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BREEDERS' DIRECTORY.

Cards of four lines or less will be inserted in the Breeders' Directory for \$15 per year or \$5.00 for six months; each additional line, \$2.50 per year. A copy of the paper will be sent to the advertiser during the continuance of the card.

HORSES.

PROSPECT STOCK FARM.—Registered, imported and high-grade Clydesdale stallions and mares for sale cheap. Terms to suit purchaser. Thoroughbred Short-horn cattle for sale. Two miles west of Topeka, Sixth street road. H. W. McAfee, Topeka, Kas.

CATTLE.

ENGLISH RED POLLED CATTLE AND COTS-wold Sheep.—Young stock for sale, pure-bloods and grades. Your orders solicited. Address L. K. Haseltine, Dorchester, Green Co., Mo.

NEOSHO VALLEY HERD OF SHORT-HORNS.—Imported Buccaneer at head. Registered bulls, heifers and cows at bed-rock prices. D. P. Norton, Council Grove, Kas.

H. W. CHENEY, North Topeka, Kas., breeder of **HOLSTEIN-FRIESIAN CATTLE.** Farm four miles north of town.

VALLEY GROVE HERD OF SHORT-HORNS.—For sale, choice young bulls and heifers at reasonable prices. Call on or address Thos. P. Babst, Dover, Kas.

HOLSTEIN-FRIESIANS
From this herd were furnished some of the winners at the World's Fair. Write for catalogue.
M. E. MOORE, CAMERON, MO.

SWINE.

V. B. HOWEY, Box 103, Topeka, Kas., breeder and shipper of thoroughbred Poland-China and English Berkshire swine and Silver-Laced Wyandotte chickens.

MAPLE GROVE HERD OF FANCY BRED POLAND-CHINA swine. Also Light Brahma fowls. Owned by Wm. Plummer & Co., Osage City, Kas. Stock of all ages for sale at reasonable rates.

TOPEKA HERD OF LARGE BERKSHIRES.—Breeders strong-framed, growthy and prolific; eight to fourteen pigs to a litter this year. Boars and sows of all ages ready to ship. H. B. COWLES, Topeka, Kas.

DIETRICH & GENTRY, OTTAWA, KAS.—Our Poland-China spring pigs are sired by W. Z. Swallow's Ideal Black U. S. 2355 O., Guy Wilkes 3d 1213 C., Pet's Osgood and the great Loyal Duke 29823 O. For choice pigs write us.

SWINE.

D. TROTT, Abilene, Kas.—Pedigreed Poland-Chinas and Duroc-Jerseys. Also M. B. Turkeys, Light Brahmas, Plymouth Rock, S. Wyandotte chickens and R. Pekin ducks. Eggs. Of the best. Cheap.

OHIO IMPROVED CHESTER SWINE—Pure-bred and registered. Stock of all ages and both sexes for sale by H. S. Day, Dwight, Morris Co., Kas.

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J. F. THOMAS, MAPLE CITY, KAS., breeder of Registered **POLAND-CHINA SWINE AND FINE POULTRY.** Stock for sale cheap. Mention FARMER in writing.

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HARRY T. FORBES—FINE S. C. BROWN LEG-horns. Eggs for sale, safely packed and sent by express to any part of the United States. Address 701 Polk St., Topeka, Kas.

A. B. DILLE & SONS, EDGERTON, KAS., breeders of choice B. F. Rocks, S. L. Wyandottes, Light Brahmas and M. B. Turkeys. Chicken eggs \$1 to \$2 per 15; turkey eggs \$3 per 11. Satisfaction guaranteed.

PURE-BRED LANGSHAN, BARRED PLYM-outh Rock and S. C. B. Leghorn eggs, one dollar per thirteen. Address Robert Crow, Missouri Pacific Railway Agent, Pomona, Kas.

EUREKA POULTRY YARDS.—L. E. Pixley, Emporia, Kas., breeder of Plymouth Rocks, S. Wyandottes, Buff Cochins, B. and White Leghorns, B. Langshans, M. B. Turkeys and Pekin ducks. Chickens at all times. Eggs in season.

KAW VALLEY HERD FANCY POLAND-CHI-NAS—Of the most noted families, bred for feeding qualities as well as fancy points. Bebout's Tecumseh at head of herd. M. F. Tatman, Proprietor, Rossville, Kansas.

WHITE GUINEA FOWLS—\$2 each; eggs, \$1 per dozen. *Plymouth Rock Cockerels*, \$2 each; eggs, \$1 per dozen. *White Holland Turkeys*, \$3 each; eggs, \$2 per dozen. **MARK S. SALISBURY,** Independence, Mo.

SWINE.

SELECT HERD OF BERKSHIRES
Have for sale pigs from State fair winners. Can fill classes for show. Boars for full service. A few choice sows bred. Address
G. W. BERRY, Berryton, Shawnee Co., Kas.

J. N. ELLIS, Cameron, Mo.,
Large Berkshires
Choice pigs of best families now ready to ship. Come or write. Satisf'n guarant'd.

JAMES QUOLLO, Kearney, Mo.,
Large Berkshires,
S. C. Brown Leghorns and Bronze Turkeys. On H. & St. Joe, 23 miles northeast of Kansas City.

T. A. HUBBARD, Rome, Kansas,
Breeder of
POLAND-CHINAS AND LARGE ENGLISH BERKSHIRES. Two hundred head. All ages. Fifty boars and forty-five sows ready for buyers.

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J. R. KILLOUGH & SONS, Richmond, Kansas,
Breeders of
POLAND-CHINA SWINE
The very best strains. Nothing but first-class stock will be shipped to any. Come and see us or write.

SWINE.

Thoroughbred Duroc-Jersey Hogs
Registered stock. Send for 44-page catalogue, prices and history, containing much other useful information to young breeders. Will be sent on receipt of stamp and address. **J. M. STONEBREAKER,** Paola, Ill.

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BREEDER OF
Chester Whites
Exclusively.
Young stock at all times. Satisfaction guaranteed.

CLOVER LAWN HERD POLAND-CHINAS.
Young sows and boars and spring pigs for sale. Prices reasonable. Stock first-class.
W. N. D. BIRD, Emporia, Kas.

P. A. PEARSON, Kinsley, Kansas,
Breeder of
Poland-China Swine
All ages for sale. Herd headed by Dandy Jim Jr. and Royalty Medium, a son of Free Trade.

W. E. GRESHAM, Burrton, Kansas,
Breeder of
POLAND-CHINAS.
Won six prizes, including first blue ribbon west of Mississippi at World's Fair. Stock all ages for sale.

E. E. AXLINE, OAK GROVE, MO.,
(Jackson Co.)
Poland - Chinas.
Breeder and shipper pure-bred registered stock. Dugan 10213 S. and Western Wilkes (Vol. 9) head the herd. Write or come.

HILLSDALE HERD
Short-horn cattle and Poland-China hogs bred by C. C. KEYS, VERDON, NEB. Aberdeen King 101458, a pure Cuckoo Shank, heads the herd. Stock for sale at all times. Visitors welcome. A fine lot of young male pigs for sale. Farm two miles north of Verdon, Nebraska.

R. S. COOK, Wichita, Kas.,
Breeder of
Poland - Chinas.
Won seven prizes at World's Fair—more than any single breeder west of Ohio.

RIVERSIDE HERD
Poland-China Swine.
For sale sows bred to farrow in September and October. Also young stock at reasonable figures at all times. Satisfaction guaranteed. Correspondence as well as inspection invited. **J. V. RANDOLPH,** Emporia, Kas.
Established 1868.

MAINS' HERD OF POLAND-CHINAS.
JAMES MAINS, Oskaloosa, - Kansas, Jefferson Co.
A grand lot of early pigs for sale, sired by Monroe's Model U. S. 29933 O. Tornado 30595 O., I. X. L. King and Royal Chief 30343 O., from highly-bred sows, many of them and the two first named boars purchased direct from Ohio's best breeders. I pay express on pigs to August 7. Sows bred to farrow in the fall for sale. Write me for No. 1 stock. Safe arrival of all guaranteed.

SHEEP.

DELAINE SHEEP
We keep strictly to the Delaine Sheep Wool on a mutton carcass, and we guarantee satisfaction in size and in quality of wool. 80 Rams and 100 Ewes for sale at a low price considering quality. Write at once to
ALEX. TURNBULL & SON, CEDARVILLE, OHIO.

SHEEP AND POULTRY FOR SALE.—Some choice Cotswold and Merino bucks, any age. Will sell to suit the times. The leading varieties of first-class poultry for sale at all times. Address H. H. Hague & Son, Walton, Kas.

CATTLE.

SUNNY SLOPE FARM,
C. S. CROSS, Proprietor, Emporia, Kas.

Breeder of pure-bred Herefords. Beau Real 11055 heads the herd. Young bulls and heifers for sale. Also for sale, Poland-China swine. Choice bred young boars and sows by the World's Fair prizewinner, Longfellow 29785; and Berkshire swine of the noted Duches and Lady Lee strains of N. H. Gentry. Bismarck and General Lee, both Gentry bred boars, in service.

SHORT-HORN CATTLE
Poland-China Swine,
Buff Cochins Fowls.
Inspection invited.
E. L. KNAPP, Maple Hill, Kansas

SHANNON HILL STOCK FARM.
G. W. GLICK, ATCHISON, KAS.
Breeds and has for sale Bates and Bates-topped **SHORT-HORNS.** Waterloo, Kirklevington, Filbert, Cragg, Princess, Gwynne, Lady Jane and other fashionable families. The grand Bates bulls Waterloo Duke of Shannon Hill No. 89879 and Winsome Duke 11th 116,137 at head of herd. Choice young bulls for sale now. Visitors welcome. Address **W. L. CHAFFEE, Manager.**

For Trade.

Two grown and two yearling Jacks, all desirable. Full-blood Holstein cattle, stallions and hogs. I want unincumbered Kansas lands or other stock.
L. FERRELL, Wichita, Kansas.

The Hereford Sale!

We will offer at public auction a very choice draft from our herd of Herefords during October, 1894. The date and place of sale, together with other particulars, will be announced later on. Parties wanting first-class cattle will do well to wait.
MAKIN BROS., Florence, Kansas.

Jack Stock at Auction!

We will sell
Sixty Jacks and Jennets
At Hopkinsville, Kentucky, October 18, 1894. Send for catalogue.
S. H. MYERS & SONS, Kelly, Kentucky.

Standard-Bred Trotting Stock for Sale

BIRD—Bay mare, foaled 1884; by Hero of Thorns-dale 549, dam by John Bright 596, granddam by Columba Chief 881.
GRACE BIRD—Bay filly, foaled 1891, by Egmont Chief (2:24) 10903, dam Bird above.
FLORA CROCKETT—Brown mare, foaled 1859; by Col. Crockett (2:29) 11940, dam by Darwin 687, granddam by Hartford Hambletonian, great-granddam by Fearnaught Hambletonian.
BLACK COLT—Foaled 1894; by Domineer (2:19) 8575, dam Flora Crockett above.
BLACK COLT—Foaled 1893; by Creeco 4908, dam Flora Crockett above.
MAMBRILLE—Chestnut filly, foaled 1891; by Boniface (2:23) 16635, dam by Abstract 2230, granddam by Bob Dildake 794.
Mares and fillies stunted to high-bred stallions and supposed to be with foal.
DAVID POTTER, Emporia, Kas.

MISCELLANEOUS.

J. M. HOSMER, Live Stock Auctioneer, Maryville, J. Mo. Fine stock a specialty. I respectfully solicit your business and guarantee satisfaction. Terms reasonable. Secure dates early.

F. M. WOODS, Live Stock Auctioneer, Lincoln, Neb. Refer to the best breeders in the West, for whom I do business. Prices reasonable and correspondence solicited.

ELI ZIMMERMAN, Hiawatha, Kansas, Live Stock and General Auctioneer. Pedigreed and registered live stock a specialty. Write for dates. Sales conducted anywhere in the country. Best of references and satisfaction guaranteed.

JAS. W. SPARKS, Live Stock Auctioneer, Marshall, Mo. Sales made in all States and Territories. Refer to the best breeders in the West, for whom I have made sales. Write or telegraph for dates before advertising. Terms reasonable.

S. A. SAWYER, FINE STOCK AUCTIONEER—S. Manhattan, Riley Co., Kas. Have thirteen different sets of stud books and herd books of cattle and hogs. Compile catalogues. Retained by the City Stock Yards, Denver, Colo., to make all their large combination sales of horses and cattle. Have sold for nearly every importer and noted breeder of cattle in America. Auction sales of fine horses a specialty. Large acquaintance in California, New Mexico, Texas and Wyoming Territory, where I have made numerous public sales.

The Stock Interest.

THOROUGHbred STOCK SALES.

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

OCTOBER 5—Eli Zimmerman, Poland-China swine, Hiawatha, Kas.
OCTOBER 10—George W. Null, Poland-Chinas, Chester Whites and Horses, Odessa, Mo.
OCTOBER 24—F. M. Lull, Poland-China swine, Marshall, Mo.
OCTOBER 24—J. B. Davis, Duroc-Jersey swine and cross-bred Short-horn and Red Polled cattle, Fairview, Kas.
OCTOBER 26—C. G. Sparks and G. L. Davis, Poland-Chinas, Marshall, Mo.
NOVEMBER 7—Martin Melsenheimer, Poland-China swine, Hiawatha, Kas.

Trott Tells Things.

EDITOR KANSAS FARMER:—I have received a great many letters from farmers lately, asking my idea in regard to future prospects, and prices for hogs. I have answered a large number, but I can answer a much larger number through your most valuable and popular paper.

There has been a short hog crop for some time. In looking over the present situation, I find that, on account of the very short corn crop, there are thousands of farmers who will scarcely raise enough for their own use. This is the case all through the hog-raising States, Kansas included. This will still reduce the supply very much more. Fat hogs will be scarce, and the price will most certainly be high for some time to come. I would advise all who can possibly do so to raise a few, in order to be in a position to get the benefit of the high price.

For this purpose, sow a field of wheat or rye for them to pasture on this fall, winter and spring. It will save one-half the grain or more and be healthier for them. In the spring sow some oats for them to run on while the wheat or rye is ripening. After the wheat is ripe turn the pigs on it again. Let them do their own harvesting. It will save the price of a header or binder, also price of threshing. They will waste no more than enough for seed, which will grow after the first good rain and furnish more green stuff for them. Let them harvest the oats also. You who have not tried this way of raising hogs will be surprised at the growth they will make. A very little grain after this will get them to the market in the best of shape.

We have had seven years of very uncertain corn crops. Now, according to the prophets, we may expect seven years of sure crops of corn. In the face of this, farmers, raise a few fat hogs. It will supply meat and shoes for the little folks, and help swell the pocket-book. D. TROTT.

Abilene, Kas.

Death From Second-Growth Sorghum.

EDITOR KANSAS FARMER:—In the last issue of the FARMER I see an article from our Secretary of Agriculture, on the above subject. While there is no doubt in my mind but that the real facts in the case are given, yet I think the article without further discussion is liable to lead the people to fear the growing of one of the most important articles of feed and pasture we have. So I wish to say a few words on the subject, hoping to encourage a thorough discussion of this important matter.

There is no doubt but that the cattle died from the eating of the second growth of cane, instead of the "shatterings," just as friend Coburn has said, and, also, I think Dr. Pritchard is correct, that second-growth sorghum and also second-growth Kaffir corn will do the same thing under certain conditions, and if the Doctor could tell us what these "certain conditions" are it would be a good thing for the people to know.

I have grown sorghum for feed and pasture considerably, always pasturing the second growth until killed by heavy frost, and never had any bad results, not even sick cattle; but I never let the growth get rank before turning in. Had Mr. Diefenbach got his shocks out within ten days or two weeks after cutting, and turned the cattle in to eat the "shattering" and left them run on it until frost, he would have experienced no trouble with his cattle.

I would like to know if the land on which this cane grew had not been

heavily manured, or if the cane was not an exceptionally heavy and rank growth.

Sorghum makes a good strong pasture if turned on first growth when about a foot high. When eaten down the second growth follows until hard frost. Let us hear from the brethren, generally. R. T. STOKES.

Garnett, Kas.

Northwest Missouri.

EDITOR KANSAS FARMER:—As the mists begin to roll away and our people realize that starvation is not staring them in the face, they begin looking about them to better their condition in different ways. Our farmers have at last realized that this part of Missouri is blessed with fully a half crop of corn and other crops save hay were good, and they have overcome the effects of a short hay crop by cutting an unusual amount of fodder; so that we are fixed, so far as roughness is concerned, and I can see no good reason why stock of all kinds should not command fair prices in this section of country. A few local sales of common and grade stuff have demonstrated the fact that the people will buy if they can find what they want, and I look forward to the coming sales of blooded hogs and cattle with bright expectations, believing that with the advanced price of corn that farmers and breeders will want the class of stock in all lines that will convert the least number of bushels of grain into the greatest possible number of pounds of marketable meat. And no sane man will deny that our improved animals, brought to a state almost bordering on perfection by careful, thoughtful and intelligent breeding, will most successfully accomplish this end. Then, of all times, while feed is scarce and high, should men strive to get only the best. And if this opinion does not prevail among the bidders at the sales this fall I shall think that they have surely started on a wrong basis.

Among the sales that I am to conduct this fall are: T. Outhier & Son, Maryville, Mo., grade Galloway cattle, horses, mules and jacks, October 2; estate of L. E. Shattuck, Stanberry, Mo., October 9, thirty head of Short-horns of rare merit and 240 head of prize-winning Merinos; L. M. Kennedy, Wildwood herd of Poland-Chinas, Nevada, Mo., October 18; Carver, Hocker & Craig, Poland-Chinas, at Guilford, Mo., October 24; J. F. Waters, Hereford cattle, Savannah, Mo., October 31; Fred Porcher, Poland-Chinas, Maryville, Mo., November 13; J. V. Pfonder, Walnut Grove herd Poland-Chinas, Clarinda, Iowa, November 14 (this date having been changed from November 7).

I wish to say that among the offerings in these sales will be found some of the best blood and most perfect individuals known to the different breeds. Catalogues can be obtained from either of these gentlemen by request, or any information that I can give regarding stock, etc., I am ready to communicate. Maryville, Mo. J. M. HOSMER.

A Horn-Fly Trap.

The Canadians with characteristic ingenuity have invented a trap for capturing the pestiferous horn-fly. The device consists in a deep frame with a close-fitting curtain on one side and a set of brooms on the other, so arranged that an animal in passing through is given a thorough sweeping, whereby it is effectually ridden of all flies, themselves entrapped by means of the curtain and brooms. The frame is made to set in an ordinary doorway and the animals are said to manifest apparent satisfaction in passing through it and leaving the flies behind to be taken out and burned or otherwise disposed of.

Fifty-seven head of 1,487-pound steers, fed by J. S. Wright, of Ashland, Ill., were sold in the Chicago market on Wednesday of last week at \$6.25 per 100 pounds.

Five World Beaters.

"SICKLES" BRAND HARNESS. All genuine stamped with this "Trade Mark." Made in five styles at \$6.50, \$9.00, \$10.00, \$15.00 and \$25.00 per set complete. The best harness for the money on the market. Ask your harness dealer for them. Manufactured only by J. B. Sickles Saddlery Co., St. Louis, Mo.

Wheat as a Hog Feed.

A valuable addition to the current fund of knowledge as to how to feed wheat to swine, is made by S. W. Myers, of Sugar Grove, Ill., a breeder of trotters, Jerseys and Poland-Chinas. He says:

"I think the mistake most likely to be made in feeding wheat will be in feeding it soaked unground. I have experimented a good deal with feeding soaked wheat, and my conclusion is that it will not work. A short time ago I soaked some wheat just a week and fed it, and, although it was so soft I could mash it up in my hands, it passed through some of the hogs in as perfectly whole condition as when taken from the barrel, and in large quantities.

"Last winter I fed my brood sows and fall pigs ground wheat steamed and soaked about ten hours. This constituted about one-half of their feed, the balance being dry corn. They did remarkably well every way, except that the most of them shed spots of their hair. This, I think, was due to the richness of the wheat. The brood sows did nicely at farrowing time and I could see no ill effects from feeding the wheat.

"Since my experience last winter I have added to the wheat about one-third of either ground oats, bran or shorts; and I consider it the ideal feed for slop if soaked about twelve hours. I am not ready, however, to abandon corn as a hog feed and I shall feed some of it even if it gets to be worth \$1 per bushel. I doubt the wisdom of feeding a hog all slop, and if I could not get corn I would feed some dry ground wheat, so as to keep up the flow of saliva."

Commenting on this the *Live Stock Indicator* says:

"Mr. Myers is quite right, unless all reported experience be wrong, in supposing that the mistake most likely to be made in feeding wheat will be of feeding it unground upon the theory that soaking is a sufficient substitute for grinding. The experiments he has made are in line with those heretofore reported quite numerous by the agricultural press. Unground wheat invariably shows a large percentage of undigested grain in the droppings, no matter whether it be soaked or not, although the trials reported by Mr. Myers are the first we have noticed in which the soaking continued for a week. The fact that, notwithstanding such protracted soaking, the grains still passed through the animals undigested ought to be quite conclusive that grinding or crushing is essential."

It may be further remarked that there are now on the market feed-grinders of such efficiency, and attachable to the ordinary farm windmill, and others easily driven by horsepower, and all sold at so reasonable prices that there seems really to be no occasion why any farmer should fail to provide the conditions which all experience proves to be the best in feeding wheat as well as other grains.

Berkshire Advertising.

A veritable boom in Berkshire swine is imminent, and that, too, on their merits as a first-class breed of swine and because the American Berkshire Association is enterprising and aggressive in bringing public attention to the merits of the breed, also in stimulating breeders to exhibit their stock at the fairs this year. This association alone gives in special prizes \$2,600 in cash, while the different fairs of the country this season hang up enough prizes to make a total of \$17,286.65—a nice purse for exhibitors of Berkshires. Kansas ranks sixth in the distribution of the above amount, and her breeders who exhibit at fairs this year will receive in prizes the neat sum of \$999.50.

The American Berkshire Association, in a recent circular sent out to Berkshire breeders, offers the following timely and practical advice:

"There is no more profitable investment in the line of live stock advertising than the money paid the live stock and agricultural papers for advertising your Berkshires.

"The demand for Berkshires exceeds the supply with breeders who are liberal patrons of the advertising columns

Scrofula

is Disease Germs living in the Blood and feeding upon its Life. Overcome these germs with

Scott's Emulsion

the Cream of Cod-liver Oil, and make your blood healthy, skin pure and system strong. Physicians, the world over, endorse it.

Don't be deceived by Substitutes!

Prepared by Scott & Bowne, N. Y. All Druggists.

of the live stock and agricultural papers.

"A careful examination of over twenty-five of the leading live stock and agricultural papers reveals the fact that the Berkshire breeders of Indiana are the largest advertisers, followed in order of prominence by the breeders of Illinois, Missouri, Ohio, Nebraska, Iowa, Ontario, Kentucky, Tennessee, Pennsylvania, Texas, California, Michigan, Wisconsin, New York, Delaware, Georgia and Manitoba.

"The best available statistics warrant the statement that less than 90 per cent. of the breeders of Berkshires make an earnest effort to advertise their surplus stock in the papers. The breeders who sell their surplus stock of Berkshires quickly and at a good profit are not found in the class who neglect their best interests through failure to expend to good advantage in advertising an amount in proportion to the value of their annual sales.

