

# KANSAS FARMER

ESTABLISHED IN 1863.  
VOL. XXXIV. NO. 53.

TOPEKA, KANSAS, THURSDAY, DECEMBER 31, 1896.

SIXTEEN TO TWENTY  
PAGES--\$1.00 A YEAR.

## TABLE OF CONTENTS.

PAGE 834—AGRICULTURAL MATTERS.—A Javanese Tea Plantation. How to Make Farming in Kansas Pay.  
PAGE 835—THE STOCK INTEREST.—Keep a Few Sheep. Relative Value of Roots. Feeding Hogs for Quality of Meat. Foreign Stock Notes.  
PAGE 836—IRRIGATION.—How to Irrigate All the Arable Lands in the Arid West.  
PAGE 837—Gossip About Stock. Publishers' Paragraphs. Short-horns Are Valuable. Camel's Milk.  
PAGE 838—THE HOME CIRCLE.—Sambo's New Year Sermon (poem). Behind Iron Doors.  
PAGE 839—THE YOUNG FOLKS.—The Leaves' Farewell Party (poem). Umbrella Carriers. Chicken and Canary.  
PAGE 840—EDITORIAL.—The Farmers' Week. The Allen Land Law Not Applicable to Railroads. Kansas' Historical Collections.  
PAGE 841—EDITORIAL.—Low Railroad Rates. The Opportunities of the Western Kansan. Composition of Potatoes. Equalization of Railroad Taxes Among School Districts. Buck to Kansas.  
PAGE 842—HORTICULTURE.—Varieties to Plant in Kansas. Thayer's Berry Bulletin for January.  
PAGE 843—IN THE DAIRY.—That Cow Report. Gathered From Many Sources.  
PAGE 844—THE VETERINARIAN...Market Reports.  
PAGE 846—THE APIARY.—Selling Comb Honey. Wonderful Work of Bees. Improved Bee House.

## BREEDERS' DIRECTORY.

Cards of four lines or less will be inserted in the Breeders' Directory for \$15 per year or \$8 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 FARM.—CLYDESDALE STALLIONS, SHORT-HORN CATTLE.  
POLAND-CHINA HOGS.  
Write for prices of finest animals in Kansas.  
H. W. McAFEE, Topeka, Kas.

### CATTLE.

T. H. PUGH, Maple Grove, Jasper Co., Mo., breeder of HEREFORD CATTLE. Stock for sale.

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.

FAIRVIEW STOCK FARM.—Registered Short-horn cattle. 7th Earl of Valley Grove 111907 at head of herd. Young stock for sale. E. H. Littlefield, Newkirk, Oklahoma.

ENGLISH RED POLLED CATTLE AND COTSWOLD 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 106558 at head of herd. Registered bulls, heifers and cows at bed-rock prices. Address D. P. Norton, Council Grove, Kas.

### SWINE.

K. N. FRIESEN, ALTA, KAS.—Proprietor of the Garden Valley Herd of Thoroughbred Poland-China swine. Selected from best strains. Stock for sale at all times. Write me. Mention FARMER.

PRINCETON HERD OF POLAND-CHINA SWINE contains the most noted strains and popular pedigrees in the U. S. Choice animals for sale. Address H. Davison & Son, Princeton, Franklin Co., Kas.

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

CENTRAL KANSAS HERD OF THOROUGHbred Poland-China hogs. C. S. Snodgrass, Galt, Rice county, Kansas, breeds the best. Stock for sale now. Come or write.

OHIO IMPROVED CHESTER SWINE—Pure-bred and registered. One hundred spring pigs at hard times prices. Also a few boars ready for service. H. S. DAY, Dwight, Morris Co., Kas.

POLAND-CHINAS FOR SALE.—Twenty-five top spring pigs, gilts and boars. A few rams of each of the following breeds: Cotswold, Shropshire and American Merinos. Also Scotch Collie pups. Address H. H. Hague & Son, Walton, Kas.

D. TROTT, ABILENE, KAS., headquarters for POLAND-CHINAS and the famous Duroc-Jerseys. Mated to produce the best in all particulars. Choice breeders cheap. Write.

When writing to advertisers please mention KANSAS FARMER.

### SWINE.

Holstein-Friesians. M. H. ALBERTY, Cherokee, Duroc-Jersey swine. Kansas.

DELMONT STOCK FARM—Cedar Point, Kansas. B. Berkshires and Poland-China swine, Mammoth Bronze turkeys and Barred Plymouth Rock and S. C. B. Leghorn chickens and Pekin ducks.

W. M. PLUMMER & CO., Osage City, Kas., breeders of Poland-Chinas of the best families. Also fine poultry. Pigs for the season's trade sired by five different boars.

ASHLAND STOCK FARM—Will sell for the next thirty days, thoroughbred Poland-China boars and B. P. Rock cockerels at greatly reduced prices. No boom prices here. Give me a trial and I will surprise you with prices for quality of stock. Yours for business, M. C. Vansell, Muscotah, Atch on Co., Kas.

### POULTRY.

HIGH-SCORING B. P. ROCKS, W. WY- and B. Leghorns of the very best strains obtainable, for sale low. Score-card by Hewes or Emery with each fowl sold. P. C. BOWEN & SON, Cherryvale, Kas.

PURE-BRED HIGH-SCORING ROCKS. White and Blue Barred. The best strains, largest birds, carefully and scientifically mated. Write for descriptive circular. T. E. Leftwich, Larned, Kas.

Barred Plymouth Rocks. All the leading strains. Thirty young cockerels and twenty-five pullets for sale. A 93-point bird at head of the flock. Eggs \$2 per setting of thirteen. S. McCullough, Ottawa, Franklin Co., Kas.

HIGH-CLASS POULTRY Barred Plymouth Rocks, Partridge Cochins, Brown Leghorns, White Leghorns, Buff Leghorns, Silver Spangled Hamburgs and White Guineas. Birds \$1 and up. Eggs in season \$1 per thirteen. Fine breeders and exhibition birds. How to make "Lice-Killer Paint," 50 cents, or free for a \$5 order for fowls. A. H. DUFF, Larned, Kansas.

### SWINE.

BERKSHIRES. H. B. COWLES, Topeka, Kas. I want to close out my spring boars this month.

BOURBON COUNTY HERD BERKSHIRES. J. S. Magers, Proprietor, Arcadia, Kas. Correspondence invited. Satisfaction guaranteed.

T. A. HUBBARD, Rome, Kansas, Breeder of POLAND-CHINAS and LARGE ENGLISH BERKSHIRES. Two hundred head. All ages. 25 boars and 45 sows ready for buyers.

BERKSHIRES. We offer choice selections from our grand herd, headed by a great imported boar. New blood for Kansas breeders. WM. B. SUTTON & SON, Russell, Kansas.

BLUE MOUND HERD BERKSHIRE SWINE. Herd boars Barkis 30040, Victor Hugo 41799. One hundred head. Young sows, boars and gilts for sale. Allen Thomas, Blue Mound, Linn Co., Kas.

WYNDAL FARM HERD. Registered Berkshires and B. P. Rock Chickens. Only the best stock for sale. Eggs in season. Correspondence solicited. M. S. KOHL, Farley, Sedgwick Co., Kansas.

SELECT HERD OF BERKSHIRES For ten years winners at leading fairs in competition with the best herds in the world. Visitors say: "Your hogs have such fine heads, good backs and hams, strong bone, and are so large and smooth." If you want a boar or pair of pigs, write. I ship from Topeka. G. W. Berry, Berryton, Shawnee Co., Kas.

LARGE ENGLISH BERKSHIRES. Twenty boars, fifty sows for sale. Largest herd of registered Berkshires in Kansas. The 1,025-pound boar Longfellow W. 33611 at head of herd who, with his get, won more first premiums at Kansas State fair this year than any boar of any breed. Five herds Berkshires competing, won six first and three second premiums. Prices reasonable. Write for what you want. Also breed HEREFORD CATTLE. C. A. STANNARD, HOPE, KAS.

Franklin County Herd Poland-Chinas. Twenty boars ready for service, also twenty sows for ready sale at prices to suit the times. Inspection and correspondence invited. E. T. Warner, Owner, Princeton, Kas.

### SWINE.

J. T. LAWTON (successor to John Kemp), NORTH TOPEKA, KAS., breeder of Improved Chester White swine, Youngstock for sale. Also Light Brahma fowls.

Standard Herd of Poland-Chinas Ideal U. S. by Ideal Black U. S., Tecumseh Chief by Tecumseh 2d, at head of herd. A choice lot of U. S. gilts bred to Tecumseh Chief for sale; also some good U. S. males. Call on or address WM. MAGUIRE, Haven, Kas.

PLEASANT VALLEY HERD REGISTERED POLAND-CHINASWINE Westphalia, Anderson Co., Kas. Breeder of high-class pedigree Poland-China swine. Herd headed by Guy Wilkes 3d 12131 C. Guy Wilkes is now for sale, also fifty choice April pigs. Write. E. A. BRICKER.

W. S. ATTEBURY, Rossville, Kansas, BREEDER OF Chester Whites Exclusively. Stock for sale. Visitors always welcome.

Kansas City Herd Poland-Chinas The future villa of Hadley Jr. 13314 O., the greatest boar of his age. I have pigs for sale now by Hadley out of Tecumseh Mortgage Lifter 32649 S. Order quick and orders will be booked as received. Farm nine miles south of Kansas City, on Ft. Scott & Memphis R. R. Postoffice Lenexa, Kas. W. P. GOODE, Proprietor, Lenexa, Kas.

TOWER HILL HERD Registered Poland-Chinas. 175 head, 30 brood sows. Herd boars are Black Stop 10550 S.; U. S. Butler 13388 S.; George Free Trade 21053 A., and a grandson of J. H. Sanders 27219 O. Young boars ready for service and bred gilts for sale. B. R. Adamson, Fort Scott, Kas.

Standard Herd of Poland-Chinas. L. NATION, Proprietor, Hutchinson, Kansas. The breeding herd consists of the best strains of blood, properly mated to secure individual excellence. Stock for sale. Visitors welcome. Correspondence invited.

LAWN RIDGE HERD Poland-Chinas. 130 head, all ages. 100 spring pigs, sired by Young Competition 15082 S., Kansas Chip 15083 S. and a grandson of J. H. Sanders. Write or come. J. E. Hoagland, Whiting, Jackson Co., Kas.

Mains' Herd Poland-Chinas Headed by the grand show and breeding hog, Moorish King, by De Bf 13897 O. and out of Moorish Maid 75628 O., assisted by McWilkes Jr. 35455 O. The sows represent all the leading strains and are heavily loaded with Corwin blood. Pigs by and sows bred to Moorish King for sale. Satisfaction guaranteed. James Mains, Oskaloosa, Jefferson Co., Kas.

Farmington Herd Poland-Chinas Twenty-five spring boars sired by Little Mo. 14922 S., by Mc. Wilkes 9242 S.; Trinidad 30057 A., and Chief Kankshika by Chief Tecumseh 2d 9115 S. All stock guaranteed as represented. D. A. KRAMER, Washington, Kas.

POLAND-CHINA SWINE. We offer a fine line of brood sows, bred or not, as wanted, at prices in keeping with the times. Our gilts are the get of Upright Wilkes and J. H. Sanders Jr. We will also sell a number of our herd sows; they are bred and registered. Some choice sows bred to Klever M. and some to Medium Pride. We will also sell Upright Wilkes or J. H. Sanders Jr. A rare opportunity to get excellent stock at low prices. J. R. KILLOUGH & SONS, Richmond, Franklin Co., Kansas.

Clover Leaf Herd Poland-Chinas. We Have the Best. Nothing Else. J. H. Sanders Jr. 14953 S. 35089 O. heads our herd. Three of his get sold for \$865; entire get at average over \$200; get during his term of service exclusive of public sale brought over \$2,700. Thirty-eight pigs getting ready to go out. Among our 14 brood sows are Black Queen U. S. Corwin 26301 S., Silver Bar U. S. 30584 S., Black Queen Hadley 1st 36374 S., Annie Black Stop 33631 S. and Ruby Rustler 4th 36355 S. Write, or, better, visit the herd. G. HORNADAY & CO., Fort Scott, Kas.

ROYAL HERD Poland-China Hogs and Barred Plymouth Rock Chickens. My stock took first premium at the State fair this fall. Have a good line of hogs and chicks for sale. WARD A. BAILEY, Wichita, Kansas.

### CATTLE.

IDLEWILD HERD SCOTCH SHORT-HORN CATTLE A choice lot of young bulls and heifers for sale. Also pedigree Poland-China swine. Geo. A. Watkins, Whiting, Jackson Co., Kas.

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 Winsome Duke 11th 115137 and Grand Duke of North Oaks 11th 115735 at head of the herd. Choice young bulls for sale now. Visitors welcome.

### SWINE.

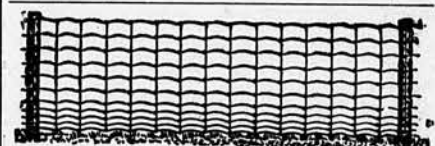
Thoroughbred Duroc-Jersey Hogs Registered stock. Send for 44-page catalogue, prices and history, containing much other useful information to young breeders. Will be sent on receipt of stamp and address. J. M. STONEBRAKER, Panola, Ill.

Duroc-Jersey March Boars Large size, heavy bone, good colors, highly bred, all registered, ready for service, shipped for inspection. You see them before you pay for them. Describe what you want and don't fail to get description and prices. J. D. STEVENSON, New Hampton, Harrison Co., Mo.

DIETRICH & SPAULDING, Richmond, Kansas. Home of the Poland-China Prize-Winners. Don't be too late. Only a few choice boars left but prices remain right. Some fancy gilts now safe in pig to the prize-winner, Silver Chief. Don't miss this chance—only a few gilts bred to Noxall Wilkes this season. Write us soon.

WILLIS E. GRESHAM, Quality Herd Poland-Chinas, HUTCHINSON, KAS. Seven prizes World's Fair. Three on litter under 6 months. More than any breeder west of Ohio. Ten prizes Kansas State, twelve Oklahoma State, and four out of six in Texas in 1896. More than any single breeder this season. Darkness F. 75222 and Darkness F. 3d 23508, Bessie Wilkes 36337, and the sensational sweepstakes and first class winner of 1896. Bessie U. S. (Vol. 11 S. R.), one of the best sows living to-day. Darkness Quality 14361, Guy Unfortunate 29295, Darkness Wilkes (Vol. 11 S. R.), first in class in Kansas and Oklahoma and in herd in three States. Some good ones for sale, both sexes. Write me. Willis E. GRESHAM, Hutchinson, Kas.

THOS. B. SHILLINGLAW, Real Estate and Rental Agency, 115 East Fifth St., Topeka, Kas. Established in 1884. Calls and correspondence invited.



Are You Insured? Strange that a man will insure his buildings against fire and lightning, which come so seldom and yet take chances on destruction of crops and other losses arising from inefficient fences. Page fence is a permanent investment and the interest on that is the cost for absolute safety. Write for proofs. PAGE WOVEN WIRE FENCE CO., Adrian, Mich.

NEW MULE AND HORSE MARKET. 23d and Grand Ave., Kansas City, Mo. We announce our entire removal to Twenty-third and Grand, where we will be found in future, ready to buy or sell mules and horses. SPARKS BROS. We will remove our entire horse and mule business to Twenty-third and Grand Ave., about October 10. Highest cash price paid for horses and mules. All car lines transfer to Westport line, which passes our door. COTTINGHAM BROS. Other Stables of equal or greater capacity ready soon.



## Agricultural Matters.

### A JAVANESE TEA PLANTATION.

By David G. Fairchild, (Excerpts from a Private Letter), in the *Industrialist*.

I have just come in from an excursion to one of the great tea plantations of Java. As the difficulties of travel here are great, every planter has become a sort of hotel-keeper—only no charges are made. I stayed in a plantation house four days, and I assure you it was a most novel experience.

America is noted for its large plantations; but I don't know of any culture of a perennial plant there which covers over 21,000 acres, or of a single farm of 35,000 acres, employing 1,500 men regularly, and from 1,000 to 2,000 women as tea-pickers. It is simply a stupendous plantation, and a walk through it is like an ocean voyage—the horizon is bounded by tea plants, and the rolling hillsides are covered with an even green color like immense billows. Words fail to describe the beauties of this mountain scenery or the charm of its climate after six months spent here at lower elevation. The farm is spread out on the saddle between two immense volcanoes, at an altitude of 1,600 feet. The morning temperature is about 60° to 70° F., and the rainfall is less than at the altitude of 800 feet. It is claimed that this higher altitude, from 1,000 to 2,000 feet, has the healthiest climate in the island; for it is neither too cold and cloudy nor too sunny and dry, but year in, year out, has a genuine May weather in the morning and June weather after dinner.

But I suppose your interest will center in questions of the management of such an immense estate. Where labor costs only 6 to 8 cents per day per man, it is not to be expected that much labor-saving machinery will be introduced; the driers and rollers and selectors, or graders, being essentially simple machines, though quite effective. There are two kinds or sorts of tea grown here—the China tea and Assam tea. The former is a small tree, when not pruned growing to twelve or fourteen feet, but when pruned, as for the plantation, scarcely two to two and a half feet high. It yields smaller quantities and an inferior quality of tea to the Assam tea plant, which is much larger when pruned, often three and a half to four feet high. The trees are pruned to make the plant form a broad, flat top, and a cross-section of a well-proportioned Assam tree would be almost an equilateral triangle. It is the young, tender shoots which arise from over this flat top which are picked and furnish the tea. In general, the young twig when picked has only three leaves unfolded. In certain special cases, a small portion of the twig is plucked. The plucking is done by girls and women exclusively. Children of eight years often show great proficiency in snipping off the twigs between thumb and forefinger.

At the drying factory, in the smooth gravel plot in front, long lines of girls and women with their packages of tea file in. They spread the tea out deftly on large, round bamboo mats in a thin layer to wilt in the strong sunlight. When the turgescence has disappeared from the leaves, they are poured into a hopper which feeds a narrow space between two horizontal metal plates in slow rotation in opposite directions. The principle of these rolling machines must have been taken from the simple, almost instinctive, movement of rolling any thin substance between the palms of the hands, for it produces the same result and resembles it most strikingly. As the tea falls from this roller, it is stacked in trays for an hour or two to "ferment," or as Dr. Van Romburg claims, to oxidize.

As there is no bacterium connected with the process, it is not admissible to use the term fermentation. This process produces, through an oxidation of one of the aetherial oils in the tea leaves, the aromatic compound which gives to the tea its aroma. This aromatic compound, or tea oil, has already been separated from the tea and ana-

lyzed, and will no doubt some day be produced synthetically.

Upon the length of time which the tea is allowed to oxidize, depends in a measure the quality of the tea, and the sooner the leaves can be dried after "fermentation" the better the quality of tea. The market value of tea, however, is quite another thing, and depends largely upon the percentage of tips in it. These tips are composed of the very youngest still unfolded leaves, and are much more thickly beset with gold brown hairs, giving them a beautiful glossy appearance. The so-called gold Peko (which brought such fabulous prices on the London market, and as every one supposes, these prices seem to have been made by those interested in Ceylon plantations) is made by selection from ordinary tea. A flannel cloth is pressed upon the dry tea and then lifted, when many of the very youngest of the tips, because covered with hairs, stick to it and may easily be shaken upon a separate tray.

The tea, after oxidation, is put at once through the drier, which resembles in appearance a threshing machine, and in principle is simply an oven with continually changing air current. A current of hot air, 200° centigrade, is conducted over a slowly moving sieve, on which the tea is spread out. After forty minutes passage twice through the machine, the tea is considered dry and is sorted by means of a slanted revolving drum with perforations of increasing size. A few minutes stay in the sunlight the following day to drive off any moisture gathered during sorting and cleaning by the women, and the tea is packed in lead-lined receivers, ready to be shipped in the well-known tea chests, which are also made on the place.

The tea plant reaches a very old age, of course, and one is often surprised to hear that this or that portion of the estate is fifty or sixty years old. The methods of culture are more those of a garden than of a farm, scrupulously clean, and well worked, all by hand, no plows or harrows or cultivators being used. The soil is a brick-red, and seems to be as mellow and easy of manipulation as that of a potting bench. Chemical manures are little used; in fact, the concurrence has been so slight as yet that this aid to the production of larger leaf surface has not been thoroughly exploited, and yet it would seem one of the most fertile fields for the investigation of the effect of nitrogenous fertilizers.

But of all the interesting things which strike the eye of a horticulturist must be the fact that every tree is a seedling. The look of heterogeneity presented by a tea field is very striking, especially to one accustomed to plantations of grafted nursery stock. The difficulties in the way of grafting and budding are not insurmountable, I am told, and I even saw one or two budded trees on the place. What a wide margin for improvement is left, should the tea market become glutted, is shown more clearly by this fact than by anything else connected with the business of tea manufacture. It would seem to me a most delightful task to produce by selection a variety of Assam tea, with leaves as large as a chestnut leaf and as thin and aromatic as the London fancier could wish. It is probable that I have not seen enough to realize the difficulties of the problem, but I believe such things are possible. Buttenzorg, Java, October 25, 1896.

### How to Make Farming in Kansas Pay.

[PRIZE ESSAY.]

EDITOR KANSAS FARMER:—I have turned my attention to trying to make farming pay in western Kansas, and have made it pay me more in one year under changed plans than it did in the four previous on the old plan, of which wheat-raising was the alpha and the omega. In the last year I have tried to give the cow, calf, pig and poultry as fair a chance as I gave the grain, and they have proven far less treacherous.

Now, to give you my plan that has paid me. I bought and traded for and managed to get a bunch of milch cows, about forty, of which some fifteen were giving milk. Selling this to the skim-

house brings me in an income of about an average of \$30 per month in cash. The skimmed milk is used to raise the calves (eight in number this year); the balance has kept a bunch of fifty hogs in good shape, not fat but thriving, while the proceeds enable me to pick up any bargains I may chance upon—gives me chance to buy grain to put me through a severe snap and plenty for living expenses. Am giving good care to a bunch of 100 hens, that, even in this non-egg-laying month, are paying their way, and in a month more will be making money. I have also irrigated a garden of one acre in all kinds of vegetables, one acre of artichokes—and let me say, right here, to some disgusted writer about them, who says the first year it was plenty of feed and plenty of exercise, but after that it was all exercise and nothing else, the trouble was that you should have taken more exercise in that patch yourself, in the way of furrowing it out and cultivating. Your crop was too thick and the ground too hard. I have a patch of ten acres of alfalfa which is valuable as hog grazing, thus reducing the expense of keeping a bunch of hogs to a minimum. Am wintering ten sows, which will bring pigs from March till May. I hope to raise thirty calves and milk as many cows the coming year.

Nor do I mean to give the impression that I have dropped grain-raising, but am only going on a scale that I can do myself. The cost of putting grain in is small, and all reasonable years I shall put out from 100 to 200 acres. I raised this year 850 bushels of grain, which helps the business very much.

But let the income be a little more than the outlay all the time, and the increase can then go to build up the place and it will always pay. No man ever lost anything in this country on a calf or pig that he raised himself, and the more closely the most economical ways of caring for them are studied the better it will pay. I will tell another scheme that has paid me, which is, cooking the feed for pigs. I have a wooden tank with a sheet-iron bottom over a pit out of doors, where I can, by cooking about five pails of ground grain (rye and barley mixed) in about three times the quantity of water, make more than a barrel of rich, thick slop; mixed with my skim-milk it makes a supper that will send forty shoats to bed full and happy, and plenty for breakfast.

WESTERN FARMER.

Leoti, Wichita Co., Kas.

### How We Succeeded on the Farm.

[PRIZE ESSAY.]

EDITOR KANSAS FARMER:—We grow corn, oats, potatoes, hay, millet, garden truck, horses, cattle, hogs, poultry, fruit, berries, etc.

Of course, we always put out a good-sized garden, for therein grows many dainties as well as dimes.

Corn, with us, is king and is principally fed to cattle and hogs, wherefrom comes the big money, while from the several other smaller incomes come the spending money, grocery bills, etc.

