TWENTY PAGES.

ESTABLISHED, 1863.
VOL. XXV, No. 49.

TOPEKA, KANSAS, THURSDAY, DECEMBER 8, 1887.

$1.00 A YEAR.

BREEDERS' DIRECTORY.

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

HORSES.

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

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

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

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.

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

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

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

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

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

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

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

W. E. GOULD, MARSHALL, Mo., breeder of Thoroughbred and Grade Holstein-Friesian Cattle. Calumet 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.

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

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

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

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.

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

CATTLE AND SWINE.

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

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

CATTLE AND SWINE.

M. 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.

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

SWINE.

V. B. HOWEY, Topeka, Kas., (Box 103), breeder and shipper of the most fancy strains of Thoroughbred Poland-China Swine, Light Brahma and White Leghorn Chickens.

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

ELM GROVE HERD OF REGISTERED POLAND-China Swine and *Jayhawker 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.

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

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

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

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.

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.

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

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

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.

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.

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.

SHEEP.

IMPORTED AND AMERICAN-BRED SHROPshire Sheep and Holstein-Friesian Cattle. White Plymouth Rocks, Wyandottes, Cochins, Black Leghorns, White Leghorns and Pekin Ducks. Stock first-class. Write at once. J. W. Sallard, Romeo, Mich.

H. V. PUGSLEY, Plattsburg, Mo., breeder of MERINO Sheep. Ewes averaged nearly 17 lbs.; stock rams, 34 lbs. to 38¾ lbs. Extra rams and ewes for sale. Also Holstein Cattle.

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

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.

POULTRY.

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

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.

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

JOHN C. SNYDER, Constant, Cowley Co., Kansas, breeds PLYMOUTH ROCKS exclusively. Cockerels and pullets for sale at reasonable prices. Write for wants or send for circular, and mention this paper.

POULTRY.

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

E. C. McNEMAR, Fairfield, Wabaunsee Co., Kas., breeder of Plymouth Rocks. A few choice P. Rock and Wyandotte cockerels for sale. Write for wants.

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

MARMATON VALLEY POULTRY YARDS
MRS. ALLIE 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.

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

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

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

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, Norwich, Kingman Co., Kas. *Castrating Ridgling Horses* and *Spaying Cattle* a specialty.

S. A. SAWYER, Fine Stock Auctioneer, Manhattan, 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.

MERINO PARK

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

As shown above, "high-flying" prices do not now prevail, as we now offer
150 Registered Rams for sale
As shown below at "hard-pan knock-down" prices. *Satisfaction guaranteed.*

[Mention Kansas Farmer.]

A. D. FERRY & CO., Commission Dealers in
BROOMCORN
225 & 227 Kinzie St., CHICAGO. Refer to Fort Dearborn National Bank and Lincoln National Bank, Chicago. ☞ Liberal advances on consignments.

ROCK SALT!
At Salesroom DOWN'S MILL & ELEVATOR CO., 304 Kansas avenue, Topeka, Kas.

Agricultural Books.

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

FARM AND GARDEN.	
Allen's New American Farm Book	$2.50
Barry's Fruit Garden	2.50
Broomcorn and Brooms (paper)	.75
Flax Culture (paper)	.50
Fitz's Sweet Potato Culture (paper)	.40
Henderson's Gardening for Profit	2.00
Hop Culture (paper)	.30
Onions: How to Raise Them Profitably (paper)	.20
Silos and Ensilage	.50
Stewart's Irrigation for the Farm, Garden and Orchard	1.50
Tobacco Culture; Full Practical Details	.25
FRUITS AND FLOWERS.	
Elliott's Hand-Book for Fruit-Growers	1.00
Every Woman Her Own Flower Gardener	1.00
Fuller's Small Fruit Culturist	1.50
Fuller's Grape Culturist	1.50
Henderson's Practical Floriculture	1.50
Parsons on the Rose	1.50
HORSES.	
Dadd's Modern Horse Doctor	1.50
Jennings' Horse Training Made Easy	1.25
Horse-Breeding (Sanders)	2.00
Law's Veterinary Adviser	3.00
Miles on the Horse's Foot	.75
Woodruff's Trotting Horse of America	2.50
Youatt & Spooner on the Horse	1.50
CATTLE, SHEEP AND SWINE.	
Allen's American Cattle	2.50
Coburn's Swine Husbandry	1.75
Dadd's American Cattle Doctor	1.50
Harris on the Pig	1.50
Jennings' Cattle and Their Diseases	1.75
Jennings' Sheep, Swine and Poultry	1.75
Randall's Sheep Husbandry	1.50
Stewart's Shepherd's Manual	1.50
The Breeds of Live Stock (Sanders)	3.00
Feeding Animals (Stewart)	2.00
MISCELLANEOUS.	
American Standard of Excellence in Poultry	1.00
Wright's Practical Poultry-Keeper	2.00
American Bird Fancier	.50
Quinby's New Bee-Keeping	1.50
Dogs (by Richardson)	.50
Atwood's Country Houses	1.50
Barns, Plans and Out-buildings	1.50
Arnold's American Dairying	1.50
Fisher's Grain Tables (boards)	.50
Fuller's Forest Tree Culturist	1.00
Willard's Practical Butter Book	1.00
Willard's Practical Dairy Husbandry	3.00
Practical Forestry	1.50
Household Conveniences	1.50

Address KANSAS FARMER CO., TOPEKA, KANSAS.

Some Valuable Papers
CLUBBED WITH KANSAS FARMER:

The *Breeder's Gazette*, price $3.00—both	$3.00
The Topeka *Weekly Capital*, price $1.00—both	1.50
The Topeka *Weekly Commonwealth*, price $1.00—both	1.50
The *Weekly Kansas City Times*, price $1.00—both	1.75

Short-horn Bulls
For sale at the
COLLEGE FARM.

These Bulls, twenty months old and upwards, good individuals, and of excellent families bred strongly in Bates lines, are offered at prices to suit the times. Address
E. M. SHELTON,
Sup't College Farm, MANHATTAN, KAS.

ABERDEEN-ANGUS AND GALLOWAY
Cattle for Sale!

Fifteen Galloway and Aberdeen-Angus
HEIFERS,
2 and 3 years old, in calf, and two 2-year-old
BULLS.
Eight or nine were imported and some of the best strains and registered.

Will take part pay in good grade Short-horns or young Clydesdale or Percheron Mares.

A. J. GROVER, Muscotah, Kas.

TOPEKA : BUSINESS : INDEX

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

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

NEW

Millinery AND Fancy Goods STORE.

A complete stock. Everything the latest. Prices reasonable. Call before buying.

MRS. W. P. HALL, 821 Kansas Ave.

AGRICULTURAL BOOKS!

Sent postpaid on receipt of publishers' price.

T. J. KELLAM,
Wholesale and Retail
Bookseller : and : Stationer,
603 Kansas Ave., TOPEKA, KAS.

HENRY W. ROBY, M. D.,

SURGEON.

General Manager Kansas Surgical Hospital Association.

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

C. E. JEWELL & CO.

Chattel Mortgage Loans

A SPECIALTY.

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

A. W. KNOWLES & CO.,

—Dealers in—

Hardware, Stoves, Pumps, Etc.

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

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

Real - Estate - Agent,

Southwest corner Sixth and Kansas Avenues,
TOPEKA, KANSAS.

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

$1,000 FOR $400!

Baxter Engine and Boiler!

We are determined to get our 8-horse-power Engine (with 10-horse-power Boiler) out of the way. We need the room. We can show it in motion, if desired, if you will call. We guarantee it in good condition. Cannot be had new at the shops for $1,000.

DARLING & DOUGLASS, TOPEKA.

TOPEKA

STEAM DENTAL ESTABLISHMENT.

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

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

Fine set of teeth on rubber, only	$ 8.00
Fine set, both upper and lower, only	15 00
Beautiful Celluloid, only	10.00
Beautiful Celluloid, upper and lower, only	20.00

$100 will be given every time it is shown we do not use the same material in our $8 sets of teeth that other dentists use in their $15 sets. All work warranted.

WASHBURN :: COLLEGE

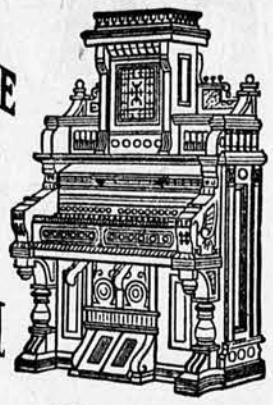
TOPEKA, - - KANSAS.

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

Address PETER MCVICAR, PRES

HEADQUARTERS FOR KANSAS.

THE ESTEY ORGAN



—AND—

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.

HOLIDAY ATTRACTIONS

FOR THE

FARMERS!

We can furnish you for a little money good solid

CLOAKS, OVERCOATS, BLANKETS, FLANNELS, UNDERWEAR, CARPETS, BOOTS, SHOES, HATS, CAPS, GLOVES, HOSIERY,

and a thousand beautiful and useful articles suitable for holiday gifts. We are the largest mercantile house in the State, making the lowest prices and furnishing the best goods.

Mail orders filled.

Goods sent by express C. O. D. with privilege to examine before taking from office.

We invite investigation.

W. W. CURDY

419 & 421 KANSAS AVE., TOPEKA.

FURNITURE

REED & SON,

510 Kansas Avenue,
TOPEKA, :: KANSAS.

Wholesale and Retail Dealers.

The Largest and Most Complete Stock of

EXCLUSIVE FURNITURE

In the City.

☞ Will deliver goods at any railroad point in Kansas at **Topeka Prices.**

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

The Central National Bank,

—OF—

TOPEKA, -:- KANSAS,

DEALS IN UNITED STATES, STATE AND MUNICIPAL BONDS.

DOES A GENERAL BANKING BUSINESS

DIRECTORS:

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

The Singer

IMPROVED

FAMILY MACHINES.

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

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

☞ AGENTS WANTED.

THE SINGER MF'G CO.,
805 Kansas Ave., Topeka, Kas.

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.

SMITH, BIGGS & CO.,

—DEALERS IN—

Hides, Wool, Tallow, Furs, Etc.

—ALSO—

Butchers' Tools and Supplies.

☞ Correspondence solicited. Send for Shipping Tags.

Office, 228 Kansas Ave., TOPEKA.

THE TOPEKA STATE SCHOOL OF ORATORY

BEGAN ITS SECOND YEAR OCTOBER 26.

Course of Two Years in the Delsarte System.

☞ Special Course in Oratory. Private Pupils taken at any time.

Address C. H. PUFFER, TOPEKA, KANSAS.

EMPORIA BUSINESS COLLEGE

—EMPORIA, KANSAS.—

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

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

State Agricultural College

Free Tuition. Expenses Light.

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

20 INSTRUCTORS. 500 STUDENTS.

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

MANHATTAN, KANSAS.

GO TO Spalding's Commercial College, LARGEST — CHEAPEST-BEST. KANSAS CITY, MO., J. F. SPALDING, A.M., PRES'T. COMMERCIAL BLOCK, Cor. 11th and Main Streets. Established October 25, 1865—Incorporated July 11, 1867.

All English and Commercial Branches, Phonography, Type-Writing, etc., taught at lowest rates. Unsurpassed Advantages. No Vacations. Catalogues Free. ☞ Be sure to visit or address this College before going elsewhere.

CENTRAL SCHOOL SUPPLY AGENCY

TOPEKA, : : KANSAS.

SCHOOL FURNITURE, BLACKBOARDS, Etc. and all school supplies at lowest rates.

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

—THE—

CHICAGO, KANSAS & NEBRASKA R'Y.

ROCK ISLAND ROUTE

TOPEKA TIME CARD NO. 6.

On and after Tuesday, September 27, 1887, trains will arrive and depart as follows: (Central Standard Time.) All trains run daily.

GOING WEST.

	Arrive.	Depart.
From St. Joseph, No. 1	12:30 p. m.	12:50 p. m.
From St. Joseph, No. 3	11:40 p. m.	11:50 p. m.
From Kansas City, No. 1	12:35 p. m.	12:50 p. m.
From Kansas City, No. 3	11:35 p. m.	11:50 p. m.
Horton Accom., No. 23	7:30 p. m.	

GOING EAST.

	Arrive.	Depart.
For St. Joseph, No. 2	3:10 p. m.	3:20 p. m.
For St. Joseph, No. 4	3:45 a. m.	3:55 a. m.
For Kansas City, No. 2	3:10 p. m.	3:15 p. m.
For Kansas City, No. 4	3:45 a. m.	4:10 a. m.
Horton Accom., No. 26	.....	6:55 a. m.

NOTE.—Passengers for points in Nebraska should take the Horton Accommodation, leaving at 6:55 a.m., connecting at Horton Junction at 10:15 a. m., with the Mail and Express on Northwest lines.

Passengers desiring to take the *first* train out of the city in the evening, for WICHITA, WELLINGTON, CALDWELL, HUTCHINSON, PRATT and GREENSBURG, should take train No. 3, at 11:50 p. m. New Pullman Sleepers are attached to this train running through to points named, *two hours and thirty-five minutes in advance* of other lines—a fact worth remembering. Train No. 2, leaving at 3:20 p. m., has a New Pullman Sleeper attached, running *through* to Chicago, arriving there at 2:15 p. m., next day.

For Tickets, Sleeping Car Berths, and general information, call at Company's Ticket Office, No. 601 Kansas avenue, corner Sixth street, and at the Passenger Station, corner Kansas avenue and First street.

City Office Telephone number is 430.

O. W. FISHER, Gen. Manager. T. J. ANDERSON, Gen. Agent. JOHN SEBASTIAN, Gen. Tick't & Pass. Agent.
TOPEKA, KANSAS.

Agricultural Matters.

Don't Forget the Chinch Bug.

At this time in the year, insects do no injury, and for that reason we are too apt to forget them temporarily. Enough has been learned about the habits of the chinch bug to satisfy all persons that during the cold weather of fall and winter many of the old bugs lie in rubbish of various kinds about farms, in fences, in grass along fences, under leaves, under sods, under pieces of wood, in corn shocks, in old straw and hay stacks, etc. They are not there for nothing. If left until spring they will go about their work of reproduction and destruction again, according to their habit unless checked or destroyed by rains during the hatching or growing season. It is very generally believed that we will not be much annoyed by chinch bugs next year; but the belief is based on observation and hope, only. There is nothing absolutely assuring about it. Because it has not been common to have three bad bug years in succession, people are led to believe that, having had two such years, we will not have a third immediately following them.

Faith without works is dead. Let us not forget the chinch bug, and wherever and whenever we have an opportunity to get rid of a nest of them, let the time and place be made occasion for doing good by destroying the insects. Farmers in Kansas ought to make it a regular business all this winter to not only avail themselves of opportunities to destroy bugs, but to search for and create opportunities of that kind. If this is acted upon generally, the good accomplished will be very great in the aggregate.

Prof. Webster, of Purdue University, Lafayette, Indiana, is of opinion that sheep would help a great deal in some places and under certain circumstances, as where grass grows undisturbed in fence corners and other nooks about the farm. He thinks the sheep would eat the grass off so close as to leave the bugs on the ground and under the blades shelterless, thus ensuring their destruction.

It has been suggested, too, that where bugs are known to be quartered by large numbers in fields, the sowing of strips of wheat or oats for them to feed on in the spring, and where they might be found collecting when warm weather comes, they could then be destroyed.

The object of this article, however, is to call attention of farmers to the importance of keeping the bug and his life work in mind continually and of improving every opportunity to destroy him and all his family. To do this it may be necessary to adopt different methods, as burning, freezing, drowning or suffocating. A compost heap is as good as a crematory for destroying insects of any kind, provided, of course, they are buried deep enough.

Skin Diseases--Cut Stalks.

EDITOR KANSAS FARMER:—I see inquiry frequently in the KANSAS FARMER and other papers for remedy for mange, Texas itch, etc. In 1882 I had ten Texas fillies, and all got the Texas itch. I used nearly all the remedies given in some of the best veterinary works, but to no avail. Eight had already died. The remaining two were nearly gone. Dr. Kernke, a German physician of Topeka, told me to use sulphur and soft soap with a scrubbing brush. I took about one pint sulphur and about one quart soft soap and applied it from head to foot with a stiff scrubbing brush, and in two days washed off with warm water and soft soap. I repeated this three times. It cured them. It has proven a sure remedy for all kinds of skin diseases on my stock.

W. C. N., in *Breeder's Gazette* of November 24, asks for information about feeding cut corn-fodder, and adds: "I noticed this week an article from a New York paper, in which the writer, speaking of having fed cut corn-fodder for three years with poor results, says that the sharp end of the stalks made the cattle's gums and jaws so sore before spring that they did not thrive on it." In December, 1886, I run shock corn without husking through my feed cutter and commenced feeding with bran and meal to my cattle. In a short time their tongues commenced swelling so that they could scarcely eat. I called a veterinarian, but he failed to find the cause. In a few days I again sent for him. He made a careful examination of the feed and decided that it was the sharp edges of the butts of the fodder that was rasping and cutting the root of the tongue. I quit feeding it, and all got well but one fine Short-horn cow, she died. Experience is a good teacher —sometimes costly.

Above I give my experience for benefit of patrons of the KANSAS FARMER.

J. B. MCAFEE.

Tame Grasses in Southern Kansas.

EDITOR KANSAS FARMER:—A correspondent in a late number of the KANSAS FARMER asked for experiences is the growth of tame grasses. From a trial of seventeen years in Cowley county, in the Arkansas valley and first foot-hill, and observation on the upland and Walnut valley, I consider the timothy a failure wherever tried, except on low, black, sandy soil, where it is sub-irrigated. The bulb or crown of the plant is killed in medows by the drouths in July and August. Orchard grass and oat grass suffer badly if cut for hay, or pastured close, probably injured the most if followed by a severe winter. Common red clover is not a success; it does not make sufficent growth to mulch the soil to prevent dying out. Good pastures of it are few and far between. Alfalfa is a miserable failure, even on the Arkansas valley, and has been discarded by our farmers. Mammoth or Sapling clover, after three years trial, promises to be one of the forage plants that will endure drouth and furnishes a mulch for the soil. Australian millet (or grass) has been tested here by a neighbor for two seasons—a perennial, furnishing two or three cuttings, six feet high, or an immense amount of pasture, unaffected by drouth or cold. From appearance if sown on land it will stay. It should be sown only on permanent pastures, or medows. Clover should be sown here about the 15th of April, just before a rain. *Do not sow with wheat or oats.* Give the young plants all the ground; cut weeds with a mower, when they get two or three feet high, raise mower bar ten inches from the ground, using a wood runner strapped to outer dividing shoe. These weeds, and if you sow on corn ground (plow deep, eight to twelve inches) there will be a large amount of volunteer corn come up; then break standing stubs of weeds and stalks with (preferably a twelve feet piece of railroad rail), and rake off in the spring and give the young clover a good rolling to prepare the ground for mowing. If for pasture, this removal of weeds is omitted; but *do not pasture the young clover the first season*, nor overstock when used for pasture. One-third less stock should be pastured than can be carried in southern Iowa or central Illinois to the acre.

English or Kentucky Blue grass, may be used to an advantage for winter pasturage by those who own large tracts of land; but to the small farmer it is useless during the summer when he needs grass for his stock. The early sowing of fall wheat and the use of standing cornstalks, is profitable wintering, ranging from green to dry feed at will. If no wheat crop is gathered, it pays for seed and putting in for pasture alone; for as is common, if not pastured too late, the heaviest pastured field is the best at harvest. Hogs do extra well on it if properly ringed to prevent their rooting up the plants.

I will suggest for the benefit of any one not familiar with the proper curing of clover hay, that when by twisting a bunch of hay, sap just fails to exude, the hay should be put into stock as rapidly as possible. If the leaves break off, or it becomes dry in handling it is worthless.

I will give a hint from an Eastern farmer, that of using good, bright straw, alternate layers of one-fourth straw to three-fourths clover hay in mow or under open shed. It is claimed that it will prevent moulding, the straw will absorb all moisture from the clover hay, leaving it free from mould or dust, and also making the straw as palatable as the clover hay for the stock.

JACOB NIXON.

Kellogg, Cowley Co., Kas.

Farm Notes.

The primary object and justification of government is to protect the weak and prevent a powerful few from wronging the humble many. If we cannot bring the Standard Old Trust into subjection to the law, how will we ever cope with a 'Railroad trust,' organized to evade all laws Congress may pass, and to violate with impunity every State law that can be enacted?"

The farming and allied interests of the United States are the majority of the whole people, and are therefore the power to control the elections and the laws. Also by far the greater part of other classes and business interests are at heart their friends. Farmers should not be afraid of pushing the remedies needed to cure the special ills of their class in the most radical and resolute manner.

An expert horseman says the best way to prevent overreaching is to shorten the toe of the front shoes and lengthen the toe of the hind shoes. By this arrangement the horse will pick up his fore feet quicker, and his hind feet slower, thus accomplishing just what is wanted. If a quarter of a second of time is thereby gained, the fore foot will be clear out of the way of the hind foot with its elongated toe.

One of the grandest triumphs of this nineteenth century is the progress that has been made in educational advantages. It is one of the proudest boasts of our native land that even to the humblest child an education is offered, almost without money and without price. None appreciate this more than farmers, many of whom in the earlier pioneer days of our country, were deprived of school advantages.

Farming without stock-raising is neither legitimate nor profitable. Nature intended all that grows to be returned to the soil in some form or other. This cannot be done without a combination of cropping and stock-raising. By such farming as enables the concentrated strength of the soil's vegatable growth to be returned to it each season, the land is improved and the farm becomes better each succeeding year. On the other hand, such farming as the "bonanza farming" of the Northwest impoverishes the land and sends its strength and vitality in the heavily laden grain trains off to the markets of the world, instead of returning at least a part to the soil. Such farming is not legitimate, and cannot be profitable for any length of time.

A Montana woman tells how she cures hams and bacon: Trim the hams in a smooth, rounded shape, and cut the side pieces lengthwise in strips about six inches wide. For 100 pounds of meat use six pounds salt, four ounces saltpetre, and five pounds brown sugar, which should be mixed together and the meat rubbed with it, and piled with the flesh sides up. Every three days it should be rubbed until the mixture is all absorbed in the meat. It is then ready to smoke. The smoke should be from hard maple, hickory, birch, or corncobs, and be kept up until the meat is a delicate brown or a dark straw color. The meat may be packed in a pickle of the same proportions, and be submerged in it for six weeks and then smoked. For large hams to keep through the summer one pound more of salt may be added. It is best to cure this in the brine. Each piece of bacon should be sewed up in a cotton cloth if sent to a distance; but if sold near home this is not necessary.

It is almost an impossibility for some farmers to see why it is not good policy to breed from grade sires when they have great individual merit. By breeding to a full-blooded sire they often get a grade produce as finely formed and with sometimes even finer points than were possessed by the sire, and such being the case they retain the grade for breeding purposes. This is a great mistake. The valuable characteristics in the pure breeds come from long breeding in the same line so as to insure ability to perpetuate certain qualities in the offspring. This is called heredity. The grade being a cross does not possess thes qualities of heredity and therefore has not the ability to impress any certain type upon his get, and his produce will as likely be a scrub as a good animal. He may breed back to either his dam or blooded sire, no matter what his individual merit may be. Therefore always use pure-bred sires.

In a collection of statistics of longevity recently published in the Boston *Globe* we find some interesting facts concerning the longevity of farmers. These show that by far the greater number of old men in New England are farmers; indeed, they number almost as many as all other men on the list. Those named are 80 years or more, and the number of farmers who have attained this advanced age is 416, while the carpenters, who comprise the next largest number, are only ninety-two. There are 3,500 names in all, and, as is seen, about one-ninth of the aggregate is farmers. The desire to live long in this beautiful land is innate, and when it is decided, by figures that do not lie, that an occupation particularly induces long life, it seems reasonable that it should be the work chosen by the many, and consequently that boy is wise who saves his money until he is rich enough to buy a farm. Hale, hearty, rugged men are these farmers, who enjoy the length of life in the fullest, and side by side with these silver-haired, rosy-cheeked, young old men come the great number of farmers' wives even as many as 250 more of those than of men, who have attained the age of 80. Hard, continuous workers, faithful to their charge, they have long retained their stewardship.

Rye on the Farm.

An eastern correspondent says, truly, no crop responds to good treatment more quickly than rye. On soil so light that not more than eight bushels per acre would grow without manure, with ten two-horse loads of barn-yard manure spread evenly, the rye having been sown broadcoast, and both harrowed in together, I have harvested over 20 bushels per acre of the nicest white rye, and three-fourths of a ton or more of straw. I have seen over 50 bushels of rye grown per acre, and a corresponding amount of straw. Being one of our surest crops, it is sown in out-of-the-way places, where scarcely any other crop would grow; hence so many acres afford small profit. Nor must one forget that rye straw is more valuable than hay. As a soiling crop, rye is the earliest of which I have any experience; that sown the first of September will be ready to cut the last of May, and I have been unable to see any difference in milk or butter production from those fed on any of the grasses. When mown before heading out, it will soon start again, and on rich ground it will produce a fair second crop for soiling or for grain. If sown so early as to have the grain stalks start in the fall, and judiciously fed off by sheep or calves, so that it does not spindle, it makes the finest pasture. Old, worn-out pastures can be quickly made new; by breaking them up in the fall, thoroughly harrowing, sowing to rye and grass seed, they furnish the best of pastures next season, and continue till the grass seed takes possession of the ground again.

The Stock Interest.

SOMETHING ABOUT FISH PONDS.

What follows is part of an article which appeared recently in the *National Journal of Carp Culture*, published at Youngstown, Ohio. The article was written by Judge J. W. Emerson, Iron county, Mo.

The safest pond is that which is wholly excavated, for then there is no dam to leak or break.

The disadvantage of such a pond is that it cannot be drained to catch fish or remove objectionable fish from it. Where ponds are made by the erection of dams, it is not usually important to excavate any more than may be necessary to supply material for the dam, and in this case the shape and size of the pond will depend entirely upon the height of the dam and the conformation of natural banks, while the excavated lakelet or pond may be often located and shaped quite largely at the maker's pleasure, at least where water and opography will allow.

Ponds should never be made with steep banks, fish will not thrive so well in them. At least half of every pond should be quite shallow, say from two inches to two feet; the remainder, various depths, running to not less than five and not over ten feet. At least while a greater depth than ten feet would do no harm, it would be of no advantage whatever in this climate. If there are any natural bars or ridges running out into the pond, leave them there. If covered with a foot to eighteen inches with water the fish will enjoy them on sunny days.

Don't try to get your shores or banks even or straight, or on set curves. Imitate nature in this regard. If you give attention to this, you will find that after you have nicely graded off and shaped the banks so there can be no abrasion or caving, and when you have planted shade trees and secured grassy banks where you can wander and enjoy the movements of the fish, and a few willows shall be planted here and there on the margin, the pond will lose its artificial appearance almost entirely. Of course you will provide ample shade for your ponds as soon as possible. Fish need shade more than animals do. Until trees grow, put in a few rafts made of plank, poles or fence rails nailed together, and fastened to stakes securely driven, for shades for your fish. Make them so they will not be unsightly. Keep an eye always to the enhancing of the beauty of the spot. Put in a few logs, so arranged as to lie just under the surface of the water, held down by rocks so arranged that the fish can pass under them. A log is not a beautiful thing to be floating about.