"The increased price realized on each pig sold as a result of judicious advertising more than pays for expenditures on said sales and leaves a good balance in the pocket of the advertiser.

"The breeder who advertises has the entire country for a market and is not embarrassed in the quick and profitable sale of his pigs by a failure east, west, north or south of the crops resulting from drought or other cause."

Retain Draft Mares.

There is a scarcity in the number of draft mares in the United States that is becoming more apparent each day. Breeders of grade draft horses have made a very serious mistake in selling their draft mares to shippers and thus reducing the number much below the producing capacity necessary to supply the current demand for heavy horses for the business of the country.

Our readers can easily demonstrate the fact stated above by an endeavor to purchase a car load of good draft mares for breeding purposes.

The feeders of Ohio and other eastern States for some years past have found it profitable to purchase young grade draft mares and geldings in McLean county, Illinois, and other heavy horse-breeding districts for development. Said feeders now have their agents at the Union Stock Yards, Chicago, and other horse markets of the country, picking up the few desirable draft mares that are offered for sale. But the supply is so limited that the dealers are forced to admit that there is an alarming deficiency that will require a number of years breeding to supply. The number of heavy mares for breeding purposes on the farms of the United States is less than it has been for the past ten years, while the demand for good draft horses in our cities is much larger than it has ever been.

The general depression in the light horse market has unduly alarmed the breeders of heavy horses, and induced them to contribute to the panic in light horses by selling the most profitable kind of breeding stock on the farm—the draft mare.

The market reports will confirm the above statements, and our breeders that

have made the financial blunder of sending to market good draft mares will be painfully aware of the fact by the great advance in the near future in the price of heavy horses for use on the streets of our cities. Comparatively few draft stallions have been purchased for breeding purposes of late years, and the number of draft colts raised of late has not been sufficient to supply the number that have passed from the days of usefulness. Our readers are requested to give this matter due consideration and to pass along the word of warning concerning the present scarcity of heavy mares for breeding purposes and prepare for the sharp and rapid advance that will soon follow in the price of good draft horses needed at an early date in all the centers of business in the United States.—*Western Agriculturist*.

The American Coach Horse.

"Grade coach horses are far too scarce," says the *Western Agriculturist*, "to form a market type; there is an unlimited demand but no supply. At the State fairs we see some fine grade coachers sired by French or German coach horses or by Cleveland Bay or Hackneys that elicit the keenest admiration.

"These breeds have taken a hundred years to develop by scientific breeding. Some of our American breeders are so prejudiced to all foreign breeds that they propose to develop an American coach horse by selecting the largest trotting-bred mares and stallions that have been bred for speed but have no established type.

"Life is too short to attempt to evolve a type out of grade sires and dams for the trotter is not yet an established breed that will reproduce itself like a pure breed; better take the established types of coach horses that European governments have been breeding for a hundred years for their armies and with the first cross on these trotting mares we get the coach type and many years of time saved.

"Skill of breeding and the selection of type of a strong coach-bred stallion will do much to develop the American coach horse; it will take, however, a high order of skill and training to breed and mature the coach horse and to those who admire and appreciate fine horses of that type the market demands offer a profitable field for breeding."

Chicago Horse Market.

For the week ending September 24, 1894, our correspondent reports the market as being very satisfactory to sellers. Receipts have been fair, with an unusually large number of buyers here, and market closes firm. Chancy drivers (coachers and fast road horses) bring the most money, but Boston chunks and breedy 900 to 1,100-pound horses are in the greatest demand. Heavy drafters are selling to better advantage than they were a few weeks ago. As is always the case, inferior and blemished stock sells at a discount.

We sold 137 horses for \$3,630 in last Saturday's auction, and 204 horses (including one load very common stock) for \$12,645 in to-day's (Tuesday) auction. We sold at private sale during the week thirty-nine horses for \$2,747.50. We quote:

Expressors and heavy drafters.....	\$ 90@175
1,100 to 1,300-pound chunks.....	75@125
Streeters.....	65@ 85
Southern chunks.....	40@ 65
Coachers and speedy road horses.....	125@250
Ordinary drivers, \$85 and upwards.	

These prices are for sound horses, 5 to 8 years old, well broken and in good flesh.

There is no question but horses will sell better during the next few weeks than later in the season.

Homes for the Homeless.

The opening of two Indian reservations in northeastern Utah to settlers opens up over three and one-half million acres of fine agricultural and stock-raising land for home-seekers.

The Uintah and Uncompahgre reservations are reached by the only direct route, the Union Pacific system, via Echo and Park City. E. L. LOMAX, G. P. & T. A., U. P. system, Omaha, Neb.

Climate and Crops Just Right.

Oklahoma has thousands of acres of the finest farming land in the world, waiting for you or anybody else with a little cash and lots of gumption. Climate crops are just right. Farms will cost more next year than this. To find out if this is the country you want, ask G. T. Nicholson, G. P. A., Santa Fe route, Topeka, Kas., for free copy of Oklahoma folder.

Agricultural Matters.

Sensible Recommendations.

In his annual report, Mr. M. E. Fagan, chief of the seed division of the United States Department of Agriculture, makes the following surprising and sensible recommendations:

"Many suggestions, valuable and otherwise, have been made in the annual reports of this division relative to the methods which should be pursued in order to obtain the best results from the distribution of seed; but every one of my recent predecessors has ignored or overlooked the fact that for many years no useful purpose has been served by the continued enlargement of the quantity of seed purchased annually, and its indiscriminate distribution to those who, by accident or design, become the recipients of this gratuity.

"The purchase, propagation and distribution of seed were begun at a time when but a few of the now thickly populated States held within their limits a propagating garden or seed farm. The conditions, however, have changed, and in nearly every State of the Union may be found large establishments built up by private industry and private capital, engaged in the business of raising new and valuable seed, and in the propagation of rare plants, trees and flowers.

"In this industry, which is no longer an 'infant industry,' many thousands of acres of land are annually cultivated, giving employment to thousands of skilled and unskilled laborers. The proprietors and managers, in order to advance their interests, are ever on the alert for new and valuable seeds, giving to their propagation as much care and attention as a loving mother gives to her offspring, and if their efforts bear fruit and something new is produced, the discovery is made public through the medium of trade journals and catalogues, and the public may receive the benefits by purchasing the product at the usual market price instead of waiting two or more years for this division to drop a package of the new discovery in their postoffice boxes.

"In view of these facts does it not appear that the Seed Division has outlived its usefulness, and that its further continuance is an infringement of the rights of citizens engaged in legitimate trade pursuits, in which they have invested their capital, and upon which the maintenance of their families and their employes depends?

"Instead of recommending an increase in the capacity of the building now occupied by this division, as is customary in the annual report, it would seem to me more proper to urge the retirement of the department from the seed business, and that the building now occupied for that purpose be devoted to some useful pursuit, more in keeping with the spirit of our institutions."

Why Brooms Are High.

The *Kansas City (Kas.) Gazette* says: "There has been a very sudden rise in the price of brooms. Housekeepers, upon finding that the cost of that useful article has materially advanced, will wonder at the cause therefor.

"Some will connect it in some way with the operation of the new tariff bill, and the Democrats come in for a good share of abuse. While they have many sins to answer for, both of omission and commission, justice demands that they be exonerated from all blame in this connection. Neither can the sudden rise in the great household necessity be attributed to the Populists, but to a corner which has been run on broomcorn.

"The crop of broomcorn has been very short this year, and this fact has been taken advantage of by speculators who have bought the entire crop.

"Mr. E. H. Thompson, who operates an extensive broom factory at 1412 Liberty street, Kansas City, Mo., is credited with being the main operator in the quiet but extensive buying of broomcorn which has been going on during the past few weeks. Mr. Thompson is related to the Armours by marriage and this gives rise to the further rumor that one or more of the great packing house magnates are

backing the scheme to sweep the field.

"At Mr. Thompson's factory a large number are employed and thousands of brooms are stacked up. There is no hurry as yet to crowd them on the market. It seems that they rather prefer that the present low stocks in the hands of retailers shall become lower and thus prices will be forced up.

"A few years ago the same gentleman is credited with having made \$12,000 by running a corner on broomcorn, and rumor has it now that he stands a chance of making upward of \$30,000 by the present squeeze.

"Recently some parties visited Rice county, in this State, and began buying all they could lay hands on. They had lots of money and for about a week kept the farmers busy bringing in loads of broomcorn to Sterling. At first they paid \$60 a ton for it, but soon raised the price to \$100. There is every reason to believe that these parties represented Thompson, the broom manufacturer, and his relatives, the Kansas City millionaire packers."

Harvesting Sorghum.

EDITOR KANSAS FARMER:—To A. J. Houghton, of Elmdale, Kas., I would say, why strip your cane at all? Haul your cane for molasses without stripping. It is better for stock feed with leaves on, and most syrup crushers don't object. I have lived in Nebraska and Kansas now twenty-three years and had cane almost every season and hauled as high as thirty loads in a year. Haul a load of cane and haul home every other load of pomace. It is better for cows and horses than all the prairie grass you can haul at two loads, every day in the week. I used it for five years in Nebraska. Ask L. L. Johnson, of Inland, Clay county, which he likes for winter feed, hay or pomace. He has made as high as 30,000 to 50,000 gallons of sorghum in one fall there. Tell him who told you, if you write him. He was one of our neighbors for ten or twelve years.

As to cutting and saving seed, we generally cut a wagon load, with top box on, putting it on back end, seed out over end of box. Then I took an old scythe or hay-knife, first putting a box under to catch the seed heads. When dry take seed heads to a threshing machine in operation and get it threshed and winded clean. My neighbors often saved hundreds of bushels each season. I hope this will help some farmer out.

C. A. HENDRICKSON, SR.
Calvert, Kas.

Restoring Fertility.

Wm. H. Glasscock, of Brunswick, Mo., writes to the *Journal of Agriculture* an interesting experience. He says:

"Having rented out thirty acres of my land for several years, it having been planted in corn each year, was almost unfit for anything, I concluded to try to restore its productiveness. I sowed it in wheat, then in the spring in clover. When I cut my wheat I found a very poor stand of clover. On July 20 I began to plow again for wheat, using rolling coulters and chains, so as to hide everything in the way of the drill. I began to sow my wheat September 10. When I cut this crop of wheat I had about a half stand of clover. In September following I sowed in wheat again, having begun my plowing on July 25. The plowing under the clover seemed to make the ground fresh and new. After cutting this third crop of wheat I had a perfect stand of clover.

"The first crop of wheat yielded about eight bushels per acre; the second crop yielded twenty-two bushels, and the third crop twenty-eight bushels per acre.

"This, the fourth year, I have planted the thirty acres in corn, having plowed the land in the fall, and notwithstanding the severe drought, I have a splendid prospect for first-class corn.

"I do heartily recommend plowing under clover as a fertilizer."

The *Kansas Weekly Capital* publishes more Kansas news than any other weekly paper. A free sample copy will be sent on application to THE TOPEKA CAPITAL CO., Topeka, Kas.



A FRIEND

Speaks through the Boothbay (Me.) *Register*, of the beneficial results he has received from a regular use of Ayer's Pills. He says: "I was feeling sick and tired and my stomach seemed all out of order. I tried a number of remedies, but none seemed to give me relief until I was induced to try the old reliable Ayer's Pills. I have taken only one box, but I feel like a new man. I think they are the most pleasant and easy to take of anything I ever used, being so finely sugar-coated that even a child will take them. I urge upon all who are in need of a laxative to try Ayer's Pills. They will do good."

For all diseases of the Stomach, Liver, and Bowels, take

AYER'S PILLS

Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.
Every Dose Effective

Corn in Seventy-Two Days.

EDITOR KANSAS FARMER:—Mr. R. Goodman, who lives five miles southwest of Wichita, says he has an early kind of good-sized corn that matured all right before the dry weather this year, and that it will make forty bushels or more to the acre. He says he has gathered roasting-ears from it in seventy-two days.

Kansas farmers should hunt up early varieties of corn, plant early and cultivate well, and they will be sure of a good crop of corn nine times out of ten.

H. FELLOWS.

Wichita, Kas.

An Edmunds county, South Dakota, farmer, M. A. Slocum, reports to the *Dakota Farmer* that the Russian thistle worm has made its appearance at one place in that county. Mr. Slocum says that there are literally millions of these worms in the small area where they have appeared. They are green in color, slightly less than an inch in length, and travel with considerable speed for such small objects. They appear to attack nothing but the Russian thistle, but their effects on these are similar to the effects of the chinch bugs on small grain. The plants turn white and are left with the life entirely sapped out of them as the result of the work of the worms. The *Dakota Farmer* has asked the entomologist at the State Agricultural college to make an investigation of this matter and report results.

If Grown in Texas, It's Good.

The Texas coast country vies with California in raising pears, grapes and strawberries. The 1893 record of H. M. Stringfellow, Hitchcock, Tex., who raised nearly \$6,000 worth of pears from thirteen acres, can be duplicated by you. G. T. Nicholson, G. P. A., Santa Fe route, Topeka, Kas., will be glad to furnish without charge an illustrated pamphlet telling about Texas.

Six Thousand Square Miles of Wealth.

The vast fertile valleys of the two Indian reservations in northeastern Utah, soon to be open to settlers comprise about 3,500,000 acres of the finest agricultural and grazing lands. The direct line to Uintah and Uncompahgre reservations is by the Union Pacific system via Echo and Park City. E. L. LOMAX, G. P. & T. A., U. P. system, Omaha, Neb.

"Among the Ozarks,"

the Land of Big Red Apples, is an attractive and interesting book, handsomely illustrated with views of south Missouri scenery including the famous Olden fruit farm of 3,000 acres in Howell county. It pertains to fruit-raising in that great fruit belt of America, the southern slope of the Ozarks and will prove of great value, not only to fruit-growers, but to every farmer and home-seeker looking for a farm and a home. Mailed free. Address,
J. E. Lockwood, Kansas City, Mo.

Irrigation.

Dates of Irrigation Conventions.

NOVEMBER 9-10.—Inter-State Irrigation Association, at Kansas City.
NOVEMBER 23-24.—Kansas State Irrigation Association, at Hutchinson.

AN ABUNDANT WATER SUPPLY.

The Barton County Irrigation Association had a largely attended meeting last Saturday, one point of attraction being the contest between a Weber gasoline engine attached to a "Wonder" pump and a tubular well sunk into the coarse water-bearing sands of the Arkansas valley. There was a delay on account of the lateness of the arrival of the pump and some inconvenience on account of the cold north winds which swept over the prairies in all their pristine freedom. Nevertheless, the pump was duly attached to the six-inch suction pipe of the drive well and rolled out a stream of water stated to be three hundred gallons per minute. This was kept up four and a half hours, with no more apparent effect on the supply than if the suction pipe had been submerged in Lake Michigan instead of the water-filled sands of the Arkansas valley.

The Weber gasoline engine is exceedingly simple in construction and requires almost no skill to operate it. Unfortunately for this occasion, the furious wind made it necessary to cover it with a small tent to prevent the extinguishment of the igniter flame, so that of the hundreds present only those who could crowd into the small inclosure had the opportunity to witness its automatic operation. It runs almost without attention, the gasoline flowing to it from a can. It is guaranteed to consume but one gallon of gasoline in ten hours per indicated horse-power developed. The manufacturers estimate that three-fourths of this power is delivered to the belt.

The "Wonder" pump is a newly-patented rotary pump. It is very simple in construction and operation. After a little sand had been thrown from the well the pump ran without interruption, raising, as stated above, some three hundred gallons per minute. It has no valves, and an observer remarked that with the perfectly clear water which it had after the first few minutes "it would last a thousand years."

It was the original intention to have the speaking on the ground, and the people came with their lunch baskets, intending to stay all day. But the blustering wind made it uncomfortable and rendered it impossible for a speaker to be heard. An adjournment was therefore taken to the court house. Great Bend came forward with her whole-souled hospitality and her citizens entertained for dinner at their homes all strangers from a distance.

The eminent speakers present were limited as to time, so that each had to say in a few minutes what might have been more clearly set forth in an hour. Judge J. S. Emery, of Lawrence, Lecturer of the National Irrigation Association, was the first speaker. He defined "arid America" as that portion of the country lying west of the 97th meridian, which runs near the towns of Washington, Abilene, Marion and Winfield; and arid America, he said, must have irrigation to make crop production certain. He said: "Irrigation is something that concerns the whole country. It concerns Kansas more than Illinois, Iowa or Missouri, but it concerns all these and every State. Already interest is developing in the question in parts of the country. At the National Irrigation Congress in Denver the first of the month we had delegates present from Rhode Island and from Florida. This shows that the interest in irrigation is not confined to the West. There will be a time, and it is not far distant, when the whole United States will be considering this question."

"We have already come to the time when we talk the truth about western Kansas. Western Kansas is a part of arid America and you are in it. You cannot here depend upon nature to furnish you with crop moisture. Sometimes she supplies it with a lavish hand, but oftener she is distressingly

sparing and you raise little or nothing. You must begin to irrigate. Begin in an humble way, but irrigate. Let others agitate. The best speech made at the recent Ellsworth convention was by an old German farmer. He said: 'Last year I do irrigate one square rod of ground. I plant it in cucumbers. It do so vell that this year I do irrigate one acre. Next year I do irrigate some more.' Then he sat down.

"It is idle to think of irrigating 160 acres of wheat. Irrigating wheat doesn't pay. Irrigate instead some crop that will give heavy returns per acre. Do not be discouraged because all of western Kansas cannot be irrigated. Do you know that Californians, the most envied of irrigators, apply water to but 2 per cent. of their ground? Yet they are growing rich. Engineers tell us that in western Kansas we can irrigate 10 per cent. of our lands. I don't know how much we can irrigate. No one knows; but we can certainly irrigate many times as much as we do now. If we can irrigate 2, 3 or 5 per cent. of our lands, we can become a rich country, and arid America will be able to support a population of 70,000,000 or 75,000,000 instead of the 3,000,000 or 4,000,000 who exist there now."

Prof. H. R. Hilton, of Topeka, talked briefly on the subject of retaining soil moisture, giving practical demonstrations of the action of water in various kinds of soils by means of large glass tubes. He showed that fine earth draws moisture from the subsoil much more readily than coarse earth; that moist soil takes up water much more rapidly than dry soil and that the water from the most rapidly falling showers may be conserved in ground that is prepared for its reception by deep plowing. The speaker gave some advice to wheat-growers, which may be condensed as follows: Burn off your stubble as well as you can. Disc the land first for the purpose of working the surface to a fine tilth. Plow so as to turn the fine surface soil underneath, then float and harrow. Endeavor to keep the land mulched with dry soil. When rains have formed a crust, break it up at once with a harrow if possible.

This last, Prof. Hilton said, is an important point in the cultivation of any crop. Most farmers stop cultivating just when corn needs it most. Rains come and crust the soil after corn is "laid by." The crust needs to be broken up. "Don't quit cultivating as soon as it becomes impossible to use two horses, but keep at work with a one-horse five-tooth cultivator, or better with a knife cultivator."

John H. Churchill, the "alfalfa king" of southwest Kansas, told briefly of the success that he has had with irrigation in Ford county and also the wonderful profit which he has realized from his alfalfa fields. Mr. Churchill uses a home-made "Jumbo" windmill, which pumps water for irrigating a fine garden and keeps a well stocked fish pond full. He is positive that irrigation pays and that it is inexcusable for an Arkansas valley farmer not to adopt it at once.

Secretary Coburn, of the State Board of Agriculture, made a brief talk which was full of the gospel of encouragement for the courageous men, good women and bright youth of the best of all States—Kansas, and of hope for the future through irrigation. Mr. Coburn said in part:

"It is indeed gratifying to see how keen an interest is being taken in the question of irrigation in western and central Kansas. Your attendance at this meeting proves that you share that interest. The fact that you are here demonstrates that you have come to know what ails you. You want water and I am glad to see that you are starting out to get it. I am of those who believe that the United States government, having taken your good money for these lands which were supposed at the time of their purchase to be agricultural, should help you to discover, locate and estimate the water. And I believe, too, that the State should early do something in the way of assistance. We have, however, all been waiting too long for the government to do this thing for us. We have been praying to a god that is too

Irrigated Farms---\$1,000!

Out of a thousand farms in **SOUTHWEST KANSAS**, of 160 acres each, we are selling a limited number equipped with an independent and permanent irrigation plant sufficient for at least ten acres on each farm. The price at which these 160 acre farms are selling is merely about what the ten acres and irrigation plant are worth.

Before buying a farm investigate this. Special terms made for Colonies. Call on us or write for particulars.

THE SYNDICATE LANDS & IRRIGATING CORPORATION,

Room 412 New England Life Building, 9th and Wyandotte Sts., KANSAS CITY, MO.

far off. It is time now to get to work for ourselves, as best we may.

"Too much time has been wasted in wondering how we are going to irrigate western Kansas.' It is time to quit wondering that. We neither want nor need to irrigate all western Kansas. If we can irrigate five or ten acres on each farm we shall have made a glorious beginning toward a commonwealth of productive farms and prosperous, contented farmers. If we can irrigate even an acre on each farm we shall be infinitely better off than we are now.

"And with all respect for the manufacturers of gasoline engines and other like devices, I am of the opinion that the thing to do is to harness the wind that is so abundant in this State, and blowing, as our enemies assert, 365 days or more every year.

"While I shall continue to hope for some degree of helpfulness to be given by the State and nation, I am persuaded a large measure of our salvation must be worked out by ourselves individually, from small beginnings. If to-day's work, through the efforts of Prof. Cowgill, Mr. Moses and the splendid array of other bright men gathered here gives such undertakings the needed impetus it will indeed have been a red-letter day for this section of the Arkansas valley. I bid you God speed, and in parting would leave you this injunction: Investigate! cultivate! saturate!"

H. V. Hinckley, of Topeka; Ira C. Hubbell, of Kansas City; Judge D. M. Frost and A. W. Stubbs, of Garden City; W. H. Biddle, of Topeka; Prof. G. H. Failyer, of Manhattan, and others also made brief addresses.

The interest was fully attested by the throng which attempted to find standing room in the court house and by the attention given to each speaker.

The time is doubtless at hand when a system of farming with the use of the abundant and easily accessible stores of water is to be inaugurated in central Kansas and there is now the dawn of the day of prosperity which that country should have entered upon at the date of its first settlement, twenty-three years ago.

Can He Irrigate His Orchard With Little Water?

EDITOR KANSAS FARMER:—Some months ago there appeared in the FARMER an account of irrigating an orchard (I think) in New Mexico, where the man hauled water in a tank wagon to the trees. At each one a six-inch square box, some two feet long, opened at each end, was inserted in the soil, and this box or wooden pipe was kept full of water, with good results to the trees. I have an orchard, some ten years old, that might be made the most paying part of the farm if I could only get water in sufficient quantity to the trees to counteract the effects of dry weather, and this plan appeared to me to be cheapest if it was effective. I would like your opinion, as well as the gentleman who writes from Topeka on moisture in the soil, as to what extent such a plan would mitigate the effects of dry weather and raise the orchard to a paying basis.

Our soil is the usual upland loam, water at fifty feet plenty for stock. Trees 400. Hard, clayey subsoil. Location of orchard so that it could be irrigated on the surface if I had sufficient water. Plowboy, Minneapolis, Kas.

