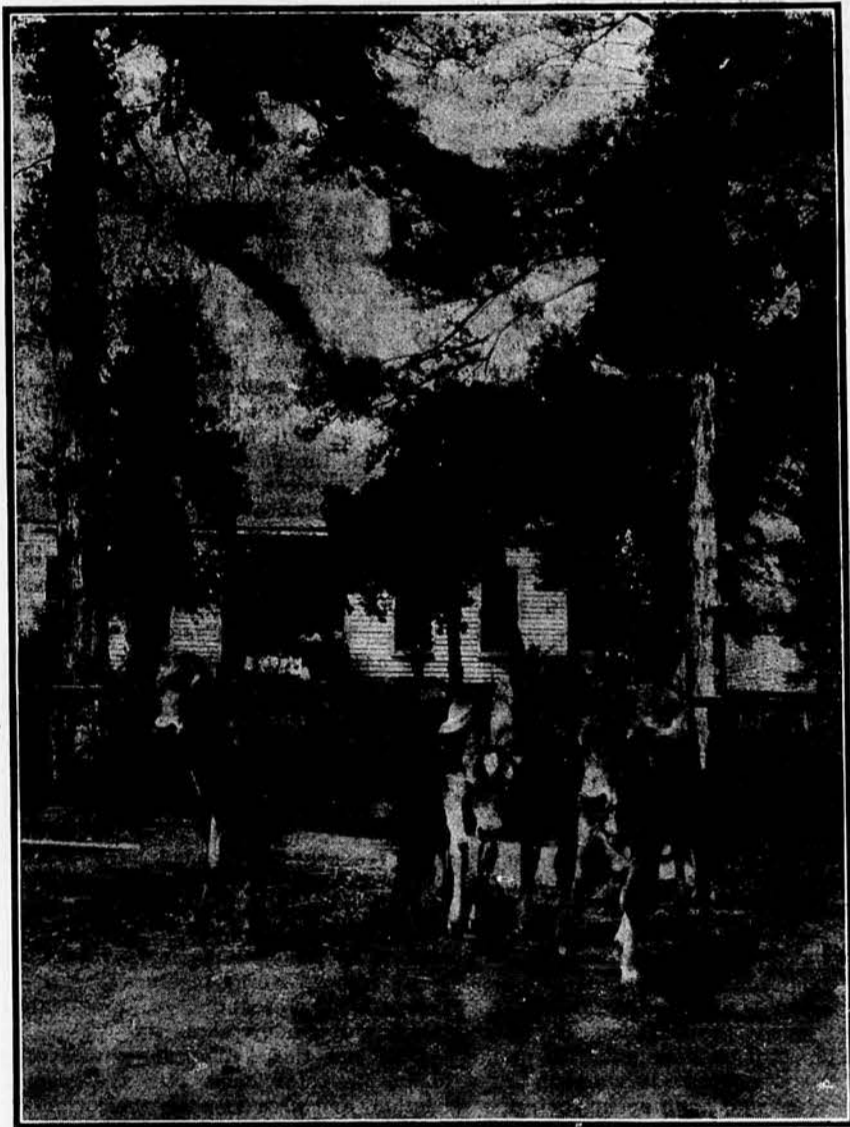


KANSAS FARMER

Volume XLVI. Number 8

TOPEKA, KANSAS, FEBRUARY 20, 1908

Established 1863. \$1 a Year



FUTURE MONEY-MAKERS.



Principal Contents of this Week's Paper

Alfalfa for dairy cows.....	245
Bulletins, farmers'.....	248
Butter, the panic and the price of.....	219
Butter will not gather.....	245
Calf instead of buying it, raising the.....	242
Calves, skim-milk.....	229
Cattle, dual-purpose.....	225
Club program.....	248
Cream, grading.....	218
Creameries, centralized or cooperative.....	227
Dairy farming—why and how.....	232
Dairying in Kansas.....	218
Dairy phase of agricultural economics, the.....	240
Dairy short course at Manhattan, the.....	245
Dairy, the farm, skimming station, hand separator, and the cooperative and centralized creameries.....	238
Difficulties, overcoming.....	247
Green bugs, fight the.....	219

Him, like (poem).....	247
Hog-tight fence along the railroad.....	219
Individuality.....	246
Know what you are buying.....	219
Live, how to.....	246
Milking machine, the.....	219
Pedigreed stock, an equitable basis for the assessment of.....	237
Secret, my beautiful (poem).....	246
Separator and farm dairy development, the hand.....	245
Smile a little (poem).....	247
Success, the way of.....	247
Tramp, the wisdom of.....	247
Tuberculosis in the dairy herds.....	236
Trees from the State forestry plantation.....	220
Use, do not abuse.....	246
Washington, Little Johnny on G. (poem).....	247
West Side reading club.....	248

DAIRYING IN KANSAS

With more than fifteen thousand dairymen and an annual product of nearly \$18,000,000, Kansas may rightfully be placed among the dairy States of the Union. Her place among these States, however, has only recently been attained and receives as yet but scant recognition. It is true, however, that she has attained such a position and it is also true that her work along this line has but just fairly begun.

