

# KANSAS FARMER

Volume XLI. Number 7.

TOPEKA, KANSAS, THURSDAY, FEBRUARY 12, 1903.

Established 1863. \$1 a Year

## KANSAS FARMER.

Established in 1863.

Published every Thursday by the  
KANSAS FARMER CO., - - TOPEKA, KANSAS

E. B. COWGILL.....President  
J. B. McAFEE.....Vice President  
D. C. NELLIS.....Secretary and Treasurer

SUBSCRIPTION PRICE: \$1.00 A YEAR

E. B. COWGILL.....Editor  
I. D. GRAHAM.....Associate Editor  
H. A. HEATH.....Advertising Manager

Entered at the Topeka, Kansas, postoffice as second-class matter.



### ADVERTISING RATES.

Display advertising, 15 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.54 per inch per week.  
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 agate line for one year.  
Annual cards in the Breeders' Directory, consisting of four lines or less, for \$16.00 per year, including a copy of the Kansas Farmer free. Special rates for displayed live stock advertising.  
Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.  
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 communications to

KANSAS FARMER CO.,  
116 West Sixth Ave., Topeka, Kans.

## Table of Contents

Alfalfa in Kansas, growing.....	171
Anderson, R. W.....	181
Animal intelligence.....	176
Avery, H. W.....	170
Beard, Frank.....	176
Bellows, H.....	172
Bermuda grass.....	179
Bliggs, A. T.....	181
Billings, Mrs. Kate.....	177
Bliss, Mary.....	177
Buffalo tree-hopper.....	170
Carpenter, Mrs. L. K. J.....	170
Chicken-house, a good.....	184
Chickens and flowers.....	177
Churchill, John H.....	170
Corned beef.....	172
Dickens, Prof. Albert.....	172
Dunbar, Jas. A.....	170
Dwyer, H. V.....	172
Ericson, C. W.....	181
Farm notes.....	172
Feed grain and corn for Kansas, bet- ter.....	171
Garcia, Fabian.....	183
Good men still needed.....	178
Grandma (poem).....	176
Grange department.....	179
Guy, Geo. F.....	170
Hast thou forgotten (poem).....	177
Hog-feed, an eastern.....	173
Horticultural society, Missouri Valley.....	182
Incubation, artificial.....	184
Irrigation, profits in.....	172
Isely, C. H.....	181
Jamie's secret.....	176
Johnson, Burgess.....	176
Johnson, M. M.....	184
Johnson, Rev. W. B.....	181
Kansas? why not.....	173
Kirkpatrick, H. M.....	170
Macauley, W. J.....	181
Machinery, cheap.....	178
Martindale, W. J.....	181
Mayo, N. S.....	174
Moss, Mrs. I. B.....	181
Mother find time? how can the busy.....	177
Murphy, Eva M.....	170
Naber, H. A.....	172
Needed legislation.....	170
Onion culture.....	183
Pit, the.....	177
Recipes, our weekly.....	177
Roads, farmers can make the.....	172
Robinson, Dr. J. P.....	177
Robinson, J. W.....	170
Scab or itch in cattle.....	173
Scandrett, M. H.....	170
Sheep-speltz-timothy.....	172
Shepherd, N. J.....	172
Some of the results.....	176
State fair, Kansas needs a.....	172
St. Valentine's day, getting ready for (poem).....	176
Sturgeon, Mrs. M. M.....	181
Sutton, Chas. E.....	170
Swallowed a farm.....	177

Tanton, G. A.....177  
Taylor, Edwin.....170  
Telephones, wire-fence.....183  
Ten Eyck, A. M.....172  
Thompson, Albert.....181  
Trott, D.....173  
Urner, E. E.....181  
Valentine party, a.....176  
Vegetable question, a.....184

### BLOCKS OF TWO.

The regular subscription price for the KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year with one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, Kansas Farmer Company, Topeka, Kans.

The question of feeding corn worth 35 or 40 cents a bushel to feeders costing \$3.55 to \$4.55 in Kansas City, when export beaves bring \$3.60 to \$5.05, is one that is not receiving an affirmative answer in some sections of Kansas.

The value of alfalfa as a crop and as a feed is better understood each year. Reports indicate that if seed can be had at a reasonable price the coming season will witness the greatest increase in the acreage of alfalfa ever made in one season. The farmer who has alfalfa feels a sort of contemptuous pity for those who have not become aware of its value.

The farmers in the vicinity of Wellsville, Franklin County, held an interesting and profitable institute last week. The Grange is well organized in that part of the State and, as is always the case where the grange prevails, the arrangements were perfect and local farmers strongly represented on the program. The editor has many of the papers read, and will present them in the KANSAS FARMER as rapidly as room can be found.

The world is just beginning to realize the advantages and economies of doing business by mail. When these things are fully understood there will be a demand for better facilities for the remission of money than now exist, and it will be most emphatic. The post check system is evidence of such a demand. It provides a perfectly safe and economical plan of sending money through the mails at a minimum cost to the sender; and he can hardly lose except by his own negligence. The plan has been before the public for some time and no valid objections have been found. An innovation that promises so much at so little expense should be given a trial.—National Stockman and Farmer.

The majority of letters received during the last week by the KANSAS FARMER have been directed to the subject of needed legislation. Most of these have been in opposition to the proposed constitutional convention. Nearly all of the opponents of a constitutional convention have based their opposition on the plea that it is not wise to resubmit the question of prohibition. Among farmers and other substantial citizens of Kansas there is strenuous opposition to allowing the firing line of the temperance battle to be moved backwards. Evidently the

present conflict has been won by the prohibition forces on the skirmish line. It seems little worth while to be at the expense of a general warfare with the liquor interests so long as they can be beaten back by the pickets.

### BERMUDA GRASS.

Frequent inquiries are received, especially from the Southern part of the State and from Oklahoma, concerning Bermuda grass. The South Carolina experiment station has published a bulletin on this grass, from which the following information is compiled:

Bermuda grass came originally from India. In Southern States it is the most valuable of all grasses for pasture and for hay. As much as six and one-half tons of hay per acre has been produced at three cuttings on bottom land in Georgia.

It propagates by underground stems similar to those of Kentucky blue-grass and also by over-ground stems or runners which take root.

Bermuda grass blossoms in the Southern States, but produces no seed in this country.

The best way to secure a stand is by planting the sod. The bulletin says: "In the fall while breaking the land with a turn plow drop pieces of the sod in every third furrow behind the plow and cover with the next plow slice. Sow rye on the land as left by the plow, and harrow or drag smooth, covering the rye seed. In spring turn cattle on to pasture the rye and aid the Bermuda by removing shade and firming the soil upon the Bermuda roots. Neither horses, sheep, nor hogs should be allowed upon young Bermuda pastures. These animals will interfere with the spreading of the Bermuda by biting off the over-ground stems. "For spring planting, prepare the land by plowing and harrowing as for corn. Open furrows two feet apart, and in these drop pieces of sod every two feet. Cover with a light furrow and roll down smooth. This should be done late in March or in April [in South Carolina]. It may be planted in this way at any time during the summer and early fall by covering the pieces of sod deeply."

The directions for seeding are to have a good seed-bed freshly harrowed and to sow at the rate of five pounds of seed per acre and cover lightly.

It is extremely important that the young plants be not shaded, since shade is death to Bermuda. Close pasturing with cattle is recommended.

Bermuda will grow on poor soil but appreciates fertility. Once well established it is good for an indefinite period and improves the land every year.

When it is desired to destroy Bermuda sod it is recommended to expose the roots and underground stems to freezing weather in winter. For this purpose it is suggested to cut up the sod with a disc or cutaway harrow, crossing to cut the sod into small blocks, and to tear up these blocks with some plow or harrow that will bring them to the surface, repeating this several times during the winter. The sod should be frequently stirred in spring until corn-planting time, then plant corn and keep it well cultivated with some implement that will not cover portions of the sod. When the corn is knee high, sow two bushes of peas per acre and cultivate them in.

### Live Stock Movements in 1902.

According to reports the receipts of cattle at the five leading stock-markets of Chicago, Kansas City, Omaha, St. Louis and St. Joseph during the past year numbered 7,710,559 head, compared with 7,243,469 head in 1901 and

6,602,735 head in 1900. The number of hogs received in 1902 is given at 15,614,129 head, in contrast with the much higher number of 18,764,014 head in 1901, as well as with 17,239,621 head in 1900. The average weight of the 7,895,238 hogs received at Chicago in 1902 was 220 pounds, compared with 226 pounds for the year 1901. At Kansas City, the average weight of hogs received in 1902 was 200 pounds, and 197 pounds in 1901.

In 1902, local consumption took 4,180,297 head, and in 1901, 5,572,930 head. The feeder movement in 1902 reached the extraordinary total of 1,112,067 head, in comparison with 758,045 head in 1901. At St. Joseph a similar condition prevailed throughout the year, resulting in a reduction in local consumption from 2,758,110 head in 1901 to 2,419,535 head in 1902, while the number of feeders shipped and driven to the country increased from 67,926 head in 1901 to 152,198 head in 1902.

The stock of cut meats at the five markets of Chicago, Kansas City, Omaha, St. Louis and Milwaukee on December 31, 1901, amounting to 269,137,147 pounds. On the corresponding date of 1902, the stocks were 179,029,100 pounds. There was thus a shrinkage of 90,108,047 pounds, or 33.48 per cent, in the course of a year.

### What Kind of Mulberry-Trees?

EDITOR KANSAS FARMER:—I am planning to set out a lot of wild mulberry-trees this spring. I can get good straight trees along the river, but several of my neighbors tell me that they are hard to start and only do well by the river. I expect to set them in low land and only for shade and timber. Do you think they will answer my purpose, or would you advise buying the Russian mulberry from a nursery?  
Salina, Kans. A READER.

If the neighbors speak from experience had in your vicinity, their advice is better than others can give. All who have ever written about the mulberry say, "Plant the Russian." Trees suitable for planting are not very expensive. Unless some one shall report favorable experience with the wild, by all means procure the nursery-grown.

### KANSAS FARMER'S NEW WALL ATLAS.

The KANSAS FARMER has arranged with the leading publisher of maps and atlases to prepare especially for us a New Wall Atlas, showing colored reference maps of Kansas, Oklahoma, Indian Territory, the United States, and the world, with the census of 1900. The size of the New Wall Atlas is 22 by 28 inches and it is decorated on the outer cover with a handsome design composed of the flags of all nations.

Tables showing products of the United States and the world, with their values, the growth of our country for the last three decades, and a complete map of the greater United States are given. This is an excellent educational work and should be in every home. The retail price of this New Wall Atlas is \$1.

Every one of our old subscribers who will send us \$1 for two new trial subscriptions for one year will receive as a present a copy of this splendid New Wall Atlas, postpaid, free.

Any one not now a subscriber who will send us 50 cents at once will receive the KANSAS FARMER for five months and will be given a copy of our New Wall Atlas free and postpaid.

## NEEDED LEGISLATION.

## State Fair.

Several persons who have opinions on the question of establishing a Kansas State Fair under State management have sent their views to the KANSAS FARMER:

J. W. ROBISON,

President Kansas State Live Stock Association, Vice-President Kansas State Board of Agriculture, Vice-President Kansas State Horticultural Society, President Kansas State Corn-Breeders' Association, Ex-President Kansas Improved Stock-Breeders' Association, Ex-President Butler County Fair Association.

I hope you will not fail to use your influence with the Legislature now in session to pass the necessary legislation to secure a State fair in some suitable location where we can exhibit the products of the farm, orchard, shop, and factory, and the live stock of our State without going to some adjoining State to make such exhibit. We have the material to make a grand and creditable exhibit that would be a credit and a profit to our State. An exhibition of this kind held in our own State would be invaluable to our people, especially so to the farmers, where they could see and compare the improved grains, fruits, vegetables, plants, flowers, and live stock of the State. Improvement in all of these is great since Kansas last held a State Fair. The improved bred corn and new methods of culture of that one plant alone would be worth many times the cost of the fair to the State; and the improvement in our live stock would be of equal value with corn and other cereals.

Let us not get more than a half dozen years behind Missouri. We need a place where we can meet annually and show to ourselves and the outside world what we are and can do. Let us get up in front with the foremost in the procession and not be lagging back with the hindmost. We need such an exhibit this fall so we may be able to select our best to take to St. Louis.

EDWIN TAYLOR, EDWARDSVILLE, WYANDOTTE COUNTY, EX-PRESIDENT KANSAS STATE BOARD OF AGRICULTURE AND STATE HORTICULTURAL SOCIETY.

I am not sure that it is a good thing for the State of Kansas to build up and maintain a State fair. Had we not better put all the money we have to spare for such purposes into the St. Louis Exposition?

CHARLES E. SUTTON, PRESIDENT KANSAS IMPROVED STOCK-BREEDERS' ASSOCIATION, RUSSELL, RUSSELL COUNTY.

A State Fair for Kansas—this has been my pet hobby for years, and after we have had the first State fair this fall (for I have every reason to think our present Legislature will provide for one), we will say as we have already said of the telephone, "How did we ever get along without it?"

There is no way in which the present Legislature can do as much good with the same amount of money for the farmers and stockmen of Kansas as they can by passing a businesslike "State fair" measure—not a "horse trot" or a "Midway," but a State fair where the farmer can take his entire family and give them more education and pleasure at one time, for a few dollars, than he can secure for them in any other way for \$100. Here he can show them the best types of horses, cattle, sheep, swine, and poultry; the varieties of wheat, corn, oats; all the latest appliances in the line of labor-savers—in fact, he shows them more that is good and will benefit them, in a few days spent here, than they would learn at home or from reading in a lifetime. They carry away many new ideals. They know nearer than ever before what the best breeders consider the best types of the different breeds of live stock and are thus better qualified to select breeding animals for future use.

Comparison is the greatest of all teachers, and at no place can so great a number of comparisons be made and at such a limited cost as at a State fair. The railroads grant the lowest rates of the year, and the Kansas farmer will look forward to this annual event and arrange his work so that he can go and take the entire family.

The importance of a State fair can not be estimated in dollars. It is an educator. It advertises Kansas in every State in the Union. It brings buyers for our lands as well as our stock. It brings to our attention every device of merit of use on the farm. It is a

State picnic, where we gather annually to exchange ideas and have a good time. It presents less immoral influences than any gathering of similar size. No man, woman, or child can spend a week at a State fair such as Kansas can have—with the assistance of the Legislature—without being greatly benefited.

H. W. AVERY, WAKEFIELD, CLAY COUNTY.

During the fair season of 1902 I had the pleasure of attending nearly all of the larger fairs of the State; also the Royal at Kansas City and the International of Chicago. After this somewhat extended opportunity of observation, I was impressed by two prominent conditions. First, the presence and general distribution of good horses, cattle, hogs, and other kinds of live stock, a great many individuals in all the different breeds, rich enough in quality to hold good places in the warmest company of hotly contested Eastern show-rings. It is surprising, indeed, in so young a State as Kansas, that we find such general interest in improve d stock, and the presence of so many prize-winners and fashionably bred representatives of all the prominent breeds. In breeding stock the Kansan has been true to his reputation for wanting and getting the best.

The second condition that impressed me, in the midst of this presence and plenty of good stock and good crops, was the absence of the thing that promotes and encourages both—a well-managed official State fair, and this condition in a State that has the greatest improved stock organization in the United States. As a member of the standing committee on World's Fair exhibits of the Kansas Breeders' Association, the advisability, if not the absolute necessity of a State fair where all of the good things of our great State might assemble, seems apparent first of all that we may measure ourselves and acquaint ourselves with our own resources, and then that we may gather the cream of them all and place such on exhibition before the visitors at the Louisiana Purchase Exposition, that will speak in that familiar Kansas tone of voice. We never before had such resources as we now have. The necessity of a great Kansas exposition was never greater nor could it be more profitable. Kansas, with anything but the best, would be a disappointment. We can not afford to be a disappointment at home or abroad.

Let us have a good State fair backed by a liberal State appropriation, and Kansas stockmen will respond with a grand exhibit of their skill at home, and later at St. Louis.

H. M. KIRKPATRICK, WOLCOTT, KANS., PRESIDENT KANSAS SWINE-BREEDERS' ASSOCIATION.

Is Kansas to have a State fair? Can it come to pass, after so many pulls, after so long a time, after so many promises, after so many disappointments, after the heart is sick with hope deferred, after all other Western States that have a standing as an agricultural community have shown the way, after Kansas has earned for herself the credit of leadership in so many great achievements, after she has so signally failed in that leadership in promoting, establishing, and maintaining a place for the exhibition of the resources of the State—at so late a date, the appropriation and provision for a State fair, a time and place to exhibit to the world her wonderful resources should be made. Orators sing her praises on "Kansas Day" in beautiful diction, poetry in prose. We read about Kansas and get all swelled up. Then we think about Kansas and the way she takes care of the greatest of all her vast interests, live stock and agricultural products and

—the swelling goes down. Advertising one's business has become a necessity. There is no known facility for the advertising of the live stock, agricultural, and mineral products of a State that can take the place of the annual exhibition of these products to the world.

The expense of this undertaking in order to meet the competition of other States on a scale equal thereto is too great for the individual or a community to undertake. Much has been done by individuals and communities; but it is not right that a few should bear the burden and the whole State reap the benefits. Every citizen of the State becomes a beneficiary in a greater or less degree, no matter what his occupation or in what quarter of the State he may live, and he should be willing to bear his like proportion of the responsibility. In addition to the necessity of advertising the things you wish to sell, there is another great benefit derived by this plan of getting together the best things of the State. It is that each may know where he stands in the merit of his production. In short, it is the great school of the State. I beg, therefore, that the bill now before the Congress of the State will pass.

JOHN H. CHURCHILL, DODGE CITY, FORD COUNTY, PRESIDENT STATE BOARD OF AGRICULTURE.

I have thought for some time that Kansas should have a State fair along permanent and substantial lines. Agriculture and the live-stock industry, the great lights of Kansas, never were in a more flourishing condition, and the people generally happy and contented on every side. Kansas, with its diversity of crops, its wonderful resources, possibilities, and its salubrious climate is to-day attracting more attention than any State in the Middle West. We have homes for many more intelligent farmers in the great wheat and corn belts, the "stockman's paradise" western Kansas. We have range and ranches, the best of grasses and never-failing water, and on the east nearness to market with cornfields adjoining, all complete—ideal conditions for the live-stock farmer and breeder. And all this leads up to the State fair proposition. Kansas and her people and others from the outside that want to learn more of this State should get together once a year and have a grand round-up of her resources. Agricultural display, products of the soil, the different breeds of cattle, horses, hogs, sheep, poultry, dairy department, manufactures—in fact, everything should be represented which makes this a prosperous State.

I have talked with many breeders and farmers, who are prominent in their different communities, men who are doing something, who pay good round taxes. They without exception endorse the State fair project. The State Board of Agriculture, the most conservative body of farmers and stockmen in the State, at their last annual meeting in January, passed a resolution heartily favoring the idea. The great majority of the people of this State want to be doing something to keep us in the front rank, ever advancing along the lines which are bringing us success. They say let us have a fair this year—every year—and we can make a showing that will astonish the world, even ourselves; and when we go home from our annual fair with new ideas, higher hopes and aims, an added faith and pride in our hearts—will we not thank God we are from and of Kansas?

## TO CURE A COLD IN ONE DAY

Take Laxative Bromo Quinine Tablets. All druggists refund the money if it fails to cure. E. W. Grove's signature is on each box. 25 cents.

## Wagon World Awheel.



Half a million of these steel wheels have been sent out on our own wagons and to fit other wagons. It is the wheel that determines the life of any wagon, and this is the longest lived wheel made. Do you want a low down Handy Wagon to use about the place? We will fit out your old wagon with Electric Wheels of any size and any shape tire, straight or staggered spokes. No cracked hubs, no loose spokes, no rotten felloes, no resetting. Write for the big new catalogue. It is free. Electric Wheel Co., Box 46 Quincy, Ills.

## Constitutional Convention.

Many citizens of various parts of the State have written their views on the proposition to hold a constitutional convention.

MRS. L. K. J. CARPENTER, OSWEGO, LABETTE COUNTY.

Let the Prohibitory Law stand. There is nothing wrong about it whatever. The fault of violation and lack of confidence in it, lies in the derelict officers. When a school-room is disorderly, the remedy usually lies in a new teacher, one who will enforce order. So in counties where the prohibitory law is set at naught, the remedy should be a new set of county officers appointed by the Governor or Attorney-General.

JAMES A. DUNBAR, CIMARRON, GRAY COUNTY.

As a teacher and a voter in Kansas, I wish to put myself on record as opposed to Waggener's House Bill providing for a convention to frame a new constitution for Kansas. The Kansas constitution has served as a model for the framers of constitutions in other States, and serves our purpose well. In my opinion, this measure is aimed at prohibition in Kansas and ought to be opposed by every friend of law and order and every reputable journal in the State.

GEO. F. GUY, RILEY, RILEY COUNTY.

I realize that a constitutional convention would be a good thing to the end that some of our laws might be changed, but if such a convention means a blow at prohibition in Kansas I desire to register my vote against a constitutional convention.

M. H. SCANDRETT, LIBERAL, SEWARD COUNTY.

In view of the fact that a bill for a constitutional convention has been introduced into the State Legislature, threatening the present prohibitory law, I wish to enter a vigorous, earnest, emphatic protest against this measure, or any other movement looking to a change in the present liquor laws of the State. The majority of the citizens of Kansas are strongly in favor of the present laws on the subject, and are first, last, and all the time for their support.

EVA M. MURPHY, GOODLAND, SHERMAN COUNTY.

The proposed extravagance of the State's money in the bill for a constitutional convention is amazing to an economical woman, when changes if necessary can be so easily and economically made by amendments. I suspect the only change that is really desired by those advocating this bill is a change in the prohibitory law. Heretofore these honorable men have openly advocated resubmission bills, which have been turned down one after another. Now they propose to sneak through a bill like this in order to get a chance at the prohibitory law. If this is statesmanship, I fear women would never make statesmen. Her prohibi-

(Continued on page 181.)



## Buy a PLANO and get LASTING SATISFACTION

For five years past you have not seen our advertisement in this paper—we've been "crum full" of business; had no need for more. Our factories have been growing, but the satisfying quality of our machines remains the same—a quality that's hard to match at any price.

The Plano Binder holds the world's record for accurate tying; is the only harvester with a Fly Wheel, Lever Driven Binder, Friction Clutch Reel, etc.

The Jones Vertical Mower, though one of the simplest mowers made, shows many valuable features found in no other. Its Lifting Lever brings the bar straight up to pass a tree or stump.

The Plano Husker and Shredder and Corn Binder are among the latest triumphs of farm implement construction; get double profit from the corn crop. The Plano catalogue tells more about them—it's free.

## PLANO DIVISION

International Harvester Co. of America, Chicago, Ills.



# Agricultural Matters.

## Growing Alfalfa in Kansas.

FROM BULLETIN NO. 114, FARM DEPARTMENT KANSAS STATE EXPERIMENT STATION, BY H. M. COTTRELL, M. S.

(Continued from January 15.)

### TOP-DRESSING.

Each winter, while the ground is frozen, we cover the college alfalfa-fields with a good top-dressing of manure. Usually the manure is taken directly from the stables or feed-lots without rotting. We spread from fifteen to thirty tons per acre, and are careful to spread it thinly and evenly. This is best done with a manure-spreader, but can be done by hand if care is taken.

The manure is used on the alfalfa-fields not so much on account of the fertilizing effect, though this is profitable, as for its effect in holding moisture in the soil. The college fields are upland, with heavy soil and a hardpan subsoil. In one of the fields permanent water is 180 feet below the surface. The field suffers from lack of moisture if high winds blow in the spring and in times of drouth. The rainfall is sufficient every year for large crops of alfalfa if it could be saved in the soil for the plants. The top-dressing of manure greatly helps in this saving.

Prof. F. H. King found, at the Wisconsin Experiment Station, that in the spring, manured ground contained on an average thirty-four and four-tenths tons more water per acre in the first three feet than did unmanured ground, and in a dry season seven-two tons more water. The loss of water from evaporation in unmanured ground was one ton per day greater than from manured soil. And he also found that the manure in the surface-soil brought up the deeper soil-water to where it could be used by the plants. In another case, wetting the surface of sand with water leached from manure reduced the evaporation one-half.

It was a study of Professor King's experiments that led us to top-dress alfalfa, and the top-dressing has proved satisfactory in every respect. The manure spread on the surface does not dry out the soil as it sometimes does when plowed under, the crowns of the alfalfa prevent it from being washed out of the field, the rain and snow dissolve the plant-food and carry it into the soil, and the leachings of the manure prevent evaporation of moisture from the soil. Where the manure is spread thinly a large portion of it decays, and becomes a part of the soil itself. The rest acts as a mulch.

In the spring we disk the land, and this covers up the manure that has not rotted, and we are not troubled with the manure being raked up in the hay. When alfalfa is seeded in the fall, and a heavy top-dressing put on when the ground is frozen, the top-dressing will delay the thawing out of the land in the spring, and will check alternate freezing and thawing, and in these ways will be a help in protecting the young plants from heaving and from blowing.

### THE TUBERCLE.

An examination of the finer roots of a thrifty alfalfa plant will show little tubercles about the size of a pin-head, attached to the roots. These tubercles are swellings or enlargements made on the roots by bacteria. These bacteria exist in the soil, and when they come in contact with a hair root attach themselves to it, and wounding the root, make it form a tubercle in which they make their home. These bacteria take the free nitrogen of the air and combine it into forms available for plant-food.

Nitrogen is one of the most-needed elements of plant-food. The reduced yield from our long-cultivated fields comes largely from a lack in the soil of nitrogen in a form which our field plants can use. Four-fifths of the air is pure nitrogen. But ordinary plants can make no use of it. The bacteria that cause and live in the tubercles on alfalfa roots take this nitrogen from the air and put it in such a condition that the alfalfa can use it. This enables the alfalfa to make a vigorous growth, containing a large amount of protein, a compound of nitrogen, and when the roots decay the nitrogen in them supplied by the tubercle-forming bacteria enriches the soil.

With the help of these tubercles, alfalfa can yield heavy crops and leave the soil richer in nitrogen than it was before the alfalfa was grown, as this addition of plant-food comes entirely

from the air. Where no tubercles form on the roots, the alfalfa does not add to the fertility of the soil, but simply gets its growth from food already in the soil, leaving it poorer.

### THE TUBERCLE AND YIELD.

We have frequent reports from correspondents in sections of southern Kansas and Oklahoma that a good stand of alfalfa is easily secured, but that good yields are produced for only a year or two, when the plants gradually dwindle and dry. One of our students, W. L. Elglish, examined a number of these fields where the alfalfa was dwindling away, and was unable to find a single tubercle on the roots in any of the fields. He found one field of alfalfa of several years' growth growing vigorously, and found the roots well supplied with tubercles.

This suggests that, when alfalfa is seeded in a section where it has not previously been grown, it may be profitable to inoculate the soil at the time of seeding, rather than wait for the slow spread of the bacteria by natural means.

In 1898, George L. Clothier, then assistant botanist of this station, examined alfalfa-fields from Manhattan west to the Colorado line, and found tubercles in sixty-three out of sixty-eight fields investigated. We have not found an alfalfa-field without tubercles in this section of the State, and have therefore been unable to test the effect of their absence on the growth of alfalfa.

### RESEEDING.

J. W. Robison, Eldorado, Kans., a large alfalfa-grower has found that it is much easier to get a good stand of alfalfa on ground where alfalfa has previously been grown than it is on land that has never been in alfalfa. In sections where little alfalfa has been grown, it is frequently easy to secure a good stand, and the first year good yields are secured. The alfalfa then begins to weaken, and either makes a short, feeble growth or dies out in patches. Mr. Robison says that, when this is the case, if the ground is plowed after the alfalfa has been grown two or three years, and immediately reseeded, a good stand is easily secured, and the alfalfa grows vigorously for years. The probable explanation of the fact is, that the ground where alfalfa has never been grown is poorly supplied with the root-tubercle bacteria, and as a consequence the plants are weak and short-lived. At the same time, as long as the alfalfa plants live, the bacteria continue to multiply, especially on the few plants that are vigorous. When the dying alfalfa is plowed up and the ground thoroughly pulverized for reseeding, the operation of pulverizing distributes these bacteria throughout the entire surface-soil, furnishing an abundant supply for the plants from the reseeding.

H. D. Watson, Kearney, Neb., has 2,500 acres in alfalfa. It yields well, and a large part is growing on what was called the arid plains, where, until Mr. Watson started alfalfa-growing, the farmers thought they had proved that cultivated plants would not grow. Mr. Watson obtains the same marked beneficial results from a second seeding as does Mr. Robison, but he prefers to grow a crop of wheat or corn between the two seedings, as he gets a heavy yield from the land enriched by alfalfa, and the time between the two seedings allows for a more thorough rotting of the alfalfa roots.

We urge the use of the methods of Mr. Robison and Mr. Watson on hard, stubborn soil, where alfalfa has either not been grown or has not made a vigorous growth. In hard and waxy subsoils, the roots at the first seeding of alfalfa have a hard time to work their way down, and may not be able to penetrate more than five or six feet before they become exhausted and feeble or die outright. The soil may be so compact that the plants get drowned out. If, when the plants show signs of this exhaustion, the ground is plowed, the roots will decay. This will let air into the subsoil, where it can act to break up the soil, and the decayed roots will add vegetable mold to the subsoil and make it more mellow. The alfalfa should be sown again on this land. The plants from the second sowing will find the ground prepared for them to the depth which the roots from the first seeding penetrated. By the time these plants have reached subsoil that has been untouched they will have reached an age and vigor that will enable them to further extend their growth and to yield well.

### FERTILIZING VALUE.

The way in which alfalfa takes plant-food from the air by means of its

The Great Opportunities in the Canadian Northwest are attracting large numbers of settlers from the United States.

# The Canadian Bank of Commerce

Paid-up Capital, - \$8,000,000.00

Eighty Branches throughout Canada and the United States  
SAVINGS BANK DEPARTMENT AT EVERY branch. Deposits of One Dollar and upwards received, and interest allowed at current rates.

### BRANCHES IN THE CANADIAN NORTHWEST:

CALGARY—N. W. T. C. W. Rowley, Mgr.	GRANDVIEW—Manitoba. H. E. P. Jemmett, Mgr.
CARMAN—Manitoba. E. C. Complin, Mgr.	MEDICINE HAT—N. W. T., F. L. Crawford, Mgr.
DAUPHIN—Manitoba. J. S. Munro, Mgr.	MOOSOMIN—N. W. T. E. M. Saunders, Mgr.
EDMONTON—N. W. T. T. M. Turnbull, Mgr.	NEEPAWA—Manitoba. G. M. Gibbs, Mgr.
ELGIN—Manitoba. G. H. Horne, Mgr.	SWAN RIVER—Manitoba. F. J. Macoun, Mgr.
GILBERT PLAINS—Manitoba H. E. P. Jemmett, Mgr.	TREHERNE—Manitoba. H. B. Haines, Mgr.
WINNIPEG—Manitoba.	John Aird, Mgr.

Address any of the above managers for maps and reliable information concerning his locality if you contemplate removing to Canada's Great and Fertile Northwest.

## Remittances to Europe

Drafts issued payable at all points in Europe, Asia, Australia and America.

FARMERS' NOTES DISCOUNTED, SALES NOTES COLLECTED AND A GENERAL BANKING BUSINESS TRANSACTED.

### BANKING BY MAIL.

Deposits may be made and withdrawn by mail. Out-of-town accounts receive every attention.

LONDON (ENGLAND) OFFICE, 60 LOMBARD ST., E. C.  
HEAD OFFICE, TORONTO, CANADA.

tubercles and adds it to the soil has been fully explained under the heading "The Tubercle." The increase in the yield of following crops caused by alfalfa is great. Lord Skully's agent, Mr. Powers, reported to us that he had made a test of the fertilizing effect of alfalfa in Marion County, Kansas. Alfalfa was grown for three years and was then plowed up and the land sowed to wheat. The first crop (1900) yielded forty bushels of wheat per acre; the second crop (1901) yielded forty-one bushels per acre. Adjoining fields with the same character of soil, that had not been in alfalfa, yielded twelve to fifteen bushels of wheat per acre.

Prof. B. C. Buffum, at the Wyoming Experiment Station, selected an area of land and seeded one-half of it to alfalfa. The alfalfa was allowed to grow on this land for five years. The other half of the area was cropped with grain crops and potatoes in a rotation for the same five years. At the end of this time the entire area was plowed up and planted to field crops. The yield of wheat on the alfalfa land was 60 per cent greater than on the other, and the grain weighed more per bushel.

The yield of oats was 48 per cent greater on the alfalfa land; the grain stood a foot and a half higher, and the heads were two inches larger. The yield of marketable potatoes was increased 62 per cent on the alfalfa land; the potatoes averaged larger in size. The yields per acre were as follows:

	Alfalfa land, bu.	Other land, bu.
Wheat.....	30	18
Oats.....	73	37
Potatoes.....	81	52

The increased yield of crops on land on which alfalfa has grown does not come alone from the addition of plant-food to the soil which alfalfa makes. In many soils the mechanical improvement made by alfalfa has a greater influence in increasing the yield. Alfalfa roots are large and abundant, and they penetrate deeply. When alfalfa is plowed these roots decay, adding vegetable matter to the soil, and pro-

viding a passage for the air to go down to the subsoil and loosen it. On stiff clay lands this addition of the vegetable matter mellow the soil; on sandy lands it helps bind the soil particles together. On both classes of soil the addition of decayed vegetable mold increases the power of soil to absorb and retain moisture and makes a better tilth.

(To be continued.)

### Better Feed Grain and Corn for Kansas.

EDITOR KANSAS FARMER:—The Agricultural Department of the State Experiment Station will begin a series of experiments in 1903 for the purpose of testing and comparing varieties of all kinds of grain and corn which are being grown or are recommended for planting in Kansas. These trials will be made at the Manhattan Station and will be duplicated as far as possible at the Hays Station. I wish to secure seed of all the best varieties of grain and corn which are now being grown by Kansas farmers. If you have a good strain of corn, wheat, oats, barley, flax, kafir-corn, sorghum, etc., which you would like tested in this trial, send a sample of seed to the Agricultural Department of the Experiment Station, Manhattan.

For all varieties which it is desirable to grow both at the Manhattan and Hays Stations, one bushel of grain and one peck of corn will be required. For a single trial one-half bushel of grain and one-half peck of corn is sufficient. I prefer to have the corn not shelled, but in the ear in order to compare varieties and make some selections for breeding purposes. The results of the variety trials will be published, and it is the purpose, if certain varieties are found to be better adapted to the State or to parts of the State than others, to begin the propagation and improvement of such varieties and ultimately to breed, propagate and distribute to the farmers of the State better varieties of grain and corn than those grown at present.

I believe that the surest and quick-

est way is to get improved varieties of grain and corn for Kansas is to begin with the best native varieties—those sorts which have been planted and grown in this State for a long time, until they are thoroughly adapted to the climate and soil. These varieties have got the stamina to withstand adverse conditions. All they need, perhaps, is a few years of careful and scientific breeding and selection to improve them and make them superior to the best we can get from other States. I earnestly invite the farmers and especially all grain- and corn-breeders and seed-growers to cooperate with the Experiment Station in this work.

A. M. TEN EYCK,  
Agriculturist Kansas Experiment Station, Manhattan, Kans.

#### Sheep—Speltz—Timothy.

EDITOR KANSAS FARMER:—I have found the KANSAS FARMER an almost up-to-date paper, but it lacks a little in one department, that of sheep, a stock that is neglected in Kansas. No other stock pays its way as it goes like sheep. The wool will pay for the keeping, and the lambs and the manure are clear profit, to saying nothing about the noxious weeds the sheep will destroy. A pasture will carry more stock with some sheep in it than it will without them, for they will eat weeds that no other stock will eat, and that gives the grass a better chance. Farmers should be encouraged to raise sheep. If there were more raised in the country, buyers would come around the same as for other stock.

I have seen an inquiry about speltz. I tried a bushel last spring; sowed it on land that would grow from forty to fifty bushels of corn to the acre in an ordinary year. To protect it I sowed oats all around it. It grew finely, and every one that saw it admired it and wanted to know what it was. When it was ten inches high, the chinch-bugs spied it, and they concluded it was something nice, and in less than two weeks it looked as though it had been through a cyclone or a fire. There would have been nothing left if wet weather had not set in. As it was, it made one-fourth of a crop. I am feeding it in the sheaf with sheaf-oats but the stock don't like it as well as oats. The oats did well and made fifty bushels to the acre. I have got enough of speltz.

I have been experimenting a little on sowing timothy the last two years. I sowed in October, 1901, on corn ground without plowing, and harrowed it in. Some of the ground had a heavy coat of crab-grass on it, and there the timothy did the best. I sowed a bushel in October, 1902, in oat-stubble; sowed it broadcast over the field and did not even harrow it in. September had been a wet month and October was dry. Where the crab-grass and water-grass had been, it came up right away. Where there was not such trash it did not come up till November, but it came up and went into winter all right.

H. BELLOWS,  
Cherryvale, Montgomery County.

#### Buffalo Tree-hopper.

EDITOR KANSAS FARMER:—I enclose a twig of a young apple-tree. Are the little scars in the bark natural or diseased? If the latter could you give treatment, or would you advise destruction?