[This letter was referred to Mr. H. R. Hilton, of Topeka, who is, probably, on such subjects, the best informed writer in the State, who kindly furnishes the following comprehensive discussion of the subject.—EDITOR.]

Where water has to be hauled to trees it should be applied as directly as possible to the roots, so as to secure the best service from such a limited supply. For trees ten years old, would suggest that two narrow trenches be dug, eighteen to twenty-four inches deep, one, say, on west side and one on

WATER PIPE.

Our Hard Burned Vitrified and Glazed Clay Pipe is everlasting. With our Improved Joints this pipe will stand same pressure as iron and costs about one-fourth as much. Write for particulars.

W. S. DICKEY CLAY MFG. CO.,
Makers of all kinds of Burned Clay Goods.
Office 300 N. Y. Life Bldg., Kansas City, Mo.

east side, to make two sides of a square ten or twelve feet each way, according to space occupied by tree. If roots are encountered, dig below the largest ones without cutting. Level bottom of each trench, so that water will stand at uniform depth. Fill up six inches with fine rock, gravel, coarse sand, or any rubbish that will not prevent the free passage of water along the trench. Put in one wooden pipe three or four inches square in each trench, to reach above surface, and fill up. Then water through these pipes. In this way the water will be distributed on all sides of each tree, insuring a better growth than if all applied at one point, which would probably create an uneven root growth.

These suggestions are made on the supposition that as deep as trench is dug the soil is loam or clay. Should coarse sand or gravel be encountered, then trench would have to be made shallow, as water will not move laterally in coarse sand or gravel.

"Plowboy" can, however, probably save more water for his trees by good cultivation than he could ever haul by wagon to replace what careless cultivation has lost. If the orchard was planted for fruit, then cultivate only apple trees. Keep out corn, clover and weeds, and cultivate trees only. Commence midway between trees and plow very deep, both ways. When roots are encountered let plow run shallow. Cultivate and harrow repeatedly, and always as soon after every rain as ground will admit. Keep a mulch of dry, loose soil, three or four inches deep, on top of ground all the time. This will encourage deeper rooting and the trees will transpire a larger percentage of the stored rainfall. This thorough cultivation should come first, then what is added by filling trenches occasionally from water wagon will count for something.

The great thing is to store all the rain that falls on the orchard, but the greatest thing is to prevent its evaporation from the soil and save it for the use of the trees. The trees need it all.
H. R. HILTON.

Great Irrigation Meetings in November.

Two meetings of importance to the people of all the great semi-arid country lying east of the Rocky mountains are to be held during the month of November. The first of these is the meeting of the Inter-State Irrigation Association, at Kansas City, November 9-10. This association has many auxiliaries throughout the great plains region and will be attended by representatives from the States comprising this territory. It will be under the auspices of the Kansas City Commercial Club and will be addressed by eminent speakers who have devoted much time to the various phases of the irrigation problem as it pertains to the plains.

It is just now beginning to be understood that there is a great difference between the process of catching a mountain stream and turning its waters upon the limited areas of fertile lands comprising the valleys, and that of procuring water for the irrigation of the vast plains of the eastern slope, where almost the entire expanse is tillable. It is just now beginning to be realized that the investigations here-

tofore made by the government have been with reference to the interests of the first mentioned small valleys, with the possible addition of a narrow band along the foothills, and that the greater interests of the greater area have received but slight attention. It is likely that these last interests will be discussed in a comprehensive way before the Inter-State Association and that such united action will be had as will lead to an investigation of the problem of irrigating the plains.

Exhibits of pumping machinery will constitute an interesting feature of the Inter-State meeting at Kansas City.

The second meeting, and one more important, if possible, to the people of Kansas, will be that of the State Irrigation Association, at Hutchinson, November 23-24. At this meeting the practical irrigators will have their innings. The questions of how to get the water, how to raise it and how to apply it, are fundamental and will be discussed by men who have experience in these very matters. It is expected that some of the oldest irrigators in the United States will present their experiences, both as to methods and as to results. So also will be present those who have made money and beautiful homes through the application of water to the soil of Kansas, as well as many more who want to know a great deal and scarcely know where to begin asking questions.

Of course, the Moses, that is he who would lead the people to irrigate but who does not himself enter the promised land, will be there—several of him. He is useful, for he gathers up and presents much information, he promotes enthusiasm and he makes a fine address.

The questions of needed legislation in this State to provide for the economical development of our irrigation resources will properly come before this convention and should be carefully considered.

The exhibition of irrigation machinery under conditions which prevail where much of it will be used will be an important feature both for the manufacturers and the users of such machinery.

A Texas State irrigation convention has been called to meet at San Antonio, December 4.

Gossip About Stock.

The public sale advertised in last issue of KANSAS FARMER, at Independence, Mo., by John A. Sea, administrator, has been declared "off," as Mr. Sea has sold the entire herd at private sale to Elbert & Hall.

Cattle-feeders will be interested in the Brosius dehorning clipper, advertised in this issue. This is said to be one of the very best in the market. The device cuts from all sides and does not crush or injure the horns. The Keystone dehorning clipper was awarded first prize at the World's Fair. If you are thinking of dehorning cattle be sure and write to this responsible advertiser, A. C. Brosius, Cochranville, Pa.

Our readers, especially those residing in the great corn-growing district of eastern Kansas, should keep in mind that George W. Null's clearance sale of Poland-Chinas will take place on his farm, near Odessa, Lafayette county, Missouri, next Wednesday, October 10. It is less than an hour's run east of Kansas City, on the Chicago & Alton railroad, and the Poland-Chinas, Chester Whites, horses, the jack and milch cows will form an interesting all-round live stock sale. The individual and collective make-up of the offerings is a good one, and some extra good bargains may be had.

A number of breeders interested in the projected grand combination consignment sale of pure-bred swine to be held at Friend, Neb., November 20, 21 and 22, met at that place last Friday to conclude arrangements for the sale. Several Nebraska breeders have arranged to place their consignments here, and yet there is room for others. It is hoped that there will be at least 300 head entered for this sale, and those who wish to place a consignment should be prompt to do so, as the catalogues are to be framed at an early day. More than half the number are already entered and others are promised. The following breeders were present at this meeting: P. J. Gossard, S. Andrew, Elias Kessler and Jesse Miner, of Friend; I. O. Manning and W. J. Hildreth, of Exeter; W. B. Long, of Cordova, and L. H. Steiger, of Fairmont. Dawson Bros., of Endicott, were also present by letter. They will have a consignment in this sale. The various live stock papers of the West were represented at this meeting, and these

representatives were instructed to make public announcement of this sale. Col. T. C. Callahan, the well-known live stock auctioneer, of Friend, has full charge of the business affairs relating to the sale, and any one wanting further information should correspond with him at once. Further announcements regarding this grand combination consignment sale will be made in this journal at an early day. It is to be made one of the best advertised sales of the season; everything is to be conducted on the square, and it will be just the place to go to find the stock you want.

The KANSAS FARMER takes pleasure in calling the attention of its readers to the closing-out sale advertisement of Mr. J. B. Davis, of Fairview, Brown county, Kas., that appears elsewhere in this issue. In a letter to us, among other things he says: "Owing to the decease of my wife and the rapid failing of my aged mother's health, I have rented my farm, and in order to close up my business and go East, I will sell at public auction all my personal property, at my farm, one-fourth mile southeast of Fairview, on Wednesday, October 24, 1894." Among the live stock that will be offered are his herd of sixty registered Duroc-Jersey swine, fourteen head of cross-bred Red Polled cattle, several Holstein cows and a fine yearling bull, twelve head of horses and a modern equipment of farm machinery. Consult his advertisement elsewhere in this issue and write for a copy of his free catalogue.

Farmers who would be successful should pay especial attention to the improvement of their swine herds. An opportunity will be presented on October 24, at the public sale of F. M. Lail, at Marshall, Mo., to procure breeding animals which will do honor to any swine farm in the United States. Mr. Lail has made it his principal business for many years past to continually improve his College Hill herd of Poland-Chinas, and every year in October offers at public sale the finest of these animals. He reserves his whole crop of pigs for these annual sales, so that buyers may feel sure of getting the very best. Notice his announcement of sale in this issue of KANSAS FARMER. Whoever buys his Lail's Victor 4298 S. will obtain a prize, sure. On the following day at Sparks Bros' barn, in Marshall, Mo., will be held another great sale of Poland-Chinas belonging to C. G. Sparks, of Mt. Leonard, and Geo. L. Davis, Elwood, Mo. Whoever attends these sales will be sure to obtain his choice of the three largest and best herds of Poland-China hogs offered at auction this year.

One of the most important Poland-China sales yet announced during the year is that of Mr. L. N. Kennedy, of Nevada, Vernon county, Missouri. Every farmer and breeder in southeastern Kansas and southwestern Missouri, that section of the United States which has the largest and best corn crop, should at once realize that at no time in American swine history has the future outlook for pork been more promising than at the present time. Many farmers realize that well-bred, growthy and early-maturing individuals bring the quickest and most profitable returns. Not only this should be taken into account, but another very important fact, and that is that no one branch or breed in live stock husbandry has proved in the past thirty years to be the equal of the pure-bred hog for quick returns and satisfactory profits. The best always top the market, and they come from such herds as that owned and bred by Mr. L. N. Kennedy, whose present herd was founded four years ago and now contains about one hundred and forty head of as well bred Poland-Chinas as can be found in the West. The blood lines are mainly Wilkes and Free Trade strains, whose representatives were added to the herd regardless of cost. About one hundred and twenty head of youngsters belonged to the spring and summer of 1893 farrow, eighty of which he will offer from the block at public sale, on Thursday, October 18, 1894. Only tops, the reader will see, will go into the sale ring. They will be the best of the February, March, April and May farrowings and were sired by five different boars. A few head of yearling boars and sows sired by Tecumseh Wilkes 8153 S., a son of George Wilkes, all of them good, growthy, smooth-turned individuals, will be included in the sale. The herd is perhaps the largest of almost exclusive Wilkes blood in either Missouri or Kansas, and among the strongest of the family in the West—General Wilkes 10513 S. by Tecumseh Wilkes 8153 S., dam Lady Wildwood (18663); Black Wilkes 10096 S. In another line is Columbus 9813 S. by Sambo H. 6394 S., dam Omaha Handsome (14412), will have a nice string of youngsters of both sexes in the sale. He is a very large, smooth fellow and a grand son of Sambo 6th, that weighed in his show ring dress about 1,000 pounds. In one of the runs we found twelve extra fine gilts that will average 175 pounds by sales day. Among the good things lately added to the herd is the fourteen-months boar Vernon Free Trade 12268 S., a son of Free Trade, and bred by David Finch, of Ohio. He is one of the kind that every ambitious

breeder wants, and cost Mr. Kennedy a long price. Every informed swine-breeder is familiar with the history of his sire. One of the strongest individuals among the excellent array of brooders is Madamoselle (28833) by King Butler 11734 S., and out of Temptation (28435). In her line is Bess Stebbins, a granddam, and grandsires Surprise 621 S. and Lord Corwin 3d 836 S. That the reader may the better understand the Wilkes line of the herd, we will name and indicate a part of the harem queens: Pretty Wilkes (28799), Ollie Wilkes (28798), Kinky Wilkes (28796), Miss Wilkes (28793), Nancy Wilkes (28797), Lorene Wilkes (28791), Georgiana (28789), Honey Wilkes (28790), Jemima Wilkes (28791), Iona Wilkes (28792) and Quality Wilkes (28800). A major portion of the eighty head of offerings have to their credit the granddams Lady Wildwood, Fidelity, Climaxia and Annette, all of whom were very strong, prolific and excellent mothers, selected for their high-class brooding qualities. The reader will find on reference to Mr. Kennedy's announcement, found elsewhere in this issue (page 16), further particulars concerning the herd and the sale. By writing him for a copy of his free catalogue, complete details can be learned of the coming sale at Wildwood farm.

One of the prominent herds lately visited by our field man was that of E. E. Axline, of Oak Grove, Jackson county, Missouri, whose 320-acre farm lies four miles north of town. The herd of Poland-Chinas was founded ten years ago by stock from D. A. Watts and Duffield, of Ohio, and now consists of over one hundred head. The spring pig crop of 1894 were sired by seven different boars, and five of these harem kings were used on the farm. They were Missouri Prince 9537 S., Bob Tail Billy 10768 S., Iowa Chief 12054 S., O. K. 11731 S., and John L. 9517 S. A few youngsters were by Geo. Wilkes' Last 24161 A. and Roy U. S. 24165 A. Now at the head of the herd is Dugan 10213 S., by Norman J. Colman 9441 S., and out of Black L. 5th 3671. He has a long line of top ancestry, and such is his prepotency as a sire that he is almost sure to get large litters, especially in this so when fairly prolific dams are mated. Another extra good sire is Jumbo 11999 S., by Zenas 1248 S., and out of Elsie Lenox 26th 7496 S. He was sold from the farm in his pig form, and proving himself an extra good "pig-getter" he was subsequently brought back, where he sustains a reputation as a tappy breeder. He weighs over 500 pounds in his court-yard dress. One of the youngsters bred here on the farm that promises something more than ordinary is Missouri Wilkes, by Geo. Wilkes' Last 24161 A., dam Hill's Belle Wilkes (28006). In his company another good one was seen, Western Wilkes, that was bred by Cantrell & Garrett, of Illinois. He was sired by Guy Wilkes 2d 17777 A., dam Corwin Tecumseh 66680 A., grandsire George Wilkes 14487, by King Tecumseh 11793, granddam Lady Corwin 62924, by King Corwin 9435, out of Choice of Maids 59008. The reader will observe that he is royally bred and about as good an individual as is his blood lines. His co-worker, Missouri Wilkes, we like the better, however, as he now shows himself, though we are willing to be content and await their future development within the next twenty-four months. Both are good ones and twelve months from now, as the spring crop of 1895 will have been well along, the test will have come that will to a certain extent prove their worth as sires. Among the fifteen aged brooders now in the female division is Curly Pet (11854) by Zenas 1248 S., and out of Queen's Belle (2382). Her grandsire, the Duke of Summer 1304, was one of the original foundation animals that was bred by Duffield. She is one of the very prolific kind and one of the most profitable individuals in the herd. Close up in line comes Alex's Fancy (9901) by Alex L. 3052 S., and out of Faustina (7903). Her last litter of ten were all good ones and such their quality that all have left the farm but three. Rose A. (4320) by Stem's Chip 4320 S., and out of Hustler Ann (9781), is another very prolific harem queen. One of her grandsires, Stemwinder 1214 S., and her granddam, Beauty Corwin (6532), at once sets her right in the estimation of the well-up Poland breeder. One of the finest and best lookers in the array of queens is the yearling Quality Girl (28008) by U. S. Tecumseh 9422 S., and out of Lady V. (23048), she by King Quality 6967. Such is her exterior conformation and quality points that she at once takes a front place in the show yard. Hill's Belle Wilkes (28006) by Young George Wilkes 11883 S., dam Belle 12th (28005), is another individual that commands the eye of the professional breeder. Deep, broad and of the maternal character that not only insures large litters, but the ability to raise them as well. Among the yearlings is Duchess Girl (28007) by Risk's U. S. 11168 S., and out of Duchess 3d (26076), that farrowed her first litter of six and raised them nicely. She was thought, when in her gilt form, to be one of the most promising ever bred by that veteran Poland breeder, D. F. Risk. Another very fine youngster now raising

Keeps Leather

as good as new—

Vacuum Leather Oil.

25c. worth is a fair trial—and your money back if you want it—a swob with each can.

For pamphlet, free, "How to TAKE CARE OF LEATHER," send to VACUUM OIL CO., Rochester, N. Y.

her first litter of seven is Lucy's Bess (25180) by John W. 2893 S., dam Lucy Allen (24556). She is a granddaughter of Old Royalty 1666 S., also a granddaughter of Black Bess 23d (8071). Black Empress (11858) is raising a litter of eight; Spotted Nell (11852) raising a litter of eight; Short Tail (11856) just weaned a litter of ten; Daisy Risk (28361), a very fine one, is due to farrow in November; Bell's Last (28243) has a fine growthy litter of six that will do to go later on; Star Bessie (28144), that came from R. Scott Fisher's excellent herd, is in farrow to Jumbo 11999 S., and something extra good is expected. The visitor will find about forty head of youngsters, thirty or thereabouts that were farrowed in July and August and a nice array of September farrowings. Several extra good litters are expected during October. The premises are nicely fitted up for poultry breeding and Mrs. Axline takes great delight in breeding the best strains of Barred Plymouth Rocks. There are over two hundred in this season's hatch, out of which about fifty first-class birds could go to re-enforce the flocks of others, especially those who desire something above the ordinary run of a farmer's flock. The foundation stock was the best to be had and has since been re-enforced by prize-winning cockerels from the Kansas City Poultry Association, Jno. R. Hill, of Illinois, and Mrs. J. J. Brice, of Saline county, Missouri. More could be said about both swine and poultry and a great deal concerning the well-cultivated farm, the improvements thereon and the big full crop of 140 acres of corn and forty acres of clover whose seed crop run over five and one-half bushels per acre, but space forbids more at this time.

Irrigation in Colorado.

Choice farms in the San Luis Valley, Delta and Grand Junction fruit districts, Longmont and Greeley potato belt, etc. No drought. Home market. Send address for "Irrigation in Colorado" (illustrated), free. H. W. HOWE, Real Estate and First Mortgage Loans, 1640 Curtis St., Denver, Colo.

See Chicago Sewing Machine Co.'s advertisement in next week's issue.

NO CROP FAILURES —IN— COLORADO.

Statistics issued by the Agricultural Department at Washington show that Colorado is the banner State of the Union in

YIELD (PER ACRE) QUALITY AND MARKET VALUE.

We have a number of finely cultivated Colorado farms, large and small, with plenty of water for irrigation. There is always a home market for farm products at good prices.

Prices, \$5 to \$50 Per Acre,

Including water rights and improvements. Favorable terms. Write for full particulars to

S. H. STANDART, Assignee,
P. O. Box 1352. DENVER, COLO.

ANY FRIENDS COMING WEST?

If so, be sure and remind them of the Home-seekers' Excursions over SANTA FE ROUTE, on September 25 and October 9, to all points in the Great Southwest. This means Kansas, Oklahoma, Colorado, Texas, etc. Rate is about one fare for round trip. Full particulars can be learned by applying to nearest ticket agent. The main point is, to direct them over the Santa Fe Route from Chicago or Kansas City. They can get free illustrated folders descriptive of the Southwestern country by addressing

G. T. NICHOLSON,
G. P. A., A. T. & S. F., TOPEKA, KANSAS.

TELL THEM ABOUT THIS!

HENRY W. ROBY, M. D.,

SURGEON.

Office 118 Sixth Ave. West, TOPEKA, KAS.

The Home Circle.

To Correspondents.

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

The Hermit Gray.

In the evening gray the hermit sat
Before his cave on a twisted mat,
And he told his beads and breathed a prayer
Of thankfulness for his haven there.
"Here, far from the jostling market-place,
My humble spirit grows in grace;
And here my lot and fate I'll fill,
Lulled by the tinkling, drowsy rill."

But, hark! A horse is coming fleet,
And the rider stays his steed to greet
The hermit gray, and bends him low.
"My lord!" he cries; "lost thou not know
Thy brother's dead, and his wealth is thine?
Among the peers 'tis thy lot to shine.
Why linger here? Come, mount and ride
Upon my horse, a steed of pride!"

"Here is my cloak of golden sheen,
My spurs, my sword, and doublet green."
The hermit rose and a curious look
Pasted o'er his face. He rose and took
His staff, his cruce, his beads and all,
He gave them a fling and he let them fall
Far and wide on the cavern floor,
As one who'd never need them more.

"Come! Haste!" he cried, "I long to see
The acres broad that belong to me;
The towers and trees and the manor old,
The boxes, iron-ribbed; the gold;
All that wealth and power can bring
To a noble rich as a Moorish king!"

Alas and alas! As the hermit rose
He clapped his fingers to his nose,
For a smell of sulphur filled the air,
While the rider—well, he wasn't there!
And the hermit wished he had held aloof
As he gazed on the print of a cloven hoof.

MORAL:

The tale is good—if well applied;
Be sure all checks are certified.—Puck.

IMPRESSIONS

Of Midway and Women Managers of Woman's Building.

INTRODUCTION.

This paper was written at the request of the Women's Missionary Society of the First Congregational church, of Topeka. Their first desire was for a comparison between the women of the Midway Plaisance and the Women Managers of the Woman's Building at the World's Fair. On second thought it was considered best not to make any comparisons, but simply give the impressions of a visitor. Hence the following:

A comparison between the women of the Midway and the women of the Woman's Building. I feared the comparison would be too odious. All summer the unskillful laughed. All summer the judicious grieved. The cause of all this laughter and grieving are too well known. It was the notorious quarrels of the Board of Lady Managers. They represented the choicest results of centuries of culture and refinement. The vivacious Javanese did not belong to the first circles of Javanese society. The amiable Samoans were evidently very common people at home. The Turkish, Arabic and Persian dancers were from the disreputable ranks of society (slyly whispered of Chicago). No comparison would be possible.

I retired by mutual consent from the American Mutual Admiration Society, and I will write on some of the might-have-beens of the Woman's Building.

It might have been headed by a woman of ideas instead of an amiable copy of the latest French fashion-plate. Dear soul! How she must have reveled in those interminable miles of embroidery and lace!

Fancy an inhabitant of Venus come down to earth. He alights in the Woman's Building.

"All this," we say to him, "is woman's work." A smile of comprehension breaks over his features.

"Ah, I see!" he exclaims. "How lofty! how inspiring! This embroidered pillow! This transparent doily! How useful! how beautiful. Shall I rest my head upon this pillow?" We start in alarm. "Shall I wipe my mouth on this doily?" We shrink in affright. "Here, we hasten to say, 'are the things of use.' We point to the splendid costumes.

"Ah, the women wear these?"
"Some women do. About one in one hundred thousand."

"Ah, that is fortunate; they do not look comfortable nor even modest. Perhaps the heathen women wear them. Surely women who have studied the subject for thousands of years should have here many costumes of grace and comfort. Behold the women about us. Do they not need such an exhibition?"

We go on, more embroidery, more lace.
"Do all your women do nothing but needlework?"

"Oh no; ninety-nine hundredths of us do housework three-fourths of the time."
"Housework!" he inquires.

"Yes," we answer, "work in houses."
"Who plan the houses?"
"Men," we answer.

"Alas! Why not the women who work in them? And what is done in the houses?"

"Mostly cooking."

"Ah! Show me the cooking."

"It is not the hour."

"Only one hour for so important an operation? Why should not more of this be constantly going on, since it is so truly woman's work?"

"How is the house furnished?"

"By men."

"Where are the things that women have planned to make home beautiful? The commodious living room, the wholesome and convenient chamber, the model kitchen for the ordinary home?"

"They have forgotten to exhibit them. But here—here are more laces and embroideries from Japan, from the English Queen."

"Ah! The women of Japan seem the more skillful. And is this all of woman's work?"

"Oh, no. She trains the children."

"Where and how?"

"Not in this building."

"She does not consider it work worth showing?"

"I think she has forgotten it. Once a Roman matron, pointing proudly to her sons, exclaimed: 'Hæc ornamenta mea.' (These are my jewels.) The world thinks less of that now."