No better illustration of the meaning of the State motto of Kansas could be given than is shown by the history of the dairy industry in this State. Just a little more than a quarter of a century ago a few far-sighted men, realizing the possibilities afforded by her mild climate, her abundant and cheap feeds, and her accessibility to good markets, pointed out the desirability of the dairy industry and organized the State Dairy Association as the most effective means of securing the results in view. Following the organization of this association came a very general and wide-spread interest in dairying in this State. Enthusiasts figured and published their figures. Other enthusiasts invested money and lost it, and one enterprising but unscrupulous company of manufacturers took advantage of the situation and sold to companies of farmers in many parts of the State complete creamery equipments at four or five times their value. These enthusiastic but misguided farmers were induced to invest in creamery plants when they had no milk cattle with which to supply them with the raw material and no experienced man who knew how to operate them profitably. The result was disaster and a general set-back to the dairy interest of the State.

The time had come, however, when the ranges were being fenced up and intensive was taking the place of extensive farming and something had to be done, as the old method of beef production on the range was no longer profitable. The more conservative and wiser of the enthusiasts still maintained their faith in dairying as a profitable industry for Kansas, and a general study and investigation of the problems connected with it developed and the business was started again along right lines.

It was found that it was folly to build a creamery before there were cows from which to support it and the farmers proceeded to secure the cows. It was found that the former system of hauling whole milk to skimming-stations was not only unprofitable but costly. And it was eventually found that the introduction of the hand separator would offer a solution to most of the vexed questions of the time and the result has been a constant and steady growth which has given this State a recognized position in the ranks of the dairy States.

Dairy countries are uniformly wealthy countries. The transition from ordinary farming to dairy farming is the transition from moderate returns and moderate wealth to the accumulation of surplus and even a means of luxury. It is the transition from extensive to intensive farming; from farming by the mile to farming by the acre; from farming extravagantly in which the fertility of the soil is decreased each year with the selling of the grain crop, to that kind of farming which sells a highly concentrated manufactured product only, and retains and increases the fertility of the soil. It has been estimated that the marketing of one ton of wheat which has an average value of \$20, will cost the farm \$9.35 of fertility, while the marketing of a ton of butter worth \$500 only removes from the soil 50 cents worth of fertility. The dairy products of Kansas amounted in 1897 to less than half what they are today. The figures for butter alone were 37,213,928 pounds, worth \$4,585,271 in that year, while during 1907 the figures were 43,940,531 pounds, worth \$9,705,423. The dairy products of Kan-

sas are the most valuable with the exception of corn and wheat alone, and if the present growth of the industry continues it is doubtful if there is any other agricultural product which will exceed or even equal that of the dairy.

THE KANSAS FARMER has taken some pains to bring together the papers which are presented in this, our annual dairy number, but has failed to secure some on time that were promised us. It takes pride in giving the large amount of dairy information that is herein contained. Many of these papers were read at the annual meeting of the State Dairy Association and others were prepared especially for this issue of THE KANSAS FARMER. Invitations were sent to a number of farmers who are experienced dairymen to contribute to this issue but their home duties have prevented their preparing these papers in time for this issue, much to our regret.

Dairying in Kansas is just in its infancy. With our mild climate, our lavish abundance of cheap feeds, and the gradual increase in quality of our herds of milk cattle, the time is not distant when Kansas will rank among the first of the dairy States of the Union. Her methods at present are far in advance of those of other States which have won reputations along this line. We commend this our Annual Dairy Number to our readers for the amount of information on dairy subjects which it contains.

Grading Cream.

J. C. KENDALL, PROFESSOR OF DAIRY HUSBANDRY, STATE AGRICULTURAL COLLEGE.

In nearly every line of human activity, some form or system of grading or standard of quality exists. This may be in quality of man's work, or the texture and weave of some delicate fabric. On every hand, we find variations and differences, which make necessary some form of classification, based upon quality.

In the manufacture of butter, the condition of the raw material from which the product is made, governs to a marked degree the quality, and hence the value of the finished product. There are so many ways in which the quality and the worth of cream for butter-making can be injured, that it is imperative that cream be separated into grades, depending upon its purity and wholesomeness, otherwise from the conglomerate mass of cream, an inferior grade of butter will be made. Butter to command top prices, can only be made from cream which has been produced under sanitary conditions, and handled in a cleanly and wholesome manner.

Then arises the question, Is every one competent to judge as to the quality of cream, and how it has been handled? Men who have spent their life in handling cream, and are experienced in this work, can fill this office, but to the unskilled, and those indifferent as to results, we can not depend upon their judgment, to grade cream.

Among the 1,600 cream buyers in Kansas, there are very few whose training has been such as would fit them for grading cream, when it is received at the station, and since competition is so sharp, and fear of disappointing a would-be customer so strong, that the results of an arbitrary grading of cream would be very unsatisfactory indeed. A striking example of the desire of the storekeepers to please and keep the good will of their patrons, is to be seen in the present method of buying country butter. It is all bought for the same price, good and bad alike. The storekeeper does not even dare to suggest that any particular lot of butter is not good. It means the loss of a customer. While this may be a necessary evil, it certainly does not tend to improve the quality of butter, made in our farm dairies.

Since many of these same men are acting in the capacity of cream buyer, or agent for our creameries, and since

the same reasons exist for pleasing their patrons as when buying country butter, it is not to be expected that they would intentionally do anything which would be detrimental to their trade. On the other hand, if a grading system based upon an accurate test could be substituted and eliminate the personal element, it would meet with favor by all concerned.

