do not have this opportunity we must do the work on a smaller scale. The plan we prefer and give below suits us better than any other method outside of steam. We use a sack made from thin muslin. (Butter muslin or cheese cloth is preferable.) This sack should hold from a peck to a half bushel. Fill it with comb and place it in a boiler filled with water. As the boiling progresses the wax will melt and strain out of the sack, and rise to the top of the water, and may be skimmed off and thrown into another vessel to cool. The water and all sediment will settle to the bottom when cool. The wax may be taken out, formed in nice cakes, with the sediment adhering to the bottom, which may be scraped off readily. The above is an old idea that we must credit to bee-keepers of years ago.

There is a lady in Panola, Ga., who is the mother of twelve living children, the eldest of whom is forty-five years of age and the youngest seventeen, and she never has seen them together all at once in her life, that is, they all have never been about home within six months of each other.

A Rare Opportunity.

Now is the time for the breeder and ordinary farmer to prepare to supply the great demand at high prices that will surely be made next year on all swine breeders. The time for one to commence producing a staple article like pork, in any quantity, is when from any cause others are quitting, as is now the case throughout the great corn belt.

Heretofore it has been my policy to never allow the best to be selected from my herd at any price, but now for the first time during an experience of eleven years as a breeder of Large English Berkshire swine, I offer a majority of the very best of either sex, both matured and younger, composing the famous Manhattan Herd. The females represent ten families, and are headed by six larger boars than can be found in any other herd in the country, and that could be made to average 800 pounds each.

No expense or care has been spared in making this herd second to none in America.

We retired from the show ring some few years since, but not until after five years' exhibiting demonstrated the ability of the Manhattan Herd to win a majority of the premiums competed for at the leading fairs in the West.

My Berkshires are in the pink of thrifty feeding condition, and I have never owned as many high-class individuals as at present.

A better opportunity to found a new herd of the highest excellence, or to improve old herds by selections from mine, has rarely if ever been offered.

To those that are unable to make personal selections I would say that good health, usefulness and satisfaction regarding any sale made is guaranteed.

Prices will be made very low and to suit the animals taken. Special prices on large orders.

Refer to my many customers all over the United States, whose purchases have often been winners at State and District fairs.

Lose no time in ordering if you wish the best.

A. W. ROLLINS,
Manhattan, Kas.

Purify the Blood.

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

Hood's Sarsaparilla

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

100 Doses One Dollar

HUMPHREYS' HOMEOPATHIC VETERINARY SPECIFICS



For Horses, Cattle, Sheep, Dogs, Hogs, Poultry.

500 PAGE BOOK on Treatment of Animals and Chart Sent Free.

CURES—Fever, Congestion, Inflammation, A. A.—Spinal Meningitis, Milk Fever, B. B.—Strains, Lameness, Rheumatism, C. C.—Distemper, Nasal Discharges, D. D.—Botts or Grubs, Worms, E. E.—Coughs, Heaves, Pneumonia, F. F.—Colic or Gripes, Bellyache, G. G.—Miscarriage, Hemorrhages, H. H.—Urinary and Kidney Diseases, I. I.—Eruptive Diseases, Mange, J. K.—Diseases of Digestion.

Stable Case, with Specifics, Manual, Witch Hazel Oil and Medicator. \$7.00

Price, Single Bottle (over 50 doses) .60

Sold by Druggists; or

Sent Prepaid on Receipt of Price.

Humphreys' Med. Co., 109 Fulton St., N. Y.



HUMPHREYS' HOMEOPATHIC SPECIFIC No. 28

In use 30 years The only successful remedy for Nervous Debility, Vital Weakness, and Prostration, from over-work or other causes. \$1 per vial, or 5 vials and large vial powder, for \$5. SOLD BY DRUGGISTS, or sent postpaid on receipt of price.—Humphreys' Medicine Co., 109 Fulton St., N. Y.

AGENTS WANTED (Samples FREE) for Dr. Scott's beautiful Electric Corsets, Brushes, Belts, Etc. No risk, quick sales. Territory given, satisfaction guaranteed. Dr. SCOTT, 843 E'way, N. Y.

Campbell :: University, HOLTON, - KANSAS.

DEPARTMENTS:

- PREPARATORY,
- CLASSICAL,
- SCIENCE,
- LANGUAGE,
- MATHEMATICAL,
- TEACHER'S,
- MUSICAL,
- ART,
- COMMERCIAL,
- TELEGRAPHIC,
- SHORT-HAND,
- PREPARATORY MEDICAL,
- ELECTIVE,
- POST-GRADUATE.

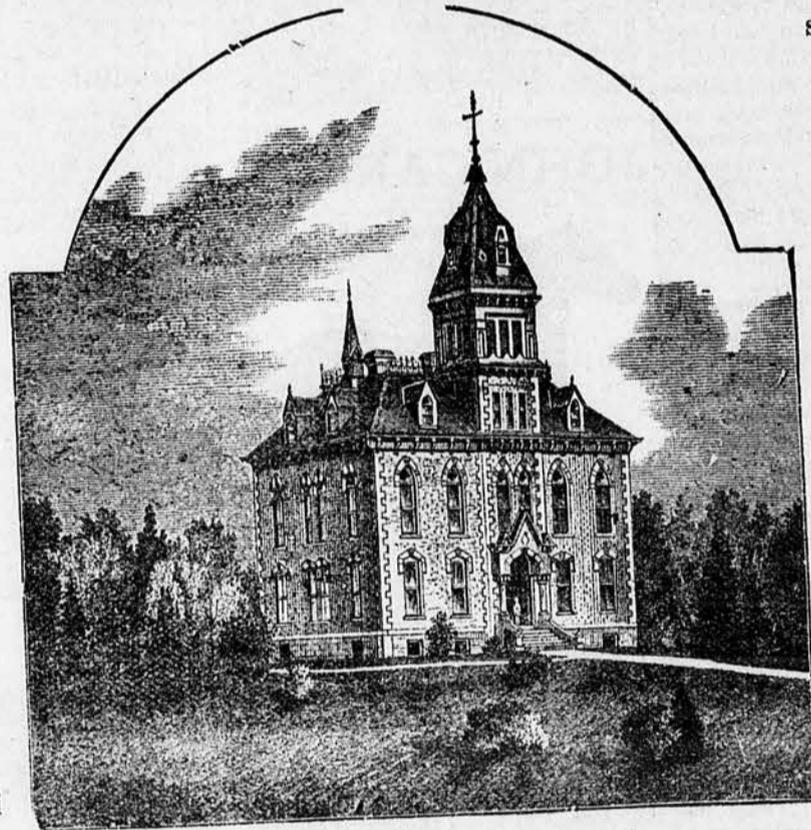
STATEMENTS:

FALL TERM OPENS
SEPTEMBER 6.

Tuition \$10 per term and Board \$2 to \$2.50 and \$2.75 per week.

SEND FOR A CATALOGUE.

ADDRESS PRESIDENT J. H. MILLER.



Students may enter at any time and choose their studies.

By a natural order of studies our students save time and gain power.

We demand thoroughness in the common branches. English before Latin, Algebra before Geometry, etc.

Our courses fit for any vocation.

The school meets the wants of the times.

New classes at opening of every term, and no extra charge for plain or ornamental penmanship, German, vocal music, drawing.



ESTABLISHED 1877.