"What could she show?"

"Boys and girls of robust frames and innocent countenances and intelligent manners. We have none on exhibition; no medals were offered for such woman's work."

"Does she do nothing to lighten or facilitate her labor; has she invented nothing?"

"Yes, a few things, but the most of them are not here. We do not make a specialty of that branch of woman's work—but, see, here is more lace, from France, from Spain, from Germany."

"Is she not to man an inspiration?"

"So he has said. We have not thought it worth while to direct attention to woman's work in that line. See this exquisite embroidery from Siam."

But he refused to listen any further or gaze any longer at needlework. He fled away from the paralyzing fripperies over to the Children's Building, where there were some traces of woman's work worth remembering. There the care and teaching of little ones revived his hopes for the race.

Naturally, to a childless woman, the very center of the universe seems to revolve around the children. If women have not yet learned that the only object of woman's work should be the improved human being, then the world might as well drop at once into the eternal night to which it is surely destined, and from which no amount of embroidery or lace or pictures or china painting will ever rescue it.

Mrs. S. E. ROBY.

Request for Recipes.

EDITOR KANSAS FARMER:—Have you a domestic column or department in your paper? I am searching for recipes of characteristic or local dishes. What I wish are native or peculiarly Western dishes, such as baked beans are to Boston. Can you help me with two or three recipes from your paper or put me in communication with a good housewife in your locality? I am willing to pay 50 cents apiece for all such recipes as I find available.

Mrs. AGNES B. ORMSBEE.

435 Macon St., Brooklyn, N. Y.
This letter was referred to Mrs. Kedzie, who answered as follows:

The enclosed letter was written by the Brooklyn lady while I was in Brooklyn. It was sent to me at Michigan college, was forwarded twice, and after some long delays was sent to me here. I have thought over the matter some, and I believe it would be wise to print her request, with the offer of 50 cents each for the recipes, and let some of the farmers' wives answer her by sending their own recipes. I could give you some to print in the FARMER, but wouldn't the plan I propose interest more women, and possibly give some one a little pocket money.
NELLIE S. KEDZIE.
Manhattan, Kas.

Handkerchiefs.

One can buy handkerchiefs very cheap nowadays, but they are not worth any more than they cost—cheap, flimsy affairs, anything but inviting, as the hems fray out and the colors fade.

To those who can afford to buy good handkerchiefs, I have nothing to say; but for the benefit of such as want a serviceable article, at small cost, I will give my plan. I buy India linen, at from 10 to 25 cents per yard. The latter price buys a superfine quality, and any one who has time and talent for hem-stitching or other decorating can make dainty 'kerchiefs, indeed. A little less than a yard makes four, at a cost of 2 to 6 cents apiece, and much or little time, as one chooses.

The sewing machine does my work and I do not find it necessary to even baste a hem. They can be hemmed any desired width. I prefer them about one inch wide. Turn the hem on two opposite sides; then the other two. If it is not basted, hold firmly and stitch one side to the edge of the cloth, then



FORTY MILLION CAKES YEARLY.

THE PROCTER & GAMBLE CO., CINCINNATI.

to the corner of the handkerchief, then an inch down the edge, turning even with the next hem. Complete your work, going entirely around each corner.

Use fine white thread, or for a variety, colored silk with single or double rows of stitching and varying the corners to suit the fancy. An initial can be marked with a pencil in the corner square and stitched, running back at the end of letters to avoid ravelling.

This proves much more satisfactory to me than the cheap ready-made article.

IDA KAYS.

Converted on the Spot.

It was at Mrs. Hopskip's dinner dance and the conversation had turned toward mind-reading.

"I'm not a mind-reader," said Miss Smilax to Professor Bierlieber, who sat on her right, "but I can tell you a great many things about yourself simply by looking at your hand."

"Ach, dat don't can be, already!" he replied with characteristic vehemence.

"Indeed I can, Professor Bierlieber," urged Miss Smilax. "Let me just try once."

"Vell, yah. Oof you dinks, ain'd it, dat you gan dell my gharacter mit mein handt, you gan dry vonce."

"Only once."

"Yah—vonce!"

He placed his smooth bearded fingers in the smooth, delicate ones of Miss Smilax. "Well," she said, "to begin with, you are a German—"

"Shtop!" he cried, jumping from his seat, "I am gonvinced. It vas vunderful, vunderful!"—*Boston Budget.*

The Phonograph as a Recruiting Device.

When one of the Australian squadron was patrolling the South seas lately she came up with a sailing vessel, and one of her officers boarded the stranger. She proved to be a colonial craft, engaged in recruiting Kanakas for the Queensland plantations. On board the naval officer noticed a phonograph. He was told that before the vessel left Queensland the captain visited some of the sugar plantations, where South Sea Islanders are employed.

He took a camera and a phonograph, and then he went into the business of photographing groups of natives on the plantations; also taking individual pictures of well-known natives from the New Hebrides, and others from the Solomon group. Edison's invention was then brought into service, the best known of the natives, especially those who have relatives and friends in the islands, being asked to speak into the phonograph anything they would like to tell their friends. Large numbers of these phonographed letters were produced, giving accounts of what sort of life the Kanakas were having on the plantations and any other news that would interest the "old folks at home" at Mallicollo, Ambrym, San Christoval, Malaita, and other islands.

After securing a good supply the ingenious shipmaster sailed for the islands, and, when last seen, was astonishing the natives. Many of the photographs he had transferred to glass for use with the lime-light, and with the photographs and the phonograph he was in a position to give such an ocular exhibition of the life on the plantation that fairly changed the native doubts into an enthusiastic desire to emigrate.

Nor was this all. At the lime-light show he would produce a full-sized picture of an absent friend, a native who was well known in the island in which the shipmaster happened to be, and to the amazement of his dusky audience would make him speak words of greeting from his plantation home in Bundaberg—1,000 miles away.

If any misgivings were felt before the phonograph was produced, that bewitched machine dispelled them by making the lime-light figure of their friend address the natives in their own tongue, and in the same voice they knew so well when he dwelt among them. Needless to say the phonograph has proved a valuable recruiting accessory.—*Sydney (N. S. W.) Mail.*

The best way to avoid scalp diseases, hair falling out, and premature baldness, is to use the best preventive known for that purpose—Hall's Hair Renewer.

Age of Niagara Falls.

Prof. J. W. Spencer says that the first conjecture as to the age of Niagara Falls was made by Andrew Ellicott in 1790. Ellicott believed the falls to be 55,000 years old. About 1841 Lyell estimated the age of the falls as 35,000 years. All of these estimates were pure conjectures but they were correct in assuming that the gorge had been excavated by the river. Prof. Spencer, in outlining the progress of the falls, says that a little stream draining the Erie basin once fell about 200 feet from the brow of the Niagara escarpment. This stream was not over one-fourth the volume of the present cataract, and consequently excavated the gorge at a much slower rate than at present. During the early history of the river the waters of the three upper lakes emptied through the Huron basin by way of the Ot'awa river. The height of the falls has increased several times. The first episode represented by a small river falling 200 feet lasted 11,000 years. Then the height of the falls was increased to 400 feet, and took the drainage of all the upper Great Lakes. At the same time there was a series of cascades, three in all, the lower gaining on the upper until finally they were all united in one great cataract, much higher than that of to-day. Subsequently the waters were raised at the head of Lake Ontario, and the falls approximated to the present conditions after a lapse of 1,000 years, and another 1,000 years was probably occupied by transitoral changes of a very gradual character. It is now 8,000 years since Lake Huron emptied into Lake Erie for the first time. The land has risen about the outlet of Lake Erie, and if the present rate of change continues, in 5,000 or 6,000 years the waters of the four lakes will be turned into the Mississippi river drainage at Chicago.

The universal prevalence of scrofula is a fact well known to physicians. The only medicine that has hitherto proved a specific for this dreadful complaint is Ayer's Sarsaparilla, which expels every germ of poison from the blood. You cannot begin to use it too soon.

"Garland" Stoves and Ranges are no higher in price than the worthless imitations. Ask to see them.

200 EGG INCUBATOR ONLY \$10.00
F. M. CURVEA, Box 151, Lincoln, Neb.

GEARHART'S FAMILY KNITTER.
Knits a stocking heel and toe in ten minutes. Knits everything required in the household from homespun or factory wool or cotton yarns. Most practical knitter on the market. A child can operate it.
STRONG, DURABLE,
SIMPLE, RAPID.
Satisfaction guaranteed. Agents wanted. For particulars and sample work, address:
J. E. GEARHART, Clearfield, Pa.
PRICE \$8.00

CHRISTY BREAD KNIFE

A New \$900. Upright Grand STEINWAY PIANO is offered as a premium to agents selling most CHRISTY KNIVES by Dec. 31, '94. Write for particulars. Christy Knife Co., Fremont, O., Box 3.

LEWIS' 98% LYE
POWDERED AND PERFUMED
(PATENTED)
The strongest and purest Lye made. Unlike other Lye, it being a fine powder and packed in a can with removable lid, the contents are always ready for use. Will make the best perfumed Hard Soap in 20 minutes without boiling. It is the best for cleansing waste pipes, disinfecting sinks, closets, washing bottles, paints, trees, etc.
PENNA. SALT MFG CO.
Gen. Agts., Phila., Pa.

FITS CURED

(From U. S. Journal of Medicine.)
Prof. W. H. Peeke, who makes a specialty of Epilepsy, has without doubt treated and cured more cases than any living Physician; his success is astonishing. We have heard of cases of 20 years' standing cured by him. He publishes a valuable work on this disease which he sends with a large bottle of his absolute cure, free to any sufferer who may send their P. O. and Express address. We advise anyone wishing a cure to address, Prof. W. H. PEEKE, F. D., 4 Cedar St., New York.

The Young Folks.

Old Gaffer von Gunther.

There hangs in my office,
Just back of the door,
A picture by Solomon,
Painted of yore,
In the days long departed,
A time and age when
The doctor was counted
The greatest of men.
Old Gaffer von Gunther
(I guess that's his name,
Though history nowhere
Refers to his fame)
Sits propped up in pillows,
Adjusted with care
In the arms of an ancient
Baronial chair;
His feet cased in slippers,
His face in a frown,
His head in a bandage,
His legs in a gown,
His skull like a foot ball,
Demanded of hair,
While his face is the picture
Of woe and despair.
On his left sits the doctor
As pompous and great
As a cardinal burdened
With secrets of state,
And bursting with impulse
To let them all out,
And see his King tremble
And hear the mob shout,
While patient and doctor
Look grave as the grave,
One craving salvation,
One power to save.
This pompous old doctor,
With powdered peruke
And ruffs like a Duche's
And rings like a Duke,
With velvet knee breeches
And long silken hose,
And silver shoe buckles
And red shining nose,
Sits there with his finger
On von Gunther's wrist
And looks at his time-piece
Like one keeping tryst.
His face is a study
For painters, I ween—
A slight hint of jesting,
A quizzical mien—
A shadow of dolor,
A quick glance of mirth,
A solemn demeanor,
Like men wear at birth,
His eye fixed on—nothing
Hung up in the air,
Like one who is dreaming
Nor foul dreams nor fair.
His staff half reclining
Leans back on his chair,
His cocked hat close by him,
One foot in the air
And hanging just over
A well-rounded knee,
Where trunk-hose and stockings
Are met and agree.
Across from the doctor,
Near old Gaffer's chair,
A medical student
Well-favored and fair
Is counting his pulse-beats
And wondering why
A man with such pulses
Should think he might die;
And close by the student,
With exquisite grace,
A coy little maid,
With smiles on her face,
A cap on her ringlets,
A bodice of blue,
A kirtle to match and
A dream of a shoe,
Is brewing a tankard
Of something so rare
That the pompous old doctor
And student so fair
Wear glorified faces,
Like monks when they pray,
And sniff at the fragrance
Well knowing that they
Will sample the nectar
And do it in haste
Before poor old Gaffer
Comes in for a taste—
For doctor and student
Have never been seen
To take the last pull
From a jug or canteen,
But times out of record
At dinner or lunch
They lead the whole rabble
From roast beef to punch.
While Gaffer von Gunther,
With woe-begone look,
Stares up at the student
And glares at the cook,
The tankard of toddy,
O'erflowing its brim,
Is passed to the doctor.
Who takes a big drink,
Then says, very coolly,
"The stuff is too hot
For a man with a stomach
Like Gunther has got,"
And orders the student
To ladle it out
From tankard to beaker,
From nozzle to spout,
Till, coming at last
Into Gaffer's own cup,
The student and lady
May both take a sup.
Then the doctor cries out,
With a smile and a wink,
"Ah, Gaffer, that's good!
Now, brace up and drink!"
And then I can fancy
They chatter and laugh,
And praise up the toddy
Which all of them quaff,
While doctor and student
Go off with an air
Of "knowledge abundant,
Enough and to spare."
And old Doctor Pompons
Is heard to declare,
"The man has le maladie
Imaginaire!"

HENRY W. ROBY, M. D.

PAOLO.

Little children were laughing and dancing merrily in a narrow alley—an alley that ran off from a big business street in the down-town part of New York. The street was filled with drays, carriages and carts; horses stumbled, wheels crunched and rumbled, hoofs clattered, bells jangled. Ragged boys were crying extras. People were hurrying along because it was coming on toward 6 o'clock, and they were anxious to get home either to dinner or to supper. As they passed by the alley they heard the laughter of the children as it arose, mingled with and was lost in the roar of the mighty city. In the minds of some it may have awakened echoes of the laughter of days long gone—that joyous laughter.

Bare little legs and feet were flitting about in the dying sunlight. It was strange, the way in which the rich sunlight poured into this alley. It seemed to caress the children so softly, so tenderly as it lit up their ragged little shirts, badly mended frocks and tiny caps. It was as if it knew of many sad things concerning them.

They were dancing while a street organ was playing.

And there was Paolo, Paolo with face so tender and beautiful, Paolo who dreamed. Paolo with his organ!

He had fixed it to lean against the wall so that he could sit on a step while playing.

Long years ago he had left his beloved Italy and had come to this wonderful New York to seek his fortune. But no fortune had he found. At first, perhaps, he sorrowed, but he ended by learning to dream. Aye, he learned to dream amid the chaos of the mad, civilized rush for gold.

For Paolo was truly of the fiber of an artist. Glorious thoughts were in his soul, even though he lived in the midst of wretchedness. In his hands the common organ of the streets became a thing of magic. It appealed. Its sounds lost their monotony, for the glory of the Italian's soul spoke through them.

As he played for the children the expression of his face was so soft and tender. It was as if an angel had descended—an angel that spoke with loud-like voice to the hurrying passers-by. Faces that were grave, faces that were stern, faces that were cruel softened as they passed, hearing.

And visions slowly uprose before the poor organ-grinder. He had been thinking. The sense of his surroundings was fading from him. His imagination had swept him back into the long ago.

He played on without knowing.

And now the organ, the children, the alley were lost to him—lost in a rush of ghosts, of pictures. Dear images beckoned lovingly from out of the shadows of the past. Ah, the shadows were becoming luminous! Luminous! So changed was the scene.

Soft lights were glistening through the half-gloom of a vast church. Around the altar were clusters of flowers, marble and gold gleamed, censers were swinging. Through the air stole a perfume, a perfume that soothed, that lifted the senses, that brought devotion to the soul. Great pillars stood around, immense sentinels at once deeply sleeping and on guard. Arches arose till they were lost within the sweep of the mighty dome. Stained glass windows, tinted rarely and exquisitely, let the light fall dimly upon the bowed heads of the kneeling people below. Frescoes upon which great artists of the past had spent their lives and their souls made glorious the walls. And here was the Child Jesus sleeping in peace in His mother's arms, and here was the Man Jesus perishing in agony upon the cross.

The altar was a gleam of radiance, in the midst of which a stoled priest stood with arms raised. The organ was pealing forth the thoughts of grand-souled Beethoven. Sublime harmonies were swelling out. Beautiful voices were chanting in adoration of the God, voices that seemed to be coming from a far, far place—as if angels were singing in the stars.

And boys came and knelt before the altar rail. As a priest approached, one of them slowly raised his head. Oh, how beautiful was the face that the light of the altar fell upon. It was as if a flower had opened its petals to the sunlight.

"Accipe corpus Dominum nostrum Jesu Christi custodiat animam tuam in vitam aeternam. Amen." (Receive the body of our Lord Jesus Christ, may it keep thy soul in eternal life. Amen.)

It was Paolo receiving his first communion.

But now the scene was wild and hurried. Smoke and mad disorder filled the air. Cannons roared, and shook, and belched forth death, musketry cracked, horses rushed and neighed with terror. Bayonets glistened murderously as they formed into bristling, malignant phalanx. The polish of long rifle barrels flickered. Men shouted and groaned and cursed. Cavalry galloped, sabers gleamed and slashed, horses stumbled and fell, crushing wounded and dying men. In places the smoke was so thick that men met and were struggling to the death before they knew of it. Destruction tore,

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Men fell wounded, men fell dying, men fell dead.

Paolo was here fighting for liberty with the glorious Garibaldi!

But here was a scene—beautiful, tender Paolo had taken Amina's hand and was talking to her in a low voice. What was he saying? Oh, he was telling her nothing, telling her everything. In her face was shining a light, a light that thrilled Paolo. It was the old, old story, that story which will always bear the telling, which glorifies, softens this harsh old world—Love.

The birds sang sweetly to each other as they saw the lovers whispering, the flowers nodded approval, the breeze spoke of it in the trees. There was joy in the forest and the little dwellers therein were not afraid as the lovers came near.

And after there came the ring of wedding bells, joy was in the air. All was light. Paolo was with his bride.

Now Paolo was looking into the face of a little girl child. She was dressed in a simple gown and flowers were twined in the hair which fell upon her shoulders in long, soft waves. Her eyes looked clearly into the eyes of Paolo. She was reading his soul by the light of innocence. And he felt that God was speaking to him from the face of the child. In her presence he felt a higher and sweeter happiness than he had ever known before. It was like the happiness he felt when a boy as he knelt before the altar rail in the church at Milano.

It was his little daughter Amina. Her mother had died in giving her birth. Paolo had grieved very deeply, but as time went on his sorrow became healed, for in the child's face he saw the soul of the mother. And he brought her with him to live in a cottage in the mountains, so that she might grow up to be fair and strong and beautiful. Beside her he saw things in a calmer, clearer light. Away from the conflict of human passions and greed his mind gained breadth and power as it rested in the love of his child.

Paolo was very happy. And it was the best happiness of all—that happiness which brings peace.

Again Paolo. He was standing alone in a wild spot in the mountains. The moonlight was upon his face. His arms were folded and in his eyes was a hunted, grieved look.

Amina was dead.

Amina, the light of his soul, who was to him more than the blood of his heart, was gone. Gone! Gone! The rocks, the mountains echoed the awful word.

Oh that he might join her! Oh, that he might join her! This thought stirred him as he stepped to the brink of an abyss. Down, down it he gazed. Ah, it was fathomless as his own sorrow! Yes! He would end it all!

But no! Before him arose a face—the face of a child!

And now Paolo was in the streets of a great city. Years ago he had left his beloved Italia forever. No more would he see that grand land with its glorious shine of sun. The grape-laden vine, the toss and sparkle of the Mediterranean waters were to him but sad memories. Into the lowest depths of poverty he had fallen. A mendicant he wandered, playing a street organ for his bread. He was alone, nay, not alone, for in spirit his child was ever by his side. And all little children he loved tenderly for her sake.

Ah! He had been dreaming! Dreaming! He had forgotten! Here was his organ, the children, the passing crowd, the roar of the city! All here! He had been playing without knowing it, and he leaned his back wearily against the steps where he sat, for he was feeling strange and faint. It would be well for him to rest there a little while, he thought. Darkness had come, however. It was time for him to go.

But no? There was the face—the face of his child, Amina! She was standing before him. Oh, how beautiful and radiant she looked! She lit up the darkness! Angels were singing! Their voices were coming from the stars!

She smiled, oh, so sweetly, and beckoned to him to come.

And the soul of Paolo, the poor organ-grinder, fled and joined the soul of his child and together they flew upward to where the angels were singing. And through the roar of the mighty city there came a softened peal of bells. It was as a requiem in which were the tones of a strange joy.—
Bart Kennedy.

Dismiss the hired man who does not or cannot manage the horses without blows. It is good business policy to discharge him if he makes harsh commands or swears at them. Kind and quiet drivers are always to be preferred. Teasing horses renders them vicious; do not permit it.

For a thorough business and shorthand course attend the Wichita Commercial college, Y. M. C. A. building.

King No-To-Bac and His Work in America.

Many of our readers no doubt noticed in the last issue the large announcement of King No-To-Bac. Less than five years ago he was unknown in America and since that time he has been crowned and called King by hundreds of thousands of happy, vigorous men, who point to him with pride and hold him dear as the means of their deliverance from tobacco slavery.

Oftimes tobacco's victims look at the dying spark in the cigar stump, or at the big, masticated "chaw" of tobacco just expectorated, and with nerves nicotinized with nicotine mentally resolve, "Now, that is my last; I will never use it again. I know that it is injuring me physically and financially and my nerves are becoming so irritated that I can't stand the least annoyance any more." What is the result? These good resolutions are generally made while the effect of the use of tobacco practically paralyzes the cravings of millions of irritated nerve centers and just as soon as the effects commence to pass away these good resolutions weaken, showing conclusively that the use of tobacco is not a habit but a disease of the nervous system caused by the education of the nerves to crave for the nicotine poisoning. What then is the easy, permanent, natural way to relieve yourself of the use of tobacco? Certainly not by discontinuing it and suffering the nervous reaction and prostrating effects and mental degeneracy sure to follow the long and continued use of tobacco. Does it not suggest itself to you that the natural thing to do is to take a remedy that is specifically prepared to eradicate the effects of the nicotine in the system and to overcome the nerve craving effects and restore the tobacco charged nerves to a normal and healthy condition? To this we all say "Yes, where is the remedy?" You will find it in No-To-Bac. This is easily said and we all naturally ask for proof. This is all answered in the simple statement that if No-To-Bac fails to cure, the proprietors, The Sterling Remedy Company, of New York, Montreal and Chicago have so much faith in their remedy, that they positively guarantee to refund the money, and the concern being owned and operated by some of the most reputable business men of the East and West, is absolutely reliable, and we are glad to say, able in every way to live up to its guarantee.

The sale of No-To-Bac within the past few years has assumed enormous proportions, almost entirely developed upon its merits and the recommendations of the cured. So great is the sale that it is hardly possible to go into any leading drug store without finding it on sale, and the druggist has nothing but words of praise to give it.

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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.

All advertising intended for the current week should reach this office not later than Monday.

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

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KANSAS FARMER CO., Topeka, Kas.

A destructive tornado struck Wichita last Monday night. It is reported that five persons were killed and much property destroyed. A furious rain-storm followed.

The statisticians are still figuring on the probable outturn of this year's crops. The editor of the *Cincinnati Price Current* thinks the corn crop is as likely to reach 1,500,000,000 as not to exceed 1,400,000,000.

St. Louis quotations on broomcorn are cheering to those who have not yet sold. The *Reporter* says of it: "Very scarce, and consequently very firm in price; would readily bring 4 cents in 5¢ cents, and choice brush probably more."