The small creameries and the large creameries, are individually, due to the sharp competition which exists, practically powerless when it comes to demanding that only certain grades of cream shall be received. While every other company in the State may know that it is to their advantage to get a better grade of cream, the cream buyers for these companies will not let such a good opportunity pass by to obtain more cream, and hence larger commissions. As soon as any company starts to grading cream, or refuses to take poor cream, other buyers in that locality make it a special point to take any cream that the producer may see fit to bring. How, under such conditions, when good and poor cream is bought at the same price and put into the same can, can we hope to obtain good cream, which makes possible the production of a high grade of butter? So long as the farmer can sell his cream for the same price, no matter what its quality, and when he deals with a third and disinterested party, how can we hope to make improvements along this line?

The farmer prides himself on being able to get as much for his cream as his neighbor, even though his neighbor may have taken more pains with his cream, handled it in a sanitary manner, and brought it in in a sweet condition. But there is no question but what the man who is doing good work is being taxed for the careless, slipshod methods of his neighbor. If creameries do not receive good cream they can not make the best grade of butter. Now, some one is a loser thereby, and I am convinced that the farmer has to stand for his share of this loss. It is impossible for the creameries to pay the same price for this poor grade of cream, that they could pay if the cream was handled and delivered as it should be.

Competition may be the "spice of trade," but it certainly does not tend to improve the quality of cream. We have recently seen a striking illustration of this fact. Cream which was delivered in one locality, where competition was lacking, was nearly all classed as first grade. In another locality where several buyers were competing for the cream, it was practically all third grade cream.

How can these different grades of cream be established with the least friction, and give to each their rightful dues? It is apparent at once, that under existing conditions, any grading system, which is arbitrary, depending upon the time of delivery of the cream, or the judgment of the cream buyer, is entirely out of the question. The system to be adopted must be such as to give definite and accurate results, just the same as the Babcock test. Any other system of grading is sure to fail. While it is much more desirable and can be done where a man well trained in his work receives the cream, to take into consideration, together with these accurate tests, a due consideration of other most important factors, affecting the quality of the cream, it is out of the question to take them into consideration under our present system of buying cream. After all, it is not how often the farmer delivers his cream, but the condition of this cream when it is delivered. Some patrons can hold cream twice as long as others, and yet bring it in in a better condition, and be worth more when manufactured into butter.

We are using the following method of grading cream, and it is giving good satisfaction, both to our patrons and to ourselves, and we believe it has

merit to commend it to general use by the creameries of the State. Especially is this true since this system is definite as to results, and could, if adopted, be enforced by our State law:

First grade cream shall be cream containing 30 per cent or more of fat, and not more than .2 of 1 per cent of acid. Second grade cream, cream which contains 25 per cent or more of fat, and not more than .3 of 1 per cent of acid. Third grade cream, cream which does not meet the requirements of the first and second grade cream. We realize that second grade cream should also contain 30 per cent of fat, but since it is the intention of making use of the grading system to improve quality, if a material difference is made in the price of first and second grade cream, and occasionally through some mistake the test falls to a little below 30 per cent, and is otherwise in first-class condition, it is inclined to work too great a hardship on the producer. It is to meet cases of this kind that a reduction in the requirements of second grade cream was made. The main object of a grading system being to encourage and foster in every way possible the production of a high grade of cream, which would make possible the manufacture of a correspondingly high grade of butter. We can not stand still, no one would think of going backward, and there seems to be but one route left, and that is "Onward and Upward," which means prosperity to the dairy interests of the State, and a just pride in one of Kansas' leading industries.

Briefly, the equipment for grading cream consists of Faringtons' Alkaline Tablets, a flask or bottle for measuring the water, a white cup, a milk pipette, and a cream pipette. A tablet is added for each ounce of water, the quantity being determined by the number of tests to be made. When the cream is sampled for the Babcock test, an 18 c. c. pipette full of cream is placed in the cup, to this is added two 17.6 c. c. pipettes of the solution. The cup is rotated in order to mix the cream and solution thoroughly. If there is more than .2 of 1 per cent of acid present, the reddish color disappears at once. Add another pipette full of the solution, and if the color disappears, it shows there is more than .3 of 1 per cent of acid present, or two much acid to be classed as second grade. If there is not in the first case, .2 of 1 per cent of acid, or in the second case, .3 of 1 per cent of acid present in the cream, the solution will remain red or pinkish. This test requires only a few moments to make, the changes take place immediately.

Some of the advantages of a cream grading system might be summarized as follows:

First. There is a very urgent and universal demand for a better cream supply.

Second. The cream grading system serves as a just basis upon which to change the value of any lot of cream for butter-making.

Third. It costs more to care for and deliver first grade cream. It is worth more for making butter, and should command a correspondingly high price.

Fourth. A cream grading system, backed up by a reasonable difference in the price between the grades, offers encouragement for the producer, to give more care and attention to the delivery of a clean, wholesome product, and to realize returns commensurate with the extra care and expense of producing first grade cream.

Fifth. It makes possible the educational side of dairy work, since immediately there would be a demand to know how to care for cream, in order to produce first grade cream, and to realize the most out of the business.