The Smith Mf'g. Concern

OF TOPEKA, KANSAS,

Have the best facilities for making high-grade ARTIFICIAL LIMBS and ORTHOPEDIC INSTRUMENTS (Braces for Deformities). Their work-shop is complete in every respect, having fine machinery and tools to do work equal to any in the United States. Their workmen are thoroughly skilled, and they turn out work that every Kansan should be proud of being done in this State. They make the mechanical treatment of Hernia a specialty, carrying the largest line of Trusses in the West, have special facilities and years of practical experience in the proper application of Trusses to Hernia (or Rupture). They make special Trusses for severe or neglected cases, and it matters not how many have tried to apply a Truss to hold a Rupture and failed, if they will go to this place there is hardly a chance of their failing to properly retain it. Hundreds have been held successfully by them that have gone from ten to twenty years, and even longer, without being able to find any one that could succeed in retaining their Rupture. They have the patronage of every leading Physician and Surgeon in Topeka, to any of whom the public are cordially invited to apply for reference. Business confidential. Ladies' and Children's Trusses successfully applied. Call at their private Fitting Parlors, or write for particulars.

ADDRESS

THE SMITH MF'G. CONCERN,
425 & 425 1/2 KANSAS AVE., TOPEKA, KANSAS.

Keep this advertisement, as it may not appear again in this paper.



The Veterinarian.

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

ERUPTION OF THE SKIN.—I have a cow that has sores on her back; they are like blisters, only there is matter instead of water. They are from the size of a pea to that of a penny. What can I do for it? [The eruptions or blisters on your cow's back are caused by some irritation, probably accumulation of dirt in the hair. Wash thoroughly with soap and warm water, removing all loose scabs and dress the sores once a day with carbolic acid, 1 ounce to 16 of linseed oil. As there might be some constitutional disturbance, open the bowels with a laxative diet and give a little nitrate of potash in the water to drink.]

PROBABLY FARCY.—I have a two-year-old filly that is diseased. In June last there were lumps raised under the skin, at first about the withers and then about the eyes. There were lumps under the eyes and they became running sores, and she ran blood and matter out of the eyes, and lumps raised on her belly and pasterns, and there is now running sores on her pasterns. The sores refuse to heal. I am a reader of your valuable paper and have been for two years. Please tell me the name of the disease, and also the treatment. [The symptoms described in your letter are those of farcy, and as this disease is identical with glanders we would advise you to have a qualified veterinary surgeon examine the filly and determine whether such is the case. In the meantime keep the filly isolated from the remainder of your horses and take care that none of the discharge comes in contact with your person.]

STIFF HIND LEG.—Please prescribe for a horse, which seems to be unable to use his hind legs, except with difficulty, and apparently with pain. Has great difficulty in getting over a plank twelve inches high, with his hind feet. When pushed out of a walk, has an ambling step in the hind legs—altogether different from his motion when in health. His appetite is good, and digestion also. Has been gradually getting more and more in this condition for about six weeks. Horse is seven years old. [Give one of the following balls, and repeat on fourth day: Powdered barbadoes aloes, 1 ounce; powdered gentian, 1 ounce; powdered nitrate of potass., 3 drachms; powdered sulphate of iron, pure, 6 drachms, and a sufficient quantity of Venice turpentine; mix. Make into two balls. Give him the following drench, and repeat next day: Chloral hydrate, 4 drachms; bromide of potassium, 4 drachms; mix. Give two tablespoonfuls of bi-carbonate of potass. in feed three times a day for two weeks.]

DIARRHEA IN COLT.—A neighbor of mine has a five-year-old mare that had her first colt about one month ago, and it looks all right, but every two or three days it has an attack of scours, which is very hard on it. It takes to cramping, and can hardly get up and down. The mare is a good suckler and the colt might get too much milk; and it may be that her milk is not in the right kind of order. Some horse doctor gave him some medicine that stopped it for a while, but it does not prevent the colt from nearly dying with the scours. [Your supposition may be correct, and there may be some property of the mare's milk which has a tendency to griping and diarrhea. The usual starting point of diarrhea in foals is indigestion; the milk curdles, and when in that condition irritates the stomach and

bowels and thus causes diarrhea. If we can render the milk more digestible the attacks of diarrhea might be obviated. For this purpose we recommend taking an ounce of lime water and mixing it with two ounces of fresh milk just taken from the mare, which should be given to the colt slowly out of a small, rather long-necked bottle. This should be done at regular intervals four times a day, and the treatment should be continued until such time as the attacks of diarrhea subside. If the treatment does not prove quite effectual at first the quantities of lime might be increased. A pint of lime water might be procured at first, and as the remedy is a safe and inexpensive one, an additional quantity might be afterward procured if necessary.]

RIVERSIDE STOCK FARM, DEGEN BROS., Ottawa, Ill.



Importers and Breeders of French Draft and French Coach Horses. We have now over 75 head of imported French Draft Stallions and Mares on hand. Our importations this year have been selected from the best breeding district in France. Our stock is all recorded in France and in the National Register of French Draft Horses in America. Our French Coach Horses are the best that could be found in France. We will be pleased to show our Stock to visitors. Correspondence invited and promptly answered. **DEGEN BROS.**

JOHN CARSON,

Pleasant View Farm, WINCHESTER, KAS., (Jefferson Co.)



IMPORTER AND BREEDER OF Clydesdale, Percheron—Norman & Cleveland Bay HORSES.

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

E. BENNETT & SON, TOPEKA, - KANSAS,



IMPORTERS AND BREEDERS OF Percheron, Clydesdale and Coach Horses.

106 Head of Stallions just arrived from Europe. Choice stock for sale on easy terms. We won all the leading prizes at Kansas State Fair last fall. Send for Illustrated Catalogue, free on application.

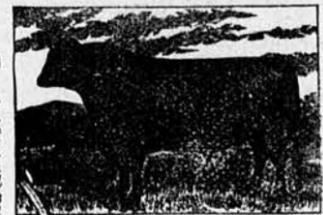
IMPORTERS AND BREEDERS OF ENGLISH SHIRE AND SUFFOLK PUNCH HORSES



Monitor (3232).

RED POLLED CATTLE.

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,** 34 East Fifth Ave., Topeka, or Maple Hill, Kansas.



Peter Piper (17).

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,** 34 East Fifth Ave., Topeka, or Maple Hill, Kansas.



EARLY DAWN HEREFORD HERD, The Champion Herd of the West,

CONSISTING OF 250 HEAD OF THOROUGHBRED HEREFORD CATTLE.

The sweepstakes bulls BEAU MONDE and BEAU REAL and first-prize Wilton bull SIR JULIAN, out of the famous English show cow Lovely, by Preceptor, are our principal bulls in service.

E. S. SHOCKEY, Secretary, Maple Hill, Kansas.

Twenty miles west of Topeka, on the C., R. I. & P. R. R.

Devon Cattle!

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

RUMSEY BROS. & CO., EMPORIA, KANSAS.

TIMBER LINE HERD Holstein - Friesian Cattle.

We have for sale any or all of our entire herd of Holstein-Friesian Cattle, consisting of Cows, Heifers and Calves—full-bloods, and Grades up to fifteen-sixteenths. Ask for just what you want. Send for prices of family cows—grades. All our Holsteins will be at Winfield, Kas., after April 1, 1887. **W. J. ESTES & SONS.**

HAZARD STOCK FARM

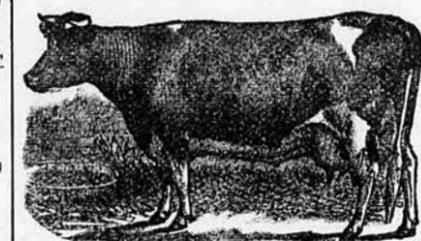
NEWTON, - - KANSAS,

Breeder of A. J. C. C. H. R.