H. V. DWYER,  
Asherville, Mitchell County.

#### REPLY BY PROF. ALBERT DICKENS.

The very small light-colored specks are natural. They are the lenticels, and are believed to be active in transpiration. The punctures in the bark, looking as though made with a dull instrument, are the scars of wounds made by the Buffalo Tree-hopper. Press Bulletin No. 68, by Prof. E. A. Popenoe, which treats the subject and of its prevention at some length, is as follows: "Numerous inquiries received by the entomological department of the Kansas Experiment Station from different parts of this and neighboring States, accompanied by specimens of apple-twig and branches showing the work of the Buffalo Tree-hopper, lead us to believe that the apple-growing public is becoming awakened to the abundance of this orchard insect, though not aware of the methods of avoiding the injury of its numerous punctures. The facts brought forth by correspondence with those who report the damage confirm the previously published deductions of this station, where the true nature of these injuries was first made known. Upon inquiry as to the condition of the injured trees during the previous August and September, it appears in each case that the trees were grown at that time in weeds and grass, cultivation having been suspended, for one cause or another, and the orchard

weeds allowed to grow unchecked. Inquiry from the same reporters as to the amount of injury in orchards where cultivation was not thus suspended shows in such an almost entire immunity from the work of the pest. The inference is too plain to need special argument. Clean culture during the late summer, to keep the ground free from the weeds on which the young hoppers feed, will protect the young orchard from attack. When the trees are already badly punctured, the only thing that can be done is to cultivate generously the coming season, to keep the injured trees in the best of thrift, and so assist them in outgrowing the injury. It has been suggested by some that the injured branches should be pruned out and burned thus reducing the number of the pests the next season, but if such a plan were to be put in practice, it would result in many cases in the removal of entire trees, no part of the small tree being exempt from attack. The eggs which are laid in August in the wounds in the bark, hatch the next May or June, and it is suggested by this station that at the time when observation shows the insects to be emerging, it will be possible to destroy most of the tender young by a spray of kerosene emulsion at a moderate strength. So much reliance may be placed upon clean culture, however, that this spraying is not considered as necessary, though a practical method of destruction, if done at the right time."

#### Profits in Irrigation.

The wonderful transformation that is seen where water is turned in on the rich Kansas soil is an illustration of what may be accomplished in any locality where rainfall is insufficient for maximum crops. It shows what the great plains of western Kansas are capable of if water can be had.

It is not generally supposed that the State of Wisconsin is in the dry section, nor that irrigation would be profitable there. In the report of the U. S. Irrigation Investigation Bureau for 1901, Prof. F. H. King, of the University of Wisconsin, gives the following as a summary of five years' work:

CONCLUSIONS AFTER FIVE YEARS' WORK.

The studies in irrigation at Madison and at Stevens Point, Wis., and the investigations regarding the best amount of soil moisture for crop production suggest the following conclusions:

1. The amount and distribution of rainfall in climates like that of Wisconsin are not such as to permit well-managed soils to produce maximum yields.

2. No method of tillage now practiced can very much increase the soil moisture above that which falls in the region as rain and snow.

3. Good soil management may reduce the loss of water by drainage and by surface evaporation from the soil, but if the precipitation is deficient reduced yields are inevitable unless the deficiency of the soil-moisture is made good by irrigation.

4. The major part of the moisture lost during the growing season from the soil occurs through the crop by transpiration, and neither tillage nor mulching can reduce this.

5. Supplemental irrigation on heavy soils in climates like Wisconsin may increase the yield of hay from twofold to threefold; it may increase the yield of ear corn 25 to 35 bushels per acre, and of potatoes 80 to 100 bushels per acre.

6. On very poor, sandy soil supplemental irrigation may increase the yield of potatoes 80 to 100 bushels per acre; of corn, 9 to 15 bushels per acre; of watermelons, 4 to 8 tons per acre; and of muskmelons, 4 to 6 tons per acre.

7. The mean fuel cost of pumping water for irrigation at Stevens Point to a height of 33 feet was 27.96 cents per acre-inch (cover an acre to the depth of an inch) when gasoline was 11.98 cents per gallon. At Madison the fuel cost with steam from coal at \$5 per ton was 22 cents per acre-inch with a lift of 26 feet.

8. The cost of irrigation at Madison per acre for the season was \$6.68, and at Stevens Point \$6.70.

9. The profits of irrigation at Madison in 1901 on a clay loam were about \$20 per acre on hay, \$11 per acre on corn, and \$73 per acre on potatoes. At Stevens Point on sandy land the profits were about \$30 per acre on potatoes, \$1 per acre on corn, \$58 per acre on watermelons, and \$45 per acre on muskmelons.

10. Farnyard manure alone on sandy land increased the yields somewhat, water alone did much more, but manure and irrigation together had much the largest effect on the yield.

It is lamentable that we have no data from nearer home. There has



### The Old Reliable Anti-Friction Four-Burr Mogul Mills

No gearing; no friction. Thousands in use. Four-horse mill grinds 60 to 80 bushels per hour; two-horse mill grinds 30 to 50 bushels per hour. We make a full line of FEED MILLS, best ever sold, including the famous Iowa Grinder No. 2 for \$12.50. Send for free Catalogue. Manufactured and sold by the

IOWA GRINDER AND STEAMER WORKS, Waterloo, Iowa.

been some work done along this line, but on such a small scale that it could not command confidence. At the Fort Hays Branch Experiment Station there is ample and suitable land, and it is hoped that the present Legislature will provide the means. The Irrigation Investigation Department agrees to cooperate to the extent of half the expense, furnishing instruments for laying out and conducting the work.

It is hoped that wells may be put down at convenient locations for irrigating a considerable tract, and thorough tests made in irrigating alfalfa, all the grain crops, vegetables and fruits. The station has twenty-two acres of alfalfa that is a perfect stand and a more profitable test could not be made than to water half of this and compare results with the half not watered. The land that could be used will require practically no work to prepare for putting on water. The water could be pumped from the underflow that is in sand twenty-five to thirty-feet below the surface.

#### Kansas Needs a State Fair.

An enterprising representative of the Kansas Legislature has introduced a bill into the House providing means for holding an annual State fair under the direction of the Kansas State Board of Agriculture. Every power is placed in the hands of the board, and it is destined to promote the success of the proposed institution the board has the power to make all needful rules and regulations, but must select a secretary who is not a member of the State Board.

When one comes to think of the matter it is with feelings of some surprise that Kansas has not had a State fair long ago. Other States have possessed this great agricultural institution, and have converted it into a tool for the advancement of agriculture. Kansas needs a State fair under the management of the State. It has the smaller fairs, to be sure, but it is the State institution that is capable of doing the most good along the lines of the farmer, the stock-grower, and breeder.

When the urgent needs of Kansas for an annual meeting place for the leading agricultural interests of the State is considered, it would appear that there would be no doubt of the action of the Legislature. The course will be watched with interest by all interested in the good that may come to Kansas from such an institution.—Chicago Drivers' Journal.

#### Farmers Can Make the Roads.

EDITOR KANSAS FARMER:—The terrible cry about public roads is all a humbug. Neither brick, stone, nor asphalt roads would induce the farmers to haul their produce to the cities when they can get it shipped on the railroad for 80 cents a ton. There are from 100 to 140 miles of wagon-road in a township and 100 to 150 farmers, with their teams, can do more work with their improved road-scrappers than a man who would be appointed by the county commissioner and take their money.

In this age of electricity and steam it is nonsense for people to run in debt for roads. It only costs \$16,000 a mile to make a No. 1 macadamized stone road. I have seen them in Illinois and Indiana. It is a \$50 fine in Indiana to load more than 3,000 pounds on a wagon to be hauled over a macadamized road. I have seen these fine roads in Europe, also, which were built over a hundred years ago, and they are taken care of, too.

We demand that the culverts and bridges be made strong for steam-threshers, and if the State or National Government wants to make macadamized roads, they can do so.

H. A. NABER.

Wallula, Wyandotte County.

#### Farm Notes.

N. J. SHEPHERD, ELDON, MO.

Wood ashes make a good fertilizer for grass lands.

When it can be avoided compel no animal to drink stagnant water.

The growth of early lambs intended for market must be pushed now.

With the work-team especially, select the food with a view to quality.

Rich land is a strong protection

against drouth, as well as giving better crops.

If an opportunity occurs this month, push the plowing for the spring crops.

Better purchase some feed rather than allow the stock to fall off in condition.

Commence the preparations for the spring work in good season as as to be fully ready.

Make sure of the needed supply of seeds in good season so as to have on hand when needed.

If fencing is to be done this spring set out the posts and sharpen them before the season opens.

Clover is hard to excel as a renovator of poor land; plan to sow more or less acreage this spring.

More or less pruning is needed with fruit-trees and grape-vines every year. This may be done any time now.

Many farmers fail to make their farming profitable for no other reason than that of undertaking too much.

Get all the manure possible out on the fields; it will be of more benefit to the fields than in the stables and feed-lots.

By having everything in readiness in good season, the seeding and planting may all be done under the best conditions.

The advantage in using the stalk-cutter to get rid of the corn-stalks is that it puts them in condition to be plowed under.

With grass, clover, and all small grains it is important to sow plenty of seed in order to secure a good even stand of plants.

Sometimes a good opportunity occurs to saw grass-seed or fall-sown wheat the latter part of February; be ready to take advantage of it.

As nearly as possible have the seasons work planned out so that when the time comes to begin, no time will be lost determining what to do.

Commercial fertilizer is not a stimulant but a plant-food, and can be used in many cases to advantage when the supply of stable manure is insufficient.

Harnesses will last longer if kept well oiled. Take all apart, clean and wash thoroughly and then oil well, giving plenty of time to dry before using.

See that the plows are sharp, the harrows, seeders, and cultivators in good condition for work. Looking after these things now will save time later on.

If an orchard is to be set out this spring, take advantage of the first opportunity to plow and harrow the ground and have it ready so that the trees may be set out early.

When writing advertisers, please mention this paper.

### Well Machinery.

For drilling and boring either deep or shallow wells, in any kind of soil or rock; with engines or horse powers. Easily operated; built strong and durable. Used for over 20 years and they are no experiment. Before buying send for our free illustrated catalogue.

THE W. M. THOMPSON CO., Sioux City, Iowa.

POPULAR GOODS—POPULAR PRICES.

**Matthews' New Universal**  
(Improved for 1903)

**HAND SEEDERS AND CULTIVATORS.**

Suitable for every class of work.

All styles. Only combination 1 and 2 wheel cultivator and drill made. Every way adjustable. All our tools have tough oak bent handles and are made of best material throughout. 1903 catalogue now ready, free.

AMES PLOW CO., 42 Market St., Boston.

For Sale by Parlin & Orendorf Co., Kansas City, Mo.

### Our 1903 CATALOG Contains GREATER BARGAINS

145 styles vehicles than offered by any other manufacturer. Our wonderful offers will surprise you. We use the best material and guarantee every rig for 2 years. If the buggy you buy from us is not better in every way than you can get elsewhere then return it and A rubber tire top buggy, \$45.00. —145 other equally big values.

**PAY US NO MONEY.**—145 other equally big values. Cut out this ad, send it to us and we will mail you catalog free.

**MARVIN SMITH CO., Chicago, Illinois.**

## Horse Owners! Use GOMBAULT'S 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 all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUSTIC 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.

## The Stock Interest.

### THOROUGHBRED STOCK SALES.

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

February 16, 1903—J. S. McIntosh, Manhattan, Kans., Shorthorns.  
February 17, 1903—Geo. F. Kellerman, Shorthorns, at Kansas City.  
February 18, 1903—C. M. Garver & Son, Abilene, Kans., bred Poland-China sows and gilts.  
February 20, 1903—S. S. Spangler, Milan, Mo., Percheron horses.  
February 25, 1903—Croft, McCandless, and Lindsey, Galloways, at Denver, Colo.  
March 3, 1903—L. M. Monsee & Son, Smithton, Mo., jacks, jennets, saddle horses, and Poland-China swine.  
March 3 and 4, 1903—C. H. Gardner and M. A. Judy, Aberdeen-Angus cattle, at Chicago.  
March 13, 1903—H. W. Weiss, Westphalia, Kans., Shorthorns, at South Omaha.  
March 19, 20, and 21, 1903—Combination horse sale at Riverside Barn, Wichita, Kans., 300 high class horses. J. S. Lehr, Eldorado, Kans., and others.  
April 1-2, 1903—Shorthorn cattle. H. O. Tudor, Holton, Kans.  
April 22, 1903—Shorthorn Breeders' Combination Sale, Bancroft, Mo. C. P. Tut, Secretary.

### An Eastern Hog-Feed.

EDITOR KANSAS FARMER:—I am in a puzzle; can you help me out? I have tried everything and everybody else, and now come to you. You know that I have tried for a great many years to raise the best hogs and to raise them economically. But there is one thing that I have not been able to find out, yet it is recommended so highly by the Eastern papers as being such a good food for hogs. So many of the Eastern papers advise giving hogs dish-water, whatever kind of material that is. I have failed to find out yet whether a grain, fruit, or vegetable. Can you tell me? I have written to the seedsmen but they do not seem to keep any dish-water seed on hand. The nurserymen keep no trees by that name for sale. Vegetable-growers have no vegetables by that name. But one man thought perhaps it was that kind of stuff you peel off your sweet potatoes after you cook them and that I would have to buy the potatoes from him. I thought it would take lots of sweet potatoes to get enough of that to feed a hundred head of hogs, so had to give that up.

I thought perhaps a doctor would know what this dish-water is and that he could tell me. I went to see the doctor and he did not know it by that name, but thought perhaps it was calomel. I asked him how much it would take to make a feed for a hog. He said he couldn't tell without seeing the hogs and looking at their tongues and feeling their pulses. I asked him how much he would charge to do that, and he said "50 cents a hog." I asked him how often he would have to see them, and he said, "Once a day." "Would the stuff cost much after you would do that?" "Yes, considerable if you keep it up." So I thought 50 cents a hog to the doctor besides his trip, and the price of the stuff to the druggist would soon eat up the farm, and after the farm was gone I would have no place to keep the hogs, and that did not seem practical. I went to see the druggist himself to see if he kept anything by the name of dish-water. He thought it is what they call "whisky," but I would have to get a doctor's prescription to get it, and that placed me in just as bad a position as I was before. I then thought perhaps a saloon-keeper might have something by the name of dish-water. He thought it was lager-beer or some kind of water, or both; but he could not tell me how much it would take for a feed for a hog, and as that was pretty expensive stuff, I thought the cost would be too great. The hardware merchant, grocer, or clothier—not one of them kept it on hand, except the clothier, who thought it might be overalls. He could supply me with overalls, but I thought it would cost considerable to get a pair for each pig and didn't think that practical. However, I thought overalls a good thing for a man to put on when looking after the hogs and they came the nearest so far, but yet they were not dish-water.

After seeing everybody and writing to everybody I could think of, I went home and told my wife about it. She said, "Why didn't you come to me at first? I could have told you better than anything they have told you." I commenced to feel good and asked her to tell me quick. "Well," she said, "You take the dish that you have fed the baby from, put it into a pan and pour boiling water on it, you take lots of soft soap and washing powder and scrub the dish off and that's what you call dish-water." I asked her how it should be used. "Why," she said, "you put it on the stove and boil it down to get it to its proper consistency." We tried boiling it down but that left only about one drop for each animal and one drop surely would not make a very big feed for a hog, and I told her so. "Well," she said, "you will have to find more babies," and that discouraged me. I could not afford babies enough to secure dish-water enough to feed a hundred brood-sows, and I surely would have to give that up, the cost was too much. Between the food to feed the babies, and the dishes to feed them on, and the soft-soap and washing powder necessary to get the material off the dishes after the babies had left them, it would take too many babies and too much material in order to get enough dish-water for a few hogs, and here I am just as bad off as I was when I started. Can you or any of your contributors help me out? Those Eastern parties who recommend dish-water as such a good food for hogs must keep very few hogs or lots of babies. Perhaps they can afford more babies back East than we can here in the West. Maybe the stuff to feed them on is cheaper or the dishes are cheaper, or perhaps their climate is different so that they don't need so much food as out here in this great Western country. Anyway, I can not afford babies enough to manufacture dish-water for fifteen, or twenty, or fifty brood-sows and their progeny. I can't do it.

How these Eastern people do it I can not tell. We here in the West try to raise the best and do it by giving them plenty of good grain, grass, alfalfa, and other feed that we consider good material. We get more economical feeds, and they do well on that kind. They show it, too, by the glossiness of their coats and their satisfied look, but this dish-water business that the Eastern papers talk so much about puzzles me some, and has caused me a great deal of thought during the last year or two. And the solution is as far off as ever.

Now, Mr. Editor, unless you can find some cheaper way to manufacture dish-water, or tell me where I can buy dish-water seed, we will have to content ourselves by selecting the very best hogs we can for breeders, take proper care of them, and feed them the kind of food that we can grow, such as corn, alfalfa, and other material of that kind. Let our aim be upward and onward, dish-water or no dish-water.

D. TROTT.

Abilene, Dickinson County.

P. S.—Since writing the above I have heard of parties who have killed their pigs by feeding them house-slop.

### Scab or Itch in Cattle.

Scab or itch, sometimes called mange, of cattle is caused by a minute mite *Psoroptes communis* var. *bovis* that lives upon the surface of the skin and burrows in the epidermis. It does not attack other animals than cattle, although scab of sheep is caused by a similar parasite.

Symptoms.—Scab or itch does not trouble cattle to a noticeable extent during the grazing season, when they are doing well on grass. Close observation is required to detect the disease in a bunch of cattle, but as soon as they are placed on dry feed, and cold weather sets in, the disease appears and, if the cattle are not doing well, in an aggravated form. Scab usually attacks young cattle, calves, yearlings, and 2-year-olds, but may attack cattle of any age if they are "out of condition." The first symptom noticed is an intense itching of the skin, usually in the region of the neck and shoulders. The animals lick themselves, dig at the skin with their teeth or horns, rub against posts or barbed wire, often tearing the skin until it bleeds. The disease gradually spreads along the back, sides, and outside of legs, but does not attack the inside of the legs, thighs or thin skin of the abdomen. In the early stages the coat looks rough; there is a scurf condition of the skin; the scurf becomes mixed with a gummy exudate and forms crusts in the hair, sometimes one-half inch thick; the hair then

# A TRIUMPH

## IN MACHINE MANUFACTURE

IS THE **MCCORMICK BINDER . . .**

During 1902 more McCormick machines were sold than in any previous year, a fact which attests the wide-spread popularity of the world-renowned machine. The seventy-two years success of the McCormick has made this name a household word throughout the world.

The McCormick is the machine to buy for 1903.

Write for beautiful McCormick calendar and copy of 1903 book entitled "A MODEL MACHINE."

**B. L. Rees, Topeka, Kas., M. W. Weeks, Wichita, Kas.**  
General Agents for McCormick Machines.

comes off or is rubbed off the badly affected area, leaving bald patches of thick, calloused, wrinkled skin. These patches often show first and prominently on the top of the neck, as if the neck had been calloused from wearing a yoke. After the hair comes off the parasites leave that part and the hair grows in again. Animals suffering from scab present a dejected and debilitated appearance and fall away rapidly in flesh; they do not eat well and spend a great deal of time and energy in scratching themselves.

Scab spreads quite rapidly through a bunch of cattle, especially if the cattle are not doing well. Six or eight weeks after the disease first makes its appearance is sufficient time to disseminate the disease pretty thoroughly. Thrifty, vigorous animals resist infection longer than others, and recover more quickly under treatment than debilitated animals. The disease is spread by direct contact and by contact with infected posts, feed-racks, walls, etc., against which infected animals have rubbed. The mites will live for a week to ten days in protected places but are killed quickly by direct sunlight.

By scraping off some of the scabs, and especially the epidermis, from the infected part and placing the material in a clean, dry glass bottle, in a few hours minute white specks, barely visible to the naked eye, can be observed crawling on the inner surface of the bottle. By the aid of a hand lens these mites can be easily recognised.

Treatment.—As soon as the disease is discovered in a bunch of cattle the affected animals should be isolated, and the infected quarters and rubbing posts disinfected with a five-per-cent solution of carbolic acid. Affected animals should be well fed and cared for and be salted with a mixture of one pound of flowers of sulphur mixed with ten

### BALMOLINE The Corn-Husker's Friend

And Nature's Perfect Healing Salve  
**MAN OR BEAST.**  
Druggists, or by mail. Trial box, 4c; 2 oz., 25c; 6 oz., 50c. Balmoline Mfg. Co., Sta. B. Abilene, Kas.

### LUMP JAW.

A positive and thorough cure easily accomplished. Latest scientific treatment, inexpensive and harmless. **NO PAIN, NO PAY.** Our method fully explained on receipt of postal.  
Chas. E. Bartlett, Columbus, Kans.

### Immune Hogs

The pigs are born Cholera-proof.

Innoculation before birth the most scientific and best hit ever made in preventing Hog Cholera. Write for free book and agency.  
**ROBERT RIDGWAY, Box 300, AMBOY, IND.**

### MOORE'S HOG REMEDY

The Original Hog Dip.

Used on Outside and Inside of Hogs  
Kills lice and fever germs, removes worms, cures mange, canker and cough; aids digestion, promotes healthy growth, and  
**Prevents Disease, at Small Cost.**  
At dealers in Sealed Cans Only. Useful book with illustration of Dip Tank FREE. Address  
**MOORE C. & M. CO., 1501 Genesee St. Kansas City, Mo.**

## REX CONDITIONER

Endorsed by State Veterinarians. Every Package Guaranteed

Especially for "Out of Condition," wormy, or "run down" stock of all kinds. It's made upon honor. Accept no substitutes. Farmers, Stockmen, Get It, Try It, and you will stay by it. 25-cent, 50-cent, 75-cent and \$1.00 packages. We are also exclusive manufacturers of Rex Lice and Mite Killer, Rex Poultry Food, Rex Hog Remedy, and Rex Stock Food.  
**REX STOCK FOOD CO., OMAHA, NEBRASKA.**

### 30 YEARS SELLING DIRECT

We are the largest manufacturers of vehicles and harness in the world selling to consumers exclusively. **WE HAVE NO AGENTS,** but ship anywhere for examination, guaranteeing safe delivery. You are out nothing if not satisfied. We make 195 styles of vehicles and 65 styles of harness.  
Large Catalogue FREE—Send for it  
Visitors are always welcome at our factory.  
**ELKHART CARRIAGE & HARNESS MFG. CO., ELKHART, IND.** No. 726 Driving Wagon, Price \$37. As good as all else for \$23 more Extra 1/2 in. Kelly Rubber Tire \$13.

pounds of common salt. To cure the disease, external treatment must be applied. If a large number of cattle are affected, the most satisfactory method is to build a dipping vat, through which the animals must swim in the dip used to destroy the mites. The vat should be forty feet long. Efficient remedies used for external application are some of the coal tar products, such as Car-sul, Chloro-naphtholeum, Zenoleum, Creolin, etc.; these are used in two and one-half per cent solutions with water; that is, one part of the medicine to forty parts of water. A very effective and cheap dip is composed of lime and sulphur in the following proportions: Flowers of sulphur, 21 pounds; unslacked lime, 16 1/2 pounds; water, 100 gallons. Slake the lime to form a thick paste, sift in the flowers of sulphur and stir well; put this mixture in a kettle with twenty-five or thirty gallons of water and boil for thirty minutes at least; two hours is better. The chocolate-looking mass is allowed to settle, the clear liquid is drawn off and water enough is added to make one hundred gallons. All the dips are more effective when used warm, from 100 to 110 degrees Fahrenheit. Animals should be kept in the dip about two minutes, or until the scabs are thoroughly saturated. A second dipping in two weeks will kill any mites that may have hatched from the egg after the first dipping. One dipping, if thoroughly done, is usually sufficient however, to free a bunch of cattle from this disease.

Where only a few animals are affected, hand treatment can be resorted to, but it should be thoroughly done. The remedies can be applied with scrubbing brushes, cloths or sponges, and all scabs and crusts should be thoroughly saturated. The remedy should be applied warm, as in dipping. In dipping or hand treating, warm, sunny days should be selected for treating the animals.

Cattle scab is rather common in some parts of the Great Plains region and stockmen in purchasing cattle should be cautious about getting animals affected with this disease. While the death loss is usually not high the loss of flesh, general deterioration and annoyance resulting from this disease is considerable. Cattle that have been treated should be carefully watched for reappearance of the disease, especially when taken off of grass the next season. N. S. MAYO.

Kansas Experiment Station.

Cotta's Kansas City Sale.

On Saturday, February 7, J. V. Cotta, sale manager, Clifton, Ill., conducted a Poland-China brood-sow sale of fifty head from the herds of T. N. Langan & Co., Clifton, Ill.; W. H. Mast, Ogden, Ill.; and J. W. Wampler & Son, Brazilton, Kans. It was one of the liveliest swine sales ever held in Kansas City, and Manager Cotta was well pleased with the way the Western breeders interested themselves in this particular sale. A great many of the sows were bred to Keep On, the champion Poland-China at the International Live-Stock Exposition held at Chicago last December.

The consignment of J. W. Wampler, of Brazilton, sold five bred sows and gilts for \$182, an average of \$36.40.

Messrs. W. H. Mast and T. N. Langan & Co.'s consignments averaged \$53.

The results of the sales in detail were as follows:

Perfection 126770, Henry Smith, Stillman's Valley, Ill.	\$69
Two-Step, Winn & Mastin, Mastin	46
Miss Hadley 2d 179494, Prettyman & Garvey, Pekin, Ill.	130
Plumb 177090, Kirtpatrick & Son, Wolcott, Kans.	50
Ina Perfection 159566, H. P. Cott, Springfield, Mo.	33
Henry's Queen, Jno. Bollin, Kickapoo	66
Mimic, J. R. Young, Richards, Mo.	70
Guy's Perfect Maid 154936, W. H. Snyder, Frazier, Mo.	40
Delegate 182406, H. Picott, Springfield, Mo.	80
Panaoma 186440, R. S. Williams, Liberty, Mo.	55
Margareta, J. A. Pendergast, Garfield, Ill.	62
Porous Plaster 185674, F. A. Gully	60
Miss Sunshine 172644, Winn & Mastin	61
Kid Glove 185230, Jas. A. Vanhoover, Liberty, Mo.	28
Honeysuckle 182408, C. E. Smort, Petersburg, Ill.	60
Perfect Bonnie 164036, L. W. Brick, Alden, Iowa	69
Cheek 174552, Robt. Hanson, Concordia, Kans.	81
Gold Belle, F. C. Weeks, El Dorado	50
Lady Wilkes 163674, Harry Smith	40
Minerva 177086, Winn & Mastin	65
Perfection Quality, C. W. Huntington, Liberty, Mo.	35
Cremo 185232, J. R. Killough & Sons	61
Blanche 113984, J. Hostetter, Maryville, Mo.	51
Elsie's Perfection, J. W. Wampler, Brazilton	50
Magie Sunshine, W. H. Mast, Ogden, Ill.	73
Garden Gate, C. G. Mills, Pleasant Hill	46
Queen I Know 63036, F. A. Dawley, Waldo	39
King's Queen, A. G. Woodbury, Ill.	66
Caldwell's Glory, J. W. Snyder, Frazier, Mo.	20
Stella Sunlight 175774, H. W. Cheney, North Topeka	55
Chief I Know's Last, H. E. Messick, Western Park	50
Bloomer 182416, L. F. Fairfax, Otterville, Mo.	51
Queen Foster 7th 175824, J. A. Van-Hoover	58

Perfect's Nellie 161166, Thos. Daly, Ashton, Mo.	27
Queen Perfection, W. H. Cheney	38
Woodbury (boar), F. A. Dawley	38
J. W. WAMPLER'S CONSIGNMENT.	
Choice Goods 69771, Robt. Hanson	39
Perfect Beauty 69774, C. M. Huntington	38
Kansas Sunshine 69773, R. S. Williams	37
Lady Butler 69770, W. H. Shanks, Centerville	34
Western Model 69772, J. H. Berker, Newton	34

American Percheron Horse-Breeders' Association.

Pursuant to a call issued some time ago by Secretary S. D. Thompson, of the American Percheron Horse-Breeders' Association, there gathered at the Grand Pacific hotel, Chicago, February 5, about 100 of the leading importers and breeders of Percheron horses. The meeting was a very harmonious one throughout. After listening to the report of the secretary and treasurer, the following officers were elected:

President, C. F. Slingmaster, Keota, Iowa; vice-president, John C. Baker, Manhattan, Ill.; treasurer, John R. McLaughlin, Columbus, Ohio; secretary, S. D. Thompson, Chicago, Ill. Directors—H. F. Hagemelster, Green Bay, Wis.; Robert Burgess, Wenona, Ill.; J. M. Hanley, Winamac, Ind.; F. T. Peterson, Grove City, Minn.; H. C. Lawry, Nevada, Iowa; J. C. Robison, Towanda, Kans.; F. R. Crocker, Chariton, Iowa; William Bell, Wooster, Ohio; O. A. Champlin, Clinton, Iowa.

After the election of officers a committee, consisting of John R. McLaughlin, George J. Woods, and W. E. Fritchard, was appointed to wait upon the members of the lately organized American Percheron Horse-Breeders and Importers' Association, which was in ses-

Ethelyn, E. H. Andrews, Kearney, Mo.	72.50
Lauriel, T. J. Porter, Glen Elder, Kans.	90.00
Lady U. S. 2d (64687), Turney Bros., Alberta, John Tyson, Virginia, Mo.	140.00
Annette, Turney Bros.	67.50
Patience, Turney Bros.	100.00
Gibson Girl, Robt. Hanson, Concordia, Kans.	48.00
Prudence, E. J. Porter	80.00
Lucretia, H. W. Henry, Topeka	50.00
Jeannette, Turney Bros.	42.50
Geraldine, A. B. Burt, Hutchinson	105.00
Ophelia, H. E. Messick, Western Park	128.00
Proud Star's Sister, Ed. Williams, Kanaka, Iowa	52.50
Kansas City Maid, L. C. Horst, Newton	65.00
Maid Elsie, H. W. Cheney	57.50
Lisette, A. B. Dille, Edgerton	35.00
Marcella, A. B. Dille	100.00
Banner Girl 2d, L. T. Brick, Alden, Iowa	46.00
Little Sister, L. C. Horst	49.00
Phyllis, W. D. Porter, Vandalla, Mo.	32.50
Stylish Price 51593, W. D. Cane, Pickneyville, Ill.	40.00
Leah, Robt. Hanson	40.00
Doris, Malcomb, Craig, Mo.	110.00
Lois, Turney Bros.	76.00
Saint Cecilia, T. J. Porter	67.50
Griselda, F. A. Darnley, Waldo	71.00
Zenobia, E. K. Axtell, Trent, S. D.	41.00
Hilaria, E. E. Axline	36.00
Camille, A. H. Schooley, Austin, Mo.	59.00
Theodora, J. G. Gates, Oak Grove	37.00
Valeria, Turney Bros.	61.00
Marianne, A. G. Woodberry, Danville, Iowa	50.00
Ideala, J. G. Gates	100.00
Drusilla, E. J. Porter	59.00
Judith, W. H. Manley, Wheeling, Mo.	82.00
Miss Langtry, F. A. Dawly, Waldorf	58.00
	40.00

**Free to Horse and Cattle Owners**

Our two large booklets telling how to cure Lump Jaw in cattle, Spavins and all kinds of blemishes upon horses, also Fistula, Poll Evil, Sweeney and Knee-Sprung, Inexpensive methods, easily employed by anybody, and that cannot fail to cure.

We know of over 140,000 farmers and stockmen who rely upon these same methods, and for whom we have saved hundreds of thousands of dollars. Books mailed free if you write stating what kind of a case you have to treat.

**FLEMING BROS.,**  
Chemists,  
312 Union Stock Yards,  
Chicago, Ill.

Two Shire stallions brought \$875, average \$437.50. The thirty-four draft-horses brought \$14,105, a general average of \$403. The sale was conducted by Cols. Sparks, Harriman, Burger, and Harshberger, which is one reason for its being such a particularly good sale.

Included in this sale were two coach stallions which brought \$675, and five



PERCHERON MARE REGINA 28817. Champion mare, any age, at the International Exposition in 1902. Owned by S. S. Spangler, Milan, Mo., and included in his sale on February 20.

sion in a nearby building, and endeavor to bring about a settlement of differences between the two organizations, but no progress was made toward an amicable understanding.

A committee consisting of two members and the secretary of the association, was appointed to visit Secretary Wilson and lay before him the claim of the American Percheron Horse-Breeders' Association as the regular Percheron registry association for this country.

Secretary Thompson turned over to the new officials all the records and stud books of the association, and at a meeting of the board of directors, held after the regular meeting of the association, Secretary Thompson was voted an annual salary of \$5,000.

The association, which is a voluntary organization, will be continued under the rules and regulations heretofore in force. The personnel of the new board of officers is one of strength throughout.

Winn & Mastin's Poland-Chinas Average \$67.50.

On Friday, February 6, Winn & Mastin, of Mastin, Kans., sold at their Oakwood farms about fifty head of bred sows for which they realized the handsome average of \$67.50. There was a splendid attendance of the leading breeders of the West, and notwithstanding the failure of the sale to arrive and the inconveniences caused thereby, the sale was a most gratifying success to the owners. H. O. Correll and D. P. McCracken, of Illinois, were the auctioneers, and did a fine piece of work in handling this sale. The detail sales were as follows:

Jean, J. A. Perrigo, Mt. Vernon, Mo.	\$106.00
Beauty's Maid (66302), Jno. W. Stuart Jr., Sherman, Tex.	62.50
Salome, G. P. Shehea, Amos, Mo.	61.00
Perfection Beauty 4th (64783), Turney Bros., Lorimer, Iowa	106.00

Angelina, H. E. Messick	47.00
Priscilla, J. L. Coberly, Wheeling, Mo.	57.00
Alice Sunshine, Cotta & Mast, Ogden, Ill.	60.00
Wilhelmina, T. J. Porter	75.00
Perfect Jewel, Jas. Mains, Oskaloosa	47.00

The Wichita Draft Horse Sale.

Last week was a notable one in purebred circles in southern Kansas. A series of fine-stock sales was held at the Riverside barns, Wichita, which proved quite satisfactory to the consignors and went a long way towards establishing Wichita as a sales center for pure-bred stock.

The first of these sales was held on Tuesday, February 3, and was a draft-horse sale contributed to by J. W. & J. C. Robison, Towanda; Snyder Bros., Winfield; and Henry Avery & Son, Wakefield. As these gentlemen are among the oldest and best-known breeders of draft-horses, the public had a right to expect something above the ordinary. The mare offering was a splendid one and the stallions were excellent in quality though lacking in the maturity necessary to secure a good average. While the sale as a whole was a good one and the contributors are well pleased with it, we think there were a few things that went too cheap. The Brilliant 3d mare Endymion 22941, belonging to Henry Avery & Son, is one mare in a thousand, and has a wonderfully rich pedigree. She brought \$475, which is thought by good judges to be but little more than half her value. We are glad to note that she went to the Robisons, where her merit will be fully appreciated. Snyder Bros' gray 2-year-old stallion, Cowley King 28705, also went below his real worth. He brought \$775, and went to F. H. Schrepel, Ellinwood, one of the best Percheron breeders in the West.

Eleven Percheron stallions brought \$6,190, average \$562.73; twenty-one Percheron mares brought \$7,040, average \$325.24.

high-grade Percheron stallions which brought \$965.

The details of the sale of pure-bred draft-horses are as follows:

PERCHERON STALLIONS. Consigned by J. W. & J. C. Robison, Towanda.

Reveurette 23809, James Hopkins, Goddard, Kans.	\$260
Bouvard (45552) 25971, J. H. Huckle-bridge, Eureka, Kans.	845
Nicodemus 27759, G. L. Seaman, Udall, Kans.	775
Diamond 25896, Fairview Horse Co., Siloam, Kan.	1,015
Hercules 26530, J. P. Clark, Colwich, Kan.	555
Lazare, W. M. Tuel, Matze, Kans.	210
Consigned by Henry Avery & Son, Forrester 26035, R. W. Bolton, Olathe, Kan.	525
Alexander, James Hopkins	200
Consigned by Snyder Bros.	
Cowley Peck 28709, Nelson & Shidler, Latham, Kans.	405
Cowley King 28705, F. H. Schrepel, Ellinwood, Kans.	775
Cowley Prince 28710, Geo. H. Stringer, Clearwater, Kans.	625

PERCHERON MARES.

Consigned by J. W. & J. C. Robison.	
Bijou 18372, A. J. Zang, Denver, Colo.	615
Carnotta 28268, S. S. Olds, Deer Creek, O. T.	440
Fidelity 28267, A. J. Zang	390
Lois 2370, H. C. Staley, Rose Hill, Kans.	300
Topsy 28685, A. J. Zang	400
Norma 9007, E. J. Knowlton, Alton, Kans.	160
Vashti 28794, C. J. Cox, Rose Hill, Kans.	210
Sultana 30854, C. J. Cox	200
Diana 36531, Groenmiller & Son, Centropolis, Kans.	405
Olivette 18374, A. J. Zang	455
Juliette 17031, A. J. Zang	415
Colette 29705, A. J. Zang	405

La Rose 24619, Avery & Son, Wakefield, Kans. 380  
 Consigned by Henry Avery & Son.  
 Alcott; A. J. Zang. 275  
 Endymion 22941, J. W. & J. C. Robison, Towanda, Kans. 475  
 Evalena 17353, J. W. & J. C. Robison, Consigned by Snyder Bros. 325  
 Lutine 28703, Fred Wren, Kellogg, Kans. 295  
 Lauretta 20183 (blind), J. T. Fry, Udall, Kans. 135  
 Julia 15508, Fairview Stock Farm, Siloam, Kans. 140  
 Marcelia 18377, Fred Wren, 325  
 Nora 20184, S. W. Hyatt, Clare, O. T., 295

ENGLISH SHIRE STALLIONS.