I now and then see small ponds, so-called, dug in the form of square pits, the banks quite vertical, exposed to the blazing sun the day long. You might as well expect a man and children to thrive in prison cells, as to hope to have fish live and thrive in such a place. Do not vex yourself with a trial in that way. Fish want a decent place to live, as do cattle, or human beings, if you expect them to live, thrive, behave decently and be happy.

Any body of water will furnish natural food for only a given number of fish, just as any field will furnish natural pasturage for only a given number of cattle. If you furnish artificial food, you may have the water as thick with fish as you could in the same way have your fields swarming with pigs and cattle. Boiled cracked corn and boiled potatoes, (and where you have carp, vegetable trimmings,) are about the only item of food cheap enough to allow of use, hence I shall not suggest other articles which are occasionally used without reference to expense.

Of course each dam must depend upon its own situation. You cannot use a large stream for the private culture of fish, for, in the first place, you could not control the stream, and in the second place, you could not control the fish in it. Even very small streams, subject to rapid rise and freshets, cannot be used. The pond must be located where it is secure from overflow, else the fish will escape, and your dam would often be ruined.

All the surface earth should be scraped away for the foundation of the dam, and the surface earth from the pond should not be used in the body of the dam—only hard earth should be so used. If your dam is four feet high, do not make its base less than thirty to forty feet wide, sloping both ways to a width of ten to fifteen feet on top.

Such a dam, if well tramped by the teams in the making, is likely to stand a lifetime if not exposed to violent freshets. It is safer to cut an outlet around the end of the dam, through the natural formation, than to allow the surplus water to pass anywhere over the dam even in a pipe or slide. If you take it thus around the dam, you can carry it in the canal a good distance below and thus avoid the danger of abrasion.

A thin dam of earth is certain to become saturated and softened, and with the aid of the crawfish, is sure to go to pieces in a wet season. And such a disaster involves not only the cost of the dam, but the loss of your fish. Make it strong and safe in the beginning so that you can rest and sleep with composure through any storm.

Other disasters to be guarded against arise mainly from minks, turtles, snakes, cranes, ducks, geese, and the like. The boys must use their guns and fine shot freely, and they will keep away the pests quite largely. A pleasure boat kept on the water will cause the place to be less lonely, and will do much to frighten away enemies of the fish. On no account whatever allow your geese or ducks to occupy your fish pond. It will not do. Besides, if you have the grounds nicely fitted up and neatly kept, you want them kept clean. If you raise fish you must have a different pond for your poultry.

Some of your fish may be stolen, not by the snake or turtle, but by human lovers of them. But what of it? You occasionally lose chickens from your hennery, but you do not therefore abandon the raising of poultry. And if we will multiply private fish ponds until the private culture and ownership of fish becomes as common and well recognized as the private ownership of chickens, you will find that there will be no greater danger of the invasion of your fish pond than of your chicken house. Indeed, not so much, for there is little danger that any of the varieties of fish which you would care to cultivate could be caught at night to any extent.

KINDS OF FISH.

I have space to add but few words as to the best kinds to be raised in ponds. If your pond embraces as much as two or three acres, and the water is cool and good, you can venture bass, croppie, and two or three of the best varieties of the perch family. If not over an acre, I would advise omitting the bass as they are specially destructive.

If the water is stagnant, or warm, or muddy, or has a tendency that way, by all means stock it with carp. They are inferior in quality to the native fish named, but are hardy, vigorous growers, and in any water will produce double the quantity of fish food of any other fish I know.

Winter Care of Colts.

EDITOR KANSAS FARMER:—Colts the first winter need better care than afterwards, and need extra good care during and just after weaning. A common mistake is to shut up a good colt in a warm stable and feed high with grain, and all the exercise they get is while being watered.

While colts need shelter in very cold weather, and in stormy weather, the better way is to have a good stable to go in and out, and have a chance to run on rye if possible at will. There should be an arrangement to feed hay and grain under cover, but most of the rough feed should be fed out of doors in good weather.

There is nothing equal to grain feed to keep a colt in good growing condition, and in this latitude the best way to secure it is to sow a patch of rye early, near the stables. Oats make the best grain feed, but a mixture of chopped corn and rye and bran makes a ration that will keep the colt growing, and make bone and muscle. Corn alone is too heating for young stock.

The quantity of feed will depend upon the breed, and how the colts are to be "pushed," heavy draft stock requiring much more grain if heavy horses are wanted, and size is the one thing in draft stock now-a-days, but enough should be fed to keep the colt in good, thrifty condition. All colts should be thoroughly halter-broken, so that they will lead and stand tied before weaning, but if not done before, it should be done the first winter. If well done then they never forget it, and it saves a great deal of trouble when they are old enough to break. And it is a good thing to teach all the colts to eat grain out of your hand anywhere in the feed lot, and get them so they can be caught anywhere. That is another thing they never forget, and it saves much trouble in future years. After the first year they will not need as much attention, and will do well with the same care and feed that a steer *ought* to have, and there will be but little more risk until they are 3 years old. Look out for lice and worms, and if they have the distemper, give them good care.

Russell, Kas. MAC.

Holsteins at the Texas State Fair.

The Murray Hill Herd of Holstein cattle, owned by Henson & Rathbone, of this city, has just returned from the Texas State Fair, where they carried away most all the blue and red ribbons. This herd was awarded first premium on bulls 2 years old and under 3, first and second premiums on bulls 1 year old and under 2, first and second premiums on bull calves under 1 year, first and second premiums on cows 3 years old, (no entry in 2-year-old class), first premium on yearling heifer and second premiumon heifer calf under 1 year old, first premium on best milch cow any age or breed, regardless of pedigree, milk on the grounds beating the competition just two pounds to one with the grand Holstein cow Shadeland Nettie, who milked 27¾ pounds at one milking. The judges had the cows milked out at 6 o'clock in the evening and were milked at 10 o'clock the following day, making sixteen hours to a milking on dry feed, Shadeland Nettie having been shipped 500 miles from home, in a strange place, while her competition was at home. Shadeland Nettie has a milk record of 63 pounds in one day, 586 pounds in ten days, 1,755 pounds in thirty days and 11,003 in nine months on grass alone as a 3-year-old heifer. This herd also won the grand herd prize for best bull and five females with the noted imported bull, Kansas, and cows, Yuma, Shadeland Nettie, Dorian, Alexia and Agiette, making in all seven first premiums out of a possible eight, and four second premiums, having taken the first with one exception—a total of eleven premiums. This is no doubt the banner record of any herd in Kansas shown at any State fair in 1887. This herd came in competition with herds from New York, Tennessee and Texas, there being about eighty head of Holstein cattle on the fair grounds. We congratulate Messrs. Henson & Rathbone upon their success, as this is the first time their herd has been shown away from home and the second time shown this year. They report the Texas State Fair a grand success in attendance, display and management, being only second to the great St. Louis fair.—*Council Grove (Kas.) Guard.*

How to Train Heifers.

A correspondent of the Iowa *Homestead* gives good advice on this subject. He says: "Commence with the calf, and with proper treatment there will be no 'breaking' to be done when the calf becomes a cow. It is the custom of a great many farmers to wait until the heifer drops her first calf, and then proceed to 'break' her. The process is sometimes very interesting to the looker-on, but not always so much so to the party engaged in the active operations. The heifer never having had her udder and teats handled, naturally objects when a man sits down beside her and begins to pull her teats. Her udder being more or less inflamed and tender, and having her calf to engross her attention, she resents any treatment so near her as milking. The result is more or less kicking on the heifer's part, and more or less profanity on the milker's part, followed sometimes by a vigorous application of the milker's stool to the heifer's back, with a great risk of making her a confirmed kicker, than which there is nothing more undesirable to own in the way of a cow. It is such a simple matter to train the calves that the wonder is that a badly-trained cow should be found, and I cannot but think that it is more from carelessness than anything else that farmers allow their cows to grow up before they begin training. You cannot begin training the calf too early. Commence the day it is dropped and handle it all over, head, back, sides, and especially its udder. Always in handling make the udder the principle object of your care. As soon as the teats are long enough to take hold of, pull on them gently, being careful not to hurt her, and give the udder a good manipulation before you leave her. She will soon begin to look for this attention and without any especial effort on your part, will learn to 'back her leg' in order that you may have easier access to her udder. This treatment continued until she drops her first calf will result in you having a cow thoroughly 'broken'—if you prefer that term—and you can sit down on your stool and milk your cow without having occasion to break her, the stool, or any of the commandments.

"This is not theory on my part, as in this case I practice just what I preach. I have never had to tie up a heifer with her first calf; in fact I just put her in a roomy box-stall and then go on with the milking. Of course a young cow will not stand quite as still as an old one—that is too much to expect—but there is little or no trouble to milk her, and if at the end of a week or ten days your cow does not 'stand' and 'back her leg' in the orthodox way you may be sure it is your fault and not hers. The time required to train a calf from the day it is dropped until it 'comes in,' say two years, would probably not be more than

four or five hours. As the editor says, she is 'to be taught by easy steps and short lessons.' That is just it,—short lessons. If you attempt to give long lessons you will make a mistake. When you find that the pupil is becoming uneasy and restless it is much better to stop than to force her to submit to your handling. But in my experience I was always the first to get tired.

"This training while young applies to all farm animals, colts, pigs, lambs, chickens, etc. We often read directions for treatment of the sow at farrowing time, where the writer cautions his readers not to go near the sow as it will cause her to move and endanger the lives of the young pigs. Now if a sow has been properly trained from pig-hood up there is no danger of disturbing her by your presence while farrowing.

"She ought to look upon you as her best friend and be glad of your company. As soon as my sows hear my voice they give a contented grunt and I can go into the pen and do whatever is necessary for her or the pig's comfort without any danger of her resenting my interference.

"It is the same way with my cows at calving time; no danger of any disturbance to the cow, and what is of just as much importance, no danger of the cow disturbing me. Train all farm animals while young and when they are grown you will have your reward."

In the Dairy.

A CHAPTER ON CHURNING.

That the best quality of butter may be produced, every step in the process must be conducted exactly right. One of the most important steps is that of churning. Following this and closely allied with it, comes salting and working, and, therefore, they will be included in this article.

Good butter can be made from sweet cream. More than that, it has been demonstrated that such butter will keep good as long as that made from sour cream,—popular conviction to the contrary, notwithstanding. This is a question, like many others relating to butter-making, so easily tested that butter-makers need not take the assertion of any one, but can settle it in their own dairies. But most good butter-makers prefer the cream to become slightly acid before churning, but the acid should not be carried too far, for if it is, the yield of butter will not be as great, as the acid will consume to a certain extent the oily or butter portion of the cream. The latter should be churned at a temperature of from 58 to 60 degrees in the summer, and at 60 to 62 degrees in winter. When milk is set in shallow pans and allowed to stand thirty-six to forty-eight hours in a temperature not varying but little from 60 degrees, the cream will perhaps be very near the proper condition and temperature for churning when removed or skimmed. But when cream is raised by the cold, deep-setting or Swedish method, its temperature is, of course, not the proper one for churning, and unless sweet cream butter is preferred it must be allowed to stand until the proper degree of acidity has been developed.

On removing the cream, or separating it finally from the milk,—I now refer to cream raised by the Swedish method,—it should be stored in tin pails having ventilated covers and kept at a temperature of about 62 degrees for twenty-four hours, when in most instances it well thicken and become slightly acid. Occasional stirring will be found beneficial. Of course the time it will be necessary to allow the cream to stand will vary, but the condition above named should be reached, but not greatly exceeded, for reasons before mentioned.

It is claimed a slight degree of acid on the cream improves the flavor of the butter. This is another matter for dairymen to decide for themselves, or submit to the taste of their customers, or the demands of the market where the butter is sold.

When preparing to churn, temper the cream by placing the cream pails, one at a time, in vessels of hot or cold water, as a higher or lower temperature may be sought. Stir the cream with one hand using any convenient article, and with the other hand, hold in it a thermometer till the proper temperature has been reached. Then remove the cream part from the vessel of tempering water. As stated before, the proper temperature of the cream for churning is from 58 to 60 degrees in the summer, and from 60 to 62 degrees in winter. This method of tempering cream is better than to pour into it either hot or cold water, especially the former, for it would melt the oily portion and injure the grain of the butter.

Prepare the churn by first scalding with hot water, then by rinsing with cold water.

It makes but little difference what kind of a churn is used, only that it has no paddles, floats or shafts inside. There should be nothing inside of a churn at time of starting but cream. It should be made of good, sound, sweet wood—hard wood, of course, perferred—smoothly finished, especially on the inside and so constructed that it can be easily kept clean. There can be hardly anything better than oak package.

A churn should never be more than half full of cream, to insure which it should not be quite half full before starting, for after a few revolutions the cream swells to the extent of considerably increasing its bulk.

As indicated by kind of churn here recommended, the agent employed to produce separation, or to "bring the butter," should be concussion, not friction, as would to a certain extent be the case were paddles or floats driven through the cream. Even in the old fashioned dash churn the agent employed in churning is mainly concussion and the grain of butter is less likely to be broken in that kind of a churn than in one having internal parts that grind or, as might be said, rub it.

With the cream properly tempered, and not to exceed the proper amount in the churn, churning may begin.

If a revolving churn be used, for instance a barrel churn, one revolving endwise, the revolutions must not be too rapid, say from sixty to sixty-five per minute; for very thick cream less speed will answer. The motion giving greatest concussion is the correct one; it can be determined by the ear of the operator, and varied according to the condition of the cream.

It is now conceded by experts in dairy matters that from twenty to forty minutes is about the time required in churning to produce most satisfactory results in quantity and quality.

The operation of churning should go no farther than to bring and leave the butter in granular form. In most barrel churns that revolve endwise a small, round pane of glass is inserted in the cover. Before separation begins the cream will adhere to and cover this glass. When the churning is well advanced it will begin to part so as to show some of the glass clear, and when entirely clear, stop churning and your butter will be in a granular form, the particles about the size of kernels of wheat or small peas.

This is the only correct method of producing butter, and below are given directions for making it.

Draw off the buttermilk, and with a dipper pour a pail of cold water over the butter, letting it run through it and out of the churn, This hardens the granules of butter, and prevents their massing together. Next cover the butter with cold water, and move the churn back and forth a few times; draw off the water, and repeat until the water runs from the churn clear. At this stage it is recomomended and practiced by many to cover the butter with strong brine (which can be kept for this purpose and repeatedly used by occasional scalding to keep pure) which hardens the grain, and more perfectly liberates the buttermilk, giving the butter a brighter appearance.

It is now ready for the salt. The amount required depends on the tastes of the consumers and the demands of the markets. The average is one ounce of salt to a pound of butter. In some markets only three-fourths of that quantity is wanted.

The butter should be weighed, or by some system correctly estimated and the salt always weighed, which can be sifted on while in the churn, by stirring or moving about from one side of the churn to the other, or it can be sifted on as it is removed to the butter bowl, or spread the butter on the butter worker, and sift on the salt and work very lightly, then remove to the butter tray, cover it with cloth wet in brine to exclude the air, let it remain a few hours for the salt to dissolve, when a second light working prepares it for the package. The advantage of this method is that the buttermilk is removed, and the salt coming in contact with the small particles is thoroughly incorporated without working the butter, except to liberate the brine, thus preserving the grain perfectly and consequently its keeping qualities.

Some good butter-makers whom I have conversed with, claim to get along well without working the butter, and if they can do so successfully, it is certainly a great point gained This is another matter for butter-makers to test for themselves by actual experiment. The reader can easily understand that, as the buttermilk is all disposed of by rinsing and draining, the only need for working is to liberate the brine. One thing is certain, the less working the better, and if working can be entirely dispensed with so much the better. Overworking ruins a great deal of milk, which, otherwise, would be pretty good butter. In manipulating butter never allow the hands to come in contact with it, as their warmth melts and injures the grain.

Break a piece of cold butter and if the grain is perfect the broken parts will resemble the broken parts of cast iron or steel, also the same of some rock formations.

The advantage of making butter in granular form must be apparent to the reader, as the process is set forth in this article. Those who have never practiced that method will do well to try it.

The impression that seems to be current to a great extent, that better butter can be made in factories, or, as they are popularly called, public creameries, than in private dairies, is an erroneous one. It is true that better butter is made in factories than is in many instances made in private dairies, but there is no reason why just as good butter can not be made at home on the farm as at any factory or public creamery. In fact better butter should be made at home.

The art of butter-making is a simple one, care and cleanliness entering largely into it. Churning is an important factor in the art. There is nothing in the entire system of butter-making but can be tested by any intelligent and painstaking man or woman.—*F. W. Moseley, in North Dakota Farmer.*

Dairy Notes.

Sweden has entered the dairy field of late years, and made giant strides. Italy is said to have done great work in this line with the past year.

The dairy product of Colorado will the present year approximate in value close to three million dollars. It requires four millions to butter and cheese the entire population, therefore one million must be sent from abroad.

"Far less value of food is required to obtain milk to the value of twenty shillings from the cow than to put beef of that value on the bones of a bullock." These words come from the pen of a correspondent of the London *Agricultural Gazette.*

An English writer says: In a rough estimate we may say there is at least one-third more in value of the product of the cow consumed than of the bullock by the well-to-do and richer classes, while the poor rarely touch beef in any shape, but do use milk and cheese.

Russia has entered the dairy field in earnest, and there is no telling what her myriads of inhabitants and unlimited territory may do in this line. There are splendid dairy sections, according to all accounts, in the Baltic Province, that have been neglected, which can be turned to good account now that the chances of a profitable foreign market has been opened to them, though it may take some time to fully develop them.

The newspapers never tire of telling about the immense herds and their princely owners on Western plains, of the novel and palatial cars used for transporting these beeves to the seaboard, and their export to all parts of the world, and then how the foreign governments fight to keep them out through all kinds of complaints of disease and decayed meat. But of that greater animal industry, the dairy, the same paper has but little to say.

The statements in this paper week afte week about Shallenberger's Antidote for Malaria are not made solely to get your money; we would despise ourselves for doing any such thing. Please don't make that mistake. If you are suffering from Malaria, get the remedy at any cost or trouble, and you will *know* there is one honest proprietary medicine about which the truth only is told.

Enough weeds can grow along an ordinary fence row, out of reach of the plow, to seed abundantly acres of land, thus causing a hundred times the necessary amount of labor to keep the fence row clean. A growth of weeds along a fence row, by holding the moisture and keeping away the sun and air, will cause a fence to rot in one-half the time it would if kept clean, thus adding a tremendous tax to the farmer.

Consumption Surely Cured.

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

All fowls shed their feathers annually; in the case of the growing chick, several times in the first six or eight months of its life. This making of new feathers costs almost as much vital energy as the formation of bone and muscle. This is easily proven by examining a flock of moulting fowls and noticing their emaciated condition. It is more trying on old fowls than on chicks. They often droop and become really sick before they are through moulting. Food of a stimulating nature should be abundantly supplied. Not a great amount of corn, but plenty of wheat, oats and mixed food. A liberal supply of bone or shell meal is good.

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.

Correspondence.

THE SENECA FARMERS' INSTITUTE.

Special Correspondence Kansas Farmer:

Pursuant to announcement a Farmers' Institute was held in the court house at Seneca, Nemaha county, this state, commencing last Thursday and closing on Friday evening, four meetings in all. Owing to unavoidable circumstances, continued rain both days, the attendance was not what it should have been; however the meetings were full of interest.

President George T. Fairchild, Prof. Edwin A. Popenoe, and Prof. John D. Walters were in attendance and took active part in the work of the Institute. These gentlemen are thoroughly versed in work of this nature.

The officers of this Institute are; Chairman, N. Coleman; assistant chairman, John M. Ford; secretary, James Fisher; corresponding secretary, N. Coleman; treasurer, Peter McQuaid; executive committee, L. N. Simon, James Fisher, Peter McQuaid and L. Knowles.

The first subject under consideration was that of

SMALL FRUITS,

by R. Robertson. He stated that as farmers we eat too much hog and not enough fruit. There should be on every farm plenty of strawberries, raspberries, blackberries, grapes, etc.; they should be well cared for and not allowed to become foul. The Crescent Seedling, although not the best, yields the most; but it should be fertilized by the Capt. Jack or some other as good. Keep clean, and don't plant too close. Let plants vine a little and protect from dry weather and hot sun by mulching. To have best results pull off blossoms the first season. Fall set plants don't grow as well as those set out in the spring. Of raspberries he preferred the Shaffer and Nemaha, the latter being the hardiest and best for general use. Has had no success with blackberries, they drying up in the bushes before maturing. Thinks cause of this is lack of mulching. He has twelve varieties of grapes. The Niagara not as good as the Concord. Thinks the Worden a better grape than the Concord and commands a higher price in the market. He uses the Kiefer system in trellising vines and does not trim while fruiting, save to pinch back buds. Pruning soon after the leaves fall is better than to wait until spring. Loose from trellise and let drop on the ground for protection. He keeps ground thoroughly worked and mulched. Never troubled with blight, rot or other disease. Bagging grapes protects from heat, storms, birds, etc., and gives rich color to the fruit. Never lost any strawberries from dry weather. Cob or wood ashes make the best manure for strawberries, holding moisture better and protects from hot sun.

In the remarks which followed Mr. Robertson's talk, Prof. Popenoe said that at the college farm they had discarded many varieties of small fruit on account of their failure. Of strawberries they had none living. Raspberries had done well, so also with blackberries. Tried currants with a degree of success. Gooseberries were not considered successful on account of mildewing. Grapes planted on hillside lands would freeze out. Had not tried the Worden. With them the Concord stood first on the list of grapes, it being the best and most profitable and of which they could get a crop five times to one of any other variety. The excessive dry summer was the cause of failure in growing strawberries which may be overcome in course of time.

Mr. Wilkinson stated that he had no trouble in growing the Red Dutch currant and that successfully. He planted bushes in a protected place and did nothing to them thereafter except once in awhile when he would apply a mulching of coal ashes and nothing else. From one-half an acre choice fruit to the value of $500 was regularly procured.

Mr. Coleman thought that after all it was more in the man than in the kind of fruit. The man, and manner in which he did his duty to kind of fruit growing had more to do with the pro and con of success than all other things combined.

THE FARM A MACHINE,

was the next topic to which attention was given. Before the speaker, President Fairchild, entered upon the subject, he stated the origin of Farmers' Institute. It originated with the college, and had for its object consultation and mutual benefit. Those here were somewhat after the plan of those established while he was in charge of the Michigan Agricultural college. Here the Faculty are instrumental in holding six Institutes every winter, take an active part in each, and see that permanent organizations are perfected. The Agricultural college is the farmers' school and a decided help to the state. The farm is like a machine. It is a wonder. Earth, air, water, sunshine and light are the leading parts, and all combined in proper qualities bring glowing results, while each of itself is nothing more than a body of inert, useless material. Soil is parts of matter associated together, the substance of which tend to production and the better we understand how to cultivate the better will be the result. Manure and other fertilizers supply parts taken away or gone. Air must come to furnish certain supply of plant food. To see how much atmosphere is required to sustain life we find that potatoes contain 90 per cent. water, and meats, an outgrowth of soil production, is largely water. Sunlight is a necessity and must be had, as constant shade tends to loss of growth. The man who knows what his powers are must know how to use and control them. The more carefully we analyze the more we can understand how the plant is built up, part by part. In preparing the soil it should be made soft so that all things coming in contact therwith will grow when planted where suited. The studying of the absorption of plants, where located, is valable. To attempt to run a machine without first understanding the parts of which it is composed would be considered out of place. Every step of knowledge to farming is like learning to run a locomotive; move at the wrong time you are hindered; move at the right time you succeed. No wonder that Edwin Burke said it takes so much to make a farmer. We all need to know more. Find out when and then do. In regard to meats, find out how you can fatten for lean or for fat, as demonstrated by Prof. Henry, of Wisconsin. There is no possibility of universal success, yet we should attain as near thereto as possible. Men can keep body and soul together on a mere pittance, but should they stop there? We should gather and profit by the experience garnered by others. We should make profit out of thought. It is thoughtfulness that wins. We do nothing in the world except to move things from one place to another, and failure to do this causes drawbacks. Capital is not gold, nor land, alone, but to know what, when, where and how to accomplish things.

TAME GRASSES

was ably handled by Mr. Lewis Zahm, the pioneer clover and timothy grower of Nemaha county. He has 225 acres in clover and timothy, some of which has been seeded down eleven years. Having sowed from twenty to thirty acres each year, all of which stands well and has a good sod, without any reseeding of any part thereof, it all being first sowing. He intends seeding fifty acres more the coming spring. Clover acts different here from what it does in the eastern states, in that our soil does not heave by frost, thereby killing the clover. Occasionally, in very heavy cold wind, when fields are not protected by snow, the clover suffers to some extent. He had met with but one failure in obtaining at least a fair stand, and mostly a good stand, and this was owing to a heavy gale in March eight or nine years ago, occurring soon after seeding, and blew the loose soil and seed all over the country, depositing the same like snow drifts in hedge rows, ravines, etc. The stand was better some years than others. However, he found, even an ordinary stand was too good to plow under, for by using the ground for meadow a year or two, and cutting it for hay and seed, it would thicken up from seed shelled out of the hay and second cutting for seed. His mode of seeding is with oats or barley and in the spring, and if on plowed ground sow the oats first and harrow, then sow the clover and timothy seed and lightly cross harrow. If on corn stubble, cut the stalks, sow grain and plow under, rather shallow, then harrow, sow seed and cross harrow. He uses six quarts of clover seed and two quarts of timothy seed per acre, and two bushels of oats; would rather sow less than over two bushels so as to give the young clover plant a chance to grow and obtain some strength by the time oats are harvested. He considers it better to mix the clover and timothy seed than to sow either one by itself, from the fact that the yield and quality of hay is better and makes the sod more compact, and a better pasture is the result. If it is desired to cut the second crop of clover for seed, the timothy is no hindrance thereto, on the contrary it leaves a better pasture after the clover seed is secured. To raise timothy seed sow that alone and in the fall. Some two years ago, after burning off the grass, he scattered a lot of lot of clover seed over a quarter section of prairie and dragged the ground with a weighted harrow. The result proved very satisfactory and for the past two seasons had cut the grass for hay, but earlier than prairie grass is usually cut commencing the latter part of July and continuing until completed, thus securing a good crop and quality of hay, mixed with considerable clover, yielding fully one ton per acre, which is good for the dry seasons of this and last year. Fall pasture was much better on it than on prairie stubble alone, and considerable young clover had made its appearance this season froom seed shelled and scattered over the field from last years hay crop, and he feels assured that the clover will increase from year to year until it takes entire possession of the whole quarter. He usually commences to cut clover about the first week in June, when it is in full bloom. Would rather wait until the 10th or 15th had he not so much to cut, but in his case by waiting the latter part of cutting would lose by being too ripe, and, also, be liable to injure the second crop for seed, especially in dry seasons. At no time has he harvested less than one ton per acre, and from that amount up to two tons. Then later, last of August and forepart of September he cuts the second crop for seed, yielding from one and a half to two bushels per acre every season for the past eight years, excepting this and last year. He cuts the clover when the dew is off, and rakes up what is cut in forenoon of first day in the afternoon of the second day, hauls it in and stacks it, and rakes up toward evening what was cut in afternoon of the first day, hauls it in in the forenoon of third day, and so on until done. Prefers to cure it in cocks, but the difference in expense being greater as to more than offset the difference in quality. The crop for seed he cuts with a self-rake reaper, and after curing a little, the gavels are pitched from five rows respectively into bunches, to be left until cured and dry, then to be hauled in and stacked. After this crop is off it leaves a valuable fall pasture, especially when treated to an occasional shower of rain, and will remain good until the coldest winter weather sets in—long after prairie pastures have been made worthless by frosts. Tame pastures are not materially injured by frosts. It is the same in spring with clover and timothy pastures, they being fit to turn onto fully two weeks earlier than that of prairie. This and the amount gained in the fall will shorten the feeding season nearly two months.