Cattle are usually fattened and sold, but sometimes sold as feeders. We keep a number of cows for milk, butter and calves, some to raise calves. We think it pays to keep cows to raise calves.

Hogs are raised on the farm and kept until ten months or a year old and sold to our shippers at the prevailing price. We grow two litters of pigs each year, spring and fall. Spring farrows are usually the best and pay the best. Poland-China is our choice of breeds.

Hay, mainly prairie, we cut in season, put in round stacks, and what is not fed to the horses is hauled, loose, and sold in our town. We feed but little hay to the cattle, their feed being corn and corn fodder, millet and straw. Hay is a cash article and there is always a market for it, and, managed as we do, quite an income is realized from that source.

Millet is grown each season for cattle feed only, and fed mainly in damp weather, when it is poor economy to feed corn fodder.

We have lost so many cattle in stalk fields that we have quit pasturing on stalks, except for horses. We find it pays to cut and shock the fodder, husk

## "Saved My Life"

### A VETERAN'S STORY.

"Several years ago, while in Fort Snelling, Minn., I caught a severe cold, attended with a terrible cough, that allowed me no rest day or night. The doctors after exhausting their remedies, pronounced my case hopeless, saying they could do no more for me. At this time a bottle of



### AYER'S

Cherry Pectoral was sent to me by a friend who urged me to take it, which I did, and soon after I was greatly relieved, and in a short time was completely cured. I have never had much of a cough since that time, and I firmly believe Ayer's Cherry Pectoral saved my life."—W. H. WARD, 8 Quimby Av., Lowell, Mass.

## AYER'S

### Cherry Pectoral

Highest Awards at World's Fair.

AYER'S PILLS cure Indigestion and Headache

the corn out and feed the fodder rather than take the risk of pasturing the stalk fields.

Horses we raise, all we need on the farm and occasionally one to sell, but there is but little money in them except for our own use. There is always sale for hogs or cattle, but not so with horses.

Oats are grown, but there is no big money in them, yet we sow them, as they are fine feed for horses and calves. The straw, if saved in good condition, is as good as hay for stock. Then oats are fine for rotating crops; can always fall plow the ground, which makes it fine for corn, besides it gets away with many weeds.

Of corn fodder, we cut enough each fall to feed the cattle during the winter, when the weather is suitable for feeding it; when not, we feed millet.

We keep a few milch cows for home use, milk and butter for family use and a few pounds of butter to exchange occasionally for groceries. We do not patronize the creamery, as we think fine, large calves pay better than selling the milk and stunting the calves.

Of course, we keep poultry, as it pays as well on the money invested as anything on the farm. We keep enough to produce all the flesh and eggs we wish to use in the family, besides a basket of nice, fresh eggs to carry to the grocery occasionally, and a dozen or more fowls to sell as time rolls along.

Our town, though small, is a good market place for fruit and berries. Our orchard affords us apples from the earliest to the latest varieties. After supplying the home the remainder are sold in our town market, bringing us some revenue not to be overlooked. Same with berries, grapes, cherries, etc.

We are not what might be termed potato-growers, but we plant so as to grow double the amount of both late and early varieties that we expect to consume in the family, thereby we usually have enough and to spare. Have not had to buy potatoes, only for a change of seed, during a residence of twenty-five years in the State.

The garden consists of onions, cabbage, tomatoes, beets, sweet potatoes, melons and all the other garden relishes. Of these we grow more than we intend to use in the family, and they, too, find a fair market in our town and bring in a small revenue.

We save and haul out all the manure onto the poorest spots of land, which pays well for the labor.

We fall plow all the land we can each year. It pays well for any spring crop.

Now, to sum up: Where I have used the word "we," I mean the family, six of us. We are not rich, but we have



gained financially each year, little by little, during a residence of twenty-five years in Jefferson county. We have not lived miserly, having had plenty to eat and respectable clothing, besides doing our share for church, Sunday school and benevolent affairs. It has been done each year, little by little, on butter, eggs, poultry, berries, garden truck, fruit, hay, oats, and largest and surest on hogs and cattle. M. M. M. Valley Falls, Jefferson Co., Kas., December 21, 1896.

## The Stock Interest.

### THOROUGHbred STOCK SALES.

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

JANUARY 20, 1897.—D. A. Kramer, Poland-Chinas, Washington, Kas.  
FEBRUARY 1, 1897.—Risk & Gabbert, Poland-Chinas, Weston, Mo.  
FEBRUARY 2, 1897.—B. R. Adamson, J. M. Turley and G. Hornaday & Co., Poland-China brood sows, Fort Scott, Kas.  
FEBRUARY 9, 1897.—Kirkpatrick & Son, Connor, Kas., W. P. Goode, Lenexa, Kas., Poland-Chinas.

### KEEP A FEW SHEEP.

EDITOR KANSAS FARMER:—The raising of certain crops on a large scale will always be practiced, and this is the reason why small farmers will have to intensify their farming. For years we have had the principle of rotation preached to us by the farm press, and it is right we should, but with this should go the keeping of a few sheep on the farm.

The principal point in rotation is the growing of clover, and there is no stock to which clover can be so successfully fed as to sheep, and with the rotation of clover must, of necessity, come sheep. With intensive farming sheep will play a very important part. They destroy a large per cent. of noxious weeds, and no matter what they are fed on, there is no part of their food but what is fully digested. With cattle, horses and hogs a large per cent. of corn and nutriment is lost in their excrement, but with sheep this never occurs.

Economy of space in shed room will be an important part in intensive farming, and this can be practiced best with sheep. Sheep are the neatest things to handle of all live stock, and thirteen sheep can be kept on the same feed as one large cow. Ever since feeding began in the fall, I have fed sixty-five sheep exactly the same as five Short-horn cows, and they are very fat. Sixty stalks of corn fodder with the ears left on, are fed to the sheep, and also to the cows, twice a day, and six big forkfuls of millet to each lot is fed twice a day. I might here mention that the millet fed was the millet raised in the potatoes, and I shall have enough to run me till February 1. It really seems as though some one had given it to me, and instead of having one mow in my barn empty on January 1, not a forkful has been used.

Thirteen sheep will net \$10 worth of wool on April 1, even at the present low prices, and \$20 should the tariff be returned on wool; and in addition to the wool the thirteen will raise twenty lambs that will easily bring \$70 by November. This gives \$80 profit on the feed that is fed to one cow, and should be a point in intensive farming.

Another important point is the sheep manure, which is very valuable to the farm. Sheep make splendid scavengers, and will clean up what is left in a garden or field and return valuable nutriment. There is scarcely anything that sheep will not eat and turn to the advantage of the intensive farmer.

It is not necessary to keep many; just a few will be of great value, and now is the time to buy them cheap, and they are so easily kept that I do not see how any farmer can afford to be without them. A common barbed wire fence of five wires, with posts ten feet apart, is sufficient to keep them, and almost any cow pasture has that kind of a fence. Most of the mutton breeds are celebrated for their reproductive qualities, almost always raising thirty lambs to every twenty ewes, and oftentimes forty. In addition to this, they produce a crop of wool that always finds a ready market at a time of year when the money is most needed. What other stock is there

that will always turn off a revenue by April 1 and, besides this, more than double their number? And again, sheep will produce both the above revenues when only one year old, instead of waiting three years, as we have to with a cow or mare. Then, one can always have fresh meat when needed, and of a very superior kind. For years I have kept sheep, and find them the best paying thing on the farm. By all means, let us keep a few sheep, and thus get into the band wagon with the most progressive and intensive farmers.

CLARENCE J. NORTON.  
Morantown, Kas.

### Relative Value of Roots.

A correspondent of the Iowa *Home-Steak* writes, asking what is the value of roots as compared with the grain foods in ordinary use? In making his winter plans, he says, he is thinking of including a supply of roots to feed with other feeds. No class of questions propounded to us is susceptible of a less satisfactory answer than those which involve the question of relative value. There is a theoretical method of determining relative values that is easy enough. It consists simply of assuming that the several nutritive elements, classified as albuminoids, carbohydrates and fat are each worth so much per pound. By taking the analyses of the various kinds of food and ascertaining how many pounds of each of these nutrients a given feedstuff contains, per hundred, it is easy enough to calculate its value. The difficulty about this, however, is that it is mere theory, and that the results obtained do not work out in practice. As is well known, theory that will not work out in practice may have a use somewhere, but practical men have no use for it. By this method it is commonly said that potatoes have a feeding value of 29 cents a hundred pounds, artichokes 24 cents, sugar beets 19 cents, carrots 18 cents, turnips 11 cents, and so on. But by the same method corn has a feeding value of \$1.11 per hundred pounds, so that to make the figures true in any sense this value would have to be assumed for corn, with similar values for other grain feeds. It is not possible to bring feedstuffs to a common standard. Any food fed as a single article of diet might have one feeding value, while if fed in combination with other articles might have an entirely different one. The actual nutrition contained in roots is not large as compared with their weight or bulk. This will be obvious when we consider that they are very largely composed of water. Over and beyond the value which they have as roots, however, they give, in the first place, variety, which is always an important element in feeding. They add relish, increasing the amount of feed that the animal can consume, digest and assimilate. They improve the health and vigor and render in some way more active the entire digestive tract. They give succulence, which is of special importance where milk production is involved, and which is important for feeding of all kinds except, perhaps, the final finish in the production of meats where strictly dry feeding for a couple of weeks gives firmness and reduces shrink. Roots are of very small account in and of themselves, but as part of almost any ration, except pasture grass, they have a very high value, much higher as a practical question than any chemical analysis will give them. The English mutton producer could not get along without them. They form a very large element and a very important one in the Scotch system of cattle feeding. Swine are the better for them, especially when the other feeds upon which they subsist will be principally corn. While we hesitate to put figures on the value of roots as compared with dry grain, simply because to do so would be almost certainly misleading, it is safe to say that they have a very high value as part of almost any ration, and within limits may be safely planned for with an assurance that to the feeder they will give as good returns for the time and labor spent in growing them as any other feed that can be grown on the farm.

### Insects Affecting Domestic Animals.

"Insects Affecting Domestic Animals: An account of the species of importance in North America, with mention of related forms occurring on other animals, by Herbert Osborn, Professor of Zoology and Entomology, Iowa Agricultural College, Ames, Iowa, (Bulletin No. 5, new series, Division of Entomology)," lately issued by the Department of Agriculture, discusses "particularly those insects which, by direct attack upon domesticated animals, render themselves an injurious element to the stock breeder, poultry-raiser, and keeper of various animals for pleasure or profit."

Each species is treated as fully as possible, its past history, extent of injury, habits, and life history being given, and, finally, methods of preventing or relieving its injuries are described.

In order to furnish a convenient key to the different species and enable the different forms occurring upon one animal to be seen together, a table has been arranged according to animals infested; and to offer some means of relief to those whose stock may be infested, a chapter is devoted exclusively to a discussion of remedial measures, methods of prevention, and notice of animals which have parasites in common.

This last chapter is to the practical stock breeder the main point on which information is desired, although it is most important for him to know the extent the insect can be injurious, the time and manner of its attack, and the animals it may affect.

To prevent is frequently much easier than to remedy, and if careful attention is given to the matter practical immunity for the herd may be secured from many of the pests enumerated in the bulletin. This is true of all pests incapable of flight, even if other herds in the neighborhood are infested, and especially is this true with internal parasites which are difficult to reach when lodged.

Remedial treatment is to be given in one of two forms, i. e., repellent or destructive, the first being by means of mechanical devices or repelling odors, the second by the use of substances fatal to the parasite.

The edition is limited to 1,000 copies, and it is not for general distribution by the Department of Agriculture; copies, however, can be secured from the Superintendent of Documents, Union Building, Washington, D. C., for 20 cents.

### Feeding Hogs for Quality of Meat.

The Indiana Experiment Station issues the following:

"An inquiry has recently come to the Indiana Experiment Station from one of our well-known swine breeders, Mr. I. N. Barker, relative to the most desirable food for preparing pigs for the market.

"The market to-day demands pork with a fair admixture of lean meat, such as cannot be produced as a rule by a pure corn diet. The best results will be secured by using two or more kinds of grain, and also skim-milk, if it can be obtained. The general run of feeding experiments in this country have shown that where corn meal and shorts were fed, the meat showed more lean than when corn was fed alone. At the Wisconsin Experiment Station, a mixture of 431 pounds corn meal and shorts, half and half, fed wet, produced 100 pounds of gain, as compared with 784 pounds whole corn or 517 pounds corn meal, to make 100 pounds gain.

"The shorts are muscle-forming foods, and where these are used, a more vigorous pig usually results. Ground barley or oats may also be fed with corn to great advantage. There are many farmers in Indiana who grow oats extensively, besides corn, who could feed them to stock hogs, with corn, to far greater profit than selling them at 13 cents per bushel.

"In a letter to this station, Mr. Barker says: 'My own experiments in feeding hogs to produce the best quality of meat, have been similar to those you speak of and those of Prof. W. A. Henry, only I did not feed as much meal or corn. I fed ground wheat and oats in equal parts, and not more than one-fourth corn. I also fed skim-milk and

# Merit

Is what gives Hood's Sarsaparilla its great popularity, increasing sales and wonderful cures. The combination, proportion and process in preparing Hood's Sarsaparilla are unknown to other medicines, and make it peculiar to itself. It acts directly and positively upon the blood, and as the blood reaches every nook and corner of the human system, all the nerves, muscles, bones and tissues come under the beneficent influence of

## Hood's Sarsaparilla

The One True Blood Purifier. All druggists. \$1.

Hood's Pills cure Liver Ills; easy to take, easy to operate. 25c.

ripe pumpkins in connection with these, and secured a much larger per cent. of lean meat than when fed exclusively on corn, and also a much stronger bone and a healthier hog, and of course better pork.

"The farmers of Indiana ought not to allow a pound of skim-milk to go to waste, from the creameries or farm dairies. It can be fed to great profit to growing pigs, for it will assist in rapid flesh development. Corn, shorts and skim-milk make a combination that will produce a high grade of pork. Or wheat may replace the shorts. These foods assist in producing flesh so rapidly as to enable the feeder to dispose of his pigs to advantage when young, yet of good weight. The market demand is now for light pigs. On December 3, at the stock yards at Indianapolis, light and medium pigs, weighing from 153 to 291 pounds as extremes, brought much better prices than heavier stock. At Chicago, late in November, 'assorted light' pigs were quoted at \$3.40 to \$3.45. 'Good to choice medium weights' at \$3.40 to \$3.50, and 'good to choice heavy' at \$3.25 to \$3.35.

"It is hoped that there is enough of suggestion in this communication to induce many of our feeders to use something other than pure corn as a food for their pigs."

### Foreign Stock Notes.

The London *Meat Traders' Journal* published a table of statistics showing from whence come the foreign live stock and fresh meat supplies for the United Kingdom. According to its figures for the first six months of 1896 the United States furnished 81.30 per cent. of the dressed beef and 75.10 per cent. of the live cattle. The *Journal* also observes: "It is an extraordinary fact that the Argentine Republic now ranks first among the contributing countries in the supply of live sheep, and second in respect of live cattle and frozen mutton."

The drought under which New South Wales languished in 1895, as measured by the official tables, may be said to have cost the colony 2,000,000 bushels of wheat, 18,000 horses, nearly 400,000 cattle of various kinds, more than 10,000,000 sheep and 5,000,000 lambs. If to these figures be added the natural increase which, under ordinary conditions, the flocks and herds and wheat lands of the colony would have known, the mischiefs of the drought take still more tragic dimensions.—*Butcher's Advocate*.

Every breeder, feeder or farmer would find it decidedly to his advantage, both from a business and social standpoint, to make a special effort to be in Topeka during the week of January 10-16, 1897, in attendance at the annual meetings of the Kansas Improved Stock Breeders' Association, the Kansas Swine Breeders' Association and the State Board of Agriculture. It will be a veritable farmers' congress, and it will pay any enterprising farmer to be present. The time and money expended will be wisely invested. All Kansas railroads offer an open rate of half fare for the entire week.

If you want to be on the safe side, stick to the old reliable, Dr. Bull's Cough Syrup. It is sold by dealers everywhere.



## Irrigation.

Conducted by HON. M. B. TOMBLIN, Goodland, Kas.

### HOW TO IRRIGATE

#### All the Arable Lands in the Arid West.

From a paper read before the Nebraska State Irrigation Association, 1896, by Eli Newsom.

Napoleon I., one day riding in advance of his army, came to a bridgeless river which it was necessary that his hosts should cross immediately on a forced march. "Tell me," said the great Emperor to his engineer, "the breadth of this stream." "Sire, I cannot," was his reply. "My scientific instruments are with the army and we are ten miles ahead of it." "Measure the width of the stream immediately." "Sire, be reasonable." "Ascertain at once the width of this river or you shall be deposed from your office." The engineer drew down the cap-piece of his helmet till the edge of it just touched the opposite bank; and then holding himself erect turned upon his heel and noticed where the cap-piece touched the bank on which he stood. He then paced the distance from his position to the latter point and turned to the Emperor, saying: "This is the breadth of the stream approximately," and he was promoted. Napoleon's engineer, after his instruments came up, no doubt made a more accurate measurement than he had done by his skillful expedient of common sense; but the new and exact determination of the distance must have proceeded upon precisely the same principle by which he had made his approximate calculation. Both the estimates would turn on the scientific certainty that the radii of a circle are equal. For things which are equal to the same are equal to each other. The most exact instruments ever invented would have behind them only that incontrovertible axiomatic self-evident truth. The engineer's final measurement of the river with scientific instruments was simply his pacing made exact. In the year 1875 it was my fortune (or misfortune) to make a settlement temporarily on the rich table land between the Platte and Republican rivers in your fair commonwealth, which led up to the knowledge that wells sunk on that mesa invariably struck sheet water in quicksand, and the amount of water furnished was measured by the quantity that would percolate through the sand, fed by a ceaseless sea. I further observed what was then to me a strange phenomenon, that at certain seasons of the year the Platte, to the north of us, flowed with a greater volume of water on the surface at North Platte than at Plattsmouth, and that the numerous springs putting into the valley of the Republican, to the south, were all found on the north side of the latter river. I and five other students had left the seminary and its instructors away back in Indiana, so I pulled down my cap-piece to my helmet, paced the radii and described an arc and then declared these waters to be connected in the vast substratum of quicksands forming a vast subterranean sea, the rivers or run-off waters corresponding to the gulf stream and ocean currents. Crude as was my pacing in 1875, I beg to state that subsequent geological surveys and the added crucial tests of experiment have but confirmed my original pacing. Later, my duties as sales and immigration agent for the great Atchison, Topeka & Santa Fe railroad, made it my duty to settle emigrants in the "Famous Mesilla valley" of New Mexico, a valley noted in the treaty of Guadalupe Hidalgo, the Gadden purchase, as being very fertile. But the Rio Del Bravo could not pay tribute to the repeated demands for water to irrigate the valleys and mesas along its 400 miles of length to its source in the mountains of Colorado and supply our growing needs, and its bed became dry and dusty a little earlier year by year. My conscience whispered, "give these people water." Imagine my humiliation to be compelled to answer, "I cannot." We could not wait for the now-exploded theory of increasing rainfall, as we

were too far in advance of the tide of emigration. So we grabbed at the time-honored pump and our American genius has almost, if not altogether, brought that valuable machine up to the perfection of its capacity. We can now not only pump water, but also about every substance that water can dissolve or penetrate. But the pump in its perfection demands some kind of mechanical force, and true to our duties, powers have been invented. Steam, air—hot and in motion—animal forces, electricity, gasoline and about all the forces in nature have given lavishly of their powers to run the pump, and today we find the pump too limited and too expensive, too uncertain and troublesome to practically serve the increasing demand of the practical irrigator. So the question arose, why continue to doctor the old pump, which, like sins and evil habits that are constantly bringing us into increased trouble when only patched up, and the thought akin to inspiration came.

Throw the old pump away and substitute nature's forces—gravity—which, like charity, never faileth. Possibly to some this may be, as it was to me, a revelation. Having conceived the principle, the next step was to set to work to ferret out a process, and so, sparing your patience as to detail of experiment following theory, after repeated failure, standing out alone with poverty on the one hand and the finger of scorn and ridicule on the other, and forsaking all that one holds dear, even with success in sight to one above the horizon and masses of doubt, a method has been evolved, dug up, which, if noted for anything, it is for its simplicity, ease of demonstration, plainness of comprehension and non-expensive operations. To a practiced engineer or practical irrigator it is like presenting a self-evident truth or proposition. Everybody can see it, and no one doubts its workings. Limitless is the vast sea under us, constant and certain as the laws of gravity, perpetual as the stars in their courses, and satisfying as the gospel of love. Having thus gone over the whole route, a careful engineer should correct back, and thus the first question to settle seemed to be the quantity of the underflow, and even now I find many to doubt its vastness and limitless extent. But I am happy to be able to state that thinkers and practical men who have drawn on this source of supply, and who still believe in the inconsiderable theory, are growing fewer as investigation and tests grow greater and experiment grows more general. In my searchings I found that Colonel Fountain, who gave up his valuable life in the cause of putting down lawlessness near the Mexican border a number of years ago, dug his milk-house in an arroyo south of the old town of Mesilla, in the valley of the Rio Grande, and discovered that any substance left floating on the water would float immediately across the house towards the down stream side. In repairing the head of the San Mag-nall acequia, the boards used in the excavation were pressed up and washed out by the moving water when the river bed was dusty. In digging a large well in the San Luis valley, on the upper Rio Grande, in Colorado, a Mr. Throckmorton informs me the chips that fell into the well from the curbing all went to the south or down stream side. In sinking a well on the college farm, near Las Cruces, N. M., the water was observed to flow from the direction of the Organ mountains towards the river, showing that the waters constituting the underflow do not all come from Colorado. At the State Soldiers' Home, at Fort Dodge, in the Arkansas valley, one point sunk far into the underflow furnished 700 gallons of water per minute. At Garden City, same valley, points were driven in the bottom of a twenty-foot well, and although the well was easily exhausted before, or rather pumped down (there is no such thing as exhausting a well in sheet water in any valley of the valleys out of the Rocky mountains), yet a test of a perfect pump, with two six-inch exhausts and a great force, showed the water to rise one inch in six minutes in the well

eighteen feet in diameter, and the pumps running under full force. At North Platte there are twenty-two points or Cook's strainers driven, some sixty-five, some eighty-five feet, and the water flows in every one of them within five or six feet of the surface of the ground when uncapped. I am told a well was built here at Lexington, 500 feet deep, and the hope was not realized of a flowing well, but as in all the valleys out from the mountain, the waters rose to first water, and, indeed, in most cases it rises a little above first water, owing to pressure, perhaps, of the regular incline of the earth's surface, which here is about seven feet to the mile, as I am informed. I might name instance after instance in the several valleys but let the above suffice to show that the underflow is vaster in quantity than any reliable hydraulic engineer has yet been willing to admit. From the above I submit that the several strata of water are connected. It is not true that "there is water all the way down," as far as any one has gone, because these valleys were all made by the alluvial washings from the mountains. At certain seasons a deposit of sand was made, then sediment impervious to water, but not an entire sheet throughout the valleys, else we could secure artesian wells, but the strata of sand, and hence sheet water, connected at various and uncertain points, indeed sometimes wells are driven and little or no strata of impervious substance is met for considerable distance after first water is struck, and the drillers declare their belief that there is water all the way down, while perhaps a short distance away another point encounters a hard impervious silt and water must be poured down into the well to facilitate the work of sinking. Again, when water is met it rises in the pipe to first water and flows at greater or less force or velocity, in proportion to the distance released before first water.

So there is practically no limit to the quantity of water that can be collected in a large well, sunk, say six to twenty feet below the surface of the first water struck, and this is true in all the valleys east and south of the Rocky mountains, where irrigation is needed; so, if we need more water, all that is necessary by my method is to drive points more or strainers and lay a larger conduit, and the connecting tubes being of various lengths and radiating in all directions, there positively is no limit to the quantity of water that may be obtained by this means. Again, were there a limit to the underflow, when once we use the water for irrigation, it sinks back to its home and again becomes an underflow to be brought up and used again, and yet again lower down in the valley. [This is only partially correct. A large part of the water used in irrigation is either transpired through the leaves of plants or evaporated from the soil. Some estimates place this at half the amount applied. It varies greatly. —EDITOR.] We use the water but do not consume it, and hence are free from the law of priority. Added to all the advantages of freedom of expensive and troublesome head-gates, ditches filled with silt and numerous other observable advantages, the greatest perhaps is, it is a peace-maker and harmony-producer among irrigators, who at the best are only human and need all possible sources of temptation to controversy and litigation removed.