Honest Prince 4917, F. H. Schrepel. 550  
 Duke of Cowley 6221, F. H. Schrepel. 325

FRENCH COACH STALLIONS.

Mazarine 2766, C. R. Leland, Manchester, O. T. 375  
 Ibis 2767, J. C. Watson, Wichita, Kan. 300

GRADE PERCHERON STALLIONS.

Hindus, R. W. Bolton. 185  
 Immel, O. L. Thieser, Chapman, Kans. 200  
 Romaine, C. H. Hucklebridge. 210  
 Romani, C. C. Lilley, Eureka, Kans. 210  
 Dewey, Sunrise Ranch Co., Florence, Kans. 160

J. W. & J. C. Robison's consignment averaged \$444.20 on nineteen head.  
 Snyder Bros.' consignment averaged \$387 on ten head.  
 Avery & Son's consignment averaged \$360 on five head.

Thompson Bros.' Poland-Chinas Average \$48.39.

The second annual brood-sow sale of Thompson Bros., Marysville, Kans., was held on February 5, and fifty-one head sold for \$2,465, making an average of \$48.39. The following comprise a complete list of the sales:

Sustie M's Last 55271, B. F. Thompson, Waterville, Kans. 54.00
Maud Muller 69762, Beveridge Bros., Home, Kans. 46.00
Jane 68806, Beveridge Bros. 45.00
Fannie Priceless 2d, J. J. Minnahan, Summerfield, Kans. 50.00
Black Sustie, H. L. McKelvy, Fairfield, Neb. 52.50
Jennie H. 68607, Wm. Foulk, Oketo, Kans. 50.00
Belle Perfection, M. B. Hitchcock, Sabetha, Kans. 45.00
May Flower, W. F. Smith, Oketo, Kans. 42.50
April Hopes, Lewis Scott, Marysville, Kans. 56.00
Jessie B., D. Delair, Oketo, Kans. 38.00
Black Bess, J. Brooner, Marysville, Kans. 35.00
Estella B. 64506, E. Z. Phyllip, Home, Kans. 50.00
Black Queen Gouldsberry Bros., Beattie, Kans. 35.00
Josephine, McCulloch Bros., Irving, Kans. 45.00
Blackbird, D. Seibert. 37.00
Priceless Gem 64154, T. J. Hunt, Blue Rapids, Kans. 47.00
Pet's Daisy, H. Boomer, Oketo, Kans. 55.00
Miss Perfection, L. Dawson, Endicott, Neb. 35.00
Daisy Perfection, G. Burkett, Marysville, Kans. 41.00
Lucy Marshall 64590, Gouldsberry Bros., Oketo, Kans. 41.00
Queen's Frid, H. N. Farrer, Axtell, Kans. 31.00
Daisy Dean 3d, J. M. Williams, Frankfort, Kans. 40.00
Fannie R. 59948, R. N. Farrer, Adel, Kans. 30.00
Sunflower, H. N. Farrer. 60.00
Miss Faultless, J. H. Northrup, Frankfort, Kans. 56.00
Miss Up to Date, W. E. Willie, Steer City, Neb. 48.00
Queen's Price 51762, Lewis Scott, Orange Blossom, Kans. 48.00
Marysville, Kans. 61.00
Jewell, Ben Belle, Beattie, Kans. 61.00
Mary Ann 70268, W. J. Smith, Oketo, Kans. 60.00
Miss March On, Harry Boomer. 47.50
Fannie P., D. Delair. 56.00
Miss Lil, A. B. Garrison, Beattie, Kans. 55.00
May Victor, L. Dawson. 35.00
Purity, L. Dawson. 32.00
Useful Maid, J. B. Swank, Waterville, Kans. 42.00
Rose Bud, W. J. Smith. 47.00
Hoosier Girl, Mrs. C. B. Wilson, Marysville, Kans. 55.00
Nellie R., Gouldsberry Bros. 39.00
Maud Perfection 2d, O. B. Smith, Cuba, Kans. 55.00
Fancy Lady, J. Stanbaugh, Virginia, Neb. 45.00
Maybee 2d, Mrs. James Schroyer, Schroyer, Kans. 41.00
Black Patti, D. Seibert. 44.00
Lillie C., H. L. McKelvy. 51.00
Estella H., H. N. Farrer. 36.00

The Wichita Shorthorn Sale.

On February 4 the Riverside barn at Wichita was the scene of the second in the series of combination sales. This sale was one of Shorthorn cattle from the herds of J. W. & J. C. Robison, Towanda, Snyder Bros., Winfield, G. D. Stratton & Son, Walton, H. M. Harrington, Clearwater, Cecil McArthur, Walton, and Fred Cowley, Columbus.

Owing to the fact that much of the sale stuff was thin in flesh and had not been prepared for the sale, the average price received was not large though we believe it was fairly satisfactory to the consignors. A total of fifty-six head was disposed of for \$4,920. Some of the representative sales were as follows:

Lady Foggathorpe 15th, Robison to S. M. McCowan, Chillico, O. T., \$100.
Josephine, Cowley to W. E. Hunter, Mitchell, Kans., \$100.
Lady Sharon, Stratton & Son to W. H. Cottingham, McPherson, \$115.
Roan Boy, Cowley to W. H. Cottingham, \$105.
Emma Moreton, Robison to O. A. Seaton, Jewell, Kans., \$155.
Nellie's Prince 194081, Stratton & Son to Chas Shaffer, Milan, Kans., \$100.
Star Lad 179748, Harrington to W. A. Hearn, St. John, Kans., \$130.
Baron Dudding, Stratton & Son to John Beck, Nickerson, Kans., \$105.
Seh Barnes 173466, Harrington to J. P. Campbell, Ashlan, Kans., \$180.
Lady of the Lake 2d, Robison to C. H. Keeman, Wichita, \$100.

Loudon Duke of Elm Park 191751, Stratton & Son to A. D. Gilchrist, Walton, \$180.  
 Rose C of Eldorado, Robison to Ed. Brookover, Eureka, \$150.  
 Ducal Crown of Elm Park, Stratton & Son to S. M. McCowan, \$140.  
 Baron Victor of Elm Park 191748, Stratton & Son to Ed. Brookover, \$155.  
 Kirklevington Court 5th, Stratton & Son to S. M. McCowan, \$120.  
 Maid of the Falls, Robison to Ed. Brookover, \$155.  
 Grand Lad of Elm Park 191750, Stratton & Son to C. G. Martin, Idaho Falls, Idaho, \$100.  
 Red Eagle, McArthur to F. A. Wolf, Clearwater, Kans., \$100.  
 Summer Day, Robison to Ed. Brookover, \$105.  
 Red Pippin of Clay, Snyder Bros. to W. H. Cottingham, \$170.

Other purchasers were as follows:  
 T. H. Schimmelpfennig, Belle Plaine, Kans.; J. J. Beck, Nickerson; C. Haynes, Sedgwick; M. J. Johnson, Goddard; C. W. Sesser, Goddard; O. H. Clark, Nardin, Okla.; David Rose, Valley Center; J. H. Shipley, Garden Plain; R. L. Ogden, Goddard; J. H. Sherman, Peck; T. J. Davis & Son, Nickerson; J. M. Wilkinson, Piedmont; Preston Wyckoff, Corbin; F. T. Little, Maize; Wm. Toms, Wichita; J. M. Hill, Halstead.

The Wichita Poland-China Sale.

The last of the series of sales of purebred live stock at the Riverside barn in Wichita was the Snyder Bros.' Poland-China sale, which took place on Thursday, February 5, and which the writer regards as one of the best he ever attended. Certainly it was one of the best of the year. Only forty-six head were sold and at least ten of them were little more than sucking pigs, while many of the gilts were not bred. In spite of these facts, however, they brought \$1,330, and thirty-five head of them averaged \$35. This sale was a good one and we imagine the Snyder Bros. retired that night with the feeling of satisfaction which comes of work well done.

The sales amounting to \$25 or more are as follows:

1. Sow, F. H. Schimmelpfennig, Belle Plaine. \$61
4. Boar, F. H. Green, Leon. 25
5. Sow, G. W. Huff, Milan. 31
8. Sow, Frank Orth, Andale. 39
9. Sow, G. W. Huff. 31
12. Sow, J. R. Roberts, Deer Creek, Okla. 40
13. Sow, G. D. Stratton & Son, Walton. 35
17. Sow, O. H. Bentley, Belmont. 46
19. Sow, W. A. Graves, Dunlap. 20
23. Sow, C. C. Fair, Sharon. 25
24. Sow, L. K. Potts, Kingman. 29
26. Sow, W. A. Graves. 25
27. Sow, H. S. Mead, Wichita. 29
29. Sow, F. A. Wolf, Clearwater. 35
30. Sow, W. A. Graves. 26
31. Sow, Mrs. Mary E. Mead, Wichita. 32
32. Sow, G. D. Stratton & Son. 29
33. Sow, J. M. Clark, Wichita. 31
34. Sow, Alfred Beason, Arkansas City. 36
35. Sow, G. D. Stratton & Son. 28
36. Sow, Harry Lunt, Furden. 38
37. Sow, E. E. Schmidt, Mound Ridge. 41
42. Sow, Harry Lunt. 53
51. Sow, G. W. Huff. 34
52. Sow, E. S. Groves, Wichita. 26
53. Sow, J. C. Crawford, Baxter Springs. 30
46. Sow, G. D. Stratton & Son. 27

Fifty-seven Shorthorns Sell for \$16,690.

On February 5, Geo. E. Ward, of Sioux City, Iowa, sold fifty-seven Shorthorn cattle for \$16,690, an average of \$292.30. Forty-three females averaged \$309 and fourteen bulls averaged \$212.50. The sale was held at the farm near Le Mars, Ia. A big crowd of farmers and breeders were present. Of course the majority of the cattle were sold to farmers and breeders near that place, but some good buyers were down from South Dakota and Minnesota. W. D. Flatt, the noted importer of Hamilton, instructed a representative to buy the imported cow, Lavender Rose 2d and secured her for an even thousand dollars. She sold with a roan bull calf by Mr. Ward's \$5,000 bull, Imp. Lord Bank, at side, Frank Harding, of Waukesha, Wis., sent in a big one the young show bull, Secret Valentine, and secured him for \$1,000. Some of the highest prices were \$525, \$500, \$450, \$480, and \$395. Nellie 3d, the yearling show heifer, sold to J. S. Farnam, of Chatsworth, at \$695. N. Gearing, of Garrison, S. D., secured Warden Dove 2d at \$620. E. R. Sisson, of Storm Lake, secured Warden Sweet Brier at \$600.

Sale Notes.

The large sale-tent was well packed during the horse sale in spite of the very cold weather. About 400 people were present and made a good sale.

Brookover Bros., Eureka, Kans., purchased a number of Shorthorns and among them the best bull in the sale. Their former herd-bull is now for sale, as may be seen by a reference to our special want column.

Supt. S. M. McGowan of the Chillico Indian School, attended the Shorthorn sale and purchased four bulls and two cows for that institution. We are glad to note that the Government is taking this step in securing pure-bred stock as one of the means of education of its wards at the Indian school.

The three days' sales at Wichita foot up about like this:
Horses. \$16,105
Shorthorns. 4,920
Poland-Chinas. 1,330
Total. \$32,355

We think this ought to look pretty good to Wichita.

In addition to the purchases made in the Percheron sale by the Zang Brewing Co., of Denver, Col., a representative of that institution visited the Robison farm at Towanda, and bought two teams and one horse for which he paid \$1,075. The check which this firm gave the Robisons after the sale amounted to \$4,000 and they

A WAGON LOAD OF HEALTH

The Watkins agent is the bonded representative of the largest medicinal business in the world; capital stock \$500,000. He carries a full line of Watkins' famous standard remedies, and he guarantees satisfaction. Can you afford to run risks when you can have these time-tried standard remedies in your house?



- Watkins' Vegetable Anodyne Liniment.
- Watkins' Anodyne Cough Cure.
- Watkins' Lax-Tone.
- Watkins' Petro-Carbo Salve.
- Watkins' Veterinary Ointment.
- Watkins' Pabular Stock Food.

Uses All Of Watkins' Remedies. I have used Watkins' Cough Cure and can recommend it the highest of any I ever did use. I have also used all of Watkins' Remedies in my family for several years and find them to be just as recommended. ADAM FISCUS.

They will save doctor's bills and promote health and happiness, and they're guaranteed. Wait for the Watkins' wagon and get the best. If our agent hasn't yet called, send for Watkins' Home Doctor and Cook Book, free.

THE J. R. WATKINS MEDICAL CO., 28 Liberty St., Winona, Minn. We have a good agency proposition for responsible young men. If you want good employment, write us.



are so well pleased with their purchases that they promise to return for more soon.

W. H. Cottingham & Son, McPherson, who, it will be remembered, purchased a number of good Shorthorns at H. O. Tudor's sale last spring, were buyers of a number of the tops at the Wichita sale. In their big sale on February 21 and 25, they will offer eleven head of young Shorthorn bulls and about twenty-five head of Poland-China hogs in addition to about sixty head of horses. See their advertisement on page 192.

Col. R. L. Harriman is proud of the fact that while the sale of draft horses at Wichita last week amounted to more than \$14,000, he sold the first ten head for more than \$10,000. Having been officially connected with both the Missouri and Kansas State Fairs where J. W. & J. C. Robison made such magnificent exhibitions of their Percherons, Colonel Harriman was in a position to open the Percheron sale with a very telling speech in regard to their winnings.

S. C. Bartlett, Route 5, Wellington, whose advertising card appears on page 188, has the satisfaction of knowing that a number of the good things sold in the Percheron sale were of his raising. While better known, perhaps, as a breeder of Red Polled cattle, Mr. Bartlett has no small reputation as a breeder of Percheron horses. Sultana 30854, who won first everywhere she was shown in the Robison herd in 1902, was bred by Mr. Bartlett, as was also her half-sister, Diana 36351. Any man who can raise that kind of Percherons has something to be proud of.

The Next Kansas City Hereford Sale.

On February 26 and 27 the most attractive auction offering of Herefords of the year will be held at Kansas City consisting of the following very choice consignments:

Gudgell & Simpson, Independence, Mo., will sell twenty-five heifers and five bulls; C. A. Stannard, Emporia, Kans.; fifteen heifers and eighteen bulls; Scott & March, Belton, Mo., twenty-five heifers and eight bulls; Frank Rockefeller, Belvidere, Kans., fifteen heifers and eleven bulls; Fritz & Shea, Blakesburg, Iowa, four heifers and two bulls; Mrs. C. S. Cross, Emporia, Kans., two bulls; Walter B. Waddell, Lexington, Mo., three heifers; Geo. B. Baker, Maryville, Mo., three heifers. Each of the contributors to this sale is sending the very best young cattle on his farm that he will sell. There are among the consignments prize-winners at the shows of 1901 and 1902, both bulls and heifers, so that the wants of all can be supplied—the rangeman who wants bulls to turn on th range and the breeder who wants a bull to head his herd. It should also be remembered that the public sales have been the cheapest at which to buy cattle the past four months. Too many times the ranchman or farmer says: "They will sell to high for me, for at these public sales cattle average from \$250 to \$350 per head, which is more than I want to pay." But they do not stop to think that perhaps figured in that average are four or five animals sold at from \$1,000 to \$5,000 each and several cows with calves at side at from \$400 to \$1,000 each. Cut these out of the average and the price looks altogether different. Some of the best breeders in the country have adopted the plan of selling their best cattle at public sales and especially is this true of combination sales, where each breeder has a desire to have his consignment compare favorably with those of his fellow-breeders. The Gudgell & Simpson, Sunny Slope Farm, Scott & March, and Frank Rockefeller herds are among the oldest and most noted herds in the coun-

try and 122 of the cattle to be sold in this sale come from these great herds. As the cattle market has been bad for the past three months and many cattlemen do not feel like buying it is believed that this will be one of the best opportunities ever offered to buy good cattle cheap. If only one animal is wanted you will perhaps be able to buy it at this sale at a price that will more than save railroad fare and expenses.

G. B. Baker, president of the Real Estate Bank, Maryville, Mo., although one of the small contributors, will have three bulls that the writer thinks will be a very attractive consignment, consisting of Hestrod 88th 116355, by Hestrod 2d, and out of the imported cow Hestrodop, of the Armour importation; the bull, Jackson 134291, sired by Van Natta's March On 76035; also the Showy bull, Krackerjack 135258, a grandson of Beau Donald.

In the Gudgell & Simpson consignment are five bulls sired by Beau Brummell 51817 and Millant 108801. The twenty-five 2-year-old heifers are safe in calf to Dandy Rex and Beau Brummell, and are sired by such famous bulls as Lamplighter, for coming Beau Brummell, Andrew, etc. All those heifers are very well tried to Scott & March consignments, and their fine excellence, of which special mention will be made next week. For catalogues, see advertisement on page 192.

The Next Sale of Galloways.

Western cattlemen are to have an opportunity for the purchase of pure-bred and registered Galloway cattle at the Union stock yards in Denver, Colo., on Wednesday, February 25, from three of the leading herds of these popular market-topping cattle in Kansas and Nebraska. Our advertising columns this week give full particulars of this sale, to which contributions are made by Messrs. W. Guy McCandless & Sons, of Cottonwood Falls, Kans.; S. M. Croft & Sons, of Bluff City, Kans.; and G. W. Lindsey, of Red Cloud, Neb. Forty-eight head, including twenty-four cows and heifers and twenty-four bulls, will be offered at this sale. These bulls are all of good, serviceable ages, and we are assured that they will be presented in excellent condition. The cows are all bred but two or three young heifers, and are also in good condition. We have seen a part of the consignment and will say that they are as good a lot of Galloway cattle as we have seen in a sale recently. All three of the contributors are well known breeders and have been prominent in western show rings.

A feature that should not be lost sight of in connection with this sale is the fact that these cattle are offered to buyers at Denver, Colo., almost in sight of the

(Continued on page 180.)

HONEST MEN

are at a premium everywhere and an Honest Farm Wagon should be. If more men who misrepresent articles they offer for sale were put

IN JAIL

the farmer would have less trouble. When you buy a Farm Wagon see that it is the "NEW TIFFIN," for it is an HONEST wagon in every part. No Mapleaxles. No Elm or inferior Birch hubs. Nothing in the gears but first quality Hickory and Oak. If your dealer will not handle it write to THE TIFFIN WAGON CO., TIFFIN, OHIO, and they will tell you where you can get one.

German and Oldenburg Coach Horses

Our Last Importation Arrived January 3, 1903, Making Our Fifth Importation in the Last Nine Months.

No other importers buy direct from breeders in the old country. The oldest member of our firm resides in Germany on a 1,000-acre farm on which are kept constantly 50 to 75 stallions of service age. He is active twelve months in the year, buying the choicest blood of the breed, and thus as a resident buyer avoids large expense of inter-ferer, commissions, etc. He is only ten hours by rail from the DRAFT HORSE districts of Belgium and France. All importers and breeders will save time, money, and risks by buying coach and draft horses from us at our 101 nois streets, at "old country prices." A full stock of GERMAN COACH, BELGIAN, and PERCHERON STALLIONS constantly for sale.

OLTMANN'S BROS., WATSEKA, ILLINOIS. 77 miles south of Chicago, on C. & N. E., and E. P. & W. Railways.

## The Young Folks.

Conducted by Ruth Cowgill.

### GETTING READY FOR ST. VALENTINE'S DAY.

(The poet composes.)  
To tell thee of my lasting love  
I send this to thee, dear,  
To say that throughout all my life  
I've ne'er found maid so-queer  
—drear  
—Peer—  
Of course,  
I've ne'er found maid thy peer.  
I love to gaze into thine eyes,  
Those windows of thy soul,  
So full of tender meaning, Love,  
Like to a-buttered roll  
—tons of coal  
—distant goal—  
To be sure,  
They are my distant goal.  
I love to clasp thy little hand,  
I can not let it fall;  
Your shapely, tender little arm  
Is like a-parasol  
—worsted shawl  
—musket ball  
—garden wall—  
Just what your arm is like,  
I can not now recall.  
I love the music of thy voice,  
I'd listen to it long,  
I often think its gentle tones  
Are like a-dinner gong  
—something wrong  
—angel's song—  
Yes, yes,  
Are like an angel's song.  
Thy wavy hair, thy cherry lips,  
Thy merry, silvery laugh;  
But more than all, thy graceful form,  
'Tis like a-thin giraffe  
—brindle calf  
—turning lathe—  
You know just what I want to say,  
I can't express it half.  
And so  
I send these verses to you, Love,  
I hope that they will take;  
For if you should accept my suit  
I'd have a-stomach ache  
—griddle cake  
—Irish wake,  
—garter snake—  
I fear that I can rhyme no more,  
I'll stop it for your sake.  
—Burgess Johnson, in Life.

### A Valentine Party.

One of the jolliest parties I ever enjoyed was a valentine party. My invitation was written upon a small pink heart of cardboard, and in the point of the heart was the word "valentines," knew that I must set my rk. I knew just about who would be there, for our crowd was one of those perennial affairs which begin in toddling childhood and last till one of the fatalities, death or marriage, breaks it up.

First I bought some cardboards in red and pink and white. Then I hunted up all the old magazines and papers in the house, and cut out carefully all the appropriate pictures—anything in the shape of a heart, or a cherub with wings or a bow and arrow, or a sentimental scene, fell victim to my scissors. I even sacrificed some last year's valentines, whose fetching cupids and roses and arrow-pierced hearts seemed too useful in the present crisis, to be wasted in the obscurity of my bureau drawer.

Now came the real trouble. I must write some sentimental verses to match each picture and not being at that time in the least sentimentally inclined, I despaired before I began. But found, after writing one or two, that that kind of "poetry" flowed from the point of my pencil with wonderful ease. So that soon all I had to do was to look at my picture, and begin to write, always managing to end my lines with something to rhyme with heart, joy, or valentine, and my verses were done. I have no doubt that the poetry I perpetrated was terrible, but I thought it was fine, and no one else knew who did it, so it answered the purpose beautifully. Having cut my colored cardboards into pretty or fantastic shapes, I pasted upon them my pictures and wrote my "poetry," and my task was done.

On the evening of the fourteenth of February, we gathered in the home where we were to be entertained, a jolly party, each with a package of greater or less dimensions. In one corner of the room was a box arranged to look like a post-office window as we came in, the hostess making a very pretty postmistress. Our packages were dropped into the slot beneath the postoffice window as we came in, and when all had come, we began getting our mail. I wish you could have seen some of those valentines! Most of them were of home manufacture. Some were ridiculously ill-made, some were beautiful but all were interesting. One boy who had some little skill with a pencil had made caricatures of every one there, even of himself, so that it took some little time to find out whom to vent our wrath upon. They were really just as funny as they could be—

much funnier than the hideous so-called "comic" valentines which so often are so cruelly used to hurt some sensitive soul. None of the valentines received that night had anything malicious in them, though many of them were full of good-natured jokes and harmless personalities.

There was one which excited my curiosity a good deal, because the girl who received it blushed so furiously, and would not let the rest of us see it. She announced her engagement in a couple of weeks, to one of the members of that jolly party, and I have always suspected that the valentines had something to do with it, but she has never told me a thing about it, so that I can only fancy. At any rate, we all had a lovely time, and I have often thought I should like to give a party like it. You are welcome to the idea, if it appeals to you.

### Some of the Results.

The animal stories which we publish this week are some which came in after the date set as the limit for the contest.

This contest has accomplished several things. Doubtless it has taught you something of the generosity of nature who has bestowed such marvelous gifts of instinct and intuition upon her lesser children; perhaps it has called your attention to your own humble friends with a new respect. At any rate it has furnished an hour's genuine entertainment to all who cared to read. This much it has taught us, that our readers have the habit of sympathetically observing the doings of the creatures of nature's lower world; and that they have also the ability to relate the results of their observation accurately and entertainingly. What we want to say to you now, is: Keep it up! We want to hear from you, young and old, men and women, girls and boys. Tell us what you see in God's great beautiful out of doors; tell us what you learn in the splendid university of nature, in which you are enrolled, and where you learn things that are beyond the curriculum of the colleges. Write us something that is wholesome and happy, and interesting, and be sure that it will help both you and your readers.

### ANIMAL INTELLIGENCE.

#### Intelligent Dogs.

Papa went after the cows one evening and took our two dogs with him. Their names are Rover and Shep. There are timber and brush in the pasture, and papa went up on the high ground and couldn't see the cows, and he told the dogs to go after the cows. One dog went one way and the other another way, and in a little while Shep came back with the cows. When Rover came and saw the cows it made him jealous and he took after Shep and chased him around among the cows to flog him, but he did not catch him because papa called to him.

ADA EDWARDS.

Osawatomie, Miami County.

#### The First of All a Rooster.

On the night of the 31st of December, 1902, father was lying on his accustomed bed by the window in one of the rooms in the front part of the house. Right out from the window about twenty yards is the lot between the barn and house, and along that lot are a row of trees. Upon one of those trees was seated a bunch of chickens, among them a proud old rooster. My father was lying awake, thinking, as he often does. Suddenly that rooster gave one long, loud crow. Immediately the old family-clock chimed the hour of midnight. Then began the crowing of all the other roosters around on the trees. Does it not seem as though that rooster wanted to be the first one to bid his master a "Happy New Year?"

We had some kittens about 2 months old. We have five large cellar rooms under our house, and there chanced to be in one of the rooms off in a corner a hole about ten inches square and about fifteen feet deep. I do not know what it was made for, as it was there when we bought the place. One day as I came in the cellar the old mother-cat was at the hole mewing pitifully. I went there and listened and I heard the three kittens down in the bottom of that hole. I was puzzled to know how to rescue them. Then, seeing a long broom-corn slat I seized it and put it in the hole. As soon as it touched the bottom I heard them scratching on it. I pulled it out, and to my joy, their hung a kitten at the end of it, with its little sharp claws sticking in the slat. Two more times down brought the others out, and they were safe with the mother-cat. But mark it, they never went near that hole again.

CHRISTENA RAISNER.

Poor time has its ending



Good time has its beginning

in an

# ELGIN WATCH

Every Elgin watch has the word "Elgin" engraved on the works, and is guaranteed against original defect of every character. A booklet about watches will be mailed to you for the asking.

ELGIN NATIONAL WATCH COMPANY, Elgin, Illinois.

#### Prince and Tip.

We have a 2-year-old colt and his name is Prince. He can pace, trot and rack. When we go out to the pasture to get the horses, Prince is the first one to be caught. When he is bridled he will stand very quiet till he is mounted, when he will canter off with as much ease and grace as any animal. When we go out to the herd with him and turn him loose, he will stay near us and not run off. He is a great pet and likes to be with boys and dogs. We have a new saddle, bridle and whip that we use when we ride on Prince. I attend Sunday school almost every Sunday, and Prince is the horse I ride. I also have a white shepherd dog, of which we are all very proud. His name is Tip. When we leave the house in the big wagon Tip always goes along, but when we go in the buggy, Tip will not attempt to go along. When we point to the ground and tell him to dig, he will dig; and hold a hat up and he will jump and bark at it. When I throw up a ball he will catch it in his mouth.

Gem, Kans. HENRY ADRISSON.

#### A True Story of a Dog.

A neighbor of ours once owned a very cross bull-dog. He kept him tied to a wire leading from the house to the barn. One day the man went to town and while he was gone an Indian came to get some stray ponies that were at this house. The dog saw the Indian and in his excitement broke loose and chased the Indian to a haystack near the barn on which the Indian had to sit until our neighbor came home. The Indian was almost frozen, and he said, "That dog was not of any account." Indians do not like cross dogs.

JESSE NIXON.

Pawnee, Pawnee County, Okla.

#### The Intelligence of Squirrels.

Kittens are smart (?) and learn to do lots of tricks, but our pet squirrel beats any kitten we ever had. We put him in a bird-cage, because we had no other, and he wore his nose raw trying to get out, so we gave him free scope in the kitchen.

He sleeps every night and an hour at noon, in an overcoat pocket which he found for himself; and he always finds it, no matter where we hang the overcoat. He knows his name and when we call "Ben, Ben," he peeks his head out of the pocket to see what we want.

He runs after a ball, carries it off and hides it. He plays with a handkerchief, tossing it jumping and rolling over with it like a kitten.

We don't allow him in the pantry or on the plant-shelves, and when we say, "Go back!" "Get down!" he minds in a hurry. He feeds from our hands; hunts food out of coat pockets; will scold to keep what he has in his mouth, and we have to be careful not to mash his nose when we crack nuts for him, he tries so hard to get them. He stands erect when bidden, and we can put him to sleep by rubbing his head. He climbs all over us and loves to caper on a bare arm or hand, acting as though he wants to bite but he never does.

Had we kept him in a cage we would never have known what a smart (?) pet we have.

L. E. ADAMSON.

Erie, Kans.

I have a young Scotch shepherd dog named Beaver. If any animal possesses the gift of intelligence surely my dog does. He will when very happy or excited over anything almost talk.

I have raised him from a puppy, and when he was still small my brother

Tommy fed and cared for him. He fed Beaver at regular intervals and when Beaver thought he was not getting his milk on time, he would go and stand in front of Tommy and call his attention by an occasional sharp bark. This he would continue until he was fed.

When about 4 months old he had learned my name. He was always up early in the morning and when he heard father call me, he would at once begin to bark, and run from one door to the other awaiting my appearance. When I appeared he barked in exciting tones as if he wished to say, "Good morning, Louis." He is not a lover of cats, but he always regards my pet cat with the utmost respect.

These are only a very few of the smart actions of my dog.

LOUIS WILLIAMS.

Wetmore, Kans.

#### A Faithful Dog.

A man near Pond Creek, Grant County, Okla., by the name of Schuyler, had a very common looking shepherd dog. Mr. Schuyler had filled his granary with wheat, and during the night it had sprung a leak in the floor. The dog discovered it and went to the house and barked. His master got up, went to the door, and seeing nothing went back to bed. The dog was not satisfied with this, so he continued to bark; so the man got up, dressed, and started out to see what was the matter. The dog went to the granary and showed the man the hole in the floor through which, by this time, several bushels of wheat had run out. Mr. Schuyler stopped the leak and the dog seemed well pleased with what he had done.

A KANSAS FARMER READER.

## For the Little Ones

### GRANDMA.

Grandma sits in her rickety-chair,  
Watching the sun go down.  
There's a yellow glow on her snow-white hair  
As she sits on the porch in the open air,  
That seems like a golden crown.

Watching the cloud with dreamy eyes—  
I wonder what grandma sees.  
Is she watching the pictures in the skies  
That change and fade as the sunlight dies,  
Above the distant trees?

All her life she has done her best  
To walk in the narrow way,  
Which leads to the mansions of the blest  
Where longing hearts find peaceful rest  
In never-ending day.

And now she is old and her work is done,  
Her treasures safe on high;  
The sands of her life are almost run;  
Her earthly battles are fought and won,  
And heaven draweth nigh.

What does she see in the summer sky,  
Watching the sun's last ray?  
A shining path to her home on high  
That brighter grows as the days go by,  
And ends in perfect day.  
—Frank Beard, in The Ram's Horn.

### Jamie's Secret.

"Mamma, some robins have built their nest in our dogwood tree!" exclaimed Jamie, running excitedly into the room.

"I am not surprised," said mamma. "I knew they had been looking about in this neighborhood."

"It is in the branch right near your window. I should think they would be afraid."

"Perhaps they are some of the birds who were brought up in our cherry-trees last summer, and they know us and trust us."

"Oh, mamma," laughed Billy, who had followed Jamie into the room, "do you believe birds know enough for that?"

"Certainly I do," said mamma. "They took a good look before they made up

their minds to build in Dogwood-tree Place. They probably said, "The children in that house never hurt birds; there is a cherry tree in the yard, and a garden full of angle-worms. It is as good a place as we can find. We'll go to housekeeping there!" I think they were wise, for I know my boys won't touch them.

"No," said Billy, "only Jamie will tell; and if Johnny Rush finds it out he'll steal the eggs."

"I won't tell," said Jamie.

"You told about the chippy's nest."

"No, I didn't either."

"Well, Johnny Rush said that he got it out of you, anyway. You know he climbed up the tree and took two eggs, and you had promised honest and true, black and blue, that you would not tell."

"How is this?" asked mamma. "Jamie, let us hear about it."

"He just kept teasing and teasing to know our secret."

"So he did," interrupted Billy, "that was because you kept singing around, 'We've got a secret! we've got a secret, and I won't tell!'"

Jamie hung his head and mamma could not help smiling a little.

"Well," continued Jamie, "he said he would give me his knife, that's got one blade with only the point broken off, if I'd tell him something that sounded like it, and I said, 'there's a lippy's lest in the leeder lee,' and he gave me the knife and that's all about it," and Jamie produced a very dilapidated knife from his trouser's pocket.

"Wouldn't anybody have known that he meant a chippy's nest in the cedar tree?" Billy asked, looking disdainfully at his younger brother.

"Anyone would have been pretty stupid not to know," mamma said, and I do not think Jamie did right at all; but I am glad he is honest enough to explain just how it happened."

Just then Johnny Rush came whistling down the path. The boys whistled in answer.

"We'll call him up here," said mamma, "and tell him about this nest, and I do not think he will touch it when he really knows how unhappy it would make the birds."

After a few moments' talk Johnny was as much interested in the bird neighbors as Billy and Jamie were. Mamma said he could come up to her window and look at them as often as he liked, and they would all find out just how the robins kept house.

After that the children watched every day. They knew all about the blue eggs in the nest and how patiently Mrs. Robin sat there, and were delighted when the little robins came.

From that time till the little ones learned to fly Mr. and Mrs. Robin did little but find food to fill the very big mouths of their very small babies. The boys helped them by scattering crumbs where they could easily pick them up.

"Well, I'm glad," said Billy, "that I am not a robin. It is all very well to live in a tree when the sun shines, but I would not want to live there all the time."

**Swallowed a Farm.**

The following advertisement once appeared in a daily paper:

"WANTED—A nice cottage and grounds in exchange for a choice lot of liquors."

Thousands of drinking men have made just such an exchange. My homeless friend, with the chromatic nose, while you are stirring up the sugar in a ten-cent glass of gin, let me give you a fact to wash down with it. You say you have longed for years for the free, independent life of the farmer, but could never get enough money together to buy a farm.

But this is just where you are mistaken. For several years you have been drinking a good, improved farm at the rate of one hundred square feet a gulp.

If you doubt this statement, just figure it out for yourself. An acre of land contains forty-three thousand five hundred and sixty square feet. Estimating, for convenience, the land to be worth \$43.56 cents per acre, you will see that it brings the land to just 1 mill per square foot, 1 cent for ten square feet, 10 cents for one hundred square feet. Now pour down that fiery dose and imagine you are swallowing a strawberry patch! Put down that glass of gin; there's dirt in it—one hundred square feet of good, rich dirt, worth \$43.56 an acre.—Robert J. Burdette.

**FOR OVER SIXTY YEARS**

An old and Well-Tried Remedy. Mrs. Winslow's Soothing Syrup has been used for over Sixty Years by Millions of Mothers for their Children while Teething, with Perfect Success. It soothes the Child, softens the Gums, allays all Pain; cures Wind Colic, and is the best remedy for Diarrhoea. Sold by druggists in every part of the world. Be sure and ask for Mrs. Winslow's Soothing Syrup and take no other kind.

Twenty-Five Cents a Bottle.

**The Home Circle.**

Conducted by Ruth Cowgill.

**HAST THOU FORGOTTEN.**

In memory's halls does a picture stand,  
A masterpiece from an artist's hand,  
A shadowy face, 'neath a silken crown,  
That into my heart keeps looking down;  
Delicate lips that whisper low  
"Hast thou forgotten the long ago?"

"Hast thou forgotten a maiden fair  
With a queenly crown of silken hair?  
Hast thou forgotten the word, the glance  
That made the boyish pulses dance?  
Has Time's hard hand with its movement slow  
Erased these things?" And my heart cries "No!"

"Hast thou forgotten one midnight bleak  
When the tempest raged o'er the mountain's peak,  
When thy chance of life grew less and less,  
Whose picture won thy last caress  
E'er thou layest down amid the snow?"  
And again my heart-beat answers "No."

When life's last shadow darkling falls,  
When memory flies from her shattered halls,  
When the reaper Death with his sickle keen  
The bearded grain from the field shall glean,  
Thy memory shall be treasured yet,  
And not 'till then, shall my heart forget.  
—G. A. Tanton, Jefferson, Okla.

**Chickens and Flowers.**

MARY BLISS, M'PHERSON, KANS.

This is the season when the farmer is making his plans for next season's work, and he looks over his land and carefully considers the best location for different crops.

In like manner his wife and daughter are considering what they can do to make their yard and grounds bright and attractive.

One great obstacle to flowers on a Kansas farm is the ever-present Kansas hen, who usually has the run of the whole farm, and not only scratches for her own living, but for many a right round dollar for the same farmer's wife and daughter.