Jersey Cattle.

The herd is headed by the Stoke Pegis Victor Hugo Duke bull, St. Valentine's Day 15278, and the Coomassie bull, Happy Gold Coast 14713. Sons and daughters by above bulls out of highly-bred cows, for sale for next ten days.

Address **S. B. ROHRER, Manager.**



H. V. PUGSLEY, PLATTSBURG, MO.,

Breeder of Holstein-Friesian Cattle, of the Mercedes, Helntje, Katy K., and other noted families. Herd headed by the prize bull MINK 3D'S MERCEDES PRINCE 2361. Have Merino Sheep. Catalogues free. [Mention this paper.]

Holstein - Friesian Cattle

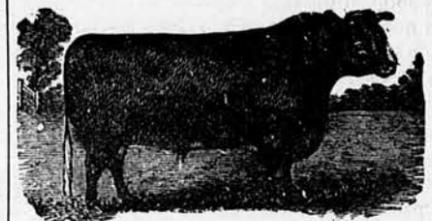
Of European Herd Book Registry.



PRINCE OF ALTIJOWERKEIN.

The sweepstakes bull PRINCE OF ALTIJOWERKEIN (61 M. R.) at head of herd, has no superior. Cows and heifers in this herd with weekly butter records from 14 pounds to 19 pounds 10 1/2 ounces; milk records, 50 to 80 pounds daily. The sweepstakes herd. Write for catalogue. **M. E. MOORE, Cameron, Mo.** [Mention this paper.]

SUNNY SIDE HERD OF SHORT-HORNS.



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

BRIGHTWOOD HERD OF SHORT-HORNS

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

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

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

Also two handsome, rangy,

FINELY-BRED TROTTING STALLIONS for sale.

B. K. THOMSON, Slater, Mo.

HAY FEVER CATARRH

is an inflamed condition of the lining membrane of the nostrils, tear-ducts and throat. An acrid mucus is secreted, accompanied with a burning sensation, severe spasms of sneezing, frequent attacks of headache, watery and inflamed eyes. Cream Balm can be depended upon to give relief at once and cures.



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

STIMMEL, ROBINSON & BRIGHTON,

REAL ESTATE AGENTS.

HUTCHINSON, - - - KANSAS.

10,000 acres of improved and unimproved land in Reno and Harvey counties for sale very cheap and on long time at 7 to 8 per cent. interest. Also farms and good pasture lands to exchange for merchandise or Eastern property. All kinds of stock taken in part payment on some of this land. Correspondence solicited.

WESTERN KANSAS!

Full information regarding the great and rapidly-developing Southwestern Kansas given on application. **200,000 ACRES OF CHEAP LANDS FOR SALE!** Price \$2.25 to \$6.00 per acre. Terms easy. All inquiries about Western Kansas promptly answered, and the "Settler's Guide" sent free. Railroad fare one way free to buyers of a half section, and round trip fare refunded to buyers of a section of land. Address **DUNN & BELL, GARDEN CITY, KAS.**

Potato-Growing in Kansas.

A New York farmer who was interested in potato farming in Kansas (Douglas county), says in a letter to the Country Gentleman: "After making potato-growing a specialty here for thirty years, and constructing several new tools for that work, which greatly reduce the labor and cost of growing this crop, I went to Kansas last summer and help to grow 11,000 bushels of Early Ohio on seventy-five acres of one potato farm. A friend of mine grew 150 or 160 acres of potatoes. This year he has 170 acres and thirty acres of sweets. These men have made it pay well—better I think than any other as a farm crop, and I formed the conclusion that although the climate of Kansas is not naturally favorable to the best development of this crop, still, by taking advantage of the season, and of the kinds of potato best adapted for the purpose (the Early Ohio seems to lead), I know of no part of the country that I would sooner go to, to grow this crop, either for the pleasure or profit of it—for it is an actual pleasure to till such soil, and such thrifty crops as it produces, and as far as I know they obtain better prices than we of the east. * * * *

"As to cost of growing the crop there, I would say that I tilled forty acres for a farmer there last year, he furnishing team and the ground plowed and my board, and I furnishing the tools and doing the work in a most thorough manner, from tilling the crop up to digging time, and this I could well afford to do, and would willingly contract to do again, for \$3 an acre. But as this farmer was from Pennsylvania, and a thorough farmer, he might have spent a little more than some of his neighbors did, but I am sure his cleaner and better crops more than made it up. Though as he hired this land, and almost all that was done on it, I am aware that it cost him between \$15 and \$20 an acre for this forty acres, and am confident that he cleared \$1,000 on that forty acre crop. I wish to emphasize the importance of frequent and thorough tillage, as as being in all cases the cheapest, considering the result, and especially so for Kansas, where the weeds, as well as the farm crops, grow about twice as rapidly as they do here; and as tillage hastens maturity as well as increases the yield, its importance will readily be seen in bringing the crop forward before the extreme heat that climate is subject to. Potato growing is considered about as profitable as any branch of farming here at the East, in almost all sections adapted to their growth, but, although at the West they cannot compete with us in our markets, still when they obtain about as much a bushel as we (which they usually do) I see several reasons for its being more profitable for them than for us. The land, either to buy or rent, is cheap; it is more easily worked, and is better adapted to the use of the best labor-saving implement especially suited to potato culture or tillage."

THE GREAT KANSAS FAIR — Sept. 5-10, at BISMARCK GROVE.

The ancient Germans swore by their gods, by their swords, and by their beards.

The most beautiful grounds in Kansas, the largest and most delightful grove, the biggest and finest collection of agricultural products, the fastest and the most magnificent stock, will be found at Bismarck Grove Sept. 5-10.

Sandy soils are not always the most undesirable. In truck and small fruits the poorest white sandy soil, if well manured, has given large yields and reasonable success. The labor of cultivating sandy soils is also much lighter than it is for heavy clay soils.

Homes in the Sunny South.

The Marion Standard has gotten up a special edition descriptive of the resources, products, location, climate, health, &c., of Perry county, Alabama. Copies sent free on application. Address, Marion Standard Marion, Perry county, Alabama.

Ohio Improved Chesters Warranted cholera proof. Express prepaid. Wins 1st prize in the States and Foreign Countries. 2 weighed 2506 lbs. Send for description and price of these famous hogs, also fowls. THE L. B. SILVER CO., Cleveland, O. If these hogs are really cholera proof, as guaranteed, have we not the solution to the problem, "How to banish hog cholera?" Write for particulars, and investigate and mention this paper.

ROME PARK STOCK FARM.

PURE-BRED POLAND-CHINAS.



LARGE ENGLISH BERKSHIRES.

T. A. HUBBARD, PROP'R, WELLINGTON, KANSAS. — Sweepstakes on herd, breeders' ring, boar and sow, wherever shown in 1886, except on boar at Winfield, winning (75) premiums at four fairs, including Grand Silver Medal for Best Herd, at Topeka. Stock recorded in Ohio Poland-China and American Berkshire Records. In addition to my own breeding, the animals of this herd are now and have been prize-winners, selected from the notable and reliable herds of the United States, without regard to price. The best and largest herd in the State. I will furnish first-class hogs or pigs with individual merit and a gilt-edged pedigree. Single rates by express. Personal inspection solicited. Correspondence invited.