Sixth. Cream bought on its merits is more just to the farmer. It encourages more and better dairying, and would have a tendency to build up and advance the dairy interests of the State.

(Continued on page 225.)

KANSAS FARMER.

Established in 1868.

Published every Thursday by
THE KANSAS FARMER COMPANY
 (Incorporated, January 1906).
 Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

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

OFFICERS.

President.....E. B. COWGILL
 Vice President and General Agent.....I. D. GRAHAM
 Secretary and Manager.....H. A. HEATH
 Treasurer.....JOHN R. MULVANE

E. B. COWGILL.....Editor
 I. D. GRAHAM.....Live Stock Editor
 THOS. OWEN.....Poultry Editor
 RUTH COWGILL.....Home Departments Editor

LIVE STOCK REPRESENTATIVES.

J. W. JOHNSON.....Kansas and Nebraska
 L. K. LEWIS.....Kansas and Oklahoma
 GEO. E. COLE.....Missouri and Iowa

SPECIAL AGENTS.

New York.

J. C. Bush.....1110 Potter Building

Chicago.

Stillwell Special Agency.....501-504 Unity Building

Pacific Coast.

David R. McGinnis, 211 Peoples Savings Bank Building, Seattle, Washington

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, 16 cents per agate line.
 Special reading notices, 30 cents per line.
 Special rates for breeders of pure-bred stock.
 Special Want Column advertisements, six words per line, 10 cents per week. Cash with the order.
 Electrotype should 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.
 All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

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

Address all communications to
THE KANSAS FARMER CO.,
 625 Jackson St., - Topeka, Kansas



THE MILKING MACHINE.

That the milking machine is still on trial and its net advantages open to question, is evident from remarks by Prof. A. L. Haeker at the recent annual meeting of the Nebraska State Dairy Association. Professor Haeker gave a clear demonstration of the milking machine. He told why it was not a real success and what the prospects are for another year's trial. The eight cows milked this past year lost 440 pounds of butter over hand milking. Unless the utmost care is used in cleaning the pipes, the bacterial content is increased greatly.

A rather more encouraging allusion to the milking machine is contained in a report of the New Hampshire Dairy Exhibition. The winner of the prize for quality of milk said:

"We have a herd of pure-bred Jerseys with a few grade cows. At the time the milk was sent to the dairy exhibition we were feeding ensilage, after milking night and morning, and two feeds of clover hay, one in the morning after the ensilage and another feed of hay at about two o'clock in the afternoon. The grain ration was a mixture of three hundred pounds gluten-meal, one hundred pounds Climax middlings, one hundred pounds Biles Union grain with a little corn bran. The amount of grain fed each cow varied considerably with her capacity and condition.

"The milk was drawn with a milking machine, and as fast as it was milked it was passed over a cooler and collected in a large tank, from which it was taken to the dairy in eight quart cans and bottled with the aid of a bottle filler. The samples shown at the exhibition were taken from our bottling table and were the same as the rest of the milk sold. The cream shown was taken from the night's milk, separated while warm, put up in half pint jars and cooled under water."

FIGHT THE GREEN BUGS.

In a bulletin just issued, T. J. Headlee, professor of Entomology at the Kansas State Agricultural College, discusses the green bug situation at considerable length. On account of the crowded condition of this special number of THE KANSAS FARMER it is impossible to reproduce this bulletin in full at this time. In his concluding paragraph Professor Headlee says:

"These spots where the green bugs are killing out the wheat, and where

winged forms are being constantly produced, are simply centers of contagion from which the bugs go to other parts of the same field and to other fields. The fact that such spots bear the over-wintering parasites in the swollen and blackened bodies of their victims should not deter us from treating them, for it is an easy matter to go over a small area and pick off the stalks that bear these blackened seed-like bodies, because at a touch the living green bugs will fall to the ground while the dead ones, being fixed to the stalk, will remain. This parasitized material should be gathered and strewn in other parts of the field or stored elsewhere for future reference, and the bug-infested wheat be turned under deeply with a plow, the soil being harrowed down smoothly and rolled so that none of the bugs can ever reach the surface. The other measure lies in the preservation, accumulation and multiplication of the green bug's enemies so that, in case the parasite fails to live over and the green bug appears where there are no parasitic enemies, we can introduce this friend and give it a chance to show whether it can destroy the lice for us. The experiment station is watching these matters closely and making every possible preparation to prevent serious damage from the green bug next year. The experiment station, however, needs the aid and cooperation of the people in all parts of the State in finding out where the green bugs are, and in carrying out these measures of prevention. Let every one who has a grain field keep a close watch and, whenever green bugs appear, send by mail to the station entomologist, T. J. Headlee, Manhattan, Kansas, specimens of bug-infested wheat or oats enclosed in a tight tin box or can, as well as a description of the way they work. Investigation and recommendations as to method of procedure in the particular case will follow in the shortest possible time. By cooperation and mutual understanding, we hope, in so far as possible, to prevent any outbreak of green bugs next spring and summer."

THE PANIC AND THE PRICE OF BUTTER.