So the hen is indispensable on the farm; yet that is no reason why she should have the monopoly of the whole place. There are two plans whereby one can raise both flowers and chickens and I would advise trying both. The first is to enclose a small plot with chicken-wire in which to plant the more tender flowers. The next plan is to plant shrubby and perennial plants. The shrub that I consider ahead of all others for Kansas is the Althea, or Rose of Sharon. I have had best success with small plants which one can buy of the florist for 15 or 20 cents. They come in several colors and will bloom the first season, when only a few inches high, and will be loaded with bloom for two or three months; are perfectly hardy and grow quite rapidly and will make quite a little tree in a few years.

Then there are hosts of other desirable shrubs, such as snowball, Hydrangea, Spirea, Syringa, Wiegela, etc. All these are hardy and once started will require very little care, and will increase in beauty from year to year.

Then be sure to have a canna bed, located near enough to the kitchen-door so you can soak it well with the wash-water each Monday. Make the soil deep and rich, the more water the better, and it will be a thing of beauty the whole summer through.

"Go make thy garden as fair as thou canst,  
Thou workest never alone,  
Perchance he whose plot is next to thine  
Will see it and mend his own."

We are glad to endorse what our correspondent says in regard to the necessity for flowers about a home.



**The New Way of Smoking Meat**

No fire, fuel, or smoke-house. Apply WRIGHT'S CONDENSED SMOKE with a brush, giving meat two coats a week apart. Will smoke Hams, Bacon, Dried Beef, Sausage, or Fish with no shrink, or loss by fire or thieves. A liquid made from hickory wood, Peppercorn, and other spices, gives it fine flavor, and protects it from insects. Can be used in kitchen or garage. No experiment. Sold for 6 years all over U. S. and Canada. FREE SAMPLE. Send names of 5 who cure meat and we will mail you sample. A 75c bottle smokes a barrel of meat cheaper, better, and quicker than the old way. Get the genuine. Fully guaranteed. Sold only in square quart bottles with metal cap. Never in bulk. At druggists 75c. Post prepaid \$1.00 or for 50c if you pay express. Write for FREE BOOK on curing meats. Be sure to get WRIGHT'S CONDENSED SMOKE. Made only by E. H. WRIGHT & CO., 915 K. Mulberry St. Kansas City, Mo.

There is no place in the world more beautiful than a cozy, vine-covered country home set among flowers and trees, with all the loveliness of sky and limitless prairie adding to their charm. It takes so little to make the infinite difference between beauty and ugliness—a few trees, some vines, and a profusion of flowers will transform the plainest cottage into a veritable palace of beauty which will gladden the eye and cheer the heart of the most casual passer-by.

We Kansas people are only beginning to realize the importance of beautiful surroundings. Here and there are artistic country homes, but there are only a few out of the great number. As soon as the great mass of our farmers become familiar with ideas like those put forth by our correspondent, Kansas will blossom like the rose and become what it ought to be, the beauty-spot of America.

**Our Weekly Recipes.**

**SOUPS.**

Nothing is more delicious on a cold day than a bowl of hot soup. Here are a few recipes which have been tried and not found wanting:

**Salsify or Vegetable Oyster.**—This makes an excellent soup, even preferred by some to the real oyster. Wash and scrape and slice the plant. Put it on the stove with enough water to cover and boil until it is tender. Then add milk and water, half and half; season with salt, pepper and butter; thicken a little with flour, and cook a few moments longer, when it is ready for the table.

**Potato Soup** is made in the same way, with a little onion added.

**Tomato.**—Tomato soup is delicious, also. Cook a quart of tomatoes—either canned or fresh—until they are well done, and put them through a colander. Dissolve a heaping tablespoonful of flour in milk, as for gravy, and pour into the tomato. Add a quart of milk and a quart of water, not stirring until the milk has boiled up, else it will curdle. Season with salt, red pepper, and butter.

**Mixed Vegetable.**—Procure a soup bone, wash it thoroughly and put into cold water to cook slowly for three or four hours. After it has cooked a while, a scum will rise, which must be skimmed off. Then add vegetables—potato, onion, carrot, turnip, celery, salsify, cabbage, tomato, in short any kinds of vegetables—and let it cook a long time, until the vegetables are very soft. Add as much water as required, and season with salt and pepper.

Many delicious soups can be made with the stock made by boiling a bone, for a foundation. This bone need not necessarily be beef. The carcass of a turkey or chicken, or any fowl, makes a very delicately flavored stock.

**How Can the Busy Mother Find Time for Reading, Recreation, and Self-improvement?**

This is the question we wish to ask our readers. In the multiplicity of constantly recurring tasks, where is the hour for recuperation to find its place? To fill her place adequately the mother needs a daily opportunity to remove her mind from the humdrum of work and worry, to think of beautiful things, or to plan for the children's future and think out better ways of teaching them the way of noble living; to read the words of the world's great thinkers for inspiration, for courage, and for practical help, or to come in touch with the world's thought and progress through the papers and magazines. Time for all this is necessary, we say, in order to maintain the high type of motherhood and wifehood which makes its indelible impress for good upon the lives of children and husband. There is always danger that the mother, by reason of her very love and devotion, shall degenerate into a mere working machine, and thus, in her endeavor to supply the physical wants of her family, lose her power to help them in higher ways.

There are many mothers living on Kansas farms, whose homes are beautifully neat, and whose children are well looked after, yet who have found

the way, in spite of the mountains of work always waiting to be done, to take this needed rest each day. It is from such mothers we want to hear on this subject. Tell us about it. How can the busy mother find time for rest and self-improvement?

**The Pit.**

To most people the Chicago Stock Exchange is a vague place where men gamble for great fortunes, sometimes winning immense sums, but oftener ruined utterly. Few Kansas farmers realize that they have a share in this making and breaking of fortunes, and few realize the immense effect this gambling has upon the price which they receive for their grain.

Frank Norris, who has recently died, made a complete study of the complicated problem of wheat-speculation, and had just finished a powerful exposition of it in the novel, "The Pit," when death claimed him. In this story he portrays very vividly the whole great drama of the Board of Trade, with the irresistible fever which the speculation infuses, and the almost inevitable wreck which it works.

That a love-story is interwoven with the plot does not mar it, since love is the great incentive to most achievements, and the result of one's actions is reflected to a greater or less degree, upon the lives of those who love him. "The Pit" is a story that is well worth reading.

**Corned Beef.**

EDITOR KANSAS FARMER:—Will you please give a recipe in the next issue of your valuable paper for corning beef. Several years ago we tried to make some corned beef and it spoiled; never was fit to use. It got slimy, and tasted bad. Thanking you in advance, Harris, Colo. DR. J. P. ROBINSON.

A farmer whose table is noted for its fine meats gives the following directions for corning beef:

Have the meat nicely dressed so as to be free from blood and other foreign matter, and cut into pieces of suitable size.

For a half-barrel of meat prepare brine by boiling together, water 12 1/2 gallons; salt, as much as will dissolve; sugar, 4 pounds; saltpeter, 1/4 pound.

When the brine is cold pour it over the meat in the barrel. If the meat makes the brine bloody pour off the brine in about ten days and use a new brine of water and salt without the sugar and saltpeter.

**Deafness Can Not be Cured**

by local applications, as they can not reach the diseased portion of the ear. There is only one way to cure Deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube gets inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed Deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

We will give One Hundred Dollars for any case of Deafness (caused by catarrh) that can not be cured by Hall's Catarrh Cure. Send for circulars, free.

F. J. CHENEY & CO., Toledo, Ohio. Sold by Druggists, 75c. Hall's Family Pills are the best.

**THE SHARPLES**  
**TUBULAR DAIRY SEPARATOR**  
 is guaranteed to yield the farmer a 6 per cent greater profit on his investment than any other cream separator. Our book No. 166 explains why.  
 Sharples Co., P. M. Sharples, Chicago, Ill., West Chester, Pa.



**In the Dairy.**

Conducted by Ed. H. Webster, Professor of Dairy Husbandry, Kansas Experiment Station, Manhattan, Kans., to whom all correspondence with his department should be addressed.

**Why Not Kansas?**

The following quotations are taken from the Chicago Dairy Produce for the special purpose of calling the attention of Kansas dairymen to this important subject of improving our dairy herds. Dairymen could and would cheerfully pay all that these items suggest if they could but realize that they are in the same old rut year after year when they go on milking unprofitable cows. For every dollar that such instruction would cost the people of Kansas would be returned a hundredfold in increased profit to the farmer in the dairy. Read and consider:

"Occasional mention is made of the instruction being given dairymen of Illinois by the State's dairy school, but the work is too new to be generally and thoroughly understood, not only outside but inside the State except by those directly interested in spreading of the dairy knowledge and improving the dairy conditions and dairy-herds.

"The spreading of dairy knowledge is the first object of the State Dairymen's Association; and this association is, therefore, in close touch with the work being done by the dairy school. In the resolutions passed by the association at its recent annual convention, this work was not only recognized as it deserved, but the Legislature was asked for a larger appropriation to broaden the work so that more dairymen could receive the instruction now being given to the comparative few.

"In the work now being pushed in Illinois, only one instructor, Mr. A. J. Glover, is employed. He is conducting a series of tests of herds, the object being to build up the dairy-herds in the State, and is also instructing in dairy and creamery methods where such instruction is requested.

"When he started, the idea that dairymen of Illinois needed instruction was new, and he had to beg for herds to test. In two years the worth of the work is so recognized by dairymen of the State that Mr. Glover is asked every day to take on additional herds, and has to refuse because he has now more work than one person should try to do.

"The Illinois State Dairymen's Association wants to see additional dairy instructors put into the field; and at the recent annual convention it was stated that there should be five at least to carry dairy knowledge into all parts of the State. Besides building up the herds, instruction in the dairy work, in the handling of milk, etc., is needed. In the condensed milk sections of Illinois, rules for milk production are strict and they are educators toward better dairying, but even in those sections it is shown by work already done that the herds can be improved and made more productive.

"The additional appropriation is wanted not only to extend this field of work, but to extend work along other lines of dairying, to help manufacturing, and to bring the Illinois Dairy School to a place equal to that of Iowa, or Wisconsin, or Minnesota.

"A. J. Glover, of the staff of the Uni-

versity of Illinois, at the State Dairymen's Convention, gave an explanation of 'Field Work in Illinois.' Mr. Glover goes into the dairy districts and, securing the cooperation of the dairymen, makes a series of tests of the milk to ascertain the per cent of butter-fat in the milk of each cow. In this way the poor animals are discovered, enabling the farmer to eliminate them from his herd and raise its standard. Mr. Glover said that in a number of instances he found farmers getting less butter-fat from their herds than the value of the food fed the animals. In some instances individual cows were found which produced a profit each year of \$33.45. The convention recommended that an appropriation be asked to defray the expenses of five additional field workers."

**Cheap Machinery.**

It is astonishing, when one comes to think about it, the amount of "cheap-John" machinery that is palmed off on the agricultural implement-dealers and in turn upon the farmer. It is called "improved machinery, latest style, and design," and the like. If you have to put two pieces of it together with two bolts in any part you have to tug and pull and say (or think) some words that would not sound well before your wife, pound your thumb and spoil the threads on the side of the bolt before you can bring the last two holes in line that the bolt may go through. If the machine has parts that must be run at high speed and stand great wear, the gearing and journal-boxes are more than apt to be exposed in such a way that they gather all the dust and dirt that comes their way; the boxings are in such form that they will not retain oil even if you can get a little on, the gear-wheels are cast uneven and rough, no possible chance if left for adjustment in any way. It tries the patience of Job to run some of these machines. It may be a tank-heater that has no visible means of support and is anchored to the bottom by four poorly constructed screws with half the threads gone. It wobbles around like a drunken man and you are always afraid the thing is going to pull loose on one side or the other and spill its contents into the tank. It may be a hand-tester with a ring of balls under the wheel that carries the bottles, put there for the purpose of making the machine run lighter, but being in fact a contraption to hold dirt and make the thing run hard. Every ball is flat on one or more sides and all stick fast in the track they are supposed to run in. The gear-wheel will wobble in and out, because the hole through its center has not been drilled straight with its rim.

Examples might be multiplied but this is enough to give the idea. Some manufacturers think that anything will do the farmer and the quicker it wears out the quicker they will sell another. There is a notable exception to all this kind of goods. That is the hand-separator. It matters not whether the credit is due to the makers or whether the machine had to be built right in order to run. The hand-separator among farm machinery stands almost alone as a perfect mechanical device. Every precaution is taken to put the best material into the machine and the finished product is worthy of the mechanic's skill. Occasionally a cheap contraption is put on the market in the form of a hand-separator but it stands no chance against the well-made machine. The farmer will buy every time the machine that shows the best construction.

There is a proverbial saying that the farmer don't know how to take care of a machine. Be this true or not, and we think it is not, many of the machines he is compelled to use by necessity, because there is nothing else to be had, are not worthy of so much as a shed to keep off the rain. We do not think that many farmers, if they had a corn-binder constructed with as much mechanical skill as a hand-separator, would let it remain out in the fence corner over winter. If they had directions as to its care and operation as minute and satisfactory as those published by a separator company, they would take some pride in keeping that machine in best working condition.

To be sure, heavy machinery that must stand work over rough ground and in all sorts of unfavorable circumstances can not be kept in the same condition that a hand-separator can. It will be hauled through the mud and mire, it will get an occasional rain. But there is no earthly use of its vital parts being made in the "cheap-John" manner they so often are.

The hand-separator is going to be a lesson for the boys who will be the future farmers, in better care of machinery, and through it will come a demand

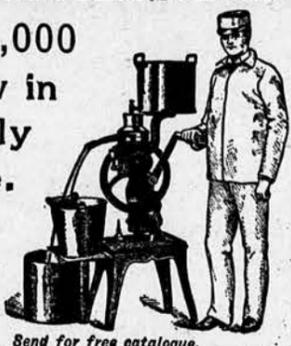
for better tools of all kinds. There will always be some farmers who will throw away their earnings by neglecting their machinery just as there are some merchants who fail in business because of slipshod methods, or professional men who fail because of lack of application to the thing in hand. Agents selling separators could do no better turn for their patrons than to interest the boys in the machine, point out its superior construction compared with the ordinary farm machine, and entuse them with the idea of keeping it in perfect running order. Thus another blessing would come from the introduction of the farm-separator.

**Good Men Still Needed.**

There seems to be an idea prevalent among those who would enter the creamery business that the chance for remunerative employment is being cut off by the hand-separator. The Kansas dairy school has had more calls for men in the past month than ever before at this time of the year.

Men are wanted, good men, hustlers, there is no room for a lazy man. In fact a creamery man said to us that he wanted half a dozen station-men for good points—all to take the places of men whom he would be glad to get rid of. Butter men are in demand. The introduction of the hand-separator is going to make the qualifications of the men needed, higher and of a different

**DE LAVAL**  
**CREAM SEPARATORS**  
 375,000  
 Now in Daily Use.  
 Save \$10.- per Cow each year.  
 Send for free catalogue.  
**THE DE LAVAL SEPARATOR CO.**  
 RANDOLPH & CANAL STS. CHICAGO. 74 CORTLANDT ST. NEW YORK.



**BUTTER MAKERS**  
 make better butter and more butter by using the  
**KNEELAND OMEGA CREAM SEPARATOR**  
 simple, cheap, efficient. Easily cleaned. Free from repairs. Guaranteed to suit or money back. Send for Free book, "Good Butter and How to Make It." The Kneeland Crystal Creamery Co., 225 Concord St., Lansing, Mich.



**U S U S U S U S U S**  
**BIG VICTORY FOR THE U. S. SEPARATOR**  
 At the Meeting of the Maine State Dairymen's Ass'n, at Waterville, Dec. 3-5, 1902, the U. S. Separator again proved its ability to produce the cream from which the finest butter is made. At this meeting the butter made from cream separated by  
**THE U. S. SCORED** { **THE HIGHEST**  
 { **THE SECOND HIGHEST**  
 { **THE THIRD HIGHEST**  
 entitling it to the GRAND SWEEPSTAKES, CREAMERY SWEEPSTAKES, DAIRY SWEEPSTAKES, and winning **10 First, 9 Second, and 6 Third Prizes.**  
*A record not approached by any of our "Would-be Competitors"*  
**MORAL:** Buy the U. S. if you want the best. It not only produces the finest cream, but at the same time does its work the most thorough, for the  
**U. S. SEPARATOR HOLDS THE WORLD'S RECORD** for clean skimming.  
 For Western trade we transfer our Separators from Chicago, Minneapolis and Omaha. Address all letters to Bellows Falls, Vt.  
*Ask for catalogues which tell of many other victories for the U. S.*  
**VERMONT FARM MACHINE CO., Bellows Falls, Vt.**  
**U S U S U S U S U S**

**You can find out something you ought to know by writing to the**  
**BLUE VALLEY**  
**CREAMERY COMPANY,**  
**St. Joseph, Missouri.**

**End Your Butter Troubles**  
 with a National Hand Separator and make more and better butter from same quantity of milk. The National will do it easier, quicker and pay its cost in a very short time. We don't ask you to take our word—we send the machine for **10 Days' Free Trial** and let it prove its worth right in your own dairy. You take no risk—we assume it all. If it does not meet your expectations, send it back—we pay the costs. Our catalogue tells more—write for it, it's free.  
**National Dairy Machine Co., Newark, N. J.**




**Davis Cream Separator Co.**  
**BEST IN THE WORLD**  
**EASIEST CLEANED**  
**MOST DURABLE**  
**CLOSEST SKIMMER**  
**CATALOGUES**  
 Davis Cream Separator Co.,  
 54 TO 64 N. CLINTON ST., - CHICAGO, ILL.  
 Save time and freight by ordering from  
**PIONEER IMPLEMENT CO.,**  
**COUNCIL BLUFFS, IA.**

order. The increased sale of separators means that the dairy interests of Kansas are going to enlarge. Men will be needed to educate the farmers to better methods, men will be needed to run hand-separators at receiving stations. Men will be needed to sell hand-separators.

A call came last month for a station superintendent, for three butter-makers, and for six station-men. In the last two months the writer has had calls for two men to take State agencies for different separator firms. None of these calls for men have been filled because there was no one on our lists to fill them.

Three station superintendents of one creamery told us that in the next few weeks they would call at the dairy school to see what kind of material they could get for work this summer. A general agent of one separator company says, "Whenever you get a good man let me know; I will investigate the case and see if he is what I want, and if he proves to be I will take him any time in two or more years if we have to wait for him."

One of the greatest needs—though we do not get calls for such men—they are called nevertheless—is for young men who know that they will farm and know that the dairy will be a feature of their farm work, to take the dairy course and fit themselves for the work they will follow. There is a tendency among some to take the dairy course simply to get off the farm. They usually fall to be satisfied and sooner or later drop out of the business. The most actual good cash will be found by the young men who will stick to the dairy-farm, thoroughly inform themselves in their line of work and push.

### Grange Department.

"For the good of our order, our country, and mankind."

Conducted by Ed. Blair, Cadmus, to whom all correspondence for this department should be addressed. Papers from Kansas Granges are especially solicited.

#### NATIONAL GRANGE.

Master..... Aaron Jones, South Bend, Ind.  
Lecturer..... N. J. Bachelder, Concord, N. H.  
Secretary, John Trimble, 514 F St., Washington, D. C.

#### KANSAS STATE GRANGE.

Master..... E. W. Westgate, Manhattan  
Overseer..... J. C. Lovett, Bucyrus  
Lecturer..... Ole Hibner, Olathe  
Steward..... R. C. Post, Spring Hill  
Assistant Steward..... W. H. Coultis, Richland  
Chaplain..... Mrs. M. J. Ramage, Arkansas City  
Treasurer..... Wm. Henry, Olathe  
Secretary..... Geo. Black, Olathe  
Gate Keeper..... G. F. Kynor, Lone Elm  
Ceres..... Mrs. M. J. Allison, Lyndon  
Pomona..... Mrs. Ida E. Filer, Madison  
Flora..... Mrs. L. J. Lovett, Larned  
L. A. S..... Mrs. Lola Radcliff, Overbrook

#### EXECUTIVE COMMITTEE.

Henry Rhoades..... Gardner  
J. T. Lincoln..... Olpe  
A. P. Reardon..... McLouth

The legislature is now in session, and it would be an excellent idea for the members of the different granges to write representatives and senators urging them to treat the demands of the Kansas Agricultural College with as much liberality as possible. The good work done at Manhattan the past ten years has attracted attention throughout the whole world, and the college should receive as liberal treatment as the condition of our State treasury warrants.

Some folks join the grange through curiosity, then stay at home. Some join expecting it will put many dollars in their pockets from somewhere; and if they don't hear the dollars clink right away, say the grange is "no good." These fellows usually think it will not pay to have the wife and children belong as it would cost too much; but the fellows who are receiving the most benefits are those who have done the most for the order. The grange does not want members of the receiving kind only. While its benefits are for all, yet the member who lends a hand in pushing the grange band-wagon is the fellow it needs most. Too many riders and not enough pushers make progress slow. If your wife does not belong ask her to join, and get your children to join just as soon as they are old enough. You will be surprised at the good the grange will do the boys and girls who join it. Get a list of those who are eligible in your vicinity and get them to join. You can not improve your grange faster than by paying attention to the coming men and women who now are in their "teens."

The Patrons Cooperative Association of Cadmus, Linn County, held its annual meeting in the Cadmus grange hall Wednesday, January 15, 1903, and reelected the old board of directors. Four per cent rebate was paid to purchasers and 4½ per cent added to

**THE SATURDAY EVENING POST**

FROM NOW UNTIL JULY 1st FOR **50¢**

## Americans of To-Day and To-Morrow

By Senator Albert J. Beveridge

A set of brilliant personal articles outlining some distinctively American types of to-day and forecasting future types that will be the product of present conditions.

---

## Salaries and Savings

By Hon. Leslie M. Shaw  
Secretary of the Treasury

This is the first of a series of papers in which some successful business men will tell how to save money and to invest it safely.

---

## Papers by Mr. Cleveland

Hon. Grover Cleveland will continue to be a regular contributor on great political questions of the day.

---

**THE SATURDAY EVENING POST**

FROM NOW UNTIL JULY 1st FOR **50¢**

## Try the NEW POST to July

New features, more of them, greatly improved. A handsomely printed and beautifully illustrated weekly magazine. Established 175 years and circulating nearly half a million copies every week.

**THE CURTIS PUBLISHING COMPANY**  
Philadelphia, Pa.

surplus fund. Mr. Ed. Blair, who for the past seventeen years has been manager, was retained, also his able corps of assistants, viz., Theo. McIntyre, J. R. Lemen, and W. H. Lyon. The sales of this institution to its patrons for the year exceeded that of any previous year and they start in the year 1903 with the brightest of prospects.

Miami County grangers are going to have something to report in the way of progress this year. Prospects for two new granges, and the deputy of that county is going right after them, too.

In the Kansas Patron of January 29, and in the KANSAS FARMER of February 4, appears the address of Worthy Master E. W. Westgate, before the State Board of Agriculture. It is an able paper and we wish every Patron in the State could read it.

The State of Michigan has 35,000 paid-up members in good standing in her 550 subordinate granges and yet organizers are pushing the work with more vim in that State than in any other. Kansas ought to double its membership in 1903 and can if proper work is done.

How many secretaries of subordinate granges notify promptly those

who are in arrears for dues? It is the duty of the secretary to do this, and if done as soon as members get in arrears will result in the members being in good standing when quarterly reports are made. It is the business way of doing things, and when once a custom, will result in good to the Grange.

New Lancaster Grange held a meeting Saturday evening, January 31, and raised \$1,500 towards starting a co-operative store. Committees were selected to solicit further subscriptions and another meeting arranged for Saturday, February 7, at which time they expect to have \$3,000 subscribed. If they succeed, they will fit up their present grange hall for a store building and add a second story for their hall.

In many subordinate granges too much work is put on the recording secretary. Where a grange has a membership of fifty or more, a financial secretary should be appointed and thus give the recording secretary time to keep a correct record of the proceedings. I noticed in the report of one grange recently that the grange closed without the minutes being read and approved; also the receipts of the evening were not announced. The sec-

retary should record in the minutes the names of all parties paying in monies and for what purpose and when. These are read at the close of the meeting, and if any errors are made they can then be rectified.

Every grange needs a library. And if every member will bring one book a small library will be started. That is one way to start a library. Would it not pay the average grange to spend \$5 or \$10 for good magazines, and as much more for grange papers? When a new member is taken in to the Grange he ought to go home with a good grange paper in his pocket. Why not have a bundle of papers come to the secretary for this purpose?

Manhattan Grange No. 748 Patrons of Husbandry, installed their officers on Wednesday, January 21. Mrs. Helen M. Barnes was the installing officer, ably assisted by B. M. Porter. The following are the officers for 1903: W. M., S. B. Barnes; W. O., E. St. John; W. Lect., Lloyd S. Fry; W. Steward, J. G. Matter; W. Assistant Steward, J. F. Swingle; W. Chaplain, E. W. Westgate; W. Treasurer, John Tennant; W. Sec., Flora M. Allen; W. G. K., John M. Shumway; W. Pomona, Cynthia P. Chandler; W. Ceres, Sophia Baxter; W. Flora, Minnie Odle; W. L.

A. S. Mary L. Fry. There were about forty-five members present, and a good time was enjoyed by all.

FLORA M. ALLEN, Secretary Manhattan Grange, Manhattan, Kans.

The Next Sale of Galloways.

(Continued from page 175.) ranches and within easy distance of just the places to which they ought to go. It will save the time and expense of a trip to the eastern herds, as is stated in the advertisement, and will also save considerable in the matter of freight rates. The sale occurs at a time most opportune to prospective buyers, and we urge a general attendance at this sale of all interested parties. It might be interesting to state in this connection that the champion carload of range-bred calves at the American Royal Show at Kansas City last fall was of this popular breed. Look up the advertisement in this issue and write to either party for a copy of the sale catalogue, which will be sent free, and which the contributors would like to place in the hands of every breeder and ranchman in the western country.

Ohio Poland-China Record Company.

Stockholders of this company held the annual meeting at Dayton, Ohio, January 28. There was the largest attendance the company ever enjoyed. The advisability of consolidating the different Poland-China records was considered, and many were in favor of such. A committee was appointed to confer with similar committees that may be appointed by other record companies. Directors elected were: L. N. Bonham, Oxford, Ohio; L. C. Nixon, Lebanon, Ohio; J. M. Kiever, Bloomingburg, Ohio; J. H. Lackey, Jamestown, Ohio; W. C. Hankinson, Blueball, Ohio; A. M. Brown, Winchester, Ind.; F. G. Shuey, Camden, Ohio. Officers elected were: President, L. N. Bonham; vice-president, L. C. Nixon; treasurer, J. H. Lackey; secretary, Carl Freigau, Dayton, Ohio. Executive committee—J. M. Kiever, J. H. Lackey, A. M. Brown.

American Chester-White Record Association.

Members of this association held the annual meeting at Columbus, Ohio, and enjoyed a royal good time. The swine-breeders' institute, which was held under the auspices of the association, organized under the name of Ohio Swine-Breeder's Institute, and elected for president I. T. Cummins, Xenia, Ohio; vice-president, C. R. Betts, Stryker, Ohio; secretary-treasurer, Carl Freigau, Dayton, Ohio; executive committee—C. A. Kurtz, Indianapolis, Ind.; E. S. Tussing, Canal Winchester, Ohio; J. J. Snyder, Paris, Ohio. Officers for the record association elected were: President, F. P. Hardin, Lima, Ohio; vice-president, W. H. Pool, Delaware, Ohio. Board of trustees—E. S. Tussing, Canal Winchester, Ohio; I. T. Cummins, Xenia, Ohio; J. L. Beringer, Marion, Ohio; A. L. Glover, Delaware, Ohio; N. P. Kerchner, Ansonia, Ohio; W. H. Pool, Delaware, Ohio. Executive committee—E. S. Tussing, J. L. Beringer, J. T. Cummins.

The Standard's Seventeenth Annual Meeting.

The seventeenth annual meeting of the Standard Poland-China Record Association was held at Maryville, Mo., on February 4. About fifty stockholders were present and some 250 shares represented by proxies.

W. G. Garrett, mayor of Maryville, and the perpetual chairman of the board of directors, still continues to dominate the affairs of the Standard Record. He was the "wet nurse" at the birth of the Standard and will undoubtedly be the chief mourner at its demise, which is likely to occur in the near future unless there is a radical change in the close corporation policy now in vogue.

The best interest of the Poland-China swine-breeding fraternity demand an expansion policy and the consolidation of all the five records into one National record, and the Standard Poland-China Record Association should have this year led the movement to success; but the dominating Garrett influence will surely lead to the disintegration of this Standard and thereby sacrifice and imperil the proud prestige of this grand record. There is no question but that a great majority of the stockholders of the Standard are favorable for consolidation of all records could the question be submitted on its merits without prejudice. The Garrett domination, with the official machinery in his hands succeeded in defeating the movement this year and prevented desirable action and progress, and elected a president and a majority of the board of directors that he will control until the Standard may lose all the prestige which properly belongs to it. Mr. Garrett does not seem to realize that the Standard is no longer an infant industry or a child of Maryville, but that it is a mature and lusty creature, past the majority and should be permitted to take its place in the Poland-China world where it properly belongs—the chief cornerstone of the Poland-China merger.

PRESIDENT'S ANNUAL ADDRESS.

President Blain said: The nineteenth annual meeting of our association marks the close of a very successful year for the hog business. Prices of pork have been high, while the demand for breeding stock at remunerative prices has, in most localities, greatly exceeded the supply, while losses from diseases have been comparatively small.

The meeting also marks the close of a very successful and prosperous year for our Record Association and the affairs of the office are in a most satisfactory condition.

During the year just closed you have paid a cash dividend of 50 per cent and furnished to each stockholder a copy of

LIKE HER OLD SELF

THE STORY OF A GIRL ON THE PACIFIC COAST.

Both She and Her Mother are Enthusiastic Over a Wonderful Event in Their Lives.

Miss Maud E. Cable, of Chico, Butte County, Cal., is a bright, vivacious girl of fifteen, with the glow of health in her cheeks. A few months ago, however, she was sick and weakly. How this wonderful change came about is best told in the words of her mother, Mrs. Rose Cable, who says:

"My daughter was in a miserable state of health and I feared she could not live. It began with irregularity in the natural functions of her sex, accompanied by severe headaches, heart and stomach trouble, and finally she broke down entirely. The doctor said she had anemia, which, he said, meant that her blood had turned to water.

"The pain in her head was so severe that she was hardly able to bear it; her stomach so weak that she could eat nothing but soup. Her liver was congested and torpid, her nerves all unstrung and her complexion just like a dead person's. She grew worse in spite of the doctor's care and finally her hands and feet began to swell.

"An advertisement in the papers led me to have her try Dr. Williams' Pink Pills for Pale People and she began to feel better almost immediately upon taking them. She grew better every day. When she had taken them two weeks she had gained eight pounds, and fourteen by the time she had taken five boxes. Her color had come back and she looked like her old self. She has gone to work again."

"I feel very grateful for what Dr. Williams' Pink Pills have done for her, for I am sure they saved her life."

Anemia is not the only disease which succumbs to the potent influence of Dr. Williams' Pink Pills for Pale People. They are an unfailing specific for such diseases as locomotor ataxia, partial paralysis, St. Vitus' dance, sciatica, neuralgia, rheumatism, nervous headache, the after-effects of the grip, palpitation of the heart, pale and sallow complexions and all forms of weakness either in male or female. They are sold by all druggists, or direct from Dr. Williams' Medicine Co., Schenectady, N. Y. Price, 50 cents per box; six boxes \$2.50.

Volume 16 of the record worth \$3, and yet you have a healthy surplus in the treasury.

These conditions have a tendency to stimulate a growing demand for record stock with none to sell. There should be some action taken along this line, if possible, to increase the capital stock of the association from 500 to 700 shares.

Upon the subject of consolidation I wish to state that it has had an unusual amount of agitation during the past year, perhaps too much for the general good of the breed. However, strange as it may seem, the most of it has been done among our own number, notwithstanding the fact that we have a system of record that has no equal. As you all know it was founded on a broad basis that beats all records in existence, not going to the barn-yard for any of its foundation stock, carrying the name of animal and number in other records as well as our own number through our volumes, rendering the tracing of a pedigree a matter of ease and accuracy without the aid of any other record.

I can not quite understand why any of our membership should worry, lose sleep, and walk the floor at night while our especial advantages and conditions are suggestive of letting the other fellow do that, if consolidation pure and simple is the only object sought.

The Ohio and Central Records are to be congratulated and commended for their good judgment in turning down this self-constituted merger committee. It is to be inferred by their actions that they realize no good can come from it either to a record company or the breed. In regard to dictating the management of affairs of the company, that is a matter of but little moment, providing that management be in the interest of the shareholders and patrons.

They are certainly deserving of praise rather than censure and if there is any one here who feels inclined to indulge in the latter, the State of Maine might be suggested as a good place to cool him off, rather than a place to organize a Poland-China Record Association.

GARRETT'S SPEECH.

W. T. Garrett took advantage of the lull in the proceedings pending the report of the committee on credentials, to make a speech to get even and roast all who had the temerity to get proxies, urge consolidation, or send out circular letters to shareholders, all of which was a "fraud," "rank treason," etc., etc. With coat off he proceeded in a frenzied manner to "make Rome howl." It was a pitiable exhibition of temper and profanity, and his tirade was most tiresome to the audience as well as himself. His speech was an ostensible defense of himself and the secretary, which was altogether irrelevant, as the integrity of either was not in question by the promoters of consolidation. This speech was the sensation of the meeting, but after it was over, the strained situation was greatly relieved when H. M. Kirkpatrick, who followed him, calmly explained that there

was no occasion for personalities and that a difference of opinion did not necessarily reflect on any one. Mr. Kirkpatrick reviewed the work of the breeders' movement to secure consolidation and made a telling plea in behalf of the same.

The committee on credentials then reported, and the relative strength of the two factions were shown in the vote for president. Mr. Blain of Nebraska was reelected and received 259 votes, while Dietrich of Kansas received 143 votes. The new board of directors were as follows:

W. T. Garrett, E. E. Axline, H. M. Kirkpatrick, Alex Johns, Geo. Woodford, B. F. Gilmore, and Sam McKelvie. A dividend of 25 per cent was declared.

Gossip About Stock.

The lovers of red, white, and roan Shorthorns can secure a very desirable lot of this class, sired by the noted herd-bull, British Lion, of D. P. Norton, Dunap, who is closing out a choice lot at \$50 per head, net.

Don't overlook the two-days' sale at McPherson, Kans., on February 24 and 25, by W. H. Cottingham & Sons, who offer sixty horses, fifty Poland-Chinas, and twelve young Shorthorn bulls. See advertisement on page 192.

J. M. Buffington, of Oxford, Kans., will hold a public sale of horses on Wednesday, February 18, 1903. The offering consists of registered thoroughbred and Standard-bred horses, mares and colts, several jacks and jennets.

The popular headquarters for stockmen who visit Kansas City is the Coates House. Direct car lines from the Union Depot and to the stock-yard. Whenever public sales of fine stock are held at Kansas City you can depend on meeting the crowd at the new Coates House. Special rates to stockmen.

Farmers and stock-raisers will find a few moments well spent looking over the advertisement of the Rex Stock Food Co., of Omaha, in this paper. Their Rex Conditioner is just the thing for poor, wormy and out of order stock. It is the very best spring medicine for all kinds of stock and now is a good time to begin using it. Send them a trial order. It will bring your stock out in the spring strong and hearty and sleek as moles.

The Healey combination Shorthorn sale held at the sale pavilion, South Omaha, on February 3 and 4, comprised offerings from the herds of C. F. Mitchell, Shenandoah, Iowa; J. S. Dickey, Farragut, Iowa; W. R. Wilson, Arispe, Iowa; Owens Bros., Homestead, Iowa; G. P. Simpson, Blockton, Iowa; Alex John & Son, Bedford, Iowa; O. M. Healey, Bedford, Iowa; F. P. Healey, Bedford, Iowa. It was a successful sale. Seventy-nine cows and heifers sold for \$9,155, an average of \$115.88. Twenty-five bulls brought \$3,085, an average of \$123.40. One hundred and four head of Shorthorns brought \$12,240, general average of \$117.69.

The Duroc-Jersey bred sow sale of S. L. Spath, of North Bend, Neb., was a brisk success and forty-four head sold for \$14,450, an average of \$32.15. The top price of the sale was \$67, paid by Gilbert Van Patton, Sutton, Neb., for Squaw 40662. The other purchasers were: Thos. Bryant, Schuyler; H. Bock, David City; J. P. Binder, Richland; H. W. Weir, Dodge; M. Veis, Geo. Love, Clarence Wallace, J. D. Maben, J. H. Wallace, R. B. Sloss, D. W. Dickson, J. P. Colgan, B. Walker, of North Bend; J. B. McMahon, Morse Bluffs; J. D. Devore, Wm. Weaver, of Mead; E. M. Tarbell, Leavitt; H. S. Spath, C. M. Spath, of Scribner; E. M. Collins, Fremont; Chas. Stears, Snyder; and John Reis, of Scotia, Neb.

Oltmans Bros., Watska, Ill., are noted as pioneer importers of German and Oldenburg Coach horses as well as Percheron and Belgian draft breeds. Their business has reached great proportions. They made five importations in the past nine months, the last on January 3, 1903. They are selling not only to the breeders, but in lots to importers who find it cheaper to buy of this firm than to take the risks of crossing the water. One brother is a resident of Germany, and gives his whole time to buying in Germany, France, and Belgium. Having full familiarity with the languages, he avoids the usual heavy expenses of buying through an interpreter. Our readers will do well to write or call on this firm before buying a stallion for the coming season.