CHOICE Berkshire and Small Yorkshire

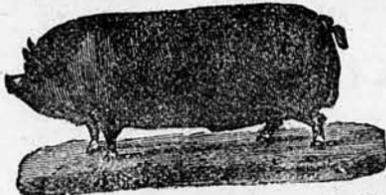
PIGS and MAMMOTH BRONZE TURKEYS. We have a splendid lot of the above named hogs and turkeys for sale at hard time prices. Write for prices before making purchases if you need anything in this line. Satisfaction guaranteed. WM. BOOTH & SON, Winchester, Kas.

SELECT HERD OF LARGE BERKSHIRES!

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

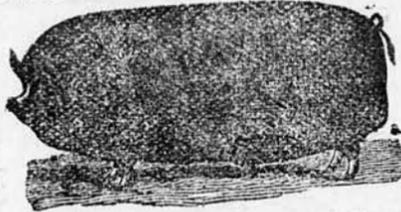
For Berkshire Swine, South-down Sheep, and Bronze Turkeys, that are first-class, or money refunded, call on or address J. M. & F. A. SCOTT, Box 11, Huntsville, Mo. [Mention KANSAS FARMER.]

LOOUST GROVE HERD OF Large English Berkshires



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

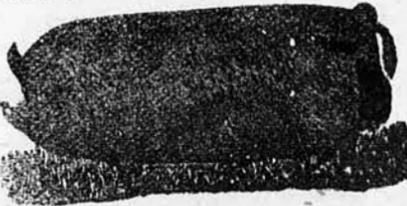
ENGLISH BERKSHIRES.



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

PLEASANT VALLEY HERD

Pure-bred Berkshire Swine.



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

Chester White, Berkshire and Poland-China Pigs, fine Setter Dogs, Scotch Collies, Fox Hounds and Beagles, Sheep and Poultry, bred and for sale by W. GIBBONS & CO., West Chester, Chester Co., Pa. Send stamp for Circular and Price List.

Pure-bred Poland-Chinas

C. G. SPARKS, Mt. Leonard, Mo. BLACK U. S. at head of herd. About sixty choice pigs, both sexes, for sale. Special express rates. Stock recorded in A. P.-C. and O. P.-C. Records.

POLAND-CHINA PIGS!

185 FOR SALE. Sired by six first-class boars, for season's trade. My herd is headed by STEW WINDER 7071. Address F. M. LAIL, Marshall, Mo. [Mention KANSAS FARMER.]

OTTAWA HERD.



400 POLAND-CHINA & DUROC-JERSEY SWINE of the most popular strains, at prices to suit the times. Send for catalogue and price list. I. L. WHIPPLE, Ottawa, Kansas.

THE GOLDEN BELT HERD OF THOROUGHbred POLAND-CHINAS.



Every breeder is strictly first-class and registered in the American P.-C. Record. A comparison with any other herd in the United States is solicited. I will sell first-class boars, ready for service in November and December, for \$20 each, on orders received on or before October 10, 1887, and deliver them by express free, within 100 miles of Lyons. Sixty choice April and May sows for sale. Cash to accompany order. Satisfaction guaranteed. Pedigree with every sale. F. W. TRUSDELL, LYONS, RICE CO., KAS.

NATIONAL HERD.

Established 1845. THOROUGHbred POLAND CHINAS as produced by A. C. Moore & Sons, Canada.

Is bred from 100 sows and 12 males. All recorded in A. P.-C. Record. Pigs all eligible to record. Pedigree sent when desired. Photo Cards of 43 breeders sent free. Swine Journal 25 Cents 1 & 2-cents stamps. COME AND SEE OUR STOCK We have special rates by express. If not as represented we will pay your express.

Gold Dust Herd of Poland-Chinas.



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

CHICAGO, KANSAS & NEBRASKA R'Y.

ROCK ISLAND ROUTE

TIME CARD: ATLANTIC EXPRESS. Arrives from Chicago..... 12:26 p. m. Leaves for Chicago..... 2:45 p. m. Depot, Union Pacific R. R., North Topeka.

ALMA ACCOMMODATION. Arrives at Topeka..... 11:50 a. m. Arrives at North Topeka..... 12:00 noon. Leaves North Topeka..... 1:00 p. m. Leaves Topeka..... 1:10 p. m. From crossing R. R. street and C., K. & N. track, North Topeka. ALL TRAINS RUN DAILY.

MISSOURI PACIFIC RAILWAY.

ONLY LINE RUNNING 3 DAILY TRAINS 3 BETWEEN ST. LOUIS & KANSAS CITY.

Double Daily Line of Free Reclining Chair Cars to OMAHA. Elegant Parlor Cars to KANSAS CITY, and Reclining Chair Cars Free on all trains.

2--DAILY TRAINS--2 ST. LOUIS TO WICHITA AND ANTHONY, KAS.

THE IRON MOUNTAIN ROUTE

Is the only route to the Great Hot Springs of Arkansas, and the most direct route to all points in Texas.

Only one change of cars St. Louis to San Francisco.

Through Pullman Buffet Sleeping Cars to Memphis, Mobile, Malvern, Houston, Galveston, and all principal Southern points.

Information cheerfully furnished by Company's agents. H. C. TOWNSEND, W. H. NEWMAN, Gen'l Pass. & Tr't. Agt. Gen'l Traffic Man., St. Louis, Mo.

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

Burlington Route H&STJ, KC, STJ & C.B.R.R'S

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

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

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

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

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

BURLINGTON ROUTE

Daily Trains via this Line between KANSAS CITY, LEAVENWORTH, ATCHISON, ST. JOSEPH and DES MOINES, COUNCIL BLUFFS, OMAHA, SIOUX CITY, ST. PAUL and MINNEAPOLIS. KANSAS CITY, ATCHISON, ST. JOSEPH and QUINCY, HANNIBAL and CHICAGO, Without Change.

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

THIS PAPER is or file in Philadelphia at the Newspaper Advertiser, Using Agents of N. W. AYER & CO.'s, our advertising agents.

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, 1885, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal, to forward by mail, notices 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 falls for ten days, after being notified in writing of the fact, any other citizen and householder may take up the same.

Any person taking up an estray, must immediately advertise the same by posting three written notices in as many places in the township giving a correct description of such stray.

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

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

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

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

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

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

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

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

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

FOR WEEK ENDING AUGUST 25, 1887.

Ness county—G. D. Barber, clerk.

HORSE—Taken up by Thomas Harding, in Eden tp., July 19, 1887, one sorrel horse, indistinguishable brand on left thigh, white face, four white feet, white spot on right thigh, \$3 on right thigh.

Norton county—Jas. L. Wallace, clerk.

PONY—Taken up by S. A. Thombrue, (P.O. Almeno), June 29, 1887, one bay mare pony, 12 hands high, indistinguishable brand on left hip, dark mane and tail and legs, white spot on neck supposed to be collar mark; valued at \$35.

Miami county—H. A. Floyd, clerk.

HORSE—Taken up by M. B. Atteberry, in Richland tp., (P. O. Wado), July 29, 1887, one sorrel horse, 12 or 13 years old, 15 1/2 hands high, saddle and collar marks, scar on left side of head between eye and ear, marks scattered white hair in forehead.

Shawnee county—D. N. Burdge, clerk.

2 STEERS—Taken up by John D. Knox, in Topeka tp., (P. O. Topeka), August 16, 1887, two steers, as follows: One roan steer, with brand resembling double U on left hip, a gash or scar on left side and a notch under right ear; the other red, piece taken from under part of right ear, and letter H on left horn; both valued at \$50.

FOR WEEK ENDING SEPT. 1, 1887.

Marion county—E. S. Walton, clerk.