The *Cincinnati Price Current* gives the following statement of the total receipts of wheat at primary markets for twelve weeks, from July 1 to September 22, with comparisons for ten years:

1891.....	59,408,000	1889.....	35,686,000
1893.....	46,595,000	1888.....	35,919,000
1892.....	85,540,000	1887.....	35,356,000
1891.....	76,894,000	1886.....	47,013,000
1890.....	28,071,000	1885.....	24,958,000

The latest circulars from Wall street indicate that the "lamb" are still shy about browsing in that pasture to the disgust of the "professionals," whose method of making money is by fleecing the "lamb." Those speculators take an interest sometimes in "skinning" each other by means of "corners," etc., but for genuine amusement and permanent profit to the "street" it is necessary to beguile outsiders to "operate."

The date for holding the annual meeting of the North American Bee-Keepers' Association has been changed to October 10, 11 and 12, in order to secure better rates on the railroads. All roads will sell tickets at one and one-third fare, on the certificate plan. This means that if as many as 150 persons pay full fare going and take the ticket-seller's certificate to that effect, return tickets will be sold at one-third fare.

A fruit expert, who has just completed his investigations of the apple crop of 1894, has stated his opinion that the New England States will have a good average crop, and the outlook where he has been outside is for a large yield. In no particular section west of the New England States is there a full crop, and every section in the States visited, which has supplied winter fruit heretofore, will supply quite largely this year. A close inspection shows this to be a season in which the fruit is found well inside the tree. The quality of the fruit is below the average, except in Missouri, Kansas, Nebraska and Iowa. The aggregate supply will be in excess of the fall of 1891, except as it may be changed within the next few weeks by the elements. The crop in the New England States, New York and Michigan is fully equal to that of last year. In some sections apples have been injured by the severe drought, but late rains are bound to help them.

WHEAT SOWING AND PRICE PROSPECTS.

The Kansas farmer in the wheat belt is proceeding with his wheat sowing just as vigorously as if the last crop had been a very profitable one. In many sections of the State a larger acreage than ever before is being sown. This is notably the case in the broad belt wherein wheat is nearly always a successful crop.

The belief has in some way taken hold of the people that there must be a turn in the market, that the downward course of prices which has prevailed must give place to a movement in the opposite direction. And whether this turn is reached or not the farmer is assured that meats will bring remunerative prices, and it is now well ascertained that at prices now prevailing, or likely to prevail for hogs, wheat can be marketed in the form of pork so as to yield a profit on the cost of production. Again, the cost of seeding is light because of the low price of wheat.

That the farmer's conclusion that activity is better than sluggishness, that industry is better than idleness, and that the next crop is liable to meet a better demand and to command a better price than now prevails, may be shown to have a foundation in the crop records of the recent past is apparent from a review of the situation recently published by a New York observer. He says:

"In 1891, we commenced the crop year on July 1, with a reserve of about 40,000,000 bushels of old wheat, and a new crop of at least 680,000,000 bushels. The home consumption for 1891-92 was 365,000,000 bushels, exports 225,000,000 bushels, leaving a reserve of 140,000,000 bushels old wheat; and No. 2 cash wheat in Chicago sold from 90¢ to 99¢ cents per bushel during September, 1891.

"In 1892, with a reserve of 140,000,000 bushels, a crop of 570,000,000 bushels, home consumption 368,000,000 bushels, exports 190,000,000 bushels, left a reserve of 157,000,000 bushels of old wheat; and No. 2 cash wheat in Chicago sold from 71¢ to 74¢ cents per bushel during September, 1892.

"In 1893, with a reserve of 157,000,000 bushels, a crop of 485,000,000 bushels, home consumption 370,000,000 bushels, exports 165,000,000 bushels, left a reserve of old wheat of 107,000,000 bushels; and No. 2 cash wheat in Chicago sold from 62¢ to 69¢ cents per bushel, and that in a panic year and large surplus.

"In 1894, with a reserve of 107,000,000 bushels, an estimated crop of 500,000,000 bushels, home consumption 373,000,000 bushels, estimated used as feed for animals 77,000,000 bushels, would leave available for 12 months' exports 117,000,000 bushels and an unavailable reserve of 40,000,000 bushels of wheat to carry over on July 1, 1895; and No. 2 cash wheat in Chicago sold from 50 to 52 cents a bushel to date during September, 1894. And on September 22, 1894, December wheat in Chicago sold at 54¢ cents per bushel, the lowest price on record.

"As regards the position of wheat and the wants of Europe, there is no worse prospect for us than same time last year; then, they had about average crops, all harvested in fine weather, while this year France, the United Kingdom and one or two other countries have larger crops, but they are all without exception harvested in wet weather, and have suffered loss in consequence; consequently they will require to import into Europe as much wheat in 1894-95 as in the two previous crop years, which Beerbohm gives as 368,560,000 bushels in 1892-93 and 373,200,000 bushels for 1893-94."

That the requirements of importing countries can be only partially satisfied from this country; that our exports of wheat will necessarily be many millions of bushels less than from any of the crops under consideration is easily apparent.

That the production of some South American countries is rapidly increasing is true, and yet, with all the stimulation given to this production by peculiar artificial conditions as well as by the opening of new areas, the added production of Argentina will not equal the reduction made in the exportable

surplus from this country. The entire exports of wheat from Argentina for the twelve months of 1893 are officially stated to have been 31,464,000 bushels, and for the eight months ending August 31, 1894, 49,160,000 bushels. Thus it will be seen that the entire crop of this much talked of rival of the United States in the world's wheat market can make but a small figure in supplying Europe's import demand for 740,000,000 bushels.

Unless artificial conditions interfere with the natural action of supply and demand it is reasonable to expect better prices for the crop now being sown than are being received for the crop now being marketed.

SIGNS OF THE TIMES.

The question, as to when a return of better times is to be expected, has been carefully studied and variously answered. Not a few students of the situation have designated the resumption of manufacturing industries in the East as a necessary preliminary to the revival of prosperity. Some have attached so much importance to certain economic legislation as to conclude that under the reduction of prices, expected to result from lower duties on foreign manufactured goods, no revival can take place, and that, on this account, the depression must last at least until after the next Presidential election. That the resumption of activity among the manufacturers is an important element is very evident, inasmuch as it will provide employment, and therewith the ability to purchase, for large numbers of people who have, for a long time, been consuming but little, so that there has been an appearance of overproduction in every department of industry.

It is, therefore, with much interest that we turn to the *American Wool and Cotton Reporter* and *Financial Gazette*, of Boston, Mass., and read, in the issue of September 17, its notes under the heading, "Starting Up and Shutting Down." Of thirty-one mills mentioned under this head twenty-seven are noted as starting up and four as shutting down. If space permitted, these notes would be found interesting in full. It will be necessary, however, to confine quotations to a few samples:

The operatives of the Pickering knitting mills, Lowell, Mass., started their machinery on September 10. Work had been suspended five months.

The Hosiery Company, at Dover, Del., has resumed operations.

The mills of the Victory Manufacturing Company, at Schuylerville, N. Y., after being a long time shut down, started again on the 11th inst. on full time.

The Millville Manufacturing Co., Millville, N. J., have resumed work on full time.

Business in the cotton mills at Greenville, N. H., is steadily improving, and before many weeks the Columbian Manufacturing Co.'s mills will all be running full time. No. 2, which manufactures chevrons, went on full time last week, as did the dye house and cloth room.

The Globe woolen mills, at Utica, N. Y., started up on Saturday morning, after a strike of one week by the weavers, and more than 50 per cent. more went to work than there were when they struck the week previous.

John Farnum & Co.'s cotton mills, at Lancaster, Pa., employing over 1,000 hands, which have been idle for two weeks, resumed Monday. At present the employees will work four days a week. Extensive improvements are being made, and the expectation is that the mills will be run full time in a few weeks.

The gingham mill of the Highland Park Manufacturing Company, at Charlotte, N. C., has started on full time, after running a week on half time.

The Monadnock mills, Claremont, N. H., have started up, having been closed for six weeks.

The Natchez cotton mills, Natchez, Miss., which have been shut down for some time, have started up. During the shut-down the machinery has received a thorough overhauling.

The entire plant of the Amoskeag Co., of Manchester, N. H., one part or another of which has been shut down since August, 1893, has been started up again, employing some 8,000 hands at forty hours a week.

Of the four shut-downs reported, low water is assigned as the reason in the case of three, as will be seen from the reports:

The water is very low in the river, and the machinery in the mills at Fiskville, Jackson and Hope, R. I., is not running.

The water in the north branch of the Pawtuxet river is so low that all the factories depending on water for power from River Point, R. I., up, have been compelled to shut down.

Firth Carpet Company have shut down their mills at Cornwall, N. Y.

As a result of the severe drought the

whole of the Hamilton Woolen Company's extensive plant in Southbridge, Mass., is idle, as the plant is only in a measure equipped to run by steam.

Under the heading "Enlargements and Improvements," the journal quoted mentions fourteen, of which the following are specimens:

The Perseverance Worsted Co., Woonsocket, is building a dye house. The new structure will be a wooden building, 100x32 feet, one story.

The Dover cotton mills, Pineville, N. C., which are now being enlarged and generally overhauled, will have 10,000 spindles in operation when business is resumed.

Work on the annex to the Talbot mills, North Billerica, Mass., is being carried on rapidly. The new building will be of brick, two stories and basement, and will be 140x40 feet. When completed the whole mill plant will be enclosed by a high iron fence.

A new fifty-horse-power engine and boiler are to be placed in the factory of the Columbian Knitting Co., Rome, N. Y., in place of the twenty-horse-power now in use.

In addition to these cheering signs, the *Reporter* has ten notices under the heading, "New Mills." The following are some of them:

J. A. Brooks, Cohoes, N. Y., who recently erected a large storehouse, will equip the new building with machinery to manufacture knit goods.

An English syndicate has, it is stated, purchased, through J. M. Goad, the Alton Park property, on Chickamauga creek, at Chattanooga, Tenn., and proposes building large cotton mills.

Work is progressing very satisfactorily on the cotton mill of the Queen City Cotton Co., at Burlington, Vt. The foundations for the main mill and boiler room are nearly completed. The main mill will be 302x118 feet, three stories high. The boiler house will be 70x55 feet and the engine room 80x60. The company expects to employ 300 hands and run 850 looms and 82,880 spindles.

The *KANSAS FARMER* is not concerned as to what use any aspirants for political favors may make of the facts it presents. In the opinion of the writer an honest analysis would indicate that these favorable results grow rather from the fact that no immediate changes affecting economic conditions are probable than as the effect of any party's policy. But leaving the politicians to quarrel over the matter of credit, the people at large may rejoice together at these beginnings of signs of better times.

Water Near the Surface.

EDITOR *KANSAS FARMER*:—The question I desire to ask may have been answered in your paper before, but as I am a new subscriber and have just recently caught the irrigation and alfalfa fever, have had very little information on this point. I am thinking about buying a piece of bottom land with the intention of irrigating part of it, and want land that will grow alfalfa without irrigation. I can get land with plenty of water at all depths below the surface. What depth would you recommend for the purpose I have mentioned? Am glad to say that I get some very valuable information from the *KANSAS FARMER*, which may be a benefit to me in the future.

E. J. GUILBERT.

Augustine Springs, Logan Co., Kas.

This question has not been discussed in the *KANSAS FARMER*. Where permanent water is closer to the surface than five or six feet, the soil is sometimes rather thin. For land to be irrigated, there is no practical advantage in having the water nearer than ten feet from the surface. This gives room for a good depth of fertile soil and is not so great as to make lifting the water very expensive.

The writer is not informed whether alfalfa does better where water is nearer than ten feet from the surface, but has little doubt of its thriving well where the water is within six or even four feet of the surface. The roots of alfalfa are willing to go very deep for moisture, but they must find it.

The editor will be glad to hear from those who have had experience with alfalfa where water is very near the surface.

Addresses Wanted.

You no doubt have several friends in other States who might be induced to come West if properly approached. There may be one or two dozen of them. Nothing better than nicely illustrated folders, with appropriate maps, and text prepared by somebody whose only interest in the matter is to tell the truth.

If you will send to Geo. T. Nicholson, G. P. A. Santa Fe Route, Topeka, Kas., a list of persons who would be interested in literature regarding Kansas, Oklahoma, Texas, New Mexico or California, he will take pleasure in mailing to each one an assortment of folders, pamphlets, etc. They are free. SANTA FE ROUTE.

Farmers' Institutes.

The season for farmers' institutes will soon be at hand. It is time to begin to lay plans for them. No successful institute can be held on brief notice. It requires planning, consultations and advertising on the part of the organizers in order to bring it to the notice of all who ought to take interest. The organizers, on whom these duties devolve, either through appointment at last year's meeting, or by reason of a natural selection of the fittest, should begin their preparations at once. There ought to be at least one good, rousing farmers' institute in every suitable community through the length and breadth of the State this coming winter. There is no form of social intercourse that can unite everybody in the advancement of a common cause like the institute, nor is there anything more conducive to the growth of neighborly feelings. But above all, the institute is an educator. No one "knows it all;" everybody can learn something from everybody else, and the institute brings out the experience and best thought on the methods of farming and stock-raising in which each will be sure to find something that may be of profit to him if he will but heed the suggestions. A live institute, well attended is the most intensely practical school of agriculture that one can conceive of. It is a school in which experience and not theory, is brought forward, and we all acknowledge that experience is the best teacher; and next in value to our own experience is the experience of others.

The Agricultural college has, for many years, given proof of its interest in this form of education by taking an active part in the organization of institutes, and by promoting institute work by all possible means. The college has sent from one to four representatives to nearly one hundred institutes in the last thirteen years. This is 'college extension' work of the most valuable kind, resembling, in the manner of giving the instruction, the "university extension" work which the literary institutions have taken up in the last two years. The college intends to continue this work. As in the past, members of the faculty will be sent to all parts of the State to aid at institutes wherever such aid may be necessary and desired. These representatives are invariably sent at the expense of the college without any tax whatever on the institute or the community where the institute is held. The college, moreover, offers to aid in the arrangement of the program and to print posters and programs, free of charge. A standing committee of the faculty is charged with the duty of aiding in the organization of institutes, especially in places where none have heretofore been held, and of considering requests for assistance.

The object of this brief article is to call the attention of the public to these facts and to invite correspondence from all communities in the State which desire to avail themselves of the assistance of the college in this matter. Correspondence addressed either to President Fairchild or the writer of this will receive prompt attention.

In places where no institutes have been held heretofore, but having material enough for a good institute, it is sometimes difficult to start the ball rolling. Nobody likes to make the first move. Let it be understood that it is the duty of every intelligent, progressive farmer to take an interest in this. Consultation with neighbors will always meet with their co-operation. When a half dozen persons thus agree as to the advisability of holding an institute in the nearest town, or at some central location in the community which will be most accessible to the audience, let them address a request for aid to the college as above noted, and the details as to the number of representatives from the college, and when they can attend, can then be arranged.—Prof. C. C. Georgeson, Manhattan, Kas.

A Florida gardener reported the following experience in propagating tomato plants from cuttings: "On May 1, in pruning a tomato plant I decided to experiment on cuttings and

set them in sand. On May 10, just ten days, they were well rooted and potted in milk cans. On May 16 the roots had filled the can and the plants were put out in the open ground. To-day (June 4) they are strong, healthy plants. Every cutting put out rooted."

The Census on Kansas Mortgages.

The Census office issued, on September 24, a number of extra bulletins as a result of its investigations of farm and home proprietorship throughout the Union. These investigations have also been accompanied by an inquiry into the mortgages and indebtedness of the home owners.

In Kansas the conclusion is that 31 per cent. of the farm families hire and 68 per cent. own the farms; that 55 per cent. of the owners own subject to incumbrance and 45 per cent. own free. Among 100 farm families 61 hire, 38 own with incumbrance and 31 without incumbrance. On owned farms there are liens amounting to \$73,749,283, which is 36 per cent. of value, and this debt bears interest of 8 per cent., making annual interest charge \$92 to each family. Each owned and incumbered farm is worth an average of \$3,100 and is subject to a debt of \$1,100.

The corresponding facts for homes are that 50 per cent. of the families hire and 50 own; of home owners 61 per cent. own free and 39 own with incumbrance. Of 100 home families 50 hire, 20 own with incumbrance and 30 without. The debt on owned homes aggregates \$20,330,951, or 37 per cent., and bears average interest of 8 per cent., so the annual interest averages \$69. An average debt of \$820 incumbers each home, which has the average value of \$2,200. There are nine cities in the State of those having population from 8,000 to 100,000, where 58 per cent. of the home families hire and 42 per cent. own, and of the home-owning families 43 per cent. own with incumbrance and 57 free. In 100 home families on an average are 58 that hire, 18 that own with incumbrance and 24 that own without incumbrance.

The liens on owned homes are 37 per cent. of the value. Several averages show that the rate of interest is 8 per cent.; value of each owned and incumbered home \$3,000; liens on same, \$1,120, and yearly interest on each \$90. Real estate purchase and improvements, when not associated with other objects, caused 52 per cent. of the farm families to incur 52 per cent. of the farm debt and 75 per cent. of the home families to incur 74 per cent. of the home debt.

Weather Report for September, 1894.

Prepared by Prof. F. H. Snow, of the University of Kansas, from observations taken at Lawrence:

There have been six warmer Septembers on our twenty-seven years record; only three have had more rain. The number of thunder storms of the past month has not been exceeded. Wind, cloudiness and barometer, normal. The first light hoar frost of autumn occurred on the 19th, eleven days earlier than usual; but no damage has been done to the tenderest vegetation during the entire month.

Mean temperature was 68.80°, which is 1.90° above the September average. The highest temperature was 94°, on the 6th; the lowest was 41°, on the 30th, giving a range of 53°. Mean temperature at 7 a. m., 62.3°; at 2 p. m., 79°; at 9 p. m., 65.95°. The first hoar frost of the season occurred on the 19th.

Rainfall was 5.68 inches, which is 2.10 inches above the September average. Rain in measurable quantities fell on eleven days. There were six thunder showers. The entire rainfall for the nine months of 1894 now completed has been 24.13 inches, which is 5.55 inches below the average for the same months in the twenty-six years preceding.

Mean cloudiness was 37.77 per cent. of the sky, the month being 1.23 per cent. clearer than usual. Number of clear days (less than one-third cloudy), fourteen; half clear (one to two-thirds cloudy), ten; cloudy (more than two-thirds), six. There were five entirely clear days and none entirely cloudy. Mean cloudiness at 7 a. m., 42.3 per cent.; at 2 p. m., 32.6 per cent.; at 9 p. m., 38.3 per cent.

Wind was southwest, twenty-four times; south, twenty-three times; north, fourteen times; southeast, twelve times; east, ten times; northwest, six times; northeast, once. The total run of the wind was 10,366 miles, which is 143 miles above the September average. This gives a mean daily velocity of 345 miles, and a mean hourly

velocity of 14.4 miles. The highest velocity was 37.5 miles an hour, between 12:45 and 12:50 p. m., on the 19th.

Barometer.—Mean for the month, 29.127 inches; at 7 a. m., 29.151 inches; at 2 p. m., 29.107 inches; at 9 p. m., 29.124 inches; maximum, 29.555 inches, on the 24th; minimum, 28.812 inches, on the 7th; monthly range, 0.743 inch.

Relative Humidity.—Mean for the month, 66.83 per cent.; at 7 a. m., 78.42; at 2 p. m., 48.65; at 9 p. m., 73.42; greatest, 100, on the 14th and 20th; least, 24, on the 14th. There was one fog.

Horticulturists and Grangers at Oak Grange Hall, Mission Center.

EDITOR KANSAS FARMER:—It was with a feeling of elated expectancy that so many wended their way to Oak Grange hall, on the morning of September 27, and it is especially gratifying to chronicle the fact that none were disappointed. Before 10 o'clock the large hall was comfortably filled, many coming from Silver Lake and vicinity, Kilmer, Tevis, North Topeka and Oakland.

The meeting was opened by the horticulturists, the President, Mr. B. F. Van Orsdal, calling to order, and after some well-chosen remarks announced it as ready for business. Minutes of previous meeting read and approved. As much time had been spent in friendly greetings, the program was immediately called.

Mr. Philip Lux presented a paper on "Cultivation of the Apple," and in a very lucid manner gave his method of planting and cultivation until the tree attained full growth. Mr. Lux favored deep planting in furrow and frequent cultivation.

Discussed by Thomas Buckman. Thought shallow planting on side of furrow better, especially on hardpan. Would cultivate by zigzag plowing, thus keeping weeds down in tree row.

Lux objected. Furrows turned together harbor mice, which really do more harm than rabbits.

Discussion limited, owing to want of time. Mrs. Cecil entertained the audience with a beautiful paper entitled "Cultivation and Selection of Roses." After giving in detail the successful method of cultivation and selection of the varieties adaptable to this climate, Mrs. Cecil made an eloquent plea for this queen of all the flowers, its more frequent use in the adornment of the home, that it might gladden the hearts of the little human flowers, who are too often denied their sweet companionship.

Mr. Cheney being called, responded promptly with a very amusing paper on "The Connecting Link of Holsteins with Horticulture." Mr. Cheney, whose remarkable good nature is proverbial, was assigned this weighty subject without serious intention. The way in which he handled it proved him master of the situation. Portraying, so temptingly, the deliciousness of such luscious fruits as strawberries and peaches smothered in Holstein cream, suggested an immediate adjournment to dinner, which was taken. Baskets were unpacked, and their contents spread upon tables in the hall below.

The dinner was a revelation of skill and variety. Cold meats, sandwiches, salads, pies, cakes and various other toothsome dainties, all bearing the stamp and seal of "perfection cookery," were heartily partaken of. An hour or two of pure social enjoyment was thus delightfully passed.

At 1 o'clock the President again called the meeting to order for the further transaction of business. A beautiful and bountiful display of fruits was tastefully arranged, consisting of apples, pears and grapes. The Committee on Nomenclature not being present, a special committee, consisting of Thomas Buckman, L. R. Taylor and J. F. Cecil, was appointed to name fruits exhibited, which in due time reported as follows: "We, the committee on exhibits, would report that we find a very creditable display of apples of the following varieties: Rambo, Rome Beauty, Smith's Cider, Willow Twig, Jonathan, Ben Davis, Grimes' Golden, White Winter Pearmain, Huntsman's Favorite, Romanstem, Winesap, Union Spy, Dominic, Ortle, Rawles' Genet, Talman Sweet, Missouri Pippin, Romanite, Baldwin and Tulpehocken. Also, the Kiefer pear and Concord, Gæthe (Rogers' No. 1), Pocklington and Niagara grapes." Many of the varieties were much better than expected in this season of drought.

The following is a partial list of exhibitors: Thomas Buckman, H. W. Cheney, B. F. VanOrsdal, W. H. Coultis, A. E. Dickinson, Mrs. Parkhurst, W. H. McCracken, Mrs. Brown and I. N. Witt.

Question, by Thomas Buckman: "What is Effect of This Year's Drought on This Season's Fruit?" to be considered at October meeting.

Committee reported program for October meeting as follows: "Fruits of Ohio and Pennsylvania as I Saw Them," A. H. Buckman; "Marketing of Fruit," B. F. VanOrsdal; "Home Literature," K. J. McCracken.