We make a last call this week for the next great sale of Shorthorns to be held at Kansas City on Tuesday, February 17, 1903. This will be a dispersion sale occasioned by the death of D. K. Kellerman, the senior member of the firm of D. K. Kellerman & Son, Mound City, Kans. The offering consists of fifty-two cows and heifers and fifteen bulls, an exceptionally useful and desirable lot of Shorthorn cattle. Shorthorn buyers should not fail to send for catalogue at once and notice the exceptional breeding of the entire offering, and the individual merit of every animal will be a surprise to those who see the cattle. A more desirable lot of cattle will not be offered at auction in the West is the honest belief of all of those who are familiar with this herd. This herd was originally established in Ohio in 1876 and has been steadily improved ever since. The offering will include stock suitable for herd foundations and animals suitable for the showing. Buyers will hardly find elsewhere a better opportunity to get the high class of cattle offered.

S. S. Spangler, of Milan, Mo., will hold a public sale of registered Percheron horses from his Mt. Vernon stock farm in Milan, Friday, February 20. On this occasion he will offer forty-two stallions, mares, and fillies. There will be twelve stallions, including the great breeding stallion Imp. Jourdan 14025 (38454), a half-brother to the great Invincible, a prizewinner at the International Live Stock Exposition in 1901. Jourdan is a sire of demonstrated great merit, as his produce in this sale will abundantly show. Mr. Spangler has bred nearly all his horses and is a great believer in American-bred horses. At the International Live Stock Exposition in Chicago last year he was the only exhibitor of Percherons from Missouri. At this show he won championship on the mare Regina, and second on yearling filly. Both these animals

THE BLIZZARD. That's the name of the best, most dependable lantern there is made. The wind can't blow it out, and it sheds the largest, whitest, steadiest light. DIETZ Gold Blast BLIZZARD LANTERN is the model for safety and convenience. Globe is locked to burner when in use and raised and lowered for trimming, lighting, etc., by same convenient side lever. Just the thing to carry doing chores and all stable or domestic duties. Burns 19 hours with one filling. Name is stamped on the oil pot. Don't buy a lantern that doesn't say Dietz. Send for our free lantern catalog and make a selection before you go to the dealer to buy. R. E. DIETZ COMPANY, 95 Light St., New York. Established 1840.

are included in the thirty head of mares. Regina is the dam of a yearling stallion also included in the sale, and she is now in foal to Jourdan. That she is a breeder as well as a show mare is shown by this great colt. Another great mare, and one considered by many good judges the superior of Regina, is Sadie 24612. She is a 5-year-old, weighs 2,100 pounds, and is also in foal to Jourdan. She is the dam of the yearling filly that won second at Chicago. Altogether this will be the most desirable lot of Percheron horses that will be consigned to the auction ring this season. The catalogues are now ready and will be mailed to all applicants.

The most notable horse sale ever held in Kansas will be the dispersal sale to be held at the Topeka fair grounds on Thursday, March 5, 1903, by R. I. Lee, of Wanamaker, Shawnee County. This is one of the most famous breeding establishments of the West for registered standard-bred horses.

This offering consists of fifty-four horses, all ages, and includes sixteen stallions, all standard-bred or registered. Showing the high character of this horse-breeding establishment, it is only necessary to mention a few of the famous horses bred by Mr. Lee.

In the first place Robt. McGregor, sire of Crescens 2:02 1/4, was owned by this farm from the time he was a yearling past, till he was sold when 19 years old to J. E. Madden, of Lexington, Ky., for \$35,000 cash.

Paula, dam of Grattan Boy 2:08, as well as her dam, were bred and raised here.

The sire of Pansy McGregor (1) 2:23 1/4, (world's race record for age) and the sire of her dam were foaled, kept, and died at this farm.

The sire and his dam of Maxine (4) 2:08 1/4 (in 1902) fastest trotter for age last year, were bred here and he, Jackdaw, is owned here now. The sires of Maxine's dam and grandam were foaled and owned here as well.

The record shows no State in the Missouri and Mississippi Valleys except Kansas and Iowa ever raised a 4-year trotter with as fast a record for the age as Maxine 2:08 1/4, a 4-year-old.

Mr. J. S. McIntosh, of Kansas City, Mo., will sell at public auction at Manhattan, Kans., Monday, February 16, about fifty head of registered Shorthorn cattle from his Blue Grass herd at Eudora, Kans. A representative of this paper recently looked over this offering and found one of the best herds he has ever seen in Kansas. Mr. McIntosh is aiming for size combined with the quality in his breeding operations, and he is succeeding to a remarkable degree. The lot of cows will be found very desirable in every way, in good flesh well forward in calf, many of them with calves at side, and in every condition the most desirable for the purchaser.

The list includes thirty-four cows ranging 3 to 7 years old, fourteen yearling heifers and four young bulls. Of the older cows seventeen head will be sold with calves at side. Some of these are rebred, and the balance are all safe in calf. The calves are all sired by, and the cows in calf to, Color Bearer, an extra good breeding son of Imp. Cupbearer. As a breeder this bull is siring some of the most uniformly good calves of any bull in Kansas. Mr. McIntosh was first attracted to him by the quality of his more than on account of his breeding. His pedigree, however, is one of the best, being sired by Imp. Cupbearer, and out of a straight-bred Cruickshank cow. The young calves in the sale sired by him are marvelous of uniformity, all but one being a rich red in color, and all showing remarkably good heads, and all with broad strong backs. Color Bearer is a rich red roan with style and substance of extra heavy bone, good size, and wide arched back and well-sprung rib. The cows in the sale in calf to him, or with calves at side by his service, will be especially desirable to either breeders or farmers. The cows are all of unusual scale, and will average right at 1,400 pounds. Some of them weigh above 1,750 pounds. Catalogues are ready for distribution, and Mr. McIntosh will send them upon application to him at Kansas City, Mo.

The breeders' combination sale of Berkshire bred sows, held at Kansas City, on February 6, was somewhat disappointing to the consignors as the offering deserved much better prices than was realized. The average on the entire lot was only \$25. The sale was lacking in local advertising, consequently buyers present had a positive snap in the way of Berkshire bargains.

COUGHS, Bronchitis, Hoarseness, Sore Throat, Effectively Relieved. BROWN'S BRONCHIAL TROCHES. The-Bimble Signature of John A. Brown on every box.

NEEDED LEGISLATION.

(Continued from page 170.)

tory law (I wish we had a better term for it. It is no more prohibitory than the law against stealing) is becoming dearer to the hearts of her people with each succeeding year. A law so righteous, so just, so wholesome and helpful in the cultivation of manliness would be fought for to the last ditch, and won again just as surely as the Kansas sun shines.

W. J. MARTINDALE, WICHITA, SEDGWICK COUNTY.

I desire to enter my protest against a constitutional convention for Kansas. It would not be thought of but for the desire on the part of some to get rid of prohibition. The expenses of the convention to the State, the litigations that would arise in adjusting laws to a new constitution, and the opening of questions that have been settled by the State ought to be arguments sufficient to settle the question in the minds of those desiring the welfare of the State.

MRS. M. M. STURGEON, PRESIDENT W. C. T. U.; MRS. CLARA CARD, VICE-PRESIDENT W. C. T. U., SCOTT CITY, SCOTT COUNTY.

We hope you will vigorously push the matter against the proposed constitutional convention, and any and all measures weakening our temperance laws.

C. W. ERICSON, PASTOR BAPTIST CHURCH, UNIONDALE, KANS.

I am not in favor of opening again the question of liquor and prohibition, and am therefore opposed to a constitutional convention, which is not needed, but would involve the State in an immense outlay of money.

MRS. KATE BILLINGS, CLYDE, CLOUD COUNTY.

Realizing the power of the press, and knowing the principles of your excellent paper, I write you in behalf of law-abiding citizens of our State, urging your emphatic cooperation in assisting to defeat any legislation calculated to weaken our temperance laws.

ALBERT THOMPSON, HUTCHINSON, RENO COUNTY.

I desire to register a protest from Reno County against the calling of a constitutional convention, the enactment of a local option law, the resubmission of the liquor question, or any legislative action tending to weaken our present prohibitory statutes. Kansas has tried prohibition and found it to be good. As president of the Young People's Christian Local Union of Hutchinson I desire to record that its 576 members are practically a unit in opposing resubmission. We know a good thing when we see it. We have a good thing and intend to keep it. Let Kansas go on and upward in the vanguard of civilization "to the stars through difficulty."

REV. W. B. JOHNSON, GARNETT, ANDERSON COUNTY.

It seems that the anti-prohibition crusade has opened the eyes of the friends of good government to the fact that the lawless element are up in arms. Can it be that the friends of law and order are indifferent, are they willing to sell out at such a sacrifice?

It can not be disputed by the opponents of prohibition that the moral tone of our young men is surpassed by none. Let the friends of pure homes and in honor of our fair State take the stand; no retrogression; no compromise, but a rigid enforcement of our prohibitory laws. Our cause is right and we are against resubmission with all our might.

E. E. URNER, RILEY, RILEY COUNTY.

I am confident that a large majority of the people of this community are opposed to the passage of the constitutional convention bill now before the Legislature. You would certainly do well to use all the influence of your paper against this proposition, which looks like a scheme to resubmit the question of prohibition amendment.

W. J. MACAULAY, TEVIS, KANS.

We don't want any constitutional convention. And we do want United States Senators elected by popular vote. And we want the postal savings bank, and parcel postage.

C. H. ISELY, FAIRVIEW, BROWN COUNTY.

A petition with the following significant head was circulated in our town on Monday, and between twenty

and thirty signatures of leading citizens were attached to the paper:

"To the Honorable House of Kansas Legislators, now in Session at our State Capitol, Topeka, Kansas.

"Dear and respected Sirs:—We, the undersigned, petitioners and voters of Fairview, Brown County, Kansas, and vicinity, unequivocally protest against a constitutional convention, and we protest against a resubmission of our present prohibitory laws."

Good Roads.

H. W. ANDERSON, HACKNEY, COWLEY COUNTY.

There has been so much said within the past few years about good roads in the agricultural and farm papers and in farmers' institutes, that one would naturally arrive at the conclusion that every enterprising citizen, that has push and vim in him and ideas regarding progressive improvements, would be full and running over with good-roads enthusiasm. Yet I doubt if there is more than one-half or one-fourth of the citizens of Kansas who are tax-payers that have given this question sufficient thought to be in favor of voting bonds or a tax-levy to build macadam or gravel roads. With the exception of a few localities in the State, a macadam or gravel road would be rather an expensive luxury for a majority of the people who would be taxed to build it. So we are of the opinion that it would not be of any great benefit to the State at large for the present session of our State Legislature to frame and enact a law for the building of macadam or gravel roads, unless they make it optional with the tax-payers in the locality of the road to be built.

Good roads do not necessarily mean that they must be macadam or gravel, especially in a very large portion of Kansas. If the common dirt roads in this State were properly graded at the right time of the year (that is, in April, May, and June), and kept in repair during the remainder of the year, we could have good roads in Kansas the year round. But here is where our present road laws are lame, and our present system of making roads with poll-tax work is not economical. It is a lamentable fact that at least one-half of the poll-tax road work is done in a dilly-dally way at any and all times of the year or when it suits the convenience of the road overseer and the voter who is liable to this poll-tax road work. There are two very lame features in this poll-tax road work. One is that it is seldom the piece of road being worked on is completed. That is, about half the work is done that should have been done on that mile or few miles of road. The second is, too much of the work is done late in the fall when there is a lot of weeds and grass dragged up in piles and bunches along with the dirt which makes a bad and unpleasant road to travel over for some five or six months. Under the present system, road grading is seldom completed, and as a rule people blame the road overseer for it, when it is the wasteful system of working out a \$3 poll-tax by men, one-half of whom aim to do as little work as possible. If roads were graded by contract or under the supervision of a competent person, men with teams could be had at \$2 a day that would do twice the amount of work, do it better, and could complete a piece of road before leaving it. While our State was sparsely settled and we could turn out on the prairie sod to avoid a piece of bad road, the present system was good enough. But as the State becomes more densely populated and farms are fenced, centralizing travel along section-lines, we find ourselves greatly in need of better roads.

We presume the present session of our State Legislature will either add to or make some changes in the road-laws; and it is to be hoped that they will devise some plan that will require the grading done between the first of March and the first of July, and that the work shall be scientifically done and thoroughly completed during that season of the year. If we have the right kind of road-laws there is no reason why we should not have good dirt roads in Kansas the year round.

The thing for us farmers to do is to inform our Representatives in our State Legislature as to the kind of good-road legislation we are in need of at the present time and we will get it.

Protect the Quails.

A. T. BIGGS, SYLVAN GROVE, LINCOLN COUNTY.

A petition numerously signed has been sent the Legislature from here for the better protection of birds, especially to prevent the killing of quails

MAUD MULLER
raked hay in the old fashioned way.
DEERING IDEAL RAKES AND MOWERS are used nowadays by up to date farmers.
DEERING DIVISION INTERNATIONAL HARVESTER CO. OF AMERICA CHICAGO, U.S.A.

at any time. Not a corporal's guard of farmers could be found that would oppose the complete protection of the only bird that will eat chinch-bugs and the larvae of Colorado beetles. Will not a few thousand farmers drop a postal to their representatives and make this a "sure enough" law?

Price Raid Claims.

MRS. J. B. MOSS, VERNON, KANS.

The matter of the Price raid is a subject I am interested in. I desire to have something done about a fund received "Union Military Script," that received "Union Military Script," that was called in by the State in 1885, with the plea of finding how much there was out to pay. Instead of money a receipt was returned stating the amount, and for what received. My husband has passed away and I am 75 years old, and a few dollars would be very acceptable.

Poland-China Sale.

The Mound Valley Herd of Poland-China swine will offer a fine opportunity for swine-breeders to obtain thoroughbred animals which will enrich the blood of any herd in the West. W. P. Wimmer & Son will hold their third annual sale at Mound Valley on Tuesday, February 17, 1903. There will be forty animals offered for sale, each of which is considered to be among the very best of the breed.

Among the many excellent ones to be sold is Lady Perfection 70659, a granddaughter of Chief Perfection 2d and Perfect I Know. Of the grand boars to be offered is Tecumseh Fashion 70656, whose superior can rarely be found in any herd in the West. Among the gilts offered will be a litter of six out of a granddaughter of old Look Me Over, and sired by Black U. S. Best 21757 and are all bred to I. B. Perfection.

Write W. P. Wimmer & Son, Mound Valley, Kans., for catalogue, and then be sure to attend the sale.

CANCER ON THE ARM CURED BY THE COMBINATION OILS.

Emporia, Kans., October 18, 1901. Dr. D. M. Bye Company, Indianapolis, Ind.

Dear Doctors:—Believing you would be glad to know of the recovery of your patients, I am pleased to tell you the cancer on my arm is well. It is wonderful, this rapid recovery. I do not believe things happen, but that the Lord rules in all things, and that He led me to try your wonderful cure. May the dear Father bless you in your work of healing is the earnest prayer of your grateful patient,

Mrs. A. J. Wooster. The Combination Oil Cure was originated and perfected by Dr. D. M. Bye. He has cured many very bad cases without pain or disfigurement. Those who would like to know more about it, or who desire free books and papers, should write to the HOME OFFICE of the Originator, Dr. D. M. Bye Company, Drawer 505, Indianapolis, Ind.

...PLANT...
Pinus D'varicata Seed!
The hardiest evergreen for the semi-arid prairie. One ounce (over 7,000 seed) for 50 cents prepaid.
H. S. AYERS, Sturgeon Lake, Wisconsin.

Archias' Sure Seeds!
Money Growers and Mortgage Lifters.
Sure to Grow, Sure to Please. Largest Seed House in the West. LOWEST PRICES. Onion Seed, 65 cents per pound; Pure seed corn (15 kinds), \$1 per bushel; \$500 in prize; 100,000 packets free seeds. Send 10 cents for 5 large packets garden seed and our beautifully illustrated catalogue for 1903. Catalogue alone free. Write to H. S. Archias' Seed Store, Mention this paper. 106-1-8 E. Main St., Sedalia, Mo.

Strawberry Culture
By M. CRAWFORD Over Forty Years' Experience.
A 60-page Book—not a catalogue. Send ten cents for a copy, read it, then return it and get your money back if you want to.
The Miami County Nurseries, Louisburg, Kans.

Wanted
Experienced man in all branches of Nursery Work—grafting, budding, planting and packing. Liberal wages and good position to the right party. Give experience and time served, references, also if married or single. Address
MAYFIELD NURSERIES, St. Paul, Minn.

This Tubular Fence Post
made of Galvanized Metal, will not rust, rot nor burn, and will last a lifetime. Cheap as the best wood post. Takes any kind of woven, barb or smooth wire fence. Made plain or ornamental. For farm, lawn, cemetery, etc. Circulars and prices on application.
Bloomfield Mfg. Co. Box 112, Bloomfield, Ind.

TURN THE CRANK
Liquid Sprayers are out of date in up-to-date orchards. Dust Sprayers do the work twice as effectively at one-tenth the expense. The Ozark Dust Sprayer is the lightest, simplest, cheapest, and most effective of all; weighs but 17 lbs. loaded. Write for booklet.
Haldeman Mfg Co 106 Sanford Bg Springfield Mo
SAVE THE FRUIT

March On!
The artistic hanging calendar of the Champion Harvesters begins with the spring month and carries one clear through to the next spring. It shows a handsome farm team refreshing themselves at the watering trough, and is in brilliant colors and handsome enough to please everyone. This art calendar is offered free to all of our readers who will send their name on a postal to Champion Division, International Harvester Co., of America, Chicago, and make request for same. We know this is an opportunity of which many will take advantage.

PILES NO MONEY TILL CURED. 25 YEARS ESTABLISHED.
We send FREE and postpaid a 200 page treatise on Piles, Fistula and Diseases of the Rectum; also 100 page illus. treatise on Diseases of Women. Of the thousands cured by our mild method, none paid a cent till cured—we furnish their names on application.
DRS. THORNTON & MINOR, 1007 Oak St. Kansas City, Mo.

**Horticulture.**

**Missouri Valley Horticultural Society.**

EDITOR KANSAS FARMER:—On Saturday, the 17th of January, the Missouri Valley Horticultural Society gave a banquet at the Coates Hotel of Kansas City, in place of its regular meeting. There were seventy-four members and friends who attended this meeting. This was a very enjoyable time. The luncheon was very daintily prepared and well served.

After luncheon the members repaired to the club-rooms of the hotel where a short program followed. President George Holsinger presided with Secretary Harriet Chandler at the desk.

The first selection was an instrumental solo, Schubert's Serenade by an Ohio lady. This was followed by a short history of the society by Mr. Goodman, of Westport, who was the society's secretary for a good many years. We were all glad to review the good works of the society with Mr. Goodman and see what good progress has been made.

Professor Dickens, of the Kansas State Agricultural College (Professor of Horticulture), then gave a very interesting talk on colleges. He believes horticulture to be a growing science, touching other sciences such as botany and entomology, very closely. It is a question what young men and young women should study in the schools today. Life is too short to devote so much time to the languages, mathematics, and higher studies, much as we would enjoy them. Our time should be occupied with the practical for we can not take time for all. We should interest our young men in the preservation of our forests and trees, which an interest in horticulture will arouse. The experiment stations, too, need our interest because they make records of horticulture and all records of the realm of nature are carefully kept. This information well kept will be useful to future generations.

At the close of Professor Dickens' speech President Holsinger called on a few of the visitors for remarks.

President Robinett, of the Missouri State Society, was the first to speak. He said, "The half has never been told of the good work of the Missouri Valley Society." He felt benefited by the enthusiasm and good cheer of the society. His remarks were received with great interest.

The next to speak was George Tiffin, of Springfield, vice-president of

the Missouri State Society. He was not only thankful for what he had seen and felt, but for what he had had to eat. In fact he had eaten too much for a speech, although he never felt more like making one. Mr. Tiffin believes with Professor Dickens that horticulture develops the man. He says there is intense interest in the society in Missouri. Pioneer members introduced horticulture in the southern part of the State, for which all have been grateful. He is gratified to know that the society is as strong as it is and does the work that it does.

Horticulture in the Mississippi Valley is in its infancy at present. There will be greater possibilities offered in the future than we have had in the same time in the past.

Professor Dutcher, of Warrensburg, Mo., the second vice-president of the State Society of Missouri, was then called for. He found it almost impossible to get to the front, he was so nearly overcome by the good things of the banquet. He entertained the society with very spicy remarks interspersed with numerous stories, which kept his audience in continual good humor.

Mrs. McAfee, of Parkville, then entertained us with a delightful instrumental solo.

The next to speak was Vice-President Robison, of the Kansas State Society. He thought the horticultural societies were a great benefit to members, especially new and inexperienced members. One man will receive ideas from another, go home and think them over and profit by them.

Edwin Taylor, vice-president of the Kansas State Society, was next to respond with his usual brilliancy in extemporaneous speaking. We are always ready to hear Mr. Taylor speak, because he always has something to say worth saying.

Major Frank Holsinger, one of the society's charter members, then read a paper. He spoke of many of the old members who were gone and paid his tribute to old friends of the society who had helped to build the society of today.

The president then made the announcement that the membership fee was only \$1 per year and that the society would be glad to receive new members.

A card from Mr. Butterfield and a letter from Mr. Munger, stating their regrets at not being able to attend and sending their best wishes for the success of the banquet, were next read by the secretary.

Mr. Smith, of Lawrence, then made a plea for the preservation of the quail, the farmers' good friend. He thought it would have been better had the quail been at large on the farms than on toast at the table.

Mr. Maffett, of Lawrence, stated that he had wanted to attend the Missouri Valley Society for a number of years, for it is a great pleasure to rub up against congenial minds. The Lawrence society has been invaluable to him for he had no experience to begin with. He is very grateful for the kindness of the society in answering his questions. The members are willing to tell all they know for the benefit of others.

Colonel Evans next begged permission to speak of the ladies. Without the ladies there never would have been a horticultural society. The ladies help to make the societies. Without them most of the pleasure would be lost, especially the pleasure of the delightful basket picnics of the summers.

A few of the ladies were called upon for remarks, to which Mrs. Goodman, Mrs. Espenland, Mrs. Thompson, of Edwardsville, Miss Beard, of Kansas City, Kans., Mrs. Maffett, of Lawrence, all responded.

A pleasant diversion was then created by another instrumental solo by Mrs. McAfee.

Mrs. Frank Holsinger was called for and responded with a few very earnest remarks. She was glad to see the young people taking hold of the work because of its uplifting, refining influence.

A small amount of necessary business was then transacted and was followed by more extemporaneous speaking.

Mrs. McAfee spoke of her delight in looking into the faces of some of the older members of the society for they show that they have lived in God's sunshine and in God's country.

Mr. Espeuland and Mr. McAfee were next to respond.

Mr. Hare entered another plea for the quail, and spoke of its great value to the farmer and the great care we should take protect it. He also spoke of the delights of living in the country, of the birds, the shrubs, the trees, in which we have all that is beauty. None

**BURPEE'S** Largest Mail-Order Seed House in the World. In buying BURPEE'S SEEDS direct by mail you get your money's worth in the Best Seeds that Grow—and you have your choice of Rare Novelties for 1903, which cannot be had elsewhere. Write to-day (a postal card will do) for our complete catalogue —FREE to all who intend to purchase seeds. W. ATLEE BURPEE & CO., Philadelphia.

**Plant Trees for Posts**  
Catalpa, Osage, and Russian Mulberry Seedlings, one year old for planting. The Catalpas are from seed selected from known Speciosa trees. Write for prices stating number wanted  
**PETERS & SKINNER, North Topeka, Kans.**

**The Kansas Seed House IS READY**  
with an unusually attractive and beautiful Catalog of good things in SEEDS, for 1903.  
FREE copies for the asking. Their SEEDS are always Reliable, Fresh, and True to Name. All are Carefully Tested and Depend on the Best Results. Headquarters for ALFALFA Get your supply while it can be had. SUPPLY LIMITED. We advise early buying to secure it. BROMUS INERMIS, MACARONI WHEAT, and the Wonderful RUSSIAN SPELTZ or EMMER. THREE TRIED GRAND NEW NOVELTIES. Millet, Cane, and all other Field, Farm, and Grass Seeds, in fact Everything that a First Class SEED House should keep. Write now for Catalogue.  
**F. BARTELDES & CO., Lawrence, Kansas.**

**Guard Against Failure.**  
Plant Griswold's Seeds.  
Our Garden Seeds are clean, fertile and select. They grow. They yield big and true to type. We have a personal interest in sending out the best, and we are mighty careful you get the best of what you want.  
Our Seed Corn is free from frost, hand-picked, dry and well matured. We have the corn this year and the Sure To Grow kind. Write for our quotations. Get our big free catalog. Write now.  
**Griswold Seed Company, Box A Lincoln, Nebraska.**



**95 Tons Per Acre.**  
Farmers everywhere and every one who keeps even one cow will be interested in the wonderful fodder plant  
**PENCILARIA**  
which we introduced two years ago. It yields 3 to 7 crops each season from one planting, and has produced 90 tons per acre of green fodder, and 16 tons of dry hay, in a carefully weighed test; highly nutritious, healthful and relished by cattle, horses, hogs and all kinds of live stock. It is not coarse like corn fodder, but takes the place of hay with better results and much less expense. It withstands severe drought and also does well in a wet season in all parts of the United States. Fully 225,000 farmers who experimented with it last year will this year plant it as a regular crop.  
One from Nebraska says: "It is the greatest fodder plant ever grown here. Produced 75 stalks 12 feet high from one seed."  
From Penna. "Planted on clayey soil but grew 13 feet high and made a grand crop."  
From Iowa: "I cut 7 crops from my field and some plants had 76 stalks. Cows and calves eat it greedily green or dry."  
From Texas: "So dry this year that oats, cane, pearl millet and almost everything failed, but Pencilaria grew vigorously and kept green as though watered daily."  
From Va. "Grew 14 feet high; makes more and better feed than sorghum-cane."  
The seeds are small so that one pound will plant an acre.  
**It Grows 12 Feet High**  
and 76 large leafy stalks have been produced from one seed. One-fourth acre will support a cow for green food all summer or for winter fodder. We will send 1/4 lb for 25 cents; 1/2 lb 40 cents; 1 lb 75 cents, postpaid. Write for price in quantity.  
We have so much confidence in Pencilaria that we want every one to try it. Therefore if you mention this paper in writing us, we will send enough seed to plant a row 100 feet long, also our large illustrated catalogue of farm and garden seeds, free.  
**IOWA SEED COMPANY, Des Moines, Iowa.**



**GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM.**  
The best book on strawberry growing ever written. It tells how to grow the biggest crops of big berries ever produced. The book is a treatise on Plant Physiology and explains how to make plants bear Big Berries and Lots of Them. The only thoroughly bred scientifically grown Strawberry Plants to be had for spring planting. One of them is worth a dozen common scrub plants. They grow **BIG RED BERRIES**. The book is sent free to all readers of the Kansas Farmer. Send your address to  
**R. M. KELLOGG, Three Rivers, Mich.**

**SEED CORN**  
The vigorous, hardy, productive kind that shows big results at harvest time and makes glad the hearts of the wise men who plant one of our famous kinds, "Pride of Nishna," "Ratekin's Iowa "Silver Mine" and "Imperial" are names known wherever corn is grown. Write and we will tell you about each of these varieties, how and where grown and why so wonderfully successful; also about our price list of Seed Oats and Garden Seed. Write now for catalogue. Sent free for mentioning this paper. Address  
**The Ratekin Seed Co., Shenandoah, Iowa.**



**HAVE YOU A DOLLAR?**  
It will return many fold if you invest it in one of our  
**Three Fruit Options --**  
20 Budded Peach Trees, 25 Grafted Apples or 50 Concord Grapes, either one for the dollar. Only clean, well rooted, vigorous stock in Trees, Shrubs and Vines. English or German catalog and \$5.00 due bill sent Free. We pay freight on \$10.00 orders.  
**FAIRBURY NURSERIES, Box L, FAIRBURY, NEB.**

**ALFALFA SEED.** New Crop; thoroughly re-cleaned, evenly graded, no chaff nor waste to pay for.  
BUY IT WHERE IT GROWS nearest perfection and save money. Write for prices.  
**GEO. H. MACK & CO. Garden City, Kansas.**

**ADD DOLLARS TO YOUR CROPS**  
By planting seeds that bring results and reap dollars with the harvest. Our **Garden and Farm Manual** tells all about the best seeds that money can buy. Sent free.  
**JOHNSON & STOKES, 217-219 Market St., Philadelphia.**



**FREE PANSY SEED**  
WRITE US TO-DAY and receive by return mail absolutely FREE a liberal package of our celebrated "Everblooming Pansy Seed" and our beautifully illustrated Catalogue for 1903. Our Reliable Seeds have had an enviable reputation for over 30 years. **FAIR AND SQUARE** This offer is made to build new business. Write to-day. A Postal-card Will Bring Them.  
**GREAT NORTHERN SEED CO., 236 Rose Street, Rockford, Illinois.**



**GOOD SEEDS CHEAP**  
Best in the world  
From 1c. a pk'g., & up. A lot free with every order. Great Big Catalogue FREE to all. Picture of all varieties. Send for big catalogue

**R.H. SHUMWAY**  
ROCKFORD, ILL.

**STARK TREES** best by Test—78 Years  
LARGEST Nursery.  
FRUIT BOOK FREE. We PAY CASH  
WANT MORE SALESMEN  
STARK BROS., Louisiana, Mo.; Huntsville, Ala.; Etc

**SEEDS** BUY SEEDS THAT WILL GROW  
Ours have that reputation, there are plenty that have not. 10 pkts. Annual Flower Seeds, 10c. 5 pkts. Vegetable Seeds, 10c. 5 pkts. Giant Cyclamen, Double Dahila, White Pansy, Mammoth Verbena and Monstrous Phlox, 7c. **PLANTS** 2 c. Roses, 25c. 4 Poinsettias, 25c. 6 Geraniums, 1c. 4 Japanese, 2c. Catalogue free. **A. G. ANDERSON, COLUMBUS, NEBRASKA.**

**Fruit Trees** 17 Peach, \$1.00.  
50 Concord, \$1.00.  
1000 Mulberry, \$1.00  
Immense stock, fine quality, low prices. Freight prepaid on \$10.00 orders. General catalogue free. **CAGE COUNTY NURSERIES, Beatrice, Nebr., Box 625**

**Trees That Grow**  
The best and hardest varieties. See our prices. Grafted Apple, 4 1/2c. Budded Peach, 3 1/2c. Concord Grapes, 5c. Black Locust Seedlings \$1 per 1000.

**German Nurseries**  
We pay the freight. Illustrated Catalogue, German or English free. **German Nurseries, Carl Sonderegger, Prop., Box 9, Beatrice, Neb.**

**EVERGREENS**  
Hardy sorts, Nursery grown, for wind-breaks, ornaments and hedges. Prepaid, \$1 to \$10 per 100-50 Great Bargains to select from. Write at once for free Catalogue and Bargain Sheet. Local Agents wanted. **D. Hill, Evergreen Dundee, Ill.**

**The Farmer's Wife**  
usually selects the garden seeds for the family garden. The garden is her pride, while the farmer has his larger sphere of operation. Do not use "store seeds" this year but send for one of our large, true to name, fresh seeds of pure vitality. We sell direct from the grower to the user at bargain prices, two cents per packet and upwards. Beautiful catalog mailed free if you mention this paper.

**IOWA SEED COMPANY, DES MOINES, IOWA.**  
"Seedsmen to the American People."

For nearly half a century

**Ferry's Seeds**

have been growing famous in every kind of soil, everywhere. Sold by all dealers. 1903 Seed Annual postpaid free to all applicants.

**D. M. FERRY & CO.**  
Detroit, Mich.

**SALZER'S SEEDS**

**Beardless Barley**  
is prodigally prolific, yielding for Mr. J. E. Wells, Orleans County, New York, 109 bushels per acre. Does well everywhere. **That Pays.**

**20th Century Oats.**  
The oat marvel, producing from 200 to 300 bus. per acre. Salzer's Oats are warranted to produce great yields. The U. S. Ag. Dept. calls Salzer's Seed Oats the very best. **That Pays.**

**Three Eared Corn.**  
200 to 250 bus. per acre. Is extremely profitable at present prices of corn. Salzer's New Golden Gate Corn yields 300 bushels per acre.

**Macaroni Wheat.**  
Greatest wheat on earth for arid, dry, hot soils—yields 63 bus. per acre. Introduced by U. S. Dept. of Agriculture. It's a wonder! **That Pays.**

**Speltz.**  
Greatest corn food on earth—80 bus. grain and 4 tons magnificent hay per acre. **That Pays.**

**Victoria Rape**  
makes it possible to grow hogs, sheep and cattle at a cost of but 1c. a lb. Marvelously prolific, does well everywhere. **That Pays.**

**Bromus Inermis**  
this and Billion Dollar Grass are the two most wonderful grasses of the century. Produce 6 tons of hay and lots and lots of pasturage besides per acre. Introduced by U. S. Dept. of Agriculture. It's a wonder! **That Pays.**

**\$10.00 for 10c.**  
We wish you to try our great farm seeds, hence offer to send 10 farm seed samples, containing Macaroni Wheat Teosinte, Rape, Giant Clover, Speltz, etc., (fully worth \$10.00 to get a start) together with our great catalog, for 10c. postage.

**John A Salzer Seed Co. LACROSSE WIS.**

of these pleasures may we enjoy in the city.  
J. H. Derkes and Asa Chandler completed the list of speakers.  
Rosedale, Kans. X. Y. Z.

**Onion Culture.**  
The "new method" of onion culture, which is the growing of onions from plants started in a seed-bed and transplanted to the field, is becoming more popular and is quite extensively practiced in other sections of the country. The operation of transplanting onions is slow, and usually considered an expensive one, and the inexperienced onion-grower is liable to think it is too laborious and not a paying proposition. But as a matter of fact, it is no more expensive than the thinning out and transplanting in the vacant spots of onions started in the field. It is slow work to thin out the small onions and leave in place, at the proper distance in the row, the plants that are to be left without disturbing them. If the onions are quite thick, or have come up in bunches, and if the soil is at all hard or sticky, the thinning is still slower and more expensive. The onions, which are transplanted in the vacant spots in the rows, make the fields look uneven. This is due to the transplanted onions not recovering for some time from the operation, while the plants left intact in the rows continue to grow and consequently their growth is larger. This unevenness of growth, while not a serious drawback, does not occur in a field where all the onions have been transplanted.

As stated in Press Bulletin No. 69, the results of last year's work with onions at the station show that it was cheaper to transplant from the seed-bed than to thin the onions grown in the field and transplant in the vacant spots. A plot of one-tenth of an acre was transplanted with onions grown in a cold-frame. The rows were 300 feet long by 15 inches wide, with the onions 4 inches apart in the row, making 900 onions to the row, or 9,000 to the plot. The onions were irrigated immediately after transplanting. The cost of transplanting this plot of the 9,000 onions amounted to \$2.95. This included the cost of the first irrigation, bringing the onions from the cold-frame to the field, and the dropping of them about the proper distance in the row. It was observed that better time could be made by having a man drop the onions a little in advance of the man setting them. At this rate it would cost \$29.50 to transplant an acre, or 90,000 onions. The thinning and transplanting in the vacant spots of a similar plot cost \$4.10. The estimated cost of thinning an acre would be \$41, practically one-fourth more than in the former case.

The distance to plant onions varies, but the most common one (when hand culture is practiced) seems to be from 12 to 15 inches between the rows and from 4 to 4 1/2 in the row. Many of the authorities on onion-growing give 100,000 to 160,000 onions to the acre.

Onions are very expensive to grow, but, as a rule, they are one of the best paying crops. The following is the cost of growing one-tenth of an acre of onions at the station last year:

Plowing and leveling land.....	30
Marking and bordering land.....	20
Transplanting.....	2.95
Cultivating and irrigating.....	2.90
Harvesting, topping and hauling....	2.95
Seed.....	.35
Growing seedlings, or sets, about....	1.65

Total cost of plot.....\$ 10.70  
Estimated cost of one acre.....\$107.00  
This plot produced 1,185 pounds, which was quite low. The low yield was largely due to the crop being set out so late in the season and partially to the hard adobe soil in which the onions grew. It is believed that by starting the crop earlier the yield can be very materially increased, and the cost of production can also be reduced. The onions were sold in the local market at 2 1/2 cents per pound. The crop sold for \$27.65, which, after deducting the cost of production gave \$16.95 profit. At this price the estimated profit per acre would be \$169.50.

**FABIAN GARCIA.**  
New Mexico Experiment Station.

**Wire-Fence Telephones.**

**EDITOR KANSAS FARMER:**—Will you inquire through the columns of your paper if the telephones constructed on wire fences out of barbed wire are a success? **A SUBSCRIBER.**

**California—Low Rates.**

Beginning February 15, the M., K. & T. Ry. will sell Colonist Tickets to California at very low rates, viz.: St. Louis, \$30; Kansas City, \$25. Tourist Car through to San Francisco leaves St. Louis each Tuesday at 8.32 p. m. Ask any Katy Agent or address

**JAMES BARKER,**  
Genl. Pass. Agent, M., K. & T. Ry., 202  
Wainwright Bldg., St. Louis.

**SEED CORN** ON THE EAR. Send to the grower for your seed and save the middleman's profit. Choice seed at farmers' prices. Send red stamp for samples and circular.....  
**ARBELA, MISSOURI.**

**Seeds** **Alfalfa Seed A Specialty.**  
Alfalfa—the king of drought-resisting Forage Plants. Pure and fresh 1903 seed, plump and vigorous. In car or bushel lots. Also all other Field Seeds. Write us for prices.  
**MOBETH & KINNISON,**  
Garden City, - - Kansas.