Having given one method in this imperfect and crude manner, I shall not be so vain as to claim no other or better means can or will be invented; but having dumped the pump overboard and given the principle of gravity on an incline, which is essential and almost universal in the arid belt, I think possibly I have thus become the Elias Howe of the irrigation methods.

Many machines are better than the Howe sewing machine perhaps, but all must come to him for the eye in the point of the needle. But you say, this only applies to the valleys; what plans for the table or bench lands? I have shown that to water the valleys little or no water has been consumed, and I believe the danger lies in raising the water line by universal irrigation of the valleys until they become a swamp, as has been the experience in certain val-

## THE TREATMENT THAT CURES

How Dr. Copeland's Wonderful Medication Does Its Beneficent Work in Restoring Lost Hearing.

It is the simplicity of Dr. Copeland's treatment for deafness that seems so wonderful to the doctors, scores of whom still come long distances to investigate it, and to the people under treatment, as well. Such marvelous results as are accomplished by it naturally led to the supposition that there must be employed some remarkable mechanism, some tedious or painful process, some mysterious combination of drugs and instruments.

There is nothing of the sort.

Dr. Copeland's treatment is a discovery, not an invention.

No instruments are used. No catheter, no Politzer bag, no powerful spray apparatus. The ear is not touched by hand or tool. The patient breathes the treatment into his ears, and it is this fact that floors the investigators. The natural power of inspiration or in-breathing alone is the force, all the force, and just the force, that is required for the application of the discovery.

The discovery is based on nature's own laws. It is a secret wrested from nature. It is as simple as nature itself. And it is as majestic and impressive in its results as nature.

Mr. E. S. Triggs, engineer, Nineteenth and Bell streets, this city: "I have been a sufferer from catarrh of the head and throat for eight years—my throat was so bad that I could not swallow solid food. I began a course of treatment at the Copeland Institute, and improved from the very beginning. My throat is now well, I can swallow any food and am gaining rapidly in strength."

Mr. Jas. Powell, engineer, Sheffield, Mo.: "I have been getting deaf for four months—became so deaf that I could not hear common conversation. I read of Dr. Copeland's triumph over deafness, and applied at the institution for treatment. I gained from the first under the Copeland treatment. I now have my hearing back, and am free from those distracting noises in the head. I owe much to the wonderful skill which has cured me."

Mr. James Neeson, 808 Penn street: "I had severe headache, pain in the eyes, stopped-up nose and a dry throat. I coughed all day long, and felt miserable. At times I could not work. After taking a course of treatment with Drs. Copeland & Branaman, I am now enjoying good health. I have no pain, and am entirely free from the above mentioned symptoms of my disease. I consider the Copeland treatment a grand success."

Herman Peters, Fairdale, Kas.: "I am taking the Copeland treatment for catarrh and deafness. I have been treated by other physicians, but received no benefit. I can truthfully say that I'm improving under the treatment of the Copeland Specialists, and know that within a short time I will be perfectly well."

Mr. E. L. Phinicle, Eudora, Kas.: "I had a severe case of catarrh of the head and stomach of eight years standing. Since taking a course of treatment from Drs. Copeland & Branaman, I am entirely relieved of all my trouble. All symptoms of the disease have disappeared, and I am strong and well."

### DR. COPELAND'S BOOK FREE TO ALL.

On application at this office, or by writing for it, you may obtain Dr. Copeland's book, containing a description by Dr. Copeland of the Treatment That Cures, Dr. Copeland's Monograph on Deafness, Dr. Copeland's Monograph on Catarrh and Dr. Copeland's famous Symptom Questions describing disease in its different forms.

Our home treatment is just as effective as the office treatment. Write for Home Treatment Symptom Blank.

Dr. Copeland's Monograph on Deafness will be mailed on application to those directly interested in the curing of this condition.

## Copeland Medical Institute,

Rooms 204-205-206, New Altman Building, KANSAS CITY, MO.

DR. W. H. COPELAND, Consulting Physician.  
DR. G. M. BRANAMAN, Consulting Physician.

OFFICE HOURS:—9 a. m. to 12 m.; 2 to 5 p. m. Open Sundays, 9 a. m. to 2 p. m. Monday, Wednesday, Thursday and Saturday evenings, from 7 to 8.

leys in California and Utah, in valleys over-irrigated.

In such cases, as well as present conditions on the Platte, for instance, collect the water in large wells by my system, pipe it into a large open ditch or closed conduit, as means and conditions allow, and carry the same on to the mesas, just as the run-off waters are now conducted to these table lands, as at Garden City, Kas., (for example). So, by this method we not only bring the underflow to surface and provide against a possible and probable raising of the underflow water line, avoiding the turning of our valleys into swamps, but by a complete system of wells and conduits fed by radiating tubes, we also draw off the flood waters, a little here and there a little, until any of these streams, reaching hundreds of miles through an arid country, can be depleted, not only below the danger point by flood, but the flood waters carried on the table lands and deposited in small and safe individual reservoirs, the danger of other Johnstowns is averted and the filling up of the larger and dangerous reservoirs, where storm



waters have been caught, is all avoided, because I take all water originally from the underflow, which is free from silt, and thus avoid not only the fatigues of cleaning ditches, but the filling of reservoirs as well. As to expense, it is compared favorably with first cost of surface reservoirs, besides the breaking of dams as above Eddie, N. M., in 1895, costing millions.

And as Governor Ross states in his article in the *North American Review* for October, 1895, which all students of the science of irrigation, who have not, should read, he avers that all reservoirs not only fill up with sand and silt, but sooner or later break and devastate life and property below them.

#### Kramer's Brood Sow Sale, January 22.

Among the progressive swine breeders in Kansas that are keeping well to the front in fashionable Poland-Chinas, is Mr. D. A. Kramer, of Washington, whose announcement appears elsewhere in this issue, concerning his coming sale of brood sows. The visitor at the farm finds a herd whose individuality and breeding ought to be better known by the breeders of the West. The harem masters, Little Mc. 14492 S. by the noted McWilkes 9242 and out of Betsy A. 2d 32162 S., is one of the choicest sons of his sire. He is above medium size, with a fancy head and ear, extra heavy bone and up on the best of feet. From observations taken by the writer during the year over the State, but few if any sires beget finer finished sons than does Little Mc. His coadjutor, Beauty's Chief 17783 S., is one of the best sons of the noted Chief I Know 11992 S., that won all in the field at four State fairs in 1895, and a half interest in him sold for an even \$1,000. His dam, Black Beauty 5484 S., is a granddaughter of King Butler 620 S. The gilts by Little Mc. that are among the offerings have been nicked with this royally-bred young fellow, and if the reader will consult the sale catalogue he will be able to see the combination of blood that is sure to result in something more than ordinary. Among the aged brooders that are catalogued are Daisy Rounds S. 32501 and Two Spot 32439 S. The produce of the former shows her to be an extra fine breeder, and the latter is equally as good. Both are safe in pig by Little Mc. Among the bred gilts are two granddaughters of Chief Tecumseh 2d 9115 S., that ought to go to some appreciative breeder. They are good enough, both individually and in breeding, to send in bids by wire or mail. If something both fancy and high-toned is wanted, then the two February gilts by Seldom Corwin 18184 S. and out of Betsy A. 2d 32162 S. and bred to Beauty's Chief ought to catch the eye of the prospective buyer. For further particulars consult the announcement and send for catalogue.

#### Publishers' Paragraphs.

The *Swine Breeders' Journal*, of Indianapolis, Ind., and the *KANSAS FARMER*, both one year for only \$1.40.

Remember that you can get the *KANSAS FARMER* and the *Kansas City Daily Star*, both for one year, for \$4, or the *KANSAS FARMER* and the *Kansas City Weekly Star* both for one year, for \$1.20.

The Midland Supply and Purchase Co., of Kansas City, Kas., advertises in the *FARMER* this week to furnish supplies of all kinds for the farm, shop or home and save money for the purchasers. This concern means business and is well known as trustworthy, and all orders sent it for anything will receive prompt and careful attention.

The knowledge, how to make a profitable as well as beautiful garden, would be a valuable acquisition to any farmer or farmer's wife. The excellent magazine called *American Gardening* will impart the desired information. Send to *KANSAS FARMER* \$1.15 and it will pay one year's subscription to *KANSAS FARMER* and *American Gardening*.

There are several methods of using commercial fertilizers for strawberries. Probably one of the best was used by J. G. Harrison & Sons, of Berlin, Md., the past season, a mixture of fifteen tons to a thirty-acre field of spring-set plants, broadcast at two applications, two tons potash, one and a half tons nitrate soda, seven and a half tons rock and four tons of tundra, which gives them ten millions of fine plants to offer to their trade. The land was fresh cleared, some never in any other crop before. There are over sixty varieties, foliage green and healthy and well rooted.

**CALENDARS AND COUPONS.**—So many beautiful calendars and entertaining novelties have been issued by the proprietors of Hood's Sarsaparilla, that we are hardly surprised to receive this season not only one of the very prettiest designs in calendars, but with it coupons which entitle the recipient to attractive novelties. Every one who gets a Hood's Sarsaparilla calendar for 1897 secures something that will prove interesting and valuable as well as a beautiful specimen of the lithographer's art.

The calendar is accompanied this season by an amusing little book on "The Weather." Ask your Druggist for Hood's Coupon Calendar, or send 6 cents in stamps for one to C. I. Hood & Co., Lowell, Mass.

**A VERY POPULAR CALENDAR.**—Few people in these busy days are willing to live without a calendar to mark the passing of time. This fact, no doubt, accounts for the calendars of all kinds, colors, shapes and sizes which flood the mails at this season. Among them all the one that best suits us is that issued by N. W. Ayer & Son, the "Keeping Everlastingly At It" newspaper advertising agents of Philadelphia. We have just received our new copy and are fixed for 1897. It is not difficult to see why this calendar is so great a favorite. The figures on it are large enough to be read across a room; its handsome appearance makes it worthy of a place in the best furnished office or library, while it is business-like all the way through. The publishers state that the demand for this calendar has always exceeded the supply. This led them years ago to place upon it a nominal price—25 cents, on receipt of which it is sent, postpaid and securely packed, to any address.

#### Gossip About Stock.

"Dairying for Profit, or the Poor Man's Cow," is practical, was written by a woman who knows what she is talking about, and is cheap—only 10 cents for a 25-cent book, to subscribers for the *KANSAS FARMER*. Send to this office.

A loss of 37 per cent. of the number of hogs in the country through cholera alone, this year, makes the coming crop of pigs that much more valuable, hence farmers as a rule will want to save every pig they possibly can this season. J. N. Reimers, of Davenport, Iowa, will send free to all who write him (naming this paper) many pointers about raising pigs. See his advertisement on page 12 in this issue.

T. A. Hubbard, proprietor of Rome Park stock farm, Rome, Kas., authorizes us to state that during the month of December he will sell thoroughbred Poland-China and Large English Berkshires as follows: One-half cash and a good bankable note drawing 10 per cent. for one year for the balance. The hogs are extra quality. Males, either breed, \$25; gilts bred, \$25. Send orders at once and get the benefit of this special offer.

The sale of Berkshires and Poland-Chinas by Geo. W. Berry, Berryton, Kas., January 14, consists of twenty head of each breed. The Poland-Chinas include daughters and granddaughters of Hadley Jr., Chief I Know, Chief Tecumseh 2d and other noted Poland-China sires. The early spring gilts, as well as five choice yearlings, will be sold bred to such choice boars as Victor E. Jr. and Hadley U. S. The Berkshire division will include a number of selected sows and gilts bred to Majestic Lad, Onward Jr. and the imported boar, Simple Lad; also, the fine eight-months-old boar, Onward Jr., by Longfellow's Model, and several young boars of both breeds will be sold. Particulars will be given next week. See advertisement in another column.

I heartily recommend Salvation Oil for neuralgia, for it acts like a charm. J. S. McCauley, 538 N. Gay street, Balto., Md.

#### 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.

#### Unequaled Service

Denver to Chicago via Kansas City is given via the UNION PACIFIC and Chicago & Alton railways.

Through Pullman Sleepers, Pullman Dining Cars and Free Reclining Chair Cars leave Denver daily. The Union Pacific is the great through car line of the West. Ask your nearest ticket agent for tickets via this line.

E. L. LOMAX,  
Gen. Pass. and Ticket Agent,  
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.

Young men or old should not fail to read Thos. Slater's advertisement on page 15.

#### Short-horns Are Valuable.

Why Short-horn cattle are valuable is accounted for by the *Butchers' Advocate*, for the following reasons:

"It is not because, intrinsically, the beef of a Short-horn is better than the beef of any other cattle, nor yet because, taking one year with another, animals of this breed have triumphed at the fat stock shows, but because of the great advantage in producing cattle for the butcher of a cross of early maturity cattle, which gives additional value to the ordinary commercial stock of the country. These are truisms, but truisms which bear repetition, because there is a wonderful tendency in human nature to allow the effect to stand alone and to forget its causes. The ultimate court of appeal in the cattle trade is the butcher, and it is because Short-horns pre-eminently assist in making good butcher's cattle that this particular class are in such spirited demand. No cattle breeder worthy of the name can afford to ignore the state of the beef market. If there is a good demand for beef there will be a good demand for cattle of all kinds, and vice versa."

#### Camel's Milk.

The average composition of camel's milk is said to be: Fat, 2.5; casein and albumen, 3.6; milk sugar, 5, and "salts" 0.65 per cent. This places the camel's milk in the first rank as a substitute for human milk. Aside from its composition, it possesses a further advantage over cow's milk of yielding a flocculent curd, similar to human milk, favorable to digestion. Camel's milk is white, sweet in taste and odor, clean and agreeable.

#### Important to Breeders.

Every one interested in improved stock should have the *Breeder's Gazette*, of Chicago, as well as the *KANSAS FARMER*, which we furnish for the price of one—both papers one year for only (\$2) two dollars; or we will supply the *National Stockman and Farmer*, of Pittsburgh, Pa. (the best general farm and stock journal in this country, price \$1.50), and the *FARMER*, for \$1.50. Send for sample copies to the papers direct, and save money and get a big benefit by sending your subscription to *KANSAS FARMER*, Topeka, Kas. No progressive farmer or breeder can afford at this low price to be without this great trio of farm magazines.

#### Did You Ever See an Indian?

Expect not, so send a 2-cent stamp to the General Passenger Agent Colorado Midland Railroad, Denver, and he will send you a fine colored picture of one.

#### Ho! for Cripple Creek.

Remember that the Chicago, Rock Island & Pacific is the only line running directly from the East to Colorado Springs, the natural gateway to the Cripple Creek District. Colorado Springs lies at the foot of Pike's Peak at its eastern base, and Cripple Creek is part way down the southwest slope of Pike's Peak and near its western base.

Two all rail routes from Colorado Springs are offered you. One by the Midland railway up Ute Pass, via Summit, to Cripple Creek. Another over the Denver & Rio Grande, via Pueblo and Florence, to Cripple Creek. Take the great Rock Island Route to this wonderful gold mining camp. Maps, folders and rates on application. Address

JNO. SEBASTIAN, Gen'l. Pass. Ag't.,  
Chicago.

## DO YOU WANT TO MAKE MONEY? —THEN BUY— CRIPPLE CREEK STOCKS

NOW! and take advantage of coming advance in prices.

#### Bull Hill Gold Tunnel Stock

We are recommending, and have a limited amount of *TREASURY* stock, full paid and non-assessable, that we can sell at 3 cents a share.

This Tunnel site runs under the famous Bull Hill and cuts many valuable veins. Eight hundred feet of work already done.

Prospectus, map, etc., furnished if desired. Send orders to

THE MECHEM INVESTMENT CO.,  
Colorado Springs, Colo.



It isn't fair to start a baby out in life loaded down with the chains and manacles of ill-health. A baby ought to have an even chance any way.

A mother can do a great deal to give her baby a fair start. She can almost always give him a strong, healthy constitution, by taking proper care and building up her health during the time when baby is expected. Dr. Pierce's Favorite Prescription has done wonders for expectant mothers and their babies. It gives health and strength to the mother at the time she needs it most. It purifies the whole system; gives endurance and elasticity to the special organs of maternity, and healthful tone to the nerves. It makes confinement shorter and easier; protects the mother from prostrating relapse and promotes a good supply of healthy nourishment for the child.

It is the only medicine that does all this. It is the only medicine for women devised by a regularly graduated, skilled and experienced physician. Dr. Pierce's medicines are standard remedies all over the world.

W. R. Malcolm, of Knobel, Clay Co., Ark., writes: "Since I wrote you we have had a baby girl born to us. My wife took your 'Favorite Prescription' all during pregnancy until confinement, and she had no trouble to mention at confinement. A stouter, heartier child was never born. She will be one year of age the 8th inst. and she has not been sick a day. Has not had so much as the colic. And my wife had not so much as fever two or three days after the child was born, although the attending physician told us she would have fever about such a time. Our neighbors remarked to me that they thought my wife the stoutest little woman they ever knew. We think our good health due to the use of your family medicines, and of course so told our neighbors. If I believe in anything as I do in your medicines, I like to recommend them."

## THE STRAY LIST.

### FOR WEEK ENDING DEC'R 17, 1896.

Cherokee county—T. W. Thomason, clerk.  
MARE—Taken up by C. N. Shigley, in Shawnee tp., November 21, 1896, one light bay mare, fifteen hands high, wire cut on right hind leg, weight about 850 pounds; valued at \$15.

Chase county—M. C. Newton, clerk.  
STEER—Taken up by M. G. Gerner, in Diamond Creek tp. (P. O. Strong City), November 10, 1896, one yearling steer; no marks or brands.

Coffey county—T. N. Bell, clerk.  
STEER—Taken up by T. F. VanArsdale, in Pleasant tp., one red and white steer, grown, no horns, branded I or (1) on left hip, weight 1,100 pounds; valued at \$20.

Norton county—D. W. Grant, clerk.  
STEER—Taken up by Henry Shoaf, in Model tp., October 15, 1896, on red yearling steer, dehorned, small white spots on sides; valued at \$12.

Greenwood county—J. F. Hoffman, clerk.  
MULE—Taken up by John Webb (P. O. Twinfalls), November 19, 1896, one brown horse mule, 2 years old, silt in right ear, no brands; valued at \$25.  
MULE—By same, one black mare mule, 2 years old, no marks or brands; valued at \$25.

### FOR WEEK ENDING DEC'R 24, 1896.

Allen county—James Wakefield, clerk.  
CALF—Taken up by J. H. Wood, in Elmore tp., one red muley steer calf, about 6 months old, no marks or brands; valued at \$10.

Wabunsee county—J. R. Henderson, clerk.  
TWO COLTS—Taken up by C. N. Fair (P. O. Alma), November 23, 1896, two colts, supposed to be 3 years old—one dark bay horse colt, white spot in forehead, no other marks or brands; one bay mare colt, no marks or brands; valued at \$12 each.

Linn county—William H. Ward, clerk.  
COW—Taken up by William Barker, in Potosi tp., November 11, 1896, one red cow with crumpled horns, switch off tail, silt in right ear, weight about 1,000 pounds, will drop calf soon; valued at \$18.

### FOR WEEK ENDING DEC'R 31, 1896.

Chase county—M. C. Newton, clerk.  
STEER—Taken up by Peter Lind, in Toledo tp. (P. O. Toledo), November 3, 1896, one two-year-old steer.

McPherson county—C. M. Gray, clerk.  
STEER—Taken up by A. Forsberg, in Gypsum Creek tp. (P. O. Roxbury), one large light red steer, 4 years old, large white star in forehead, weight about 1,100 pounds; valued at \$25.

Greenwood county—J. F. Hoffman, clerk.  
STEER—Taken up by T. S. Haight, in Janesville tp. (P. O. Hamilton), November 27, 1896, one red steer, heart-shaped brand on right side; valued at \$25.  
STEER—By same, one red steer, heart-shaped brand on right side; valued at \$25.  
STEER—By same, one red steer, branded ON on left side and NO on right side; valued at \$25.  
STEER—By same, one red steer, branded O O on right side, dehorned; valued at \$25.

Allen county—James Wakefield, clerk.  
TWO MULES—Taken up by J. W. Wolf, in Elm tp., two young black mare mules; valued at \$15 each.  
MULE—By same, one young brown mule; valued at \$15.  
HORSE—By same, one sorrel horse; valued at \$5.  
MARE—By same, one bay mare; valued at \$2.50.

#### Union Pacific Route.

What you want is the through car service offered between Denver and Chicago via the Union Pacific and Chicago & Alton railroads, which is unexcelled by any other line. Magnificent Pullman sleepers, dining cars and chair cars, run through daily without change, Denver to Chicago via Kansas City.



## The Home Circle.

### SAMBO'S NEW YEAR SERMON.

BY I. EDGAR JONES.

On New Yeah's day resolbe straightway to minimize yo' ills,  
Wiv sanitary common sense reduce yo' doctah's bills.

Sweah off from clogging greediness, wiv gluttony an' such,  
Fo' one who starbs hisself to def ten die who eat too much.

Doant capah like a mooley cow on ruin's dizzy brink,  
Keep way back f'om de precipice respect-fully an' think.

Resolbe dat yo will not flare up in wild extremes ob dress,  
Take middle groun' atween a ton an' none at all, or less.

Doant soak yo' clay too labishly wiv red-eye, gin or rum,  
Dey'll switch yo' off down grade right quick to wha' no good folks come.



SAMBO DELIVERING HIS SERMON.

Doant oberdo y' wuks an' ways, f'om cycling to a walk,  
An' nebah weah yo' wisdom thin by eberlastin' talk.

Doant be a scandalmongah mean—a cawin' carrion crow—  
Inventin' odorous abuse in word-bombs packed wiv woe.

Doant be a narrow-gauge false saint wiv no thought but ob creeds,  
Let out de tucks sewed in yo' soul, expandin' yo' good deeds.

Be faithful to yo' chosen chu'ch, but widen out yo' glance,  
See noble motives eberywha' an' gib all souls a chance.

Dispute yo' politics an' points wiv tempah all serene,  
An' nebah in fair abgument explode an' make a scene.

In sho't, resolbe to gib yo' soul a balance-wheel an' guide,  
An' nebah let it run slam-bang wiv throttle valve too wide.

Resolbe to be symmetrical upon de broad-gauge plan  
Which wiv uncommon common-sense rounds out de noble man.

Be hones' upright, squah-toed, true, to right good things inclined,  
Instead ob a lop-sided soul by ebil undermined.

Doant covet watahmillyuns, hens, or slip in thievish ways,  
Yo' chickens may come home to roost in melon-colic days.

Doant gib yo' pennies to de chu'ch, yo' dollahs playin' craps;  
Or make yo' sins all wide-awake, yo' 'ligion ob cat-naps.

An' when yo' sweah off on New Yeah stick bravely to yo' word,  
Instead ob floppin' like a flea, or playin' mockin' bird.

Be hones' in you' life an' lub, no hones' gal deceive,  
A flirt am like a coward wiv a daggah up his sleeve.

No grumbiah, growlah, chronic-crank or insect wiv a sting,  
But wiv de sunshine in yo' soul soah high on happy wing.

So shall yo trabel heabenwahd by de best an' lib yo' pledges to renew on many a New Yeah's day.

De quatet now will sing de hymn: "We know whar we am at,"  
While Deekin Bunette locks de doahs an' passes roun' de hat.

#### One Who Succeeded.

He gave up whisky and tobacco,  
Vowed from vice to be exempt,  
And he kept his resolutions,  
For he died in the attempt.

—Truth.

#### Lots Better.

New Year's reformers some assall  
Because so many of them fall.  
'Tis better to "sweah off" and fall  
Than never to swear off at all.