The October, or chrysanthemum meeting, will be held at the residence of Walter Bates, in Aburndale. Meeting adjourned. Mr. H. H. Wallace, as presiding officer of

the Grangers, immediately re-convened the assembly, whose numbers filled the hall beyond its seating capacity, and introduced Mr. A. P. Reardon, Worthy Master Kansas State Grange.

Mr. Reardon spoke briefly and, in turn, pleasantly introduced Mr. Alpha Messer, Worthy Lecturer National Grange. Mr. Messer held the earnest attention of his audience throughout his lecture, which was strictly non-partisan, wholly in the interest of the Grange, and from the "unquestionable standpoint of an American citizen." It was a strong, earnest plea for the up-building of the home, for education and for organization as a means of protection to the farmer. Mr. Messer is himself a farmer, still living on the farm where he was born, in the old Green Mountain State, and, therefore, understands the needs and necessities of his brother farmers everywhere. In a convincing manner he emphasized the necessity to the farmer of educational advancement, citing the present gathering as an illustration of the benefit to be derived, socially, from organization, thus keeping in touch with the outer world of progress.

A vote of thanks was unanimously extended to the Worthy Lecturer for the rare treat afforded his hearers.

With many interchanges of friendly good wishes the company regretfully separated and were soon on the homeward way, leaving Oak Grange hall to dreary silence.

KITTIE J. McCracken,
Secretary Horticultural Society.

WORLD'S CARNIVAL CITY.

St. Louis Offers a Continuous List of Attractions—Her Unrivalled Fall Festivities Commence September 5, and Hold Full Sway Until October 20, 1894.

The successful series of carnival seasons inaugurated by the citizens of St. Louis some fifteen years ago, continue as ever for the season of 1894, and from the morning of September 5 to the evening of October 20 the city will be one scene of gayety and splendor. Many new, novel and unique features have been added to the long list of standing attractions, and from every point of view this reign of high carnival will outshine all previous attempts.

THE ST. LOUIS EXPOSITION, the only one of its kind in the United States that has lived year after year with flattering results, will throw open its doors to the public September 5, and remain in a state of activity until the evening of October 20. Sousa's Grand Concert Band has been re-engaged for the season and will give the usual number of concerts during the afternoons and evenings. The entire Missouri exhibit which appeared at the World's Fair will be transplanted here, and find space in the commodious building.

The exhibitors, both foreign and home, will present new ideas in displaying their goods, and, in addition to other features, a full complement of specialty artists will perform on the stage of the Music hall.

THE GREAT ST. LOUIS FAIR, which will open Monday, October 1, and continue during the week, promises to afford many pleasant surprises. The "Midway Pleasance" feature at the World's Fair will be reproduced in full, and the people of the West and Southwest given an opportunity to see in real life the inhabitants of every civilized and uncivilized country on the face of the globe.

The "Streets of Cairo," "Old Vienna," "Moorish Palace," "Hagenbachs," "Ferris Wheel," etc., will be faithfully portrayed.

His Royal Highness, the MIGHTY VEILED PROPHET and retinue, will enter the gates of the city on the evening of October 2, and parade through the principal thoroughfares as of old. Visitors to the city will arrive at the handsome new Union station, the largest railway edifice in the world, and the most perfect in every appointment. Great inducements to visit the Carnival City are offered via the MISSOURI PACIFIC RAILWAY AND IRON MOUNTAIN ROUTE, from all points on the system.

For a complete program, giving each week's attractions in detail, address any agent of the company, or H. C. Townsend, General Passenger Agent, St. Louis, Mo.

Professor Blount of, the New Mexico Agricultural college, says that his Mexican neighbors plow their crops once and irrigate six times. He reverses the practice, cultivating five or six times and irrigating from one to three times, and harvests from ten to twelve times as much product as the Mexican farmers. He claims that a great deal too much water is habitually used by the native and American farmers upon orchards and crops. He is irrigating fruit trees only twice a year, viz., in March and November, and finds that by using this small amount of water the wood opens better, and the fruit, if rather smaller, is of decidedly better flavor and keeps better. Many vegetables also need no more water than is necessary to start them into growth.

Horticulture.

Planting Trees.

EDITOR KANSAS FARMER:—In answer to "T.," in yours of August 8, will say I have set many trees in that way for the past fifteen years, in all kinds of soil. I will now quote from a paper from H. W. Stringfellow, of Hitchcock, Tex., as the largest fruit-grower, perhaps, in Texas, also President of the Texas Horticultural Society:

" * * * If the tree has been grown from a cutting or been transplanted before, then cut back all the roots to one inch. Hold the tree top down. Cut the root so the surface will face downward when set. Cut, but a short time before transplanting, so as to have a fresh surface for the root to form its callous; make no large hole, and where the tree is to stand drive a three-inch stick down six or eight inches and insert the tree in the hole. Push the dirt in with the feet and tramp thoroughly. With six men I thus set out 2,000 trees last winter, between 8 a. m. and 5 p. m. One to drive the stick, one to insert the trees, and the others to tramp. These were peaches and plums, and not only did they all grow, but to-day it is the evenest and handsomest. * * *"

I have tried it both ways. Cut the roots as he suggests and have tied them and forced them in. I see no difference. It must be remembered that the root of a transplanted tree does not grow when in wood. After transplanting, the growing roots will be new roots, and as all substance of trees and plants come from the atmosphere through the buds and leaves and none through the roots, so the root growth and vigor comes from the leaves—a good healthy top, and if the roots are kept in moist soil and the surface mulched to hold moisture and to keep the surface of the soil cool, not over 80° Fahr. When the surface under a tree is bare and exposed to hot sun and wind and becomes over 90° at the surface and for several inches below the surface, it soon kills a tree or plant. Again, soil contracts by heat, and drought causes the land to crack and all the moisture for several feet below the surface is brought to the surface and evaporates. The surface does not cool sufficient after night, hence no dew. This is not the case where surface is mulched thick with dead or growing vegetation or stones, etc.

My greatest success was in a blue grass yard that had never been plowed—prairie, rather gravelly. I drove my three-inch stake (round, three inches in diameter) in the ground two feet, then with a gas-pipe drove to moist earth, filled up the hole with small rocks and sand, set the tree eighteen inches deep, filled with good coarse rich soil, well watered if in a dry time, and mulched with old grass and weeds. No other cultivation. It was the most vigorous tree I ever planted. In this way your tree will stand firm and does not have same effect as a tree set in old way, with long side roots. A small deep hole will hold moisture, and drain if too much water. The roots will run straight down; not so many surface roots. Your tree will be long-lived and in good condition to stand dry weather.

Bear in mind that good land is coarse, granulated, not fine and dusty. When land becomes dusty fine—*impalpable* land will never grow trees or plants. It is dead, and when a country becomes of that character vegetation ceases, hot winds evaporate the moisture and make it a desert. Cultivation means moisture, protection and surface clothing of our soil. All naturally fertile lands were originally by vegetable growth brought from the atmosphere to the surface, and if not disturbed, adds each year the thickness of a sheet of paper of solid humus. The fertile part of the soil comes to the top, like cream on milk. See an old fence row that has not been plowed for years. It is higher than the adjoining plowed and cultivated land. So all that tends to make land productive must be put on the surface—not turned under. Roots should always remain in the land and not be disturbed. It gives the soil the proper physical and mechanical condi-

tion; it gives the soil capillary tubes, absorbs and holds moisture. That is all there is of productive land. B. St. Joseph, Mo.

[It is presumed that a good many horticulturists will disagree to the above.—EDITOR.]

Subsoiling.

A good deal has been printed and spoken recently in favor of subsoiling for field crops and especially for corn. Unquestionably the practice has advantages to an extent not usually appreciated, especially for regions in which the rainfall, though in the aggregate ample, is sometimes deficient at the times when crops most need moisture. A writer in the Iowa *Homestead* gives his experience with subsoiled garden plats. He says:

"Taken in an experimental way on plats of from three to ten acres in several parts of our farm, we are surprised to see the effect that continuous subsoiling has had during the past dry season. These plats have been subsoiled each fall and the growth upon them has been a matter of wonder when they were compared with the growth on lands not subsoiled. We regret that we did not have any corn planted on these plats in order to test the comparative ability of corn to withstand drought on subsoiled and unsubsoiled land, but the small plants and other plants that occupied these plats show scarcely any evidence of the extreme dry weather. They had a deep, loose, friable soil into which to extend root growth and the percentage of moisture in it was much larger than in unsubsoiled land. The blanket of dust or dirt mulch was thinner here and the growth was proportionally stronger, the new growth being from eighteen inches to five feet up to August 1. The excessive heat of the sun and the thirsty air beating down on the dust mulch evaporated the least moisture in the stratum directly beneath it in those places where the ground had been loosened deepest.

"It is the common belief that during times of drought the deeper one digs for the first eight or ten feet from the surface the drier is the first foot, and the percentage of moisture increases as one goes down. In a well-cultivated field the reverse of this true. There is a sort of blanket of moisture under the surface and the great heat absorbed by the surface continually draws up this subterranean moisture, holding it directly to the roots of the crops, which, together with surface evaporation, draws it off. This, we think, is one reason why wells go dry. The evaporative power of the sun and heat-laden air is least where the ground has been regularly loosened quite deep, and the power of the soil to draw up moisture and hold it about the plant roots is here the greatest, just as a fresh, open lamp wick can draw up oil and keep a better supply to feed the flame than one that has become old and clogged. Subsoiling is a good thing for droughty years, but it often happens that just about the time the cultivator gets his ground well subsoiled there comes a series of wet years. What the value of the work would be then would remain to be seen, but it has been a good thing during the last season.

"We think it most advantageous to subsoil just before the ground freezes up, so that there will be no beating rains on it before freezing solid. Under these conditions the soil is most benefited and is filled with moisture by the winter snows melting and gradually working into the ground. If the ground can then be seeded in the spring before it is beaten down so that the roots can get growth downward with the gradual settling, ideal conditions of growth are furnished for vegetation of all kinds. No soil is nicer to work than well-subsoiled land just after the frost has left it and before beating rains have impacted it."

"For several months I was troubled with a persistent humor on my head which gave me considerable annoyance, until it occurred to me to try Ayer's Hair Vigor. Before using one bottle, the humor was healed."—T. T. Adams, general merchant, Tureville, Virginia.

Time to Plant Apple, Peach and Plum Seeds.

This is in answer to the questions, "How and when to sow apple seed?" and "When to plant peach and plum stones to propagate from the seed?"

Apple seed and some others, which have been allowed to become too dry, may be started by scalding and then exposing them to the action of the frost, and by repeating the process several times there is a greater certainty of germinating. As the scalding and cooling must be quickly done, portions not larger than two or three pounds should be taken at a time. To secure the best success they must be kept moist by imbedding them in moist sand, leaf mould, moss, etc., from the moment they are separate from the fruit until they are put in the earth. As a general rule, seeds germinate and grow most readily when buried to a depth of from three to five times their diameter in soils of ordinary moisture.

It is best to sow apple seeds directly they are taken out of the fruit, for if kept long they get dry and hard and do not germinate freely. Take the pits at once and sow them in a pot of sand or light, rich soil, and set them in a cold house or cellar where the frost is excluded, but where there is not heat enough to excite or start growth before spring. Kept this way the young seedlings will come up in March or April, and after danger of frost can be set out where they are to remain for grafting or budding.

Most apple seedlings are grown from pomace from the cider mills. I have succeeded in getting a good stand by sowing pomace from the cider mill, but they must be sown before they are soured. But, as I stated in a former article, I would not advocate starting a tree from knotty windfalls.

FREEZING PEACH AND PLUM STONES.

The object in cracking peach and plum stones before planting is to admit air and moisture—a process which is also hastened by subjecting them to freezing and thawing. A great many farmers and fruit-growers are in the habit of saving their peach, plum and cherry seeds to sow and raise stock for grafting purposes. Just how to treat these pits to have success with them is a puzzling question to them, and no wonder it is, for men of experience very often fail with them. It is a popular fallacy that these stones need freezing, and that without it they will not grow. That this idea is universal can be learned from seedsmen who deal in these seeds, who tell us that when customers fall the complaint nearly always is that the seeds had not been properly frozen, or had got too dry before freezing.

The only way that I know that stones will grow is as soon as pits are taken from the fruit put them in a damp cellar until spring. If the earth or sand has been kept moist, and the cellar damp and warm, the stones will crack before spring.—*Jacob Faith, in Journal of Agriculture.*

Campbell's Sub-Surface Packer.

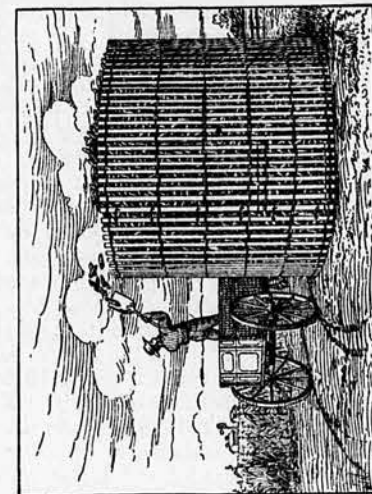
Our attention lately has been called to the peculiar excellence of the Campbell Sub-Surface Packer, a cut of which is shown in their advertisement, and which is now being placed on the market by the Sioux City Engine & Iron Works, of Sioux City, Ia. The farm papers lately have been full of various methods of subsoiling, etc., but none of them have exactly hit the mark as closely as has Mr. H. W. Campbell, of Putney, S. D., in the invention of this Sub-Surface Packer, and also his Surface Cultivator, and of his methods of farming with these tools. This Sub-Surface Packer, while it has never before been placed upon the market, has been in use in its various stages of construction for four years. The object in view when work was first begun on it was to produce a machine that would thoroughly pack the bottom of deep plowing in order to prepare it in such a way that it might be made to gather and hold moisture for plant growth and force decomposition of all stubble, manure or any substance turned under, instead of leaving it loose and thus preserving and drying the stubble, etc., thereby leaching all moisture from the seed bed and having no moisture or root bed to assist plant growth. The inventor is a practical farmer; has been farming in the semi-arid regions of South Dakota for fourteen years and has spent years and thousands of dollars in experi-

menting, and after building six different styles and constructions of sub-surface packers, finally hit upon this plan and has proven by crop results of 1892 and 1893 that he has a perfect machine. His experiments have brought out some other astonishing results. He has proven conclusively that the soil of the Western prairies, especially in the drier sections, when newly plowed and thoroughly pulverized and packed in the bottom of deep plowing, has a wonderful power of absorbing and retaining moisture. This storing and retaining of moisture is the key to successful grain-raising in the arid and semi-arid districts, making prolific crops a certainty without the necessity of irrigation. The machine is especially valuable on summer fallowing when the plow has been used to plow deeply and turn under the rank vegetation usually growing at that time. The plow should be followed closely with the Sub-Surface Packer while the soil is yet loose and susceptible to the wheels, always going lengthwise of the furrow; carry not less than 500 pounds weight in the weight-box of the four-horse packer, when the sharp edges of the wheels will be forced within one or two inches of the bottom of seven-inch plowing, the line of pressure being at right angles with the bevel of the wheel. Thus each wheel has a side as well as a down pressure, completely firming the entire under portion of the plowing, packing the soil so firmly onto the weeds or other vegetation turned under as to immediately force decomposition. Now you not only have a root bed well filled with moisture but a fertilizer to still further assist the crop growth. In fall plowing or spring plowing the same rule should be held to, deep plowing and thorough packing of the bottom. Remember that it is the moisture and heat brought together that sets nature's wheels to work grinding out your crop. Heat we are invariably sure of, moisture you can be sure of if you will only build your reservoir as above directed. While this machine was originally designed for the Western prairies it has been found by experience that it is adapted to scientific farming in all portions of this country, and that wherever used the results are such that no intelligent farmer will be without one.

Write to the Sioux City Engine & Iron Works for H. W. Campbell's book on "Hints to Farmers," which will be mailed free of charge on application.

Adam's Portable Corn Crib.

We call attention to Adam's Portable Corn Crib, a comparatively new article which is of great use in the corn-growing sections. These cribs are made of heavy staves, one inch thick, dressed on both sides and beveled to an edge, so as to allow the wires to fit closely around them and not



be injured by the twist. These staves are woven between six sets of No. 10 galvanized steel wires at distances of about one and one-third inches apart, thus allowing ample ventilation. A gate is provided at the bottom to empty the crib. On the inside, below and above the gate, and at the top of the crib are iron stay-rods to prevent the crib from spreading while the door is open, and also allows an opening to be made the entire length of the crib large enough to set a sheller at. The crib is shipped all rolled up in a bundle, and requires no tools nor mechanic to erect it. The fastening attachments are all properly secured, and all that is necessary is to stand it in a circular form, latch it together and fill it. Ten or fifteen minutes is all the time it should take to erect a crib. If your corn fields are a long distance from the house you can save time and money during the corn-husking season by erecting cribs convenient to the fields and filling them, and hauling the corn during the less busy months of winter. When shelling, if you use more than one crib, as soon as one is empty take it around and set it under the cob-carrier, where it will receive the cobs from the other cribs of corn and keep them in good condition for fuel. The cribs being portable, may be taken down and removed as often as desired, thus preventing them from becoming a harbor for rats and mice. A good cheap roof may be made by taking a piece of canvas or heavy sheeting, drawing it tightly over the top of the crib and giving it a coat of paint. A thatch of hay or straw will also make a good roof. These cribs have been in use in some sections for the past three seasons and have given good satisfaction. They may be had at any first-class lumber yard or agricultural implement house. If your dealer does not handle them, write the manufacturer, W. J. Adam, Joliet, Ill.

In the Dairy.

Conducted by A. E. JONES, of Oakland Dairy Farm. Address all communications Topeka, Kas.

Canadian Dairying.

W. D. Hoard, editor of *Hoard's Dairyman*, recently attended the great dairy conference, under the management of Prof. Robertson, at Fredericton, N. B. In writing to his paper he said, in part:

"The farmers have, unfortunately for themselves, be it said, pursued a soil-exhausting kind of farming. Oats, hay and potatoes have been their cash crop, and thus they have sold out the fertility of their land to a degree that has discouraged the fathers and sent the young men to the West in great numbers. A new spirit of hope and encouragement, however, has taken possession of the agricultural communities, and they are entering upon the work of dairying with great zeal.

"Prof. Robertson is a shrewd, capable manager for the dairy interests of Canada. He strives at one time to arouse the thought and develop the skill of Canadian producers, and crowds them with all his might to the highest standard of excellence in their product. Then we hear of him again over in England, stirring up the consumers and buyers of butter and cheese, and striving to incline their judgment favorable to the Canadian product. Like the famous Scotch collie dog, he knows how to get on both sides of a flock and keep them moving in the right direction. If we had two or three Robertsons in the United States our foreign market for dairy products would not languish as it does now.

"Our impression concerning the future possibilities of dairying in these three maritime provinces is simply this: Everything is especially favorable to the production of butter and cheese of the very finest quality, providing the farmers will do their part. As yet but little attention has been paid to earnest, skillful improvement of quality in cows. The average of August milk in butter fat is too low for good profit. There needs to be more attention paid to breeding, to the production of a dairy cow for the dairy business, and also the science of dairy feeding and more skillful dairy handling. This will soon come when the farmers give themselves up in right earnest to the business and put themselves into the channels of modern dairy thought. What has made other communities successful in dairying will do the work completely for eastern Canada."

The Dairy Industry at the St. Louis Fair.

The St. Louis Fair Association, under the vigorous management of its new Secretary, J. K. Gwynn, will try to remedy some of the errors of the past. Among features that will be pushed to the front and made conspicuous, none will receive more attention than the exhibit of dairy products and goods. To insure a dairy display commensurate with the dairy interests of the country, Mr. Gwynn called to his assistance Mr. Levi Chubbuck, Secretary of the Missouri State Dairy Association, and late Secretary of the Missouri State Board of Agriculture, who has been intrusted with the work of arranging for and preparing the dairy exhibit. Mr. Chubbuck is now at work on this feature of the coming fair, to be held October 1-6, and enough has already been done to insure a fine display of dairy products, goods and machinery, one of the best ever seen in this country.

A separate, commodious and well located building has been set aside by the fair association for the dairy exhibit, and this will be provided with cooling facilities and show-cases for the display of the dairy products to the best possible advantage.

Other portions of the building will be devoted to displaying dairy appliances and machinery. Arrangements will be made for running separators, churns, butter-workers, sterilizing apparatus and other machinery, and thus afford opportunities for manufacturers to go through the different processes of separating milk, churning

and working butter, making cheese, testing and sterilizing milk, etc., both as a means of showing the capacity of the machines and imparting instruction in the most approved methods of dairying. In short, the dairy building will be made a school of instruction in dairying, thoroughly equipped with everything needed to illustrate the best methods, together with samples of the best dairy products made, to show what can be done. Experts in the different branches of the art of dairying will be in constant attendance during fair week, prepared to freely impart information.

Liberal premiums, aggregating \$1,000 in value, will be given by the fair association, State Board of Agriculture, butter and cheese dealers and milk dealers of St. Louis, Lindell hotel, St. Louis, refrigerator transit companies and others, for best dairy products shown, which will, without doubt, call out a large display.

Advantage will be taken of this opportunity by members of the Missouri State Dairy Association, National Dairy Union and other dairy organizations to hold meetings at the dairy building for the transaction of business and discussion of dairy matters. It is expected that a large number of dairy people will, in consequence of the arrangements being made, attend the fair. D. W. Wilson, Secretary National Dairy Union, Elgin, Ill., will be one of the speakers to address meetings of dairymen. Arrangements for other speakers will be made.

Those wishing space for exhibition purposes, or information of any sort pertaining to the dairy exhibit, should write Levi Chubbuck, care Secretary St. Louis Fair Association, St. Louis.

Too Much Work.

On the way to the depot with butter one winter, I overtook a neighbor with a ton of hay. I asked him what he got for the hay. He said it was a fine article and he got \$12, \$2 above the market price. I called his attention to the fact that my load, which I was moving along easily with one horse, would bring over \$100, while his, heavily loading two horses, would bring only \$12. He acknowledged the advantage I had over him, but said there was too much work to this dairy business for him. Now this is the trouble; too many are trying to escape work, and especially brain work. Dairying, to be carried on successfully, requires brain work as well as muscular work; it requires attention to details. Nothing can be done in a careless or slipshod manner. Regularity and neatness must be stamped upon everything. The cows must be fed and watered at regular intervals and at specified times, so there will be no uneasiness noticed. Milking must be attended to at a specified time and performed with cleanliness and dispatch; the milk must be skimmed and the cream churned at just the right time in order to produce a fine article of butter, and no other kind pays for producing. This course can be pursued just as easily as the opposite if we only make up our minds to it, and lay our plans accordingly.—O. Meader, in *New England Farmer*.

An over-ripened cream gives us a strong suggestion of putrefaction and decay, and the resulting butter is bad in both taste and flavor.

Low Rate Home-Seekers' and Harvest Excursions.

On September 11, 25 and October 9 the MISSOURI PACIFIC RAILWAY AND IRON MOUNTAIN ROUTE will sell tickets at half rate (plus two dollars) to the following territory: All points in Arkansas, Texas, southwest Missouri, Kansas, Nebraska, Colorado, Wyoming, Utah, Idaho (east of and including Nampa), Montana, Mexico (except points on the Southern Pacific and Atlantic Pacific railways), Tennessee (except Memphis), Mississippi, Alabama, Louisiana (except New Orleans), Indian Territory and Oklahoma.