The depressing effect of the late panic on prices of farm products was shared by butter, as will be seen by comparing the Elgin quotations for last winter, including October and the first half of February, with this same period this season. Following are the average quotations:

Oct. 1907.....	29.1	Oct. 1906.....	25.6
Nov. 1907.....	26.2	Nov. 1906.....	28.6
Dec. 1907.....	28.1	Dec. 1906.....	31.0
Jan. 1908.....	30.2	Jan. 1907.....	30.7
Feb. 1908.....	32.0	Feb. 1907.....	32.6

*First two weeks.

The Elgin market has dropped within the last few days, and it is not a safe guess where it will land. Market experts assign the open winter as a reason for the decline. They state that production is very great for this time of year. Possibly the accumulation of stocks that, had labor been fully employed, would have been consumed has something to do with the butter market.

KNOW WHAT YOU ARE BUYING.

EDITOR KANSAS FARMER:—What is the law of this State on buying and selling ridgel stuff, such as horses? If a man goes to a public sale and buys a ridgel horse, when not represented as such, is there any recourse to an innocent purchaser? In this case the horse was sold without recommendation. W. K. Sedgwick County.

The term "ridgel" sometimes corrupted to "riginal" and often "original," is applied to an animal only half castrated or having only one testicle. Such an animal is worth considerably less than if in normal condition. The defect, while not always conspicuously apparent, is one that may be detected by anyone accustomed to handling horses on such careful examination as the buyer of a horse ought to make unless the animal is specifically guaranteed to be sound,

FILES CURED IN 6 TO 14 DAYS.
 PAZO OINTMENT is guaranteed to cure any case of Itching, Blind, Bleeding or Protruding Files in 6 to 14 days or money refunded. 50c

Why Not Cash?

All other farm products sell for cash on delivery—why not cream? This is the way the question presented itself to us years ago and we answered by paying cash at all points where we buy. Our agents sample, test and pay cash.

If you are not within reach of one of our several hundred buying stations please write us, telling where you are located and we will arrange to handle your cream any way.

We aspire to give every cream producer a market—the best there is in the country.

We solicit correspondence of cream producers on any question pertaining to the business.

THE CONTINENTAL CREAMERY CO.

Topeka, Kansas.

and in normal condition. Very few animals are perfect in every respect. From bridle to crupper deficiencies almost amounting to blemishes are liable to be discovered on minute examination. The legs and feet of the horse are especially liable to defects. A slight cut, an unimportant wire scratch, a little contraction of the hoofs, tender feet, and many other deficiencies may be discovered on close examination, but the seller would scarcely be required to call attention to them on placing the animal in the auction ring. It would, of course, be fair on offering a ridgel, especially if the conditions were not very apparent, to state frankly the fact, and the seller's conscience might be easier about the situation when he shall face Saint Peter if he should have made sure that a ridgel would not look him in the face upon that important occasion.

It is doubtful, however, whether the omission to mention this condition of the animal would subject the seller to action under the "false pretense" statute. This law found in the General Statutes of Kansas, chapter 31, section 94, provides that "every person who, with intent to cheat or defraud another, shall, designedly, by any false pretense, obtain from any person any money, personal property, right in action, or any other valuable thing or effects whatsoever, upon conviction thereof shall be punished in the same manner and to the same extent as for feloniously stealing the money, property, or thing so obtained."

VALUABLE BOOKLET.

Spencer Trask & Co., Investment Bankers, William & Pine Streets, New York City, announce the publication of the 1908 edition of their booklet entitled "Statistical Tables." In accordance with the custom of this firm for the past twenty-five years, copies of the booklet are distributed upon application, free of cost.

The current edition comprises 84 pages and is filled with information relating to American railroad and industrial companies, together with details covering practically all of the securities dealt in upon the New York Stock Exchange, and includes a fund of information not otherwise readily obtainable.

The pages devoted to statistics of railroad bonds show the amount outstanding, the rate of interest, the interest dates, the number of miles upon which the bonds are a lien, high and low and last price in 1907 and the approximate yield. Information of the same general character is given upon the bonds of street railway, gas, electric light, and industrial companies, and Government bonds. The pages devoted to statistics of railroads give the average mileage operated, capitalization, dividends, the dates of payments, gross and net earnings, fixed charges, the range of stocks for 1907, etc. The same records are given as

applied to street railway, electric light, and industrial companies. In addition, several pages are devoted to explaining just what stocks are cumulative or non-cumulative as to dividends, and also the amount of dividends to which preferred stocks are entitled, and whether or not they are also preferred as to assets.

HOG-TIGHT FENCE ALONG THE RAILROAD.

EDITOR KANSAS FARMER:—I saw in your paper of June 6, 1907, where the railroads could be made to put in their part of a hog-tight fence. I put in my part of the fence and notified the vice president. I wrote him again and he has never answered. As it is almost spring I need the pasture for my hogs. Would be glad if I could get the fence. A. AUSTIN.

Neosho County.

The General Statutes of Kansas, Chap. 84, Sec. 84, require that in cases like that here described, the owner of the land may demand the railroad company to construct a hog-tight fence between the proposed hog-pasture and the railroad right-of-way.

Section 85 provides that if the railroad company shall neglect or refuse to build such fence, the owner or occupant of the adjacent lands may give notice in writing to build such fence within sixty days, except during the months of December and January, after the service of such notice. Such notice must describe the lands on which such fence is required to be built. Service of the notice may be made by delivering the same to any station agent of the railroad corporation.