MULE—Taken up by Jacob J. Harden, in Riskey tp., (P. O. Hillsboro), one brown mule, about 10 years old, 15 hands high, branded W on right shoulder; valued at \$40.

PONY—Taken up by Peter Gode, in Liberty tp., one bay pony mare, about 12 years old, 14 hands high, white face, right fore leg and left hind leg white half way to the knee; valued at \$35.

COW—Taken up by V. P. Duvall, in Clark tp., (P. O. Marion), May 24, 1887, one red and white cow, 7 years old, no marks; valued at \$22.50.

COW—By same, one red cow, 4 years old, no marks; valued at \$22.50.

HEIFER—By same, one speckled yearling heifer, no marks; valued at \$15.

HEIFER—By same, one yearling heifer, with silt in ears; valued at \$15.

STEER—By same, one spotted 1 year old steer, no marks; valued at \$15.

Thomas county—J. M. Summers, clerk.

MARE—Taken up by S. W. Roller, in Randall tp., (P. O. Oakley), August 11, 1887, one black mare, 15 hands high, 7 years old, branded SS on left shoulder.

Cherokee county—L. R. McNutt, clerk.

MARE—Taken up by J. H. Abbott, in Spring Valley tp., August 9, 1887, one bay mare, 14 hands high, three white feet, scar on left shoulder, 10 or 12 years old; valued at \$40.

Labette county—W. W. Cook, clerk.

STUD PONY—Taken up by W. C. Jarrett, in Hackberry tp., August 11, 1887, one sorrel stud work pony, 3 years old, white feet and face; valued at \$15.

STUD PONY—By same, one chestnut sorrel stud work pony, 3 years old, white hind foot; valued at \$15.

FOR WEEK ENDING SEPT. 8, 1887.

Johnson county—Henry V. Chase, clerk.

MARE—Taken up by —, one gray mare, 9 years old, between 14 and 15 hands high, dark spot on left side of face, slightly lame in front feet; valued at \$50.

Leavenworth county—J. W. Niehaus, clerk.

HEIFER—Taken up by Daniel Murphy, at St. Vincent's Orphan Asylum, May 10, 1887, one light red heifer, coming 3 years old, brass tag in right ear, slight cut on both ears; valued at \$13.

Hamilton county—T. H. Ford, clerk.

MULE—One dark bay mare mule, 6 years old, branded W.E. m.

MULE—One dark bay horse mule, 6 years old, branded W.E. m.

Kansas Fairs.

Anderson county—Garnett, August 30 to September 2.

Bourbon—Fort Scott, October 4-7.

Brown—Hiawatha, October 4-7.

Cheyenne—Wano, September 14-16.

Coffey—Burlington, September 12-16.

Cowley—Winfield, September 5-9.

Crawford—Girard, September 4-7.

Davis—Junction City, September 20-27.

Edwards—Kinsley, September 27-30.

Elk—Howard, September 22-24.

Ellis—Hays City, September 20-23.

Ford—Dodge City, October 5-7.

Franklin—Ottawa, September 27 to October 1.

Graham—Hill City, Sept. 20 to October 1.

Harvey—Newton, September 21-29.

Jefferson—Oskaloosa, September 13-16.

Jefferson—Nortonville, September 28-30.

Jewell—Mankato, September 27-31.

Lincoln—Lincoln, September 21-24.

Linn—LaCygne, September 5-9.

Linn—Pleasanton, September 13-16.

Linn—Mound City, September 19-23.

Marion—Peabody, September 14-16.

Mitchell—Cawker City, September 6-9.

Montgomery—Independence, September 6-10.

Morris—Council Grove, September 13-16.

Nemaha—Sabetha, September 20-23.

Nemaha—Seneca, September 6-9.

Osage—Burlingame, September 27-30.

Osborne—Osborne, September 14-17.

Phillips—Phillipsburg, September 27-30.

Pottawatomie—St. Marys, October 4-7.

Pratt—Pratt, October 11-13.

Rice—Lyons, October 10-13.

Riley—Manhattan, September 13-16.

Rooks—Plainville, September 27-30.

Rush—LaCrosse, September 13-15.

Saline—Salina, September 7-9.

Summer—Wollington, August 30 to Sept. 2.

Washington—Washington, September 12-16.

Washington—Greenleaf, September 21-23.

STATE AND DISTRICT FAIRS.

Kansas State Fair—Topeka, September 19-24.

Western National Fair—Lawrence, September 5-10.

Nebraska State Fair—Lincoln, September 9-18.

Kansas City Fat Stock Show—October 27 to November 3.

St. Louis Fair—St. Louis, October 3-8.

St. Joseph Inter-State Fair—St. Joseph, September 12-17.

For Trade or Sale!

Two hundred and eighty (280) acres of land one and a half (1 1/2) miles south of Sedan, Chautauqua county, Kansas. Will make a first-class dairy farm. Good springs and shade, about 40 acres under cultivation; common house, and some other improvements. Also good Residence Property in city. House of seven rooms, good stone barn, and other improvements, — all situated on six nice lots. Good stock, horses or cattle, or some of both, will be taken.

Inquire of D. C. BALDWIN, Hewins, Chautauqua Co., Kansas.

CITY HOTEL, :-: CHICAGO.

State Street, Corner Sixteenth Street.

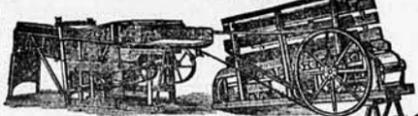
Rate \$1.50 Per Day.

Convenient to Stock Shippers. A good Family Hotel.

Table and Rooms first-class. State street, Archer avenue or L. S. & M. S. Dumry pass the house to all parts of the city and depots.

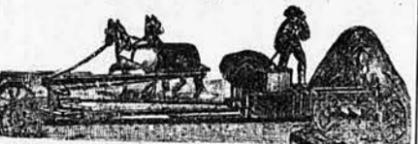
W. F. GRCUTT, Proprietor.

Heebners' Patent Level-Tread Horse-Powers, With Patent Speed Regulator



Heebners' Improved Threshing Machines. Fodder-Cutters, Corn-Shellers, Wood-Saws, Field-Rollers. Extraordinary success with latest improvements. Catalogues Free. HEEBNER & SONS, LANSDALE, PA.

The Lightning Hay Press.



Superior to any other press made. Send for descriptive circular and price list.

K. C. HAY PRESS CO., Foot of Sixth street, KANSAS CITY, MO. When writing advertiser mention KANSAS FARMER.

DAVID BRADLEY MFG. CO. SUCCESSORS TO FURST & BRADLEY MFG. CO. CHICAGO ILL. U.S.A. MAKERS OF RELIABLE PLOWS CULTIVATORS RAKES ETC.



COOK FEED FOR YOUR STOCK With the TRIUMPH STEAM GENERATOR and save 1/4 to 1/2 of your feed. Also ENGINES & BOILERS, CRINDING MILLS, FEED CUTTERS and CORN SHELLERS. Send for Catalogue A and state what you want. RICE & WHITAKER MFG CO. 12 & 14 W. Monroe St., Chicago.

CHAMPION Baling Presses. Bales one to two tons an hour. Loads 10 to 15 tons in car. Double Working. Easy on man and beast. Uses no doors. Send for Circulars with Prices. Address FAMOUS MFG. CO., Quincy, Ill.

ERTEL'S VICTORY PRESS. GEORGE E. TELFER & CO. QUINCY, ILL. SHIPPED ANYWHERE TO ORDER ON TRAIL AGAINST ALL OTHERS. USING MOST MODERN BEST WORK.