—L. A. W. Bulletin.

THE GENUINE "BROWN'S BRONCHIAL TROCHES" are sold only in boxes. They are wonderfully effective for Coughs and Throat Troubles.

## BEHIND IRON DOORS.

BY WALT MASON.

Hugh Morse looked gloomily through the window of his apartment and found nothing in the view to cheer or encourage him; a high board fence 50 feet away marked the boundary; inside the fence two or three men labored dismally at a pile of stone, with chains on their ankles, while a man in uniform sat on a bowlder and stormed at them with threats and curses. Hugh had stood for hours at that window, looking at the same scene; the men were not always the same, but there was always the swearing official on the bowlder, and the high board fence, and the pile of rock, and the manacled ankles.

When he looked from the barred window, it was to envy the men with chains on their ankles, who were permitted to follow the exhilarating work of breaking rock; and also to escape the gaze of curious country people, who came to the jail every day to see the murderer, as they would go to the circus to see the sacred elephant of Siam or the horned rhinoceros of Africa.

The evening was closing in, and Hugh sat in his broken chair and counted the hours that must pass before his trial; he had counted the hours, and was reducing them to minutes, when the wicket in the door was opened, and the deputy sheriff presented his face at the aperture, saying:

"There's a gentleman here wants to see you. You may come into the corridor."

The door was opened and Hugh stepped into the dingy corridor, where a stranger greeted him politely; the stranger was small and pale, with cold blue eyes, and was attired in black, like a respectable undertaker in the course of his duty.

"My name," said the stranger, "is John Pauley; I am a detective; I have been engaged by a friend of yours, who wishes to remain unknown, to work in your behalf. Your trial is set for the 2d of January, and this is the 10th of December, so I have but little time; tell me all that you can, so that I may begin work intelligently."

"There is but little to tell," replied Hugh, despondently; "and that little seems to be all against me, although I am as innocent as a child. I was employed in Mr. Wilkie's store, and had been there for four years. Although a thoroughly honest man, he was very avaricious, and had an uncertain temper. He had promised me, again and again, an increase of salary, but the increase never came. On the night of the murder Mr. Wilkie worked in his office late, and, as we were alone, I took advantage of the opportunity to ask him when I might expect the promised increase; I told him that I was preparing to be married, and urged upon him the fact that I had served him faithfully for years, at very low wages; he lost his temper and abused me so scandalously that I in turn became angry, and we had a quarrel. It is very possible that our voices were heard on the street outside. I gave him my resignation, and retired to the little room at the back of the store, where I had slept every night during my employment in the store; I went to bed and slept until daylight. When I went to the office, I found Mr. Wilkie sitting at his desk, dead; he had been stabbed with my knife, which I had laid on the desk during our quarrel. I heard no sound during the night. When I ran out to give the alarm, I noticed that the front door was not locked, although I am sure I locked it before my interview with Mr. Wilkie. That is all that I know about the murder."

Mr. Pauley proceeded from the jail to a cottage in the suburbs of the town; there he was eagerly welcomed by a young woman who, although pale and with lines of care on her brow, suggesting that trouble was no stranger to her, was still a beauty; with feverish impatience she motioned the detective to a seat, and calmly he adjusted himself in his chair and glanced around the room, as though to inspect the furniture before proceeding. An old man was nodding in a chair before the stove; an old lady was nodding in a chair behind the stove, with a pious book in her lap. "Your father and mother?" queried Mr. Pauley.

## Scott's Emulsion

is Cod-liver Oil without the fish-fat taste.

You get all the virtue of the oil. You skip nothing but the taste.

50c. and \$1.00 at all druggists.

"No; my uncle and aunt; now do tell me all; have you seen him?"

"I have seen him. Miss Simmons, it is a tough case; it will take a great deal of work to prove anything to his advantage, and my work is expensive. Do you want me to go ahead?"

"Certainly; the little money I have is my own, and every cent of it is at your command. Money! I would give my life to save Hugh, as he would for me."

"How much money have you?"

"Five hundred dollars."

"I'm afraid I'll need it all. Now, I'll say something for your comfort; that young man is no murderer; he wouldn't kill a sheep, and I'll have him out of jail by the 1st of January. Somebody killed Wilkie. Hugh Morse didn't do it. Therefore, the man who did do it must be found. I am the man to find him. But I won't find him sitting here, so I'll say good-day, Miss Simmons."

After delivering these sentences in a jerky fashion, the detective prepared



"THIS BELONGED TO MY BROTHE..."

for his departure. He buttoned his black coat up to his chin and pulled down the brim of his hat; for the evening was growing cold, and a wild north wind rattled the window panes.

"You have no overcoat with you?" said Miss Simmons; "you must not go into the storm without one."

She hurried away to the closet, and returned with an old-fashioned heavy ulster. "This belongs to my brother," she said; "he is away now; you may use it as long as you please." As she handed it to Pauley, a strange smile played around his lips, his hard eyes seemed to soften; when he departed, he was more courteous than usual, and he muttered to himself, as he walked into the storm:

"For once John Pauley has experienced the novelty of being treated like a Christian. It's a caution how such treatment will thaw a man out!"

It is impossible to follow the movements of Mr. Pauley, during the next two weeks, in detail; he was a very busy man; sometimes he appeared soothed and sustained by an unflinching trust, as though he were nearing the goal, and again he appeared discouraged and perplexed.

On the night before New Years he arrived at the cottage rather late. Although calm, there was enthusiasm in his eyes and cordiality in his voice, as he said:

"Miss Simmons, the task is nearly accomplished. To-morrow I shall place the murderer in the hands of the authorities, and you may go to the jail

and get your lover. Now, be calm, and I'll give you a brief outline of the story. I soon found that there was nobody in this town who had a motive for killing Wilkie, and there was no robbery done. It was very possible that Wilkie had made enemies, though, for he was miserly and tyrannical. So I hunted up his past; it was not very hard to do, for he was one of those foolish people who keep a diary. In an old trunk I found a dozen volumes of his journal. I struggled through hundreds of pages of personal reflections and turgid weariness, and found at last what I wanted. In his younger days Wilkie was a sea captain, and a very cruel one, I have no doubt. One day, years ago, when his ship was on the Pacific ocean, he gave an order to an Italian sailor. It wasn't obeyed with proper alacrity, and he knocked the sailor down. The sailor made a threat, and was treated to the rope's end. Now, Miss Simmons, the Italians, or some of them, are vengeful in the extreme; they can carry a grudge for a lifetime, and leave it as a legacy to their children. I made inquiries. Sure enough, on the day preceding the murder of Wilkie, a swarthy man with a hand-organ and a monkey came into the town, to the great amusement of the children. I have no doubt that the swarthy man was knocked down on the deck of a ship in the Pacific ocean once upon a time.

"Singularly enough, after leaving the town, this swarthy man fell down an embankment a few miles in the country, and broke his leg; and he was carried to a hut in the woods, where an old bachelor lives, and there he has been lying ever since, and the children play truant to go there and feed the monkey. He is able to walk now, and might go away unexpectedly, were it not for the fact that I have made the old bachelor a deputy of mine; and he watches the swarthy man, and will keep him there until to-morrow, when I'll go after him, and release your lover from jail. I might have had him here before, but there is some romance in me, and I wanted the climax to occur on New Year's day."

The detective was almost merry as he concluded; but when Miss Simmons begged him to defer the release of Hugh Morse no longer—not an hour—he grew somber, and talked in a disconnected way of overcoats.

The morning of New Year's day was so peculiar that old men and sages who were reputed weatherwise, shook their heads ominously, and predicted that the day would be one to be remembered. Not a bough stirred in the heavy air; the clouds were low, and moved slowly to the north; there was audible a gentle hum, as of the noise of a brook in the distance, and no man could tell what gave rise to it. But these things did not disturb Mr. Pauley, as he

## ICUREFITS

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

Prof. W. H. PEEKE, F. D., 4 Cedar St., New York

SPRAINS AND PAINS St. Jacobs Oil the foil. Use it and promptly feel the cure. That's all, but that is something sure.



moved actively along the highway on his triumphal errand. He started at daylight on foot; he had arranged for a horse and wagon for the return journey. At eight o'clock he reached the hut in the woods and entered it. An old man with a gray beard was lying on a cot, breathing heavily and asleep. Pauley shook him roughly, and cried: "Where's the Italian?"

The old man started from his cot and looked wildly around. "Gone! gone!" he cried. "He was here with his monkey when I went to sleep; he gave me something to make me sleep, for I was sick, and I trusted him."

Pauley raised his hand, as though to strike him.

The ground was damp under the trees, and Pauley soon found the track of the fugitive; he moved along like a hound on the scent. And now the gentle hum



HE EMPTIED HIS REVOLVER.

had died away and the clouds no longer moved, but a great mass of gray hung overhead and large flakes of snow began to fall; they thickened rapidly, and soon John Pauley found that a fleecy blanket was spread all about him, and under him and over him; and the wind arose suddenly with a shriek, and the snow in blinding masses was flung into his face; he could no longer see his hand when he held it before him, and the truth came home to him that he was lost on the prairie in a western blizzard.

He stumbled against a tree that grew upright for a couple of feet and then bent at an angle; he placed his back to it and determined that the hut which he had left half an hour before was straight ahead; he tried to reach it; stumbling, falling, creeping and struggling, he progressed painfully for hours, as it seemed to him, and then, with outstretched hand, he felt something hard before him. "The hut, at last!" he cried, but it was the tree he had left so long ago. He stumbled on again, this time at random; he was growing drowsy, and he knew that if he went to sleep he would never wake again. On, on, he dragged himself, and the fury of the storm began to abate; in a little hollow in the prairie he stumbled over something and fell; with his hands he examined the something, and found it to be the form of a man, with something large on his back. It was the Italian, with his organ.

"Whether we live or die, we'll stay together," said John Pauley, and he took from his pocket a pair of handcuffs; he snapped one iron loop on the Italian's wrist and the other on his own, and then unable to struggle longer against his fate, he went to sleep.

The New Year's day was far gone when the deputy's red face appeared at the hole in the iron door, with a smile that was unusual. "A lady to see you, Mr. Morse," he said; "you may step into the corridor."

Hugh accepted the invitation, and a pair of arms were thrown about his neck.

"You are free, Hugh," cried a glad voice, and tears of happiness began to flow. And when all the amazement and tears were over Miriam explained how it came about. Only a part of her narrative is necessary to ours: "And that noble detective, as he was sinking to sleep, manacled to what he supposed was a corpse, thought he would make one more effort to be saved; and he shot off all the cartridges in his revolver, and, do you know, he was within ten feet of a house and didn't know it; and

the people rushed out and found the two and carried them into the house. The Italian was revived, but his hours were numbered, and he confessed, and he died an hour ago; and here is the order for your release."

On the next day Miss Simmons went to the bank without a sigh to withdraw her little fortune for the detective; she took the roll of bills and went to his hotel. Mr. Pauley, the clerk said, although very sick, had left by the midnight train; he had left a note for her. The note read as follows:

"Miss Miriam Simmons: I am a hard and unscrupulous man; perhaps training and circumstances have made me so. But down in the bottom of my heart there is a little human nature. You treated me like a Christian. You thought of my comfort when you had trouble of your own, and gave me the use of your brother's overcoat. With your permission, I will keep the coat, and call our account square. I leave the town before my worse nature gets uppermost. To-morrow I might want the money; for, as I said, I am a hard and unscrupulous man. JOHN PAULEY."

## The Young Folks.

### THE LEAVES' FAREWELL PARTY.

All summer the leaves have been dressed in green; Dresses as pretty as ever were seen; But Dame Nature came one day in the fall And said: "Leaf children, harken all!

"For many days you have done your best To shelter the birds in the nest; Have given shade to the cows and sheep— Now soon comes the winter, for rest and sleep.

"All the earth's been more happy and fair Because God sent his little leaf-children there; But before you bid the earth good-night We'll make it e'en gay with colors bright.

"To a great happy party I bid you all— Your gayest dresses you shall wear to the ball; Dresses of yellow, red and green, Prettier dresses were never seen."

Gay was the earth when the leaves were all dressed, Each one nodding and looking its best; Then down they all came—they danced and they flew While the wind played the music—the birds helped, too.

Many little children passing by Cried—"Dear little leaves, good-by! good-by! Thank you for making our earth so bright; A sweet winter's rest to you; good-night! good-night!" —Child Garden.

### UMBRELLA CARRIERS.

Ants, Sea Urchins and Anemones That Affect Sun Shades.

"One of the most interesting sights I have witnessed," remarked a naturalist to a group of listeners, "was an army of ants marching through a South American jungle. I had been out all day hunting butterflies with a native guide, and, almost overcome by the intense heat, had stretched myself out beneath a great mass of vines which hung from a large tree, when I noticed a column of ants moving along at my feet.

"There was nothing remarkable in this, as it was an ant country, where they literally overrun everything; but these ants, as though recognizing the tropical heat, each bore a highly-colored umbrella in such a position that it was more or less a shield and protection. The umbrella was a bit of a leaf that had been carefully bitten out in a semi-oval shape, and was an umbrella in fancy only, hundreds being carried to line a subterranean nest, deep in the heart of the jungle.

"One of these nests," continued the naturalist, "I found by following up the train, and saw the saubas, as these ants are called, pouring into it, each holding the umbrella, which was about as large as a ten-cent piece, vertically, resembling soldiers raising banners.

"There were three kinds of ants, Those who carried the leaves were laborers, but hot workers, as they merely deposited the bit of leaf in the nest, where it was taken in hand by another kind of ant, the skilled carpenters of the tribe, who placed the leaves on the wall, as a thatching, and covered them with globules of earth. Some of the nests built in this way are two feet high, and three or four feet in diameter—marvels of constructive ability."

Among the marine animals are many that construct over and above themselves coverings which might not inaptly be termed umbrellas. This is particularly noticeable in the sea anemones. At times they are free and unencumbered with foreign objects; at others they are completely covered

with plates of sand, which they take from the ground about them, or bits of seaweed, which form more or less protection or covering.

When the anemones desire to assume these countless umbrellas, they bend over their tentacles and touch the ground, many bits of shell and sand adhering. These are lifted up and placed upon the sides of the creature until it finally appears to be covered with a mosaic, which, while a protection, serves as a disguise, making the otherwise conspicuous animal resemble the rocks about it.

By far the most interesting animal possessing this habit is the sea urchin that looks like a pin cushion, being covered with long or short bristles, according to the species. How the sea urchin, with its stiff spines, can lift scores of minute stones and bits of shell, distributing them over its body in such number that collectively they form an umbrella-like covering, would appear a mystery, which, however, is solved upon an examination of the urchin. The spines are not the only organs, but from among them rise two suckers, with little disks attached to them, and



UMBRELLA CARRIERS.

other organs that have long stalks upon the end or top of which is perched a little feeler with three biting teeth. These feelers, stationed on the lower part of the urchin, pick up particles of shell and sand, and pass them to others higher up, and so, by continued passing, the piece of shell travels up to the dome of the animal, and there finds a place among the spines. This is repeated an indefinite number of times, until the urchin is completely covered by a strong umbrella, poised, as it were, upon the spines, affording more or less protection. Sometimes the animal disdains one of shell or stone, and spreads over itself a canopy of weed, a ribbon of green zostera, or one of brighter hue, a decoration more or less esthetic.—C. E. Holder, in Chicago Inter Ocean.

### CHICKEN AND CANARY.

A Firm Friendship That Was Begun in a Singular Way.

One day last spring, in purchasing a lot of fowls from her marketman, a lady in Nashville, Tenn., got one little bit of a chicken that was almost too small to eat, and which made its escape through the wires of the coop and began to chirp and cry about the yard. The lady made no effort to recapture the little thing, thinking it would be better off running free about the place. But it soon became evident that the chick had been too soon taken from parental care and was totally unable to provide for itself. Two whole days passed, during which it neither ate nor drank, though the lady tried every means in her power to provide for its welfare. The chicken simply peeped and drooped till the lady gave up all efforts and left the little thing to die, which no doubt it would have done right speedily had it not been rescued in the following singular manner:

It chanced that the lady has a pet canary of which she is very fond, and to which she devotes much care and attention. For instance, it is her invariable custom in mild weather to turn the bird out of his cage for a certain portion of each day, letting him have his bath in a sunny spot on the back porch. So that morning when the little chicken was so nearly giving up his life for lack of food and comfort, it hap-

pened that the canary was turned out of his cage for his hour of freedom in the sunshine. The lady was watching to see that no cats came around, and presently she saw the canary trip down the steps to the lawn, where the little chicken was crying. For a moment the two little feathered things stood and looked at each other inquiringly. Then the bird chirped and made a dab with its beak. The chicken chirped and made a dab, too, and pretty soon the two were chirping and dabbing away mightily. What the chirps and dabs meant of course we may not know, but presently the bird came hopping up the steps, the chicken following behind. Making his way to the cage, which sat open on the floor, the bird went in, chirping and dabbing all the while, with the chicken following after, and presently the two little friends were eating and drinking together.

That was the beginning of the singular friendship, which continues still unabated. The chicken stayed in the bird's cage with him till it was too large to get in the door, and then a roost was placed for it close to the cage hook, so that they might be near each other at night. It is no uncommon sight to see the canary throwing seeds down from his cage to the chicken, and if the chicken finds a worm he brings it in the house and chirps under the cage till the lady lets the bird out when the friends enjoy the feast together.—Philadelphia Times.

### What He Thought About It.

A small boy, after writhing and twisting under his mother's attempts to wash his ears, says the Youth's Companion, recalled what his papa had said about his own struggles under the hands of a faithful grandmother, and vehemently exclaimed: "Oh, mamma, you do hurt so! You must have inherited washing ears from papa's grandmother!"

In cases where dandruff, scalp diseases, falling and grayness of the hair appear, do not neglect them, but apply a proper remedy and tonic like Hall's Hair Renewer.

## FARMERS

DO YOU WANT TO BETTER YOUR CONDITION? If you do, call on or address: The Pacific Northwest Immigration Board, Portland, Oregon.

### Train for Business

At Kansas' most thoroughly practical institution, The Emporia Business College and Short-hand Institute. Modern methods, able teachers and low expenses. Board \$1.00 per week. Students are assisted in getting positions when competent. Write for any other information to the President, C. E. D. PARKER, Emporia, Kansas.

\*\*\*\*\*

## Washburn College,

TOPEKA, KANSAS.

Progressive Management,  
Thorough Courses of Study,  
Economical for Students.

Academic and Collegiate departments. Special teachers of Oratory, Music and Art. THE FALL TERM begins Wednesday, September 16, 1896.

GEO. M. HERRICK, President.

\*\*\*\*\*

### Commercial Collections a Specialty.

H. C. ROOT, Attorney at Law, 104 Sixth Ave. East, Topeka, Kas. Practices in all State and federal courts.

Send your name for a Souvenir  
of the Works of Eugene Field,

## FIELD FLOWERS

The Eugene Field Monument Souvenir

The most beautiful Art Production of the century. "A small bunch of the most fragrant of blossoms gathered from the broad acres of Eugene Field's Farm of Love." Contains a selection of the most beautiful of the poems of Eugene Field. Handsomely illustrated by thirty-five of the world's greatest artists as their contribution to the Monument Fund. But for the noble contributions of the great artists this book could not have been manufactured for \$7.00. For sale at book stores, or sent prepaid on receipt of \$7.10. The love offering to the Child's Poet Laureate, published by the Committee to create a fund to build the Monument and to care for the family of the beloved poet. Eugene Field Monument Souvenir Fund, 180 Monroe Street, Chicago, Ill.

Topeka Business College  
TOPEKA, KAN. BEST BUSINESS, SHORTHAND, PENMANSHIP COURSES.  
Large School Good Positions. Elegant Catalogue Free. Address L. H. STRICKLER



# KANSAS FARMER.

ESTABLISHED IN 1863.

Published every Thursday by the  
**KANSAS FARMER COMPANY.**OFFICE:  
No. 116 West Sixth Avenue.

SUBSCRIPTION PRICE: ONE DOLLAR A YEAR.

An extra copy free fifty-two weeks for a club of six, at \$1.00 each.  
Address **KANSAS FARMER CO., Topeka, Kansas.**

## ADVERTISING RATES.

Display advertising, 15 cents per line, agate, (fourteen lines to the inch).  
Special reading notices, 25 cents per line.  
Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per line for one year.  
Annual cards in the Breeders' Directory, consisting of four lines or less, for \$15.00 per year, including a copy of KANSAS FARMER free.

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

To insure prompt publication of an advertisement, send 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.

Address all orders—  
**KANSAS FARMER CO., Topeka, Kas.**

Everybody whose label on KANSAS FARMER reads "January, '97," and who has not yet renewed to "January, '98," please attend promptly to this little matter. No farmer in Kansas can afford to miss a single number.

Kansas City market for last Monday recorded the following sales of red wheat: Two cars No. 2 red at 92½ cents, two cars at 93 cents; one car No. 3 red at 88½ cents, two cars at 89 cents and one car at 91 cents; one car No. 4 red at 73½ cents and two cars at 70 cents.

It is announced that the steamship service of the North German Lloyd Company between Galveston and European points would be resumed after January and continued as heretofore. The first vessel of the North German Lloyd to arrive at Galveston in the new year will be the steamer Roland.

Hogs that are crowded and made ready for the February and March markets usually catch better prices than again prevail until September. It is well to have fat stock ready for market at the seasons when prices are best. The difference between profit and loss may depend upon the management in this respect.

The aggregate of gross earnings for all the railroads in United States reporting for the first half of December, or a part thereof, is \$12,017,126, a decrease of 4.5 per cent. compared with last year and of 11.4 per cent. compared with the corresponding year of 1892. Of sections of the country in which representative roads have reported, Western roads, including the "grangers," make the most favorable showing.

The low price of corn is not unlikely to cause many feeders to incline to hold their steers late and get as much corn into them as possible. On the average, this is not good policy. The December price for fat cattle averages higher than that of any other month of the year. While there are exceptions, the decline during the first few weeks of the year is usually rapid enough to balance the pounds that are added during these same weeks.

It is authentically reported that the department of justice contemplates action to be taken at an early date looking to the foreclosure by the government of the Union Pacific with the probability also of similar proceedings against the Central Pacific and Kansas Pacific. A very large portion of the first mortgage bonds as well as the second mortgage will mature with the beginning of 1897. The holders of the first mortgage bonds would naturally have priority over the government liens, but it is said that the Attorney General has construed the original and amended Pacific railroads acts as conferring ample power upon the government to proceed irrespective of any course which the first mortgage holders may see fit to take.

## THE FARMERS' WEEK.

Big Attractions at Topeka, January 10 to 16, 1897.

The week of the new year—January 10-16, 1897—is to be the greatest week for the farmers of Kansas ever known in its history. It will be a veritable State farmers' institute, and those who attend the entire week will be well rewarded for the time and money expended. It will be a week of both profit and entertainment.

The Kansas Legislature convenes that week in biennial session. The Kansas Improved Stock Breeders' Association and the Kansas Swine Breeders' Association hold their seventh annual sessions. The State Board of Agriculture holds its twenty-sixth annual meeting.

Eminent authorities on leading farm interests from other States will be present and participate in the programs.

So important are the combined meetings that all railroads in Kansas have, for the first time, made an open excursion rate one fare for the round trip (no certificates required) from all points in Kansas, also from St. Joseph and Kansas City to Topeka. Tickets sold January 9 to 16, inclusive, good to return until and including January 18, 1897.

H. A. Heath, of Topeka, Secretary of the Kansas Improved Stock Breeders' Association, says that association will have the most valuable and entertaining meeting ever held during the existence of this fine stock organization. The best talent in Kansas and the West will present papers, addresses and discussions that will do much to set the proper pace for 1897 in the improvement and prosperity of the animal industry of Kansas. No owner of pure-bred domestic animals can afford to be absent during the sessions, which commence Monday evening and close Wednesday noon, giving way then to the State Board of Agriculture meeting. The fine stock breeders will also hold their second annual banquet on Wednesday night, January 13, 1897, to which everybody interested in the improvement of live stock is cordially invited. Breeders who will be present are requested to notify Secretary Heath in advance of their coming, so that suitable provision may be made for all.