Section 86 provides that if the railroad company after such notice shall refuse to build the fence required, the owner or occupant of the land may build the fence and may recover the value thereof with interest at the rate of one per cent per month together with a reasonable attorney's fee for the prosecution of any suit to recover the same.

Some railroads are very negligent about constructing such fences. When patience shall have "ceased to be a virtue" it will be perfectly proper to apply the remedy provided by the law. It is important, however, to observe the statute with reference to giving notice.

It should be known to the credit of Kansas that her breeders of Berkshire swine now rank as leaders in the production of the highest type of this splendid breed in America. Public sales held by Kansas Berkshire breeders attract the best breeders from all parts of the Union and Kansas, last year, ranked sixth in the production and sale of Berkshires in this country. The next big Berkshire events will be the sales of T. F. Guthrie, of Strong, on March 3, and Chas. E. Sutton, of Lawrence, on March 4. Last year Mr. Guthrie took first rank in Kansas and

ninth in the whole United States and he thinks that, with a little concerted effort backed by the great Black Robin Hood blood lines which both he and Mr. Sutton have in such abundance, Kansas can be made to take the first rank as a Berkshire breeding State. She can and will.

This number of THE KANSAS FARMER is given over almost exclusively to the subject of dairying. The growing importance of the dairy interests and their intimate relations with all kinds of farming justifies this special attention. While some of the papers presented are rather long, the editor has mitigated this evil as much as possible by printing sub-heads throughout the longer articles. These will enable the reader, who may not have time to follow an entire discussion, to select such portion as may be most important to him. It is the belief of the editor, however, that every line in this number is well worth reading, and that the paper should be filed for future reference.

It is stated from France that a new breed of cattle is in progress of creating in that country by crossing the Holland and Breton cattle, the former famous for the great quantity of milk they give and the other for the large per cent of butter-fat. It is said that the Bordelaise race, whose first herd-book appeared in 1889, combines the excellence of its two progenitors. Its most characteristic external mark is the black-and-white tiger pattern covering the body. In the pure-bred the head is entirely black. The name comes from the city of Bordeaux, the metropolis of the region where the new race is bred.

According to the February report of the Statistical Bureau of the United States Department of Agriculture over fifteen per cent of the value of all live stock in the United States is in milch cows. Nearly fifty-three per cent is in horses and mules. In Kansas the cows constitute about thirteen per cent, while the horses and mules are credited with a little less than fifty per cent of the total value.

Had the recent financial disturbance been prolonged there would have been developed a greatly increased affection for the cow on account of her ability and willingness to "tide over" until the quieting of financial waters. In any case she is a mighty good friend and efficient help in time of trouble.

TO THE MAN BEHIND THE COW.

Any subscriber to THE KANSAS FARMER, whether new or old, who sends us \$1 before March 1, 1908, for subscription or renewal, will be presented with one year's subscription to Kimball's Dairy Farmer if he so desires. Kimball's Dairy Farmer is published at Waterloo, Iowa, in the heart of the dairy district. It is a live and up-to-date paper for those interested in dairy farming, and is well worth the price asked for its subscription.

If you desire this excellent paper order at once by sending your dollar to The Kansas Farmer Company, Topeka, Kans.

Miscellany

Trees from the State Forestry Plantations.

Can you tell me if the State Forestry Station will furnish forest trees free to settlers in Western Kansas on application? I understand the one that receives them pays the freight. Whom shall I address to get information? Mrs. C. WOODLEY.

Stanton County.

The State has two stations, one at Ogallah in the north part of the State and the other at Dodge City. Each commissioner issues trees free of charge to any resident of the State of Kansas, who may apply for the same.

WHAT CAUSES HEADACHE.
From October to May, Colds are the most frequent cause of Headache. LAXATIVE BROMO QUININE removes cause. E. W. Grove on box 250.

in such quantities and under such restrictions as may in the judgment of said commissioner be advisable. All applicants pay freight or express charges. The applicant should give shipping points as well as postoffice address, and the second year should report to the commissioner the per cent that have died of each variety; also the kind of soil and subsoil, so the commissioner can determine what kinds of trees are best suited to the locality to which they are sent. Trees will be shipped in April or sooner if weather will permit.

H. C. COOPER, Commissioner.
Dodge City, Kans.

Field Notes

LIVE STOCK REPRESENTATIVES.

J. W. Johnson.....Kansas and Nebraska
L. K. Lewis.....Kansas and Oklahoma
G. E. Cole.....Missouri and Iowa

February 28 is the date of Mr. B. N. Welch's Duroc-Jersey bred-sow sale at Waterville, Kans. Mr. Welch had February 4 as the date, but owing to the severe storm of that date he was compelled to postpone it and fixed February 26 as the date. There were several there as it was, and by request Mr. Welch turned the red beauties into the sale ring for inspection. Everyone was enthusiastic about them. Everything with one or two exceptions is bred to farrow after the first of March, so that there will be no trouble on that score. For breeding and other information you had better drop him a card at once or consult his advertisement which appeared in THE KANSAS FARMER in the issues of January 23 and 30. Also field notes in those issues. The offering is one of merit all the way through.