NEARLY 50 YEARS SUCCESSFUL OPERATION. STRAUB'S PORTABLE MILLS QUEEN OF THE SOUTH Select FRENCH BUHRS for Stock Feed or Meal for family use, 4 styles, 8 sizes. Every mill GUARANTEED. Write for descriptive circular. STRAUB MACHINERY CO., Cin., O.

THE LANE & BODLEY CO., CINCINNATI.

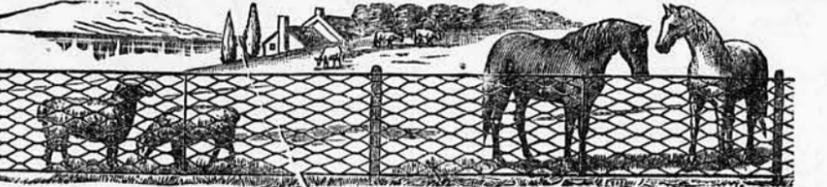


MANUFACTURERS OF SAW MILLS AND ENGINES

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

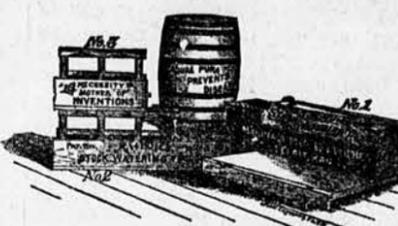
We manufacture Hydraulic, Jetting, Artesian and Gas Well Machinery. Business pays large profits; small capital needed; plenty of work. Acme Wind Mills, Pumps and appliances. Special Tube Well Pipe. Send 14c. and we will mail or express you, charges pre-paid, the full, most compact, most elegant Catalogue published in our line. CHICAGO TUBULAR WELL CO., CHICAGO, ILL.

SEDGWICK WOVEN STEEL WIRE FENCE AND GATES.



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 Stretcher and Pliers. Ask dealers in hardware, or address SEDGWICK BROS., Richmond, Ind.

T. W. BOIES' AUTOMATIC NON-FREEZING STOCK WATERING TROUGH.



Patented in the United States, November 10, 1885. Patented in Canada, January 13, 1886.

The Best and Cheapest Automatic Watering Trough Ever Presented to the Public.

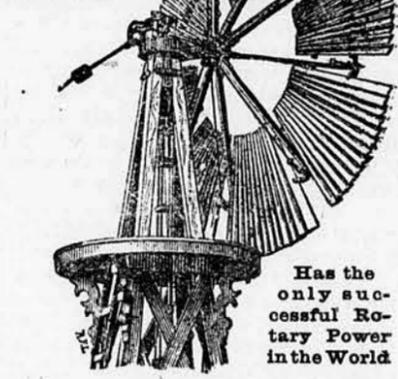
No patent ever issued has taken so favorably with the stockmen. Endorsed by PROF. SHELTON, of the Kansas State Agricultural College, Manhattan; JOHN WHITE, Live Stock Sanitary Commissioner, and hundreds of other prominent live stock breeders.

Now is the Time to Secure Territory, as the Troughs sell on sight, and when once introduced become a necessity to all parties raising stock. Troughs sent on trial to responsible parties giving references. For price of territory, terms and information, address

GOODWIN & BISHOP, DELPHOS, KANSAS.

THE VANELESS MONITOR.

—IS— UNEQUALED —AS A— FARM MILL.



Has the only successful Rotary Power in the World

SEARLES BROTHERS GENERAL AGENTS.

No. 621 Commercial St., ATCHISON, KAS.

I WANT ACTIVE ENERGETIC MEN and Women all over the country to sell the Missouri Steam Washer. Why does it pay to act as my Agent? Because the argument in its favor is so numerous and convincing that sales are made with little difficulty. I will ship a Washer on two weeks' trial on liberal terms, to be returned at my expense if not satisfactory. Agents can thus test it for themselves. Don't fail to write for terms and illustrated circular with outline of arguments to be used in making sales. J. WOLFE, 1715 & Franklin Ave., St. Louis, Mo. (Sent prepaid or 2 weeks' trial to persons for their own use.) (where I have no Agent. Ask particulars about Free Trial.)

I WANT AGENTS for best SASH LOCK ever invented. Excellent ventilator. Stops rattling. Big pay. Sample & terms to agents 10 cts. SAFETY LOCK CO., 108 CANAL ST., CLEVELAND, O.

Clover is one of the greatest consumers of lime among farm crops, and this explains the marvelous effect of sulphate of lime or land plaster in making clover catch. On heavy soil a dressing of 100 pounds of gypsum per acre rarely fails to bring good clover.

Remember that the greatest enemy a plant can have is another plant of the same kind growing by its side, as both feed on the same material. Remove the weaker plants and leave the stronger. One good plant will yield more than two plants under unfavorable conditions.

All who feel interested in obtaining a thorough business, short-hand, academic, music or art education should put themselves in communication with the Lawrence Business College and Academy of English and Classics, Lawrence, Kas., the leading institution of its kind in the West.

An acre of carrots can be made to yield over 500 bushels, though the labor would be quite an item in the beginning. Turnips are grown in preference to carrots, because they germinate from the seed sooner and are not so easily overrun with grass and weeds; but the carrots are far more valuable as food for all classes of stock.

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.,
Bank of Topeka Building, (upper floor),
Topeka, Kas.

Are You Going South?

If so, it is of great importance to you to be fully informed as to the cheapest, most direct and most pleasant route. You will wish to purchase your ticket via the route that will subject you to no delays, and by which through trains are run. Before you start, you should provide yourself with a map and time table of the Gulf Route (Kansas City, Ft. Scott & Gulf R. R.), the only direct route from and via Kansas City to all points in Eastern and Southern Kansas, Southwest Missouri, and Texas. Practically the only route from the West to all Southern cities. Entire trains with Pullman Palace Sleeping Cars, and Free Reclining Chair Cars, Kansas City to Memphis; through Sleeping Car, Kansas City to New Orleans. No change of cars of any class, Kansas City to Chattanooga, Knoxville and Bristol, Tenn. This is the direct route, and many miles the shortest line to Little Rock, Hot Springs, Eureka Springs, Fort Smith, Van Buren, Fayetteville, and all points in Arkansas. Send for a large map. Send for a copy of our "Missouri and Kansas Farmer," an 8-page illustrated paper, containing full and reliable information in relation to the great States of Missouri and Kansas. Issued monthly and mailed free.
Address, J. E. LOCKWOOD,
E. P. & T. A., Kansas City.

Remember the FARMER is now \$1 a year.

WANTED Ladies and Gentlemen to take nice light work at their homes. \$1 to \$3 a day easily made. Work sent by mail. No advertising. Steady Employment. Address with stamp **CROWN** 100-102, 20th St., Cincinnati, Ohio.

PENSIONS For Mexican War and Union Veterans. **MILO B. STEVENS & CO.**, Washington, Cleveland, Detroit and Chicago.

GO SOUTH Young Man and - **BUY A HOME** Stamp for particulars. **E. C. LINDSEY & CO.**, Norfolk, Va.

EMPORIA BUSINESS COLLEGE
EMPORIA, KANSAS.
PROF. O. W. MILLER, PRESIDENT.

Garden City,
The QUEEN CITY of the Arkansas Valley.

Surrounded by the FINEST LANDS in Kansas. Lands cheap, but developing rapidly. Now is the time to invest! Deeded Lands, \$4 to \$7 per acre.
Write for full information to **STOCKS & MILLER,**
The leading Real Estate Firm in GARDEN CITY, KANSAS.