Secretary O. P. Updegraff, of the State Swine Breeders' Association, informs us that never before in the history of this association were the prospects so flattering for a good meeting. The program is now being formulated, containing the names of eminent authorities outside of our State, as well as of prominent breeders within our borders. Membership rolls promise a very large increase, establishing beyond doubt the fact of the prosperity of this industry. In addition to the regular meeting, commencing Monday evening, January 13, there will be held the first of annual sales to be under their auspices, which is for the purpose of interchanging blood among breeders, as well as introducing samples of their herds. The sale promises to be a feature of the meeting, and happily is held at a time when the Kansas farmers are gathered together, attending not only this meeting but those of the Improved Stock Breeders and State Board of Agriculture.

Secretary Coburn outlines the following as among the good things planned by the State Board of Agriculture, for those who attend its twenty-sixth annual meeting in Topeka, January 13, 14 and 15:

Ex-Governor Furnas, forty years a leading man in Nebraska affairs and who has conducted her State fairs for twenty or thirty years as Secretary of the Agricultural Association, will make an address on fairs and expositions. R. M. Allen, manager of the Standard Cattle Co., and probably the most extensive stall feeder in the world, will come from Ames, Neb., to talk about the cattle problem. I. A. Fort, the boss irrigator of Nebraska, will be on hand to tell of the outlook for irrigation as observed by him in western Kansas and Nebraska. Prof. H. J. Waters, Dean of the Agricultural College of Missouri, a way-up authority on silos and ensilage, will

discuss those topics. Hon. C. E. Lobdell, of Lane county, Speaker of the last Legislature, will, out of ten years experience and observation, talk about the needs and possibilities of western Kansas. Col. T. W. Harrison, of Shawnee county, will talk entertainingly and profitably about the longevity of farms. Geo. P. Dold, of the great Dold Packing Co., Wichita, Kansas City and Buffalo, who comes of a family of butchers 300 years in the business, will point out to stockmen some things they ought to know, as seen from the butcher's standpoint. Mr. A. T. Howden, of Hodgeman county, one of those old Washington county, Pennsylvania, in-bred sheep-growers, who has for a dozen years been making money with a big flock of fine-wools in western Kansas, in spite of almost no prices at all, says he will tell how he does it. Dr. C. J. Sihler, who represents the government in that work at Kansas City, is to give an illustrated lecture on the necessity of meat inspection that should be very interesting. C. B. Hoffman, the noted miller of Enterprise, is billed for a talk on wheats and wheat-growing, and Charley Ridgway, the very successful Secretary, of Ottawa, who has demonstrated that he knows, will be on hand to tell what county fairs are good for and how to run them. Senator W. A. Harris, of Linwood, will make an address outlining some of the things unlearned in his thirty years experience as a Kansas stockman and breeder, which all will want to hear. Mrs. Willis Lord Moore, of Hutchinson, the accomplished President of the Kansas Social Science Federation, is to deliver an address at the last session on "Country Clubs," which will surely attract the ladies. Emerson T. Abbott, of St. Joseph, Mo., who was present last year to discuss bees and honey, will on the same evening deliver his address on agriculture in the common schools. "These with the others too numerous to mention," along with the welcoming address to be delivered by the new Governor, will make up a program which we shall all hope may be not only pleasant but profitable. The best way to know about it is to be here.

## THE ALIEN LAND LAW NOT APPLICABLE TO RAILROADS.

Judge Myers has decided, in the famous suit against the Santa Fe, under the alien land law, that this law does not apply to railroads. This suit was brought in Jefferson county immediately after election, and one of the first steps was the appointment of a receiver for the railroad. By various legal maneuvers and by agreement of the parties interested, the receivership was not made effective. An attempt was made to have the case taken to the Federal court, there being some apprehension on the part of the attorneys for the railroad that prejudice might exist in the mind of the court on account of politics and local sentiment. Judge Myers was understood to have supported Bryan for the Presidency, and the vague apprehension, which has been indulged in the East, lest people of his political views were all repudiationists and confiscationists on general principles, led to great consternation when it was found impossible to remove the case from Judge Myers' court. Some hysterical papers even imagined this action to be the first of a contemplated series of gross robberies which the people of Kansas were supposed to be about to enter upon under the forms of law and by the aid of the courts. The KANSAS FARMER has before shown that the people of Kansas are in the first rank as to intelligence, bravery, independence and honesty, and that no people on earth are more attached and devoted to the blessings of law-abiding, well-ordered communities and stable institutions than are these same people of Kansas. In their selection of officers to decide upon and execute the law their wisdom has averaged well with that of the other front rank States of the Union. In the matter of political charges against their opponents in the field they have been no more violent than is customary in all well-regulated communities. It has been difficult to account for the fact

that our friends further east, while understanding perfectly well that among themselves charges made during political campaigns are to be taken as containing, to say the least, but an economical proportion of truth, have accepted as indisputable every charge of dishonesty made in Kansas. This can only have resulted from the record for truthfulness which Kansans have established.

But the decision of Judge Myers, which is an able exposition of the law, coming as it does from a State instead of a Federal court, and from the side, politically, which was most charged with vicious hostility to vested rights, is a refutation of campaign charges which can be understood beyond the borders of Kansas.

Whatever may be the opinion of those interested as to what application the alien land law ought to have had as to railroads, the fact that the court finds that it has not such application carries such weight that, unless reversed by a higher court, it will be observed as reverently as in any community on earth.

Let it be known and understood by all the world that while Kansans deserve their splendid reputation for telling the truth in all other matters, their political charges are to be taken with the same degree of allowance as are the political charges of other peoples.

## KANSAS' HISTORICAL COLLECTIONS.

"The Future by the Past" is the title of a book, published several years ago, which has to do especially with the weather and the seasons. Whether observations have yet been sufficiently extended and sufficiently accurate to enable any one to predict storms and seasons, need not be discussed here. But in affairs more especially human and having to do with the actions of men, the experience of mankind has long ago determined that the surest index to what a man will do in the future is the record of what he has done in the past. The axiom is almost equally trustworthy as to communities, society and the state. Human action has been so carefully recorded and so profoundly studied in modern ages and made so much a matter of record that the close analyst need not be greatly mistaken in his predictions of general social events under given conditions, if only the antecedent history of the people concerned be thoroughly understood.

The realization of these truths has led, of late years, to a more careful preservation of the records of human action than ever before in the known history of the world. In this regard Kansas is well in the front rank. In the archives of her historical library may be found the authentic record of almost every important action of any of her people, full statement of every public transaction and almost as complete accounts of what her people and their ancestors did before they came to Kansas. The almost complete files of every newspaper and other periodical ever published in Kansas contain elaborate details of history such as no other commonwealth has ever preserved. A similar completeness is found in the collection and preservation of every other record of information as to this State.

These collections, which are beyond valuation in money, are the property of the State of Kansas, and are preserved in the State house. The Legislature at its last session set apart for this purpose all of the east wing except that part occupied by the Senate chamber. The collections have been so systematically arranged that any piece of information is produced by the attendants whenever requested. Every year the number of people who use this great library increases rapidly. During political campaigns the demands upon it are especially strong. Every public utterance of every public man in Kansas, if of sufficient importance to get into print in any form, is here available. No doubt some inconsistent politicians would be glad to blot out their records. But this is not possible.

The use of the library is not confined to those who can visit it. If any citizen of Kansas desires information he



has only to write to the Secretary of the State Historical Society, stating his inquiry, and the subject is looked up by competent persons and the information sent immediately and without charge. Some of the reformers who have tried it say that this library contains the ammunition to blow any old-line politician in Kansas entirely out of water. Some of the old-liners declare that by this library they can prove the inconsistency of every reformer who ever posed before a Kansas public.

But, while the politicians are thus well provided, the more important use of the library is by those who study the philosophy of history and desire to continue the advancement of the State. Civilization builds slowly on its past and present. When the past is fully known the future may be safely projected. The good of the past is sometimes overlooked and forgotten and has to be rediscovered. When the record of it is preserved it has but to be reviewed to make the wisdom of the past available for the present and the future.

The expense of the historical collections of this State is small—almost nothing—and the cost of caring for them is insignificant compared with their worth. Kansas has a right to be proud of the leading position she has taken in this regard and her people will never forget the devotion, the energy and the efficiency of Secretary Adams, whose quiet persistence has guided the work from its inception.

KANSAS FARMER and the *Advocate*, both one year, for \$1.50.

Remember, you can get the KANSAS FARMER and the Topeka Semi-Weekly *Capital*, both one year for \$1.50, sent to this office.

The United States and Canadian deep waterways commissions will petition Congress for a deep water channel between Duluth and Chicago and the Atlantic seaboard. All the feasible routes, lake levels, ice records and similar matter have been considered and will make a part of the data to be submitted to Congress in the report accompanying the petition. This is with a view of meeting Gulf competition, which is every year becoming more a serious matter for Eastern seaboard cities.

One of the most important law suits ever tried in western Nebraska is now before the court at Chadron. Lands valued at hundreds of thousands of dollars, canals, reservoirs, grist mills, etc., are all involved, the question being the use of the waters of White river for irrigation purposes. The legal talent employed represents men eminent in their profession. The questions are upon the appropriation of water for irrigation, domestic and manufacturing purposes, under the Nebraska laws of 1889 and 1895.

Some weeks ago the KANSAS FARMER asked for papers, based on actual experience, on "How to Make Farming Pay," and offered a year's subscription free for the best paper from each county in Kansas and six months for the second best, the papers all to be in by Christmas. Numbers of successful farmers have responded and the awards have been made. Two of the papers are presented this week. They are worthy of careful study. The success which these farmers have achieved is within reach of others. They have had no special advantages, but have been wise, careful and diligent in the use of their opportunities.

#### LOW RAILROAD RATES.

Since the program of the State Board of Agriculture's annual meeting was printed, in last week's FARMER, Secretary Coburn has been notified by the Western Passenger Association that an open rate of one fare for the round trip (no certificate required) has been made for all who attend. This rate is good for all who wish to come to Topeka for any purpose or meeting during the second week in January. Half fare round trip tickets will be on sale January 9 to 16, inclusive, and be good for return until and including January 18,

#### The Opportunities of the Western Kansan.

In one of its admirable passing comments the *Topeka Mail and Breeze* contained the following, which shows something of the value of western Kansas:

"Whenever the tax is cut down to a reasonable figure that part of the State will take another start and develop along the line that nature intended. The land will be bought up in tracts of say a section, and stocked with horses, cattle, sheep and fish. The settler will have an irrigating plant that will supply his fish pond with water and irrigate two or three, perhaps five, acres, where he can grow a garden, orchard and vines. His home will be in the shade of trees, his cellar will be stocked with apples and cider. His table will be supplied with vegetables, crisp and sweet, from his own planting, and his breath will be redolent with the odor of onions, as he goes out to look after the lowing kine. Fat, tender, educated fish will come to their daily repast at the sound of a dinner bell, and the air will be sweet with the flowers and the scent of grapes growing purple in the autumn sun. His stock will feed on the native pasture in the summer and thrive in the winter on the fodder, which can be depended upon to grow in that section. He will give up the idea of trying to make a living off a quarter section of land by raising corn and wheat. His children will grow bright-eyed and strong with deep lung and complexion of classic bronze. There is the future for western Kansas. We have tried to beat nature out there for twenty years, and at the show-down nature has always held four aces while the settler has exhibited a diminutive pair of deuces. It is time to let common sense have a show. All talk about putting all that country under irrigation, or half of it, or even a tenth part of it, is attenuated moonshine, and on the other hand the man who waits for the climate to change, and the rain belt to move west to Colorado, will still be waiting when the angel, standing with one foot on the Gulf of Mexico and the ether on one of the abandoned additions to Wichita, shall proclaim in a voice that will make the tones of Mrs. Lease sound like the murmur of a gentle rill, 'That time was, time is, but time shall be no more.' If the people of western Kansas will follow nature instead of entertaining a fool notion that they are smarter than she is, the problem will be nearly solved and that section of the State will enter on an era of permanent prosperity with a firm grip on the tail of destiny."

#### Composition of Potatoes.

EDITOR KANSAS FARMER:—Your correspondent, Clarence J. Norton, says his new potatoes, the "Early Kansas and Kansas Farmer, always grow dry and mealy in Kansas, while the Ohio contains 83.03 per cent. of water or only 16.97 per cent. of dry matter." Now, as the very highest authority we have, which is a consolidation of analyses, gives 75.4 per cent. as the very lowest amount of water in potatoes, and 79.8 per cent. as the average, for the purpose of a fair comparison, I would ask Mr. Norton to give the per cent. of water in his new potatoes, and if no analysis has been made, then to give a fair approximation, having in mind the above extremes of 75.4 and 83.03 per cent., as "dry and mealy" does not give us a fair comparison, neither does 83.03 per cent. of a Virginia analysis, as the Kansas soil and climate are very different from Virginia. I do not ask this in any captious spirit, but the new creations must be governed by the same rules as the old standard. Then we know whether we have an improved variety.

J. M. RICE.

Winview, Okla.

#### Equalization of Railroad Taxes Among School Districts.

EDITOR KANSAS FARMER:—I think the time has come for every taxpayer that is interested in having good schools, and good laws, to use his influence to have our Legislature make a law this winter for the equal distribution of the railroad tax collected for school purposes, so that it shall be dis-

tributed equally among all the districts which pay their share of bonds voted to build the road. There is hardly a county in the State but what the county, or some township in the county, voted bonds to build one or more roads, and the school districts through which the road runs receive all the taxes collected for school purposes and the balance of the district receive none. Now, I believe it the duty of interested districts to petition their representatives to use their influence for such a law. I believe it a just law. I know of no better way of getting it before the people than to ask it through the KANSAS FARMER, as it probably reaches more farmers than any other paper published in Kansas.

AMBROSE COCHRAN.

Little River, Kas.

#### Back to Kansas.

The following letter from one of our old-time subscribers contains an account of experiences which will be valuable to others who may imagine that the fields are greener somewhere else: "I made a trip last spring to North Carolina, Tennessee, northern Georgia and Alabama, and the expense and time lost was a set-back I could scarcely bear. Yet I am glad I made the trip, as I had become dissatisfied with Kansas and felt confident I could find a better location somewhere in that region. But, after spending nearly three months investigating, I came home, satisfied that Kansas is, after all, the place, and am going to work to make the best of our existing conditions. Our farm was reuted out this year and planted in corn, late and poorly tended, so we have no grain to sell. Have not been able yet to get money to pay taxes. But I will have money by the middle of February, and if you will patiently wait you shall have your pay then. In the meantime I hope you will not cancel my name on your list, as I do not feel that I can get along without your paper. It is the most valuable paper for the Kansas farmer I know of."

#### A Wonderful Cure for Kidney Disease and Rheumatism—A Free Gift.

The Kava-kava shrub, as previously stated, is proving itself a wonderful curative for diseases of the kidneys or other maladies caused by uric acid in the blood. This new botanic discovery bids fair to change medical practice in these diseases, and its compound, Alkavis, is now regarded as a sure specific cure for these maladies. We have many letters on the subject from business men, doctors and ministers, of which the following, from Rev. J. H. Watson, of Sunset, Tex., a minister of the gospel of thirty years' standing, is an example. He writes:

"I was suddenly stricken down on the 22d of June with an acute attack of kidney trouble (uric acid gravel). For two months I lay hovering on the border line of life, and with the constant care of two excellent physicians I only received temporary relief. My family physician told me plainly the best I could hope for was a temporary respite. I might rally, only to collapse suddenly, or might linger some time. But the issue was made up, and as I had for years warned others to be ready, so now more than ever I must needs put my house in order and expect the end. Meantime I had heard of Alkavis and wrote to an army comrade (now principal of a college) who had tried it. He wrote me by all means to try it, as it had made a new man of him. At the end of two months, and then only able to sit up a little, I dismissed my physicians and began the use of Alkavis. In two weeks I could ride out in the carriage for a short time. The improvement has been \* \* \* constant and steady. I am now able to look after my business. I feel I owe what life and strength I have to Alkavis. \* \* \* I am 55 years old, have been a minister over thirty years, have thousands of acquaintances, and to every one of them who may be afflicted with any kind of kidney trouble I would say, try Alkavis."

Another most remarkable case is that of Rev. Thomas Smith, of Cobden, Ill., who passed nearly one hundred gravel stones under two weeks' use of this great remedy, Alkavis.

So far the Church Kidney Cure Co., of No. 420 Fourth Ave., New York, are its only importers, and they are so anxious to prove its value that for the sake of introduction they will send a free treatment of Alkavis prepaid by mail to every reader of KANSAS FARMER who is a sufferer from any form of kidney or bladder disorder, Bright's disease, rheumatism, dropsy, gravel, pain in back, female complaints, or other affliction due to improper action of the kidneys or urinary organs. We advise all sufferers to send their names

and address to the company and receive the Alkavis free. To prove its wonderful curative powers it is sent to you entirely free.

KANSAS FARMER and Leavenworth Weekly *Times* both for one year for \$1.25. KANSAS FARMER and Leavenworth Daily *Times* both for one year for \$3. Send to this office.

*Leslie's Illustrated Weekly* has always been and is now a \$4 paper, and worth the money if any illustrated paper is worth \$4 per year. But in order to accommodate our subscribers we have made arrangements with the publishing company whereby we are able to offer *Leslie's Weekly* and KANSAS FARMER both for one year for \$3.

If you would like to come to Topeka for the State Board of Agriculture's annual meeting, the inauguration, the Improved Stock Breeders' meeting, the poultry meeting, the combination auction sale of swine, or any of the temperance association meetings, during the second week in January, remember that the railroads have all made a one-fare open rate for round trip tickets for these occasions. No certificates or receipts are necessary. Just buy a round trip ticket and come.

This is the time of year to make up your list of periodicals for next year's reading. Every family should have at least one home county paper, one agricultural paper and one magazine. Many will add one State political paper and one of the great city papers. Others will want a more extended list. Whatever your wants, we can save you money on the purchase. We have wholesale rates on everything published and will give the advantage to every subscriber to KANSAS FARMER. Send in your list get our estimate.

#### Farmers' Institutes.

The following dates and appointments for farmers' institutes in this State, under the auspices of and to be attended by representatives from the Agricultural college, have so far been made:

Effingham, Atchison county—January 6 and 7; Profs. Hood and Popenoe.  
Pleasanton, Linn county—January 7 and 8; Profs. Georgeson and Walters.  
Overbrook, Osage county—January 21 and 22; Profs. Mayo and White.  
Wellsville, Franklin county—January 22 and 23; Profs. Georgeson and Will.  
Concordia, Cloud county—January 28 and 29; Profs. Mayo and Graham.  
Peabody, Marion county—January 28 and 29; Profs. Mason and Walters.  
Stockton, Rooks county—February 4 and 5; Prof. Hood and Assistant Burtis.  
Hutchinson, Reno county—February 4 and 5; Profs. Hitchcock and Nichols.  
Newton, Harvey county—February 4 and 5; President Fairchild and Mrs. Kedzie.  
Berryton, Shawnee county—February 11 and 12; Profs. Graham and Walters.  
Haven, Reno county—February 11 and 12; Profs. Popenoe and Lantz.

Never let a cough run on from day to day. It indicates either inflammation or irritation, which, if allowed to continue, may result in serious injury to the lungs. A few doses of Ayer's Cherry Pectoral cures any pulmonary complaint not entirely beyond the reach of medicine.

#### Holiday Rates.

Low rates for round trip on The Great Rock Island Route, during holidays. Ask any ticket agent of the C., R. I. & P. railway for rates and other particulars in reference to these round trip tickets.

JOHN SEBASTIAN, G. P. A., Chicago.

#### This Is How I Made Money.

I saw an advertisement of the Victor Meat Tenderer, which tenders meat without pounding or cutting. I wrote to the Watt Manufacturing Co., 47 East Third street, Cincinnati, O., who started me in business, and I sold the "Victor" for a week with the following results: First day I cleared \$2.50; second day I did better and made \$5; the third day it was raining and I did not work; fourth day I made \$12; the fifth day by selling it to the stores I cleared \$25; the sixth day I made \$12.50, making the whole week \$57, which is not bad considering that I never tried to sell anything before. I help my mother, as my father is sick and cannot do anything, and we are needing money in the family very much. Any one who wants to make money and who is willing to be industrious, can easily do as well as I have done. Write to the above firm and they will start you in business and send you all the particulars,



## Horticulture.

### VARIETIES TO PLANT IN KANSAS.

Summaries of Votes Cast at 1896 Meeting of State Horticultural Society.

Each member was asked to vote for five varieties, his choice of winter apples for a commercial orchard.

The ballots cast, as summarized by the tellers, were:

#### APPLES (WINTER)—COMMERCIAL ORCHARD.

Ben Davis	44
Winesap	42
Jonathan	41
Missouri Pippin	40
Gano	30
York Imperial	18
Rawle's Genet	12
Smith's Elder	8
*Maiden's Blush	5
*Grimes' Golden	5
Willow Twig	3
Mammoth Black Twig	3
*Early Harvest	2
Huntsman's Favorite	2
White Pippin	1
Wagener	1
Gilpin	1
Red Winter Pearmain	1
Salome	1
Rome Beauty	1
Ortley	1

#### APPLES (FALL)—COMMERCIAL ORCHARD.

Maiden's Blush	20
Grimes' Golden	13
Jonathan	10
Rambo	10
Pennsylvania Red Stripe	8
Cooper's Early White	3
Lowell	3
Fameuse	3
Fall Wine	2
Jeffers	2
Hayes Wine	2
Summer Rambo	1
Munster	1
Fall Pippin	1
Northern Spy	1
Rome Beauty	1
Hubbardston's Nonsuch	1
Huntsman's Favorite	1
Sweet Russet	1

#### APPLES (SUMMER)—COMMERCIAL ORCHARD.

Early Harvest	19
Red June	13
Maiden's Blush	12
Chenango Strawberry	6
Yellow Transparent	5
Cooper's Early White	5
Duchess of Oldenburg	4
Red Astrachan	4
Golden Sweet	4
Jeffers	2
Keswick Codlin	2
American Summer Pearmain	2
Wealthy	2
Prange Pippin	2
Summer Swaar	1

#### APPLES—FAMILY ORCHARD.

Jonathan	25
Winesap	24
Maiden's Blush	23
Early Harvest	21
Red June	15
Missouri Pippin	13
Grimes' Golden	13
Ben Davis	12
Rawle's Genet	12
York Imperial	11
Rambo	10
Cooper's Early White	8
Chenango	8
Yellow Transparent	7
Jeffers	7
Huntsman's Favorite	6
Wealthy	4
Rome Beauty	4
Milam	4
Gano	3
Duchess of Oldenburg	3
Red Winter Pearmain	2
Willow Twig	2
Bailey's Sweet	2
Fameuse	2
Benoni	2
Fink	2
Gilpin	2
Golden Sweet	1
Early Strawberry	1
Northern Spy	1
Fall Pippin	1
Newtown Pippin	1
Sweet June	1
Lansingburg	1
Jersey Sweet	1
Whitney	1
Red Astrachan	1
White Winter Pearmain	1
American Summer Pearmain	1
Minkler	1
Yellow Bellefleur	1
Dominie	1
Summer Rambo	1
Pennsylvania Red Stripe	1
Stark	1
Lawver	1
Lowell	1
Fulton	1
Roman Stem	1
Red W. Sweet	1
Primate	1
Klepsroth	1
Garretson's Early	1
Wagener	1

#### PEACHES—ALL PURPOSES.

Elberta	17
Mixon Free	14
Salway	13
Smock	11
Champion	10
Alexander	9
Stump the World	9

\*Supposing they were voting for a full list, some included fall and summer varieties among the winter apples.