**STRAWBERRY PLANTS THAT PAY**  
**TO PLANT.** Sure to produce BIG RED BERRIES. You cannot fail if you plant our plants. We have been growing berries in Kansas 21 years; began when 12 years of age, and know just what you need. Our Catalog tells you all you want to know. Have Raspberry, Blackberry plants, etc. Write for Free Catalog  
Address **F. W. Dixon, Holton, Kansas.**

**SEED CORN OATS** **GOLDEN BEAUTY, ECLIPSE, LEAMING, SILVER MINE, WHITE PEARL, BALDWIN,** all tested and leading varieties, per bu., \$1.00.  
Texas Red, sure cropper, fancy seed, per bu., 65c. Catalog free.  
**TRUMBULL & CO., 1426-1428 St. Louis Ave., Kansas City, Mo.**

**TREES** Ours have stood the test of 50 years. Send for Catalogue.  
600 Acres, 13 Greenhouses, Established 1852.  
**PHOENIX NURSERY COMPANY,**  
1250 Park St., Bloomington, Illinois.

**J. G. PEPPARD** **MILLET CANE SEEDS**  
1101 to 1117 West 8th St. **CLOVERS TIMOTHY**  
(Near Santa Fe St.) **GRASS SEEDS**  
**KANSAS CITY, MO.**

**KUMLER & BUSCH**  
Dealers in all kinds of **GARDEN and FIELD SEEDS**  
Send in your samples; ask for ours. 600-603-604 Mass. Street, Lawrence, Kansas.

**KENTUCKY BLUE GRASS SEED.**  
For a Beautiful as well as a Most Profitable Pasture sow **BLUE GRASS.**  
The genuine Kentucky seed is what you want, and from September until June is the proper time to sow. For pure seed of our own raising, and full particulars, write **MT. AIRY SEED FARM, Paris, Kentucky**

**Seed Corn** We have best varieties of Field Corn, Iowa Silver Mine (white), Early Gem (yellow), and White Rose. We also have best of seed wheat, White Russian oats, and cane seed. Write for price list and other information. Prompt attention to all orders.  
**ROSS & FERRELL, - - FARRAGUT, IOWA.**

**VANSANT'S SEED CORN HAS NO RIVALS**  
IT IS GROWN ON HIS OWN FARMS, SORTED, TIPPED, SHELLS SACKED AND SOLD EXCLUSIVELY BY  
PRICE, \$1.25 PER BU., F. O. B.  
CIRCULARS AND SAMPLES FREE **W. W. VANSANT & SON, Faragut, Iowa**

**Make the Garden Pay**  
by planting good, vigorous seed. We have had years of experience and we know how. These things show in the seed, they show in the crops and they show in the profits. The new catalogue tells all about our immense line of garden and field seeds. Full of interest to the man who wants to buy in the best market. It is free if you mention this paper. Write to-day. Always address **The Ratekin Seed House, Shenandoah, Ia.**

**SEED CORN TESTED TRIED TRUE**  
SEND TWO CENT STAMP FOR SAMPLES AND BOOK ON CORN GROWING  
**J.B. ARMSTRONG & SONS, SHENANDOAH IOWA**

**Reliable Northern Grown FARM AND GARDEN SEEDS**  
We are Growers of New and Improved varieties of Seed Grain, Seed Corn, Seed Potatoes, and of Pure and Hardy Strains of Vegetable Seeds. Our stock of High Grade Timothy and Clover Seed, Turkestan Alfalfa, Rape, Sugar Cane, Macaroni, Wheat, etc., is the most complete. Hardy and Rare kinds of Small Fruit Plants, Ornamental Shrubs and Novelties in Flower Seeds, Clover Grass Mixtures for Permanent Pastures and Meadows our Specialty. Reasonable Prices, Best Railroad Connections, Special Seed Rate to the Northwest. Large illustrated catalog free. 10 rare Farm Seed Samples for 10c.  
**FARMER SEED CO.,**  
16 4th St. Fairbault, Minn.

**Hogs and Sheep for Profit.**  
The best paying animals on the farm. Aren't you making them so? Do you provide plenty of good pasture or green feed? If you don't you are missing lots of profit. You should undoubtedly sow

**BERRY'S Hog Pasture Mixture,**  
composed of Essex Rape, Thousand Headed Kale, Teosinte, Pencilaria, Japanese Millet, Kaffir Corn, Soja Beans, Cow Peas, Barley and Spanish Grass Peas. Truly great and wonderful, the amount of valuable feed produced on one acre, and profits derived from pasture. Our Catalogue Manual tells all about it. You must send for it and obtain more profit from farming. It is chock full of good things. It's free for asking if you mention this paper. Be friendly and write us.

**A. A. BERRY SEED CO.,**  
Box 50 Clarinda, Iowa.

**"HERE'S WHERE THE PROFIT COMES IN."**



## The Poultry Yard.

### A Good Chicken-House.

EDITOR KANSAS FARMER:—I am about to build a chicken-house and ask for information how to build a cheap, substantial and up-to-date chicken-house. I have at present about 100 chickens; want to build the new house large enough to accommodate about 200. I do not expect to use an incubator this year, so must have the new house arranged so as to have a place for the setting hens. Would you advise building a chicken-house in an apple-orchard? Hoping to hear from you through your valuable paper, the KANSAS FARMER. A KANSAS FARMER. Claffin, Barton County.

A poultry-house 16 by 20 feet would accommodate from 100 to 200 hens; in addition to this it might be advisable to build a cheap scratching shed for winter. Fowls can get along with limited room if there are other buildings in which they can exercise during the day time. For 200 hens where there are no extra buildings, I would advise a house at least 20 feet square. The accompanying cut illustrates a very convenient poultry-house that can be made of ordinary lumber, the windows should be perhaps a little larger, it would let in more sunshine. By the way, I wish to mention that sunshine is very beneficial to the inside of poultry-houses, the warmth and light evaporates objectionable stenches and turns foul air into healthy air. It is argued that glass draws cold in winter time; in this case curtains could be supplied very cheaply. It will be noticed by the perch arrangement that the fowls would have the entire floor surface as a scratching shed, the scratching shed could not interfere with the perch-floor, the perch-floor being hinged to the back wall and can be lowered for cleaning; the perches are simply horses similar to the horses that carpenters use, except the 2 by 4's are turned flat ways instead of edgewise. The division down through the center of the building can be boarded up or left open, I prefer leaving it open and have the 2 by 4 extend from the highest part of the building clear to the floor down through the center of the building. The nest-boxes can be arranged to suit. Would advise your correspondent not to make the fixtures inside of his poultry-house permanent, that is, I mean that everything should be removable as much as it is possible. I have never seen a poultry-house yet that did not need some changing no matter how much thought we give it in advance of its erection. In the cut the nest-boxes are along the front of the building. There is no better place for poultry-house than in an apple-orchard but I would not advise placing the poultry-building a long distance from the residence in order to get it in an apple-orchard. Poultry does much better when it is near the house or other buildings, and it is very satisfactory in several ways.

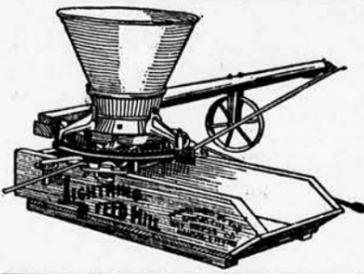
About the cheapest way to build this kind of a poultry-house is to board it up and down with ordinary barn-boards and batton the cracks, to make the building good and warm, would advise a layer of tar-paper on the inside, then over this tar-paper put a thickness of red rope-roofing. The roof can be made by sheathing over the rafters tight with barn-boards or any cheap lumber, for this roofing we have found nothing more suitable than red rope-roofing. There are other roofing fabrics that are no doubt as good. The crimped-iron-roofing is all right either for the sides or roof of the building, but I would not advise any one to use the corrugated iron for poultry-houses as every corrugation makes a suction for cold air. The coldest building I ever saw was covered with corrugated iron. I would advise your correspondent to keep the floor of his poultry-house covered with litter, chaff, fine straw or most any kind of dry stuff; it absorbs the moisture and stenches, keeps the floor of the building warm and makes a natural place for the hens to hunt some feed. M. M. JOHNSON. Clay Center, Neb.

### Artificial Incubation.

EDITOR KANSAS FARMER:—It takes a lot of big words and long phrases perhaps to write an up-to-date article on incubators, but somehow or other I have been reasonably successfully with just common United States language when it comes to the hatching question.

Let us be plain and call things by their right names. A fertile egg is a seed; it must have the necessary warmth to sprout and grow, a temper-

## Lightning Feed Mill



Greatest Capacity, Lightest Draft, Quintraple Gear, Roller Movement. KANSAS CITY HAY PRESS CO., 129 Mill Street, Kansas City, Mo.

ature of 103°; it must also be cultivated; the eggs must be turned, aired, and manipulated after nature's ways.

A temperature of 103° seems to be a standard, although very few recognize that placing the thermometer differently would necessarily mean that it would read differently, but such is the case. With the thermometer between the eggs showing 103°, the same thermometer lying on the eggs would show 104°, or if suspended above the eggs near the tank it would show still more. I prefer placing the thermometer on the eggs, thus showing the combined heat of the eggs and the heat applied to them; still more, I prefer a variation of temperature as the hatch progresses, for instance, 102° to 103° the first week, and 103° the second week, and 104° the third week; this variation being due to the increased animal heat in the eggs as they develop. This temperature will bring good results.

There are bushels of ironclad, prescribed rules about turning the eggs just so, but my advice is to turn them as often as you have time and air them as often as you have time. I don't mean that it would be necessary to put your whole time or even a tenth of it to turning and airing the eggs, but I do mean that they should be turned at least once every day and twice every other day, and that when looking at the thermometer the tray should be pulled out and let the eggs get a whiff of pure air. You would ask why? I will tell you. Turning the egg ripens it clear around, the germ comes to the top; every movement of the egg makes a corresponding movement of the embryo chick; besides ripening the shell clear around, these movements wake the chick up, it's exercise for it, it moves, expands and develops its own strength. This principle applies to all life whether stock or egg. For instance, a stock-breeder would not pen up a dam in close quarters to bring strong young. There is nothing mysterious or unaccountable in hatching eggs, a little reasoning in advance of the real thing explains most everything about it.

Now about moisture. An egg must get rid of a lot of moisture before it can hatch. Eggs during incubation get smaller and lighter; this being the case, applied moisture could not enter the egg. The moisture question and ventilation question are so entwined with each other that the effects of one are often taken for the effects of the other. Personally, I do not believe in dosing out the air in prescribed quantities. There is much said about governing the size of the air-cell by opening or closing the dampers, but I prefer a correct and continuous ventilation. If it is correctly fitted, there need be no dosing it out in a mystical way with dampers. I prefer a constant mild circulation of air and to depend on airing the eggs in open air to conform to nature's ways.

What's the good of airing the eggs? might be asked. In answer will say that the egg-shells, like other things, expand in heat or contract in cold. This expansion and contraction, the result of airing the eggs, breaks down the tough fibers of the shell, and when the chick is due to hatch it can hatch. It also applies moisture on the same principle that a glass of cold water will sweat in a warm room when the atmosphere is just right. I am sure this moisture, however light, is good for the shells, good for the reason that it is light and effects the shells only.

Good hatches are made with and without moisture, opinions are about equally divided. I am satisfied, in fact I know, it does no harm to apply a little moisture direct to the shells if the ventilation is sufficient. Have tried all the moisture plans and plans without moisture, and have, at this time, more faith in the old-fashioned way of

## POULTRY BREEDERS' DIRECTORY

WHITE Plymouth Rock eggs for hatching, from prize-winners. Second prize cock Kans. -tateshow '03 at head of this year's breeding pen. Eggs, \$1 per sitting of 13. W. L. Bates, 1829 Park Ave., Topeka, Kans.

FOR SALE—S. L. Wyandotte cockerels. Eggs in season. V. B. Howey, R. R. 5, Topeka, Kans.

FOR SALE—Thoroughbred C. I. Game and R. C. B. Leghorn cockerels, \$1 each. Eggs in season. Mrs. John Holzhey, Bendena, Kans.

FOR SALE—Prize-winning Barred Plymouth Rock cockerels, scored by F. W. Hitchcock. D. A. Kramer, Washington, Kans.

FOUR young litters high bred, pedigreed, Scotch collie pups, for sale. Book your orders quick Walnut Grove Farm, Emporia, Kans.

POULTRY FARM—Breeders of Light Brahmas, Plymouth Rocks and Partridge Cochins, took first second, and third on Light Brahmas; first, second, and third on Partridge Cochins at Fort Scott show. A few good cockerels for sale. Eggs in season, \$1.50 per 15. G. W. Shuman, Fort Scott, Kans. Rural Route No. 1.

SIXTY MAMMOTH BRONZE TURKEYS—Two separate pens, headed by a 42 pound tom. Also Pekin ducks. Address Mrs. Fred Cowley, Columbus, Kans.

DO YOU WANT LAYERS?—It's in the blood. Buy cockerels of my heavy laying strains of Black Minorcas, and White and Brown Leghorns, \$1.50 each. Also eggs for hatching, \$1.50 per 15. Satisfaction guaranteed. James C. Jones, Leavenworth, Kans.

FOR SALE—Mammoth Bronze turkeys, with large bone, fine shape and plum; age; three pens not skinned. Address Mrs. T. M. Fleming, Route No. 3, Fontana, Kans.

MRS. E. F. NEY—Breeder of WHITE WYANDOTTES. Bonner Springs, Kansas. Eggs for hatching, \$1 per setting.

COCKERELS—Indian Games and Black Langshans, farm-raised, price \$1 each, if taken soon. H. Baughman, Wymore, Neb.

### For Sale: 150 Pure-Bred Light Brahmas

Best birds we have ever offered. Prices are right and our stock is just what you want. Write us just what you want and will quote best prices. F. W. DIXON, HOLTON, KANSAS.

SCOTCH TERRIERS—Finest bred in this county. Heather Prince, the champion of Scotland, and sire of Nossay Foxglove, out of the champion imported Romany Ringlet, best service at our kennels. G. W. BAILEY & BRO., Beatle, Kans.

I HAVE some very fine pedigreed Scotch Collie pups for immediate shipment. I also have some extra fine B. P. Rock hens and young cockerels will sell at a bargain if taken soon, as I need the room. Can furnish pairs, trios, or pens headed by a male no kin to hens or pullets. W. B. WILLIAMS, Stella, Neb.

SCOTCH COLLIES—Some fine females, from registered stock, for \$4. A. P. Chacey, R. R. 1, North Topeka, Kans.

### Mr. & Mrs. Chris Bearman, Ottawa, Kans., Breeders of BARRED... Plymouth Rocks and WHITE Plymouth Rocks

1899. 1903. EGGS—\$2.00 for 15. A few choice cockerels for sale yet. I can sell you pairs, trios, and pens, not skinned. They are of prize-winning stock. Buy stock and eggs of us and be a pleased customer, as all others have expressed themselves as such. Write for prices

### THE SMITHS, Manhattan, Kans.

Buff Plymouth Rocks, Buff Wyandottes and Brown Leghorns. Fowls one dollar and up. Breeding pens mated. Stock scored by Judge Rhodes. Eggs one dollar per sitting.

### SEND FOR CIRCULAR AND SHOW RECORD.

sprinkling the eggs occasionally, than any new way.

The old-fashioned sprinkling is applied direct to the shells and does not make a heavy, continuous, mucky air in the egg chamber. It does not matter about exact dates in sprinkling, exact dates would be nonsense, but I can guarantee that you will do the eggs no harm if you sprinkle them with tepid water on the 12th, 15th, and 18th day. Yours for big hatches, M. M. JOHNSON.

Clay Center, Neb.

### The Vegetable Question.

EDITOR KANSAS FARMER:—I would like some information through your paper from some of these poultrymen who advocate feeding roots to poultry during the winter. What roots are best, and how should they be fed, cooked or uncooked? What quantity, in pounds, should be fed per hundred hens? I have several bushels of beets and potatoes and some cabbage that can be used for poultry if it will be beneficial. A BEGINNER.

When writing to advertisers please mention this paper.



"THE HIAWATHA" Is the most successful hatcher. Its wonderful success and popularity is due to superior construction and its scientific principles of heat and ventilation. IT NOT ONLY HATCHES GOOD STRONG CHICKS, BUT LOTS OF THEM. Our machines are guaranteed—your money back if you are not satisfied. They are strictly high grade in every detail. A first-class machine at a reasonable price. Send for our catalogue. It is free. "THE HIAWATHA" MFG. CO., Hiawatha, Kas., U. S. A.

**ONE GIRL** hatches 1788 chicks. One woman 2499. One man 2632. Many others do equally well with the PERFECTED HATCHING SYSTEM. Best incubators. Booklet free. F. GRUNDY, Morrisonville, Ill.

**DON'T SET HENS** the same old way with a 200 Egg Natural Men Incubator Costs But \$3, other sizes equally as low. Over 125,000 in use. Indispensable to anyone who keeps a hen. Our Patents protected against infringement. Agents wanted everywhere, either sex, no experience necessary. Catalogue sent on request. Write for free catalogue today. NATURAL MEN INCUBATOR CO., Box 2, Columbus, Nebraska.

**VICTOR INCUBATORS** Hatch every fertile egg. Simplest, most durable, cheapest first-class hatcher. Money back if not positively as represented. We pay freight. Catalogue free. Geo. Ertel Co., Quincy, Ill.

**\$12.80 For 200 Egg INCUBATOR** Perfect in construction and action. Hatches every fertile egg. Write for catalogue to-day. GEO. H. STAHL, Quincy, Ill.

**PER EGG CAPACITY** The Sure Hatch Incubator is a high grade machine throughout, (over 30,000 in use) anyone can operate them, and when it is considered that we pay the freight and that the machines are all larger than rated capacity and are sent on 30 days trial, the egg capacity is the cheapest of any good incubator on the market. Our Free 1903 Catalogue was made to order for the poultry raisers—poultry and egg record tables, etc. A big book full of good things. Address nearest office. SURE HATCH INCUBATOR COMPANY, Columbus, Ohio. Clay Center, Neb., Eugene, Ore.

**SHOEMAKER'S BOOK ON POULTRY** and family almanac for 1903. Over 200 large pages of best book paper with fine colored plates true to life. Tells how to raise chickens profitably, their care, diseases and remedies. Diagrams with full descriptions of Poultry houses. All about INCUBATORS, BROODERS, Thoroughbred FOWLS, with lowest prices. You cannot afford to be without it. Only 15 cts. C. C. SHOEMAKER, Box 600, Freeport, Ill., U. S. A.

**Counting Chicks Before Hatching** is not safe unless you have an **IOWA ROUND INCUBATOR**. R. C. Bauermeister, Norwood, Minn., got 493 chicks from 503 eggs. He followed directions, the machine did the work, because it was built on right principles and by good workmen. The IOWA has fiber-board case, does not shrink, swell, warp or crack. Regulation and ventilation perfect. Our free book gives more testimonials and full particulars. Everything about incubation free. IOWA INCUBATOR COMPANY, BOX 157, DES MOINES, IOWA.

**Brings Big Hatches** That's the test of an incubator and that's the record of the **SUCCESSFUL**. Don't experiment. Get a time tried and proved incubator. The successful not only hatches perfectly, but it will last a life-time—does not swell nor shrink. Get our big incubator book (156 pages) free. Other catalogues in 4 languages. Des Moines Incub. Company, Dept. 88 Des Moines, Iowa, or Dept. 88, Buffalo, N. Y.

**DUFF'S POULTRY** Barred Plymouth Rocks, White Plymouth Rocks, Brown Leghorns, Partridge Cochins, Light Brahmas, Black Langshans, Silver Wyandottes, White Wyandottes, Silver Spangled Hamburgs, Brown Leghorns, and Belgian Hares First-class Standard Stock of Superior Quality. Stock For Sale. Eggs in Season. Write Your Wants. Circular Free **A. H. DUFF, Larned, Kans**

**ROSS** CUTTERS AND SHREDDERS  
SAVE FEED, TIME & MONEY  
OUR FREE CATALOGUE  
SEND FOR IT TODAY  
W. H. ROSS CO. SPRINGFIELD - OHIO

**5 TON WAGON SCALES \$35.00**  
SENT ON TRIAL FREE  
CATALOGUE FREE  
**AMERICAN SCALE COMPANY**  
508 MASS. BLDG. KANSAS CITY, MO.

**\$45 WKLY.** selling **ACME PUMP**  
GOVERNORS. They  
make all pumps work easy and fit all kinds.  
(Iron or wood.) Mills run with 1/2 less wind.  
Agents Exclusive Territory. Its Merit sell it.  
**PUMP GOVERNOR MFG. CO.,**  
(G) 40 Dearborn St., Chicago, Ill.

**THIS MILL**  
DOES ALL KINDS OF WORK  
on one set of grinders without  
injury to them. The Tandem  
Sweeps are easy on the horses.  
No Gearing. No Friction. It's  
different from all others. (Also  
class belt-power mill) 3 to 25 H. P.  
C. N. F. Bowler Co. South Bend, Ind.

**THE LARGEST AND BEST LINE OF  
WELL DRILLING**

**MACHINERY** in America. We have  
been making it for 20 years. Do not buy until  
you see our new Illustrated Catalogue No. 41.  
Send for it. It is FREE.  
**F. O. AUSTIN MFG. CO., CHICAGO**

**\$10.00 A Sweep Grinder For \$10.00**

We man-  
ufacture...  
Wind  
Mills,  
Steel Tow-  
ers, and  
Feed  
Grinders.  
All sizes and styles. Write  
for catalogue and prices.  
**CURRIE WINDMILL CO., Topeka, Kansas.**

**HANDLING CORN FODDER  
MADE EASY**

By the Use of the  
**Eagle Claw Hand Fodder Fork**  
THE only tool invented and manufactured that will  
handle Corn Fodder successfully. Agents make  
big money. Write for particulars, and secure the  
agency. Address **HANDLEMAN & SONS, Des Moines, Ia.**

**WELL DRILLING  
Machines**

Over 70 sizes and styles for drilling either deep or  
shallow wells in any kind of soil or rock. Mounted  
on wheels or on sills. With engines or horse powers.  
Strong, simple and durable. Any mechanic can  
operate them easily.  
**WILLIAMS BROS., Ithaca, N. Y.**

**WELL DRILLING  
MACHINERY.**

Established  
1867  
PORTABLE and drill any depth,  
by steam or horse power.  
42 DIFFERENT STYLES.  
We challenge competition.  
Send for Free Illustrated Catalogue No. 22.  
**KELLY & TANEYHILL CO.,**  
-88 Chestnut St., Waterloo, Iowa.

Are You Going to  
**BUILD  
a MILL?**

30 years experience in building flour mills;  
all capacities from 25 bbls upward.  
Modern system for the economical produc-  
tion of flour. Estimates furnished. Send for  
catalogue describing modern machinery of  
the best type.  
We manufacture and carry in stock machines  
and supplies required for flour mills, corn  
meal and rye flour plants, engines and boilers.  
The best is the cheapest.  
**THE J. B. EHSAM & SONS MFG. CO.**  
General Mill Builders, Enterprise, Kan.

**STICKNEY JUNIOR  
3 HP GASOLINE  
ENGINES**

Safe, strong, serviceable, durable,  
expenseless, cheap in price. A  
child starts it. Runs itself. Saws,  
pumps, grinds, separates, runs  
grind stone, churn, washing and  
sewing machines. Floor space,  
20x40 inches, weight, 1000 lbs. Full  
three Horse Power. Guaranteed.  
Let us write you.  
**CHARLES A. STICKNEY CO.,**  
120 Fairfield St., St. Paul, Minn., USA

**Free Rupture Cure**

If ruptured write to Dr. W. S. Rice, 1616 Main St.,  
Adams, N. Y., and he will send free a trial of his won-  
derful method. Whether skeptical or not get this free  
method and try the remarkable invention that cures  
without pain, danger, operation or detention from  
work. Write to-day. Don't wait.

**WIRE FENCE** at Wholesale. A 34-inch  
stock fence \$9.00 per rod.  
Send for price list and FREE catalogue of Wire  
Fence and full line of Fence Supplies.  
**W. H. MASON & CO., Box 62, Leesburg, Ohio.**



**THE RESULTS**  
of the experiences of a lot of practical farmers  
have been worked into Page Fence. It's a farmer's  
fence, for all farm and stock purposes.  
**PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.**

**HOG AND STOCK.**  
The Illinois Wire Company Stock and  
Hog Fence is guaranteed proof against  
hogs and all other animals. Every wire  
a cable, spring twisted, galvanized. Ex-  
pands and contracts with heat and cold.  
Cannot slip, sag or break. Cables 8 ins.,  
stay 5 ins. apart. 6 to 11 cables, and up  
to 63 ins. high. Bars on top and bot-  
tom cables if desired. Write us for  
free illustrated catalogue, prices, etc.  
**Illinois Wire Co., Dept. 2, Chicago, Ill.**

**THE BEST FENCE**

Can be made at the actual cost of wire.  
Over 100 Styles, and 50 to 70 rods per day,  
Horse-high, Bull-strong, Pig and Chicken-tight.  
**THE DUPLEX MACHINE**  
makes it. The Machine is Automatic, simple  
in construction, runs easy, works rapidly.  
Sent on Trial. Plain, barb wire and  
Gates at wholesale prices. Catalogue free.  
**KITSELMAN BROTHERS,**  
D 37 Muncie, Indiana.

**A MACHINE**  
to weave your own fence of  
Celled Hard Steel  
Spring Wire.  
33 inches high, at  
**25 Cts. per Rod.**  
\$25 buys wire for 100  
rod fence. Agents  
Wanted. Catalogue Free.  
**GARTEK**  
Wire Fence Mach. Co.  
Box 24. Mt. Sterling, O.

**5,000 Farmers**

ordered fence direct from our factory this year.  
Many of them had done so before  
and had found that our

**ADVANCE FENCE**

fit their requirements exactly. Of course the price had  
much to do with this. When a farmer can buy the best  
fence on the market at manufacturer's prices, he finds it a  
good and safe investment. It's so good you will order  
the second and third time. Your name and address on a  
postal card will bring circular and special prices. Have  
fence ready when you need it.  
**ADVANCE FENCE CO., 180 C St., Peoria, Ill.**

**SOME PEOPLE CALL IT LUCK**

The successful farmer says it  
is modern methods that  
grows big crops of corn  
every season. The largest  
corn raisers in the world  
use the....



"Famous" St. Joe Listers and Disc Cultivators  
The LISTERS scour always and run deep. The  
St. Joe Disc Cultivators for listed corn can be  
adjusted for three times over the corn plowing 20  
acres a day better than you can hoe it. Send for  
Catalogue. Department K.  
**St. Joseph Plow Co., St. Joseph, Mo.**

**STEEL ROOFING**

Strictly new, perfect, Semi-Hardened  
Steel Sheets, 2 feet wide, 6 feet long. The  
best Roofing, Siding or Ceiling you can use.  
No experience necessary to lay it. An  
ordinary hammer or hatchet the only  
tools you need. We furnish nails free  
and paint roofing two sides. Comes  
either flat, corrugated or "V" crimped.  
**\$2.00 PER SQUARE.**  
A square means 100 square feet. Write for  
free Catalogue No. 61 on Farm supplies of every kind.  
**CHICAGO HOUSE WRECKING CO., W. 35th & Iron Sts., Chicago**

**ASTHMA** TAKEN FROM THE SYSTEM.  
Nothing remains which can pro-  
duce an attack you can eat,  
sleep, and stand exposure with-  
out slightest return of symptoms. Appetite improv-  
ed; blood enriched; nerves strength-  
ened; whole system built up; health permanently restored; life made  
enjoyable. Book L FREE. Dr. Hayes, Buffalo, N. Y.

**LADIES** My Regulator never fails. Box FREE.  
**DR. F. MAY, Box 31, Bloomington, Ill.**

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

**Towers' Surface Cultivator**  
S. F. Clark, Bloomington, Ill., sold 207 in 1902  
Jno. R. Clisby & Co., Arcola, Ill., sold 172 in 1902  
Clarence O. Hill, Dawson, Minn., sold 171 in 1902  
Morse & Proffit, Independence, Okla., sold 71 in 1902  
W. H. McCullough, Creston, Iowa, sold 62 in 1902  
Chas. Blume & Co., Wolcott, Ind., sold 54 in 1902  
Send for Treatise on Corn Culture, Free.  
**THE J. D. TOWER & SONS CO., 14th St., MENDOTA, ILL.**  
1902  
5,300 Sold

**A GOOD TIME**  
To think about your  
**WINDMILL** is before  
you buy it . . . . .

If you get **THE DEMPSTER**  
You won't have to think about it so much afterwards.  
Made in 6, 8, 10, 12 and 16 foot sizes. We also make  
Vaneless and Solid Wheel Mills.

**BUILT FOR HARD, HONEST, EVERYDAY WORK.**  
If your dealer is not posted, write us at Beatrice, or  
Omaha, Neb., Kansas City, Mo., Sioux Falls, S. D.  
**Dempster Mill Mfg. Co.**

**SECURITY STOCK FOOD**  
FOR HORSES, CATTLE, HOGS AND SHEEP.

Contains 42 feeds to the pound, to only 7 feeds of some others—a pound thus go-  
ing six times as far as a pound of the others. Highly concentrated and per-  
fectly pure. Greatest fattener known. Less feed required and better results  
obtained. **Costs only 8 cents a month to feed Hogs and Sheep, and**  
**16 cents for Horses and Cattle.** Nature's own regulator. Every domestic  
animal benefited by its use. Should be on every farm and ranch in the country.  
Try it and you will use no other. Money refunded if not all we claim for it.  
**SECURITY STOCK FOOD CO., MINNEAPOLIS, MINN.**

**Sloan's Liniment**

There is nothing like it to kill  
a Spavin, Curb or Splint.

Invaluable for cuts, kicks or bruises. Manu-  
factured scientifically by a famous Veterinarian.

Sold by Dealers generally.  
Horse size, 50c. and \$1.00 per bottle.  
Family size, 25c. per bottle.

**BLACKLEGOIDS**  
BEST PREVENTIVE OF BLACKLEG.

**Blacklegoids** afford the latest and best method of vaccination  
against blackleg—simplest, safest, surest. They are always ready  
for use; no filtering, measuring or mixing is necessary. Accuracy of  
dosage is always assured, because each **Blacklegoid**  
(or pill) is exactly sufficient for one inoculation.  
Administration with our **Blacklegoid** II vector is  
easy. The operation need not consume on 3 minute.  
**Blacklegoids** are sold by druggists; ask for them.  
Our newly printed eight-page folder on the "Cause and Nature of Blackleg" is of  
interest to stockmen. Write for it; it is free.  
**PARKE, DAVIS & CO. - DETROIT, MICH.**  
Branches: New York, Kansas City, Baltimore, New Orleans, Chicago,  
Walkerville, Ont.; Montreal, Que.; London, Eng.

**BLACK-LEG-INE**

Pasteur Blackleg Vaccine ready for use. EACH DOSE  
SEPARATE.  
Single Blacklegine (for common stock): 10 dose box, \$1.50;  
20 dose box, \$2.50; 50 dose box, \$6.00. Double Blacklegine (for  
choice stock) \$2.00 for 10 doses, first lymph and second lymph inclu-  
sive. Blacklegine Outfit for applying Blacklegine, 50 cents.

**Pasteur Vaccine Co.,**  
CHICAGO - NEW YORK - FT. WORTH - SAN FRANCISCO.

**WE WILL SAVE YOU FROM \$10 TO \$45** on almost any kind  
or style of machine. Swell Front

Sold direct from factory saving all salesman's expenses and dealers or agents' exorbitant profits.  
Our machines have modern features not possessed by any others. Ball-bearing  
Stand; finest attachments FREE. Latest design woodwork, the stylish  
swell front, polished oak. Guaranteed to be better than machines sold for  
twice the price. SHIPPED ON APPROVAL anywhere in U. S. Guaranteed 20 years.

**ARLINGTON GEM \$25.00** Regular 5 drawer Drop Head **\$11.25**  
Including all attachments.

**ARLINGTON QUEEN** Flat Tension and Needle Bar  
Take-up, same as New Home, Domestic and White.  
\$85.00 Regular 5 Drawer Drop Head **\$14.75**  
\$65.00 Regular 5 Drawer Drop Head **\$17.75**  
\$65.00 Automatic Lift, Drop Cabinet **\$19.75**  
\$45.00 Beautiful 1 Door Desk Cabinet **\$16.45** \$75.00 Beautiful 2 Door Desk Cabinet **\$28.75**  
Write for our Catalogue, 64 pages beautifully illustrated. Contains all points about buying Sewing  
Machines right—FREE. **CASH BUYERS' UNION, Dept. B 64, CHICAGO.**

**Oregon Farms.** If you are going west, write for my  
list of wheat, grazing, dairy, fruit, and  
timber lands. Fertile soil, mild climate,  
good schools, pure water, low prices.  
**N. T. CONKLIN, Pendleton, Oregon.**

PUBLISHER'S PARAGRAPHS.

An experienced nurseryman, who understands grafting and budding trees, and an find a good position by writing to Mayfield Nurseries, St. Paul, Minn. See their advertisement in this issue of Kansas Farmer.

The principal crop of the farmer is corn. How essential then that the seed you plant be the kind that grows and when it grows will produce a big crop. Van Sant's seedcorn grown and sold only by W. W. Van Sant & Sons, Farragut, Iowa, is this kind of seed-corn. Write for their catalogue. Their advertisement appears in this paper. Van Sant's seed-corn is guaranteed to grow where any corn will grow.

Experiments made in the big red apple region of Missouri during the past three years demonstrate, it is claimed, that dust spraying is not only much less expensive and troublesome than the liquid process, but far more effective. Dust sprayers are, therefore, in great demand. Attention is called to the advertisement of the Ozark Dust Sprayer in this issue, as one of the simplest, cheapest, and most thorough in its work.

In this issue of the Kansas Farmer will be found the advertisement of the Robt. Keith Furniture & Carpet Co., of Kansas City, Mo. If any of our readers are expecting to buy anything in the furniture line it will pay them to write to this firm. Their stock is strictly first-class as they carry only high-grade goods, but by selling for cash only, their prices are as low as other houses make on inferior goods. Look up their advertisement and send for their catalogue, telling them you saw their advertisement in the Kansas Farmer.

J. R. Ratekin & Son, Shenandoah, Iowa, are known far and wide as extensive growers of farm, field, and garden seeds. The catalogue just now issued by this enterprising firm is one that should be in every home throughout the agricultural States. Seed-corn is the big proposition with the Ratekin Seed House, and a spe-

The Chief Constructive Force in Agriculture.

Two generations ago our grandfathers harvested their wheat and oat crops with the McCormick reaper; and little did they dream that the crude machine they used would be the forerunner of such marvelous advancement in the method of harvesting grain as has been developed within recent years. To-day more than two and one-half million agriculturists harvest their crops with McCormick machines. Since 1831, the year in which the first successful reaper was constructed in a blacksmith shop at Steele's Tavern, Va., the McCormick has been one of the chief constructive forces in developing the agricultural resources of the world. For more than three score years, the McCormick has represented the highest attainment in the manufacture of harvesting machines, and this name has become a household word throughout the world. "A Model Machine" is the title of a new book which has just come from the press. It is an interesting publication and should be in the hands of every one who needs or operates a harvesting machine. When writing please mention Kansas Farmer and ask for a 1903 McCormick Calendar, if you have not received one, which will be sent, together with the book, without charge. Address the nearest McCormick agent.

Photographing Seed Products.

Though good seeds are scarce this spring, we feel assured that any of our readers applying to that old reliable seed house, Johnson & Stokes, Philadelphia, will be well taken care of. Even if seeds are bought elsewhere it would be well to write for their Garden and Farm Manual and see what development is reached by different varieties of vegetables and fruits from photographs therein reproduced. The book is illustrated throughout by reproducing photographs of seed products. This firm takes a good deal of pride and at the same time serves its own interests in living so scrupulously up to its old-time reputation for supplying only the best to be secured in the seed line. This manual suggests superiority in its every page. There is no better place

CHAMPION HARVESTERS



THE Champions embody all that is best in harvesting machines. From a small beginning in 1849, their sale has steadily increased, until they stand among the leaders in the harvester trade of the world, and their sale is rapidly increasing. It is the valuable improvements found only on the Champions which give them their present popularity. On the binder, the force feed which prevents choking and waste in the elevator, and the eccentric wheel which gives more power for compressing the bundles. On the mower, the draw cut, which gives great traction and cutting power, and the lining device which lengthens materially the effective life of the machine. On the rake, the lock lever hold-down by which the teeth may be locked, if desired, so that no effort is required to hold them in position. Write for catalog describing these improvements fully and for handsome calendar in colors, free. CHAMPION DIVISION, INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO.