Cheap Homes!

MEADE COUNTY, KANSAS. Organized; county seat permanently located at Meade Center; free from debt; well watered; deep, rich soil; no waste land; fine building stone. Three Railroads coming at the rate of two miles a day. Land cheap, but rapidly advancing. MEADE IS THE BANNER COUNTY OF THE SOUTHWEST, having won a special prize this year for county exhibit at the Southwestern Exposition, fifteen counties competing, and another at Dodge City Exposition over all competitors. Now is the time to invest. For further information address **J. A. LYNN,** Land and Loan Agent, Meade Center, Kansas. All representations guaranteed.

HEADQUARTERS FOR KANSAS.



PIANO

LEAD ALL OTHERS.
The Best in Quality. Reasonable in Price.

We offer special inducements to those wishing to buy for cash or on easy payments. Write to or call on
E. M. MILLER & CO.,
511 Kansas Avenue, TOPEKA, KAS.

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, 281 Wabash Ave., Chicago.

MENTAL GYMNASTICS, or Lessons on Memory, by ADAM MILLER, M. D. Price, postpaid, \$1. N. W. Book Co., 88 E. Randolph St., Chicago.

AGENTS WANTED to sell the Ohio Rug Machine. Retail price, \$1. Sells at sight. Address for Catalogue and terms to Agents, Ohio Rug Machine Co., Wauseon, O.

MARRIAGE WIVES HUSBANDS AGENCY.
Secured by mail. All suited; only honest people apply. Send 2-cent stamp for circulars. Address The Marriage Agency, North Evanston, Ill.

AGENTS LOOK HERE
and farmers with no experience make \$2.50 an hour during spare time. J. V. Kenyon, Glens Falls, N. Y., made \$18 one day, \$76.50 one week. So can you. Proofs and catalogue free.
J. E. SHEPARD & Co., Cincinnati, O.

State Agricultural College
Free Tuition. Expenses Light.
Endowment, \$500,000. Buildings, \$120,000. Grounds and Apparatus, \$100,000.
50 INSTRUCTORS. 200 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.

CHICAGO VETERINARY COLLEGE
INCORPORATED 1883.
Facilities for teaching and clinical advantages unsurpassed. Regular winter session for 1887-88 commences October 1st. For prospectus and further information, address the Secretary, **JOSEPH HUGHES, M. R. C. V. S.,** 2537 and 2539 State Street, Chicago, Ill.

CHICAGO ATHENEUM—People's College. 48 to 54 Dearborn street. Seventeenth year. One of the most practical schools in the West. Including Business School, Short-hand, Mathematics, Architectural and Mechanical Drawing, Rhetoric, Literature, Languages, Elocution, Music. Send for circular and mention KANSAS FARMER.

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. No yards are better watered and in none is there a better system of drainage.

Higher Prices are Realized

Here than in the markets East. All the roads running into Kansas City have direct connection with the Yards, which thus afford the best accommodations for stock coming from the great grazing grounds of Texas, Colorado, New Mexico and Kansas, 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.

Kansas City Stock Yards Company Horse and Mule Market.

FRANK E. SHORT. CAPT. W. S. TOUGH.
F. E. SHORT & CO.
Managers.

This company has established in connection with the Yards an extensive Horse and Mule Market, known as the KANSAS CITY STOCK YARDS COMPANY HORSE AND MULE MARKET. Have always on hand a large stock of all grades of Horses and Mules, which are bought and sold on commission, by the head or in carload lots.
In connection with the Sales Market are large feed stables and pens, where all stock will receive the best of care.
Special attention given to receiving and forwarding.
The facilities for handling this kind of stock are unsurpassed at any stable in this country. Consignments are solicited, with the guarantee that prompt settlements will be made when stock is sold.

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

CHICAGO. KANSAS CITY. ST. LOUIS.

James H. Campbell & Co.,
LIVE STOCK COMMISSION MERCHANTS.
—FOR THE SALE OF—
CATTLE, HOGS AND SHEEP.
Rooms 23 and 24, Exchange Building, Kansas City Stock Yards.

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

LITTLE JOKER BUTTONS!

For Marking STOCK. Never Come Off.
PRICE—\$5.00 per 100, numbered. Send for sample. Leavenworth Novelty Works, LEAVENWORTH, KANSAS.

J. E. BONEBRAKE, Pres't. THEO. MOSHER, Treasurer. O. L. THISLER, Vice Pres't. M. P. ABBOTT, Secretary.

Kansas Farmers' Fire Insurance Company,

ABILENE, : : : KANSAS,
Insures Farm Property, Live Stock and Detached Dwellings
Against Fire, Tornadoes, Cyclones and Wind Storms.
CAPITAL, FULL PAID, : : : : \$50,000.
The last report of the Insurance Department of this State shows the KANSAS FARMERS' FIRE INSURANCE COMPANY has more assets for every one hundred dollars at risk than any other company doing business in this State, viz.:
The Kansas Farmers' has \$1.00 to pay \$18.00 at risk; the Home, of New York, \$1.00 to pay \$46.00; the Continental, of New York, \$1.00 to pay \$80.00; the German, of Freeport, Ill., \$1.00 to pay \$70.00; the Burlington of Iowa, \$1.00 to pay \$78.00, and the State of Iowa has \$1.00 to pay \$79.00 at risk.



Per Year, 25c. KANSAS CITY, Mo., U. S. A. Six Months, 15c.

The MISSOURI and KANSAS FARMER is the cheapest paper in the whole wide world. It has eight large, clean-printed pages, with six columns of matter on each page. Every number contains a large map, showing the best portions of Missouri, Kansas and Arkansas for settlers to locate in; showing the counties and giving the number of acres of Government Land remaining open to homestead, pre-emption, soldiers' claim and private entry in each county. Every number contains the Government Land Laws, telling all about how to enter Government Lands. Every number contains descriptions of the counties, towns and townships, telling all about the soil, water, minerals, climatic influences, etc., the prairie and timber lands, and their adaptation for farming, fruit growing and stock raising. Every number will be worth more to you than the price for a whole year. Send for it now—do not delay. It will be mailed to any address in the United States, Canada, Mexico or Mexico for the trifling sum of 25 cents per year. If more convenient for you, you can send the amount in 1-cent or 2-cent American postage stamps. Write your name plainly, and give your town, county and state. [Always tell what paper you got this advertisement from, when you write.] Address, **MO. & KAS. FARMER,** KANSAS CITY, MO. Journalists' Drawer "B."

TWO-CENT COLUMN.

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

FISH FOR SALE—By the hundred or thousand. Instructions how to build ponds. Address H. E. Faldley, Burr Oak, Kas.

FOR SALE—Short-horn Bull, 9 months old. Grand-son of the famous show cow Conquest 2d. Write for pedigree. Jones Nye & Sons, Smith Center, Kas.

FOR SALE—Five hundred bushels of choice Kentucky Blue Grass Seed, in lots to suit purchasers, at 75 cents a bushel on board cars. Address R. W. Owens, Lee's Summit, Mo.

WILL SELL OR TRADE—One-half blood Clyde Stallion, Annandale, Jr.; brought from Illinois; acclimated and a good breeder. W. Guy McCandless, Cottonwood Falls, Kas.

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

FOR TRADE—Two grand Improved Farms, for Cattle. Would like one Clyde stallion. Address A. M. Mason, Neodesha, Wilson Co., Kas.