This gentlemen has 250 head of cattle and fifteen horses, and up to date, December 2, had fed no grain, except to work horses, and not to exceed fifteen tons of hay; had partially used up seventy-five acres of cornstalks, and the balance of feed consumed after prairie pastures became worthless was only tame pasture, and all of his stock are looking better to-day than they did two months ago. He further said that stock kept on tame hay only would winter fully as good, if not better, than on prairie hay and straw with a daily ration of from three to four quarts of grain thrown in. As to the value of fall tame pasture, he gave an actual test as follows: On October 18, after prairie pastures were nearly worthless, he received from Marshall county eighty-seven head of yearling steers, averaging 665 pounds each, according to weight soon after delivery at his place, in the meantime having had an opportunity of drinking along the roadside, as water was plenty in the ditches between Seneca and his place. On November 3 he weighed them again, fifteen hours off from feed and water, when they averaged 675 pounds, a gain of ten pounds each. On November 12 he weighed them again, fifteen hours off from feed and water, and they averaged 718 pounds, a gain of forty-eight pounds per head over the weight at delivery; time, twenty-five days. On November 21 he weighed them again, and they averaged 732 pounds, an average gain of sixty-seven pounds in thirty-four days from time of delivery, or about two pounds per day each. The cattle were kept on a 100-acre tract of tame pasture, together with ten head of horses, and all without any other feed. At the low price of 2½ cents per pound they have increased in value $1 67 per head; the 100 acres having eighty-seven head of cattle and ten head of horses to pasture, earned for fall feed $162, or $1 62 per acre, and feed left yet which will be utilized in pleasant days during the winter. He claims that he can pasture double the stock, if not more, on the same number of acres of clover and timothy as on those of prairie, either in pasture or in the shape of hay without the use of grain, but admits that prairie pastures, if not stocked too heavily, have no superior during the last half of May, the months of June, July, August, and a part of September. Still, if it be stocked as heavily as he stocks timothy and clover, it would be found wanting. Finally, clover and timothy, especially if cut for hay and clover seed, will keep fields free from obnoxious weeds, and whenever broke for corn would put the ground in condition to warrant a big crop with less labor than old ground.

Quite a discussion followed. Limited space prohibits my giving a detailed report of the many excellent remarks made by different parties. President Fairchild stated that they had twenty-five varieties of grasses growing on the college farm; some were good and others a failure. Of small grasses the Texas blue grass was proving good, remaining green all summer. Prof. Shelton, in his report, says: "Texas blue grass makes a very early and vigorous growth, and even during periods of drouth and severe freezing, the peculiar bright purple green of its foliage is scarcely diminished. This grass is of a much coarser habit than the common blue grass; it will cut a good swath of hay, and while it does not apparently make as firm and compact a sod as Kentucky blue grass, yet it occupies the ground very completely. I have seen enough of this new variety to warrant me in the statement that it will, without injury, withstand every exigency of our climate, and furnish treble the feed or hay that ordinary blue grass will furnish. Of the amount of seed required, or, indeed, whether it may be propagated from seed at all, I am unable to speak without further experience."

THE DAIRY,

by J. A. Boyer, was well handled, in an appropriate paper, for which room will be allotted in the Dairy department of this paper at as early a date as possible. The subject was one of great interest and caused considerable thought to be expressed as to best breeds for the dairy, and method of caring for them. Mr. Boyer had seventy head of Holsteins and thought them the cattle. He referred to the dairy competition recently held in New York, where the Holsteins came out victorious.

INSECT ENEMIES OF THE APPLE,

by Prof. Popenoe, commanded close attention, and the valuable thoughts expressed will no doubt be taken advantage of by every lover of good fruit who was fortunate enough to be present. The Professor illustrated his talk by samples of the many insects which infest the orchards of this State. They were a study within themselves, and it seems that no one can properly succeed as an orchardist without paying strict attention to the habits of these innumerable pests, so as to be able to head them off and avert their destructive work. At the College farm they use London purple to form a spray for apple trees, and by thorough application have secured good results. Parties interested in this matter should write Prof. Popenoe for such information as they desire concerning the care and treatment of orchards, etc., for their facilities are such as to enable them to make experiments which ordinarily cannot be made on the farm without needless outlay of time and expense. Whereas, by following plans adopted at the College farm, there would be no loss of time, nor expense, and all things would work together for good.

FARM ARCHITECTURE

was an important theme before the Institute, and the speaker, Prof. Walters, was thoroughly master of the subject, and before proceeding far he convinced the audience that one of the most important things to consider when about to erect farm residences is a suitable location. He used crayon illustrations in order to more fully impress his

thoughts upon the minds of his listeners. The location most preferable was that of the southeast corner of the farm when it fronts the highway east and south, provided natural advantages are favorable. He would place the house not less than fifty steps back from the roadway, each side, and have curved walks leading from it to gates both south and east. The barn he would place to the north at convenient distance from the house and fronting the road direct, with corral and shedding on the south side thereof. All outbuildings to be placed west of barn and north of the dwelling, with the vacancies and border of yard plat planted to suitable shade and ornamental trees, save that part of the yard directly southwest, and to the front on both sides; this is left open for free distribution of air from the southwest and a perfect view of the highway and landscape beyond, which is a very desirable and healthful feature. The well should be near the dwelling and supplied with a windmill pump, by which water could be elevated to a suitable tank, and from there carried in small pipes to each room of the house, and to other parts of the premises if so desired. Proper drainage must be kept constantly in mind, as the health of a family is the all important question to first command the parental attention. Many thoughts and plans were placed before us, and had I the space it would afford pleasure to follow the Professor through.

THE HOME,

by Miss Flora A. Stewart, a teacher in the public schools of Seneca, was indeed an excellent paper; and it will appear in the KANSAS FARMER soon.

Those who got up the program for this Institute are worthy of praise for remembering to grant a place thereon for women, and in the selection of Miss Stewart to present this important topic, they did credit to themselves and justice to her.

This finished the program, with the exception of a paper on "The Farmer's Horse," by Mr. Carmichael. It was deferred, owing to the lateness of time, and handed to me for publication in the KANSAS FARMER. It will appear ere long in the department of which its subject forms a part.

The following resolution prevailed:

Resolved, That this Institute does herewith declare a vote of thanks to President Fairchild, Prof. Popenoe and Prof. Walters, of the College faculty, for their efficient work in this our first Farmers' Institute, and also declare the same to Miss Flora A. Stewart for like interest.

Thus closed the first Farmers' Institute ever held in Seneca, and, from this nucleus many grand results flow. HORACE.

Garden Implements.

EDITOR KANSAS FARMER:—If the garden is properly planted out and nearly or quite everything is planted in long rows, it is possible to largely reduce the labor both in preparing the ground and in planting and cultivating the crops. Small beds must be discarded and everything be sown or planted in long rows. The plow, harrow and roller can be used in preparing the soil for planting and the work be thoroughly done. It is an item to have the rows in a straight line and equal distances apart. For this purpose a good reel and line, as well as a good marker and seed drill, will be found of considerable advantage. It is quite an item to have the plants in as straight a row as possible, so that the cultivator can be worked as close as possible to the plants. With a good marker and a seed drill this can usually be done better than by hand. By commencing early, before the weeds get a good start, and working the cultivator as close as possible to the plants, it is much easier to keep down the weeds and give reasonably clean cultivation than if we are obliged to depend upon hand hoeing entirely. All of the work of keeping down the weeds cannot be done by using the garden cultivator, but so much of it can be done that the implements necessary to do the work can be made profitable.

There are few farmers but that will find sufficient use for a good cultivator and wheel hoe to make the investment profitable. The plow, harrow, and roller can be the same as those ordinarily used on the farm. A marker can be made by any one who can drive a nail straight. A good reel and line are always indispensable in the garden. Then you want a spading fork, hoes, rakes, a good spade, a good wheel hoe and cultivator combined. These are very necessary. A good wheelbarrow or hand-cart, sprinkler, scythe, dibble, and one or two hand-weeders are very convenient, and will pay well for themselves in making the labor of hoeing a good garden light. I always consider that where there is a sufficient amount of work to be done, any implement that economizes or reduces labor can nearly always be used to a good advantage, and that when our finances will admit it is good policy to purchase. And this applies fully as much to the garden as to any other part of the farm work. It is fully as important to have a good garden as anything else on the farm, and thorough preparation, careful planting, and good cultivation are necessary to secure this. It is an item to do the necessary work as economically as possible, and often by using labor-saving machinery the work can be done better and at a less expense than without; and when this is the case it is certainly advisable to purchase and use it.

N. J. SHEPHERD.

Eldon, Miller Co., Mo.

Ensilage--Open-Air Silos.

EDITOR KANSAS FARMER:—For some three months I have been visiting in Chenango county, New York. Many things I have taken note of, and one I want to tell your readers of is the novel way my brother-in-law, J. S. Shattuck, experimented in saving corn-fodder (a sample of the same I send you by to-day's mail). The seed was an early variety of Western corn, put on about two acres of rich gravel land. An early frost cut the leaves and turned them white. He harvested it by putting in two men with team and wagon, cutting it with ordinary corn knives and immediately putting it into a stack, laying it on evenly and keeping the middle full, and when all was on, covered it with buckwheat straw to keep it dry from rain.

By examining the sample you can see and tell your subscribers how sweet and fragrant it comes out. Cows eat it readily, stalks and all, even while they are still on pasture.

Nearly all around the stack, in about two feet from the outer edge, there is a decayed streak. Mr. Shattuck thinks that if he had cut down the sides (the loose part) and put it on top, just after it had commenced to heat, before covering, there would have been very little loss; but as I examined it it had the appearance of being wet, from the top not being sufficiently laid out to shed the rain. It is my intention to experiment another year on sorghum and corn together. If we in Kansas can make a success of open-air silos, they will be far ahead of the pits.

An old subscriber, E. K. TERRY.

Burlingame, Kas.

The sample arrived on time and safely. It is bright in color, brownish, gives out a peculiar odor indicating slight fermentation yet perfectly sweet, and there is no sign of mold about it. The sample consists of part of a stalk with the ear on. The whole is perfectly preserved. The stalk is about five-eighths of an inch in diameter, the ear is seven inches long and about one and one-fourth inches in diameter.

A Universal Interest

Will be felt in the article which Mr. Gladstone has written expressly for the *Youth's Companion*. The subject of the great statesman is the "Future of the English-Speaking Races," and the paper is said to be remarkably lucid and suggestive.

Mount Hope Nurseries.

Elsewhere in this paper may be found an advertisement of this well-known nursery, which was established in 1869, by the present owners, A. C. Griesa & Bro., at Lawrence, Kas., where they have built up a large trade as a result of upright dealings with both old and new customers. This in connection with excellent location for the business which they understand so well makes them very desirable nurserymen to deal with. Write for what you want and mention this paper.

As egg-producers the Wyandotte is only excelled by the Leghorns. In hardiness, both as chicks and matured fowls, they are unequaled, and, being an out-and-out American breed, they readily adapt themselves to our climate. Their fine plumage, symmetrical form and upright and pleasing carriage enable them to bear favorable comparison with any breed, either upon the lawn, in the yard of the fancier, or in the exhibition hall. As mothers they are kind and good foragers. In short, this comparatively new breed unites all the sturdy and excellent elements of the large flesh and egg-producing breeds to a wonderful degree.

Gossip About Stock.

Col. W. S. White & Son, of Sabetha, Kas., are feeding 260 head of steer cattle at Alexandria, Neb., this winter. They consist of 2 and 3-year-olds.

The *Carbondalian* reports the sale of a fine Clydesdale stallion from the Townead Stock Farm, owned by Leonard Heisel, of Carbondale, to some of his Osage county neighbors for $1,600; also the sale of the imported stallion, Laird o' Connath, to Mr. D. Enns, of Burrton, Kas., for the sum of $2,000

Notice Dr. S. P. Cregar's Stock Cake and Anti-worm Remedy, appearing elsewhere in this paper; and should you be interested in what it treats of, send him your orders. He feels confident that his remedy will do what is claimed for it, and thinks a trial will convince the public of the merits possessed by the remedy.

The veteran prize-winning showman and modest breeder of best Berkshire and Poland-China swine, Mr. T. A. Hubbard, Wellington, Kas., writes that sales continue good and stock doing nicely. Mr. H. has a very fine lot of males as well as young sows ready for sale that will make the delighted purchaser prosper.

Remember that the Kansas State Short-horn Breeders' association meets at Topeka on the evening of December 5. Every farmer owning a Short-horn should be present at this very important meeting. An era of prosperity is close at hand, and those who expect to keep up with the procession will undoubtedly be present. It will pay.

The Breeders' Directory, as well as the displayed live stock advertisements in the KANSAS FARMER, should be read by everyone. It furnishes interesting and necessary information to nearly all of our readers, besides showing who have good bargains and have the courage and good business sense to ask for your patronage in a straightforward manner. You can rely always upon the stock offered by breeders who advertise permanently, because he is in the business to stay, and you can send him your orders with perfect confidence.

The special attention of our readers is invited to the advertisement in another column of the importers and breeders of the French draft and Percheron horses of Normal, Ill. This city and vicinity is given up almost entirely to the business of breeding and importing these noble animals, and we are doing injustice to no locality when we say that there are more firms engaged in this business at that place than are located at any point in this country, and most of them are very well known to our readers as men of experience, and who handle only the very best stock. We commend them all to the confidence of our readers, and suggest that if you wish to know how much stock is handled there, and what competition does for the buyer in the way of reasonable prices, you should address each one of these dealers whose names appear in the advertisement for full information, which will in each case be cheerfully given by return mail.

The Cherokee and Hereford Cattle Co, report the arrival at their ranch in Cherokee county, of the recent purchase of the two noted bulls, Horace 5th 12,524 (6491), a half-brother to the Grove 3d, and is the only other son of Horace 2492 (3877) in the world. He was imported by Geo. Leigh, Aurora, Ill., and has been at the head of his herd, except for the time he was let for a large sum for service in the herds of Messrs. Fowler & Vanatta, and T. E. Miller. He was also sire of the first prize thoroughbred Hereford steer at the Chicago Fat Stock Show, 1885. Wilton Duke, the other purchase, is one of the last get of old Lord Wilton, and was bought at Mr. Berland's sale in Chicago. These two bulls, with Plutarch 14,410, and Edmund 6553, noted prize winning bulls, will head the herd. The investment of $3,000, sum paid for Horace 5th, the company think is a judicious investment, and places this herd high in the ranks of the best herds.

Kohl Rabi.

Our crop of kohl rabi—less than half an acre—which has been the object of very favorable comment by many farmer visitors, was harvested last week in very satisfactory condition. The to us surprising fact about this plant is its wonderful drouth-resisting ability. During the entire summer, when for weeks at a time the ground was as dry and hot as road dust, when the heavens seemed to be of brass, and the air like the breath of a furnace, our kohl rabi appeared to suffer no particular discomfort, thriving and growing without much apparent difficulty. The yield seems to have been nearly 20 tons per acre—we have not yet measured the ground—of handsome, clean bulbs, which in appearance we have never seen excelled by anything in the turnip line. Of the nutritive and keeping qualities of kohl rabi we are not advised. We only know that our cattle, when once accustomed to them, eat them greedily and thrive amazingly upon the diet.—*Prof. Shelton.*

"What ye sow, that shall ye also reap." If we sow good seed, we may confidently expect good results; hence, it behooves every man and woman to carefully consider where the best seed may be obtained. Seed that is warranted pure, fresh, and raised on his own farms, is what the veteran seed-grower, James J. H. Gregory, of Marblehead, Mass., offers the public, and his well-known integrity makes his warranty a valuable one. Send for his 1888 catalogue.

Animals exposed to storms and changes of the weather, incident to farm work, should not be clipped.

Rheumatism

We doubt if there is, or can be, a specific remedy for rheumatism; but thousands who have suffered its pains have been greatly benefited by Hood's Sarsaparilla. If you have failed to find relief, try this great remedy.

"I was afflicted with rheumatism twenty years. Previous to 1883 I found no relief, but grew worse, and at one time was almost helpless. Hood's Sarsaparilla did me more good than all the other medicine I ever had." H. T. BALCOM, Shirley Village, Mass.

"I had rheumatism three years, and got no relief till I took Hood's Sarsaparilla. It has done great things for me. I recommend it to others." LEWIS BURBANK, Biddeford, Me.

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

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

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

Hood's Sarsaparilla

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

100 Doses One Dollar.

ROYAL

BAKING POWDER

Absolutely Pure.

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

GUNS Single Breech Loaders, $3.75, $8.50 and $11. Double, $8, $10.75, $13.50 and upwards. Fishing Tackle, Pocket Cutlery and General Sporting Goods. Send for 163-page Ill. Catalogue. CHARLES B. PROUTY & CO., 63 & 65 Washington Street, Chicago, Ill.

OPIUM AND MORPHINE HABIT CURED in 10 to 20 days. No pay until cured. Address DR. JAS. J. HOLDEN, WILLIAMSBURG, O.

The Home Circle.

Winter.

BY PHŒBE PARMALEE.

The wind has changed, the sky is overcast;
The Indian summer-time that stayed so long
Has gone, and winter settles down at last
Upon the earth, and on our hearts. The song
Upon our lips has ceased; our heads bow down;
The night is chill, and weary is day.
Is this the earth we knew, so bare and brown?
Are these the lips that smiled and sang away
Unmindful of a change so soon to come?
We look upon our peaceful dead and think
With keenest sorrow of the saddened home,
And him who has been called upon to drink
The bitter cup of mourning—now alone.
We wonder if the days to come will be
Less full of anguish, or if time will not
At last open our weeping eyes to see
The Father's hand that smote but taught.
Oh! hardest lesson—we so loth to learn!
And now the years stretch on before our feet
When we must toil and wait with hearts that burn
With longing for the time so full and sweet
And glorious, we can claim our lost and own.
As stretch the winter plains of ice and snow
To the far vision of the awakening spring,
So gaze we on the path our feet must go
Till faith and hope shall glad fruition bring.
The spring will come at last; we know ere long
The buds will open in the warm wind's breath;
The very air will teem with life and song—
A resurrection from the winter's death.
And so the time so dear draws on apace,
And farther grows our grief into the past;
And nearer comes the vision of that face
We loved, that form we missed, until at last
Time shall have merged in vast eternity,
And grief be lost forevermore in bliss;
When loves and hopes, all nevermore shall die,
When tears of sorrow that we shed in this
Shall in that better world be wiped away.

Our Benediction.

"God bless you, dear!" We said it when she came
To dwell with us, a little fragile thing;
And day by day we watched her, fearing lest
The new-imprisoned spirit might take wing.

"God bless you, dear!" We said it when she slept,
And when she woke, or wailed, or smiled, or sighed;
And when we planned her future, then we prayed
No real good or gain might be denied.

"God bless you, dear! We said it when she walked,
And when she knelt to say her simple prayer,
And when we laid her in her bed at night,
And when we called her in the morning fair.

"God bless you, dear!" We said it when she went,
Happy and proud, in school to take her place;
And when she ran to join her comrades' play,
And when we kissed her dimpled, flower-like face.

"God bless you, dear!" We said it when she stood,
With school-days all behind, in girlish grace,
To read the valedictory, and take
Among the graduates an honored place.

"God bless you, dear!" We said it when she knelt
To take the yoke of Christ, with heart so meek,
So free from guile, it seemed to us that she,
To find his kingdom, had not far to seek.

"God bless you, dear!" We said it when she stood,
With orange blossoms on her sunny hair,
Upon the threshold of her womanhood,—
The old refrain was still our loving prayer.

"God bless you, dear!" We said it yet again,
When strangely white she lay in dreamless rest;
And though we could not understand, we felt
That now our darling was most truly blest.

—*Lillian Grey, in Good Housekeeping.*

Thou canst not prove the Nameless, O my son,
Nor canst thou prove the world thou movest in,
Thou canst not prove that thou art body alone,
Nor canst thou prove that thou art spirit alone;
Nor canst thou prove that thou art both in one;
Thou canst not prove that thou art immortal, no
Nor yet that thou art mortal; nay, my son,
Thou canst not prove that I, who speak with thee,
Am not thyself in converse with thyself,
For nothing worthy proving can be proven,
Nor yet disproven; wherefore thou be wise
Cleave ever to the sunnier side of doubt,
And cling to Faith beyond the forms of Faith!

—*Tennyson.*

Pleasure that comes unlooked for is thrice welcome;
And, if it stir the heart, if aught be there
That may hereafter in a thoughtful hour
Wake but a sigh, 'tis treasured up among
The things most precious; and the day it came
Is noted as a white day in our lives.

—*Samuel Rogers.*

Time, the prime minister of death,
There's naught can bribe his honest will;
He stops the richest tyrant's breath,
And lays his mischief still. —*Marvell.*

ABOUT TRAINING CHILDREN.

Here are a few extracts from a sermon recently delivered by Rev. T. DeWitt Talmage.

The country is going to be conquered by a great army, compared with which that of Baldwin the First, and Xerxes, and Alexander, and Grant, and Lee, all put together, were in numbers insignificant. They will capture all our pulpits, storehouses, factories and halls of legislation, all our shipping, all our wealth, and all our honors. They will take possession of all authority, from the United States Presidency down to the humblest constabulary—of everything between the Atlantic and Pacific oceans. They are on the march now, and they halt neither day nor night. They will soon be here, and all the present active population of this country must surrender and give way. I refer to the great army of children. Whether they shall take possession of everything for good or for bad, depends upon the style of preparation through which they pass on their way from cradle to throne. * * * First: I remark that many err in too great severity or too great leniency of family government. Between parental tyranny and ruinous laxness of discipline there is a medium. Sometimes the father errs on one side, and the mother on the other side. Good family government is all-important. Anarchy and misrule in the domestic circle is the forerunner of anarchy and misrule in the state. What a repulsive spectacle is a home without order or discipline, disobedience and impudence, and anger and falsehood lifting their horrid front in the place which should be consecrated to all that is holy and peaceful and beautiful. In the attempt to avoid all this, and bring the children under proper laws and regulations, parents have sometimes carried themselves with great rigor. * * * The heart sickens at what you sometimes see, even in families that pretend to be Christian—perpetual scolding, and hair-pulling, and ear-boxing, and thumping, and stamping, and fault-finding, and teasing, until the children are vexed beyond bounds and growl in the sleeve, and pout, and rebel, and vow within themselves that in after days they will retaliate for the cruelties practiced.

Safer in a Bethlehem manger among cattle and camels, with gentle Mary to watch the little innocent, than the most extravagant nursery over which God's star of peace never stood. The trapper extinguishes the flames on the prairie by fighting fire with fire, but you cannot, with the fire of your own disposition, put out the fire of a child's disposition.

Yet we may rush to the other extreme and rule children by too great leniency. The surgeon is not unkind because, notwithstanding the resistance of his patient, he goes straight on with firm hand and unfaltering heart to take off the gangrene. Nor is the parent less affectionate and faithful because, notwithstanding all violent remonstrances on the part of the child, he with the firmest discipline advances to the cutting off of its evil inclinations. The Bible says: "Chasten thy son while there is hope, and let not thy soul spare for his crying." Childish rage unchecked will, after a while, become a hurricane. Childish petulance will grow up into misanthropy. Childish rebellion will develop into the lawlessness of riot and sedition. If you would ruin the child, dance to his every caprice and stuff him with confectionery. Before you are aware of it that boy of 6 years will go down the street, a cigar in his mouth, and ready on any corner with his comrades to test his pugilistic attainments. The parent who allows the child to grow up without ever having learned the great duty of obedience and submission has prepared a cup of burning gall for his own lips and appalling destruction for his descendant. Remember Eli and his two sons, Hophni and Phinehas.

A second error prevalent in the training of children is a laying out of a theory and following it without arranging it to varieties of disposition. In every family you will find striking differences of temperament. This child is too timid, and that too bold, and this too miserly, and that too wasteful; this too inactive, and that too boisterous. Now, the farmer who should plant corn and wheat and turnips in just the same way, then put them through one hopper and grind them in the same mill, would not be so much of a fool as the parents who should attempt to discipline and educate all their children in the same manner. It needs a skillful hand to adjust these checks and balances. The rigidity of government which is necessary to hold in this impetuous nature would utterly crush that flexile disposition, while the gentle reproof that would suffice for the latter would, when used on the former, be like attempting to hold a champing Bucephalus with reins of gossamer. God gives us in the disposition of each child a hint as to how we ought to train him, and, as God in the mental structure of our children indicates what mode of training is the best, He also indicates in the disposition their future occupation. Do not write down that child as dull because it may not now be as brilliant as your other children or as those of your neighbor. Some of the mightiest men and women of the centuries had a stupid childhood.