Send 15 cts. to the FARMER'S CALL QUINCY, ILL. and the names and addresses of ten good farmers for a year's subscription 20 or more pages weekly. Est. 1890. Complete in all departments, including Women's and Children's. JOHN M. STAHL, Ed. and Prop. This offer good for new subscribers only. Stamps taken. Sample copy free.

The Celebrated LaDow-Budlong DISC HARROW. The bumpers in the center take all the side draft. All boxes guaranteed against wear for two years. No other manufacturer will give you such a guarantee. No Neck Draft. No raising up in the center. All steel but tongue. We also make the Celebrated Disc Harrow and Drill throwing the earth all one way. Send for our Big Free Catalogue. It costs you nothing. We sell 1000 things you want at one-half dealer's price. Address HAPGOOD PLOW CO., Box 539 Alton, Ill. The only plow factory in the United States selling direct to the farmer.

To Owners of Gasoline Engines, Automobiles, Launches, Etc. The Auto-Sparker does away entirely with all starting and running batteries, their annoyance and expense. No belt—no switch—no batteries. Can be attached to any engine now using batteries. Fully guaranteed; write for descriptive catalog. Mottisinger Device Mfg. Co. 48 Main Street, Pendleton, Ind.

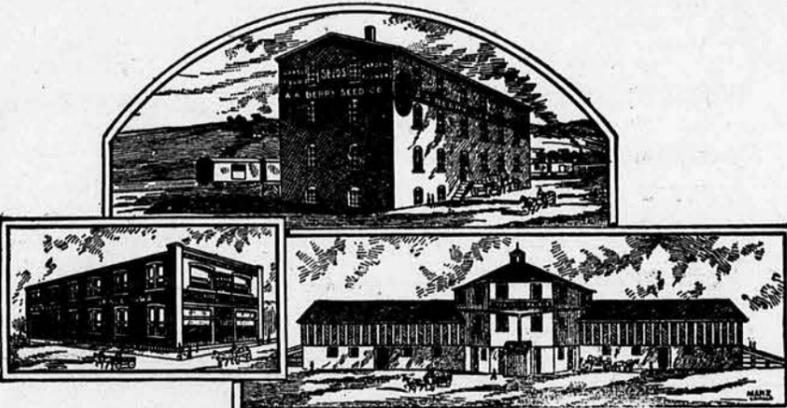
BEES If interested in bees subscribe for the Progressive Bee-Keeper 50c per year. Sample copy free, also copy of catalogue of Bee Keepers' Supplies. LEAHY CO., HIGGINSVILLE, MO. NO ENJOYMENT WITHOUT MOTHERHOOD!

Information How They May Give Birth to Healthy Children Absolutely Without Pain—Sent Free. No woman need any longer dread the pains of child-birth; or remain childless. Dr. J. H. Dye has devoted his life to relieving the sorrows of women. He has proved that all pains at child-birth may be entirely banished, and he will gladly tell you how it may be absolutely free of charge. Send your name and address to Dr. J. H. Dye, Box 137, Buffalo, N. Y., and he will send you postpaid his wonderful book which tells how to give birth to happy, healthy children, absolutely without pain; also how to cure sterility. Do not delay but write today.

There are two processes constantly at work in the human system—decay and restoration. In health there is a perfect balance between the two. Whenever the forces of decay become stronger or more powerful than those of restoration the balance is destroyed and ill-health, disease, or even death ensues. Of all mankind the brain worker finds the most difficulty in preserving this balance, which may be termed the balance of health. Mental labors consume the vital forces of restoration more rapidly than any other kind of employment, because the attack is made directly upon the nervous system, which supplies the power through which every organ of the body, as well as every muscle, voluntary or involuntary, perform their functions. The first warning or sign of danger comes from sleeplessness, loss of appetite and lack of ambition, energy or strength. Continued, this condition leads to some affection of the lungs, liver, kidneys, the brain, stomach or eyes, or if the heart is naturally weak, serious complications will ensue. With the stomach trouble will come headache, exhaustion, incapacity for continued exertion and a host of ills varying in degree and intensity with the individual. It is obvious that when the forces of decay get the upper hand, the strain upon the nerves is increased, and that too, at a time when their vitality is lowest. Thus we see that whatever aid is rendered must come from without and through the nerves. A tonic which will supply the needed element to the weakened nerves; which will be so readily assimilated as to bring speedy relief; which will not affect the most sensitive stomach; which will both rest the nerves and build them up, is found in Dr. Miles' Restorative Nervine, a true nerve food, building nerve-force and vitality so quickly that good effects are felt from the first few doses. It soothes the tired brain so that sleep may come; it brings back appetite and the enjoyment of life. Sold on a positive guarantee to benefit. Send for free Treatise on Nervous and Heart Diseases to Dr. Miles Medical Co., Elkhart, Ind.

THE PITTSBURG TUNNEL MINING CO.

The property of this Company consists of ten full mining claims in the wonderful THUNDER MOUNTAIN Idaho district immediately adjoining the famous DEWEY mine which is now producing nearly \$1,000 per day and could not be bought for TEN MILLION DOLLARS Idaho, with the exception of California, has produced more gold than any other state in the Union, and the HALF HAS NOT BEEN TOLD as to its inexhaustible mineral wealth. The greatest mines—those paying the largest dividends, owe their success to large bodies of medium or low grade ore—as proof of which the celebrated "Homestake" last year paid thirteen dividends of 50c on each share of stock; yet the average assay was only \$3.53 per ton. WE can mine ore at a profit assaying as low as \$2.00. Out of 263 assays, discarding all over \$100 per ton, the average was \$6.11 The greatest number assayed between \$3.00, and \$20.00, with occasional pockets running much higher than any of these. The general average mill runs of ore taken from the "Dewey," "Sunnyside," and PITTSBURG TUNNEL CO. properties is \$7.50 per ton in gold. This briefly describes in a very meagre form our property and its possibilities. But no matter how good or how great its prospects, such a body of rich ore needs a greater equipment. We desire to ship not later than June 1, 1903, a sixty stamp mill and have it in operation Aug. 1, 1903. To accomplish this within the time named, the Company has decided to place upon the market a limited amount of Treasury stock for DEVELOPMENT PURPOSES ONLY, feeling confident of being able to earn dividends from the day the machinery is installed. The price is 10c a share—par value \$1.00—non assessable—non-forfeitable and no personal liability. SEND FOR PROSPECTUS. IT TELLS THE WHOLE STORY with ACTUAL PHOTOGRAPHS of the property, mill site, ore bodies, water power, etc. We shall also be pleased to answer all inquiries whether by mail or in person at our office. THE PITTSBURG TUNNEL MINING CO. 930 Watson Building, CHICAGO, ILL.



The subject of the illustration above is the home of that enterprising firm, the A. A. Berry Seed Company, of Clarinda, Page County, Iowa. The commendable energy and correct methods, as well as the superior quality of their seeds, have brought to this firm a phenomenal growth in the few years they have been in business. The building to the left is their retail and mail-order office building, erected last season in the heart of the city of Clarinda. The one at the top is their three-story brick warehouse with capacity of 75,000 bushels of grain and seeds. The one at the right is their seed-corn palace, with capacity of 40,000 bushels. Their railroad and shipping facilities are unsurpassed. During last season, their average shipments were two car-loads per day, going to all parts of the United States and Canada, and they inform us

that so far this year they have filled orders in Texas and the South alone for upwards of 10,000 bushels of seed-corn. The corn storage has the latest and best cleaning, shelling and drying arrangements, and with the sorting facilities, turns out seed of the highest possible grade. This firm is headquarters for cane and sorghum seed, Kaffir-corn, millet, and all kinds of forage and grass seeds and field, as well as the best vegetable and flower seeds. They are extra strong on cane and Kaffir-corn and make low prices on these, as well as on all their seeds. Seed-corn can be furnished on the ear in some varieties, as well as shelled, but shelled corn is just as good as the ear-corn in every way. Note their advertisements and send for their catalogue, which contains much valuable information regarding seed and crops.

cial catalogue and "Book on Corn-Growing" is the outgrowth of their extended experience along this particular line. This special catalogue will be sent to all who write about it. The general seed catalogue is a fine affair of more than sixty pages, with beautifully colored covers in lithograph. It is sure to be widely asked for, and it will be thoroughly appreciated wherever seen. As we pick up this catalogue and look into its pages we find a volume of practical information under the head of "Suggestions to Customers." We commend the Ratekin catalogue to all who want full value for their money in reliable seeds. We simply give you a hint—the catalogue does the rest. See advertisements in another place in this paper and mention same when you write.

A Good Farm Lantern. One of the most serviceable little aids the farmer can provide himself with is a good lantern. No argument is required to show it a necessity, but care should be exercised in selecting to get a good one. A poor lantern is full of vexation. The lantern shown here is one of the best types we know of, and is especially well adapted to the farmer's needs. It is known as the "Blizzard" and is made by our advertising patron, the R. E. Dietz Company, of New York City. In the lighting, extinguishing, filling, cleaning, etc., it is a model of convenience, and is, moreover, absolutely safe. The light is clear, strong, and white, resulting from the making of the cold blast principle, which distinguishes all of the Dietz lanterns. Dealers pretty generally handle the Dietz lanterns or, upon request, will procure one for you. By writing direct to the manufacturers at the address given in the advertisement elsewhere, you may receive free an illustrated lantern catalogue and choose from the many there described before going to buy. Kindly mention our paper in writing.

to get a true estimate of the novelties. Whatever is of real worth is sure to be found with this firm and by illustration from photograph and accurate description you know exactly before ordering just what its merits are. The book is mailed free. Consult their new advertisement appearing in this issue for correct address before writing.

A New Tree for the Prairie. The second number of the Forestry Quarterly mentions the success of Pinus Divaricata in the "Sand Hills" of Nebraska. In looking up this experiment by the Government in 1890 we find that a large number of various species of tree seedlings were planted under various conditions in this semi-arid region and the most successful species which now forms a forest there, is Pinus Divaricata, planted in light soil without plowing. The pine seedlings used in this experiment were collected in the Minnesota forest. Mr. Ayers, who suggested the trial of this species, now offers by an advertisement in another column to supply seed from Minnesota and suggests that on sandy lands, even with light soil, this seed might be sown broadcast and harrowed in.

DISEASES OF MEN ONLY. The greatest and most successful Institute for Diseases of Men Consultation free at office or by letter. BOOK printed in English, German and Swedish, explaining Health and Happiness sent sealed in plain envelope for four cents in stamp. All letters answered in plain envelope. Vagabonds cured in five days. Call or address Chicago Medical Institute, 618 Francis St., ST. JOSEPH, MO.

New way to smoke meat in a few hours with KRAUSER'S LIQUID EXTRACT OF SMOKE. Made from hickory wood. Delicious flavor. Clearer, cheaper. No smoke house needed. Send for literature. R. H. KRAUSER & SONS, Milwaukee, Wis.

THE MARKETS.

Kansas City Live Stock and Grain Markets.

Kansas City, Mo., February 9, 1903. The paramount feature of the cattle market here last week was the demand for feeding steers at prices that looked tremendously high when compared with values of fat cattle.

Seven-dollar hogs were realized here last week, the highest February price since 1893. Among those securing this price were J. D. Andrews, Erie County, Kansas; J. D. Ray, Pattonburg, Mo.;

Yearling sheep belonging to M. A. Rogers, of Wichita, Kans., sold here for \$5.60 last Friday, the top of the year. Sheep prices are fully as high as a year ago and the continued strength of the market is surprising traders not a little.

Horse receipts were liberal at 2,000 head. Receipts ran largely to mules, however, for which there is an extra good demand just now.

The egg market slumped 2c during the week and the little owls are now selling about 5c per dozen under the high point of the season.

Table with 2 columns: Item and Price. Includes Red clover, Alfalfa, Timothy, English blue-grass, Millet, Cane-seed, and Kamr-corn.

F. BARTELDES & CO.

Lawrence Seed Markets. Lawrence, Kans., February 9, 1903. We give you today's buying prices in our market.

Mr. M. McCoy, Goganc, Kans., Captain Company A, Fifteenth Indiana Infantry, writes: "Hermit Remedy Company, Dear Sirs:—I have doctored for piles since the Civil War—thirty-six years—and am now glad to report that after using your treatment for a few weeks I am completely cured."

We have hundreds of similar testimonials of cures in desperate cases from grateful patients who have tried many cure-alls, doctors' treatments, and different methods of operation without relief.

When writing advertisers, please mention KANSAS FARMER.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small or special advertisements for short time will be inserted in this column.

CATTLE.

FOR SALE—Extra good, high-grade Hereford bull, 19 months old. E. S. Arnold, R. R. 1, North Topeka, Kans.

REGISTERED Hereford bulls, cows, and heifers for sale. Come and see them. Will make prices right. H. B. Clark, Geneseo, Kans.

FOR SALE, CHEAP—A No. 1 Galloway bull, registered, coming 2 years old, in good flesh, is good enough for a herd header and cheap enough for the range. Thos. Gribben, Hope, Kans.

BOTTOM OUT OF PRICES—Shorthorn bull and heifer calves, red with white marks, or roans, at \$50 net, the get of British Lion. D. F. Norton, Dunlap, Kans.

FOR SALE—Fifty head of unregistered, full-blooded Hereford heifer calves, well marked, weight about 450 to 500; will make someone a good foundation herd.

FOR SALE—10 head of registered Hereford bulls, 6 to 20 months old, good individuals, and in good condition. Visitors meet at trains if notified. Farm 20 miles southwest of Wichita. A. Johnson, R. F. D. 2, Clearwater, Kans.

FORSALE—A few choice young Angus bulls at right prices. Address J. E. Long, Rock Creek, Kans.

FOR SALE—A choice herd of registered Holsteins. Six heifers coming 2 years old, and one yearling heifer from first prize cow. A 2-year-old first prize bull from M. E. Moore's unbeaten 1901 show herd. M. W. Melville, Eudora, Kans.

FOR SALE—My herd bull, Baron Knight 134946, 4 years old, dark red, weight 2,200 pounds, got by Gallant Knight 124468; also three Scotch-topped bulls, 14 months old, and a few cows with calves by side. J. P. Engel, Aiden, Kans.

FOR SALE—A few choice Shorthorn heifers and young bulls. M. O. Hemenway, Hope, Kans.

FOR SALE—Ten young Hereford bulls from the Evergreen farm herd, headed by Lee 12122. Address Pearl I. Gill, Great Bend, Kans.

FOR SALE—Guernsey bulls from best registered stock. J. W. Perkins, 423 Altman Building, Kansas City, Mo.

FIVE HEREFORD BULLS FOR SALE—Never used in a herd, they are in fine fix, at a bargain for cowmen. O. L. Thistler, Chapman, Kans.

FOR SALE—Six good Shorthorn bulls, four of them straight Crackshears; prices reasonable; now is your chance to get a good individual. H. W. McAfee, Topeka, Kansas.

HERD BULL FOR SALE—After February 1, will let my double standard Polled Durham bull go; bred in Illinois, good individual, good doer; also some young Shorthorn bulls for sale. G. K. Smith, Lincoln, Kans.

SWINE.

FOR SALE—Large English Berkshires—boars and gilts, registered. A. M. Moss, Cedarvale, Kans.

WASHINGTON LAD—The greatest and best Poland-China I have ever owned. Some choice pigs bred by him now safe in pig; for sale, price \$20 to \$25 each, bred to peer of this great sire.

FOR SALE—Berkshire boars, by son of Imported Commander and King Biosom; also bred gilts. O. P. Updegraff, Topeka, Kans.

SEEDS AND PLANTS.

200,000 Johnson's Early and August Luther strawberry plants for sale. Write me what you want and see what I can do for you. E. M. Wheeler, Jefferson, Kans.

WANTED—Sweet corn wanted. Will pay a good price. Correspond with us. F. Barteldes & Co., Lawrence, Kans.

FOR SALE—300 bushels of sorghum seed. Brookover Bros., Eureka, Kans.

HONEY LOU F—300,000 plants sorted in two sizes—\$3.50 and \$2.75 per 1,000, 12 to 24 inches. The only tree for middle and western Kansas. J. E. Mellecker, Spearville, Kans.

SEND FOR price list of strawberry, raspberry, and blackberry plants to Wm. Brown & Sons, Lawrence, Kans., R. F. D. 9.

SEND to me for English blue-grass seed, \$1 per bushel. J. Ran, Robinson, R. F. D. Moran, Kans.

WONDERFUL RESURRECTION PLANT, comes rolled in a neat ball. Place in water and, presto! you have a beautiful fern leafed plant. Remove from water and it rolls up again. Sample 25 cents. Chas. Wheatley, Kellogg, Kans.

200,000 FRUIT TREES! Wholesale prices; new catalogue. Baldwin, Nurseryman, Seneca, Kans.

FARMS AND RANCHES.

FOR SALE—A well improved stock and wheat farm of 480 acres, at \$7.50 per acre. Address J. D. Hayes, Colby, Kans.

320-ACRE FARM—with fair improvements, good orchard and water. Price \$4,500; in payments, \$800 cash, balance six per cent interest; possession any time. John G. Howard, Emporia, Kans.

FOR RENT OR SALE—Two sections of good pasture land, well watered and well fenced, six miles north of Ogallah, Trego County, Kans. Skimming station at Ogallah. For particulars address, W. J. Rogers, Clyde, Kans.

FORSALE—Farms and ranches in central and western Kansas. We have some great bargains in western ranches. Write us. R. F. Meek, Hutchinson, Kans.

FOR SALE—320 acres fine pasture land in Wabunsee County, 2 miles from Halifax, good grass and never-falling water. H. R. Rice, Tecumseh, Kans.

\$20 A WEEK straight salary and expenses to men with rig to introduce our Poultry Mixture in country; year's contract; weekly pay. Address, with stamp, Monarch Mfg. Co., Box 1119, Springfield, Ill.

HORSES AND MULES.

FOR SALE—Bay stallion, Prince Nobar 35877, foaled 1900, 15 1/2 hands, sire Novar 2434, by Norval, 2143, by Electioneer; dam by Dams, son of Jerome Eddy, 2163, second dam by Patchen Wilkes, sire of Joe Patchen, 2013. This colt is a great prospect for the stud or track, as the blood lines and individuality are of the best.

FOR SALE—A high-grade black Percheron stallion, coming 3 years old this spring. This colt is large and smooth and has good bone, weighs nearly 1,500 pounds. H. E. Casad, Ocheltree, Kans.

FOR SALE OR TRADE—For a good black Percheron stallion, a Cleveland Bay coach stallion, mare, filley, and stud colt, all registered. S. S. Morine, McPherson, Kans.

FOR SALE—One 3-year-old good, coal black, high-grade Belgium stallion, heavy bone and good style, weight about 1,400 pounds. Write the owner, Tom H. Deuchfield, Eureka, Kans.

FOR SALE OR TRADE—Full blood draft stallion (Percheron), 5 years old, grandson of Brilliant. Not registered. E. E. Edgerton, White City, Kans.

FOR SALE—A registered Percheron colt coming 2 years old. He is a grandson of the great Brilliant. I will sell this colt worth the money, as I have no place to keep him. He can be used in the stud this year. Address H. C. Waun, Abilene, Kans.

FOR SALE OR TRADE—One imported French Coach Stallion, dark brown, weight 1,400 pounds, good doer; will trade for jack or road stallion. Can show colts from horse. H. J. Stevens, Wellington, Kans.

FOR SALE—A 4-year-old Belgium draft stallion bright-bay, will make an 1800-pound horse when in good flesh, won second prize at Ottawa 1902. His sire and dam were imported and recorded. He has made one season, is of a good disposition and easily handled. For full particulars address Chris Bearman, R. H. No. 3, Ottawa, Kans.

STALLION FOR SALE—Black, 5 years, standard-bred and registered, 1200 pounds, sound, gentle, city-broken single or double, sure foal getter. Traces to Hambletonian 10, only three degrees removed, through both sire and dam. Untrained but speedy. A rare chance to get a choice stallion that will pay for himself the first season. W. A. McCarter, Topeka, Kans.

FOR SALE—One Percheron stallion, 3 years old; one Hambletonian stallion, 4 years old. Both registered. Very cheap. Address G. A. Stites, Hope, Kans.

FOR SALE—One 4-year-old black jack, 16 hands, weight 1,200 pounds. Fine Jennette jack. G. W. Barnes, Agency, Mo.

FOR SALE—Two registered Percheron stallions, 4 years old, weight 1850 pounds; won second prize at Hutchinson. C. Spahr, Rome, Kans.

LEAVENWORTH CO. JACK FARM—34 head of jacks and Jennets on hand. O. T. Corson, Potter, Kans.

FOR SALE—Seven jacks, three stallions. For further information call on or address F. W. Pooe, Potter, Atchison County, Kansas. Barn three blocks north of depot.

FOR SALE OR TRADE—One of the largest and best Castilian jacks in Kansas, black; with mealy points; 2 years old Oct. 30, 1904. Would prefer to turn him for registered English Red Polled cattle. Address L. Box 53, Sterling, Kans.

FOR SALE, CHEAP—One 3-year-old black jack, and red Shorthorn bulls and heifers; show stuff. George Manville, Dearborn, Mo.

PROSPECT FARM—CLYDESDALE STALLIONS, SHORTHORN CATTLE and POLAND-CHINA HOGS. Write for prices of finest animals in Kansas. H. W. McAfee, Topeka, Kansas.

POULTRY.

FOR SALE—Single comb Brown Leghorn cockerels, \$1 each. And Poland-China bred sows and gilts. Write Adam Andrew, Girard, Kans.

MISCELLANEOUS.

CORNS—The Genuine Cactus Corn Callous Cure will cure corns, warts, bunions, and callous without pain. Sent to any address on receipt of 25 cents coin or stamps. Address Cactus Remedy Co., 1115 Grand Ave., Kansas City, Mo.

STEADY situation wanted by single man on stock farm. Six years' experience. Recommendations furnished. G. H. Williams, R. R. 2, Lawrence, Kans.

HOME C-operative former members write Consolidated Bldg. Co., Kansas City, Mo., and get credit for back payments in home fund.

100 MONEY MAKERS—Every one a winner; really money-making secrets. No office required. Full and complete plan, 10 cents. Empire Exchange, 548 Main St., Kansas City, Mo.

WANTED—Some one to furnish money to buy cattle. I have plenty of feed and grass land. Address W. J. Johnston, box 2, Bluff City, Kans.

FOR SALE CHEAP—Pedigreed Scotch Collie pups. W. H. Richards, V. S., Emporia, Kans.

PATENTS.

J. A. ROSEN, Patent Attorney, 418 Kansas Avenue, Topeka, Kansas.

A. D. Jones Real Estate and Loans 600 Kansas Ave., Topeka, Kas.

100 farms for sale this month. 20 to 30 bottom farms, from \$60 to \$80 per acre. Several nice farms from \$25 to \$30 per acre, and some good ranches, and about all kinds of city property for sale.

WASHINGTON. I have lived in Kittitas County, Washington, continuously for 18 years. Send me a 10-cent coin and a 2-cent stamp, and I will tell you why I think it the best place in the United States for a dairy farm.

James H. Endsley, Ellensburg, Wash

The Stray List.

Week Ending January 29.

Kingman County—W. R. Long, Clerk.

HEIFER—Taken up by Cory De Weese, in Rural tp., November 1, 1901, one red heifer, right ear off, weight 500 pounds, branded on left hip; valued at \$15.

STEER—Taken up by W. H. Wilkins, in Oakland tp., January 6, 1903, one red steer with horns, crop out of right ear; valued at \$15.

MARE MULE—Taken up by A. E. Sherwood, in Hampden tp. (P. O. Burlington), September 16, 1902, one light bay mare mule, about 14 years old; valued at \$15.

CATTLE—Taken up by James M. Brown, in Winona tp. (P. O. Winona), January 12, 1903, two red and white cows, ears cropped, dehorned, one red and white cow, blotch brand on right hip; total value \$67.50. Three red and white heifers, 2 years old; total value \$35. One red and white heifer, 1 year old; valued at \$10. Three 1-year-old steers; valued at \$60.

COOLT—Taken up by Jacob Ogle, in Labette tp. (P. O. Parsons, R. F. D. 5), January 8, 1903, one red-roan pony colt (male); valued at \$35.

Week Ending February 5.

Jackson County—T. C. McConnell, Clerk.

COW—Taken up by W. E. Douglass, in Garfield tp., one Western cow, black Jersey color, some white in face, branded H on right hip and 71 on left hip. Also taken up by same—one red steer, white spot in forehead, white under belly, tip of tail white, 3 years old, slit in both ears, may be holes torn out, has an old brand on left hip; not plain.

Week Ending February 12.

Wabunsee County—Sim-on C. Smith, Clerk.

MARE—Taken up by N. F. Rogge, in Newbury tp., January 10, 1903, one black mare, 5 years old, 15 hands high, branded M on left fore leg, weight 800 pounds; valued at \$15.

STEER—Taken up by D. N. Jones, in Arvonia tp. (P. O. Lebo), December 20, 1902, one black 3-year-old steer, branded X on left hip; valued at \$20.

STEER—Taken up by J. W. Bouslog, (P. O. Sharon Springs), January 5, 1903, one black steer, branded with a T; valued at \$15.

FARMERS

who wish to better their conditions are advised to write for a descriptive pamphlet and map of Maryland, which is being sent out free of charge by THE STATE BUREAU OF IMMIGRATION OF MARYLAND. Address Mr. H. Badenhop, Secretary, Merchants Nat'l Bank Bldg., Baltimore, Md.

Farms and Ranches.

We have in central and western Kansas, all kinds of farm and ranch property, large and small, improved and unimproved, for sale. In many cases we can make a desirable exchange. State what you have for sale or what you wish to buy, and we can accommodate almost any kind of a realty deal.

E. C. PREBLE LOAN CO. CUBA, REPUBLIC COUNTY, KANSAS

S. G. CARTER GENERAL AGENT

REAL ESTATE AND LIVE STOCK Miami, Texas.

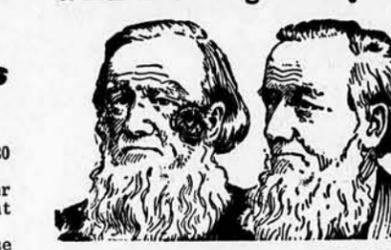
If you want to buy feeders or any kind of cattle or a farm or ranch in Texas, see or write to me. No trouble to answer questions. References: Emporia National Bank, Emporia, Kas.; First National Bank Amarillo, Texas; Lee & Co., Bankers, Miami, Texas

NEW OXFORD BALL-BEARING CREAM SEPARATOR

Advertisement for New Oxford Ball-Bearing Cream Separator, including an image of the machine and descriptive text about its features and availability.

CANCER CURED

With Soothing Balm Oils



MR. M. YANT, OF CRETE, NEB. No need of cutting off a woman's breast or a man's cheek or nose in a vain attempt to cure cancer. No use of applying burning plasters to the flesh or torturing those already weak from suffering. Thousands of persons successfully treated by this mild method.

Breeders' Directory

DUROC-JERSEY SWINE.

D. TROTT ABILENE, KAS., famous Duroc-Jerseys, Poland-Chinas

Registered Stock, DUROC-JERSEYS, contains breeders of the leading strains. N. B. SAWYER, CHERRYVALE, KANSAS.

DAILEY BROS. & CO., BEATTIE, KAS. For Sale, B Famous Pedigreed Duroc-Jersey Swine. Registered Scotch Terrier dogs. Fine, young stock 6 months old. Nosegay Foxglove at stud. Correspondence solicited.

M. H. ALBERTY, - - Cherokee, Kansas. DUROC-JERSEYS. Choice bred gilts and serviceable males.

MAPLE AVENUE HERD J. U. HOWE, Wichita, Kansas DUROC-JERSEYS. Farm 2 miles west of city on Maple Ave.

FAIRVIEW HERD DUROC-JERSEYS Watch for our Brood Sow Sale in February. J. B. DAVIS, FAIRVIEW, BROWN CO., KANSAS.

DUROC-JERSEYS. Duroc-Jerseys For Sale—Choice July, Aug., and Sept. pigs for sale, both sexes; also 4 1901 bred sows. Prices reasonable. Newton Bros., Whiting, Kans

WALNUT HILL HERD DUROC-JERSEY SWINE. H. A. J. COPPINS, County Clerk, Eldorado, Kans. Stock of both sexes for sale.

Duroc-Jerseys For Sale 16 choice, vigorous males of spring farrow, and 25 head of extra good gilts, either bred or open; best of breeding. Come and see them, or write your wants. Prices reasonable. J. F. CHANDLER, Frankfort, Kas

DUCK CREEK HERD OF Duroc - Jersey Swine. 200 head to choose from. Write us your wants. Mitchell Bros., Buxton, Wilson Co., Kans.

Duroc-Jerseys. Grade Hereford Heifers. I have for sale a few open gilts and some fine young boars old enough for service. Also 90 head of choice high-grade Hereford heifers bred to registered Hereford bulls. Write me your wants. T. F. ZIEGLER, La Harpe, Kans.

Imhauser & Co.'s Long and Large Boned Duroc-Jersey Hogs. Have some choice fall pigs for sale. If you are looking for something good, write for prices, etc. Also cultivators of Ginseng—greatest money-making plant grown. J. E. IMHAUSER & CO., R. F. D. No. 4, SEDALIA, MO.

Standard Herd of Registered Duroc-Jersey Swine, Red Polled Cattle, and Angora Goats.

Swine herd headed by Big Joe 7363 and Ohio Chief. Cattle herd headed by Kansas 8308. Young stock for sale in season. PETER BLOCHER, Richland, Shawnee Co., Kans.

Golden Rod Herd Prize-winning Duroc-Jerseys

VAN'S PERFECTION 11571, sweepstakes boar at all State Fairs of 1902, at head. Everything reserved for my great bred sow sale, February 19, 1903. GILBERT VAN PATTEN, Sutton, Neb.

POLAND-CHINA SWINE.

Dietrich & Spaulding, Richmond, Kas. For Sale—Choice bred POLAND-CHINA GILTS safe in pig to our great herd boars. Also extra good fall pigs, boars, and gilts.

Kansas Herd of Poland-Chinas Has some extra fine gilts bred, also some fall boars. Will sell Sen. I know, he by Perfect I know. Address— F. P. MAGUIRE, HUTCHINSON, KANS

Shady Lane Stock Farm HARRY E. LUNT, Proprietor, Burden, Cowley Co., Kans. A few choicely bred Poland-China Boars for sale, some choice open gilts and bred sows

SHADY BROOK STOOK FARM POLAND-CHINAS. I keep constantly on hand all sizes and ages of high-class Poland-China pigs. Quality high, prices low. Write for description and price to H. W. CHENEY, North Topeka, Kans.

THOROUGHbred Poland-China Hogs

Special price for next 20 days on 10 bred gilts, to farrow in April and May; they weigh from 200 to 275 pounds, and most of them are bred to Black Perfection 77182, the best breeder I ever owned. Also 20 fall pigs, and 4 boars large enough for service. 100 head in hand. Write for anything you want in Poland-China hogs. JOHN BOLLIN, R. F. D. No. 5, LEAVENWORTH, KANSAS.

POLAND-CHINA SWINE.

FOR SALE Poland-China Hogs, Holstein-Friesian Cattle; either sex. Best strains represented. H. N. HOLD-ERMAN, Rural Route No. 2, Girard, Kansas.

A. B. DILLE & SON, Edgerton, Kans., Have a Fine Lot of Young ..POLAND - CHINAS.. of the best blood, both sows and boars, at reasonable prices. Sows bred if desired

L. W. HAMILTON, KEARNY, NEB. Has a few CHOICE POLAND-CHINA SOWS bred, and for sale, to Grand Chief Tecumseh 2d 25585 the first and sweepstakes winner of Nebr. State Fair

Elmdale Herd of High-Class POLAND-CHINAS Shawnee Chief 28502 at head of herd. Some choice bred gilts only for sale, bred to a Perfection boar. W. L. REID, Prop., R. R. 1, North Topeka, Kas.

..Oak Grove Herd.. OF PURE-BRED Poland-Chinas For Sale—A few choice Boars and 50 Gilts, some bred for early spring farrow. Write, or come and see.... GUS AARON, R. F. D. 5, Leavenworth, Kans

Providence Farm Poland-Chinas. Correct by Corrector, Perfection Chief 2d by Chief Perfection 2d, Jewell's Silver Chief, and Kron Prinz Wilhelm, herd boars. Up-to-date breeding, feeding qualities, and large, even litters in this herd. Young stock for sale. J. L. STRATTON, One mile southwest of Ottawa, Kans.

Meadowbrook Poland-Chinas Herd boars; American Royal and choice goods for sale. Bred sows and gilts. Also two boars by Corrected. Quality and prices are right. Call, or address J. R. Killough & Sons, OTTAWA - - - - KANSAS.

PEOAN HERD OF Poland-Chinas. Our boars of serviceable age are all sold, but we have a number of good ones of September and October farrow; also a fine lot of bred gilts, sired by Model Tecumseh 64133, J. L.'s Best 70655, and U. S. Wilkes 25821. J. N. WOODS & SON, R. F. D. No. 3, Ottawa, Kansas

CHOICEST STRAINS ...OF... POLAND-CHINA HOGS 400 head in herd. Fashionably bred sows and gilts bred to Broad Gauge Chief 25733, first prize winner International Show, 1900, and Simply O. K. 24280, first prize winner, Missouri State Fair 1901. 200 winter and spring pigs in special offer. Bargains in registered Stallions and Mammoth Jacks. Also SHORTHORN and POLLED DURHAM CATTLE.

SNYDER BROS., WINFIELD, KANS

CHESTER WHITE SWINE.

D. L. Button, N. Topeka, Kans BREEDER OF Improved Chester Whites Stock For Sale. Farm is 2 miles northwest of Reform School.

Maple City Breeding Farm, Breeders of Choice Strains of Registered O. I. C. Swine, and Galloway Cattle The prize-winning boar, Ell 4049, at head of herd. The best in Chester Whites for sale in set of young boars and gilts. J. S. GILKEY, MAPLE CITY, COWLEY COUNTY, KANSAS.

The Crescent Herd O. I. C. WHITE The World's Best Swine Some choice spring boars ready for service, and Gilts bred for sale. This stock is O. K. and can not be excelled for the money. Every hog guaranteed. Write for prices and Free Delivery proposition. JOHN W. ROAT & CO., CENTRAL CITY, NEBRASKA.

BERKSHIRE SWINE. Large English Berkshires Boars and Gilts for sale at prices to suit. Write quick and get our prices; also a few good yearling boars Manwaring Bros., Lawrence, Kans

Robt. H. Hazlett, Eldorado, Kansas

BERKSHIRE SWINE.

Knollwood Farm Herd BLUE BLOODED IG BONED ROAD BACKED ERKSHIRES...

Young stock of all ages and both sexes, and bred sows for sale. E. W. MELVILLE, EUDORA, KANSAS.

EAST LYNN HERD OF LARGE ENGLISH BERKSHIRES Herd headed by Premier 4th 55577 assisted by Rutger Judge 2d 61106. ONLY THE BEST. Imp. Lady Elma 4th 44688, the highest priced Berkshire ever sold in Kansas City, is in our herd and there are others like her. Inspection invited six days in the week. WIL H. RHODES, Tampa, Marion Co., Kans.

Fall Berkshire Boars

FOR SALE, QUICK, AT A REASONABLE PRICE We have for sale a few choice yearlings, sired by Baron Duke 30th 50017, he by Baron Lee 4th 33446, and out of Duchess C 35th 33683. The dams of these boars are of the most desirable strains. Inspection or correspondence desired. Address ACHENCACH BROS., Washington, Kas., Breeders of Berkshire Swine, Double Standard Polled Durham Cattle, and W. F. Rock Chickens.

CATTLE.

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock For Sale. Your orders solicited. Address L. K. HASELTINE, DORCHESTER, GREEN CO., MO. Mention this paper when writing.

HEREFORDS FOR SALE.—Having sold the most of my herd, I have left for sale five fine yearling bulls. Write me for particulars. I will sell them cheap. R. S. COWEB, R. R. 2, BURLINGAME, KANSAS.

MEADOW BROOK SHORTHORNS—Ten fine young bulls for sale—all red. Red Laird, by Laird of Linwood, at head of herd. F. C. KINGSLEY, Dover, Shawnee county, Kansas.

COBURN HERD OF RED POLLED CATTLE. Herd now numbers 115 head. Young bulls for sale. Geo. Greenmiller & Son, Centropolis, Franklin Co., Kans

D. P. NORTON'S SHORTHORNS. DUNLAP, MORRIS CO., KANS. Breeder of Pure-bred SHORTHORN CATTLE. Herd bull, Imported British Lion 133692. Young stock for sale.

North Elm Creek Herd Pure-Bred Shorthorns and Poland-Chinas Scotch-topped Young Mary females with 9th Knight of Elmwood 161507 at head. Call on, or write W. J. Smith, Oketo, Kas

Ruby Red Herefords. 15 FINE, YOUNG BULLS FOR SALE. Socrates 75813, a mammoth, dark red sire, smooth, low, of great frame, drooping horns, and descended from Lord Wilton, The Grove 3d, Horace, and Garfield. The dams are choice, and descend from Lord Wilton, Anxiety 3d, Earl of Shadland 2d, Horace, The Grove 3d, Hesiod. A few grade bulls on hand. Also Poland-China swine. R. J. SIMONSON, Mgr., CUMMINGHAM, KINGMAN CO., KANS.