Tickets will be good for return twenty days from date of sale, with privilege of stopping off either going or returning. For further information, descriptive pamphlets of the different States, map folders, etc., call on or address nearest coupon ticket agent or H. C. TOWNSEND, General Passenger Agent, St. Louis, Mo.

IN paint the best is the cheapest.—Don't be misled by trying what is said to be "just as good," but when you paint insist upon having a genuine brand of

Strictly Pure White Lead.

It costs no more per gallon than cheap paints, and lasts many times as long. Look out for the brands of White Lead offered you; any of the following are sure:

"Southern," "Red Seal," "Collier."

FOR COLORS.—National Lead Co.'s Pure White Lead Tinting Colors.

These colors are sold in one-pound cans, each can being sufficient to tint 25 pounds of Strictly Pure White Lead the desired shade; they are in no sense ready-mixed paints, but a combination of perfectly pure colors in the handiest form to tint Strictly Pure White Lead.

A good many thousand dollars have been saved property-owners by having our book on painting and color-card. Send us a postal card and get both free.

St. Louis Branch,
Clark Avenue and Teuth Street, St. Louis.

NATIONAL LEAD CO.

The Poultry Yard

Have Chickens Rheumatism?

EDITOR KANSAS FARMER:—Do chickens have rheumatism? We have had three young chickens afflicted very peculiarly. They have an affection of the back or legs, which causes them to lose the power of locomotion. They place one foot fore and the other aft and lie around in that position. One died some weeks ago, and now two others have the same disease. Some of our neighbors' young chickens are affected in the same way.

If you can give me a cure or preventive through the columns of the FARMER, you will greatly oblige.

M. R. HUTCHINSON.

Arkansas City, Kas.

Chickens have rheumatism. The invaluable poultry book, "Five Hundred Questions and Answers," says, on page 16:

"Rheumatism generally comes from exposure to cold and wet, as by running in wet grass in the morning, wet roosting places, etc., though most frequently from feeding sulphur in the food, especially during damp weather. The malady is also hereditary. The symptoms are leg weakness, stiff joints, or contraction of the toes. It may lead to a fatal inflammation of the heart. The treatment consists mainly in warm, dry quarters and good stimulating food; a little cooked meat every day. Rub the legs well with hot mustard water, afterwards wiping quite dry. Half a grain of opium (a quarter of a grain for a chicken of 3 months), night and morning, soothes the pain."

The same authority speaks as follows, of "Leg Weakness:"

"It is usually the result of a fat condition of the hens and the heavy weight of the male, his attentions causing injury to the spine. The remedy is to remove the male.

"Fowls, especially cockerels that grow to fast, squat down on the ground. Sometimes there is also a deficiency of earthy matter in the bones. Bone dust may be freely used. Feed with substances which do not tend to fat; wheat, barley, meat. Internally may be given iron, three to eight grains of citrate daily, or some form of iron and quinine. Hinton's recipe is: Sulphate of iron, one grain a day; strychnine, one-sixteenth of a grain; phosphate of lime, five grains; sulphate of quinine, half a grain; thrice daily."

None of the symptoms described are exactly like those mentioned by our correspondent. In any case the treatment recommended for rheumatism is likely to prove beneficial.

It is a fact not generally known that Kansas is the greatest egg-producing State in the Union and Missouri the second; neither is it generally known that the value of eggs annually handled in Chicago exceeds in value its pork, although it is the greatest packing center in the world. The hens now have their inning.—*National Dairyman*.

M. A. Pond's Business College,

601 Topeka avenue, Topeka, will re-open September 17, at 9 a. m. We guarantee the lowest rates of tuition, the best teaching talent, the best course of instruction in the city or State. Our text-books received the award at the World's Fair. \$20 saved on tuition. Write for particulars.

Home-Seekers' Excursions.

The Baltimore & Ohio Southwestern Railway is now selling excursion tickets for home-seekers to points in Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi and Louisiana at one fare for the round trip. The dates of these excursions are October 2, November 6 and December 4. Tickets will be good for twenty days.

Home-seekers tickets are also being sold to points west and southwest, dates of sale being September 25 and October 9; good returning within twenty days. Liberal stop-over privileges will be granted on all tickets. For rates and further information apply to agents Baltimore & Ohio Southwestern Railway, or address A. C. Goodrich, Western Passenger Agent, P. O. Box 264, Kansas City, Mo.

J. M. CHESBROUGH,
General Passenger Agent.

Leasing Oklahoma School Lands.

All persons wanting to lease school land in Oklahoma will be rewarded by sending for a free sample copy of the HOME, FIELD AND FORUM, Guthrie, Okla., the leading agricultural paper of Oklahoma Territory.

5/A HORSE BLANKETS

ARE THE STRONGEST.

Made in 250 Styles.
For either road or stable use.
All shapes, sizes and qualities.
WM. AYRES & SONS, PHILADA.

I.C. POSTAL Farmer

from any good Farmer
Secures detailed information regarding recent offers made by the Bureau of Immigration, Spokane, Wash.

Davis International Cream Separator, Hand or Power. Every farmer that has cows should have one. It saves half the labor, makes one-third more butter. Separator Butter brings one-third more money. Send for circulars.



DAVIS & RANKIN BLDG. & MFG. CO.
AGENTS WANTED. Chicago, Ill.

"The Great Leak On The Farm"

is a valuable pamphlet relating to corn fodder, and also descriptive of that wonderful machine, the "Keystone" Corn Husker and Fodder Cutter, combined.

It is sent free.

KEYSTONE MFG. CO., Sterling, Ill.
(Mention this paper.)

The Family Doctor.

Conducted by HENRY W. ROBY, M. D., consulting and operating surgeon, Topeka, Kas., to whom all correspondence relating to this department should be addressed. Correspondents wishing answers and prescriptions by mail will please enclose one dollar when they write.

The Winfield Horror.

FAMILY DOCTOR:—Will you kindly tell us whether the operation of Dr. Pilcher on the boys in the asylum at Winfield was humane and justifiable, or whether it was, as some people claim, a brutal crime and deserving of the penitentiary? E. B. C.

The presumption of both law and science is in favor of the doctor. I have no personal acquaintance with him and no knowledge of his skill and judgment, no knowledge of the conditions of these particular boys, but the presumption is in favor of the treatment said to have been administered. Emasculation is not a crime when done to save a life, or to cure an insanity or an imbecility, as it often is. It is no crime when it is done to restrain a diseased boy from an otherwise incurable tendency to self-destruction, either of suicide or the sure damnation of an unchecked secret vice.

Gelding has been practiced all the ages to restrain the vicious and furious tendencies of animals. Without it in our domestic animals thousands of human lives would annually be sacrificed to the fury of mad bulls and stallions. Without it hogs would be hard to fatten. The markets of our great cities are full of caponized fowls that are made much more suitable for food than the uncaponized. Who would eat bull beef or boar meat, when gelding can make them fit for any table? Spaying makes much finer hams and shoulders and breakfast bacon out of a female swine.

Castrates are very common in oriental countries. Herodotus says that in Persia they were especially prized for fidelity and honor. Justinian's most famous general was an eunuch. The histories of China, India, Persia, Greece and Rome abound in instances of emasculation for various purposes aside from curing disease. From time immemorial down to the days of Pope Leo XIII, the vatican choir was supplied with male soprano singers made such by castration. That custom is still very prevalent in Mohammedan countries. All the harems and seraglios are guarded by eunuchs. Many people all over the world emasculate themselves as a religious rite. That large and religious sect in Russia called Skopzis are all eunuchs. In the third century the celebrated Origen instituted at Alexandria a flourishing sect on that line, taking his cue from Matthew xix, 12.

The somewhat analogous practice of circumcision has been an almost universal Jewish religious ceremonial for uncounted years. It is supposed to be a safeguard against certain infectious diseases, as well as a sacrificial ceremony.

There is no just ground of belief that the generative glands in the human species are any more exempt from disease and dangerous disorders than any of the other numerous glands, large and small, in the human economy. They are all subject to disease and malformation, and all alike must be subjected at times to the mercies of surgery in order that life and intellect, or both, may be saved. These glands are no more sacred or infallible than the liver or spleen or kidneys or the brain. All these must fall under the surgeon's hand in many instances that life may be preserved and intellect maintained.

The sexual glands in both sexes are the very common seat of serious disease. They are the very common source of insanity and crime when their physiological activities are perverted or reversed. Countless murders have been committed under the ardor and fury of a sexual perversity, and many nameless crimes and outrages in domestic life have their origin in disordered sex glands. Many suits for divorce in our courts would be avoided if all the people had perfectly normal reproductive glands. Thousands of invalid women have been restored to health by the removal of hopelessly diseased ovaries.

I am quite sure that if given the authority of law I could go through the jails, asylums and prisons of this country and emasculate a very large percentage of the inmates and turn them out in perfect safety to society, where now it would be the extreme of danger and folly to relax their strict and grim restraint. Just as the fury of the war horse is taken out of him by gelding, so the fury of a criminal is. It would be a most beneficent thing for society and the social compact called the state if all criminals were emasculated. The impulse to crime would be very largely eliminated thereby and the reproduction of criminals would be stopped. Who can measure in money or in words the incalculable benefit to the race if all criminals of both sexes were thus prevented from spawning their ilk in the great stream of human life? Criminal? Nay! Nay! A God's blessing to the world, a boon to all mankind. Who

keeps up the steady stream of criminals from age to age? Criminal progenitors largely. Who educates the innocent and unguarded in the ways of crime? The offspring of criminals who ought to have been rendered incapable of reproduction.

Society—the state—has the power to protect itself against the fearful prevalence of ravaging crime by any well-timed and well-adapted and humane means that wisdom can devise. But this, the most beneficent, humane and successful of all forms of defensive restraint, is left unused, because, forsooth, like false modesty, a false sense of glandular sacredness stands in maudlin mockery and scoffs at the right.

How many rapes, think you, would be committed if the penalty were certain and swift castration? Why not make the punishment fit the crime? Then, at least, they would never be repeated. This, the only reason—that from a very primitive age of the world, when mankind engaged in Phallic worship, that is worshipping their own generative organs as the creator, down to the present, a taint of that old worship still clings to the race and one set of organs is esteemed too sacred for invasion even for the beneficent purposes of cure. A wiser doctrine is found in these words from the sacred writings: "If thine eye offend thee, pluck it out. If thy hand offend thee, cut it off and cast it from thee," etc. And if a procreative gland offend thee (seriously) pluck it out and cast it from thee, is equally good, wise and just doctrine. We do it with all other glands amenable to surgery, and why not this one, which is the railroad switch of human life, that derails many a train of fine human impulses from the track of virtue, sobriety and rectitude and plunges it into the ditch of debauchery and crime.

The next Legislature can do the State no greater service than to provide for the elimination of uncounted generations of uncreated criminals who are otherwise sure to be a heavy burden on all right-minded and virtuous citizens, and also to provide proper authority and legal support for treating certain public charges according to the most advanced and humane methods of medicine and surgery.

Answers to Correspondents.

(NUMBER 34.)

FAMILY DOCTOR:—Please answer following in FARMER. My baby has a sort of blood blister on its upper lip or just partly on cheek and lip, caused by scratching it when a few days old with its finger nail so as not to break skin, but upon pricking it blood of quite a quantity runs out, then it fills again. It is as large as a bean. Can I do anything to cure it? When he is cold it looks quite purple. Mrs. V. W. G. Virgil, Kas.

Your child has naevus, or "mother's mark." It is a breaking down of the walls of the small veins in the skin, making a small pool of blood in the skin. You cannot cure it, but a competent surgeon probably can by an operation that is not serious nor dangerous.

Fair Notes—Johnson County.

The Johnson County Co-operative Fair Association held its regular annual meeting, last week, at Edgerton, in the southwestern part of the county, when a fairly well attended reunion of four days took place. The exhibits were up to the standard of the average county fair, yet something seemed to be wanting in magnitude, and on taking a second thought as to surrounding conditions it soon became patent that the association was hemmed in by too many strong and ambitious neighbors.

Edgerton, being situated as it is, in the southwestern part of the county, about equally distant from Lawrence, Ottawa, Paola and Olathe, where fairs are held, it seemed to us that it would be both sound policy and tact that Edgerton and Olathe should join forces and have one good strong county organization and then keep pace with her four lusty rivals. Johnson county is one of the strongest and most productive counties in great agricultural Kansas and by a united effort ought to be and is able, if properly managed, to hold one of the best fairs in the West.

The exhibit in the main building was a very excellent one. Fine arts, the floral display, the household arts, particularly in the sealed goods and pantry stores, were such that it reflected much credit upon the taste and skill of the household queens of southwestern Johnson county. The display of fruit was a very strong one, there being one hundred and eighty plates of an array of almost perfect specimens. In the department for field and garden products about everything grown on Johnson county soil were deftly arranged and shown. There were thirty-two entries of corn, the equal of any ever grown in Kansas in any year. Wheat, rye, oats, clover and timothy seed, English blue grass, millet, sorghum, flax seed, castor beans, and through the entire list were A 1. In the vegetable division it is safe to say that no superior is produced anywhere. Especially was this noticeable in the display of Irish and sweet potatoes.

The display of live stock, while not as

strong as it should have been—and within the ability of the county to make—was enough to convince the stranger visitor that the wide-awake and prosperous Johnson county husbandman was not a whit behind his older and more stuck-up eastern and central United States brethren. Yet it demonstrated one thing, and that was that he didn't show the snap and courage of his better half, sister or daughter, else he'd been out as strong in his part of the fair exhibit as were they. It may be, though we hardly think it, that the old man is surely a son descendant of Adam, and like him sometimes forgets himself and says: "She gave me and I did eat." However, be that as it may, the principal thing lacking is a union of fair forces in the county.

Mr. V. R. Ellis, of Gardner, Kas., the veteran Johnson county Short-horn breeder, came out with sixteen of his forty head of cattle, headed by the blocky and typical four-year-old bull, Gold Dust. The array of females are among the best bred in Short-horn lore and were in fine form for the show yard. In their company was the yearling fellow Godwin, that was purchased for \$145 last spring at Col. Harris' annual clearance sale, held at Kansas City. He is a finely-coated roan, wide, straight in his top and bottom lines, and a deep, beefy, mellow fellow, and we still think one of the three best that went in the sale. His superior in age, Gold Dust, is one of those deep cherry-red coated individuals, and in conformation is as square, deep, smooth-turned and blocky as the demands of the modern Short-horn standard could well ask. The young things sired by him and shown at once impress the visitor with his good qualities and great value as a sire. Among others of his get on the farm are five young lads, a two-year-old and four others that will be ready for service next spring, all creditable alike to master and sire.

An excellent representation of the white faces was shown by Mr. W. Sloan, of Wellsville, situated just below Edgerton, on the Santa Fe railroad. He came out with nine head—six pure-breds and three cross-breds. The pure-breds were headed by the four-year-old Alto 41536, by Governor Simpson 19646, he by Anxiety 4th 9904; dam Myrtle 5th 10468, by Benjamin 4006. He weighs, in ordinary breeding form, 2,000 pounds. His get that were shown prove his worth as a sire, and coming as he did from the Funkhouser herd, of Missouri, with his very strong blood lines, as shown by his pedigree, is enough for the well-up Kansas to know about Mr. Sloan's ambition and good judgment as a breeder among breeders. The females were as good in individuality and pedigree and demonstrated what every Kansas farmer may do if he will toward raising the standard of the output of beef cattle in Kansas. Mr. Sloan has succeeded so well with his little herd that he lately bought at a long price the young show yard prize-winner, Hissiod 16th, of Mr. Funkhouser. He is to be delivered in November, and then the successful prize-winning herd of the Messrs. Makin Bros., of Florence, Kas., will have some strong Kansas Hereford company coming on in Johnson county soil.

Mr. Henry Ackley, of Wellsville, showed several head of cross-bred Hereford-Short-horns and demonstrated how the wide-awake cattle feeder usually manages to top the market, have export fat cattle and the honor of raising occasionally a "Christmas steer." Two of these cross-breds, and twins, too, and under 2 years old, weighed over 2,000 pounds. Another seventeen-months fellow weighed about 900 pounds. Take the two herds, that of Mr. Ellis and Mr. Sloan, with the combined results as blended by Mr. Ackley, and it was a lesson for every American farmer, either large or small.

The swine exhibit—the mortgage-lifters of the times—was not as great in numbers as old Johnson is capable of turning out, yet Mathew Erskine, of Edgerton, shied in with thirteen head of Poland-Chinas; Sumner Harper, same place, with five Chester Whites, and T. E. Pearce, of Edgerton, with nine Polands. They were just what every farmer should have, and were, both breeds, creditable alike to owners and the county.

The sheep show, while not an extensive one, was a fairly good one. Messrs. E. S. Kirkpatrick & Son showed twelve head of Shropshires and C. L. Dille, Jr., eight head of Cotswolds and a Shropshire. Both herds are above the average Kansas herd and have the best of pure-bred blood lines.

The exhibit of poultry, while not large as to numbers—there being forty-six entries of chickens, ducks and turkeys—was a strong one in individuality. The poultry breeders of Johnson county are among the strongest and most successful of any in the State. As your humble servant had but six hours on Wednesday to devote to Edgerton fair he did not get the names of the exhibitors nor make the acquaintance of any except the poultry Superintendent, Miss Dille.

The attention of the Wednesday afternoon visitors was attracted by some partisan political doings, and as most of the exhibitors were off to hear "the speakin'" instead of attending to their "knittin'," I failed to meet them. I felt more than ever, on leaving the grounds for the train, that it was poor policy to mix partisan politics with agriculture on fair day. W. P. BRUSH.

To the Bee-Keepers of North America.

EDITOR KANSAS FARMER:—The North American Bee-Keepers' Association was organized in December, 1870, with the avowed object of "promoting the interests of bee-culture throughout North America." All who are familiar with its work know, and its published proceedings also show, that it has adhered to this purpose, and has contributed as much as any similar society in the world to the spread of a knowledge of practical and scientific apiculture. Reviews, translations and citations from these proceedings appear in the apian journals of all European countries. Much has in this way been done by this society toward giving to the American system of apiculture the recognition which its great merits justly entitle it to receive.

The association itself was never in a more flourishing condition than at present, having reached at the last meeting the highest membership it ever possessed. But the remarkable progress made by apiculture in the United States and Canada within the memory of many who are still among the active members of this society—in fact, the development of this industry until it has become one of considerable national importance—makes it certain, when we consider the wide fields yet unoccupied, that still greater things may be expected. If all who are interested in this pursuit and are proud of the rank which the apiculture of America holds are willing to assist the objects of this association to the extent at least of becoming members and retaining continuous membership, results not merely gratifying to all but substantial benefits to every member will follow. It is not a trade union nor a socialistic society to promote strikes and boycotting, but a peaceful joining of scattered forces which by numbers, interest and enthusiasm shall command respect and recognition with those whose work in life has not made them familiar with the extent and needs of this industry. The field is wide enough for all, and there should be no holding back through a spirit dictated by a feeling that one's own advancement is hindered by the well-earned progress of his fellow man. Each should have instead a just pride in the knowledge that he has contributed to the general advancement.

The North American Bee-Keepers' Association might aid in obtaining national and State legislation favorable to the interests of apiculture, both in securing and promoting attention to this branch at experiment stations and in checking the sale of adulterated apian products. Should this body be composed permanently (as it certainly ought to be) of three-fourths or more of the intelligent apianists of the country, its opinions, resolutions and requests would carry with them far more weight and influence than they do at present. The time has come, in fact, when apiculture, having arrived at the dignity of a distinct pursuit and having enlisted the attention of some 300,000 of our citizens, has within itself forces worthy of much consideration—forces that should be united in order to do more effective work. Every bee-keeper, therefore, whose eye falls on these lines is personally requested to ally himself with the members of our society, whether he can be present at the regular meeting or not. The proceedings, published in pamphlet form, are sent to all who pay the annual membership fee, and the names of all members appear in the printed list.

The next annual convention will be held at St. Joseph, Mo., October 10, 11 and 12, 1894. To avoid confusion at the time of the meeting and just before, members or those who wish to become such are requested to forward their dues, \$1, at the earliest date possible, to the Treasurer of the association, Mr. George W. York, 56 Fifth avenue, Chicago, Ill., who will return a neat membership card. Those who attend the convention are requested to present membership cards and secure badges. State or local apian societies paying an annual affiliation fee of \$5 receive medals to be given to their own members as prizes, and delegates appointed by these societies to attend the conventions of the North American receive membership cards and badges free. For further information address

FRANK BENTON,
Secretary North American Bee-Keepers' Association, Washington, D. C.

The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the KANSAS FARMER.

LAME MARE.—I have an eight-year old mare that has been more or less lame in the left hind leg for eighteen months and is gradually getting worse.

Answer.—You have not given me any symptoms so I cannot tell what to think. Your local veterinarian may be right in calling it ring-bone.

Weekly Weather-Crop Bulletin.

Issued by the United States Department of Agriculture, in co-operation with the Kansas State Board of Agriculture, for the week ending October 1, 1894, T. B. Jennings, observer:

The week has given Kansas ideal autumn weather. The temperature has ranged slightly above normal, with an average amount of sunshine, while but little rain has fallen, being confined to a few showers in the northern counties of the western and middle division and the central and northern counties of the eastern.

Full advantage was taken of the fine weather to continue fall plowing and seeding. Wheat and rye are up in all parts of the State and are generally in fine condition, yet in Dickinson that sprouted two weeks ago south of the river is not in the best condition.

Farmers have commenced to gather corn in various parts of the State. Pastures continue in good condition and stock is thriving on them. Apple harvest has begun; apples have improved considerably during the month.

Frost killed sweet potato and tomato vines in the central counties Saturday. On the 28th, in Thomas county, six miles north of Oakley, lightning struck a school house, killed one scholar instantly, one has died since, the teacher is in a critical condition, while another scholar, though hurt at the time, has fully recovered.

Kansas City Horse Market.

W. S. Tough & Son, managers of the Kansas City stock yards horse and mule department, report the horse market as very sluggish during the past week. Prices were from \$10 to \$15 lower than the preceding one.

No improvement is to be noted in the mule market. Prices still on the down grade. Very little trading in anything except the tops of any class.

GEO. W. CAMPBELL. A. B. HUNT. J. W. ADAMS.

Campbell, Hunt & Adams, LIVE Stock Salesmen.

Stock Yards, Kansas City, Mo. Rooms 31-32—Basement of East Wing.

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The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blenches from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blister.

THE LAWRENCE-WILLIAMS CO., Cleveland O.

MARKET REPORTS.

Kansas City Live Stock. KANSAS CITY, Oct. 1.—Cattle—Receipts since Saturday, 9,815; calves, 831; shipped Saturday, 3,327; calves, 71. The market for native steers was steady; western steers, dull, weak to 10c lower; cows weak to 10c lower; feeders, bulls and calves, steady; Texas steers, 10 to 15c lower, and cows 5 to 10c lower. The following are representative sales:

Table with columns for DRESSED BEEF AND EXPORT STEERS, WESTERN STEERS, COWS AND HEIFERS, and WESTERN COWS. Includes prices per head for various grades and weights.