An offering of bred sows that are bred in the purple and have the desirable size, with it is the offering of Geo. E. Smith, Agenda, Kans., which will be sold at Clyde, Kans., on March 3, because of the better railroad facilities. Twenty-six are big, smooth, well-grown out spring gilts sired by notable boars. There will also be a few tried sows. The offering is really of a very high class, and some of the most popular breeding is represented in the offering. Catalogues are ready, and will be mailed upon request. Be on hand and remember the date is Tuesday, March 3, and while Mr. Smith's postoffice address is Agenda, Kans., the sale is to be held under cover in Clyde, Kans. Send bids to J. W. Johnson, who will be in attendance.

The arrival of Messrs. Dunham & Fletcher's importation of February 5, as stated in their advertisement on page 251 marks the high tide in the draft and coach horse business up to date. This importation is the best in average quality of any made up to this time and comprises the tops of the twenty leading breeding establishments of France. Every animal was individually selected on his own merits and no lot of horses heretofore imported can show such bone, size, and quality as are here assembled. Nearly every animal was approved and subsidized by the French Government for the season of 1908. No buyer can afford to invest until he has looked this lot over.

This firm has a reputation throughout America for the high quality of their stock and the fairness of their business methods, established by forty odd years of successful and honorable dealing. Considering these things and their very attractive offerings, prices and terms, it is no wonder that their business during the last six months has been nearly twice as great as in any similar period in their history. Visit them.

Guthrie Berkshires.

We wish to call the attention of our readers to the public sale of Guthrie Berkshires, which will be held at Strong City on March 3, 1908. Most of us had the pleasure of meeting Mr. Guthrie and seeing his fine hogs at our State Fair last fall, where Mr. Guthrie was unusually successful in showing his hogs. The quality of Mr. Guthrie's herd was demonstrated by his record in the prize ring, at our State Fair, where he captured four blue ribbons, out of a possible five, and that these four secured a champion, a grand champion, and two reserve champions. The Guthrie Berkshires were the center of attraction among the swine exhibit at Hutchinson, as they were everywhere else around the circuit.

Mr. Guthrie, last year, sold more Berkshires than any other man in the State of Kansas, and stood ninth in the list in the United States. This is a very strong showing, especially when we take into consideration that a large part of this business was reorders by old customers. This means that Mr. Guthrie is breeding the kind of Berkshires that the people want, and the kind that will make good, and the kind that will send customers back to him for new orders.

Mr. Guthrie showed the same hogs that he had at the Hutchinson State Fair, at the Pueblo State Fair, the St. Joseph Interstate Live Stock Show, and the American Royal, and went home with a record almost as good all around the circuit, as that won by his two hogs at Hutchinson.

We take pleasure in calling attention to one particular thing in regard to Guthrie Berkshires. Mr. Guthrie is paying more attention to breeding hogs for the farmer than for the breeder.

Too many hogs are retained in herds, simply on account of their pedigree, which lack in individuality. Mr. Guthrie believes that this is all wrong, and as the ultimate end of the hog is the pork barrel, that is what we should breed him for, and then sell to the breeders only the tops of all this, and put the rest in the pork barrel as quickly as possible. The only way to carry this out properly is for the breeders themselves to pork every animal which does not come up to a certain standard. It would not take very long to put the hog on the same basis with the other pure-bred animals. If we pork everything but the good ones our customers could not buy anything but the good ones. If we keep nothing but the good ones ourselves, the percentage of good ones to come will be very largely increased. In other words, the more good ones we keep, the more good ones we can raise, and the more good ones we raise, and the more poor ones toilers will buy, and the more good we pork, the more good ones our customers they will raise therefrom, with the bank account always on the right side of the ledger.

Mr. Guthrie's March sale will consist of fifty head of Black Robinhood sows and gilts, including about twelve tried sows, and the balance gilts ready to farrow their first litters. They are offered in a practical every-day working condition, not fat enough to sell for the most money, but in just the right condition to go out and farrow a big, strong litter of money-makers for the customer. Too often sale hogs are put in too high flesh, and as a result, buyers sometimes have poor luck. Mr. Guthrie is trying to avoid this, and is offering these sows in the condition which he considers just right for practical every-day business. This will not make him so much money just now, but it will make him more money in the long run, in that the buyers of these animals will have more success with the litters, and with the sows themselves, and will be more ready to come back to Mr. Guthrie for more hogs.

This offering will be bred to some of the greatest boars in the United States, namely, Berryton Duke, the sire of the grand champions Ivanhoe and Berryton Black Girl, and the great Revelation that was exhibited by Mr. Guthrie at Hutchinson in September. Revelation himself is the sire of the prize winners, Silver Tips Revelation, Silver Tips Revelation 23d, who stood first and was reserve junior champion at Pueblo, and a world of other stuff equally as good. Sir Masterpiece, a grandson of the great Masterpiece, was not shown on account of a strain which he got just before starting out on the circuit, but those who have seen him, state that he would have been a sure winner in any company. Sir Ivanhoe, you will remember, as the beautiful under six months pig who stood first at Pueblo, and then went to St. Joseph, where he stood first again, defeating Kentucky, Ohio, and Wisconsin State Fair winners. General Premier is an extra good son of Lord Premier one of the most famous hogs in Berkshire history. He was shown at the American Royal in 1906, where he stood first in class, weighing 525 pounds under twelve months of age. His pigs are extra good, and this mating of Lord Premier blood and Black Robinhood blood will certainly continue to prove extra good.