Crosby	9
Heath Cling	7
Family Favorite	5
Troth's	4
Hale's Early	4
York Early	4
Reeves' Favorite	3
Old Mixon Cling	3
Foster	3
Crawford's Early	3
Ward's Late	3
Mountain Rose	2
Amsden	2
Crawford's Late	2
Wonderful	2
Waterloo	1
Beatrice	1
Honest John	1
Gov. Briggs	1
Chair's Choice	1
Lemon Cling	1
Indian	1
White Rose	1
Cooper's Late	1
Snow	1
Gov. Garland	1
Hill's Chili	1
Early Rivers	1
Democrat	1

#### PEARS.

Seckel	18
Kieffer	17
Bartlett	14
Duchess	14
Anjou	9
Buffum	1
Flemish Beauty	3
Clairgeau	3
Howell	2
Sheldon	2
White Doyenne	2
Early Tyson	1
Clapp's Favorite	1
Langworth's Seedling	1
Atkinson's Winter	1
Garber	1

#### CHERRIES.

Early Richmond	29
English Morello	27
Montmorency	24
Dyehouse	9
Ostheim	9
Wragg	9
Gov. Wood	9
Late Richmond	1
Napoleon Biggareau	1
Empress	1

#### PLUMS.

Wild Goose	24
Abundance	11
Damson	9
Burbank	7
Miner	7
Botan	5
Lombard	5
Chickasaw	2
Pottawatomie	2
Robinson	2
Stoddard	2
Mariana	1
Satsuma	1
Egg	1
Washington	1
Weaver	1
Quaker	1

#### APRICOTS.

Russian	6
Early Golden	3
Moorpark	2
Harris	1
No Apricots	10

#### GRAPES.

Concord	30
Worden	23
Moore's Early	15
Niagara	8
Catawba	5
Pocklington	4
Goethe	4
Moore's Diamond	3
Delaware	3
Dracut Amber	3
Agawam	2
Telegraph	2
Elvira	2
Champion	2
Supreme	1
Early Victor	1
Osage	1
Paragon	1
Primate	1
Magnate	1
White Beauty	1
Woodruff	1
Cynthiana	1
Ozark	1
Brighton	1
Wyoming Red	1
Ives	1
Lady	1
Lady Washington	1
F. B. Hayes	1
Green Mountain	1
Martha Washington	1
Salem	1
Prentiss	1
Early Ohio	1

#### BLACKBERRIES.

Snyder	19
Early Harvest	17
Taylor	11
Kittatinny	8
Lawton	5
Erie	4
Ohio	2
Ancient Britain	2
Hiatt	2
Snyder No. 2	1
Durkees	1
Wilson	1
Snyder	16 to 1

#### RASPBERRIES.

Kansas	24
Gregg	13
Progress	8
Cuthbert	7
Turner	5
Thwack	5
Queen of the West	4
Palmer	4
Egyptian	3
Mammoth Cluster	2

Hopkins	2
Prentiss	2
Souhegan	1
Doolittle	1
Hiatt	1
Miller's Red	1
Brady	1

#### STRAWBERRIES.

Warfield	18
Captain Jack	17
Crescent	16
Parker Earle	18
Beder Wood	9
Robinson	8
Gandy	8
Bubach	6
Windsor Chief	5
Chas. Downing	4
Woolverton	3
Brandywine	3
Haviland	3
Stayman	2
Splendid	2
Burbank	2
Lovett	2
Jessie	2
Bissell	2
Wilson	2
Clyde	1
Ellenson	1
Naomi	1
Miner	1
Glendale	1
Lady Rusk	1
Edgar	1
Shuster	1
Manchester	1
Martha	1
Boynton	1
Eureka	1
Greenville	1
Marshall	1
Paris King	1
Sandro	1

While the tellers were busy counting the votes on the fruit list, the subject of tree washes came before the State Horticultural Society. Mr. A. Chandler, the Argentine fruit farmer, stated that he had used Carnahan's tree wash, furnished by John Wiswell, of Columbus, Kas., with good success for borers. He applied it in June with a whitewash brush. While it does not kill borers after they have entered the tree, it prevents the moth from depositing her eggs upon the bark. Found it equal or superior to anything he ever tried. It is also good to keep off other insects. It is repulsive to almost all insects. The cost was rather less than 2 cents per tree for four to six-year-old trees. He recommended a first application early in spring and a second in June or July. Thinks the fertilizing effects are good.

#### Thayer's Berry Bulletin for January.

The farmer's berry garden should be decided upon now. Let the following months be given to reading good farm and horticultural papers. Be prepared to adopt the valuable practical advice they are sure to give you. Mature plans for the season, select your plants, order them early, and let this be your first work in the spring.

One-quarter acre of good land set with proper varieties and well cultivated should produce from twenty to forty bushels of nice berries every season. This would give an ordinary family fresh berries every day in season and a liberal supply canned, preserved or dried during the entire year.

Plants for such a garden may be purchased direct from a reliable grower, for \$10 or \$15, and should include the following varieties: Three hundred strawberry plants, early, medium and late; 100 blackberry plants, early and late; 50 black raspberry plants, early and late; 75 currants, red and white, early and late; 25 gooseberry, early and late; 18 grapes, three varieties, early. Multiply this list by four for one acre, or by twenty for five acres, and you have the right proportion for a continuous supply of different varieties for market purposes.

Good berries may be grown on any soil—sand, clay, muck, loam, gravel, or a combination of each—provided the same be highly fertilized, well drained and thoroughly cultivated. Early fruits are usually most desirable, and light soils with southern exposure are best adapted for that purpose. Light soils, however, require heavy fertilizing, more mulch in summer, are more liable to injury by drought, and produce lighter crops. Clay soil must be well drained, is more difficult to prepare, matures later crops, and not so favorable for winter protection. The ideal berry ground would be, first, a rich sandy loam with clay subsoil; second, a dark loam or gravelly loam mixed slightly with clay, and a clay subsoil, all having a southerly or east-

ern slope. Any of these mixed soils will make good berry gardens by applying good barnyard manure, which contains all the essential elements required. When such manure cannot be obtained then commercial fertilizers rich in nitrogen and potash should be applied. Avoid low, flat land unless under-drained; it is usually cold, late, and more subject to frosts. Avoid steep hillsides as being more subject to drought and wash of soil by severe rains.

Very few farmers are without suitable soil and location for a good berry garden, and that farmer who simply exists, year after year, without a good garden has not learned the first principles of good living.

#### This is Your Opportunity.

On receipt of 10 cents, cash or stamps, a generous sample will be mailed of the most popular Catarrh and Hay Fever Cure (Ely's Cream Balm) sufficient to demonstrate the great merits of the remedy.

#### ELY BROTHERS,

50 Warren St., New York City.

Rev. John Reid, Jr., of Great Falls, Mont., recommended Ely's Cream Balm to me. I can emphasize his statement, "It is a positive cure for catarrh if used as directed."—Rev. Francis W. Poole, Pastor Central Presbyterian church, Helena, Mont.

Ely's Cream Balm is the acknowledged cure for catarrh and contains no mercury nor any injurious drug. Price, 50 cents.

Every man should read the advertisement of Thos. Slater on page 15 of this paper.

#### KANSAS HOME NURSERY.

Up to date for reliable Fruit and Ornamental trees. Best varieties of Small Fruits in full assortment for all planters in the West. Catalogue free.

A. H. GRIESEA, BOX J, LAWRENCE, KAS.

#### All for \$1, Postpaid!

12 Wm. Belt, 12 Brandywine, 12 Bissell STRAWBERRY PLANTS. We have a large supply of finest plants we have ever grown for spring trade of 1897, at lowest prices. Catalogue free.

F. W. DIXON, Holton, Kas.

#### SMITH'S SMALL FRUITS FOR SPRING 1897

100 varieties old and new Strawberries, including Wm. Belt, Brandywine, Paris King, Bissell, Isabel, Barton, Marshall. New Raspberries—Egyptian, Miller, Bishop, Columbian. If you want plants I have two millions for sale.

B. F. SMITH, Box 6, LAWRENCE, KAS.

#### Northern—Grown Tested Seed Corn!

Early Yellow Rose, Snowflake White, Pride of the North, Armstrong's Mortgage Lifter. These famous varieties of corn will be sold this year (1896-97) at \$1 per bushel; sacks 20c. Five-bushel lots sacks free. Send 5c. in stamps for a package of each of the above named corn and "Hints on Corn Growing"—a 12-page book—and how up-to-date farmers grow the big crops of 100 to 150 bushels per acre in 90 to 100 days. Address J. B. ARMSTRONG, Pleasant Valley Seed Corn Farm, Shenandoah, Iowa.

#### CHOICE SEED POTATOES

COBURN No. 1.—A new seedling of great vigor; pinkish; short but very bushy vines; white bloom; extra early; eyes shallow; very prolific, indeed; good table potato and a good keeper. Price \$1.25 per bushel, or three bushels for \$3.

EARLY KANSAS.—A large medium variety; russet straw color; medium vines; purple bloom; eyes rather deep, but a great yielder of very large potatoes, and an extra good table potato. Price \$1 per bushel, or three bushels for \$2.25.

OSAGE No. 1.—Same as the Early Kansas, except it has white bloom and does not grow so large tubers. Price \$1 per bushel, or three bushels for \$2.25.

KANSAS FARMER.—A new seedling of great vigor. A late variety, oval, flattened; eyes very shallow; straw color; very prolific; vines medium and spreading, completely covering the row; white bloom; very best of all keepers and a good eater. Surely worthy of its name and a grand potato. Price \$1.25 per bushel, or three bushels for \$3.

Three pecks of each of the above four kinds, \$2.50; packed in lined barrels and delivered at depot free. Write your name, postoffice, county and express office very plainly, and send money with order. I can furnish most all of the leading new kinds.

Address CLARENCE J. NORTON, Morantown, Kansas.



**OCEAN CITY**  
Strawberry

Finest flavor; large and solid. Bear enormously. Donald's Elмира Asparagus Roots; a new production of rare merit. Greensboro Peach, Japan Plums, Small Fruits, Tenn. Peach Seed. Catalogue FREE.

HARRISON'S NURSERIES, BERLIN, MD.

#### Stark Fruit Book

contains new and copyright colored plates of over 100 rare fruits, etc.—write for particulars. Ask for list of Stark Trees—\$3 per 100 and up. STARK BROS., Stark, Mo.

**STARK TREES**  
BEARFRUIT



## In the Dairy.

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

### That Cow Report.

It would seem superfluous, in this department, at the present time to attempt to add any laurels to what has already been said in praise of Secretary Coburn's quarterly report entitled "Cow Culture." But, inasmuch as the dairy editor of the KANSAS FARMER is in hearty accord with every move that will advance the dairy interests of Kansas, he desires to add a few words in addition to what has already been expressed by the highest authorities on such matters in this country.

Secretary Coburn hit upon the happy idea of getting the "views of the leaders," as he terms it, and in addition to this, the reports of experiment stations, cheese-making, co-operative creameries, raising calves for the dairy, cost of butter production in winter, the best breeds for butter and milk, use and care of the cream separator, corn silage for milch cows, creamery buildings and ice-houses, points about salting butter, butter-making on the farm, choosing a dairy cow, a model creamery report, butter and cheese factories of Iowa, advantages and possibilities of Kansas as a dairy State, how to build and fill silos, testing the dairy herd, when should cows be dried, effect of feed upon milk, choosing a dairy cow, and scores of other subjects pertinent to such a work, all brought together in condensed form suitable for the use of dairy students, the dairy farmer, the creameryman, and, in fact, any person that is interested in getting better ideas and more practical methods in regard to such work.

Formerly a great mass of papers, reports, circulars, clippings and various works on dairy subjects had to be overhauled, consuming many hours of valuable time in finding what can be gleaned from this report in a few minutes. From a great number of testimonials already received by Mr. Coburn, it would seem this work will be used in many of our State agricultural colleges and experiment stations as a text-book. It might be said that the 264 pages within the covers of this report contain all the work and thought that has been expressed by the best writers on these topics in the last ten years. It is, in fact, an encyclopedia, and should be in the hands of every dairy student and farmer in Kansas. Secretary Coburn, in this, as in all his former reports, is doing a work that will add thousands of dollars to the valuation of the State within the next few years, besides giving to our farmers a short method of advanced dairy education. Kansas, in common with her sister States, is proud of the man whose work is always well done, and the citizens of this commonwealth, in particular, hope for a further continuation of his valuable services.

### Gathered From Many Sources.

From Report of Kansas State Board of Agriculture ("Cow Culture").

"One great trouble in making fine butter is in not knowing it when you see it. Every woman is a good judge of butter and babies—at least she thinks she is when her own are under consideration; but if babies, like butter, were sold in the market, she would be surprised to see how her taste differs from that of her buyers."

A good plan for keeping the flies off the cow at milking time has been suggested. It is said to work to a charm, and certainly it costs little to try it. The method is to throw a piece of cloth over the cow's back at milking time. The cloth can be made out of old cotton sacks and should be large enough to

cover the body very thoroughly, falling down behind over her tail, so that that member cannot be switched into the face of the milker.

"The proceeds of the dairy seem by common consent to be regarded as sacred to the family. A man's creditors look with eagle eyes at the results of his harvest, and, when they are satisfied, often there is nothing left for the family. But if there is even a small herd of cows, they will work every day and night as though the whole responsibility was theirs."

"It is the foolish man who allows his cows to suffer at any time of the year, whether it be from heat or from cold, while it is the careful money-maker who sees that they are comfortable at all times. When the sun gets hot and flies and mosquitoes abound in full force the cows are sure to suffer more than in very cold weather, and the milk supply will be cut short."

"In the late summer the butter is apt to be ill-flavored in several ways. The effect of the heat upon the cows during the few weeks of the highest temperature and the tormenting annoyances from the flies have such an injurious result upon the cows as to produce impurities in the milk that become concentrated in the fats, and thus get into the butter. Of course all this will apply to cheese as well, so that this is a matter for the consideration and attention of every dairyman. Again, it is just at this time when the bitterness of the milk and cream, and, of course, of the products of these, annoys dairy-men of all kinds. If the source of this is sought, it must be looked for in the pastures, now very much infested by prevalent weeds of an exceedingly aromatic kind. The ragweed prevails wherever the farmer is heedless as to these results of it in the dairy products. There are many other strong-flavored weeds to be found in the fields at this time, and the cows, for want of better food, eat these plants, the odoriferous oils of which cause the scent to be absorbed directly by the milk, to the great injury of the dairymen."

The greatest expense to the farmer connected with the creamery business is the transportation of his milk. It would hardly pay to haul 100 pounds of milk seven or eight miles every day. By the establishment of a "milk route," however, this difficulty may be largely overcome. One man can be employed to haul for several farmers, they paying him so much per hundred pounds. Another method of overcoming the long-distance haul is to build separator stations. If a community is ten miles from any creamery and has not cows enough to establish a creamery, a separator station can be built and the cream hauled to the nearest creamery. In some places this plan has worked well; in others it has failed. It would not be wise to establish such station to handle the milk from less than 200 cows. The station must not be put under incompetent management. The separators must be carefully operated and the cream well cared for. It should be hauled to the creamery while still sweet, and kept cool in transit, so that the important matter of ripening can be attended to by the butter-maker himself.—Prof. John M. Trueman, Dairyman South Dakota Experiment Station.

BLOOD IS LIFE and upon the purity and vitality of the blood depends the health of the whole system. Experience proves Hood's Sarsaparilla to be the best blood purifier.

HOOD'S PILLS act easily and promptly on the liver and bowels. Cure sick headache.

Kalamazoo, Mich., is famous for celery—also as the home of Thos. Slater, whose advertisement appears on page 15.

## UNJUSTLY ACCUSED

### A New York Reporter Arrested for Wife Murder.

#### IT PROVES TO BE SUICIDE.

It is only the other day that a young married man, a reporter on a New York newspaper, was arrested for the murder of his young wife. His duties as a newspaper man kept him out until late at night. In order not to disturb his wife he occupied a separate room. Returning home one night after a hard day's work he retired, only to be aroused by the sound of a pistol shot in his wife's room. Rushing in, he found that his wife had placed a revolver to her temple and fired. She had aimed a little too low and the bullet had flattened itself against the cheekbone and failed to penetrate the brain. Although suffer-



ing from the shock she was not seriously injured. Horrified, the young man rushed frantically to the nearest physician. Upon his return with the doctor his wife was dead. During his absence she had fired a second and fatal shot.

The young husband was promptly arrested on the charge of wife murder. It was only after several days' incarceration that evidence of his innocence was secured. Then his baby son, who occupied the bed with him, testified that "Papa was in bed with me when the shot came and we both ran in and found mamma with the 'volver in her hand."

This evidence was followed by the finding of this tell-tale letter in the handwriting of the dead woman:

"My Darling Jack:—Loss of sleep and worry have driven me nearly frantic. The cares of motherhood are more than I can stand. Six years ago, I thought that all poetry of love was in the maternal relation, but now I realize the awful responsibility. The fear that our children may grow up bad haunts me, especially as our older darling told me to-day a deliberate lie. I was stunned and broken by it.

"It is cheerless to live not seeing one's husband except for a few hours each day. When I want love, strength and comfort, he is not here to give it to me.

"When you get this I shall be beyond your reproaches. Far away in another sphere I may find the love that I lack here. Forgive me, love, and be good to the boys. Your wife, MARY."

No other evidence was needed. The letter tells the whole story. Suicide. The only wonder is that it is not a more common story. Thousands upon thousands of women go to the altar of Hymen with only the brightest of hopes for future happiness. They look forward to a life of mutual happiness and helpfulness with the man of their choice. They await maternity with joy. They do not for a moment realize the awful disenchantment that awaits them. In their ignorance they do not realize that they are unfitted for both wifehood and motherhood by neglected weakness and disease of the delicate organs that make them possible. They have long been silent sufferers and have imagined that their troubles are inherent in all womankind. Wifehood only adds to their suffering. They do not know how to prepare themselves for approaching maternity, and motherhood brings either death or untold agony.

Utterly broken down by their suffer-

ings they are soon unfitted for the commonest duties of life. Their shattered nervous systems, tortured by pain, give away entirely. Human endurance can no longer bear the strain, and a diseased imagination adds to their troubles. They imagine that their children are fated to turn out badly, and that their husbands have ceased to love them and neglect them. Then at some especially trying moment, reason is overtoppled, insanity assumes sway, and suicide is the result.

Had it not been for the tell-tale letter it is altogether probable that in this particular case the result might also have been the execution of an innocent, beloved husband and father for the murder of his wife—the mother of his babies.

When will the day come when women will realize the supreme importance of caring for the health of the delicate organs that bear the burdens of maternity? How long will women suffer agony, and court insanity and death, when relief is within easy reach?

Dr. Pierce's Favorite Prescription is a sure, swift, and safe remedy for all weakness and disease of the organs peculiar to women. It makes them strong and healthy. It imparts to them the tone, vigor and elasticity that rob maternity of its terrors. It allays inflammation, heals ulceration, and soothes pain. It gives the tortured nerves a rest, and cures nervous excitability, nervous exhaustion and prostration. It cures all functional and organic disorders of the organs distinctly feminine, and with their cure all disorders such as neuralgia, hysteria, spasms, chorea or St. Vitus' dance also disappear.

It is the best of all known medicines for young wives approaching the most critical event of their lives. Taken during the period preceding motherhood, it banishes the usual discomforts and makes baby's coming easy and comparatively painless. It insures a robust child. It shortens the period of illness, weakness, and lassitude following maternity and insures abundant nourishment for the newcomer. Thousands of women who were shattered and broken in mind, body and nerves are now strong, happy and helpful wives and mothers as a result of its use. It does away with the embarrassing "examinations" and "local applications" so distasteful to modest women. Women who have used it cannot say too much for it. Those who wish to know more of it should write personally to the eminent and skillful specialist who discovered it—Dr. R. V. Pierce, chief consulting physician to the Invalids' Hotel and Surgical Institute, Buffalo, N. Y. All good druggists sell it. Dishonest druggists may offer a substitute as "just as good." When they do, remember that there is more profit in selling an inferior preparation.

If women would educate themselves on the subject of their own physical make-up they would better realize the importance of taking proper care of their health in a womanly way. Dr. Pierce's Common Sense Medical Adviser teaches a woman many things about herself of which no woman should remain in ignorance. It contains 1,008 pages and 300 illustrations, and numerous chapters are devoted to the reproductive physiology of women and diseases that unfit them for wifehood and motherhood. It is also an invaluable home medical book and tells how to treat all the minor ills and accidents. It is written in plain language and contains no technical terms. Over 680,000 copies have been sold at the original price of \$1.50 each. A new edition is now ready and will be given away, absolutely FREE. If you want a copy in a heavy manilla cover send twenty-one 1-cent stamps to cover cost of mailing only, to the World's Dispensary Medical Association, Buffalo, N. Y. If you desire a fine French cloth binding, beautifully stamped, send 10 cents extra, 31 cents in all.

Remember that \$1.85 sent to this office will pay for one year's subscription to the "old reliable" KANSAS FARMER and the *Cosmopolitan Magazine*, one of the brightest, best and most artistic magazines published.

**Rose Registered Jersey Cattle and Poland-China Swine**  
Creek Farm  
rich in the blood of Coomassie and Stoke Pogis. Service bull, Calvin S. Brice 37820—grandson of Pedro and Marjoram 2d—won first premium New Jersey State fair, 1894, when a calf. Herd boars fashionably bred and high-class individuals. Head herd boar Rosewood Medium 16453 by Woodburn Medium, he by Happy Medium; dam Fantasy by One Price. Assisted by Tecumseh the Great by Chief Tecumseh 2d; dam Moss Wilkes by Geo. Wilkes. Second assistant Domino 16734 by What's Wanted Jr.; dam Bonnie Z. by Gold Coin, he by Short Stop. Domino won first, pig under 6 months, Nebraska State fair, 1896. Our SILVER WYANDOTTES are high scorers. We have the best equipped dairy farm and most complete breeding establishment in northern Kansas. Farm in Republic county, near Nebraska State line. Take U. P. or Rock Island railroad to Belleville, or write.  
JOHN F. TOLFOED, Manager, Chester, Neb.



## 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. Give age, color and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply, all letters for this department should be addressed direct to our Veterinary Editor, DR. N. S. MAYO, Professor of Veterinary Science, Kansas State Agricultural college, Manhattan, Kas.

**BOG SPAVIN.**—I have a Norman colt with a soft puffy swelling in front of his hock joint. I think it came from a strain. W. A. L. Americus, Kas.

**Answer.**—It is a bog spavin. Treatment may help it some. Bathe the part with hot water once daily, rubbing the part (rub downward only), wipe dry and rub in over the swelling a little iodine ointment. If, after two or three applications, the ointment makes the part sore, withhold the ointment until the soreness disappears.

**PECTORAL ABSCESS.**—I have two colts with abscesses in the muscles of the breast. What causes them and what can I do for them? (2) I have a cow that gives stringy milk out of one teat at night. The teat is also swollen at night. G. L. Cedar Point, Kas.

**Answer.**—The abscesses are caused by germs getting in the system, probably through the food or water. When the abscesses are forming, bathe frequently with hot water. As soon as the abscess softens, open it and wash out with a solution of carbolic acid, one part to twenty parts of water. (2) Milk that quarter of the bag as dry as possible at every milking. Bathe that quarter with hot water every morning, wipe dry and rub on an ointment made by dissolving, by heating, one-half ounce gum camphor in two ounces of fresh lard.

**PARALYSIS.**—I have a large, heavy sow due to farrow in about a week. She is weak in the loins and drags her hind quarters around. (2) Eversion of Rectum.—I have two shoats that are affected with protrusion of the rectum. It protrudes over an inch. W. M. G. Prairie Center, Kas.

**Answer.**—If your sow doesn't recover the use of her hind quarters after she farrows, there is little hope for her ultimate recovery. After she has farrowed give her a teaspoonful of turpentine in half a pint of sweet milk, once daily for three days; shake well before giving. Then give her a table-spoonful of castor oil. Rub her loins with liniment. (2) Empty the rectum by injections of warm water. Oil the finger, and, holding the pig by the hind legs, put the rectum back. Give laxative food. If this treatment doesn't cure, it will require a surgical operation by a competent surgeon.

### To Correspondents.

Please state the symptoms and conditions in full. I condense them for publication. Be sure and state that you wish a reply through the KANSAS FARMER. Try and get your questions to me by the last of the week, as I send the answer to the printer every Monday. N. S. MAYO.