The third error prevalent in the training of children is the one-sided development of either the physical, intellectual or moral nature at the expense of the others. Those, for instance, greatly mistake who, while they are faithful in the intellectual and moral culture of children, forget the physical. The bright eyes half quenched by night study, the cramped chest that comes from too much bending over school desks, the weak side resulting from sedentariness of habit, pale cheeks and the gaunt bodies of multitudes of children attest that physical development does not always go along with intellectual and moral. How do you suppose all those treasures of knowledge the child gets will look in shattered casket? And how much will you give for the wealthiest cargo when it is put into a leaky ship? How can that bright, sharp blade of a child's attainments be wielded without any handle? What are brains worth without shoulders to carry them? What is a child with magnificent mind but an exhausted body? Better that a young man of 21 go forth into the world without knowing A from Z if he have health of body and energy to push his way through the world than at 21 to enter upon active life, his head stuffed with Socrates, and Herodotus, and Bacon, and La Place, but no physical force to sustain him in the shock of earthly conflicts. * * * Just as great is the wrong done when the mind is cultivated and the heart neglected. The youth of this day are seldom denied any scholarly attainments. Our schools and seminaries are ever growing in efficiency, and the students are conducted through all the realms of philosophy, and art, and language, and mathematics. The most hereditary obtuseness gives way before the onslaught of adroit instructors. But there is a development of infinite importance which mathematics and the dead languages cannot affect. The more mental power the more capacity for evil unless coupled with religious restraint. * * * The fourth error often committed in the training of children is the suppression of childish sportfulness. The most triumphant death of any child that I ever knew was that of Scoville Haynes McCollum. A few days before that he was at my house in Syracuse, and he ran like a deer and his halloo made the woods echo. You could hear him coming a block off, so full was he of romp and laughter and whistle. Don't put religion on your child as a straight-jacket. Parents, after having for a good many years been jostled about in the rough world, often lose their vivacity and are astonished to see how their children can act so thoughtlessly of the earnest world all about them. That is a cruel parent who quenches any of the light in a child's soul. Instead of arresting its sportfulness, go forth and help him trundle the hoop, and fly the kite, and build the snow castle. Those shoulders are too little to carry a burden, that brow is too young to be wrinkled, those feet are too sprightly to go along at a funeral pace. God bless their young hearts! Now is the time for them to be sportful. Let them romp and sing and laugh, and go with a rush and a hurrah. In this way they gather up a surplus of energy for future life. For the child that walks around with a scowl, dragging his feet as though they were weights and sitting down by the hour in moping and grumbling, I prophesy a life of utter inanition and discontent. Sooner hush the robins in the air till they are silent as a bat, and lecture the frisking lambs on the hillside until they walk like old sheep, rather than put exhilirant childhood in the stocks.

A man in passion rides a horse that runs away with him.

Mental Kitchen Scales.

Ten common-sized eggs weigh one pound.

Soft butter the size of an egg weighs one ounce.

One pint of coffee A sugar weighs twelve ounces.

One quart of sifted flour (well heaped) weighs one pound.

One pint of best brown sugar weighs thirteen ounces.

Two teacups (well heaped) of coffee A weigh one pound.

Two teacups (level) of granulated sugar weigh one pound.

Two teacups of soft butter well packed weigh one pound.

One and one-third pints of powdered sugar weigh one pound.

Two tablespoons of powdered sugar or flour weigh one ounce.

One tablespoon (well rounded) of soft butter weighs one ounce.

One pint (heaped) of granulated sugar weighs fourteen ounces.

Four teaspoons are equal to one tablespoon.

Two and one-half teacups (level) of the best brown sugar weigh one pound.

Two and three-fourths teacups (level) of powdered sugar weigh one pound.

One tablespoonful (well heaped) of granulated coffee A, or best brown sugar, equals one ounce.

Miss Parloa says one generous pint of liquid, or one pint of finely-chopped meat packed solidly, weighs one pound, which it would be very convenient to remember.

Teaspoons vary in size, and the new ones hold about twice as much as an old-fashioned spoon of thirty years ago. A medium-sized teaspoon contains about a dram.—*Mail and Express.*

Fashion Notes.

Long and short wraps are equally fashionable, whether braided or not.

The braided felt hat finds favor with little people and very young ladies.

The favorite braid designs on suits and jackets is the deep V back and front, and a similar design on the top and around the wrists of the sleeves.

Bands of uncurled ostrich feather flues are used as a finish for the neck and sleeves of wraps, and in finer qualities they are utilized for bonnet crowns, in rows of alternate colors.

Plain moire skirts in black and dark rich colors are elegantly worn under long French polonaises, or with bodice and tunic of India cashmere, tricot, camels' hair, and like textiles, and also for dress occasions, in combination with velvet and costly bead garniture.

Ulsters are made in a variety of new ways, many of which are pretty and becoming. The favorite braiding has found its way on the ulster which might have been supposed too rough to adapt itself to any species of ornamentation. Military braiding down the front of a close-fitting ulster, narrowing in from the shoulders to the waist, is noted on several ulsters in plain cloth, blue, brown or green.

Among the novelties in fine woolens are braided stripes, woven in bold relief to represent rows of braid sewed to the fabric. Wide stripes are formed of six or eight rows of what seems to be soutache, or basket plaited or diagonal braid, but is in fact woven into the background, and these groups of stripes are separated by stripes of the twilled serge, the braid in black, on terracotta, Russian green, rosewood, dahlia, and the bronze shades.

Women of Wealth.

Mrs. John Minturn is worth $2,000,000.

Mrs. Kate Terry is worth nearly $6,000,000.

Mrs. John Jacob Astor is worth about $8 000,000.

Mrs. Edwin Stevens, of New York, has $15,000,000.

Mrs. Thomas A. Scott counts her wealth at $5,000,000.

Mrs. Hetty Green, of New York, is worth about $40,000,000.

Mrs. Robert Goelet, worth $3,000,000, owes her fortune to hardware.

Mrs. Jayne, the widow of the patent medicine man, is worth $3,000,000.

Mrs. Marshall O. Roberts is the eight-millionaire widow of a mining king.

Mrs. Martin Bates was left $1,500,000 which her husband made in dry goods.

Mrs. Joseph Harrison, the widow of the man who built the first railroad in Russia, has $4,000,000.

Mrs. Jane Brown received from her husband's estate about $4,000,000, which was accumulated in banking.

Mrs. Josephine M. Ayer, who gets her money from patent medicine, is estimated to be worth from $4,000,000 to $5,000,000.

Catarrh originates in scrofulous taint. Hood's Sarsaparilla purifies the blood and thus permanently cures catarrh.

The Young Folks.

Grandfather's Barn.

Oh, don't you remember our grandfather's barn,
Where our cousins and we met to play;
How we climbed on the beams and the scaffolds high,
Or tumbled at will on the hay?
How we sat in a row on the bundles of straw,
And riddles and witch stories told.
While the sunshine came in through the cracks of the south,
And turned all the dust into gold?

How we played hide-and-seek in each cranny and nook,
Wherever a child could be stowed;
Then we made us a coach of a hogshead of rye,
And on it to "Boston" we rode?
And then we kept store and sold barley and oats,
And corn by the bushel or bin;
And straw for our sister to braid into hats,
And flax for our mothers to spin.

Then we played we were biddies, and cackled and crowed,
Till grandmother in haste came to see
If the weasels were killing the old speckled hen,
Or whatever the trouble might be;
How she patted our heads when she saw her mistake,
And called us her sweet "chicken-dears!"
While a tear dimmed her eye as the picture recalled
The scenes of her own vanished years.

How we tittered and swung, and played meeting and school,
And Indian, and soldier, and bear!
While up on the rafter the swallows kept house,
Or sailed through the soft summer air.
How we longed to peep into their curious nests!
But they were too far overhead;
So we wished we were giants, or winged like the birds,
And then we'd do wonders, we said.

And don't you remember the racket we made
When selling at auction the hay;
And how we wound up with a keel-over leap
From the scaffold down into the bay?
When we went in to supper our grandfather said,
If he had not once been a boy,
He should think that the Hessians were sacking the town,
Or an earthquake had come to destroy.

Something About Toys.

Under the guidance of a bright little lady the *Inter Ocean* reporter made the tour of a large toy importing house on State street and made a mental inventory of the novelties for children for 1887 holidays. The first department investigated was that devoted to mechanical toys. There was a host of these, some very unique and amusing. A colored stump speaker, in imitation of Billy Rice, goes through the motions and slaps his umbrella on the table just like Billy, and a colored woman makes a woman's right's speech. These figures sell for $3. Then there is a mechanical rabbit that eats chestnuts and acts cunning, for $6, and a pug dog that runs about the carpet, and a monkey nursing a monkey baby. These two figures may be had for $9. There is a mechanical duck that swims in a pond for $2.75. There are bears, dogs, chickens and sheep that wind up and go through some life-like antics. These cost about $2.50 each.

The Jersey doll is homely but durable, like a stocking full of sawdust. Knit dolls, paper dolls, and rubber dolls complete the list. In the department of dolls' supplies everything is shown for the little ones in miniature—parasols, hand-bags, shoes, corsets, fans, nursing bottles, toilet sets, hair-pins, tooth-brushes, skates, jewelry, house furnishings, spectacles, waterproofs, rubbers, gloves, combs, brushes, eye-glasses, boots, slippers, and bric-a-brac for dolls' parlors.

Sewing machines in small sizes, but suitable for little girls to make their dolls' clothes upon, are to be had for from $1.75 to $3 50. Then there are outfits for dolls' parties, table-cloths, napkins, dishes of fruit, meats, vegetables, etc., wines, liquors and cigars. A doll's banquet may be set forth a la Kinsley for much less money. Crocheting sets for little girls with prize crochet and knitting balls which, when the thread is all used up, reveal a box in which is a gift for the industrious little miss. Millinery outfits contain hats and bonnets from 15 cents up to $3. Kindergarten sets from $1.25 up to $6 may be had in great variety. In the department of games there are a number of new things. The fish pond game may be had from 50 cents up to $10. The newest puzzle, however, that will this winter set the town by the ears is what is known as the United States puzzle. It consists of a block with a slot therein. Buttons in this slot have the letters of the two words on them. They are scattered, and the trick is to so move them that they will read straight. This looks simple, but the 14-15 puzzle is not more difficult, and society is liable to get tired in its endeavor to straighten out the United States. The World's Educator is another new game, and the Electric Instructor is another somewhat similar. A pretty toy for a child is the relief composition. This has a number of picture back-grounds and sheets of embossed figures of trees, people and animals; these are to be pasted upon the back grounds in such a way as to complete the pretty pictures. This costs $4, but is a host in instructing a child in art work. The quadralet block game is very interesting as a new puzzle with movable blocks and it costs 50 cents. The base ball game is shown in several varieties. Circination or swinging around the circle is a pretty game that older people can enjoy. The new mosaics for children are very fine this year and exceedingly instructive. Spatter-work sets are shown in neat little boxes. All sorts of card games abound as usual. Trick boxes range from 25 cents up to $25, and a clever boy can give an evening in the parlor that will amuse the family greatly.

Of course the drum still holds its place, as it makes the most noise of any toy invented, and the boy loves to make noise. Drums may be had all the way from 15 cents up to $10 The plush dog and elephant are reinforced by plush camels and other animals now, and the little chaps can enjoy themselves in their efforts to pull them to pieces. These plush toys may be had from 25 cents up to $1. The larger toys, such as bycycles, tricycles, wagons, wheelbarrows, etc., are to be had at all prices. The very latest fad of society, however, is the bubble set. A little tube and a package of prepared soap and a cup complete the set, and you can blow a bubble as large and handsome as any South sea bubble that was ever given to the world.

The little ones, now that the snow has come, are turning their thoughts toward that venerable old fraud, Santa Claus. The 2-year-old has but few expectations, and they can be very easily realized. But the children from 3 years upward to four-score-and-ten have all expectations that are costly to gratify. Many brains will fall asleep on Christmas Eve with the words of the old poem:

"'Twas the night before Christmas, when all thro' the house,
Not a creature was stirring, not even a mouse,"

running through their minds. It will be a hard heart that is not softened as old Santa Claus draws up his sledge and displays his wares for 1887.

Mirrors--How They are Manufactured--A Delicate Process.

In the making of looking glasses there is used a large stone table, ground perfectly smooth, and so arranged as to be easily canted a little to one side by means of a screw set beneath it. Around the edge of the table is a groove, in which mercury may flow and drop from one corner into bowls. The table is first made perfectly horizontal, and then tin foil is carefully laid over it, covering a greater space than the glass to be coated. A strip of glass is placed along each of the three sides of the foil to prevent the mercury from flowing off. The metal is then poured from the ladles upon the tin foil till it is nearly a quarter of an inch deep, and its tendency to flow is checked by its affinity for the tin foil and the mechanical obstruction of the slips of glass. The plate of glass, cleaned with especial care, is dexterously slid on from the open side, and its advancing edge is kept in the mecury, so that no air or floating oxide of the metal and other impurities can get between the glass and the clean surface of the mercury. When exactly in its place it is held till one edge of the table has been elevated ten or twevle degrees, and the superfluous mercury has run off. Heavy weights are placed on the glass, and it is left for several hours. It is then turned over and placed upon a frame, the side being covered with the amalgam, which adheres to it, being uppermost. In this position the amalgam becomes hard, and the plate can then be set on edge; but for several weeks it is necessary to guard against turning it over, as until the amalgam is thoroughly dried the coating is easily injured.

The earliest known letter is that sent to Joab by David, by the hand of Uriah, about 1035 B. C.

Interesting Scraps.

Gain a little knowledge every day.

Make few promises, and speak the truth.

Stone bullets were used in 1514; those of iron are first mentioned in 1550.

Mussulmans of Turkestan shake off their sins every month by jumping up and down seven times with their faces turned to the new moon.

The majority of inks are made from copperas and an infusion of nut-galls. Solutions of aniline blue or violet are used for writing purposes, but on exposure to light and air they fade quickly.

Two races of men are dying out—the Laplanders, who number 30,000, and the Maoris, of New Zealand, reduced from 100,000 to 45 000 since the days of Capt. Cook, and likely to be extinct by the year 2000.

The largest bunch of bananas on record was shipped to Mt. Vernon, N. Y., one day last week. It measured four feet in length and weighed 400 pounds. Some of the bananas measured sixteen inches in length.

In free countries there is often found more real public wisdom and sagacity in shops and manufactories than in the cabinets of princes in countries where none dare to have an opinion until they come into them.—*Burke.*

At Jedda, on the Arabian shore of the Red sea, is the tomb of Mother Eve. The grave is 160 feet long and five wide, surrounded by a wall, and crowned by a small mosque. Father Adam lies under the forest-clad slopes of Adam's Peak, in Ceylon.

The new Boston Consolidated Horse Railroad company employ 7,872 horses in running its 1,562 cars on 203 miles of road. In the State of Massachusetts, inclusive of the above, the horse railways employ 10,789 horses in running 2,289 cars over 440 miles of track.

It almost seems as though good serviceable paper can be made from every kind of vegetable fiber. Grasses and woods of all sorts, and even peat, have been brought into requisition, while one of the latest introductions is crushed bamboo, which has been used with very satisfactory results.

The devil agreed with a man that he should have the latter's soul at the time when the oak leaves fell; but when he came to look at the oak in the autumn he found it still in leaf, nor did it part with its old leaves until the new ones began to sprout. In his rage and disappointment he scratched the leaves so vehemently that they have been in consequence jagged ever since.

At Russel, in the year 1549, cats formed part of an orchestra which performed before Phillip II. of Spain. A bear was seated on a great car at the figure of an organ, which, instead of pipes, had twenty cats of different notes and sizes shut up in small cages with their tails out, and attached to the register of the organ in such a manner that when the bear pressed the keys, the tails of the unlucky cats were pulled, and the cats began to squeal.

Captain Thompson, of the British steamer Muley Hassan, has a remarkably sagacious retriever dog. The steamer was passing through the Straits of Gibraltar, when the dog showed signs of restlessness, and finally jumped overboard. A boat was lowered and the dog was discovered holding the collar of the coat of a drowning man, who was lying across two oars. The man was afterward discovered to be the only survivor of a Spanish revenue felucca, which had been upset four hours previously.

Money Makers

don't let golden opportunities pass unimproved; there are times in the lives of men when more money can be made rapidly and easily than otherwise can be earned by years of labor. Write Hallett & Co., Portland, Maine, who will send you, free, full particulars about work that you can do and live at home, wherever you are located, at a profit of at least from $5 to $25 daily. Some have made over $50 in a single day. All is new. You are started free. Capital not required. Either sex; all ages.

The Normal Department of Campbell University, Holton, Kas., admits students any week of the year. Young people who want to teach next year can be well prepared by July 26 by entering this winter.

An Elegant Christmas Present

Silk and Satin Ribbons FREE!

LADIES, THIS IS FOR YOU

A rare gift for the ladies. Save much money and secure the best! Every lady knows and appreciates, the privilege of having a few remnants of ribbon, handy for the thousand and one tasty and useful purposes for which such goods are used, and which they, the ladies, use to such advantage. To purchase what is wanted at the usual prices such goods are sold for, would create a large bill of expense, and therefore debars a great many from indulging their tastes in this direction. Realizing that there were thousands upon thousands of remnants of ribbons among the large importing houses of America which they would be willing to dispose of in bulk, for a small fraction of their cost, to any one capable of purchasing largely, we instituted a search, resulting in our obtaining the entire stock of **Silk** and **Satin Ribbon Remnants** of several of the largest of these houses, who imported the finest goods. These goods may be depended upon as superior to anything to be found, except in the very best stores of America. Yet they are given away **free**; nothing like it ever known. A grand benefit for all the ladies; beautiful, elegant, choice goods absolutely **free.** We have expended thousands of dollars in this direction, and can offer an immensely, varied, and most complete assortment of ribbons, in every conceivable shade and width, and all of excellent quality, adapted for neck-wear, bonnet strings, hat trimmings, bows, scarfs, dress trimmings, silk quilt work, etc., etc. Some of these remnants range three yards and upwards in length. Though remnants, all the patterns are new and late styles, and may be depended on as beautiful, refined, fashionable and elegant. **How to get a box containing a Complete Assortment of these elegant ribbons Free. The Practical Housekeeper and Ladies' Fireside Companion,** published monthly by us, is acknowledged, by those competent to judge, to be the best periodical of the kind in the world. Very large and handsomely illustrated; regular price 75 cts. per year; send **35** cents and we will send it to you for a trial year, and will also send **free a** box of the ribbons; **2** subscriptions and 2 boxes, **65** cts.; **4** subscriptions and **4** boxes, **$1.** One-cent postage stamps may be sent for less than $1. Get **3** friends to join you thereby getting 4 subscriptions and 4 boxes for only $1; can do it in a few minutes The above offer is based on this fact:—those who read the periodical referred to, for one year, want it thereafter, and pay us the full price for it; it is in after years, and not now, that we make money. We make this great offer in order to at once secure 250,000 new subscribers, who, not now, but next year, and in years thereafter, shall reward us with a profit, because the majority of them will wish to renew their subscriptions, and will do so. The money required is but a small fraction of the price you would have to pay at any store for a much smaller assortment of far inferior ribbons. Best bargain ever known; you will not fully appreciate it until after you see all. Safe delivery guaranteed. Money refunded to any one not perfectly satisfied. Better cut this out, or send at once, for probably it won't appear again. Address,
H. HALLETT & CO., PUBLISHERS, PORTLAND, MAINE.

390 Funny Selections, Scrap Pictures, etc., and nice Sample Cards for 2c. HILL CARD CO., Cadiz, Ohio.

Beautiful Cards. Agents' sample book and full outfit for 2c. stamp. EAGLE CARD WORKS, Northford, Conn.

BOOK OF BEAUTIFUL SAMPLE CARDS, 41 tricks in Magic, 800 Autograph Album Verses, 24 Amusing Games, 43 Ways to Make Money. All for a two cent stamp. EAGLE CARD WORKS, CADIZ, OHIO.

GAME OF CHECKERS, Game of Kiss Penny Morris Game of Fox and Geese, The Star Puzzle, The Great Triple Prize Puzzle, and Sample Book of Late Style Visiting Cards. All for only a 2-cent stamp. CAPITAL CARD CO., Columbus, O.

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.

NEW CARDS, 40 Samples and AGENT'S Canvassing Outfit for 2c. stamp. CARD WORKS. Northford, Conn.

100 PER CENT. PROFIT & SAMPLES FREE to men canvassers for Dr. Scott's Genuine Electric Belts, Brushes, &c. Lady agents wanted for Electric Corsets. Quick sales. Write at once for terms. Dr. Scott, 842 B'way, N.Y.

FISHING TACKLE **ShotGuns** Revolvers, Rifles, Etc. Send stamp for Price List. Address Great Western GunWorks, Pittsburgh, Pa.

AGENTS WANTED, either sex, to sell our new book, **EARTH, SEA and SKY:** 864 pps. 329 Illustrations, (Eng. or German print.) Good pay. Experience unnecessary. Success certain. Headquarters for Bibles, Albums and Gift Books. E. P. JORDAN & CO., Pubs., St. Louis, Mo.

A GRAND GIFT. To introduce our wonderful Self-operating Washing Machine we will GIVE ONE away in every town. Best in the World. No labor or rubbing. SEND FOR ONE to the National Co., 23 Dey St., New York.

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. P. BENT, 281 Wabash Ave., Chicago.

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

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.

HOLIDAY NOVELTIES

At Chickering Hall, Leavenworth, Kas.

PIANOS & ORGANS, Violins, Guitars, Banjos, Drums, Musical instruments of every description. Sole Agency Chickering & Son, Hardman, Starr and Sterling Pianos. Largest stock, lowest prices, easy terms. Address CARL HOFFMAN, Leavenworth, Kas.

KANSAS FARMER.

ESTABLISHED IN 1863.

Published Every Thursday, by the

KANSAS FARMER COMPANY.

OFFICE:
821 Kansas Avenue, Topeka, Kas.

S. J. CRAWFORD, - - - PRESIDENT.
J. B. McAFEE, - - GENERAL AGENT.
H. A. HEATH, - - BUSINESS MANAGER.
W. A. PEFFER, - MANAGING EDITOR.

SUBSCRIPTION PRICE:

ONE DOLLAR A YEAR.

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

Address KANSAS FARMER CO., Topeka, Kansas.

ADVERTISING RATES.

Reading notices 25 cents per line.

Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of $5.00 per line for one year.

Annual cards in the *Breeders' Directory*, consisting of four lines or less, for $15.00 per year, including a copy of the KANSAS FARMER free.

Responsible advertisers may contract for display advertising at the following rates:

	One inch.	*Two inches*	*Quarter column.*	*Half column.*	*One column.*
1 week....	$ 2 00	$ 3 50	$ 6 50	$ 12 00	$ 20 00
1 month...	6 00	10 00	18 00	35 00	60 00
2 months..	10 00	18 00	30 00	55 00	100 00
3 months..	14 00	25 00	40 00	75 00	125 00
6 months..	25 00	45 00	75 00	135 00	225 00
1 year.....	42 00	75 00	120 00	225 00	400 00

☞ All advertising intended for the current week should reach this office no later than Monday.

Electros must have metal base.

Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement send the cash with the order, however monthly or quarterly payments may be arranged by parties who are well known to the publishers or when acceptable references are given.

Every advertiser will receive a copy of the paper free during the publication of the advertisement.

Address all orders,

KANSAS FARMER CO., Topeka, Kas.

The KANSAS FARMER hopes the Short-horn Breeders' meeting, in this city next week will be well attended. Energy and action on the part of farmers is needed now more than ever.

Congressman Turner, of this State is reported as saying that he favors the subsidizing of exported grains. Mr. Turner will not advocate that doctrine after he learns that the people do not desire legislation of that character.

Jacob Sharpe, the New York boodle alderman who was convicted and sent to prison, is granted a new trial by the New York court of appeals, which means that he will go scot free. He is now out on bail. That is the end, we suppose.

Advertise the Farmers' Institutes well, so that peope will attend in large numbers and make the proceedings useful as well as interesting. Make a noise and attract attention; get the people out and then give them something good to remember.

Ninety-Day Corn.

We have inquiry for "ninety-day corn, sometimes called 8-rowed corn." If any of our readers have this variety or anything like it for sale they might strike a lead by advertising it in the KANSAS FARMER.

The Woman's Christian Temperance Union will ask all the political conventions to denounce personal politics. That is just like the women. But how cruel they are. What would some people have to talk about if they were not permitted to scold and fret about the candidates?

Hon. David A. Wells, in *Popular Science Monthly* says that nations, as they advance in civilization need and use more costly bases for money. While savages can get along with shells, and semi-civilized people can do with iron, civilized and enlightened people want silver and gold.

CALL THE ROLL!

The readers of the KANSAS FARMER will please stand up while their names are being called, and those of them whose term of subscription expires with the year 1887, will please listen to the following appeal:

It is expected that every one of you will renew your subscription, because it is a wise thing to do in itself. There are considerations, however, which makes it very important, almost vital. This is the only paper of its class of general circulation printed in the State; it is the only paper in the State devoted exclusively to agricultural interests; it is the only paper in the State that pretends to champion the farmer's interests independently and without party bias; it is the only farm paper in the State so situated as to be able to gather needed information quickly and conveniently from original sources, so that its readers may have at first hands reliable facts which they need early; it is the only paper of the kind in the State which attempts to make itself felt in the legislation of the State and nation—the place where farmers need most help. These facts are known and appreciated by our readers, but we want to impress upon them the value of such a paper in the struggle which is coming. The farmer must have the aid of strong, well ballasted, independent, courageous papers in the years to come. Knowing this, we are determined to increase the worth and usefulness of the KANSAS FARMER.

We expect our subscribers not only to renew, but to encourage other persons to join them. We want an army of readers so that in every neighborhood in the State there shall be at least one paper devoted wisely to the interests of agriculture. One dollar gets the paper a year, and five dollars will secure six copies. We are all interested in this matter. You know the kind of paper we make; you are interested with us in sustaining it, in enlarging its influence, in improving and strengthening its every department. Help us to increase the subscription list, for as that grows the paper will grow.

And please renew early; it will save us a great deal of time and trouble in the office and prevent mistakes if the renewals are made a week or two before the end of the year, so that the names need not be changed on the mailing list. Every reader may know whether his subscription expires with the year by looking at the letter and figures annexed to his name on the margin of his paper or on the wrapper, as the case may be. If they are "o 52," that means that the subscription expires with the last week of this year.

THE PEOPLE RULE.

Monday of this week, December 5, 1887, the Supreme court of the United States unanimously sustained the constitutionality of the Kansas prohibitory liquor legislation, and with but one dessenting voice (that of Justice Field) decide against those persons who claim the right to use brewing and distilling establishments for making beer and strong liquors in defiance of the law. The court say: "The State of Kansas had a right to prohibit the liquor traffic. It did not thereby take away the property of brewers. It simply abated a nuisance. The property is not taken away from its owners; they are only prohibited from using it for a specific purpose which the legislature declared to be injurious to the community."

This sets the question at rest forever in this country. The right of the people to regulate their own affairs in their owh way, is again affirmed by the highest judicial tribunal in the land. The people everywhere are to be congratulated. This opinion is an avalanche hurled upon the powers of rum, and is refreshing sunlight for the people.

FREE SUGAR.

A prominent Congressman, a member of the Ways and Means committee, writes to inquire whether the KANSAS FARMER is "advocating free sugar." Yes, we have been doing that ever since it became evident, that the government would not longer need the revenue derived from sugar duties. It is conceded on all sides that there must be a reduction of revenues, and there is no one item in the tariff list whose freedom from duty would effect so large a reduction at once as sugar, and what is better it would nearly all be actual relief to our own people. It would at once reduce the revenues about $50,000,000.