FOR SALE OR TRADE—On account of starting for Scotland soon, one Imported Clydesdale Stallion, 5 years old; weighs 1,700 pounds. A bargain if taken soon. For particulars, address Robert Ritchie, Peabody, Marion Co., Kas.

THE TURKVILLE P. O. FARM FOR SALE—Cheap, on easy terms. Saline river flows three-fourths mile through north side; two fine springs; 25 acres native timber; 90 acres improved; 70 acres pasture; 50 acres fine bottom land. A rare chance. Seven miles from two towns. Good schools, etc. Correspondence solicited. B. N. Turk, Hays City, Kas.

WE GUARANTEE—You to receive 500 Samples, Papers, Magazines, etc., from firms, if you send 20 cents to have your name inserted in our Agents' Directory. Copy sent to each. A. Rogers, Pub., Grand Island, Nebraska.

STOLEN.—Black horse, white face, high neck heavy mane but short, long heavy tail, shoes on front feet. \$25 reward. C. R. McDowell, 393 Morris avenue, Topeka, Kas.

WANTED—Man and wife—no children; man to superintend dairy farm and attend to growing stock. Man of experience and good judgment required. Wife to help in house and make butter. A permanent situation to right parties. Address Idylwild Farm, lock box 53, Council Grove, Kas.

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

FOR RENT—For cash, a Farm of 800 acres, fourteen miles northeast of Council Grove, Kas. It has a good house and barn and well, 52 acres broke and 640 acres fenced with four strands of barbed wire. Address E. S. Cartwright, Topeka, Kas.

FOR SALE!

Four Colonies Italian Bees, at \$5.00 each. Four Trios Prize-winning S. C. B. Leghorns, at \$2.50 per trio. Must be sold. Address J. B. KLINE, 924 Kansas Avenue, Topeka, Kas.

FOR SALE.

Twenty Large Brood Mares.

Inquire of JACOB MARTIN, Coffeyville, Kansas.

EIGHTH ANNUAL FAIR

—AT—

BISMARCK GROVE,

LAWRENCE, KANSAS,

SEPTEMBER 5th to 11th, 1887.

\$20,000 IN PREMIUMS.

FOX RIVER VALLEY HERD OF IMPROVED CHESTER HOGS.



I have a few prize-winning boars for sale, also forty-five head of aged sows have farrowed this spring. Orders booked for pigs without money till ready to ship. Nothing but strictly first-class pigs shipped. Prices reasonable and satisfaction guaranteed. My motto: "Individual superiority and best of pedigree." I am personally in charge of the herd. T. B. EVANS, Geneva, Ill.

PURE GERMAN CARP FOR SALE. For stocking ponds. All sizes, from 2 to 10 inches. Prices on application. J. J. MEASER, Hutchinson, Kansas.

FOR SALE! Large English Berkshire Hogs

Being obliged to change my business, on account of the burning of my hotel, I will sell at Low Prices

All My Brood Stock and Pigs.

The old stock is all recorded and the young stock is eligible to record. Correspondence solicited. The stock can be seen at the owner's residence, one-half mile north of Emporia Junction.

Satisfaction guaranteed. I. P. SHELDON, Emporia, Kas.

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

KANSAS IN 1887.

A GRAND EXPOSITION

Of Her Material Greatness.

THE

KANSAS STATE FAIR!

—AT—

TOPEKA, -:- KANSAS,

September 19, 20, 21, 22, 23 and 24, 1887.

\$20,000.00!

IN PREMIUMS,

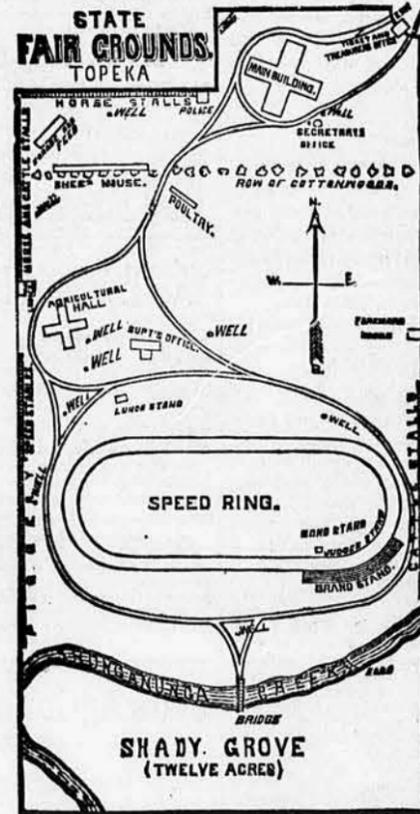
To be Distributed Under Award of EXPERT JUDGES.

\$1,000.00

IN PREMIUMS

For Best General Display of FARM PRODUCTS!

Made by COUNTIES.



\$25,000.00!

FOR FAIR GROUND Improvements.

CITY WATER SERVICE

ELECTRIC LIGHT.

NEW HORSE BARN, CATTLE BARN, ART HALL,

MACHINERY HALL, AMPHITHEATER,

And the Adornment of the FINEST FAIR GROUND and SPEED RING In the West.

THE GREATEST EXHIBITION OF Thoroughbred and Imported Stock

Ever Made in the United States, will be at the

KANSAS STATE FAIR!

—TO BE HELD AT—

Topeka, Kas., Sept. 19 to 24, inclusive, 1887.

For information and Premium Lists, address O. H. TITUS, Assistant Secretary, CHET. THOMAS, Jr., Secretary, TOPEKA.

SCAB! Only SHEEP DIP sold under Positive Guarantee. Never fails. Ten Years of Continuous Success. Nothing Poisonous about it! LADD'S TOBACCO SHEEP DIP

Is guaranteed to ERADICATE SCAB and VERMIN as surely in mid-winter as mid-summer. Those who have used other dips, with no, or partial success, are especially invited to give ours a trial. Its use more than repays its cost in an

INCREASED GROWTH OF BETTER WOOL.

Our new pamphlet, seventy-two pages, ready for free distribution. Send for it. [Mention this paper.] LADD TOBACCO CO., 1319 Spruce St., St. Louis, Mo.

PUBLIC SALE

—OF—

Thoroughbred Hereford Cattle

—AT THE—

NEBRASKA STATE FAIR, SEPT. 15, 1887,

—COMPRISING—

Twenty 2-year-old Heifers and Bulls, of the Grove, Fortune and Wilton Families,

From the celebrated herd of

J. S. HAWES, COLONY, KAS.

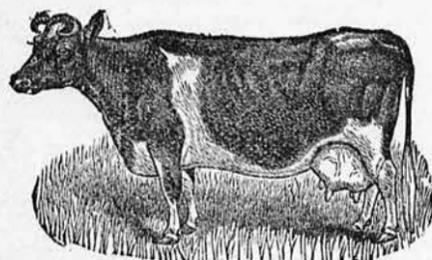
GREAT PUBLIC SALE!

—OF—

CHOICE HOLSTEIN-FRIESIAN CATTLE!

AT RIVERVIEW PARK, KANSAS CITY, MO., MONDAY, SEPTEMBER 26, 1887.

FIFTY HEAD, from the celebrated Brookbank Herd of



Send for Catalogue THOMAS B. WALES, Jr., Iowa City, Iowa.

TOWER'S FISH BRAND SLICKER The Best Waterproof Coat. The FISH BRAND SLICKER is warranted waterproof, and will keep you dry in the hardest storm. The new POMMEL SLICKER is a perfect riding coat, and covers the entire saddle. Beware of imitations. None genuine without the "Fish Brand" trade-mark. Illustrated Catalogue free. A.J. Tower, Boston, Mass.