Shorthorn Cattle

For immediate sale, 12 bulls ready for service, and 12 bull calves. Also 20 cows and heifers, 1 to 7 years old. Give me a call, or address, H. R. LITTLE, Hope, Kans.

Corrector Herefords.

A few choice yearling and 2-year-old heifers bred to one of Corrector's best sons for sale very reasonably; also some 4-year-old cows with calves at foot and rebred, and just four bulls under 1 year out of Lord Wilton and Grove 8d cows. Visitors welcome. Correspondence prompt. WM. TIBBLES, Haddam, Washington Co., Kans.

Red Polled Cattle

of the Choicest Stratus and good individuals. Young animals, either sex, for sale. Also breeders of..... Percheron Horses, Improved Chester White Swine, Bronze Turkeys, and Plymouth Rock Chickens. Address G. C. BARTLETT, R. F. D. No. 5, Wellington, Kans.

..Hazford Herefords..

Herd headed by the young show bull, Protocol 2d 91715, assisted by Major Beau Real 71621, a nephew of Wild Tom. Females largely the get of Bernadotte 2d 71634. A few choice young bulls for sale. Robt. H. Hazlett, Eldorado, Kansas

CATTLE.

POLLED DURHAM CATTLE. 20 head of both sexes. Bulls of serviceable age and young cows bred. Eligible to two records. Correspondence solicited. A. E. BURLEIGH, KNOX CITY, KNOX COUNTY, MO.

VERMILLION HEREFORD CO., VERMILLION, KANSAS. Imported Alberta 2d blood. Boatman 56011 at head of herd. A few excellent, young bulls for sale. E. E. WOODMAN, Vermillion, Kans.

Weston Stamp Herd HEREFORD CATTLE. Registered..... Anxiety 4th females with Weston Stamp 9th at head WM. ACKER, VERMILLION, KANSAS.

ESKDALE HERD OF Aberdeen - Angus Cattle. YOUNG STOCK FOR SALE. JAMES FRATER, Fredonia, Wilson Co., Kans.

MAPLE LEAF HERD OF THOROUGHbred SHORTHORN CATTLE and POLAND-CHINA SWINE. Farm is 2 miles south of Rock Island depot. JAMES A. WATKINS, Whiting, Kans.

Shorthorn Bulls For Sale From the Valley Grove Herd. An extra good lot, reds and roans, sired by Lord Mayor 11272 and Knight's Valentine 187068. T. P. BABST & SONS, AUBURN, KANS. (Telegraph Station, Valencia, Kansas.)

MODEL BLUE GRASS FARM HEREFORDS. Stock For Sale. OVERTON HARRIS, Harris, Mo

Glenwood Herds SHORTHORN CATTLE POLAND-CHINA HOGS VICTOR OF WILDWOOD 128054, a pure Cruickshank-Orange Blossom in service. Females of high quality, pure Scotch and Scotch-topped; choice bulls for sale; also females. C. S. NEVIUS, Prop., CHILES, MIAMI COUNTY, KANSAS. 40 miles south of Kansas City, on Missouri Pacific Railroad. Telephone at farm

..Clover Cliff Farm.. REGISTERED GALLOWAY CATTLE Also German Coach, Saddle, and trotting-bred horses. World's Fair prize Oldenburg Coach stallion Habbo, and the saddle stallion Rosewood, a 16-hand 1,100-pound son of Montrose in service. Visitors always welcome. BLACKSHERE BROS., ELMDALE, CHASE COUNTY, KANSAS.

E. H. WHITE, ESTHERVILLE, IOWA Importer and Breeder of GALLOWAY CATTLE Herd Foundation Stock A Specialty. A Few Choice Females and 14 Bulls For Sale. Inspection or Correspondence Invited.

CARBONDALE HERD HEREFORDS and SHORTHORNS Herefords headed by Gold Dust 96848; Shorthorns headed by Daring Knight 170761. Twenty registered Hereford bulls, 9 to 11 months old, for sale cheap. Barred Plymouth Rock cockerels, \$2 and \$3; pullets, \$2; 50 of each for sale. LOUIS HOTHAN, Carbonale, Kansas.

..THE.. ..N. MANROSE.. Shorthorns

Rural Route 5, Ottawa, Kans. Giltspur's Knight 171591, at head of herd. Young bulls ready for service for sale.

"The Wayside" Herd of Registered HEREFORDS "ANXIETY WILTONS," with Printer 66684, March On 14th 106676, and Good Sign 140887, as Service Bulls, will be represented at South Omaha, January 22-23—get a Catalogue and Kum. Some excellent young things among this year's calves for sale—private treaty. Do you want SHOW HERDS that will win? Get one by Printer, and one by March On 14th, be on top, and see them take first and second place. W. W. GRAY, Fayette, Missouri.

Sunflower Herd of... SCOTCH and SCOTCH-TOPPED Shorthorn Cattle, Poland-China Swine. Two Scotch bulls in service. Representative stock for sale. Address Andrew Pringle, Eskridge, Wabaussee County, Kansas.

CATTLE.

ABBOTSFORD STOCK FARM OF SHORTHORNS. For Sale—After August 15, the herd bull, Imp. Beauty's Heir 145125; also 80 high-grade cows and heifers, good milkers. D. Ballantyne & Sons, Herington, Kas.

ALLEDALE HERD OF Aberdeen - Angus Cattle.

The Oldest and Largest in the United States Splendid recently imported bulls at head of herd. Registered animals on hand for sale at reasonable prices at all times. Inspect herd at Alledale, near Iola and La Harpe; address Thos. J. Anderson, Manager, Iola, Allen Co., Kans., R. R. 2, or—Anderson & Findlay, Proprietors, Lake Forest, Ill.

Vinewood Herd of Registered SHORTHORNS

Armour Bearer and Lavender King cows with American Royal prize-winner Orange Lad 171699 and Lavender Gloster 166056 in service. Advance Guard and Lavender King yearling bulls for sale. D. K. KELLERMAN & SON, Mound City, Linn County, Kansas.

Walnut Valley Stock Farm Breeders of Scotch and Scotch-topped SHORTHORNS

The prize-winning bull, Scott Junior 124222 at head of herd. Choice young bulls and heifers for sale. W. J. SNODGRASS, Gordon, Butler Co., Kans.

THE SUNFLOWER HERD PURE-BRED Angus Cattle.

Herd headed by MALE LAD 20645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale. Address PARRISH & MILLER, Hudson, Stafford Co., Kans.

CHAMPION GALLOWAYS FOR 1902.

Up-to-date Galloway Cattle, All Ages, For Sale. Personal Inspection or Correspondence solicited by C. N. MOODY, Breeder, ATLANTA, MO.

POLLED DURHAM HERD FOR SALE.

Owing to the death of my brother, Mr. R. J. Borgan, I am now offering to close out the entire herd of Double Standard Polled Durhams, Shorthorns, and a herd of 150 native cows bred to Double Standard bulls. Parties desiring some first class dual purpose cattle can now buy to advantage by addressing NELLIE BURGAN, FORD, KANSAS

..GREENDALE RANCH.. BREEDERS OF ..PRIZE-WINNING..

SHORTHORN CATTLE, BERKSHIRE SWINE, and SHROPSHIRE SHEEP Great constitution and lung capacity gained in high altitudes. A few select young swine and sheep for sale. ED. GREEN, MORRISON, COLO.

Elder Lawn Herd Shorthorns

Headed by GALLANT KNIGHT and Imp. Tilly Cairn. Bulls, Cows, and Heifers, for sale at bargain prices. Can supply car-load lots if desired. Some show yard material. T. K. TOMSON & SONS, Dover, Shawnee Co., Kans

Bill Brook Breeding Farm. SHORTHORN CATTLE and ANGORA GOATS.

Herd Bull, IOWA SCOTCHMAN 2d 138687. Write for what you want. Address H. O. Tudor, Holton, Kas

Rocky Hill Shorthorns and Saddle Horses

Sempstress Valentine 157771 and Mayor 129229 at head of herd. Larkin's Duluth and Kansas King at head of Saddle Horse Herd. J. F. TRUE & SON, Perry, Kansas. Railroad Station, Newman, Kansas.

A Hereford Snap.

FOR SALE, QUICK, 20 yearling Hereford bulls and 50 bull and heifer calves. All out of dams of 15th cross by registered bulls. Practically pure-bred and a splendid lot in fine condition. Prices reasonable to early buyers. W. P. Goode, Lenexa, Kas

Mention Kansas Farmer.

CATTLE.

Registered Herefords.

THOS. EVANS, Breeder, Hartford, Lyon County, Kansas. One car load of bulls, 1 and 2 years old; one car load of heifers, 1 and 2 years old; a few cows with calves by side for sale.

COPELAND'S Shorthorns

Forty head of Scotch-topped Young Marys, Floras, Harriets, Ianthas, and Britanias. Minister 2d 150171 at head of herd. J. M. COPELAND, Glasco, Cloud County, Kansas.

PUBLIC SALE! REGISTERED Hereford Cattle

At Arkansas City, Kans., March 31, 1903, consisting of 13 Bulls and 4 Cows. Sale will be under cover. For Catalogue, address L. F. Johnson & Son, R. R. 4, Gauda Springs, Kas COL. LAFE BURGER, Auctioneer.

SWINE SALES.

...POST'S... POLAND-CHINA BRED SOW SALE

At Moulton, Iowa, Feb'y 25, 1903

Over 40 head of selected Sows and Gilts bred in the purple. For Catalog, address AUGUST POST, Moulton, Iowa.

Poland-China and Horse Sale

We will sell at our farm, 2 1/2 miles northeast of Abilene, Kans., on February 18, 1903, fifty head of first-class Poland-China sows and gilts, all bred, nearly all for March and April farrow. They are the choice of our spring of 1902 crop of pigs, and a number of yearling sows and yearling gilts. They are very large and growthy, very heavy-boned, yet smooth and well marked. Having been raised with the run of alfalfa pastures, they are very strong and vigorous, and ought to make a useful lot of brood sows. They are of first-class breeding, a number of them being sired by Kansas Chief 28250, a son of Chief Tecumseh 3d. Kansas Chief is a very large, growthy yearling, great depth, fine arched back, fine head and ear, and the best of legs and feet. The yearling sows and gilts are by Hadley I Know, a grandson of Chief I Know; and Hadley 2d. Hadley I Know is a very heavy boned, large hog, of the best quality and an extra breeder. The Hadley I Know gilts are bred to Kansas Chief and the Kansas Chief gilts are bred to Hard to Beat, a very promising young boar, that won third prize at the Kansas City Royal. He is a very heavy-boned, thick meaty fellow, very mellow and even, and ought to be a great sire. Everything to be shipped will be crated and delivered to express office. Any sow or gilt proving not to be with pig will be rebred if returned within thirty days, or we will deduct 20 per cent from purchase price at option of buyers. Parties from a distance will be entertained at the Central Hotel at our expense. Free conveyance to and from sale. Will also sell 15 head of well-bred young horses, from 3 to 5 years old—drafters, general-purpose and drivers—all broken to harness. Will also offer the Imported French Draft Stallion, Bonneville 605, a very heavy-boney gray, with splendid style and action. A first-class individual in every respect, sound and all right, and a first-class breeder. Weight 1,850 pounds; in just fair breeding condition; was foaled March 12, 1888. Also a grade stallion, will be 2 years old the 23d of April next; weighed 1,400 pounds at 21 months. TERMS OF SALE.—A credit of eight months will be given at 10 per cent. If paid when due only 6 per cent will be charged; purchaser to give note with approved security. Two per cent off for cash. Free lunch at noon, and will commence selling immediately afterward. Catalogue of Poland-Chinas on application.

C. M. Garver & Son, Abilene, Kansas. Auctioneers: Col. J. N. Harshberger, Lawrence, Kans.; Col. J. N. Burton, Abilene; Col. Jas. T. McCulloch, Frankfort.

When writing advertisers, please mention this paper.

WANTED!

A bright man, with light team, in every county. Steady work and good wages to the right man. Reference required. For particulars address, KOCH V. T. CO., Winona, Minn.

Big Cut in Prices... Direct to Consumer at Wholesale Prices. Our Handsome Catalog Free, costing over \$2 each, contains 208 pages, with 3000 illustrations and 20,000 articles listed, on which we guarantee to save you from 15 to 75%. Only book of its kind in the world, sent for 25c deposited which will be refunded with first special order of \$1. Valuable book of reference, should be in every household. Small booklet sent free for the asking. Heller Chemical Co., Dept. 47 Chicago. "The Only Mail Order Drug House in the World."

HORSES AND MULES.

PERCHERON HORSES, AND ABERDEEN-ANGUS CATTLE. GARRET HURST, Breeder, ZYBA, SUMNER COUNTY, KANSAS. Young stock for sale, of either sex. All registered.

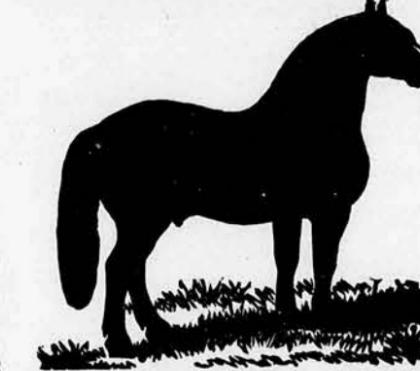
Prospect Farm



H. W. McAFEE, Topeka, Kans. Breeder of CLYDESDALE HORSES, SHORTHORN CATTLE

FOR SALE—25 Clydesdales, including three registered stallions of serviceable age, and thirteen mares. Inspection and correspondence invited.

Cheyenne Valley Stock Farm.



F. H. Schrepel, Ellinwood, Kans. —Breeder of—

PERCHERON HORSES, AND POLAND-CHINA HOGS

For Sale—Fifteen young stallions and a few mares. Inspection and correspondence invited.

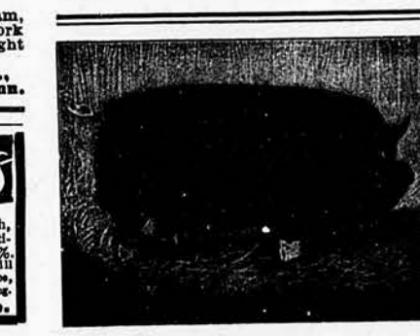
OAKLAWN FARM.

Greatest Importing and Breeding Establishment in the World. Famous Prize-Winning Stud of PERCHERONS and FRENCH COACHERS. On hand upward of 500 HEAD. Four Large Importations in 1902, forming, with our home-breds,

The Choicest Collection Ever Assembled, including Four of the Six First-Prize winners at the great annual French Show of the Societe Hippique Percheronne in 1902. At the recent INTERNATIONAL LIVE-STOCK EXPOSITION at Chicago, the Oaklawn Percherons achieved distinguished honors. The Champion Stallion and every First-Prize winner (except one) in the regular stallion classes were imported by Dunham, Fletcher & Coleman.

Notwithstanding the superior quality of our horses our prices are lower than can be obtained elsewhere in America. If a Percheron or French Coach Stallion is needed in your locality, correspond with us, with the view of our sending a salesman to place one, with your assistance. Reliable men who thus demonstrate ability in this line of work have no difficulty in arranging to represent us in the selling of stallions. Catalogue sent on application. DUNHAM, FLETCHER & COLEMAN, WAYNE, DU PAGE CO., ILLINOIS.

When writing advertisers, please mention this paper.



SHEEP.

Anoka Flocks Cotswolds and Rambouillets. Foundation for flocks a specialty. Correspondence and inspection invited. HE0. HARDING & SON, WAUKESHA, WIS.

McFADDEN BROS., WEST LIBERTY, IOWA. Breeders of PRIZE-WINNING Shropshire Sheep

Choice lot of rams and ewes—both Canadian and home bred—for sale. Can supply car lots. Write for our low prices.

George Allen, IMPORTER AND BREEDER OF SHROPSHIRE SHEEP, SHORTHORN CATTLE For Sale—100 Rams and 100 Ewes. Greatest winner of any Shropshire breeder in America. Address ALLERTON, VERMILION Co., ILL.

...A Bargain In... SHROPSHIRE.

80 head of registered ewes, bred to imported rams; 15 head of high-grade ewes, bred to a good registered ram; 6 head of English imported ewes, bred by Hardin and Minton; 45 head of lambs, rams, and ewes from imported sires; 40 head of 1- and 2-year-old rams; 4 head of yearling rams from imported sires and dams; also 3 head of ram lambs from same; 2 head of yearling ewes and 3 head of ewe lambs from imported sires and dams. These sheep must be sold before March 1. Write your wants at once and get bargain prices. The flock will go at a very low figure to a quick buyer. G. C. HAYWARD, R. F. D. No. 3, Tama, Iowa.

LIVE STOCK AUCTIONEERS.

CAREY M. JONES, Live Stock Auctioneer Davenport, Iowa. Have an extended acquaintance among stock breeders. Terms reasonable. Write before claiming date. Office, Hotel Downs.

Live Stock Auctioneer.

COL. J. N. HARSHBERGER, Lawrence, Kansas.

Special attention given to selling all kinds of pedigreed stock; also large sales of graded stock. Terms reasonable. Correspondence solicited. Mention Kansas Farmer.

Jas. W. Sparks, LIVE STOCK AUCTIONEER MARSHALL, MO. Posted on pedigrees, quality and values. Am selling for the best breeders in America. Terms very reasonable. Write before fixing dates.

Lafe Burger Wellington, Kans.. LIVE STOCK AUCTIONEER SALES MADE ANYWHERE. I am booked for some of the best combination sales of high-class stock held in America. Posted on pedigrees and individual merit. Wide acquaintance with breeders in Kansas, Oklahoma and Texas. Wire or write for dates.

R. L. HARRIMAN, Live Stock Auctioneer Bunceton, Mo.

SALES Made Everywhere. Thoroughly posted and up-to-date on breeding quality and values. Have a large acquaintance among and am selling for the best breeders in the country. Terms low. Write for dates.



J. M. SARE, General and Fine Stock Auctioneer. Twenty-five years experience; best of reference. Farm sales a specialty. Terms reasonable. Correspondence solicited. This is a profession—get salesmen who understand their business. If your family is sick the best doctor is the cheapest. J. M. SARE, Auctioneer, Phone 301. 534 Kansas Ave., Topeka

THE WILLOWDALE BERKSHIRES

ROYAL BARON 58846, the Greatest Show Boar in the World, at head of herd. Home of the Winners. Young Stock of All Ages For Sale. G. G. Council, WILLIAMSVILLE, ILL.

# STALLIONS.

IAMS' October, 1902, importation of black Percherons, Belgians, and Coachers was the largest ever made west of the Missouri River. His stallions of big size, quality, finish and extremely low prices are propositions that will make you his buyer. If you can pay cash or give bankable note, you will sure buy stallions of Iams. Only man in the United States that imported only black or bay stallions. He has just imported

## 63--STALLIONS--63

Shipped to New York by fast boat, then by Fargo Express, special train from New York to St. Paul, Nebraska. Iams' big barns are full of big, black, ton stallions. He is just finishing a new barn 36x100 feet. Iams' horses are the sensation of the town. Visitors through his barn and say: "Never saw so many big black stallions together." "They are larger, bigger bone, more finish than ever before;" "But Iams is progressive;" "He buys them larger and better each year;" "He makes prices that makes the people buy his horses;" "Iams has a horse show every day, better than State fairs." He has on hand over

## 100-Black Percherons, Belgians and Coachers-100

3 to 6 years old, weight 1,600 to 2,500 lbs. More black Percherons, ten stallions, largest French horse show winners, more government approved and stamped stallions of any one importer in the West. Iams speaks French and German; needs no interpreter, no buyer, no salesman; no two to ten men as partners to share profits. His buyers get middlemen's profits and salaries. Iams buys direct from breeders. This with his twenty years' experience secures the best. All the above facts save his buyers \$600 to \$1,000 on a first-class stallion and you get a first-class horse, as only second rate stallions are peddled by sleek salesmen to be sold. Good ones sell themselves. It costs \$600 to \$800 to have a salesman for a company and sell a second rate stallion. Form your own companies. Go direct to Iams' barns. He will sell you a better stallion for \$1,000 and \$1,200 than others are selling at \$2,000 and \$4,000. Iams pays horse's freight and his buyer's fare. Good guarantees. Barns in town. Don't be a clam. Write for an eye opener and finest horse catalogue on earth.

# FRANK IAMS,

St. Paul, Howard Co., Neb. On U. P. and B. & M. Rys.  
References: St. Paul State Bank, First State Bank, Citizens' National Bank.



## Spot Cash Talks. Write S. A. SPRIGGS

WESTPHALIA, ANDERSON CO., KANS., and see what it will do if you want a Registered Percheron or Coacher or a big, black, heavy-boned Mammoth Jack or Jennet. All stock guaranteed as represented.



P. S.—A few high-grade Stallions very cheap.

### COMBINATION SALE

## Percherons, Shorthorns, and Poland-Chinas.

J. W. & J. C. ROBISON, TOWANDA, KANSAS,

Will sell a draft of 60 head from their noted herds. Among the horses they will include most of their 1902 show herd, which won every first prize competed for at Missouri and Kansas State Fairs this year. Don't forget the date—February 3, 4, and 5, 1903, at Wichita, Kans. February 3, J. W. & J. C. Robison and Snyder Bros. sell 50 Percherons and Shire stallions and mares. February 4, J. W. & J. C. Robison, Snyder Bros., and G. D. Stratton, sell 60 Shorthorns. February 5, Snyder Bros. sell 60 Poland-Chinas.



## WILLEMORE STOCK FARM

IMPORTER AND BREEDER OF

## German Hanoverian and Oldenburg Coach Horses

In order to make room for stallions, will sell 30 mares from 1 to 3 years old, at a bargain. Telephone 292.

Best Terms and Long Time Given Responsible Parties.

Take Washington Park Car to the Farm.

Stallions of all ages for sale. Both imported and home bred. Prize-winners both in Europe and America.

Wm. EATON MOORE, Prop., SPRINGFIELD, ILL.



## America's Leading Horse Importers

Ours were the Favorite Percherons at the recent International Live Stock Exposition, Chicago. Five of our importation won First Another one of ours won Championship.

Our stallions won 10 out of a possible 17 prizes. Our French Coach Stallions won Every First prize at the great Chicago Horse Show.

With our Percherons and French Coach Stallions we won Every First at the Iowa State Fair, Kansas State Fair, Kansas City Horse Show, Central South Dakota State Fair, and Ohio State Fair including Grand Sweepstakes all draft breeds competing.

In France our horses were equally successful in the show ring, fifty of them being prize-winners in the two leading shows.

We Import More and Therefore Can Sell Cheaper Than Anybody Else.

McLAUGHLIN BROS., COLUMBUS, OHIO.

Emmettsburg, Iowa; Kansas City, Mo.



## Lincoln Importing Horse Co.

Percherons, Shires, German Coachers.

Last importation received Oct. 14, 1902

Write or wire.

A. L. Sullivan, Mgr., Lincoln, Neb.



## M. L. Ayres' Percherons

My October importation now in my Shenandoah Barn. 100 REGISTERED PERCHERONS on the farm; 75 STALLIONS. Most of them ton horses. Come and see them.

M. L. AYRES, SHENANDOAH, IOWA.



## Draft Stallions.



## Percherons, Shires, and Belgians.

60 Head to Select From—ALL IMPORTED BY US AND GUARANTEED....

\$1,000 buys a good one from us this fall. It pays you to buy one now as you get him cheaper and keep out competition. Don't pay a big price for a horse, but come and see ours and get a good one for less money than a small importer can possibly sell for. Our stables are across the road east of the Burlington Depot.

WATSON, WOODS BROS. & KELLY, Lincoln, Nebraska.

## SOLDIER CREEK HERDS OF HEREFORDS, SHORTHORNS, POLLED SHORTHORNS

SERVICE BULLS:

HEREFORDS—Columbus 17th 91384, Elvina's Archibald 75998, Jack Hayes 2d 119761, Jack Hayes 3d 124109. SHORTHORNS—Jubilee Stamp 126017, Orange Dudding 149469. POLLED—Scotch Emperor 183848, Ottawa Star 118109. Herds consist of 500 head of the various fashionable families. Can suit any buyer. Visitors welcome except Sundays. Address JOSEPH PELTON, Manager, Belvidere, Kiowa County, Kansas.



## STEELE BROS., Belvoir, Douglas Co., Kans

Breeders of SELECT

## HEREFORD CATTLE

Young Stock for Sale. Inspection or Correspondence Invited

## Scott & March, Breeders of Pure-bred

# HEREFORDS.

BELTON, CASS COUNTY, MISSOURI.

BULLS In Service: HESIOD 29th 66304, Imp. RODERICK 80155, MONITOR 58275, EXPANSION 93662, FRISCOE 93674, FULTON ALAMO 11th 83731.

25 miles south of Kansas City on Frisco; Ft. Scott & Memphis; and K. C., P. & G. Railroads.

## FOR SALE--Sixty Shorthorn Bulls

35 Registered, Balance High-grades, and all Red.

P. S. DUNCAN, Perrin, Clinton County, Missouri!

## GLENDALE SHORTHORNS

Imp. Prince Lovely 155880 and Scotland's Charm 127264 in service. Fifteen young serviceable bulls for sale. One extra good young Scotch bull, sired by Imp. Royal Favorite 140612, dam Imp. Favonia. Also 50 heifers and young cows mostly bred, some with calves by side. Visitors always welcome. Long distance phone at farm.

C. F. Wolf & Son, Ottawa, Kansas.

## SILVER CREEK SHORTHORNS.

The Scotch bull, Gwendoline's Prince 130913, in service. Also the imported Scotch Missie bull, Aylesbury Duke. 100 head of the best Scotch, Bates, and American families.

J. F. Stodder, Burden, Cowley Co., Kas.

## Pearl Shorthorn Herd Bull For Sale.

I now offer for sale, my great Cruickshank herd bull, Lafitte 119915, bred by W. A. Harris, got by Royal Knight 117203, out of 16th Linwood Lavender Vol. 38. Address

C. W. TAYLOR, PEARL, DICKINSON COUNTY, KANSAS.



## Closing Out Rome Park Poland-Chinas and Berkshires

Strictly choice show animals of Gilt Edged breeding. Established 20 years. For Sale—100 sows and gilts bred and not bred, 20 short yearlings and aged boars. Summer and fall pigs of all ages. Reduced prices before sale.

T. A. HUBBARD, ROME, SUMNER COUNTY, KANSAS.

C. M. Irwin.

S. C. Duncan, Mgr.

## ELM BEACH FARM, WICHITA, KANS.

BREEDERS OF

## Poland-China Swine

We have recently bought out the great R. S. Cook Champion Herd and combined same with the Elm Beach Herd, making us in a position to furnish swine of the highest grade. Poland-Chinas of all ages and either sex for sale. Write or come and see us. Farm is four miles north on Arkansas Avenue.....





# PERCHERONS.

HENRY AVERY & SON,  
Wakefield, Clay Co., Kans.

We claim to have owned and used a better class of Herd Sires than any other breeder in the United States. When you write us we will send you a list of them.

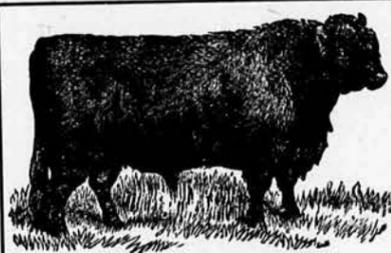
Young Stock For Sale.

## PUBLIC SALE

...OF...

# GALLOWAYS

DENVER UNION STOCK YARDS, FEB'Y 25, 1903



On the last day of the Denver Fat Stock and Feeder Show, Wednesday, February 25th, the undersigned will offer for sale at Public Auction a select lot of 48 head pure-bred and Registered Galloway Cattle from the best herds of this breed in the country, including 24 Cows and Heifers, all bred or calves at foot. For Catalogue or information, address any of the undersigned.

W. G. McCANDLESS & SONS,  
Cottonwood Falls, Kans.

S. M. CROFT & SONS,  
Bluff City, Kans.

G. W. LINDSEY,  
Red Cloud, Nebr.

**Galloway Cattle are the Ideal Cattle for the Mountains and Western Range. Black Cattle Beat the World.**

## ..PUBLIC SALE..

....OF....

# REGISTERED SHORTHORNS

FROM THE

Blue Grass Herd of J. S. McIntosh  
Eudora, Kansas.

To be held at Manhattan, Kansas,  
Monday, February the 16th, 1903.



A Choice and Select draft of 50 head of young stock selected out of a herd of 135 head. The offering consists of 47 Cows and Heifers and those of breeding age will have calves at foot or safe in calf to the noted Scotch herd-bull, Color Bearer 127045. Three bulls of serviceable age, splendid individuals, are also included in the offering. Of the 35 cows, 28 will have calves at foot. The entire female offering are splendid individuals and the cows and heifers will weigh from 1,400 to 1,700 pounds and the entire lot will average 1,400 pounds or better.

This sale will dedicate the new Sale Pavilion erected by C. P. Dewey & Co., at Manhattan. For Catalogues, address

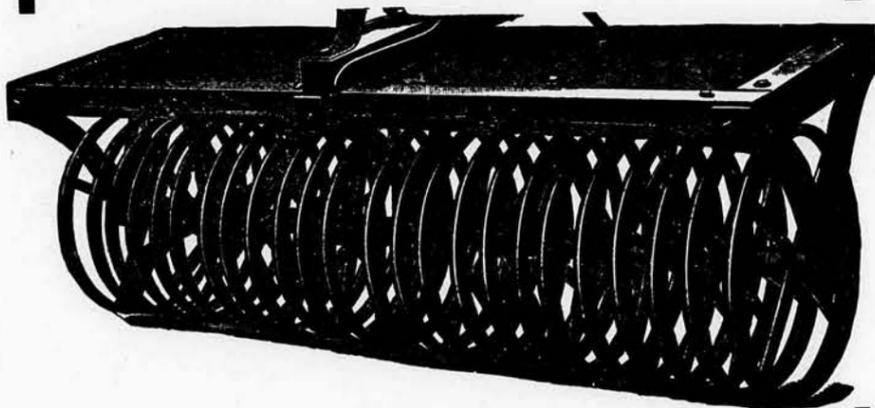
**J. S. MCINTOSH, Stock Yards, KANSAS CITY**

Auctioneers: Col. Jas. W. Sparks, Marshall, Mo.  
L. R. Brady, Manhattan, Kans.

# Drouth Defier.

The Topeka Foundry Packer

has more humps than the "Campbell," and can pack both the surface and the sub-surface.



Patent applied for.

Nothing better for putting the ground in fine condition for seed-bed.

Write for Prices and Circulars.

**Topeka Foundry,**  
Topeka, Kansas.

## POSTS

We will save you money on your Telephone Poles or Fence Posts or any kind of Lumber or Building Material. Write us for wholesale prices on White Cedar Posts and Poles DELIVERED AT

## POLES

YOUR STATION, freight paid. Send us your house and barn bills for estimate, free of cost. We will save you the middleman's profit. Price Guide on request.

South Chicago & Calumet Lumber Co., 951 Harbor Avenue, Chicago, Ill.

*The Topeka Business College*  
Largest School of Business in Kansas

Large School—Reasonable Rates—Good Positions—Catalogue Free—Address L. H. Strickler, Topeka, Kansas

## DISPERSAL SALE

Thursday, March 5, 1903,

COMMENCING AT 10 O'CLOCK,

At Topeka Fair Grounds,

—UNDER COVER—

18 Months' Credit on most of the offering

...R. I. LEE...

The Most Successful Breeder in the West, sells all of his

## High - Bred Horses.

54 HEAD—16 STALLIONS a 1 standard and registered. All bred in the purple of trotting blood for from four to six generations and represent 30 years successful selection. Most of the offerings are 1 same as Maxine (4), 2:08 1/4, fastest trotter for age in 1902. Horses exhibited day before the sale. Send for Catalogue to

**R. I. LEE, WANAMAKER, KANSAS.**

MR. L. H. BEAN, RAVENNA, OHIO, AUCTIONEER.

B. C. FOX.....

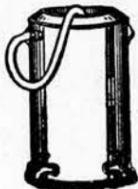
D. F. Logan.

## FOX & LOGAN.

WILL SELL AT OUR LIVERY STABLE IN DANVILLE, KENTUCKY,

On March the 4th, 1903,

35 head of Native-bred Kentucky Jacks, also a few well bred Saddle Stallions. Sale begins promptly at 10 o'clock a. m., rain or shine. Horses and mules always on hand and for sale. Call on, or address **FOX & LOGAN, Lock Box 532.** Catalogues mailed on application.



## Smith Cream Separator

The first on the market that does not mix the milk and water. Others are imitations. Beware of these and mix-water separators. If you want the best FARM SEPARATOR ever placed on the market, and sold under a positive guarantee, get the old reliable (SMITH.) No labor, more cream, better butter, and milk fine. Agents wanted. Mention the Kansas Farmer.

**Smith's Cream Separator Co.,** East Sixth and Court Ave., Des Moines, Iowa.



### A Grand Opportunity for Buyers of Herefords.



**YOU WILL BE THERE  
AT KANSAS CITY, FEBRUARY 25-26, 1903**  
if you are a discriminating buyer of

# REPRESENTATIVE AND IDEAL..... HEREFORDS.

**"The Kind That Has Made the 'Whiteface' Famous."**

This grand offering of **140 Hereford Cattle** consists of 90 Cows and Heifers, safely in calf to noted herd bulls or with calves at side; also 50 Bulls of serviceable age. The best produce of some of the best herds in America, namely:

Gudgell & Simpson, Independence, Mo., 30.  
C. A. Stannard, Sunny Slope, Emporia, Kans., 33  
Scott & March, Belton, Mo., 33  
Frank Rockefeller, Belvidere, Kans., 26.

Mrs. C. S. Cross, Emporia, Kans., 2.  
W. B. Wadell, Lexington, Mo., 3.  
Fritz & Shea, 6; Geo. B. Baker, 3.  
Logan B. Chappell, 1.



This sale affords a great opportunity for the BREEDER, the RANCHMAN, and the GENERAL FARMER, to secure foundation stock of females, also bulls for herd-headers from the most famous sires and dams in America. Animals can be secured cheaper than at private sale with the best herds from which to make selections.  
The consignments for this sale are the best young cattle from the herds of the above-named owners and every animal sold will be a good one. You are cordially invited to attend this sale. For Catalogue, address



**C. A. STANNARD, Emporia, Kansas.**

Auctioneers: Cole. F. M. Woods, R. E. Edmonson, J. W. Sparks, Carey M. Jones.

## GRAND DISPERSION SALE! (TO DISSOLVE PARTNERSHIP) OF THE VINEWOOD HERD OF REGISTERED **SHORTHORN CATTLE**

PROPERTY OF **D. K. KELLERMAN & SON,**

To be sold at Auction at Fine Stock Sale Pavillon, Kansas City, Mo., Feb'y 17, 1903.

SIXTY-SEVEN HEAD, besides some young Calves at foot, 52 Cows and Heifers and 15 Bulls. This herd is in the best possible breeding condition and is noted for the great size, substance, and quality of the cattle comprising it. In breeding they are straight Cruickshank and Cruickshank-topped Rose of Sharon, Matilda, Flora, etc. Send for Catalogue to GEO. F. KELLERMAN, Mound City, Kans. Auctioneers—Cols. Woods, Sparks, and Harriman.

### ....PUBLIC SALE....



#### OF 42 HEAD OF **PERCHERON STALLIONS AND MARES**

February 20, 1903,  
AT MILAN, MO.

From Mt. Vernon Stock Farm the home of REGINA, the Champion mare of all ages at the International Show at Chicago, December, 1902. We don't boast of having the largest herd in America, or that we import all the prize-winners from France; but we do boast of being an American breeder. We boast of breeding right here in America, the kind that defeats the imported ones, and break all previous records. We boast of raising the useful kind that know how to work and defeat the household kind that never looked through a collar. We boast of having as good as anybody, and we invite you to attend our sale and verify this statement. Terms, cash; but arrangements can be made before the sale, by responsible parties, for private terms. Send for Catalogue. S. S. SPANGLER, Milan, Mo

**REGINA,**  
The champion Percheron mare, all ages, at the International Live Stock Exposition at Chicago, 1902. Owned by S. S. Spangler, Mt. Vernon Stock Farm, Milan, Missouri.

### REGISTERED JACK AND HORSE SALE

Thirty-five head of Registered Thoroughbred, and Standard-bred Stallions, Mares, Colts, Jacks, Jennets, and Work Horses. The Jacks are 15 hands or better. Time or cash. **OXFORD, KANS., WEDNESDAY, FEBRUARY 18, 1903, at 10 o'clock a. m.** For particulars, address **J. M. Buffington, Oxford, Kans.**

### Cottingham & Sons' 7th Annual Horse Sale

will be held February 24 and 25, 1903, at their Stock Farm, McPherson, Kans., at which time we will sell 60 head of HORSES, consisting of Draft Horses, Single and Double Drivers, and Brood Mares, one imported Cleveland Bay Stallion, 50 head of Poland-China Hogs. Cottingham, Drake, and Grant will sell at same time 11 head of young Shorthorn Bulls. **W. H. COTTINGHAM & SONS, McPherson, Kans.**

### We Sell Direct to the Planter

Saves Agent's Commission of 40 Per Cent. Certificate of Genuineness furnished. Send now for Illustrated Catalogue free, if you need TREES of any kind. Freight prepaid. Packing and Boxing Free. Address **Wichita Nursery, Wichita, Kans.**