Eating is a necessity. To the healthy, it is a pleasure; to the dyspeptic, a torture. By the use of Ayer's Sarsaparilla, the weakest and most disordered stomach is restored to its natural condition, and food is once more partaken of with youthful relish and satisfaction.

Thos. Slater has a message for every man on page 15.

To Colorado, Montana, Hot Springs, Puget Sound and Pacific Coast via Burlington Route.

Take the shortest and most desirable line to the far West; complete trains from the Missouri river. Daily train leaves Kansas City at 10:40 a. m., arrives Billings, Montana, 1,050 miles distant, 6:45 next evening; free chair cars Kansas City to Billings; sleepers Kansas City to Lincoln; through sleepers Lincoln to Billings. Connects with fast train beyond to Montana and Puget Sound. Ten to twenty-five hours shorter than other lines from Kansas City.

Through sleepers and chair cars Missouri river to Denver; Rio Grande scenic line beyond for Colorado, Utah and California. Ask agent for tickets over the established through lines of the Burlington Route.

L. W. WAKELEY, Gen. Pass. Agt., St. Louis, Mo.

## Horse Owners! Use



## Caustic Balsam

A Safe Speedy and Positive Cure  
The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE-WILLIAMS CO., Cleveland O.

### MARKET REPORTS.

**Kansas City Live Stock.**  
KANSAS CITY, Dec. 28.—Cattle—Receipts since Saturday, 7,842; calves, 171; shipped Saturday, 613 cattle, no calves. The market was 15 to 25c lower. The following are representative sales:

SHIPPING AND DRESSED BEEF STEERS.			
No.	Ave. Price.	No.	Ave. Price.
17.....	1,382 \$4.75	19.....	1,552 \$4.50
21.....	1,325 4.25	22.....	1,886 4.00
23.....	1,298 4.10	23.....	1,270 3.85
31.....	1,126 3.75	2.....	1,200 3.50

TEXAS AND INDIAN STEERS.			
No.	Ave. Price.	No.	Ave. Price.
20.....	1,012 \$3.35	44.....	979 \$3.30
24.....	1,102 3.20	30.....	748 3.15
21.....	844 3.10		

NATIVE HEIFERS.			
No.	Ave. Price.	No.	Ave. Price.
1.....	610 \$3.75	1.....	1,050 \$3.50
27.....	731 3.25	2.....	990 3.35
11.....	757 3.15	10.....	619 3.10
30.....	795 3.00	1.....	720 2.75

NATIVE COWS.			
No.	Ave. Price.	No.	Ave. Price.
1.....	1,070 \$3.25	1.....	1,150 \$3.00
19.....	1,017 2.95	4.....	882 2.40
2.....	1,080 2.25	1.....	2.00
2.....	720 1.80	1.....	9.00 1.65

NATIVE FEEDERS.			
No.	Ave. Price.	No.	Ave. Price.
14.....	989 \$3.70	19.....	1,008 \$3.70
2.....	991 3.70	8.....	993 3.70
5.....	1,008 3.61	1.....	970 3.65
39.....	1,110 3.60		

NATIVE STOCKERS.			
No.	Ave. Price.	No.	Ave. Price.
6 yrl.....	673 \$4.00	1.....	670 \$3.75
6.....	928 3.50	1.....	870 3.65
46.....	826 3.40	1.....	970 3.25
5.....	832 3.00	1.....	670 2.90

Hogs—Receipts since Saturday, 8,578; shipped Saturday, none. The market was strong to 5c higher. The following are representative sales:

72.....	212 \$3.40	87.....	208 \$3.40	91.....	201 \$3.37½
56.....	197 3.37½	89.....	187 3.37½	81.....	213 3.37½
159.....	207 3.37½	69.....	206 3.37½	84.....	206 3.37½
76.....	231 3.35	92.....	190 3.35	61.....	245 3.35
158.....	116 3.35	73.....	202 3.35	63.....	240 3.35
80.....	234 3.32½	67.....	271 3.32½	50.....	272 3.32½
25.....	248 3.32½	97.....	208 3.32½	40.....	203 3.32½
73.....	263 3.30	49.....	259 3.30	82.....	233 3.30
57.....	300 3.30	72.....	251 3.30	78.....	244 3.30
68.....	255 3.27½	49.....	243 3.27½	72.....	292 3.27½
75.....	186 3.27½	79.....	228 3.25	81.....	179 3.25
78.....	213 3.25	52.....	317 3.25	56.....	335 3.25
8.....	416 3.10	20.....	101 3.05	7.....	428 3.05
9.....	401 3.05	4.....	100 3.05	14.....	115 3.05
2.....	390 3.00	6.....	125 3.00	2.....	345 3.00
1.....	330 3.00	1.....	550 3.00	2.....	565 3.00
16.....	95 3.00	20.....	216 3.00	7.....	107 3.00

Sheep—Receipts since Saturday, 1,650; shipped Saturday, none. The market was strong and active and some sales 10 to 15c higher. The following are representative sales:

24 nat lbs.....	89 \$5.00	80 cull lbs.....	61 \$3.50
236 N. M.....	102 3.30	608 sheep.....	105 3.25

Horses—Receipts since Saturday, 93; shipped Saturday, 25. There is not very much life to the market, which is probably due to the limited supply of good horses. The run of mules is fairly heavy and there is more inquiry for them than a week ago.

### Chicago Live Stock.

CHICAGO, Dec. 28.—Cattle—Receipts, 23,000; market lower; fair to best beefs, \$3.40 to \$3.55; stockers and feeders, \$2.60 to \$2.75; mixed cows and bulls, \$1.50 to \$1.80; Texas, \$2.75 to \$3.05.

Hogs—Receipts, 20,000; market 5c higher; closed weak; light, \$3.30 to \$3.55; rough packing, \$3.10 to \$3.15; mixed and butchers, \$3.30 to \$3.50; heavy packing and shipping, \$3.50 to \$3.55; pigs, \$2.90 to \$3.55.

Sheep—Receipts, 14,000; market steady; native, \$2.00 to \$2.65; western, \$3.00 to \$3.65; lambs, \$3.50 to \$5.10.

### St. Louis Live Stock.

ST. LOUIS, Dec. 28.—Cattle—Receipts, 2,000; market weak.

Hogs—Receipts, 7,000; market active and strong; Yorkers, \$3.30 to \$3.40; packers, \$3.15 to \$3.35; heavy, \$3.10 to \$3.45.

Sheep—Receipts, 1,000; market strong.

### Chicago Grain and Produce.

	Dec. 28.	Opened	High'st	Low'st	Closing
Wheat—Dec.....	79	79	78	78½	78½
May.....	82½	82½	81½	81½	81½
July.....	76½	77½	76½	76½	76½
Corn—Dec.....	23½	23½	23½	23½	23½
May.....	22½	22½	22½	22½	22½
July.....	25½	25½	25½	25½	25½
Oats—Dec.....	19	19	19	19	19
May.....	20	20½	19½	19½	19½
Pork—Dec.....	6 75	6 75	6 70	6 70	6 70
May.....	7 62½	7 62½	7 60	7 60	7 60
Lard—Dec.....	7 92½	7 92½	7 90	7 90	7 90
May.....	3 80	3 80	3 77½	3 77½	3 77½
Ribs—Dec.....	4 00	4 02½	3 97½	3 97½	3 97½
May.....	3 80	3 80	3 77½	3 77½	3 77½
July.....	4 00	4 02½	3 97½	3 97½	3 97½

### Kansas City Grain.

KANSAS CITY, Dec. 28.—Receipts of wheat here for three days, 84 cars; a year ago, one day 35 cars.

Sales were as follows on track: Hard, No. 2, 8 cars 79c, 4 cars 78c; No. 3, 5 cars 75c, 4 cars 74c, 2 cars 73c, 2 cars 72c; No. 4, 1 car 69c, 1 car 68c, 2 cars 66c, 5 cars 65c; rejected, 2 cars 60c, 1 car 58c, 1 car 55c. Soft, No. 2 red fancy, 1 car 93c, 2 cars 92½c; No. 3, 1 car 91c, 2 cars 89c, 1 car 88½c; No. 4, 1 car 74c, 1 car 73½c, 1 car 70c; rejected, 1 car 65c, 1 car 62c. Spring, No. 2, 1 car 70½c, 2 cars 78c, 4 cars 75c; No. 3 spring, 1

## BROOMCORN ESTABLISHED 1873

ON CONSIGNMENT OR SOLD DIRECT.

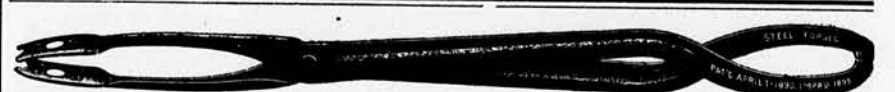
We carry the largest stock of Broom Manufacturers' Supplies in the United States. Correspondence solicited. J. P. GROSS & CO., 239-241 Kinzie St., Chicago, Ill.

## BROOMCORN F. JELKE & SON

Established 1850. 53 Walnut St., Cincinnati, O.

Cash Advances Made on All Consignments. Commission Merchants and Dealers in Broomcorn and all kinds of Broom Materials and Machinery.

REFER TO ANY CINCINNATI BANK. WRITE FOR FULL PARTICULARS.



THE BEST My new Steel Forceps will save your pigs at farrowing; my watering troughs keep hogs healthy. I will send samples at special price to advertise. Book on pigs free. J. N. REIMERS, 1016 H. St., Davenport, Iowa.

## "Old Process" Ground Linseed Cake!

It is the best and cheapest feed used. It makes more fat, of a better quality, does it quicker, and costs less than any other feed. Fed alone or mixed with wheat, corn, oats or bran, it makes solid, lasting flesh. It regulates the bowels, keeps the skin loose, and the hair soft and glossy. It will fatten every animal on the farm quickly.

FREE For a 2-cent stamp to cover cost of postage, we will send you one of our handsome 1897 steel-engraved, gold-embossed "F" calendars, which is a beauty.

TOPEKA LINSEED OIL WORKS, Topeka, Kansas.

**LIGHTNING HAY PRESS**  
STEEL  
Special prices.  
Kansas City Hay Press Co., 129 Mill St. Kansas City, Mo.

## The Kansas City Stock Yards

are the most complete and commodious in the West, and second largest in the world! The entire railroad system of the West and Southwest centering at Kansas City has direct rail connection with these yards, with ample facilities for receiving and reshipping stock.

	Cattle and calves.	Hogs.	Sheep.	Horses and mules.	Cars.
Official Receipts for 1895.....	1,689,652	2,457,697	864,713	52,607	103,368
Slaughtered in Kansas City.....	222,187	2,170,827	597,015		
Sold to feeders.....	322,232	1,576	111,446		
Sold to shippers.....	218,505	278,999	69,784		
Total Sold in Kansas City, 1895.....	1,533,234	2,446,202	748,244	41,588	

CHARGES: YARDAGE, Cattle, 25 cents per head; Hogs, 8 cents per head; Sheep, 5 cents per head. HAY, \$1 per 100 lbs.; BRAN, \$1 per 100 lbs.; CORN, \$1 per bushel.

NO YARDAGE CHARGED UNLESS THE STOCK IS SOLD OR WEIGHED.

C. F. MORSE, E. E. RICHARDSON, H. P. CHILDS, EUGENE RUST,  
V. Pres. and Gen. Manager. Secretary and Treasurer. Assistant Gen. Manager. Gen. Superintendent.  
W. S. TOUGH & SON, Managers HORSE AND MULE DEPARTMENT.

car 72c, 4 cars 71c, 2 cars 70c rejected, nominally 55c to 65c.

Receipts of corn here for three days, 664 cars; a year ago, one day, 62 cars.

Sales by sample on track: No. 2 mixed, 33 cars 17½c, 6 cars 17½c, 4 cars 17c; No. 3, 72 cars 17c, 10 cars 16½c, 2 cars 16½c; No. 4, 2 cars 17c, 2 cars 16½c, 2 cars 16½c, 7 cars 16½c; no grade, 1 car 16c; No. 2 white, 28 cars 18c, 2 car 17½c; No. 3, 29 cars 17½c; No. 4, 2 cars 17½c, 2 cars 17c.

Receipts of oats here for three days, 60 cars; a year ago, one day, 1 car.

Sales by sample on track, Kansas City: No. 2 mixed, nominally 16c to 17c. No. 3, 2 cars 15c; No. 4, 2 cars 14c. No. 2 white, nominally 20c to 23c; No. 3, 1 car 20c, 1 car 18½c, 4 cars 17c, 4 cars 16½c, 4 cars 16½c, 2 cars 16c, 1 car 15½c, 5 cars, 15½c; No. 4, 5 cars 15c.

Hay—Market steady. Three days' receipts, 142 cars. Choice timothy, \$8.00 to \$8.50; No. 1, \$7.00 to \$7.50; No. 2, \$6.00 to \$6.50; clover, mixed, No. 1, \$5.00 to \$6.50; No. 2, \$4.50 to \$5.00; choice prairie, \$5.50; No. 1, \$4.50 to \$5.00; No. 2, \$4.00 to \$4.50; No. 3, \$3.00 to \$3.50.

### Kansas City Produce.

KANSAS CITY, Dec. 28.—Butter—Creamery, extra fancy separator, 20c; firsts, 18½c; dairy, fancy, 13c; fair, 10c; store packed, 8c; packing stock, 6c; country roll, neatly packed and sweet, 10c to 12c; choice, 8c to 10c.

Eggs—Strictly fresh stock, 15c per doz.; cold storage stock, 12½c.

Poultry—Hens, 4½c; roosters, 12½c each; springs, 5c; coarse springs and roosters, 4c; broilers, from 1½ to 2 lbs., 6c; turkeys, over 7 lbs., 8c; under 7 lbs. not wanted; old gobblers, 6c; ducks, 6½c; geese, 6c; pigeons, practically no demand; dealers doing best they can with them.

Apples—Choice eating stock sells from 40c to 60c a bu.; inferior, 30c to 35c a bu.; cooking stock, 20c to 35c; Ben Davis, 20c to 40c; Wine Saps, 40c to 50c, according to quality; Huntsman's Favorite, 60c to 75c per bu. for fancy stock in a small way; shippers are paying for Northern Spy \$1.00 a bbl. in car lots; for fancy fall and winter varieties, \$1.00 to \$1.25 a bbl.; Jonathans, \$1.25 to \$1.50 a bbl. for fancy and 75c to \$1.00 for No. 2 stock; New York and Michigan stock, 90c to \$1.00 per bbl.

Potatoes—Home grown, 20c to 22½c in a small way; 17c in car lots; Wisconsin and Minnesota Burbanks, 35c to 36c in car lots, 40c in a small way; Pearls, 2c less; Iowa stock, 25c to 28c in car lots, 30c to 35c in a small way; sweet potatoes, 20c to 40c in a small way.

### St. Louis Seed Market.

Trading mostly in clover. Clean, bright seed in demand and steady; while inferior to fair ruled slow and low-priced. Other seeds in light offering and unchanged. We quote, per 100 lbs.: Timothy—Clean, bright at \$2.35 to \$2.40, fair at \$2.25 to \$2.30, off grades at \$1.50 to \$2.00. Clover—Prime, bright \$2.60 to \$2.80, fair to good at \$2.50 to \$2.55, poorer lots at \$2.40. Millet and Hungarian nominal at 45c to 50c for inferior to 60c to 65c for the best. Redtop—Good, clean at \$6.50 to 7, fancy worth \$12 to \$13, but trashy and inferior at \$1 to \$2. Sales: Clover—9 sks at \$3.90, 3 at \$4.50, 4 at \$5.38, 1 at \$5.65, 18 at \$5.93, 7 at \$5.98. Redtop—Small lot at \$1.25.

Flaxseed—Opened steady, 1 car selling Monday at 75c; lower bids at 71c Tuesday, 73c Wednesday, 72c Thursday, yesterday and to-day.

Castor Beans—Nominally steady at \$1.25 for prime in car lots, but none offering—really in demand, though. Small lots and inferior 50c to 15c less.

## GRASS AND FIELD SEEDS

MITCHELL & RAMSEY, ST. JOSEPH, MISSOURI.

When you write mention Kansas Farmer.

## HORSES SOLD AT AUCTION

on Tuesday, Wednesday and Thursday of each week. Private sales every day at the Kansas City Stock Yards Horse and Mule Department. The largest and finest institution in the United States. Write for free market reports.

W. S. TOUGH & SON, Managers, KANSAS CITY, MO.

### VETERINARY SURGEON.

D. B. U. B. MCCURDY, Veterinary Surgeon. Graduate Ontario Veterinary college, Toronto, Canada. Can be consulted on all diseases of domestic animals at office or by mail. Office: 114 West Fifth Street, Topeka, Kas.

SALESMEN to sell Cigars to dealers; \$25 weekly and expenses; experience unnecessary. Reply with 2c stamp. National Consolidated Co. Chicago



Clovers, Timothy, Millet,  
**GARDEN SEEDS,**  
FLOWER SEEDS.  
Catalogue for 1897 Free.

**SEEDS** TRUMBULL SEED CO.  
1426 St. Louis Ave.,  
KANSAS CITY, MISSOURI.

**J. G. Peppard** MILLET CANE  
1400-2 Union Avenue,  
CLOVERS TIMOTHY  
KANSAS CITY, MO. GRASS SEEDS.

**SEEDS**  
Cane and Millet Seeds, Kafir and Jerusalem Corn, Success  
and Hulless Barley, Seed Oats and Spring Wheat. All crops of  
1896. Write for our "How to Sow Alfalfa," and prices on seeds.  
MOBETH & KINNISON, Garden City, Kansas.

## Special Want Column.

"Wanted," "For Sale," "For Exchange," and small or special advertisements for short time, will be inserted in this column, without display, for 10 cents per line, of seven words or less, per week. Initials or a number counted as one word. Cash with the order. It will pay. Try it!  
**SPECIAL.**—Until further notice, orders from our subscribers will be received at 1 cent a word or 7 cents a line, cash with the order. Stamps taken.

**FOR SALE**—One hundred and sixty acre farm. Well improved and well watered; 100 acres of valley land in cultivation. Situated in Marion county, Kansas. For terms address J. W. Ford, Mason Valley, Benton Co., Ark.

**PLYMOUTH ROCK COCKERELS, BRONZE TURKEY** gobblers. Write at once. John C. Snyder & Sons, Kildare, Okla.

**FARM FOR SALE**—Three hundred and twenty acres, three miles from Eureka, Greenwood county, Kansas. One-fourth bottom land, ten acres timber, fine corals, good water, two houses, etc. Splendid cheap pastures adjoining. This farm a bargain at \$16.50 an acre, part on time at 7 per cent interest. Frank Dibert, Eureka, Kas.

**FOR RENT**—Eighty-two acres, for cash. In good cultivation; six miles northeast of Topeka. For particulars, call on or address John Rollheuser, 122 East Fourth St., Topeka, Kas.

**TO RENT**—Well improved bottom farm, 148 acres, at Dover, twenty miles southwest of Topeka, \$300. Possession March 1. Mrs. L. Wirth, 1123 W. Sixth St., Topeka.

**FOR SALE**—One hundred and sixty acres. One of the finest farms in eastern Kansas. Nice lawn, good buildings, fruit all kinds, shade. Price \$4,500. J. M. Smith, Globe, Douglas Co., Kas.

**TWENTY SHORT-HORN BULLS FOR SALE**—Pure-bred, ready for service. For particulars address J. F. True, Newman, Kas.

**OZARK FRUIT LAND FOR SALE**—Two hundred and twenty acres of the best fruit land in the world, one and one-half miles from Koshkonong station, Oregon county, Missouri, for sale at \$5 per acre, cash. Address C. C. Georgeson, Manhattan, Kas.

**SIX GALLOWAY BULLS FOR SALE**—Pure-bred, three aged and three yearlings. Bred and owned by W. G. McCandless, Cottonwood Falls, Kas.

**IMPROVED CHESTER WHITE SWINE FOR SALE**—Closing out established herd, owing to change of business. Choice offerings, both sexes, all ages. A big inducement in prices. Address C. J. Huggins, Wamego, Kas.

**WANTED**—To purchase, twenty pure-bred Holstein-Friesian cows and heifers. Price must be low to secure sale. Address "H.," care KANSAS FARMER office, Topeka.

**FOR SALE**—One hundred and sixty acre farm. One and a half miles from Paola, Kas.; mostly first and second bottom; fine grain and stock farm. Address Box 166, Paola, Kas.

**FOR SALE**—Eighty, 120 or 200 acres of well-improved land, well watered, three miles from Linwood. I will sell on reasonable terms. For particulars address Samuel Boaz, Linwood, Kas.

**WANTED**—Buyers for Large English Berkshires and improved types of Poland-Chinas, from prize-winners, at farmers' prices. Riverside Stock Farm, North Topeka, Kas.

**HIGH-CLASS POULTRY FOR SALE**—Three hundred fine birds. L. Brahmas, Buff and Partridge Cochins, B. Langshans, B. P. Rocks and S.C.B. Leghorns. Prices from \$1 up, according to score. Adam Rankin, Olathe, Kas.

**FOR RENT**—Two farms of 960 acres each in Anderson county to rent for a term of five years to good, responsible parties. All good farm land. Price \$1,200 per year. National Brokerage Company, 503-504 New York Life Building, Kansas City, Mo.

**EGGS FOR HATCHING**—See advertisement elsewhere. Belmont Stock Farm.

**SUNFLOWER HERD DUROC-JERSEY SWINE**. Choice pure-bred pigs for sale, September farrow. Address A. D. & H. L. Perrin, Prescott, Kas.

**FOR SHORT-HORN BULLS**—Reds and roans, first-class, and Poland-China boars, address D. P. Norton, Council Grove, Kas.

**MOESER ICE AND COLD STORAGE CO.**—Topeka, have just completed their new cold storage building, on the latest modern plan, and now have the best facilities for storing all kinds of fruits, butter, eggs, etc. Railroad switch to storage building. Car-load lots unloaded free of charge. Write for prices.

**FOR SALE**—One hundred and sixty acre farm, one and a half miles from Bushong station, Lyon county, Kansas. Good spring. Price \$5 per acre. J. B. McAfee, Topeka, Kas.

## SPECIAL WANT COLUMN--CONTINUED.

**WANTED**—Reliable solicitors, with or without experience. Address Kansas Mutual Life Insurance Co., Topeka, Kas.

**SHORT-HORN BULLS AND HEIFERS**—By Lavender King 4th 108682, for sale. Kellerman & Son, Mound City, Linn Co., Kas.

**TO EXCHANGE**—For choice new alfalfa seed, several choice Bronze tom turkeys, at \$3 each, or pedigreed Poland-China swine at low prices. J. H. Taylor, Rhinehart, Dickinson Co., Kas.

**FOR SALE OR TRADE**—A Spanish jack, 7 years old, also one jack 3 years; both black. Thomas Brown, Palmer, Kas.

**WANTED**—Sale bills, horse bills, catalogues and other printing. A specialty at the Mail job printing rooms, 900 North Kansas Ave., North Topeka.

**WE MAKE A GOOD FARMER'S SPRING WAGON**, two lazy backs and let-down end-gate, for \$55. Warranted. Kinley & Lannan, 424-426 Jackson street, Topeka.

**WANTED**—Buyers for Large English Berkshire gilts, bred or ready to breed to son of imported boar. Bargains! O. P. Updegraff, North Topeka, Kas.

**FOR SALE AT SPECIAL PRICES**—Hay outfits, carriers, forks, etc. Inquire at the store of P. W. Griggs & Co., 208 W. Sixth St., Topeka, Kas.

**SHORT-HORN BULLS**—Cruickshank-topped, for sale. Choice animals of splendid breeding. Address Peter Sim, Wakarusa, Shawnee Co., Kas.

**FOR SALE**—Farms in Morris, Osage, Lyon, Bourbon, Cherokee, Labette, Neosho, Anderson, Montgomery, Coffey, Woodson and many other counties for sale on eight years' time. No interest asked or added in. Write for new circulars with descriptions and prices. Hal W. Nelswanger & Co. Topeka, Kas.