It is urged against this course that sugar-making in Kansas is just being born and that it ought to have help a few years. That is conceded. The State Legislature at the last session passed an act granting a bounty of 2 cents a pound on Kansas-made sugar above a certain grade. That is quite protection enough. Let Congress pass one act removing all duties from foreign sugar, and another act appropriating money to pay a bounty on home-made sugar equal to the average *ad valorem* duty on foreign sugar under existing laws, this to continue say five years. When that time has expired it will be known whether our own people will engage extensively in the manufacture of sugar. If they do, restore the duty so as to give them the benefit of the home market, and if they do not, then let sugar remain on the free list. The people want cheaper sugar.

A FARMERS' SYNDICATE.

Those words look strange—a farmers' syndicate. But why not farmers combine in their work as well as carriers, manufacturers and traders. If half a dozen shoemakers can organize themselves into a company each one working for the new company, and make money by it, why cannot half a dozen or half a hundred farmers combine and conduct their farming operations as a company and not as individuals? Say twenty-five farmers in a neighborhood join their fortunes in a trust company, each man putting into the capital stock the value of his farm, receiving profits in that proportion. Let all the members work for the company under one central management; let the conduct of all the business be under control of persons specially appointed; let the lands be cultivated according to one general method; let the work be done wherever and whenever needed, massing the forces in localities as circumstances should require; let the stock and all farm machinery of the members, except such reserves as should be necessary for family use, belong to the trust, and let everything, plowing, planting, breeding, slaughtering, purchasing, selling, hauling, be planned and controlled by the directors.

A plan like this would give to farmers in their calling, all the benefits of organization—economy of resources, minimum of expense and maximum of profits. In such a case, members would have all the advantages of combination. One reaper would do work now done by two or three; one threshing machine would be enough for the company; one male breeding animal would take the place of two or three or perhaps half a dozen; and whenever it would be desirable to rush grain or stock to market in order to obtain present benefits, there would be help at hand. Labor could be massed at any given point in order that needed work might be done at the right time. In short, this is co-operation among farmers from the ground up, and in a way that would prove to be more beneficial, perhaps, than methods now in force which apply only to the purchase of supplies.

There ought to be a farmers' trust in every township, if for nothing else, for the purpose of mutual assistance in the matter of disposing of surplus farm products, as grain and stock. And if that is desirable, there are equally as good arguments in favor of a general trust to help through all the process of farming.

Congress covened Monday, Senator Ingalls, of Kansas, presiding over the Senate, and John G. Carlisle, of Kentucky being elected Speaker of the House by a vote of 163 to 148 for Reed, of Maine. Of the four independent members Anderson, of Iowa, voted for Mr. Carlisle, Nichols, of North Carolina, and Smith, of Wisconsin voted for Mr. Brumm, of Pennsylvania, and Hopkins, of Virginia, did not vote.

The situation in southwestern Kansas in relation to fuel is discouraging. It cannot fail to impress upon the minds of farmers out there the importance of raising their own fuel so as not to be depentent upon other persons for that necessary article. Raise sunflowers, raise peach trees, raise cottonwood and mulberry; if nothing better can be done, bale hay, or bind it tight in small bundles and burn it between iron or brick walls surmounted by sheet iron arches.

From the selection of subjects mentioned in the program, the Farmers' Institute at Nortonville, Jefferson county November 30 and December 1, was interesting from the beginning to end. Here is the list: Address of welcome, W. I. McCrea; "Advantages of Farmers' Institutes," W. H. Tucker; essay, "The Embelishment of Farm Home," Mrs. W. K. Stone, Mrs. S. Stiers and Mrs. Hannah Maxson; "Should our Farmers Encourage the Establishment of a Creamery and Cheese Factory in Nortonville," John Campbell, Edwin Snyder, S. E. Hood and R. F. Chain; "Improved Stock," D. G. Wilson and John Graves; "Fruit Growing," Joshua Wheeler and Thos. F. Cook; essay, "What should be the Work of Farmers' Wives," Mrs. W. Vanatta, Mrs. George Bennett and Mrs. R. F. Chain; "Does the Interest of the West Demand a Change in the Inter-State Commerce Law, W. K. Stone, George Goddard and A. J. Perry; "Which is the most Profitable Rotation of Crops for Eastern Kansas," W. D. Barnes, John Oiler, Henry Shell and James Eshom; "The Disadvantage in our Present School System," W. H. Tucker, Prof. Fertig and O. W. Babcock; "Which is the best for our Farmers, Tariff or no Tariff," L. P. King, H. L. Heineken and A Phillips. Mrs. Stone's essay was forwarded to us for publication. It will be printed in our next issue.

THE FISHERIES QUESTION.

In early times all of what is now Canada, with Nova Scotia and the islands near, was claimed by France, and Great Britain and her subjects had possession of the adjoining territory south many miles along the Atlantic coast and extending as far west as the Ohio river. In 1763, after a long war between those two nations, a treaty of peace was concluded, by the terms of which France relinquished all her claims to the regions above mentioned, and Britain became sole claimant. That made all the people, north as well as south of the St. Lawrence river, as well as those of Newfoundland and adjacent islands, subjects of Great Britain, entitled to like and equal privileges as such.

South of that river the people rebelled against the British government in 1775, and in 1783 a treaty was concluded between the United States and Great Britain. The independence of the several States was acknowledged; and as to fishing rights in British American waters, the treaty provided that the people of the United States—

shall continue to enjoy unmolested the right to take fish of every kind on the Grand Bank, and on all the other banks of Newfoundland; also in the Gulf of St. Lawrence, and at all other places in the sea where the inhabitants of both countries used at any time heretofore to fish. And also that the inhabitants of the United States shall have liberty to take fish of every kind on such part of the coast of Newfoundland as British fishermen shall use, but not to dry or cure the same on that island, and also on the coasts, bays, and creeks of all other of his Britannic Majesty's dominions in America, and that the American fishermen shall have liberty to dry and cure fish in any of the unsettled bays, harbors, and creeks of Nova Scotia, Magdalen Islands, and Labrador, so long as the same shall remain unsettled; but so soon as the same, or either of them shall be settled, it shall not be lawful for the said fishermen to dry or cure fish at such settlement without a previous agreement for that purpose with the inhabitants, proprietors, or possessors of the ground.

War between the United States and Great Britain again began in 1812, and in 1815 a treaty of peace was concluded, but nothing was written in the treaty about fish. It was soon discovered that a difference of opinion existed between the two governments concerning the effect of that war on the treaty of 1783, the British holding to the doctrine that war abrogates treaties, the American holding that treaties are not abrogated unless there is a formal agreement to that effect. The result of that difference in construction of international law was, that practically the United States had no rights of fishing in British waters except by sufferance of British authorities, and in order to have some agreement about the matter another treaty was made in 1818, and it was stipulated in the first article of that instrument that—

Whereas differences have arisen respecting the liberty, claimed by the United States, for the inhabitants thereof, to take, dry and cure fish on certain coasts, bays, harbors and creeks of his Britannic Majesty's dominions in America, it is agreed between the high contracting parties that the inhabitants of the said United States shall have forever, in common with the subjects of his Britannic Majesty, the liberty to take fish of every kind on that part of the southern coast of Newfoundland which extends from Cape Ray to the Rameau Islands; * * * —[here a number of other places are named where fishing, etc., may be done, and the article concludes]—And the United States hereby renounce forever any liberty heretofore enjoyed or claimed by the inhabitants thereof to take, dry, or cure fish on or within three marine miles of any of the coasts, bays, creeks, or harbors of his Britannic Majesty's dominions in America not included within the above-mentioned limits: *Provided, however*, That the American fishermen shall be admitted to enter such bays or harbors for the purpose of shelter, and of repairing damages therein, of purchasing wood, and of obtaining water, and for no other purpose whatever. But they shall be under such restrictions as may be necessary to prevent their taking, drying, or curing fish therein, or in any other manner whatever abusing the privileges herein reserved to them.

It was provided in that treaty that it should not be abrogated by war, but that it should remain in force forever unless changed expressly by subsequent treaties.

There was more or less friction all the time caused by a disposition among our fishermen to insist upon the privileges which they and their fathers enjoyed under provisions of the treaty of 1783, and by way of avoiding further trouble, a reciprocity treaty was concluded in 1854, which accorded equal privileges to citizens of both nations on both sides of the line, not only as to fish, but as to almost everything else. It did not pretend to abrogate the treaty of 1818, however. It was provided that this treaty might be terminated on notice by either party. Notice was given by the United States, and the treaty expired in 1866. Irritation was renewed, and in 1871, the treaty of Washington was concluded, which provided, among other things, that certain privileges claimed by United States fishermen should be granted, in consideration of a sum of money to be paid by the United States government, the amount to be ascertained by arbitration. It cost us $5,500,000, and it was terminated, on notice by the United States, in 1886.

The effect was to leave the treaty of 1818 the only regulation in force, and among the matters of difference in the interpretation of that instrument are (1) the 3-mile limit, and (2) whether fishing vessels are not entitled to privileges accorded to ships that sail the seas regularly. As to the 3-mile limit, the United States government claims that it means three miles from the shore line, following its sinuosities, while the British government claims that the line is to be run straight from points three miles out from headlands. As to the second matter of difference the British claim is, that fishing vessels are a special class, not subject to the rules governing ships of the ocean. The most serious difference, however, is that concerning the 3 mile limit.

It seems to us that the easiest and best way to settle this dispute is to establish free trade between the United States and the Dominion of Canada and all the islands near. That would involve a change of tariff laws of both nations so as to be uniform as to all imports, that there would be no inducements to smuggle foreign goods.

Kansas Short-horn Breeders.

The sixth annual meeting of the Kansas State Short-horn Breeders' Association will be held in the parlors of the Windsor hotel, Topeka, beginning on the evening of Thursday, December 15, and last two days. It is important that there should be a full attendance of professional breeders from every part of Kansas, as well as a large turn-out of practical farmers who desire to produce good beef according to the most economical methods. Let every man owning a Short-horn come to this meeting. It will pay in more ways than one.

In the following program the topics named will be taken up as the association may decide for each session:

Address by the President—"To What Extent the Farmer may be a Breeder," V. R. Ellis.
"The Value of Improved Stock to the Farmer," Joshua Wheeler.
"Tuberculosis from the breeder's Standpoint," A. A. Holcombe.
"A Farmer's View of Short-horn Matters," Mr. Dixon.
"Reforms in the Herd Book," W. A. Harris.
"The Cattle of a Thousand Hills—figuratively speaking," Wm. Sims.
"The Care and Management of Short-horns," M. Waltmire.
Report of Committee on Resolutions.
Election of Officers.

Other topics than those given above, particularly the following: "Economy in Winter feeding," "The Value of Bran for fattening," and "Short-horns Fed by the Side of Herefords and Grades," are likely to be discussed by competent persons.

Opportunity will be given for a full and free discussion of every paper read before the association.

The November report of the Department of Agriculture at Washington begins thus: "The present season is another of the series of unfavorable years for maize (corn). Since 1880 only one crop that is deemed an average, that of 1885, has been grown. The average for ten years ended in 1879 was 27 bushels per acre, a larger yield than has been obtained in any one of the seven years since 1880. In 1881 the yield was placed at 18.6 bushels; it was 22 in 1886; 22 7 in 1883; 24 6 in 1882; 25.8 in 1884, and 26.5 in 1885. Now it is again 18.6, as in 1881, if we count the entire breadth planted, as at that date, 19.9, after deducting the area estimated to be cut before development of the ears."

A Good Platform.

We are in receipt of a communication as follows:

KIRWIN, KAS., November 19, 1887.

EDITOR KANSAS FARMER:—In your issue of November 19, page 11, you say: "Let us raise our own wool and manufacture it here at home; let us do all the work we can for ourselves, and see to it that foreigners are not permitted to crowd our own people to the wall." We are glad the KANSAS FARMER is solicitous that our own people should not be crowded to the wall, but I enclose a platform showing that Kansas farmers are already crowded to the wall, notwithstanding the so-called "protective tariff," and not by "foreigners," either, but by sharks at home. I commend to the FARMER a study of the platform enclosed, and would like to hear from it upon the question suggested. Respectfully,

C. J. LAMB.

The platform inclosed is that adopted by the Union Labor party at Phillipsburg, Kansas, August 6, 1887, almost every word of which we heartily approve. Especially do we approve the suggestion contained in a note on the reverse side of the sheet, as follows: "Did you ever think that there is only one day in the year when the common man can make his voice heard in the councils of the nation—in the halls of legislation? It is so, and that one day is the day of election." This is the platform:

1. That the land of our country should be reserved exclusively for those who use it; not another acre for speculative purposes.
2. That the money of this country should be coined by Congress as provided by the Constitution, and in sufficient quantities to meet the needs of advancing civilization; that the public debt should be paid off as rapidly as possible; that the surplus in the Treasury at any time, over and above needs for governmental expenses, should be expended for works of public improvement; that national banks should be abolished, and that government exchanges and places of safe deposit for the savings of the people should be established in their place, and that Congress should neither create nor recognize any private banking institution.
3. That every one who eats food and wears clothes is interested in transportation; and our advancing civilization imperatively demands that it should be had at absolute cost; and that the government should own and control all facilities for transporting intelligence, passengers and freight.
4. That the text books used in our common schools should be compiled by persons appointed for the purpose, published by the State and furnished to those who need them at absolute cost.
5. That interest-bearing bonds, either city, township, county, State or national should never be issued, but that provision should be made in connection with government exchanges, whereby the money for necessary public improvements could be had of the government at lowest possible rates of interest.

Ensilage on Kansas Farms.

It has been demonstrated many times that with very little trouble corn and other kinds of fodder can be preserved in a green state for use in winter. The letter of Mr. Terry, in another column, presents this subject to our readers in a practical form. He saw the fodder put up and he sends a sample to this office for our inspection to the end that the farmers of Kansas may learn something reliable on the subject. The sample came through from New York in good condition. The fodder was cut and stacked green, and the stack covered with buckwheat straw. If ensilage can be protected with that kind of a covering, the feed problem is solved.

In the beginning of ensilage, pits were made in the ground, and called silos. They were walled up with stone or brick, and every silo was provided with a heavy weight to press on the fodder when the silo was full. The cornstalks were cut up in the field green, then taken to the side of the silo and cut into short pieces and thrown in. Afterwards the pieces were left longer, and finally the cutting-knife was wholly dispensed with. Then men began to make silos on top of the ground, and now they are even doing without silos altogether, yet making good ensilage, as this sample shows.

It is probably true, however, that some kind of an outside protection to keep out the air, will always be of great value, for the principal point in making ensilage is to keep out the air. The protection need not be a stone wall nor a brick wall, anything which will keep out air and rain. Kansas farmers ought to give this subject early attention, because aside from the mere matter of saving feed, it is a good way to ensure a crop of feed. If the corn which was caught in tassel last summer had been siloed at once, it would have been saved, every bit of it, and now be first-class feed.

Large varieties of sweet corn or small varieties of field corn make the best ensilage, and they are more easily handled than the large varieties. They mature earlier, too, and that is another advantage.

November Weather.

From Prof. Snow's report of observations taken at the State University, Lawrence, we take the following extracts:

This month was one of the seven warmest Novembers on our record, notwithstanding the fact that its minimum temperature fell below the zero point. In only one previous year (1872) has the temperature reached the zero point in November. The rainfall was three-fourths of the average, and the skies were remarkably clear.

Mean Temperature—Forty-two and fifty-five hundredths degrees, which is 2.79 deg. above the average. The highest temperature was 79 deg. on the 3d; the lowest was 1 deg. below zero on the 27th, giving the range of 80 deg. Mean temperature at 7 a. m., 34.92 deg.; at 2 p. m., 51 78 deg.; at 9 p. m., 41.75 deg.

Rainfall—Including melted snow—1.40 inches, which is 0.47 inches below the November average. The first snow of the season fell on the 23d—15 days later than the average date. The entire depth of snow was one inch. Rain or snow in measurable quantities fell on 4 days. There was one thunder shower. The entire rainfall for the 11 months of 1887 now completed has been 31.76 inches, which is 1.03 inches below the average for the same months in the preceding 19 years.

Mr. W. C. Rose, Uniontown, Bourbon county, is raising carp successfully. Last week he forwarded to this office a sample half dozen beautiful fish averaging nine inches in length, and he writes—"These fish are last year's hatch of a common stock pond." That is proof positive that carp-raising in in Kansas is a success. A pond is easily constructed, and it is a simple matter to stock it with carp. Here we have good fish the second year.

CHEAP ADVERTISING FOR SUBSCRIBERS.

Subscribers to the KANSAS FARMER who have something to sell, or to rent, or to exchange, and would like to let everybody know it, may have the use of our 2-cent column for that purpose at half rates; that is, at 1 cent a word for every publication. Any person, by counting the words, in what he has to say, will know the cost. Two figures count for one word. Terms cash, with the order. This offer will be in force only to the end of this year. It is made only to subscribers and for the purpose of letting them learn how good an advertising medium the KANSAS FARMER is.

For help in making up what you wish to say, look at the notices in our TWO-CENT COLUMN.

Horticulture.

How to Raise Fuel on Prairie Farms.

Raise trees. Peach trees will make sticks large enough to be cut into fine stove-wood. Cottonwood grows about as fast, and so does soft maple and box elder. The third year trees of these varieties are worth twice as much for fire-wood as they were the second year, and every year afterwards is very greatly increased.

It is not best, however, to raise no other varieties of trees for fire-wood. because soft wood is not the best for that use. It is better to start several varieties of hard wood trees as well as of soft wood and at the same time, so as to have wood as early as possible without disturbing those which grow more slowly. It was suggested in these columns last week that sunflower plants can be grown to advantage for fuel, and they are about as good for that use as peach or cottonwood of two years' growth. Let a small crop of sunflowers be grown three years or more, for the heads, when dry, make excellent fuel—as good as corn ears—and they, mixed with fine branches of trees well cut up, would pass on a prairie farm the first few years for very good fire-wood Plant peach and cottonwood, also Russian mulberry, catalpa, red elm, and black walnut. Raise all of them for fuel and for such other useful purposes as may be in the way, such as fence posts, building material, lumber, etc. After the second year there will be no lack of fire-wood if the trees are well taken care of.

In putting the first available wood at the second year's growth, we are counting on old ground for the growth. If the trees are to be planted in new ground, returns will be delayed a year unless extrordinary pains are taken at the planting. If the sod is pared off as shallow as possible--say an inch and a half deep—the breaker followed by a plow that will run six or eight inches deep in the same furrow, throwing the earth over on the sod, covering it in the bottom of the plowed ground, then the ground cut with sharp harrows and fined and firmed with drag or roller and then, if after all that, the ground gets a good rain before the trees are set out or immediately afterward, and the season is good throughout, the trees will do quite as well as if they had been planted in old ground. In most cases, however, it will be better to procure seed and start the trees on the farm. In that case, a small plot of ground can be prepared and the seed sprouted in that, remaining there the first year. That will give plenty of time to have ground prepared for the grove. Plant the seed in drills, about as far apart as corn rows, so that they may be cultivated, and they will send up trees that will grow one to four feet the first year. Have the ground for the growth prepared in the best manner possible; set the trees four feet apart, and cultivate shallow, keeping the weeds down and the surface of the ground loose.

At the end of the second year's growing season, if the trees have done well, a good many of them may be removed and cut up for fire-wood, and every year afterwards, a portion may be taken out in order to afford more space for the rest. As fast as the trees appear to be needing more room it must be given them by removing some.

Seed of the different varieties of trees named above may be obtained from seedsmen. Several responsible seed houses are advertised in this paper.

The Farm Garden.

There is no part of the farm more important than this. It needs attention early and all the time, and it will respond in season. Mr. Henry Stewart, in *Orchard and Garden*, says: Farmers neglect a great opportunity when they lose sight of the profits which may be made from an acre or two of garden. The farm garden is the most profitable acre on the farm alone for its supply of vegetables and fruits for domestic consumption, and the surplus besides may be made a source of revenue during the whole year. First there is the home supply, and this begins early. Rhubarb for stewing and making tarts and pies will come in very early if a few roots are well manured and protected by half barrels or boxes and covered with clean cut straw. This is a method of forcing which is very simple and easy. This vegetable, wholesome and delicious, lasts until late in the summer, if the seed stalks are kept cut down; and through the winter, if a few roots are taken up and kept growing in the cellar. Asparagus comes next, and this may be forced in a similar manner and brought in for use in April or May. Spinach is also an early vegetable, followed by peas which are sown in succession beginning as soon as a few inches of ground prepared in the fall are thawed out and dry enough. The peas may also be forced ahead by protecting the rows by boards set edgewise on the north side, or on both sides of the row, and so on through the whole list of vegetables, lasting from early spring until the new crop is ready the following spring; by saving parsnips, cabbages, beets, beans, etc., and by canning asparagus, peas and small fruits.

In the disposal of the surplus, farmers make a very great mistake in thinking people who live in villages and country towns don't want to buy garden truck, because they have gardens and go through the annual process of making gardens. On the contrary, rural and suburban residents are the best customers a farmer can wish for in this respect. I found it out in this way: I lived near a country town of 2,500 inhabitants, and nearly every house had a garden. I was in the garden one day gathering strawberries from a large bed which was crimson with fine fruit. Two of the village ladies stopped at the fence and began to admire the splendid strawberries, and finally asked, if I could spare them some. I expressed surprise, knowing they had gardens, and a gardener hired to keep it in order. "That is true, we have a garden, but we never get anything out of it, the chickens and the birds get a share and the weeds smother the rest, and all we get are a few miserable little things." Well the end was that I sent them in a dozen quarts of the fruit at 15 cents a quart; $1 80 for what could not have been missed from the bed. It occurred to me then to send my man in with a crate of baskets of fruit in a wheelbarrow to try and sell them. He was back in an hour wanting more, and was busy until night selling berries. The day's business brought over $30 and before the season was over, about half an acre of strawberries of several kinds up to the latest brought in over $250, and a horse and cart were required to deliver the fruit. But this was not all; the people wanted cream with their strawberries, and a trade in nice sweet thick cream at 50 cents a quart was started. This led to a demand for sweet corn, cucumbers, cauliflowers, cabbages, melons, raspberries, blackberries, and the produce of a large garden formerly mostly wasted, brought in almost as much as all the rest of the farm. It was in this manner that a business of making fine butter for family use was started, and this grew until it was easy to get 50 to 75 cents a pound for it; then chickens for broiling, and fresh eggs were added.

Now there is an opening in nearly every village for such an enterprise. People don't know what they want until they see it and then they wonder how they ever got along without it. The village stores will dispose of large quantities of garden truck of these kinds, if farmers will only grow it and let their neighbors know they have it to spare.

An Ohio Horticulturist in Trouble.

Mr. Adolph Leue. Secretary of the Ohio State Forestry Bureau, was good enough to send to this office a copy of the last report of his bureau, and a brief notice of it appeared among our "Book Notices." The following letter shows how our notice affected Brother Leue:

CINCINNATI, O., November 24, 1887.

EDITOR KANSAS FARMER:—Any one who wishes to distribute books on forestry in Kansas and Missouri should send you a copy, for he may be assured that he will get more applicants than he would desire to have just before or on Thanksgiving. When, some time ago, I sent you a copy of my second annual report, as Secretary of this bureau, I little thought that I should have to spend my Thanksgiving day in the way I did—writing to people in Kansas and sending them copies of my report. I might have enjoyed this day like other people if you had kept quiet about my sending you a copy, or had waited awhile. But the mischief is done, and now I come in for a little revenge. You needs must atone for your sins by sending me a copy of your issue of the 17th inst., which I am informed did all the mischief, and by sending me your paper regularly, charging the subscription either to yourself or to those of your readers who received a copy of my report.

I will keep your journal on file in my office and in my next report will let people know what the editor of the KANSAS FARMER did for this bureau.

ADOLPH LEUE.

Selecting Varieties of Fruit Trees to Plant for Family and Market Use.

EDITOR KANSAS FARMER:—Progressive people mature in advance their plans for future work. In planning for next year's improvements, one of the most important factors to future value and development, is in selecting suitable varieties of fruit trees to plant. Unless you are growing fruit for its extensive variety, or for experimental purposes, to introduce and develop new and untried kinds, your selection of varieties should be few in number. Of apples, three-fifths should be winter varieties.

The same rule which governs your judgment in buying fruit on the market for the table should be exercised in choosing varieties to plant. There you do not call for the new Russian importations, or for the latest novelties out. Neither would you except a barrel of mixed apples representing a dozen kinds, or a dozen barrels one of a kind. Only such brands of fruit familiar to you would be chosen.

The tree agents are not always the best authority to trust in selecting fruit to plant. Their recommendations are governed wholly by the stock their nurseries have for sale. The kinds recommended the highest are the kinds they have the most of, or those from which they realize the largest profit.

Horticultural societies to a certain extent can be relied on as far as their experience goes. The pomological age and experience of any State, or section of country, in a great degree, however, will govern the teachings of individuals as well as horticultural societies. Old and long-established fruit commission men and dealers, although not often consulted, are channels of valuable information in regard to the keeping qualities of fruit, their relative market value, the brands most called for, how to gather, pack and handle fruit, etc. These are the men who handle the fruit raised in their immediate section of country, which enables them to furnish reliable data in regard to varieties most extensively and successfully grown. In making our selections of fruit trees to plant the advice of reliable commission men should not be ignored.

Quality, cost, and risk being equal, home-grown nursery stock adapted to your climate and soil should receive your preference. Unless sufficient causes exist, it is not right to discriminate against the productions of any local industry that contributes to the development and support of the country.

D. S. GRIMES.

Denver, Colo.

A correspondent tells us how to get apples from four-year-old trees. He says: Sow rye on the land two years, before the trees are planted. When the rye heads out, plow it under as green manure. Get trees in the fall, and set them out in the spring. Plant tomato vines about two feet from every tree, cultivate well, and you will have apples the third year after setting out the trees.

Horticultural Notes.

At the meeting of the American Pomological Society at Boston, a cluster of white Syrian grapes, sometimes known as "grapes of Eschol," from Cape Cod, was shown.

The corn-canning factories of Massachusetts put up more than 2,147,000 cans of corn this season. In some neighborhoods the crop paid farmers from $14 to $15 per acre.

If the cutting away of the natural forests of a country change the condition of the same for the worse, manifestly the establishment of forests where not naturally found in considerable and uniform quantities would make a corresponding though directly opposite change in the condition of the country for the better.

A covering of fine, well rotted manure placed over the strawberry rows will serve as a mulch and protect the young plants. In the spring the soluble matter will be appropriated by the growing plants as soon as the season shall begin to open, thus causing them to push forward rapidly. Spring work of manuring them will also be saved.

An old Kansan says: In the coming apple orchard in Kansas, the trees would be planted 36x36 feet apart, that the branches would leave the trunk of the tree at least as high as a man's shoulder, that the top of the tree would be aired, and relieved of its surplus growth, so that the fruit would grow to fair size, and could be picked with less hindrance from water sprouts than in many of the old orchards now to be found in this country.