TEXAS AND INDIAN STEERS. 33..... 957 \$2.25 | 8..... 843 \$2.25

TEXAS AND INDIAN COWS. 32..... 726 \$2.05 | 79..... 779 \$2.05

STOCKERS AND FEEDERS. 37..... 1,156 \$3.75 | 20..... 1,028 \$3.20

Hogs—Receipts since Saturday, 1,902; shipments Saturday, 1,475. The market was active and strong to 10c higher. The top was \$5.50 and the bulk of sales were \$3.20 to \$3.30, against \$5.65 for top and \$3.15 to \$3.25 for bulk of sales Saturday.

Chicago Live Stock. CHICAGO, Oct. 1.—Hogs—Receipts, 25,000; official Saturday, 10,688; shipments Saturday, 8,521; left over, about 2,500; quality only fair; market active, and firm; prices 5c higher.

St. Louis Live Stock. ST. LOUIS, Oct. 1.—Cattle—Receipts, 4,000; market lower and slow; fair to choice native steers, \$3.50 to \$4.25; fair to good Texas steers, \$2.50 to \$3.25; Texas cows, \$1.60 to \$2.20.

Kansas City Grain. KANSAS CITY, Oct. 1.—The milling demand for carlots absorbed all the offerings of good wheat to-day and prices were about 1/4c higher than Saturday.

Chicago Grain and Provisions. Oct. 1. Opened High'st Low'st Closing

Table with columns for Wh't-Oct, Dec, May, Corn, Oats, Pork, Lard, and Ribs. Includes prices for various grain and meat products.

Kansas City Produce. KANSAS CITY, Oct. 1.—Eggs—Receipts, light; the market is active and firm strictly fresh, 14c. Butter—Receipts increasing, market weak on common grades extra fancy separator, 22c; fancy, 19c to 21c; fair, 18c; dairy, fancy, weak, 17c to 18c; fair, 16c; choice country, steady, 14c to 16c; choice packing, weak, 11c.

THE STRAY LIST. FOR WEEK ENDING SEPT. 19, 1894. Johnson county—Jno. B. Lyons, clerk.

FOR WEEK ENDING SEPT. 26, 1894. Coffey county—T. N. Bell, clerk.

FOR WEEK ENDING OCTOBER 3, 1894. Montgomery county—J. W. Glass, clerk.

Shawnee county—Chas. T. McCabe, clerk.

St. Louis Live Stock. ST. LOUIS, Oct. 1.—Cattle—Receipts, 4,000; market lower and slow; fair to choice native steers, \$3.50 to \$4.25; fair to good Texas steers, \$2.50 to \$3.25; Texas cows, \$1.60 to \$2.20.

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No. 3 mixed, nominally, 28c; No. 4 oats, nominally, 26c to 27c; No. 2 white oats, 1 car \$2 1/4; No. 3 white, nominally, 31 1/2c.

Chicago Grain and Provisions. Oct. 1. Opened High'st Low'st Closing

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B. J. KENDALL,
 Room 507 Brown Block, Omaha, Neb.

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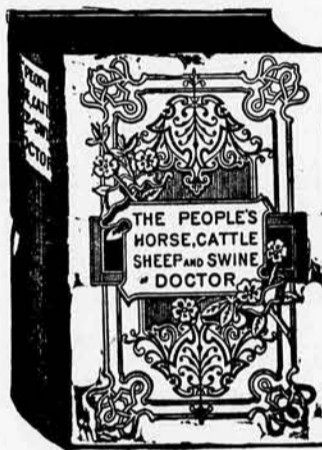
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PROPOSED AMENDMENT TO THE CONSTITUTION.

Substitute for Senate Joint Resolutions Nos. 1 and 2.

Be it resolved by the Legislature of the State of Kansas: two-thirds of the members elected to each house thereof, concurring therein.

SECTION 1. The following proposition to amend the constitution of the State of Kansas is hereby submitted to the qualified electors of the State for their approval, or rejection, namely: That section one, article five of the constitution of the State of Kansas be amended so that the same shall read as follows: "Section 1. Every person of the age of 21 years and upwards belonging to the following classes, who shall have resided in Kansas six months next preceding any election, and in the township or ward in which she or he offers to vote, at least thirty days next preceding such election shall be deemed a qualified elector. 1st: citizens of the United States. 2d: persons of foreign birth who have declared their intentions to become citizens of the United States conformable to the laws of the United States on the subject of naturalization."

SEC. 2. This proposition shall be submitted to the electors of this State at the general election of the Representatives to the Legislature in the year eighteen hundred and ninety-four, for their approval, or rejection; those voting in favor of this proposition shall have written or printed on their ballots "For the suffrage amendment to the constitution;" those voting against the said proposition shall have written or printed on their ballots "Against the suffrage amendment to the constitution;" said ballots shall be received and such vote taken, counted, canvassed and returns made thereof, in the same manner and in all respects as provided for by law, as in the case of the election of Representatives to the Legislature.

SEC. 3. This resolution shall take effect and be in force from and after its publication in the statute book.

I hereby certify that the above resolution originated in the Senate January 16, 1893, and passed that body February 8, 1893.

PERCY DANIELS, President of Senate.
W. L. BROWN, Secretary of Senate.
 Passed the House March 1, 1893.
GEO. L. DOUGLASS, Speaker of House.
FRANK L. BROWN, Chief Clerk of House.
 Approved March 6, 1893, 3:50 p. m.
L. D. LEWELLING, Governor.

STATE OF KANSAS,
 OFFICE OF SECRETARY OF STATE, ss.

I, R. S. OSBORN, Secretary of State of the State of Kansas, do hereby certify that the foregoing is a true and correct copy of the original enrolled resolution now on file in my office, and that the same took effect by publication in the statute book May 18, 1893.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my official seal.
 Done at Topeka, Kansas, this 25th day of July, A. D. 1894.
R. S. OSBORN,
 Secretary of State.

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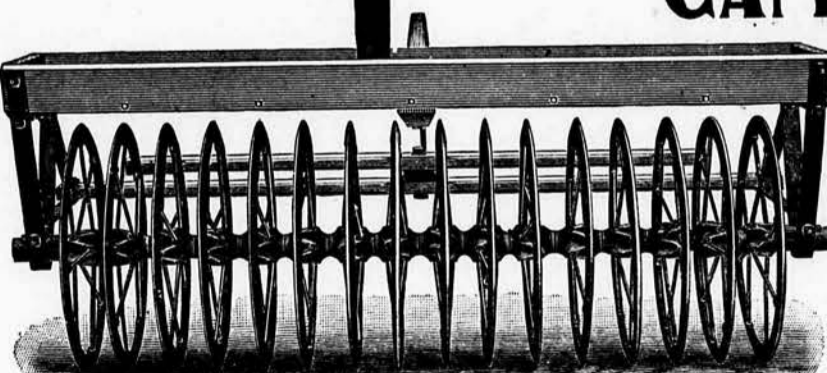
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CAMPBELL'S SUB-SURFACE PACKERS


DON'T FAIL to write for our Pamphlet containing many valuable pointers on Prairie Farming by **H. W. CAMPBELL.**
 ADDRESS, **Sioux City Eng. & Iron Works, SIOUX CITY- IOWA.**
 Will put the bottom of the plowed ground in condition to gather and retain moisture to such an extent as to assure a crop. This machine completely firms the bottom and leaves the surface loose and covered with small lumps, actually forces decomposition of all stubble or foreign matter turned under and in every instance has shown a gain of 75 to 200 per cent.

TWO-CENT COLUMN.

"For Sale," "Wanted," "For Exchange," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order. Special:—All orders received for this column from subscribers, for a limited time, will be accepted at one-half the above rates, cash with order. It will pay. Try it!

CRIMSON CLOVER SEED—New crop. Per pound, 12 cents; per bushel, \$6. F. Barteldes & Co., Lawrence, Kas.

SEND TWO STAMPS—To E. B. Winger, 532 Kenwood Terrace, Chicago, for information relative to Honduras, C. A., and its great opportunities.

WE MAKE A GOOD FARMER'S SPRING WAGON, two lazy backs and let-down end-gate, for \$65. Warranted. Kinley & Lannan, 424-426 Jackson street, Topeka.

FARMS FOR SALE OR EXCHANGE.—We make farm property a specialty. Have some of the finest agricultural and stock farms with first-class improvements and best of water rights, in vicinity of Denver. Fine climate, good markets and always sure of a crop. J. B. McNeil & Co., 226 Cooper Building, Denver, Colo.

STEAM CIDER WORKS—Sixth street road, three miles west of Kansas Ave., Topeka. Bring me your apples. Mill in operation Tuesdays, Thursdays and Saturdays. I will make your cider at reasonable rate or buy your apples at market price. H. W. McAfee, Topeka.

WANTED—English blue grass, timothy, alfalfa, rye and other seeds. Correspond with F. Barteldes & Co., Lawrence, Kas.

WANTED—A farm near Topeka. Dr. H. W. Roby, Topeka, Kas.

BELOW THE BLIZZARD LINE—Fruit and stock farms for sale. Enclose stamp for price list, terms, etc. Hynson & Elmore, Mammoth Springs, Ark.

SEND TO-DAY FOR FREE SAMPLE COPY OF Smith's Fruit Farmer, a practical Western horticultural journal, 50 cents a year. Smith's Fruit Farmer, Topeka, Kas.

"HOW TO RAISE PIGS"—A free book to farmers, postpaid. J. N. Reimers, Davenport, Ia.

FOR SALE—Five good black jacks and all the blooded horses you want. Prices low. C. H. Highley, Hall, Carroll Co., Mo.

WANTED—Buyers for Large English Berkshires. One hundred pure-bred pigs, farrowed in March and April, are offered for sale at from \$10 to \$15 each. Farm two miles west of city. Riverside Stock Farm, North Topeka, Kas.

FRESH ALFALFA SEED.

Crop of 1894. MCBETH & KINNISSON, GARDEN CITY, KANSAS.

POLAND-CHINA MALES—Tecumseh, Square Business strain, cheap. J. D. Ziller, Elawatha, Kas.

SUNNYSIDE—YAKIMA VALLEY.—Irrigated lands. Produce apples, pears, prunes, peaches, hops, alfalfa. Worth \$30 to \$600 per acre. "Twenty acres enough." For map, prices, particulars, write F. H. Hagerty, Sunnyside, Washington.

COMMERCIAL HOTEL AND RESTAURANT.—Rates per day, \$1.25; single meals, 25 cents. First-class lunch room connected. F. Long, proprietor, 528 Kansas Ave. Topeka, Kas.

FOR SALE—Splendid ranch, 1,237 acres; 400 acres in cultivation; part bottom land; good buildings, including frame house of eleven rooms and frame barn 50x200 feet; abundance of water. Three miles from Hoyt, in Jackson county, Kansas, and twelve miles north from Topeka. Easy terms. Send for full description. Accounting Trust Co., 703 Jackson street, Topeka, Kas.

PEDIGREE SEED WHEAT.

Table with 2 columns: Seed Name and Price. Includes Red Clawson, Winter Fife, Currell, Red Russian, Red May, White Leader, Genesee Giant.

TWO-CENT COLUMN—CONTINUED.

WANTED, TO RENT—A good corn farm in Kansas, east of 98th meridian, with a view of buying. Must be near a Catholic church. Give full description and price. Wm. Kurtenbach, Dighton, Kas.

WILL EXCHANGE—Water power flouring mill for a good farm or cattle. Kauffman & Son, Virgil, Kas.

WANTED—Sale bills, horse bills, catalogues and other printing. A specialty at the Mail job printing rooms, 906 North Kansas Ave., North Topeka.

DEAD.—Famous Duroc-Jersey and Poland-Chinas for sale cheap. Great breeders, rustlers and growers. D. Trott, Abilene, Kas.

BOTTLED ELECTRICITY—Cures Catarrh and all aches and pains. Agents wanted. Maynard & Co., Cincinnati, Ohio.

FOR SALE—Seventy-four three-year-old steers, now being fed corn on good pasture. H. H. McCormick, Yates Center, Kas.

CLOSING OUT—Entire stock of Hamburgs, incubators, brooders, bone-mill, clover-cutter, etc., on account of death of wife. J. P. Lucas, Topeka, Kas.

CHOICE FARMS—In Missouri to trade for horses. Always write me for bargains. John G. Howard, Topeka, Kas.

DOUGLAS COUNTY NURSERY—Lawrence, Kas. We have out our catalogue for fall and spring, giving very low prices on all kinds of nursery stock. If you want bargains, send for price list—free. Wm. Plasket & Son.

A BARGAIN.—One hundred and twenty acre farm three miles northeast of Caney, Kansas, for \$1,600, on easy terms. Well improved, bearing apple orchard, bottom land. For particulars address Sam Barr, Caney, Kas., or R. L. Wallis, Ottawa, Kas.

WANTED—To trade a \$50 scholarship in Pond's Business college for a good milch cow. W. B. Roby, 316 west Eighth St., Topeka.

POPCORN WANTED.—Correspond with F. Barteldes & Co., Lawrence, Kas.

FOR SALE—Improved broom-corn machinery. Chain-feed scraper and horse-power press, used one season. J. A. Hammers, Anthony, Kas.

CLIPPER GRAIN AND FEED MILL—Best faning mill for general use made. For price and catalogue write to F. Barteldes & Co., Lawrence, Kas.

IRRIGATION PUMPS.—For prices of irrigation pumps used by the editor of KANSAS FARMER write to Prescott & Co., Topeka, Kas.

TO EXCHANGE—Well improved 160 acre farm and clear property in Topeka for larger farm in eastern Kansas or northwestern Missouri. Address Box 54, Valencia, Shawnee Co., Kas.

FOR SALE OR EXCHANGE—For Chicago real estate, 330 acres pasture lands, plenty water, in Pottawatomie county, Kansas, two miles from two railroads. For further information address Chicago House Wrecking Co., 3005 S. Halstead St., Chicago, Ill.

FARM WANTED.—I wish to rent a good farm in Kansas, east of the 98th meridian, with privilege of buying at a stated price. Give full particulars and price. G. Lundgren, Winona, Kas.

Rested and returned. John B. Campbell, Managers. R. G. Kessler.

Armourdale Hotel,

Kansas City, Kansas.

\$1 and \$1.25 per day. Five minutes ride on electric cars from Union Stock Yards.

Farmers, Spay Your Sows

For fall fattening. Also your Nannies, Ewes and Gip Dogs, with Howsley's Spaying Mixture. Easily used, quick, absolutely certain and safe. Price, \$3 per bottle; \$2 half bottle. One bottle spays one hundred head. Write for testimonials and particulars. THE HOWSLEY SPAYING CO., Kansas City, Mo.

WINGER'S STEEL WINDMILL. Has no equal for strength or simplicity. Awarded Medal and Diploma at World's Fair. One man with helper can erect in one day. Sold low and Warranted Two Years. \$10.75 WINGER'S PUMPING WINDMILL DELIVERED. FEED GRINDER. A double grinder with three burrs. Center Draft. Can be attached to any make of pumping wind mill. E. B. WINGER, 532 Kenwood Terrace, Chicago, Ill.

The Kansas City Stock Yards

Are the most complete and commodious in the West and the second largest in the world. Higher prices are realized here than further east. This is due to the fact that stock marketed here is in better condition and has less shrinkage, having been shipped a shorter distance; and also to there being located at these yards eight packing houses, with an aggregate daily capacity of 9,000 cattle, 40,000 hogs and 4,000 sheep. There are in regular attendance sharp, competitive buyers for the packing houses of Chicago, Omaha, St. Louis, Indianapolis, Cincinnati, New York and Boston. All of the eighteen railroads running into Kansas City have direct connection with the yards.

Table with 5 columns: Cattle and calves, Hogs, Sheep, Horses and mules, Cars. Includes Official Receipts, 1893, Slaughtered in Kansas City, Sold to feeders, Sold to shippers, Total sold in Kansas City.

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

J. G. PEPPARD 1400-1402 UNION AVE. SEEDS MILLET A SPECIALTY. Red, White, Alfalfa and Alsike Clovers, Timothy, Blue grass, Orchard grass, Red Top, Onion sets, Tree seeds, Cane seed. KANSAS CITY, MO.

Shropshire Sheep. Poland-China. Aberdeen-Angus Cattle. Largest and best stock in the West. 50 year old ram lambs out of Imp. Grand Delight. and BERKSHIRE pigs. We guarantee them the equal of any in State in quality and breeding. Most noted families. Young bulls at low prices. KICKPATRICK & SON, Hoge, Leavenworth Co., Kansas.

FOURTH ANNUAL SALE POLAND-CHINA & CHESTER SWINE

At my Farm, three and a half miles northwest of ODESSA, MO., WEDNESDAY, OCTOBER 10.

Fifty head of Poland-Chinas, from sixty days of age up to young boars ready for service and young sows for breeders. In the Polands, they are the immediate get of Colonel 3236, Beauty's Wamaker 11686, John L. 9517, Sable Wilkes 21955, a son of the \$750 Geo. Wilkes; Kiever's Choice, a son of the \$1,000 Hadley; Alex L. 6227 A., Billy 7751 A. Among the dams, Miss Lord Corwin 23498, that weighed 1,000 pounds at the Nebraska State fair of 1893. The produce of the \$500 sow, Elwood Maid 4235, will be in pounds at the Nebraska State fair of 1893. The fifteen head of Chester Whites are pure-bred and from the strain of W. H. Maulie, of Philadelphia. About fifty head of high-grade stock hogs will also be sold. Two extra good stallions, an imported Percheron and a fine saddle, and an extra good Mammoth jack. Also twenty-two head of horses, mares and colts. A few extra good milch cows. TERMS:—On all sums of \$10 and over a credit of nine months, without interest, if paid when due. If not paid when due, interest from date of sale. Lunch on the ground at prime cost. Sale begins at 10 o'clock a. m. Write for catalogue—full particulars. COL. J. W. SPARKS, Auctioneer, Marshall, Mo. GEO. W. NULL, Odessa, Mo.

PUBLIC SALE POLAND-CHINAS

On Wildwood Farm, adjoining Nevada, Mo., on Thursday, October 18, 1894.

On the above date I will offer to the highest bidder Eighty head of Thoroughbred Poland-China hogs, consisting of five recorded sows, four of them sired by Tecumseh Wilkes \$153, a fine son of old George Wilkes; five head of yearling past boars, sired by Tecumseh Wilkes; fifty head of the sons of February, March and April litters, both sexes; twenty head of May and July pigs, both sexes. The above seventy pigs are the get of Gen. Wilkes 10513 and Black Wilkes 10096, grand sons of George Wilkes, and of Columbus 9813, a grand son of Samba 6th, a boar that weighed over 1,000 pounds. They are all out of fine, well-bred sows. The pigs sired by Columbus are all out of Wilkes sows. My pigs are not "balls of fat," but are nice, smooth, thrifty, well-made and well-marked individuals, in perfect condition, and as to breeding will compare with any herd in the United States. Sale will take place on Wildwood farm, two miles west of Nevada depot, beginning at 10:30 a. m. Dinner at 12 o'clock. Free transportation from depot and parties from a distance entertained at a good hotel at my expense. Terms:—Ten months time on bankable note at 5 per cent.; 5 per cent discount for cash. Write for catalogue. COL. J. M. HOSMER, Auctioneer. L. N. KENNEDY, Nevada, Mo.

CLOSING - OUT SALE!

Duroc-Jersey Swine and Cross-bred Red Polled Short-horn Cattle. On my Farm, near Fairview, Brown Co., Kas., Wednesday, October 24, 1894.

I will, on the above date, offer to the highest bidder my entire herd of Registered Duroc-Jersey swine, consisting of sixty head, all ages, the get of prize-winning sires—Duke of Verague 401, Jumbo 683, Sweetwater Jr. 1713 A., Grover 671, Ohio Chief 2537 A. Among the ten brood sows are Queen Mollie 1008, Searles' Pride II. 1004, Gold Dust 1010, Searles' Mollie 7364 A., Cleopatra II. 1016, Bess H. 6924 A., Lilly 1200, Fairview Bell 1006, Daisy 1556. The fourteen head of cattle are extra fine cross-breeds, including two high-grade Holstein cows. Four of the cows will be fresh at time of sale or soon after and four others in January. An extra pure-bred yearling Holstein bull will be offered. Twelve head of horses, consisting of brood mares, colts and work horses. A full set of modern farming implements, including everything needful on a farm. The general sale will commence at 10 a. m. The swine sale at 2 o'clock p. m. Terms:—Eight months time, without interest, on cattle and swine; twelve months on horses and implements, etc.; 8 per cent. off for cash. All sums under \$5 cash. Free lunch at 1 o'clock. Write for catalogue. ELI ZIMMERMAN, Auctioneer. J. B. DAVIS, Proprietor.

GRAND TWO DAYS SALE OF POLAND-CHINA HOGS.

Wednesday, October 24, 1894. F. M. LAIL will sell, at his farm, one mile east from Marshall, Mo., about one hundred head, being all the tops of his spring pigs and thirteen yearling sows. Also the grand old breeding boar, Lail's Victor 4298 S. Thursday, October 25. C. G. SPARKS, of Mt. Leonard, Mo., and GEO. L. DAVIS, of Elmwood, Mo., will sell at Sparks Bros.' mule barn, Marshall, Mo., about seventy-five head. This stock was sired by fifteen choice boars, among which are Lail's Victor, Haines' Black U. S., Elected, Duke, Imitation by Black U. S., Hadley's Perfection, Roy Wilkes, Admiral Chip, Hildebrother, Hummer, etc. For separate catalogues of both sales address as above. COL. JAS. W. SPARKS, Auctioneer.

HORSES! SOLD AT AUCTION.

On Tuesday, Wednesday, and Thursday of each week. Private sales every day. At the KANSAS CITY STOCK YARDS, HORSE & MULE DEPT. THE LARGEST & FINEST INSTITUTION OF THE KIND IN THE UNITED STATES. 85107 head handled during 1893. All stock sold direct from the farmer, free from disease, and must be as represented or no sale. Write for market report, mailed free. Address, W. S. TOUGH & SON, Mgrs., Kansas City, Mo.

THE UNION STOCK YARDS, CHICAGO.

(Consolidated in 1865.) The largest live stock market in the world. The center of the business system from which the food products and manufactures of every department of the live stock industry is distributed. Accommodating capacity: 50,000 cattle, 200,000 hogs, 30,000 sheep, 5,000 horses. The entire railway system of Middle and Western America center here, rendering the Union Stock Yards the most accessible point in the country. The capacity of the yards, the facilities for unloading, feeding and reshipping are unlimited. Packing houses located here, together with a large bank capital and some one hundred different commission firms, who have had years of experience in the business; and strictly a cash market. Each shipper or owner is furnished with a separate yard or pen for the safe keeping, feeding and watering of his stock, with but one charge of yardage during the entire time his stock remains on the market. Buyers from all parts of the country are continually in this market for the purchase of stock, cattle, hogs and sheep. Shipper should ask commission firms for direct information concerning Chicago markets. The Greatest Horse Market in America, the Dexter Park Horse Exchange. N. THAYER, President. JOHN B. SHERMAN, Vice President and Gen. Manager. GEO. T. WILLIAMS, Secretary and Treasurer. J. C. DENISON, Ass't Secretary and Ass't Treasurer. JAS. H. ASHBY, General Superintendent. D. G. GRAY, Ass't Superintendent.

CLOSING-OUT SALE! 100 HEAD PURE-BRED HEREFORD CATTLE At Savannah, Mo., Wednesday, October 31, 1894. Catalogues Mailed Upon Application. J. F. WATERS.