**FOR SALE**—One hundred high-grade Shropshire ewes, choice ones. Also some choice high-grade Jersey cows. E. W. Melville, Eudora, Kas.

**SHAWNEE COUNTY CIDER MILL**—Bring your apples to my cider mill, three miles west of Kansas Ave., on Sixth street road. My mill will be in operation every Tuesday, Thursday and Saturday till November. Henry McAfee Topeka.

**LADIES I Make Big Wages**—At Home—

and want all to have same opportunity. The work is very pleasant and will easily pay \$18 weekly. This is no deception. I want no money and will gladly send full particulars to all sending 2c. stamp. Miss M. E. Stebbins, Lawrence, Mich.

## SUPPLIES AT WHOLESALE

If you wish to save Money in buying anything in any line for shop, farm or house, write for our circular and prices.

MIDLAND SUPPLY AND PURCHASE CO.,  
Hall Building, Kansas City, Mo.

## Combination Suits

Consisting of one double-breasted coat, two pairs of knee pants and cap. Our No. 12468, made of dark gray mixed diagonal Union cheviot, Stanley cap to match, age 4 to 14 years, all for \$2. Our Catalogue No. 18 fits you out from head to foot at cheapest prices. Sent FREE, our Mammoth Catalogue, quoting everything, on receipt of 10 cents to pay postage. H. R. EAGLE & CO., 68 and 70 Wabash Ave., Chicago, Ill.

## FIRST ANNUAL COMBINATION PUBLIC SALE

OF  
**Registered Swine--Poland-China, Berkshire, Chester White**

UNDER THE AUSPICES OF THE KANSAS SWINE BREEDERS' ASSOCIATION.

AT TOPEKA, KANSAS, ON WEDNESDAY, JANUARY 13, 1897.

The offerings will consist of about fifty head, two each from the leading nerds in the State, both sexes and all ages and all TOPS. The collection will be representative of the leading families of each breed, and will give the visitor an idea of the type required by the up-to-date breeder and afford him the opportunity of the year to buy new blood with which to recruit and reinforce his herd. Sale to be under cover and will commence at 1 o'clock p. m.

**TERMS**—Cash or acceptable ninety-day bankable paper. For catalogue address

O. P. UPDEGRAFF, Sec'y Kansas Swine Breeders' Association,  
TOPEKA, KANSAS.

COL. S. A. SAWYER, Auctioneer.

## SUNNY SLOPE FARM

\*\*\*\*\* EMPORIA, KANSAS, \*\*\*\*\*

## Hereford Cattle Headquarters

Sunny Slope Farm is one of the largest breeding establishments in the United States. Three sweepstakes bulls in service—Wild Tom 51592, Climax 60942, Archibald VI. 60921, also the great breeding bull, Archibald V. 54433, who was the sire of two sweepstakes animals (Archibald VI., sweepstakes under one year of age, and Miss Wellington 5th, sweepstakes heifer over all beef breeds when twelve months and twenty days old. We have thirteen serviceable bulls for sale, ranging from eight to twenty months old. We also have forty bulls for sale, ranging from five to eight months old. Also a choice lot of heifers and cows. We combine the blood of Anxiety, Lord Wilton and Grove 3d. Breeders are invited to inspect our herd.

**C. S. CROSS,**

H. L. LEIBFRIED, Manager.

EMPORIA, KANSAS.

### WILD TOM 51592.

☐ Sweepstakes bull Wild Tom 51592. Weight when thirty-four months old 2,205 pounds in show condition. He is the best living son of Beau Real 11055. Dam Wild Mary 21238. Winnings:—Iowa State Fair, 1895, first in class, first in special, first in sweepstakes, and Silver Medal; Kansas State Fair, first in class, first and special at head of herd, first bull and four of his get.

**FARM**—Two and a half miles northwest of city. We furnish transportation to and from the farm if notified.

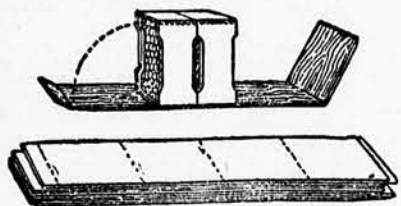


## The Apiary.

### SELLING COMB HONEY.

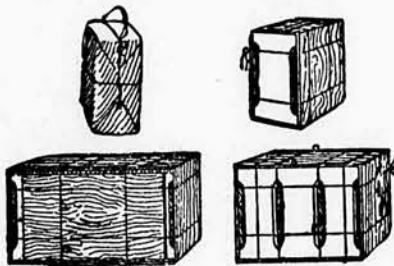
A Simple Plan That Has Been Successfully Used for Years.

There is need for a good, cheap and substantial way to put up small quantities of comb honey to preserve it from being broken until the purchaser can get it to his home. The plan that one beekeeper has used for ten years and gives an illustrated description of in the American Bee Journal may not be the best, but it is convenient and effective when the material can be obtained with little trouble and expense. Here is what he says about his method: What I use is called "basket splints" at the shops. I think almost any basket shop will sell the material very cheaply if you will order it at a time when they are the least crowded with other work, say in the winter or early spring. The size I use is about 17 inches long, four and one-fourth inches wide and one-twelfth inch thick, made from basswood timber. These I score across with the point of a knife, so



BASKET SPLINTS AND OPEN PACKAGE.

they will bend at the scored places and not break off. To score the splints in the right place I use blocks of thin lumber cut the right size to score where I want them scored. These blocks I lay on the splints and score along each edge of the blocks with the point of a knife. The number of sections sold is set out, and then the splints are scored just right for that number of sections. Then the splints are wrapped around the sections and tied with twine; then a paper is wrapped around the package and again tied with twine. This makes a good, solid package, and the customer cannot easily stick his fingers into the honey until it is untied. Sometimes when I have a little leisure I tie



CLOSED PACKAGES.

up a number of these packages so a customer does not have to wait for it to be done. By putting up packages containing one, two, three, four, five and six sections each you will be able by combining these to give the customer the exact amount he may want. You can put it up in packages containing an exact amount, as 25-cent, 50-cent or \$1-packages or almost any other amount, as the sections will vary a little in weight, and you can select the ones that will make it come about even for the price you may need. I sell the most 50-cent and one-dollar packages. Some of the packages have a convenient handle or bail to carry them by. These are for the "foot folk" and those on bicycles or those who go on the train and wish to take a package to a friend. This bail is made by cutting the twine long enough to weave back and forward a few times. It pays to make it easy and convenient for a customer to handle these packages. He gets his honey home without breaking the cappings or having any mess about it and is much more likely to want more.

#### Wonderful Work of Bees.

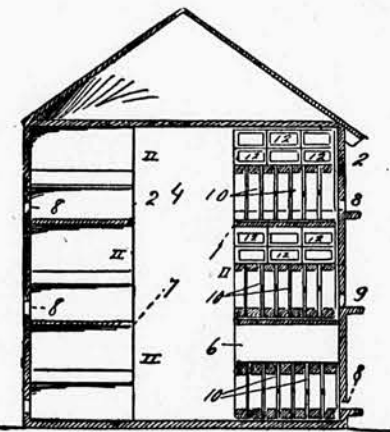
Bees must, in order to collect a pound of clover honey, deprive 62,000 clover blossoms of their nectar. To do this the 62,000 flowers must be visited by an aggregate of 3,750,000 bees. Or, in other words, to collect its pound of honey one bee must make 3,750,000 trips from and to the hive. The enormous amount of work here involved

precludes the idea of anyone that one bee ever lived long enough to gather more than a fraction of a pound of nectarine sweets. As bees are known to fly for miles in quest of suitable fields of operation, it is clear that a single ounce of honey represents millions of miles of travel. It is no wonder that these industrious little insects have earned the reputation of being "busy" bees.

### IMPROVED BEE HOUSE.

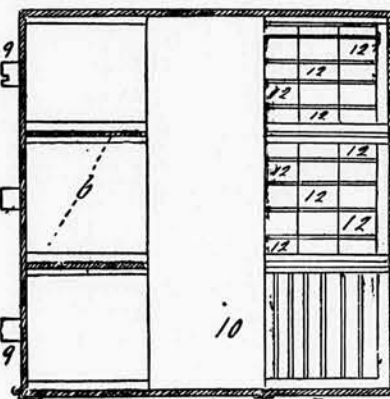
It Has Some Good Points, But Also Some Serious Disadvantages.

The illustrations represent a bee house recently patented. The house has a door and central passageway, as shown, and is provided with vertical cross-partitions secured to the inner faces of the side walls, which divide the walls into sections accessible from the passageway, as seen in the engraving.



VERTICAL CROSS SECTION.

Longitudinal horizontal division boards are secured to the vertical partitions and divide the spaces between them into hive compartments. The side wall opposite each compartment has a bee opening and an alighting board (see 8 and 9 in Fig. 1). Horizontal strips are secured to the vertical



THE GROUND PLAN.

partitions in each compartment, from which the brood frames are suspended, and the honey sections are arranged above the brood frames in each compartment and are supported by them. This house is designed to replace the individual hives and must be warmer, drier and easier of access than they are; but contagious diseases, mice, moths, etc., can do greater injury and will be more difficult to remove, as there are so many swarms kept in close quarters.—Farm and Home.

#### \$100 Reward \$100.

The readers of this paper will be pleased to learn that there is at least one dreaded disease that science has been able to cure in all its stages, and that is catarrh. Hall's Catarrh Cure is the only positive cure known to the medical fraternity. Catarrh being a constitutional disease, requires a constitutional treatment. Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system, thereby destroying the foundation of the disease, and giving the patient strength by building up the constitution and assisting nature in doing its work. The proprietors have so much faith in its curative powers, that they offer one hundred dollars for any case that it fails to cure. Send for list of testimonials.

Address, F. J. CHENEY & CO., Toledo, O.

Sold by Druggists, 75 cents.

To St. Paul and Minneapolis via Burlington Route.

Two splendid through trains each day from Missouri river points to the north via the old established Burlington Route and Sioux City line. Day train has handsome observation vestibuled sleepers, free chair cars, and dining cars (north of Council Bluffs). Night train has handsome sleepers to Omaha, Council Bluffs and Sioux City, and parlor cars Sioux City north.

Consult ticket agent.

L. W. WAKELEY, Gen. Pass. Agt., St. Louis, Mo.

## WE CURE

Diseases of the Liver Kidneys and Bladder  
Thousands of People Testify to our Success in Curing them after all other means failed

## Dr. J. H. McLEAN'S LIVER and KIDNEY BALM

IS THE PEERLESS REMEDY WE USE

All Dealers Sell It

PRICE, \$1.00 PER BOTTLE

THE DR. J. H. McLEAN MEDICINE CO. ST. LOUIS, MO.

**THE IMPROVED VICTOR Incubator**  
Hatches Chickens by Steam. Absolutely self-regulating. The simplest, most reliable, and cheapest first-class hatcher in the market. Circulars FREE. GEO. H. STAHL, 114 to 122 S. 6th St., Quincy, Ill.

**HATCH Chickens BY STEAM—EXCELSIOR Incubator**  
Simple, Perfect, Self-Regulating. Thousands in successful operation. Lowest priced first-class hatcher made. GEO. H. STAHL, 114 to 122 S. 6th St., Quincy, Ill.

**NEVER BEATEN**  
In all the many shows in which it has participated, there must be something in the superiority claims of the RELIABLE INCUBATOR. Self-regulating, entirely automatic, you put in the eggs, the Reliable does the rest. All about this and many things of value to the poultry man in our new book. Send 10 cts. for it. RELIABLE INCUBATOR & BROODER CO., QUINCY, ILL.

**Wanted, an Idea.** Who can think of some simple thing to patent? Protect your ideas; they may bring you wealth. Write John Wedderburn & Co. Patent Attorneys, Washington, D. C. for their \$1,500 prize offer and list of 200 inventions wanted.

**NO MORE TOUGH MEAT**  
**The Victor Meat Tenderer.**  
Not a pounder. Noiseless. Greatest household utensil ever invented. Any child can use it. Makes Tough Meat Tender as a Tenderloin. To introduce it, will deliver free at your express office on receipt of \$1. Victor Meat Tenderer Co., Cincinnati, Ohio.

**Chichester's English Diamond Brand. PENNYROYAL PILLS**  
Original and Only Genuine. SAFE, always reliable. LADIES ask Druggist for Chichester's English Diamond Brand in Red and Gold metal boxes, sealed with blue ribbon. Take no other. Refuse dangerous substitutions and imitations. At Druggists, or send 4c. in stamps for particulars, testimonials and "Relief for Ladies" in letter, by return mail. 10,000 Testimonials. Name Paper. Chichester Chemical Co., Madison Square, Philadelphia, Pa. Sold by all Local Druggists.

**WOVEN WIRE FENCE**  
Best on Earth. Horse-high, Bull-strong, Pig and Chicken-tight. With our DUPLEX AUTOMATIC Machine you can make 60 rods a day for 12 to 20 cts. a Rod. Over 50 styles. Catalogue Free. KITSILMAN BROS., Box 64, Ridgeville, Ind.

**J.I.C. DRIVING BIT Still King**  
THE BIT OF BITS. Will control the most vicious horse. Sales Greater Than Ever. Sample mailed 20 for Nickel, \$1.50. Stallion Bits 50 cts. extra. RACINE MALLEABLE IRON CO., RACINE, WIS.

## "Eli" Baling Presses

33 Styles & Sizes for Horse and Steam Power Bell Feed Opening 48 Inch Power Leverage 64 to 1 STEEL Send for 64 page illustrated catalogue. COLLINS PLOW CO., 1120 Hampshire St., Quincy, Ill. KANSAS CITY PLOW CO., Gen. Southwestern Agts., Kansas City, Mo.

## BIG SPECIAL OFFER

TO FARMER SUBSCRIBERS

The Kansas Farmer

For 1897—Price Alone, \$1.00.

The Peterson Magazine

For 1897—Price Alone, \$1.00

Both for the Year \$1.60!

To separate addresses if desired.

## THE FAMILY MONEY MAKER!

Worth \$100 a year and more to all who own land, a garden, orchard or conservatory; covers, in plain language, by practical men, the care and cultivation of flowers, fruits, plants, trees, shrubs, bulbs, etc., and tells how to make home grounds attractive.

**3 AMERICAN GARDENING 10**  
America's brightest and most reliable gardening and family paper. Established fifty years. Illus. Weekly. \$1.00 a year, WITH HANDSOME PREMIUM.

To introduce it to new readers we will send AMERICAN GARDENING 3 months (12 numbers) to any address on receipt of 10 cents, in stamps or coin. Sample free.

AMERICAN GARDENING, P.O. Box 1697, N.Y.

Or send \$1.15 to this office and it will pay for KANSAS FARMER and American Gardening, both for one year. Address KANSAS FARMER CO., Topeka, Kansas.

## To Cripple Creek

VIA COLORADO SPRINGS

The Chicago, Rock Island & Pacific Railway is

**4 hours quicker**

To Cripple Creek than any other line.

Full particulars by addressing JOHN SEBASTIAN, G. P. A., Chicago.

## CRIPPLE CREEK

The Santa Fe Route is the most direct and only through broad-gauge line from Chicago and Kansas City to the celebrated Cripple Creek gold mining district. Luxurious Pullmans, free chair cars, fastest time, and low rates.

## GOLD! GOLD!!

Address G. T. Nicholson, G.P.A., A.T.&S.F. Ry., Monadnock Bldg., Chicago, or W. J. Black, A.G.P.A., Topeka, Kas., and ask for free copy of profusely illustrated book descriptive of Cripple Creek. It is well worth reading.

## SANTA FE ROUTE

**BED WETTING CURED. Sample FREE**  
Dr. F. E. MAY, Bloomington, Ill



**BEFORE BUYING A NEW HARNESS**  
Send your address with 2c stamp for illus. Catalog, giving full description of Single and Double Custom Hand-Made Oak Leather Harness. Sold direct to consumer, at wholesale prices. King Harness Co., No. 87 Church St., New York, N. Y.

**"JONES HE PAYS THE FREIGHT."**  
**Farm and Wagon SCALES.**  
United States Standard. All Sizes and All Kinds. Not made by a trust or controlled by a combination. For Free Book and Price List, address **JONES OF BINGHAMTON, Binghamton, N. Y., U.S.A.**

We make Steel Windmills, Steel Towers and Feed Grinders and are selling them cheaper than the cheapest. Our productions are standards; are first-class in every respect and are sold on trial. Send us a postal and we will tell you all about them. **CURRIE WINDMILL CO., AGENTS WANTED. Manhattan, Kas.**

**LIGHTNING WELL MACH'Y**  
PUMPS, AIR LIFTS.  
GASOLINE ENGINES.  
CIRCULARS FREE  
THE AMERICAN WELL WORKS.  
AURORA, ILL. - CHICAGO - DALLAS, TEX.

**Portable Well Drilling MACHINERY**  
Established 1867. Covered by patents. Machines drill any depth, both by steam and horse power. We challenge competition. Send for free illustrated catalogue. Address, **KELLY & TANEYHILL, WATERLOO, IOWA.**  
Mention KANSAS FARMER.

**RUSSELL'S STAPLE PULLER AND WIRE SPLICER**  
A combination tool used in repairing and removing wire fences. Price \$1.25. Drives and pulls staples, cuts and splices wire. Its special use is in building and repairing wire fences, but may be used for many different purposes about a farm. Saves its cost in one day's work. You can't afford to be without it. Ask your hardware merchant for it, or address **Russell Hardware & Implement Manuf'g Co., Kansas City, Mo.**

**The Baldridge Transplanter.**  
Made of steel and iron. Earlier and larger crops.  
Soil, roots and plants taken up together, preventing stunting or injury. Vegetables, flowers, strawberries, tobacco, small nursery trees, etc., can be moved at all seasons. Invaluable for filling vacancies. Transplanter with blade 2 inches in diameter, \$1.25; same with 3-inch blade, \$1.50. **SPECIAL PRICES** with KANSAS FARMER: By a special arrangement with the manufacturers we are able to offer the Transplanter and KANSAS FARMER one year for price of Transplanter alone. Send \$1.25 and we will mail KANSAS FARMER to you and send you the Transplanter by express. Or call at FARMER office and get the Transplanter and save 25c. express charges. Address **KANSAS FARMER CO., Topeka, Kas.**

**PEERLESS FEED GRINDERS.**  
**GRIND CORN**  
Ear or Shell  
Oats, Wheat, Rye and Barley Fine Enough for any Purpose.  
Made only by Stevens Manufacturing Co., Joliet, Ill.

When you write mention Kansas Farmer.

**THOMPSON'S GRASS SEEDER**  
Sows all kinds Clover, Timothy, Alfalfa, Red Top, Flax and all Grass Seeds, any quantity, evenly, accurately, 20 to 40 acres a day. In wet, dry or windy weather. Weight 40 lbs. **HOPPER FOR OATS, WHEAT.** Catalog **O. E. THOMPSON & SONS, FREEMAN, 23 River Street, YPSILANTI, MICH.** **TRUMBULL SEED CO., Gen. Agts., KANSAS CITY, MO.**  
When you write mention Kansas Farmer.

## WE MAKE WHEELS, TOO!

We make them easy-running, durable, satisfactory, and the finish is far beyond any other you have ever seen. . . . .

Our Catalogue gives you a full description. If you want one we will send it, if you will drop us a line.

**National Sewing Machine Co., Belvidere, Ill.**

## Free to Every Subscriber.....

That grand semi-monthly, 20-page ladies' journal, **LADIES HOME COMPANION**, whose subscribers now number nearly 200,000; and this number is increasing rapidly. If you have seen some of the recent issues of this beautiful journal, and noted the many and decided improvements that have been made, you will not be at all surprised at this rapid growth.

**WOMAN IS QUEEN,**  
and Home is Her Realm.



We have at last succeeded in completing arrangements whereby we are enabled to present our readers with this charming periodical free of all cost.

Who Has Not Heard of the

## ....Ladies Home Companion?

Hundreds of thousands are familiar with this magnificent publication, and its beautiful colored covers, containing a new and attractive design for each issue. Issued twice a month; its twenty or more pages are filled with illustrations, stories, sketches, poems and practical suggestions of the most absorbing interest to every member of the household.

The various departments, each under the direct supervision of writers especially adapted to them, are as follows:

**Housekeeping** This department is full of valuable suggestions on domestic economy and preparation of the daily meals.

**Fancy Work** The numerous illustrations and practical instructions of this department will delight all lovers of this dainty art.

**Decorations, Etc.** This department is invaluable to those wishing to furnish apartments according to modern tasty ideas.

In addition to the above there is "Children's Corner," "Mothers' Chat," "Knotty Points," "Knick-Knacks," and "Miscellaneous."

**OUR OFFER!** In order to secure this Magazine free, send us two subscriptions for KANSAS FARMER, and \$2, and we will order *Ladies' Home Companion* sent to your address one year, free to you. Or, send us your own subscription and \$1.30, and it will pay for KANSAS FARMER and *Ladies' Home Companion* one year. Add 10c. if "Modern Cook Book" is desired.

Address

**KANSAS FARMER CO., Topeka, Kas.**

**Fashions** Under this head are the prevailing fads and fancies which count for so much in my lady's toilet.

**Flowers** Lovers of flowers will find this department, ably edited by Geo. W. Park, B.Sc., of absorbing interest.

**Literary** The delightful stories, interesting articles and charming poems afford ample evidence of the care bestowed on this department. Many of the most popular writers in the country are regular contributors.

Please mention "Kansas Farmer" when writing to our advertisers!

## TO THE EAST

**CHICAGO, ROCK ISLAND & PACIFIC RAILWAY.**

The Rock Island is foremost in adopting any plan calculated to improve speed and give that luxury, safety and comfort that the popular patronage demands.

Its equipment is thoroughly complete with Vestibuled Trains,

**BEST DINING CAR SERVICE IN THE WORLD,**

Pullman Sleepers, Chair Cars, all the most elegant and of recently improved patterns. Its specialties are

**FAST TIME, COURTEOUS EMPLOYEES, FIRST-CLASS EQUIPMENT and FIRST-CLASS SERVICE GIVEN.**

For full particulars as to Tickets, Maps, Rates, apply to any Coupon Ticket Agent in the United States, Canada or Mexico or address

**JOHN SEBASTIAN, G. P. A., CHICAGO, ILL.**



**SOLID THROUGH VESTIBULED TRAINS**

**Kansas City, St. Joseph, Leavenworth, Atchison,**

**TO**

**ST. LOUIS, CHICAGO, OMAHA, PEORIA, ST. PAUL & MINNEAPOLIS.**

**WITH**

**Dining Cars, Sleepers and Chair Cars (Seats Free).**

**CONNECTIONS MADE AT**

**St. Louis, Chicago and Peoria**

**FOR**

**All Points East, South and Southeast**

**L. W. Wakeley, G. P. A.,**

**ST. LOUIS, MO**

**Howard Elliott, Gen. Mgr.,**

**ST. JOSEPH, MO.**

**H. D. Dutton, T. P. A.,**

**ST. JOSEPH, MO.**

**H. C. Orr, A. C. P. A.,**

**KANSAS CITY, MO.**

**SPECIALTY!** Private Diseases and Diseases of the Rectum. Correspondence solicited. **DR. WM. H. RIGTER,** 503 Kansas Ave., Topeka, Kas.



## Vitality Men Restored.

Falling Sexual Strength in old or young men can be quickly and permanently cured by me to a healthy vigorous state. Sufferers from.....

**NERVOUS DEBILITY, WEAKNESS, VARICOCELE,**

**AND ALL WASTING DISEASES** should write to me for advice. I have been a close student for many years of the subject of weakness in men, the fact is, I was a sufferer myself. Too bashful to seek the aid of older men or reputable physicians I investigated the subject deeply and discovered a simple but most remarkably successful remedy that completely cured me. I want every young or old man to know about it. I take a personal interest in such cases and no one need hesitate to write me as all communications are held strictly confidential. I send the recipe of this remedy absolutely free of cost. Do not put it off but write me fully at once; you will always bless the day you did so. Address

**THOMAS SLATER, Box 960,**

**Shipper of Famous Kalamazoo Celery, KALAMAZOO, MICH.**

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

Office: 730 Kansas Ave., TOPEKA, KAS.