An ingenious plan to save a dying pear tree was adopted in the garden of L. M. Chase, of Boston. The mice had girdled the tree so that it seemed bound to die. Mr. Chase planted four small trees around it, and close to it, cut off the tops, pointed the ends, and, making incisions in the bark of the pear, bent the small trees, and grafted them, upon the dying trunk. They all lived and that tree draws its nourishment from the small ones. This season a bushel of handsome pears was taken from it.

If the chestnuts are desired for eating during the winter, then small boxes, or what is better, flower pots large enough to hold two to four quarts of nuts are preferable to those of larger size, because a few days supply of nuts can be taken out without disturbing the entire stock. The boxes and pots should be stored where the nuts will be kept cool, and if frozen it will do them no harm, but if wanted for use during the winter the storage pits should be so arranged and located that they can be opened without

inconvenience during the coldest weather. An ordinary hot-bed frame placed on the north side of a building or large evergreen tree will be found very convenient for this purpose.

Popular Gardening suggests that owners of hot-bed sash utilize them for making a sun drier for drying surplus fruit. The sash should be elevated on a frame four feet from the ground at the front and a foot higher behind. A rack with supports for drying trays at four or five inches apart should be constructed under the sash, to be reached from behind. The place of approach for sliding in or taking out the trays may be covered with fly screening, the other sides with boards. The sash will both increase the heat and keep off the dews and rains, thus allowing the drying to proceed from beginning to end speedily.

Fruit-growing, worthy of the name, is not possible in a timberless, exposed country. The presence of protecting forests is indispensable to successful work in this line. Fruit-growing demands a more equable climate than treeless plains can furnish. It demands protection from dry cutting winds. In our northern climates it needs the even mulch of snow over the ground that the presence of forests only can secure. It demands the humidity, the moisture, and the uniform flow and distribution of water which is also secured by the uniform distribution of forests over the surface of the country. With the solving of the foresty question will be solved the fruit question with a vast number of other questions—in fact, much of our national prosperity and advancement hinges upon this great question.—*W. D. Boynton.*

Some forethoughtful readers know the convenience and advantage of inverted sods for starting young plants of tomatoes, melons, flower cuttings or seedlings, or even peas, sweet corn, small grape cuttings, etc., under the shelter of glass, until the ground becomes permanently warm. The turfs for the purpose should be pared off three or more inches thick, from good loamy or peaty soil, and where it has not been eaten down so bare but that there are root fibres enough all through to hold the squares together into which it is to be cross-cut. These may be cubes of three inches or more, and they are handier than pots for their purpose, and will protect the roots almost as long and as well. Placed upside down in a box or flat not much deeper than themselves, the seed or cutting or seedling plant is put on each, and all are covered with fine mold or sand saved for the purpose. The transplanting to the open ground goes off more speedily than from pots.

At a recent meeting of the Douglas county horticulturists, Mr. W. E. Kibbe said that like many other Kansas farmers he began by planting his trees in orchards twenty feet apart and heading low, but he had long since discovered the folly of thus trying to grow good apple trees and good apples. W. E. Barnes favored low-headed trees, as there was danger of the sun blistering the bark on the south of the main body of trees. Samuel Reynolds thought the branches might be started low and then trimmed up five feet high. D. G. Watt was in favor of starting the branches above one's head; he had had all the experience he wanted with low-headed trees. J. G. Robinson, of Ottawa, said he planted his first orchard fifty years ago in the State of Maine, and it had always been his practice to start the heads of his apple trees five or six feet above the ground; but when he came to Kansas he was influenced by Prof. Kelsey to start the heads of his trees near the ground, but in a few years he saw the folly of it, when he had to crawl on his knees to gather his apples. Mr. Robinson had recently visited every orchard in his township, and found that all these old closely-planted low-headed orchards were fast dying out.

"We Point with Pride"

To the "Good name at home," won by Hood's Sarsaparilla. In Lowell, Mass., where it is prepared, there is more of Hood's Sarsaparilla sold than of all other medicines, and it has given the best of satisfaction since its introduction ten years ago. This could not be if the medicine did not possess merit. If you suffer from impure blood, try Hood's Sarsaparilla and realize its peculiar curative power.

The Poultry Yard.

Injustice in the Egg Trade.

Careful poultry-keepers have to contend with difficulties very like some which are found in the way of dairymen, and it is a very serious question what to do about it. Some persons make first-class butter, an article that would command the highest price if it were sold to a regular customer for personal use, but which, when sold in competition with inferior grades at the store, it sells at the rates ruling for the worse article. So it is with reference to eggs. Some persons gather in their eggs fresh every day and take them to market and sell them honestly as fresh eggs; but, unless they are engaged and taken regularly to one or more families for their use, they do not bring their worth on the general market because so many eggs are brought in that are not fresh. Where eggs are mixed in common lots, like butter is in many cases, the prices which merchants can afford to pay for the mixed article are those which they pay for the very best eggs delivered by the most careful persons. This operates unjustly. There is no way to improve the situation except by association among the farmers and the adoption of some means of protection common to large numbers of persons.

An Oregon farmer, having contended with this difficulty, being often compelled to sell his fresh eggs for prices ruling for stale stuff, inquires for remedy. His market is Portland. He says he has traveled about the country a good deal and seen how farmers bring their eggs to the stores; how they are shipped to Portland when a sufficient quantity are together. They are packed, maybe, from a dozen different varieties, in as many packages; are, maybe, from a day to two weeks in the hands of the country merchants, and arrive then in Portland as fresh eggs. There the wholesale merchants have them on hand, according as the market may be, from a day to one or two weeks, and the *fresh* eggs are through these different delays from one to four weeks old before the retail grocer gets hold of them, and then the housewife.

As long as farmers do not pay more attention to poultry-raising than most of them do, there is little reason to hope for improvement in this respect. But it does seem that a little well-directed effort on the part of individual persons where there is no organization among the farmers, would do much to remedy the trouble complained of. There is a great deal of merit in working up and maintaining a reputation in any kind of business. Egg-raising is not an exception. Let persons who do intend to make a business of raising poultry and marketing eggs, do as other business people do—go out and hunt up a market, look up customers and deal with them. Arrange for regular deliveries and then never fail in meeting engagements promptly. Every family in town prefers to have supplies delivered at the house when it can be done. Butter and vegetables are engaged by thousands of families from farmers who supply them regularly. They would be glad to have eggs delivered in the same way.

This subject is well worth attention on the part of Kansas farmers. Eggs can be made a considerable part of farm products. They are always a cash article, just like wheat and pork. A little care well-directed in the poultry line, yields encouraging returns.

Nothing But Leaves.

The fallen leaves with which the yards are now littered are unsightly, and, unless raked up, may by decaying, become disease-breeders. It has been said that the decay of vegetable matter is much more dangerous, although less disagreeable to the olfactory nerves, than the decay of animal matter. An old physician used to remark that as a source of disease one decayed cabbage was more potent than a decomposing horse. To prevent disease rake up the leaves.

Leaves may also be utilized in winter as litter for the fowls, in which to scatter whole grain and keep their feet and beaks active, rather than have them moping about with nothing to do except learning such unpleasant habits as feather-pulling. If removed when soiled, and frequently renewed, no danger is to be apprehended from their use.

Rake up the leaves, then, and make the yards look neat, prevent disease, and furnish means for activity which will promote health and profit, and substitute good for bad habits. Do this as early as possible, and the falling leaf will become a memento of life to fowls, even if it be of death to the year. —*American Poultry Journal.*

Poultry Notes.

It is well that there is a great variety of fowls. There is something for the taste of nearly everybody. The poultry interest is greater, there are more fowls raised and more men engaged in raising them, because there are many varieties.

A large, heavy duck, all other things being equal, will score more than the bird that is deficient in size, though being equal in other points. Pekins will average about twelve pounds per pair when in good condition, but can be forced to sixteen or eighteen pounds.

No one variety has yet appeared that combines all the good qualities possessed by all varieties, and it is not probable that there ever will. Great improvements are possible, but the happy combination of all that is good in a single variety of fowls is not to be looked for.

A cheap and convenient disinfectant for poultry houses may be prepared by mixing one bushel of finely-sifted dirt and one pound of chloride of lime. If fine tobacco dust be added it will assist in preventing lice. The dirt so prepared may be dusted over the floors or in any portion of the poultry house, and will greatly assist in keeping off disease and vermin.

Dark combs indicate a congested state of the system, or in other words, an unnatural collection of blood in some part of the body. In order to induce a free and healthy circulation of the blood, give small doses of Epsom salts twice on alternate mornings; you can soak the grain in water, in which the salts have been dissolved. If you are feeding too high, reduce the quantity and change the food to something cooling and not stimulating.

It is a certainty that raising poultry for egg production pays the farmer. As a general thing the fowls that the farmer keeps in the barnyard, and on which he expends but little, pay best of all his live stock; but when attention is paid especially to fowls properly fed, housed and attended, after deducting the cost of keeping, care, interest per cent. from the amount for which the eggs sell, there is, in nine cases out of ten, a larger balance on the credit side of the ledger than is found in connection with any single department of farm industry.

The following is a description of the way in which turkeys are fattened in Norfolk, which is the great English county for breeding and preparing them for the London markets: Turkeys for Christmas are shut up in a light, dry and roomy house the first week in November; troughs with as much maize and good barley as they can eat should always be by them, and they have two good meals a day of just as much barley meal mixed with flat milk as they can eat, and milk to drink. Sliced mangels, turnips, swedes and cabbage are useful and necessary, and plenty of lime, sand, ashes and brick dust should be kept in the corners of the house. It is found to be most important that the troughs be well cleaned out every morning, all surplus food removed, for on a farm there are usually plenty of other fowls to eat up what is left by the turkeys. Fed in this way, they rapidly put on flesh, which is usually very white in color and fine in texture.

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.

HUMPHREYS'

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

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

HOMEOPATHIC

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

SPECIFICS.

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

PENNYROYAL PILLS
"CHICHESTER'S ENGLISH."
The Original and Only Genuine.
Safe and always Reliable. Beware of worthless Imitations. Indispensable to LADIES. Ask your Druggist for "Chichester's English" and take no other, or inclose 4c. (stamps) to us for particulars *in letter* by return mail. NAME PAPER. Chichester Chemical Co., 2818 Madison Square, Philada., Pa.
Sold by Druggists everywhere. Ask for "Chichester's English" Pennyroyal Pills. Take no other.

Diamond Dyes

Brilliant! Durable! Economical!

33 COLORS. 10 cents each.

The PUREST, STRONGEST and FASTEST of all Dyes. Warranted to Dye the most goods, and give the best colors. One package colors one to four pounds of Dress Goods, Carpet Rags, Yarns, etc. Unequalled for Feathers, Ribbons, and all Fancy Dyeing. Any one can use them.

The Only Safe and Unadulterated Dyes.

Send postal for Dye Book, Sample Card, directions for coloring Photos., making the finest Ink or Bluing (10 cts. a quart), etc. Sold by Druggists. Address WELLS, RICHARDSON & CO., Burlington, Vt.

For Gilding or Bronzing Fancy Articles, USE DIAMOND PAINTS.
Gold, Silver, Bronze, Copper. Only 10 Cents.

CREAM OF A WEEK'S NEWS.

A whisky trust was organized at Peoria, Ill.

Two Kansas City alderman are charged with having interests in city contracts.

Railroad rates are reduced about 25 per cent. between Missouri river points and Denver.

Chicago anarchists are distributing a circular headed "Fight!" among workingmen of that city.

The national Prohibition convention is to be held at Indianapolis the first Wednesday in June next.

Ex-Gov. St. John is reported as saying positively that he will not be a candidate for the Presidency in 1888.

A circular is issued and circulated among Knights of Labor in Chicago urging a reorganization of the order.

Some 6,000 laborers are thrown out of employment by the stoppage of street work in New York for the winter.

Mr. Sullivan, Lord Mayor of Dublin, was imprisoned for publishing proceedings of land league meetings in his paper.

M. Gaunt, a wealthy colored resident of Xenia, Ohio, has deeded his property, valued at $30,000, to Wilberforce university.

A New York syndicate has purchased 10,000 acres in western Florida and will put 1,000 acres of it in tobacco during the coming year.

November 28, at Waterloo, Iowa, was reported as the coldest day ever known there, the mercury going as low as 38 deg. below zero.

A French statesman named Carnot was elected to fill the office of President of the French Republic, vacated by the resignation of M. Grevy.

An Indian named Jumping Tom, who attempted to burn the Cheyenne agency buildings a few days ago, was arrested, and while in prison killed two of the guards with a pair of shears and then killed himself.

Atlanta negroes who were courted by the white people during the late prohibition campaign, now claim recognition for regular political purposes, and they announce their intention to put up candidates of their color for city offices.

Four children of a Chinese father and American mother were sold to their uncle and his wife—Ah Doc and wife, in New York city, for $1 apiece, and a deed of conveyance formally executed by the mother, the father having abandoned them.

The Transcontinental officials formed an association. The headquarters are at Denver, and J. S. Leeds, now General Freight Agent of the Santa Fe, will be chairman. Sixty-five thousand dollars is the sum the Pacific Mail Steamship company is to receive as a monthly subsidy.

The Chicago, Milwaukee & St. Paul railway has been experimenting with steam heating for passenger trains. The experiments have shown that the system adopted is a perfect success, and the company's through lines will be equipped as rapidly as possible with the new steam heating apparatus.

Persons getting up a public demonstration in Chicago to raise funds for the families of the dead anarchists were notified by the Mayor that there should be no red flags or other emblems save the national colors. The speeches must not be incendiary; everything must be done decently and in order, and above all no beer will be allowed to be sold or drank upon the premises.

The revenues of the government from all sources during the month of November amounted to about $30,500,000. The disbursements during the month were unusually heavy and nearly equaled the receipts. Over $18,000,000 was paid out on account of pensions. It is estimated at the Treasury Department that there has been an increase of nearly a million dollars in the public debt during November.

The following extracts are from the public debt statement for December 1:

Total debt—principal	$1,664,461,537
Interest	11,355,124
Total	$1,674,816,660
Increase of debt during the month	$ 1,490,350
Decrease of debt since June 30, 1887	36,245,684
Total cash in the treasury available for reduction of the debt	280,274,908
Total cash in the treasury as shown by Treasurer's general account	504,559,165

The twenty-fifth annual report of the Comptroller of the Currency, shows that the total number of national banks organized up to the 31st of October is 3,895, of which 624 have gone into voluntary liquidation, 119 have failed, leaving in operation at that date 3,061. The total number of new banks formed during the last year is 225; the total number closed during the year is thirty-three, of which twenty-five went into voluntary liquidation and eight failed.

The latest news of the Lehigh valley strike is that 2,000 Belgian miners have been employed in the old country to come to this country for the purpose of working the mines of Eckley B. Coxe, and it is asserted that if the Belgians do come there will be bloodshed in the Lehigh region. The men there feel that they might as well die fighting as to starve to death by the wayside in midwinter, for if they are driven out of the Lehigh field they will be discriminated againt and blacklisted by every boss in the anthracite valley of Pennsylvania, and they will not be able to find work anywhere.

The *Manufacturers' Record* says the Sloss Steel company and the Tennessee Coal and Iron company will build plants at Birmingham, Ala., with an aggregate capacity of 1,000 to 1,400 tons daily. Works will also be erected at Birmingham to grind, pulverize and prepare the basic slag as a fertilizer with a capacity of making 100,000 tons of basic phosphate a year. Nashville will have a plant and works producing 10,000 tons of basic boiler plates a day from charcoal, iron and 100,000 tons of basic phosphates a year. In Sheffield will be built a plant to produce 1,000 tons of basic steel daily, and a works with a capacity of 100,000 tons of basic phosphate a year.

Topeka Weather Report.

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

Abstract for the week ending Saturday, December 3, 1887:

Temperature.—Highest at 2 p. m., 58° on Saturday the 3d; lowest at same hour, 8° on Sunday the 27th. Highest recorded during the week, 58° on the 3d; lowest, 1° on Monday the 28th. Heavy frosts the 28th and 29th.

Rainfall.—A little rain fell on the 1st and 3d of December. Total for the week, 1 39 inches.

Kansas Weather Service.

Monthly summary of meteorological observations for use of the KANSAS FARMER, month of November, 1887. Place of observation, Washburn college, Topeka, Kas.

Mean of maximum temperatures, 55.8.
Mean of minimum temperatures, 28 6.
Maximum temperature of month, 82.1, on 2d.
Minimum temperature of month, 5.2 below zero, on 27th.
Highest daily temperature, 60 0, on 2d.
Lowest daily temperature, 3.0.
Total precipitation, in inches, 1 21.
Greatest precipitation in twenty-four consecutive hours, in inches, .70, on 8th and 9th.
Total snowfall, in inches, during month, 1.8.
Depth of snow, in inches, on ground at end of month, .0.
Number of clear days, 13.
Number of fair days, 11
Number of cloudy days (including rainy) 6.
Number of days on which .01 inch or more rain fell, 6.
Prevailing direction of wind at 7 a. m., south.
Prevailing direction of wind at 2 p m, north, maximum velocity, 60 miles, on 26 h
Prevailing direction of wind at 9 p. m., south.
Frosts, dates, 3d, 4th, 5th, 10th, 13th, 14th, 15th, 18th, 28th, 29th.

Remarks—Normal temperature for November, 40 Normal precipitation for November, 1 20 inches. Highest temperature in November on record, 79, in 1884; lowes temperature in November on record, 3 above zero, in 1880.

Miss Lucy E. Whiton, of Cooper Institute, New York, will give an art reception every afternoon, at 623 West Eighth St., Topeka. Ladies please call.

The slide trombone, the most perfect of brass musical instruments, is the sackbut of the ancients, and was revived about 1790, after a model found among the ruins of Pompeii.

Campbell University, of Holton, Kas., is not, as many suppose, a sectarian institution, but receives its name from the founder, Hon. A. G. Campbell, of Utah, who formerly lived in Jackson county, Kansas.

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 Pow der Co., St. Louis.

☞ Do you know of any young people who want to teach next year? If so, have them send for circulars of the Normal Department of Campbell University.

Short-hand, type-writing, German, book-keeking, penmanship, arithmetic, commercial law, banking, etc., are thoroughly taught in the Arkansas Valley Business College, Hutchinson, Kas.

Prof. C. N. Faulk, of the Arkansas Valley Business College, Hutchinson, Kas., has been awarded the diploma for plain and ornamental penmanship, by different fair associations, over all the penmen of any note in the State.

Farm Loans.

Loans on farms in eastern Kansas, at moderate rate of interest, and no commission. Where title is perfect and security satisfactory no person has ever had to wait a day for money. Special low rates on large loans. Purchase money mortgages bought.

T. E. BOWMAN & Co.,
Jones Building, 116 West Sixth street,
Topeka, Kas.

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.

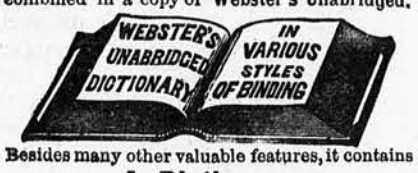
Address, J. E. LOCKWOOD,
G. P. & T. A., Kansas City.

$25! $25!
PER ACRE!
TOO CHEAP

I WILL SELL OR TRADE
80 ACRES OF NICE LAND
adjoining the town of Wilmot, Kas. Will trade for Cattle or Sheep. Farm well improved; all under fence, in good condition.
Also a nice stock of
HARDWARE and LUMBER.
Goods all new and in splendid condition. Will sell or trade as above mentioned.
Address Box 9, Wilmot, Kas.

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. Dummy pass the house to all parts of the city and depots.
W. F. ORCUTT, Proprietor.

IN THE SELECTION OF
A CHOICE GIFT
For Pastor, Parent, Teacher, Child, or Friend, both elegance and usefulness will be found combined in a copy of Webster's Unabridged.



Besides many other valuable features, it contains
A Dictionary
of 118,000 Words, 3000 Engravings,
A Gazetteer of the World
locating and describing 25,000 Places,
A Biographical Dictionary
of nearly 10,000 Noted Persons,
All in One Book.
3000 more Words and nearly 2000 more Illustrations than any other American Dictionary.
Sold by all Booksellers. Pamphlet free.
G. & C. MERRIAM & CO., Pub'rs, Springfield, Mass.

PETERSON'S MAGAZINE is the cheapest and most popular of the lady's-magazines, as proved by its large circulation.

EACH number contains a handsome steel-engraving, a mammoth double-sized colored fashion-plate, and numerous illustrated hints on the latest styles of ladies' and children's dresses.

THE literary contents of "Peterson" are not surpassed by any other magazine. Among its contributors are Frank Lee Benedict, Edgar Fawcett, Miss M. G. McClelland, and Alice Bowman.

EVERY number contains a dress-pattern, which is alone worth the price of the number, as it enables every woman to cut out her own and her children's dresses.

RECIPES for cooking, the toilette, sick-room, etc., articles on house-furnishing, gardening, are given monthly, also a mothers' department, by an experienced physician.

SKETCHES of noted places and people, splendidly illustrated articles, handsome work-table patterns, printed in colors, and other attractions, make "Peterson" invaluable to ladies.

OUR terms are $2.00 per year, invariably in advance, with great reductions to clubs, and elegant premiums to those getting up clubs.

NOW is the time to subscribe or to get up clubs for 1888. Sample copies sent free to those desiring to get up clubs.
Address,
PETERSON'S MAGAZINE,
306 Chestnut Street, Philadelphia, Pa.
Mention this paper.

THE BEST

way to provide for the improvement of time by the children of a family is to subscribe for a good magazine adapted to their ages.

They are of very great value; but they *need not cost you one cent.*

Babyland, 50 cents a year, for the help and pleasure of mother and baby together.

Our Little Men and Women, $1 a year, consists of interesting stories and pictures for children beginning to read.

The Pansy, $1 a year, for the Sunday School age—"Pansy," the famous religious writer and teacher, is the editor.

Wide Awake, $2.40, a comprehensive family entertainment every month in the year.

They are better and more important than we can put into words. We will send you a sample copy of any one of them for 5 cents. You will see from the Premium List how to get them all, and more, for a word with your neighbors which you will be glad to speak.

D. LATHROP COMPANY,
BOSTON.

SENT FREE
A SAMPLE NO. OF THE
Phrenological Journal,
A magazine of HUMAN NATURE for every body. $2.00 a year, 20c. a no., and a list of BOOKS on Phrenology, Physiognomy, Health, Heredity, &c Send address on postal.
85,000 Sold.
HOW TO STUDY THEM
A manual of Character Reading for the people, an intensely interesting and attractive book Every body should read it. 200 pages, 200 fine illus. 40 cts.
FOWLER & WELLS CO., 775 Broadway, N. Y.

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 parties 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

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

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

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

Mustang Liniment
MEXICAN MUSTANG LINIMENT, applied vigorously is death to Swinney, Wind Galls & Sore Backs!

The Busy Bee.

My Way in Winter.

For the benefit of bee-keepers similarily situated with myself, I'll give my present mode of preparing bees for winter. The plan which I pursue is the one I have followed for a dozen years past. The slight variations being only such as necessity rather than choice have impelled me to adopt. During the month of November, as soon as winter admonishes that it has come to stay, the bees are taken to the cellar, which is the one under the dwelling house, accessable by an outside trap door. This cellar is undivided and is 32x34 in area, seven feet high, the bottom is of coarse gravel to the depth of several feet. For convenience or want of something better, unused hives or barrels are set in a row next to the wall farthest from the entrance and about twenty inches from it on which are laid two widths of fencing lumber about two inches apart in the middle. On the edges of these are placed common lath, on which the hives are set. When one row is full another one is prepared and filled in like manner. Sometimes the tops of the winter hives are used as supports to the lumber. This I find to answer all the purpose of giving shelter to the tops for this part of the season. When the bees are carried in, the tops are removed and the hive placed on a board or rack, the entrance closed and thus taken into the cellar, when it is taken from this board and put in its place on the prepared stand. Some bees will get out during this last process and are sure to sting if they can find the desired object. It is well therefore to have your vest well buttoned up and your pockets closed.

Should the bees get much disturbed before all are left in, I shut the doors for a while till they quiet down. But I desire to disturb them as little as possible. I close all windows by filling them with straw or marsh hay. When the ground begins to freeze hard, I bank up the outside of the windows and leave them undisturbed as long as I can. Last spring I got the last of them out about the middle of April. Formerly I tried to get them out as early as I thought it would possibly answer, but I prefer the other extreme. The setting out is done on days sufficiently warm for the bees to take a cleansing flight without danger of getting chilled and lost. A day too warm is avoided as the commotion of so many will often cause the bees to mix badly by entering the wrong hives. To avoid this to some extent they should be placed on stands at some distance from each other at first and the intervening stands filled after the first ones have quieted down. During the winter, should warm weather cause the bees to be uneasy, I open the outside doors during the night, thus changing the vitiated and warm air for a pure and cool one. A windy night will not answer, as a sharp draft into the cellar produces the greatest disquietude.

I would here mention a suggestion or two for an improvement of my way which would be excellent, one is a subearth pipe for admitting pure air at any time. Another is to have a pipe from the top of the cellar connecting with a chimney above for the escape of foul air. A thermometer placed in the cellar would indicate the proper temperature to be preserved, and would aid the beekeeper in preventing disaster.—*G. W. Neihardt, in Bee Keepers' Guide.*

It is on record that during swarming bees have been dispersed by the noise of a band of music, reassembling in the intervals of silence. The whole of an apiary has been suddenly aroused by the noise emitted by an injured queen, the bees stinging every living thing within reach. A sound uttered by the Deaths-head moth is said to paralyze them.

Bee Notes.

To reliquify honey it is only necessary to warm it slowly and thoroughly.

No use to go into winter quarters with weak colonies. Unite them until you get your hives at least half full of bees. The key of successful bee-keeping is to keep your bees strong *at all times.*

The same general rules which guide us in marketing extracted honey are applicable in the case of comb honey. It should be made attractive to the eye, and satisfying to the taste; and should bear the name of the producer upon each package of this kind, however small.

Great care must be exercised after placing bees in the cellar to keep it perfectly dark, and it should be as dark as pitch at the time of placing them. If they have the least bit of light they will certainly take wing, and if once this happens there is no cure but to place them back on their old stands, or lose every bee that leaves the hives.

A worker bee is hatched in 21 days from the time the egg is deposited, queens in 16, and drones in 24 days.

☞ Do you know of any young people who want to teach next year? If so, have them send for circulars of the Normal Department of Campbell University.

The average life of the worker bee is 45 days. A queen will live three or four years. The drones appear to have an untimely death, as they are cut off by the worker bees.

Judging from the indorsements of the Arkansas Valley Business College, Hutchinson, Kas., from the highest possible sources, it must necessarily be one of the leading commercial colleges in the West.

Short-horn Bulls for Sale.

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

THE MARKETS.

By Telegraph, December 5, 1887.

LIVE STOCK MARKETS.

St. Louis.

CATTLE—Receipts 1,200, shipments 1,400. Market quiet. Good to choice native steers $4 25a4 70, fair to good steers $3 80a4 30, fair to choice butchers steers $3 00a3 85, stockers and feeders $1 60a2 80, Texans and Indians $2 20a 3 25.

HOGS—Receipts 2,000, shipments 1,200. Market active and a shade higher. Choice heavy and butchers selections $5 25a5 45. mixed and choice packing and yorkers $4 90a5 30, common to good pigs $4 60a5 00.

SHEEP—Receipts ...., shipments 1,200. Market active. Sheep $3 75a4 10, lambs $3 30a4 40.

Chicago.

The Drovers' Journal reports:

CATTLE—Receipts 10,000. Market strong. Choice steers $4 50a5 00, good $4 10a4 40, medium $3 60a4 00, common $2 70a3 40, stockers $2 00a2 50, feeders $2 50a3 00, bulls $1 75a2 50, cows $1 00a 2 75, Texas and Indian cattle $1 75a3 00.

HOGS—Receipts 25,000. Market stronger. Mixed $4 70a5 30, heavy $5 10a5 60, light $4 60a 5 00, skips $3 25a4 65.

SHEEP—Receipts 5,000. Market stronger. Natives $2 50a4 40, Western $3 00a3 80, Texans $2 00a3 40, lambs $3 75a5 50 per cwt.

Kansas City.

CATTLE—There was a good demand for choice beef steers and there were a number of lots in the yards which met with ready sale at $3 30a4 10.

HOGS—Last year at the corresponding season the bulk of hogs sold at from $3 85a3 90, while to-day the bulk sold at $5 20a5 30, being $1 35 higher.

SHEEP—There were no receipts of choice muttons. The demand is good, and if here the best classes would bring from 25a50c higher than the first of last week; $1 25a2 40.

PRODUCE MARKETS.

St. Louis.

FLOUR—Strong and higher, ranging $3 25a 4 30.

WHEAT—No. 2 red, cash, 80½c bid; December, 80½a80⅝c.

CORN—Cash, 49a49½c.

OATS—Cash, 30¼c.

RYE—59a62c bid.

Chicago.

Cash quotations were as follows:

WHEAT—No. 2 spring, 78⅝a78¾c; No. 3 spring, 69½c bid; No. 2 red, 83½c.

CORN—No. 2, 50¾c.

OATS—No. 2, 31c.

RYE—No. 2, 59½c.

BARLEY—No. 2, 75c.

FLAXSEED—No. 1, 1 23a1 25.

TIMOTHY—Prime, $2 30a2 31.

PORK—$14 50a15 00.

Kansas City.

FLOUR—Good inquiry and market very firm at 5c advance; one car XXX at $1 10 on orders.

WHEAT—No. 2 red winter, none on the market. On track by sample: No. 2 soft, cash, 76c.

CORN—On track by sample: No. 2 cash, 46½c.

OATS—On track by sample: No. 2 mixed, cash, 31½c; No. 2 white, cash, 32½c.

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

HAY—Receipts 12 cars. Strictly fancy is firm at $8 50 for small baled; large baled, $8 00; wire-bound 50c less.

OIL-CAKE—Per 100 lbs. sacked, 1 25; 2000 per ton, free on board cars; car lots, 19 00 per ton.

SEEDS—We quote: Flaxseed, $1 05 per bu. on a basis of pure; castor beans, $1 00 for prime; timothy, prime to choice, $2 10a2 15.

BUTTER—Receipts of roll light and sells on arrival. We quote: Creamery, fancy, 25c; good, 22c; fine dairy in single package lots. 16c; storepacked, do., 14a16c for choice; poor and low grade, 9a10c; roll, good to choice, 12a 15c.

CHEESE—We quote: Full cream, twins, 13c; full cream, Young America, 13½c.

EGGS—Receipts fair and market steady at 20c per dozen for fresh.

PROVISIONS—Following quotations are for round lots, Job lots usually ¼c higher: hams, 10¾c; breakfast bacon, 10¾c; dried beef, 9c; dry salt shoulders, $5 65; long clear, $7 35; clear, $7 30; short clear, $7 55; smoked shoulders, $6 50; long clear, $8 10; clear, $8 20; short clear, $8 05; pork, $14 00; lard, $7 00.

Topeka Markets.

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

Butter, per lb		$ 15a	22
Eggs (fresh) per doz		21a	22
Beans, white navy, H. P.,	per bus	2	25
Sweet potatoes	" "	40a	50
Apples	" "	60a	85
Potatoes	" "	50a	
Onions	" "	75a1	00
Beets	" "	40a	
Turnips	" "	25a	
Tomatoes	" "	50a	
Cabbage	per doz	30a	40
Pumpkins	" "	75a	
Squash	" "	60a1	00

J. L. STRANAHAN,

Broom Corn!

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

Broom Corn!

Consignments solicited. Liberal advances and prompt returns. Reference:—Nat'l Bank of Illinois. **J. P. Gross & Co.,** 249-251 E. Kinzie St., Chicago. [Mention the Kansas Farmer.]

F. C. VEHMEYER,

Broom Corn,

182 & 184 E. Kinzie St., Chicago.

PROPRIETOR

'Standard Warehouse,'

169 to 175 N. Water Street.

The largest and best lighted Broom Corn Warehouse in Chicago, and the only one having railroad side track alongside. Liberal advances made on consignments.

Reference—Lincoln National Bank, Chicago.

MASON & HAMLIN

ORGANS. The cabinet organ was introduced in its present form by Mason & Hamlin in 1861. Other makers followed in the manufacture of these instruments, but the Mason & Hamlin Organs have always maintained their supremacy as the best in the world.

Mason & Hamlin offer, as demonstration of the unequaled excellence of their organs, the fact that at all of the great World's Exhibitions, since that of Paris, 1867, in competition wi h best makers of all countries, they have invariably taken the highest honors. Illustrated catalogues free.

PIANOS. Mason & Hamlin's Piano Stringer was introduced by them in 1882, and has been pronounced by experts the "greatest improvement in pianos in half a century."

A circular, containing testimonials from three hundred purchasers, musicians, and tuners, sent, together with descriptive catalogue, to any applicant.

Pianos and Organs sold for cash or easy payments; also rented.

MASON & HAMLIN ORGAN & PIANO CO.

154 Tremont St., Boston. 46 E. 14th St. (Union Sq.), N.Y. 149 Wabash Ave., Chicago.

☞ J. H. LYMAN, Agent for MASON & HAMLIN PIANOS and ORGANS, at 805 Kansas Avenue, Topeka, Kas.

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.*

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.

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

Kansas Farmers' Fire Insurance Company,

—OF—

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 $30.00; the German, of Freeport, Ill., $1.00 to pay $70.00, the Burlington of Iowa, $1.00 to pay $73.00, and the State of Iowa has $1.00 to pay $79.00 at risk.

The Veterinarian.

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

FLUKE.—I have 1,000 sheep. When I kill one I find flat worms in the pipes that run from the stomach to the liver. [This is the liver fluke, one of the most destructive enemies a flock of sheep can have. They are not the immediate cause of death to the sheep, but their presence marks his early decline and final death. The parasite breeds in the large intestines, and so long as the sheep is healthy, they do not multiply rapidly, nor do they cause much trouble. They cannot pass up into the stomach in the healthy sheep, for the gastric juice of the stomach will destroy them, but they can cut off the supply of nourishment, and impair the health of the sheep in that way, and then can pass up into the stomach, and from there into the pipes of the liver, where they fasten themselves like a leech, and remain as long as the sheep lives. When they get there medicine will not reach them, Whatever is done to destroy them should be done while they are in the bowels.]

ENLARGEMENT—DISTEMPER.—(1) I have a 6-year-old dapple gray mare that is lame in her right front leg. When I work her it swells up at the pastern joint; when standing she keeps her foot set forward and favors it all the time. She also has the distemper and slobbers all the time. I work her with a small bit and feed timothy hay. (2) Also a 4-year-old sorrel mare that stepped or fell through the barn floor when she was about 9 months old, and hurt her left hind leg at the hock joint, which has been enlarging ever since until there is a lump on the inside of the leg as large as a man's fist—not so large on the outside. At first it was soft like there was wind in it, but now it is hard. She is lame at times; it appears to hurt her badly at times, as she holds it up a good portion of the time. Please tell me what to do for them. [(1) Have the foot examined to see that the shoe is bearing evenly and properly all around, and that there are no corns present. Having done so, leave the shoe off, and clip off the hairs in the region of the pastern which swells and apply the following blister: Powdered Spanish flies, 6, drachms; lard, 3 ounces. Rub in for ten minutes all around the pastern, and apply fresh lard daily for two weeks. In the mean time give rest and keep the head tied up for the first three or four days so she will not bite the part. For the distemper, if the throat is very sore, apply a poultice of linseed, warm, and give warm bran mashes night and morning, having a tableapoonful each of ginger and powdered licorice mixed in. (2) Regarding the hock, we would advise you to consult a qualified veterinary surgeon and have him fire and blister it. This would be the most effectual, but if you object to firing, blister it with the ointment prescribed for the preceding case.]

THE LIVER OF THE HORSE. Stewart says that in the horse the liver undoubtedly performs the same office as in the human being; but these are involved in much obscurity. It secretes the bile from the veenous blood, (supplied to it by the portal circulation), which, if retained therein, would poison the whole system; but which, when mingled with the chyme, is of the highest service in the operations of digestion. It is by far the largest gland in the whole body. The liver is situated in close contact with the right side of the diaphragm, and is divided into three lobes, with a color peculiar to itself. Its structure is also most peculiar. The bile is said to be secreted in small granules in this organ, called acine, from their resemblance to the stone of certain small berries. But when the liver is cut open, we find every part of it filled with little tubes, from which exudes a thin, yellow fluid. This is evidently the bile, but as yet, without the bitter qualities, which it probably acquires afterward from acine. In most animals the bile is stored away in a reservoir, called the gall-bladder, to be used as occasion may require; but the horse has no gall-bladder, so that the bile, as fast as it is formed, flows directly into the small intestines. These it enters through the hepatic or biliary duct, a few inches below the pyloric orifice. It is of the greatest importance in the work of digestion. The whole system suffers, if its secretion and flow are interrupted or retarded. Should they cease altogether, not only would the blood be poisoned by its retention, but the animal would presently starve for want of nourishment. This organ is much less subject to disease in the horse than in the other domestic animals, or in man. It is occasionally the seat of inflammation and some other affections, whose symptoms, however, are always obscure. Sometimes, where its functions are deranged, a condition is produced much resembling that of jaundice in the human being. This may be detected, without difficulty, by the yellow, pale color of the nose, and of the lips, the mouth, the tongue, and esepcially by the jaundiced appearance of the eyes.

Tutt's Pills

To purge the bowels does not make them regular but leaves them in worse condition than before. The liver is the the seat of trouble, and

THE REMEDY

must act on it. Tutt's Liver Pills act directly on that organ, causing a free flow of bile, without which, the bowels are always constipated. Price, 25c.

Sold Everywhere.

Office, 44 Murray St., New York.

Maple Grove Duroc-Jerseys.

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

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

LANEY & PFAFF,

GREEN RIDGE, MISSOURI.

THOROUGHBRED

POLAND-CHINA HOGS

FOR SALE.

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

POLAND-CHINA PIGS!

135 FOR SALE.

Sired by six first-class boars, for season's trade.

My herd is headed by STEM WINDER 7971.

Address F. M. LAIL, Marshall, Mo.

[Mention KANSAS FARMER.]

OTTAWA HERD.

400 400

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.

NATIONAL HERD.

Established 1845. THOROUGHBRED POLAND CHINAS as produced by A. C. Moore & Sons, Canton, Ill.

We breed from 160 sows and 12 males. All recorded in A. P. C. Record. Pigs all eligible to record. Pedigree sent when desired.

Photo Card of 48 Breeders sent free.

Swine Journal 25 Cents in 1 & 2-ct. stamps.

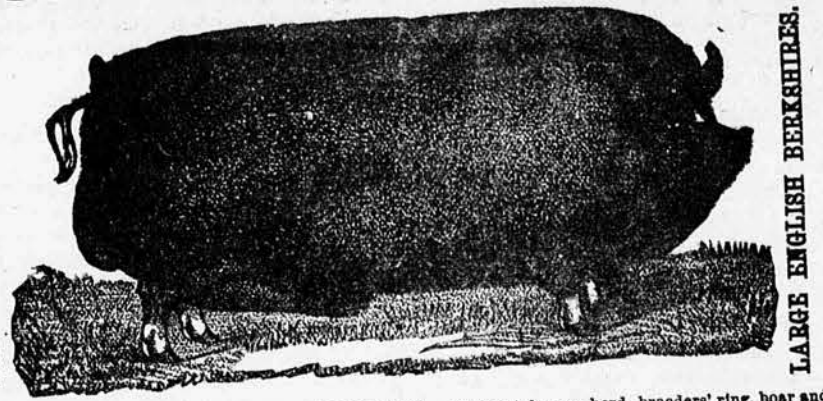
COME AND SEE OUR STOCK

We have special rates by express.

☞ If not as represented we will pay your expenses.

ROME PARK STOCK FARM.

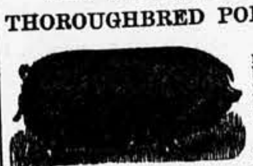
PURE-BRED POLAND-CHINAS.



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.

THE GOLDEN BELT HERD OF THOROUGHBRED POLAND-CHINAS.

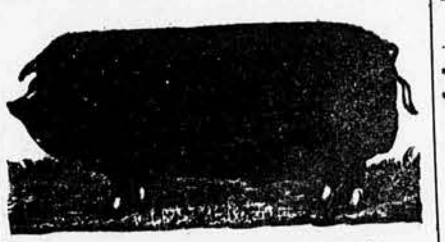


Choice Spring, Summer and Fall Pigs of both sexes, for sale in pairs or trios not akin. All breeders recorded in A. P.-C. Record.

In excellence and purity of blood my herd is not excelled.

Pedigree with every sale. F. W. TRUESDELL, LYONS, KAS.

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-edge pedigree. **Choice pigs a specialty.** Plymouth Rock Chickens of superior quality.

Correspondence invited. Mention KANSAS FARMER.

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.

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, Southdown 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.]

OAK GROVE HERD —OF— BERKSHIRES!

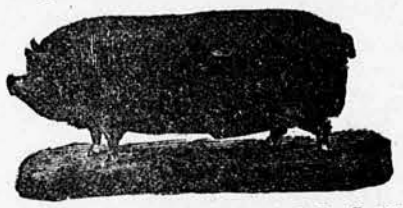
J. J. & S. W. RENFRO, Collinsville, Illinois.

The prize-winning boar Champion 4565 stands at head of herd, assisted by Model Duke 77397, winner of first prize in his class at great St. Louis fair, 1887. Have for sale some choice young sows that will be bred to the above boars in December and January, or sooner if parties desire. Also first-class pigs of both sexes, from one to four months old.

☞ We are also breeding COTSWOLD SHEEP and LIGHT BRAHMA CHICKENS (Felch strain).

Parties desiring to purchase thoroughbred stock will find it to their interest to correspond with us before purchasing elsewhere. [Mention Farmer.]

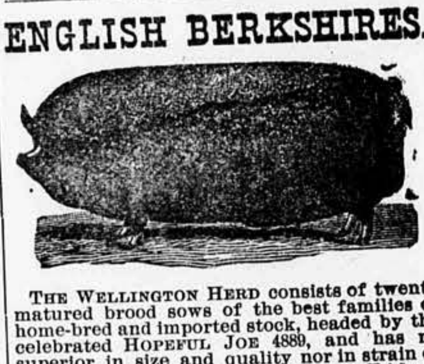
LOCUST GROVE HERD OF Large English Berkshires



Headed by GOLDEN CROWN 14823, A. B. R. CHOICE PIGS FOR SALE, either sex. Everything as represented. Write me, and please mention this paper.

Address JAMES HOUK, HARTWELL, HENRY Co., Mo.

ENGLISH BERKSHIRES.



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

M. B. KEAGY, Wellington, Kas.

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

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

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 pedigrees." I am personally in charge of the herd.

T. B. EVANS, Geneva, Ill.

C. W. JONES, Richland, Mich.

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

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.

ROHRER STOCK FARM

NEWTON, KANSAS,

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

JERSEY CATTLE.

The herd is headed by the Stoke Pogis Victor Hugo Duke bull, St. Valentine's Day 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.

BRIGHTWOOD

HERD OF SHORT-HORNS

Bates and Standard Families, including **PURE KIRKLEVINGTONS,** Places, Harts, Craggs, Roses of Sharon, Young Marys and Josephines.

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

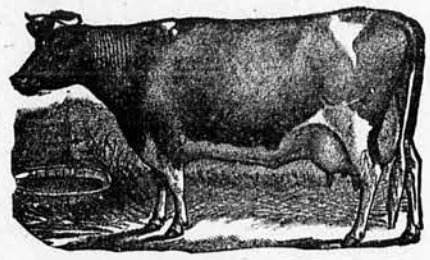
Also two handsome, rangy, FINELY-BRED TROTTING STALLIONS for sale.

R. K. THOMSON, Slater, Mo.

SUNNY SIDE

HERD OF SHORT-HORNS.

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



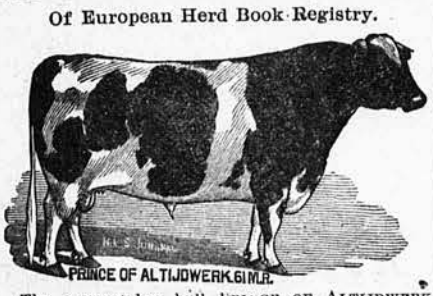
H. V. PUGSLEY,

PLATTSBURG, MO.,

Breeder of **Holstein-Friesian Cattle,** of the Mercedes, Heintje, 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.



The sweepstakes bull PRINCE OF ALTIJDWERK (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 10½ ounces; milk records, 50 to 80 pounds daily. The sweepstakes herd. Write for catalogue. **M. E. MOORE, Cameron, Mo.**

[Mention this paper.]

Cherokee Hereford Cattle Co.,

Importers, Breeders and Owners of

THE GROVE PARK HERD.

300 HEAD, representing Grove 3d, Wilton, Horace, Anxiety and Sir Thomas strains, combined with great individual merit.

Headed by the imported prize-winning Grove 3d Bull **PLUTARCH 14410, HORACE 5th 12524, WILTON DUKE 11851.**

Animals of both sexes and all ages for sale. Fair prices. Liberal terms.

☞ CATALOGUES ON APPLICATION.

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

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

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.

E. Bennett & Son,

TOPEKA, - KANSAS,

The Leading Western Importers of

CLYDESDALE, PERCHERON, CLEVELAND BAY

—AND—

French Coach Horses.

AN IMPORTATION OF 125 HEAD,

Selected by a member of the firm, just received.

Terms to Suit Purchasers. Send for illustrated catalogue. ☞ Stables in town.

E. BENNETT & SON.

IMPORTERS AND BREEDERS OF

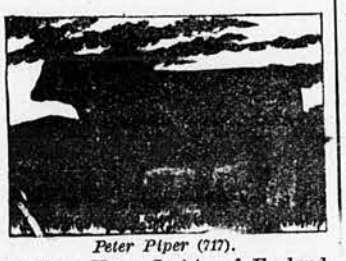
ENGLISH SHIRE AND SUFFOLK PUNCH HORSES

—AND—

RED POLLED CATTLE.

STERLING.
4713.

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



Peter Piper (717).

SEXTON, WARREN & OFFORD,
314 West Fifth Ave., **Topeka,** or **Maple Hill, Kansas.**

PERCHERON HORSES.

FRENCH COACH HORSES.

More Imported and Bred than by any other Eight Establishments.

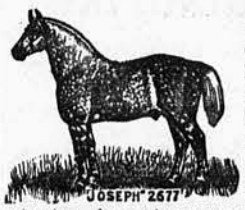
511 PURE-BREDS Now Actually on Hand.

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

Separate Catalogues for each breed, with history of same. Say which is wanted. Address

M. W. DUNHAM, WAYNE, DU PAGE CO., ILLINOIS.

Recorded Percheron and French Coach Horses.



Two importations this year. Nearly 200 of these popular breeds on hand. Every animal recorded with extended pedigree in their respective stud books. Choicest breeding and individual excellence combined. Coach stallions all purchased before the French Government made its selection. Do not buy coarse, logy horses, unsuited to your section, but come and see large, fine horses, with the best of action. They will cost you no more. Send for Illustrated Catalogue.

JOHN W. AKIN, Scipio, Cayuga Co., N. Y.

ISLAND HOME STOCK FARM

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

Savage & Farnum, DETROIT MICH.

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.

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.**

THE HOME AND HEADQUARTERS

FOR ALL KINDS OF

BRITISH HORSES.

Royal Society Winners in Each Breed.

CALBRAITH BROS.,

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

More prize winning, high class stock, imported by us than any three firms in America.

Superior horses, fashionable pedigrees and all guaranteed good breeders. Prices and terms to suit everybody. Visitors cordially invited. Send for Catalogue.

CALBRAITH BROS.,
Janesville, - Wisconsin.

CLYDES

AT OAK GROVE.

Eighty High Class Stallions

Imported During the Summer of 1887 by

JOHN C. HUSTON,

BLANDINSVILLE, - ILLINOIS.

OUR importations this year constitute the **Largest and Undoubtedly as Fine a lot of Stallions as Ever Left Scotland.**

☞ *Prize-winners and the get of prize-winners comprise our shipements.*

Grand style, clean legs, sound feet, together with fine action and perfect constitution are characteristics found in every animal Imported to Oak Grove this season. We have just completed commodious new stables located within 100 yards of the depot at Blandinsville, and will be glad to show our horses to all visitors. Each stallion guaranteed a breeder. Terms made very easy. Send for catalogue.

JOHN C. HUSTON, A. B. McLAREN, Supt.
Blandinsville, McDonough County, Illinois.

NORMAL, ILL.

French Draft and Percheron Horse

CENTER OF AMERICA.

7 model barns surround the depot; 23 barns and farms representing over

1,000 Imported

native pure-bred, and high-grade Stallions and Mares of all ages (Registered in France and America). **First-class stock, strong competition, and reasonable prices** should induce everyone to visit the French-horse city of McLean county—the France of America—before buying elsewhere. Address each of the undersigned firms.

E. McNaught.	Dillon Bros.
Kemp & Lowrey.	Dillon & Bright.
C. M. Moots.	J. F. Trimmer.

Normal, Ill., is located at crossing of Chicago & Alton and Illinois Central R. R. **15-minute street cars** to and from Bloomington depots.

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, 1866, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisement, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker-up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice.

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

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

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

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

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

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

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

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

FOR WEEK ENDING NOV. 24, 1887.

Nemaha county—R. S. Robbins, clerk.

COW—Taken up by G. Moser, in Capioma tp., November 2, 1887, one red and white cow, 5 years old, no marks or brands; valued at $15.

HEIFER—Taken up by Otto Aschelm, in Harrison tp., (P. O. Goff), October 27, 1887, one 1-year-old red and white heifer, no marks or brands; valued at $12.50.

HEIFER—By same, one pale red and white 1-year-old heifer, red feet, no marks or brands; valued at $12.50.

HEIFER—Taken up by T. Welp, in Richmond tp., (P. O. St. Benedict), November 2, 1887, one 2-year-old red heifer, white spot in forehead and white spots on hind legs and body.

Brown county—G. I. Prewitt, clerk.

STEER—Taken up by S. C. Belden, in Mission tp., November 9, 1887, one red and roan yearling steer, blind in right eye; valued at $13.

Coffey county—H. B. Cheney, clerk.

COW AND CALF—Taken up by J. H. Burguer, in Pleasant tp., November 16, 1887, one red cow, with young calf by side, 5 years old,—dreoped horns, no marks or brands; valued at $15.

STEER—Taken up by H. R. Means, in Pleasant tp., November 16, 1887, one dark red yearling steer, crop and under-bit in right ear, under half-crop in left ear; valued at $15.

Anderson county—A. D. McFadden, clerk.

STEER—Taken up by A. R. Smith, in Putnam tp., (P. O. Richmond), November 14, 1887, one red and white yearling steer, white spot in forehead, white strip on left side, girt back of shoulder, scallop under side of left ear; valued at $12.50.

STEER—Taken up by D. T. Osborn, in Lincoln tp., (P. O. Haskell), one pale red and white 2-year-old steer, small ring in left ear; valued at $18.

Hamilton county—T. H. Ford, clerk.

COW—Taken up by Ira Ford, in Bear Creek tp., November 8, 1887, one red and white cow, 7 years old, no marks or brands; valued at $18.

BULL—By same, one red and white bull, 7 years old, branded O on right hip, J.J. on left side, Π on left hip, both horns broken off; valued at $18.

Wichita county—L. G. Moore, clerk.

PONY—Taken up by Watson W. Beeman, in Edwards tp., August 3, 1887, one yellow Spanish mare pony, 6 or 7 years old, five feet high, Spanish brand on left hip; valued at $20.

Riley county—O. C. Barner, clerk.

PONY—Taken up by M. A. Coe, Manhattan, one bay pony mare, white strip in forehead, left hind foot white above fetlock joint, age unknown but very old.

COLT—By same, one bay suckling colt, about 6 months old, white strip on forehead and both hind feet white above the fetlock joint.

Lyon county—Roland Lakin, clerk.

MARE—Taken up by G. W. Thornton, in Jackson tp., January 11, 1887, one bay mare, 10 or 12 years old, 15½ hands high, white stripe in face, four white feet, has saddle and harness marks, scar at root of left ear, had on an old Texas saddle without stirrups, and a halter with a bit buckled to it, and when found was tied in the timber; valued at $40.

COW AND CALF—Taken up by John H. Wiggam, in Jackson tp., November 18, 1887, one pale red cow with a pale red calf at side; cow has a crop off right ear and split in same, branded A on right hip; valued at $15.

Wilson county—D. N. Willits, clerk.

PONY—Taken up by Eric Anderson, in Colfax tp., November 2, 1887, one small horse pony of a light gray or yellow color, 4 years old last spring, fore legs black from the knees down, black mane and tail, has been branded on left hip, but brand is not well defined; valued at $20.

STEER—Taken up by Amos Cryderman, in Talleyrand tp., November 1, 1887, one red yearling steer, slight under-bit in left ear and brand on left hip resembling an anchor; valued at $12.

FOR WEEK ENDING DEC. 1, 1887.

Osage county—R. H. McClair, clerk.

HEIFER—Taken up by A. Oleson, in Fairfax tp., October 29, 1887, one 2-year-old red heifer, mark on under part of left ear, white in the forehead and on legs and tail; valued at $10.

HEIFER—Taken up by Geo. W. Hand, in Barclay tp., November 19, 1887, one 2-year old red heifer, no marks or brands, white on belly and end of tail.

MARE—Taken up by J. A. Richardson, in Melvern tp., November 9, 1887, one bay mare, 4 years old, no marks or brands; valued at $40.

Coffey county—H. B. Cheney, clerk.

HORSE—Taken up by J. B. Lasure, in Lincoln tp., November 21, 1887, one sorrel horse, 2 years old, fore feet white, white face, and white under lip; valued at $35

MARE—Taken up by G. W. Hanna, in Key West tp., November 5, 1887, one bay mare, age unknown, white face from eyes down, defect in left ear, and bunch on back caused by saddle.

STEER—Taken up by E. A. Tyner, in Rock Creek tp., November 19, 1887, one pale red yearling steer, white under belly, and small white spot on back, under-bit in left ear, no marks visible; valued at $15.

Mitchell county—A. D. Moon, clerk.

COW—Taken up by William Rouse, (P. O. Cawker City), one brindle cow, 4 years old, hole in each ear, branded with a T on hip and notch in brisket.

COW—By same, one roan cow, 5 years old, white face, one horn broken, hole in each ear.

Johnson county—Henry V. Chase, clerk.

MULE—Taken up by John Wiederman, in Shawnee tp., November 14, 1887, one black mare mule, 16 hands high, 12 years old; valued at $25.

Shawnee county—D. N. Burdge, clerk.

HEIFER—Taken up by C. J. Stanley, in Dover tp., November 11, 1887, one red and white spotted heifer, 2 years old, no marks or brands perceptible; valued at $13.

STEER—Taken up by Byron Beard, in Dover tp., November 15, 1887, one red and white yearling steer, no marks or brands perceptible; valued at $12.

PONY—Taken up by John Pincham, in Auburn tp., November 17, 1887, one brown horse pony, 4 years old, right hind foot and right fore foot white, indistinct brand on left hip; valued at $20.

PONY—By same, one dark bay horse pony, 5 years old, star in forehead, indistinct brand on left hip; valued at $20.

COLT—Taken up by Silas Osborn, in Rossville tp., November 21, 1887, one bay colt or filly, 1 or 2 years old, no brands, small white spot in face; valued at $20.

HEIFER—Taken up by Guilford Dudley, in Topeka tp., November 23, 1887, one red heifer, 2 years old; valued at $12.

Pottawatomie county—I. W. Zimmerman, clk.

COW—Taken up by Michael Luby, in St. Marys tp., (P. O. St. Marys), November 6, 1887, one red cow, 4 years old, tips of horns broken off, blurred brand on right hip, a bit mark in right ear; valued at $12.

STEER—Taken up by Herman Meyer, in St. Marys tp., November 5, 1887, one red 2-year-old steer, large white spot on back, white on belly, half of tail white; valued at $18.

Marion county—E. S. Walton, clerk.

STEER—Taken up by A. M. Miller, in Center tp., (P. O. Marion), October 29, 1887, one red steer, bit in left ear, branded O; valued at $20.

STEER—By same, one white steer, bit in left ear, branded O; valued at $20.

Anderson county—A. D. McFadden, clerk.

STEER—Taken up by Geo. W. Dudley, in Lincoln tp., (P. O. Haskell), November 7, 1887, one spotted red and white 2-year-old steer, mark in left ear, white on bush of tail, no brands visible; valued at $12.50.

Barber county—Robt. J. Talioferro, clerk.

HORSE—Taken up by Geo. A. King, in Hazelton tp., November 15, 1887, one bay horse, 9 years old, 15 hands high, weight 1,100 pounds; valued at $40.

HORSE—By same, one brown horse, 9 years old, weight 1,000 pounds; valued at $50.

PONY—By same, one dun horse pony, 10 or 12 years old, brand on right hip similar to ⅃, weight 800 pounds; valued at $10.

Wilson county—D. N. Willits, clerk.

STEER—Taken up by R. R. Brinkley, in Colfax tp., November 12, 1887, one light roan steer with red ears, small horns curved in, no marks or brands; valued at $16.

FOR WEEK ENDING DEC. 8, 1887.

Lyon county—Roland Lakin, clerk.

MARE—Taken up by John Wilson, in Elmendaro tp., November 19, 1887, one dark bay mare, lame in shoulders, white spot in face, both hind feet white, no brands; valued at $25.

FILLY—By S. W. Miller, in Elmendaro tp., November 30, 1887, one bay filly, no marks or brands; valued at $35.

STEER—By C. C. Smith, in Elmendaro tp., November 31, 1887, one red steer with white head, ears red, belly and legs white, branded No. 5 on left hip; valued at $12.

COW—By Elwood Workman, in Pike tp., November 24, 1887, one strawberry-roan cow, red ears and nose, horns stand forward with points turned inward; valued at $10.50.

COW—By Chas. Evans, in Emporia tp., November 12, 1887, one red cow, two letters on right hip—burnt too much to make out; valued at $12.

Wabaunsee county—G. W. French, clerk.

COLT—Taken up by Townley Boyelston, in Newbury tp., November 12, 1887, one dark brown mare colt, 1 year old last spring, white stripe in forehead, no other marks or brands visible; valued at $30.

HEIFER—By A. D. Rowland, (P. O. Alma), November 26, 1887, one red and white heifer, 1 year old, branded on right hip but cannot make out the brand; valued at $12.

BULL—By John McCord, in Maple Hill tp., November 28, 1887, one 4-year old bull (color not given), some white in face, four white feet, bush of tail white, some white on belly and flanks, no marks or brands; valued at $15.

Pottawatomie county—I. W. Zimmerman, clk.

STEER—Taken up by B. Montague, in Emmet tp., November 10, 1887, one red and white yearling steer, slit in left ear; valued at $15.

Marion county—E. S. Walton, clerk.

HORSE—Taken up by Theodore Milz, Lost Springs tp., (P. O. Lost Springs), November 22, 1887, one bay horse, weight about 700 pounds, about 7 years old, white strip in forehead, branded J. A. on left hip, valued at $20.

Nemaha county—R. S. Robbins, clerk.

STEER—Taken up by Henry Koehler, in Gillman tp., (P. O. Oneida), November 11, 1887, one red and white 1-year-old steer, no marks nor brands; valued at $18.

Elk county—J. S. Johnson, clerk.

STEER—Taken up by Wm. McLuskey, in Liberty tp., November 14, 1887, one red steer, 3 years old.

Shawnee county—D. N. Burdge, clerk.

HEIFER—Taken up by James Armstrong, in Tecumseh tp., November 28, 1887, one red and white heifer, 3 years old, small slit in right ear; valued at $20.

Leavenworth county—J. W. Niehaus, clerk.

COW—Taken up by Collins McArdle, in Tonganoxie tp., November 12, 1887, one red-roan cow, about 4 years old, white in forehead and on belly and tip of tail; valued at $15.

Miami county—H. A. Floyd, clerk.

STEER—Taken up by John Fenton, in Sugar Creek tp., (P. O. Sugar), one yearling steer, with white hind feet, branded A on the right side; valued at $12.

Anderson county—A. D. McFadden, clerk.

COW—Taken up by Thos. A. Weatherman, in Ozark tp., (P. O. Colony), November 19, 1887, one red and white cow, 4 years old, no brands; valued at $16.

Brown county—G. I. Prewitt, clerk.

2 STEERS—Taken up by J. S. Tyler, in Walnut tp., one all red steer, 3 years old past, and one red steer with some white spots, 3 years old past, no marks or brands; valued at $60.

Riley county—O. C. Barner, clerk.

MARE—Taken up by Harrison McDonald, of Sherman tp., one bay mare, 7 or 8 years old, face and hind feet white, branded 333 and 77 on left hip and 3 on left jaw.

Jackson county—E. E. Birkett, clerk.

MARE—Taken up by F. C. Harwood, in Douglass tp., May 2, 1887, one bay mare, about 12 years old, small star in forehead, had rope around neck, hind feet white, small saddle and collar marks, branded B on left hip; valued at $15.

STEER—By Jas. A. Davis, in Franklin tp., November 4, 1887, one red-roan steer, 3 years old, white hind feet, dim brand on right hip; valued at $25.

HEIFER—By M. L. Varner, in Soldier tp., November 24, 1887, one red 2-year-old heifer, some white under belly, no other brands or marks visible; valued at $15.

Too Late to Classify.

B. M. PAYNE & CO.—Practical dealers in Boots and Shoes, in the very best grades, where full value for cash is the ruling principle. 705 Kansas avenue, Topeka.

STRAYED OR STOLEN—From 1114 Taylor street, Topeka, October 4, 1887, a brown mare colt, six months old, white spot on forehead. Halter on when she left. Last seen going north. A liberal reward will be given for its return or information of its whereabouts. Benj. Boyd, Topeka.

PURE GERMAN CARP FOR SALE.

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

Remember the FARMER is now $1 a year.

JOHN CARSON,

Pleasant View Farm,

Winchester, Jefferson Co., Kansas,

IMPORTER AND BREEDER OF

Clydesdale, Percheron-Norman & Cleveland Bay HORSES.

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

LATE

GEARY BROS. CO.,

BOTHWELL, CANADA.

POLLED ABERDEEN-ANGUS CATTLE,

English Shire Stallions and Mares.

THOROUGHBRED

Yorkshire Coach and Trotting Stallions.

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

G. & J. GEARY, Brookfield, Missouri.

THIS PAPER is on file in Philadelphia at the Newspaper Advertising Agency of Messrs. N. W. AYER & SON, our authorized agents.

WHEN YOU ARE IN NEED OF FURNITURE

SEE

W. L. THOMAS & CO.,

704-706 Kansas Avenue,

TOPEKA, - - KANSAS.

They carry the largest and best selection of every class of

FURNITURE

In the State.

PRICES THAT DEFY COMPETITION!

Goods packed and shipped to any part of the State.

For Sale, to Prevent In-Breeding.

Emma's Mohegan, A.J.C.C., Register No. 14668.

DROPPED MARCH, 1885.

Special Attention is Called to the Following Records:

NANCY LEE, { HIS GREAT GRAND DAM, tested 26 lbs. 2½ oz. Butter in seven days; 95 lbs. 3½ oz. Butter in thirty-one days, unsalted, when three months in calf.

LIZZIE C, { HIS GREAT DAM, tested 14 lbs. Butter in seven days.

EMMA RINGLING, { HIS DAM, tested 15 lbs. Butter in seven days.

For full information address GLENDALE FARM, P. O. Box 141, KIRKWOOD, MO.

PRICE $100.

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.

THE LITTLE WONDER

Fence Machine!

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

MORRISON PLOWS & CULTIVATORS
SURE TO BE LEADERS WHERE SOLD
WHY? Because they have patented improvements that every farmer WANTS.
SEND FOR PRICES & TERMS MORRISON, M'F'G. CO. FT. MADISON, IA.

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

COOK FEED FOR YOUR STOCK
With the TRIUMPH STEAM GENERATOR and save ¼ to ½ of your feed. Also ENGINES & BOILERS, GRINDING MILLS, FEED CUTTERS and CORN SHELLERS. Send for Catalogue A and state what you want.
RICE & WHITACRE M'F'G CO.
42 & 44 W. Monroe St., Chicago.

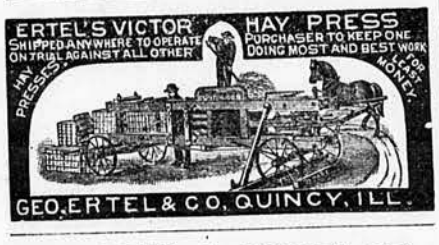
Mention this paper.

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. 9 sizes. Every mill GUARANTEED. Write for descriptive circular.
STRAUB MACHINERY CO., Cin., O.

A NEW INVENTION
NO BACKACHE.
RUNS EASY

7½ Cords of Beech have been sawed by one man in 9 hours. Hundreds have sawed 5 and 6 cords daily. *"Exactly"* what every Farmer and Wood Chopper wants. *First order* from your vicinity secures the *Agency.* Illustrated Catalogue *FREE.* Address FOLDING SAWING MACHINE CO., 303 S. Canal Street, Chicago, Ill.

ERTEL'S VICTOR HAY PRESS
SHIPPED ANYWHERE TO OPERATE ON TRIAL AGAINST ALL OTHER HAY PRESSES.
PURCHASER TO KEEP ONE DOING MOST AND BEST WORK FOR LESS MONEY.



GEO. ERTEL & CO. QUINCY, ILL.

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
WELL DRILLS
FOR
Water, Coal and Gas,
Hydraulic or Jetting.
Largest Stock in America.
Farmers with small outlay (*experience unnecessary*), Can make large profits. No risks. Can direct buyers to paying territory. Prospecting for Water, Coal or Gas done on application. Also M'f's of WIND MILLS, HORSE POWERS, FEED MILLS, FODDER AND ENSILAGE CUTTERS, PUMPS AND WELL SUPPLIES. Mention this Paper. Send 14c. to cover cost mailing Catalogue.
CHICAGO TUBULAR WELL WORKS.
68 W. Lake St., Chicago, Ill.

THE VANELESS MONITOR.
—IS—
UNEQUALED
—AS A—
FARM MILL.

Has the only successful Rotary Power in the World

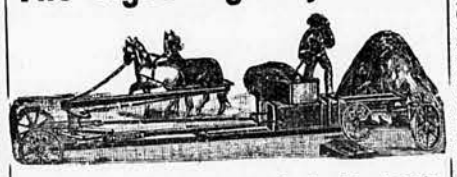
SEARLES BROTHERS
GENERAL AGENTS,
No. 621 Commercial St., ATCHISON, KAS.

Halladay Wind Mill.

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

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

The Lightning Hay Press.

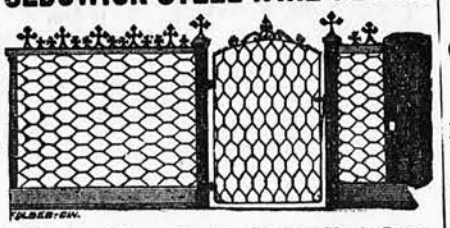


Superior to any other press made. Send for descriptive circular and price list.
K. C. HAY PRESS CO.,
Foot of Sixth street, KANSAS CITY, MO.
When writing advertiser mention KANSAS FARMER

DEDERICK'S HAY PRESSES.
are sent any where on trial to operate against all other presses, the customer keeping the one that suits best.

Order on trial, address for circular and location of Western and Southern Storehouses and Agents.
P. K. DEDERICK & CO., Albany, N. Y.

SEDGWICK STEEL WIRE FENCE.



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

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

WARM WATER FOR STOCK.

THE DECATUR TANK HEATER!

Put on coal once a week and the water in the stock tank is kept warm all winter. Saves more than its cost in feed in one winter. Saves more than its cost in time spent in chopping ice in the tanks. Stock Feeders and Dairymen who have used it say they would not be without it for $100. Will last several years. Price $20. Send in your orders early for it has been impossible to supply the demand during the last two winters. GOOD AGENTS WANTED.
FAIRBANKS, MORSE & CO., CHICAGO, ILL.

WORK FOR ALL. $50 A WEEK and expenses paid. Outfit worth $5 and particulars free. P. O. Vickery, Augusta, Me

---

DYKE'S BEARD ELIXIR
Forces Heavy Mountache, Massive Whiskers, and Hair on Bald Heads in 20 to 30 days. The only remedy. Extra strong. 2 or 3 pkgs. do it. We prove this or pay $100.00. Just think, we send $1 size Pkge. for 25c. or 4 pkgs. each $1 size, mailed for 45c. in stamps. Smith Mfg. Co. Palatine, Ills.

ORGANS & SEWING MACHINES.
$12.00 up. 30 styles. Sent on trial. New and perfect. Warranted 5 years. Buy direct and save half. Circular with 10,000 testimonials Free. GEO. PAYNE & CO., 125 S. Clinton Street, Chicago, Ill.

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. C. NEWTON, Batavia, Ill.

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

ESTABLISHED JAN. 1st, 1866.
PATENT WATER PROOFED
NO TAR
FAY'S MANILLA ROOFING.
CHEAP STRONG WATER PROOF, Applied by our new Patent method with ¼ the labor of any other way. Unlike any other roof. No rust or rattle. An Economical and DURABLE SUBSTITUTE for PLASTER on walls. Ornamental CARPETS and RUGS of same material, cheaper and better than Oil Cloths. Catalogue and Samples Free.
W. H. FAY & CO. CAMDEN, N. J.
ST. LOUIS. MINNEAPOLIS. OMAHA.

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 arthropodic 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.

ELY'S CREAM BALM IS SURE TO CURE Cold in Head QUICKLY. EASY TO USE

CATARRH

HAY-FEVER

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

I CURE FITS!

When I say cure I do not mean merely to stop them for a time and then have them return again. I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life-long study. I warrant my remedy to cure the worst cases. Because others have failed is no reason for not now receiving a cure. Send at once for a treatise and a Free Bottle of my infallible remedy. Give Express and Post Office.
H. G. ROOT, M. C., 183 Pearl St. New York.

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

Burlington Route

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, ST. LOUIS, KANSAS CITY, 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. AG'T, K. C., ST. J. & C. B. AND H. & ST. J., ST. JOSEPH.

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, Gen'l Pass. & Tk't. Agt.
W. H. NEWMAN, Gen'l Traffic Man., ST. LOUIS, MO.

ON 30 DAYS' TRIAL.
THIS NEW
ELASTIC TRUSS

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

TO ADVERTISE and meet with success requires a knowledge of the value of newspapers, and a correctly displayed advt. To secure such information as will enable you to advertise JUDICIOUSLY CONSULT LORD AND THOMAS NEWSPAPER ADVERTISING, CHICAGO, ILLINOIS.

TWO-CENT COLUMN.

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

☞ **Special.**—*All orders received for this column from subscribers, during* **1887,** *will be accepted at* **one-half** *the above rates—cash with the order. It will pay you! Try it!!*

FOR SALE—Or will trade for Scotch Terrier bitch or Wyandotte pullets, one white Bull Dog pup, age 6 months, weighs 55 pounds. He is from first-class stock, and only good stock wanted in exchange. E. A. Chase, Padonia, Kas.

ONE ACRE AND HOUSE—Topeka suburbs. $999 free. Offer exchange land. E. A. M. Smith, Gloversville, N. Y.

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

FOR SALE OR TRADE—Dairy Farm of 280 acres, one and one-half miles south of Sedan. Also one-half block, house of seven rooms and good stone barn in the city. Half down in cash or good stock. Balance on long time. D. C. Baldwin, Hewins, Kas.

FOR SALE OR TRADE—A first-class Well Machine, nearly new. B. F. Linderman, Tribune, Kas.

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

FOR TRADE—A Thoroughbred Percheron-Norman Stallion, 5 years old, weight 1,800 pounds. Will trade for wild land and pay the difference. Address P. O. Box 78, Harveyville, Kas.

50 PARCELS OF MAIL MATTER FREE.—Rogers Mailing Agency, Grand Island, Neb.

WANTED—To exchange Planet, Jr., Seed Drill and Hoe for German Millet Seed. H. T. Winslow, Cleveland, Kas.

FOR SALE OR TRADE—Three full-blood registered Holstein Bull Calves, out of imported dams and sires and good ones. Also our imported Norman Stallion Benefactor; 9 years old, dapple-gray, kind and gentle; a sure foal-getter and a No. 1 producer; weight 1,800 pounds. Terms to suit purchaser. For particulars address J. L. Taylor & Son, Box 39, Lawrence, Kas.

FOR SALE—Holstein-Friesian Cattle, Aaggie and Netherland families. Choice yearling bulls, ready for service. Write for what you want. Terms easy. Address Henson & Rathbone, Council Grove, Kas.

FOR SALE—Plymouth Rock Cockerels, $1.25 each; three for $3. Good ones. F. Bortzfield, Mapleton, Kas.

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

BLACK WALNUTS FOR SALE—Western hardy, for Western planting. W. J. Murphy, Wittrup., Hodgeman Co., Kas.

POLAND-CHINA PIGS—With gilt-edge pedigrees, shipped C. O. D. Dr. T. A. Stevens, Havana, Kas.

THIRTY GRAND BROWN LEGHORN COCKERels for sale. Combs 3 by 5 inches. Oakland Grove Poultry Yards. F. A. A'Neals, Topeka.

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

FOR SALE—Two-year-old Jersey Cow, No. 42415 A. J. C. C. She is a beauty. Price $75. Registered Holstein Bulls. Write for prices. E. Harpole, Ottawa, Kas.

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

RICHMOND CHERRY SPROUTS—Warranted true to name, for from 5 to 10 cents each, for sale by C. H. Lovejoy, Baldwin City, Kas.

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

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

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

WANTED—Clover Hulling, with a Victor Clover Huller. Address D. B. Rice, box 208, Topeka, Kas.

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

FOR SALE—Space in this column to subscribers of the FARMER at *one cent a word*, if ordered during 1887.

FOR SALE CHEAP—Thirty-five thousand three-year-old Apple Trees; three thousand Wild Goose Plum Trees, and thirty-five thousand Concord Grape Vines. Address Geo. Pavey, Fort Scott, Kas. [Mention Kansas Farmer.]

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

I HAVE LIGHT BRAHMAS AND WYANDOTTES from Foot, Langshans from Dakin, and Plymouth Rocks from Williams. Three hundred choice fowls that must be sold before January 1st, next. I expect to move and will close out my stock *very cheap*. Fifty extra good Plymouth Rock cockerels. Write for particulars. Chas. S. Pierce, Valparaiso, Indiana.

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.

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

TWO-CENT COLUMN--(Continued.)

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 S. S. Cartwright, Topeka, Kas.

Hedge Plants by the 1,000,000

KANSAS STATE NURSERY, North Topeka, Kas.

777,777 Strawberry Plants for sale. 100 varieties. Strawberries, Raspberries, Blackberries. Fine plants. Low prices for large orders. Price list free.
B. F. SMITH, P. O. Box 6, LAWRENCE, KANSAS.

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

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

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.

Douglas County Nursery!
Full line of Nursery Stock for the Fall trade. Apple, Pear, Peach, Plum, Cherry, Small Fruits, Grape Vines, Shrubbery, Roses, Shade Trees, Catalpa and Russian Mulberry Seedlings, 500,000 Hedge Plants, and everything usually kept in a Nursery. Send for catalogue.
WM. PLASKET & SON, Lawrence, Kas.

Red Cedars! Forest Tree Seedlings!
LARGEST STOCK! LOWEST PRICES!
Catalpa Speciosa Seedlings, Black Walnuts for Planting, Apple Scions, Natural Peach Pits. You will save money to get our *lowest prices*. Write for our Price Lists and give estimate of your wants.
BAILEY & HANFORD,
Makanda, Jackson Co., Ill.

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

THE LAMAR NURSERIES.
Headquarters for Fine Nursery Stock
Which is Offered at
HARD-TIME PRICES!
Dealers and Nurserymen supplied at lowest wholesale rates.
Parties desiring to buy in large or small quantities will save money by purchasing our stock.
We have Apple, Peach, Pear, Plum, Cherry and Evergreen Trees. Grape Vines in all varieties, and FOREST TREES a specialty. Osage Hedge Plants and Russian Mulberry in any quantity.
Write for Prices.
C. H. FINK & SON, LAMAR, MO.

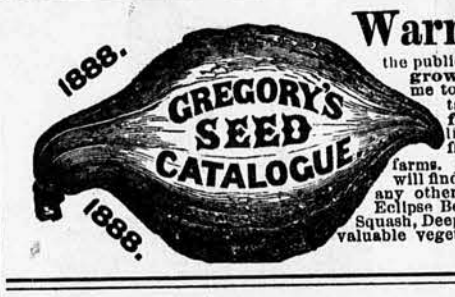
LA CYGNE NURSERY.
MILLIONS
—OF—
Fruit Trees, Shade Trees, Small Fruits. Vines, Ornamental Trees, Etc.
TEN MILLION FOREST TREE SEEDLINGS.
ONE MILLION HEDGE PLANTS.
ONE HUNDRED THOUSAND TWO-YEAR APPLE TREES—Grown from whole root grafts.
FIVE THOUSAND IRISH JUNIPERS—Two-feet, SPLENDID WALNUTS, and other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

850,000 GRAPE VINES
100 Varieties. Also Small Fruits. Quality unsurpassed. Warranted true. Very cheap. 3 sample vines mailed for 15c. Descriptive price list free. LEWIS ROESCH, Fredonia, N. Y.

BUY NORTHERN GROWN SEEDS.
WANTED:—The Names of 100,000 Farmers and Gardners 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.

NURSERY STOCK.
The Syracuse Nurseries offer for the fall of 1887, a large and unusually choice stock of **Standard Apples, Standard, Half Standard and Dwarf Pears, Peaches, Plums, Cherries and Quinces.** Also a full line of other **Nursery Stock** both **Fruit and Ornamental, Shrubs and Roses.** With an experience of nearly half a century, soil especially adapted to the growth of trees, and growing only for the trade we can offer special inducements to Nurserymen and Dealers, and solicit their correspondence or a personal examination of our stock before making contracts for fall.
SMITHS, POWELL & LAMB, Syracuse, N. Y.

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. EVERITT'S HIGH GRADE yields 10 bu. more per acre than Fultz. Red grain, beardless, ¼ bu. 75c., ½ bu. $1.25, 1 bu. $2.25, 5 bu. at $2. NEW MONARCH. Our crop yielded 42 bu. per acre. Very scarce. Red grains, beardless. $2.50 per peck. POOLE has yielded 61 bu. per acre. Red grains, beardless, ¼ bu. 75c., ½ bu. $1.25, 1 bu. $2.25, 5 bu. at $2. DEITZ LONGBERRY. The best longberry wheat in the country. Immense yielder. Red grains, beardless, ¼ bu. 75c., ½ bu. $1.25, 1 bu. $2.25, 5 bu at $2. HYBRID MEDITERRANEAN. Pleases everybody. Red grain, bearded, ¼ bu. 60c., ½ bu. $1, 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. $2.90, 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. SAMPLES to intending purchasers, 6 kinds, 15c. We are introducers of Everitt's High Grade and Martin Amber. Catalogue free.
J. A. EVERITT & CO., Seedsmen, 141 W. Wash. St., Indianapolis, Ind.
Mention this Paper.



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

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.

POMEROY COAL CO.
COAL x COAL
Wholesale and Retail.
612 KANSAS AVE.
Topeka, - - Kansas.

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

For Sale!
A NO. 1 STOCK AND GRAIN FARM, six miles from the beautiful city of Winfield. 796 Acres. Good Buildings of all kinds. Fenced and cross-fenced. At bottom figures to suit purchaser.
Address A. HOLLINGSWORTH, Winfield, Kansas.

KNABE
PIANOFORTES.
UNEQUALLED IN
Tone Touch Workmanship and Durability.
WILLIAM KNABE & CO.
BALTIMORE, 22 and 24 East Baltimore St.
NEW YORK, 112 Fifth Ave.
WASHINGTON, 817 Market Space.

BREEDER'S NEWSPAPER ADVERTISING OBTAINED THRO' OUR AGENCY (MANUL. FREE) LOWEST RATES ON ALL COMINGS BREARLEY ROCKFORD ILL.