We have had the pleasure of knowing Mr. Guthrie personally for many years, and wish to assure our patrons that they will receive nothing but fair treatment at the hands of Mr. Guthrie. The Guthrie Berkshires represent absolutely the Black Robinhood strain which has been so potent in building up the Eastern herds, and will do the same for our Western herds.

We urge our readers to write for catalogues and state that if unable to attend in person, Prof. R. J. Kinzer of the Kansas State Agricultural College, will attend the sale, and will be very glad to handle bids for any one who does not attend. Mr. Kinzer is an eminently fair man, and will do his best to protect the interests of the parties holding bids.

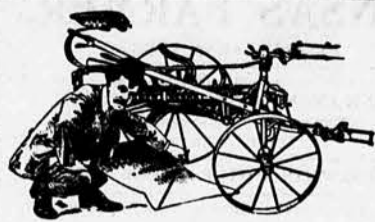
Two Important Duroc Sales.

Two great Duroc-Jersey sales that are to be held in the West this spring are the D. O. Bancroft's sale of bred sows at Downs, Kans., February 27, and the R. G. Sollenburger sale the 28th, or the day following Mr. Bancroft's sale at Woodston, Kans. Their advertisements both appear in this issue of THE KANSAS FARMER, and by reading them over carefully you will find that both sales will be made up of as choicely breeds as you have noticed in any catalogue this winter. Both of them have gone out and bought the best they could locate both in public and private sales. Both points are very easy to reach and returning the best of connections are made for almost any point you want.

Mr. Bancroft will sell at his farm, which is located a short distance from Downs, and here he has very comfortable quarters in which to hold a sale. Free conveyance from town and returning will be furnished. Those who are there to attend his sale and Mr. Sollenburger's the day following should register at the Mullin Hotel. You can leave there the next morning and go to Woodston, arriving there in good time and returning leave Woodston in the evening at 7 P. M. J. W. Johnson of THE KANSAS FARMER will be in attendance at both sales, and will handle any bids intrusted to him in a careful and painstaking manner.

The sows will be safe in pig to one or the other of the richly-bred boars that are owned by these breeders. Chief's Masterpiece, by Grand Chief, Money Musk, by Choice Chief, Advance Guard and Pilot, two sensational young boars that are to be fitted and shown at leading shows this fall, and that are called by expert hog men mighty good prospects. Also a few good ones by Glasco Chief. These breeders fully realize that they are putting up an offering that they are not going to get the money for that they should, but they have the goods and they are for sale.

The breeder that attends this combi-



JOHN DEERE
MOLINE, ILL.

Lightest Draft Plows

Over 75 per cent of the draft of a plow comes in front of the line at which the man in the illustration above is pointing.

This is the "wedge" that cuts, lifts and starts the furrow-slice to turning.

The shape of a plow at this point determines whether the draft is to be heavy or light.



All John Deere Plow Bottoms

are "narrow waisted" and shaped to enter the ground the way a thin wedge splits a log. John Deere plows are the lightest draft plows in the world.

The finest booklet of the kind ever published will be sent free to you for the asking. It is full of handsome pictures of ancient and modern plows, plowing scenes from all countries and contains an interesting story.

Write for booklet.

Ask for it by number 113. Mention this paper.

Deere & Company, Moline, Ill., U. S. A.

Texas Red Oats.

Pure seed, thoroughly re-cleaned. Will feed through any standard make of drill. Send for sample and prices.

Route 1. WARREN WATTS, Clay Center, Kans.

SILVER MINE SEED CORN

Pure-bred. Recommended by Kansas State Agril College, and grown from their high yielding ear row test breeding stock. The kind that fills the wagon box. Write for prices. Maple Hill Farms, R. R. 6, Lawrence, Kans.

\$21 A WEEK to put out merchandise and grocery catalogs. Home territory. AMERICAN HOME SUPPLY CO., Desk 10, Chicago, Ill.

nation sale and buys one or more sows will, before the first of January next, double his money and then some. These sows are in the best possible condition to do the purchaser the greatest amount of good, barring unusual accidents. J. W. Johnson of THE KANSAS FARMER, will be in attendance at this sale, and will handle bids for those who cannot attend if such bids are sent to him at Simpson, Kans., care of either party. Catalogues are ready, and you will receive one by return mail by dropping a postal card to either party.

H. W. Steinmeyer Sells Durocs March 3.

On another pages of this paper H. W. Steinmeyer of Volland, Kans., is advertising his Duroc-Jersey bred-sow sale which will be held at his farm, six miles from Alta Vista and five miles from Volland, Kans., Tuesday, March 3, 1908. Mr. Steinmeyer's offering will consist of fifty-one head representing some of the best families of the breed. Eight of these will be tried sows in the prime of their usefulness and there will be thirty-six fancy, well-grown gilts, and seven extra good fall males. The gilts are all winter yearlings but four, and they are growthy springs.

The gilts are mostly by Egypt Lad 34023, a good breeding grandson of the great Ohio Chief, and Jumbo Kant Be Beat, a grandson of the champion and prize winner Kant Be Beat. Most of these will be bred to a good breeding grandson of Golden Rule, who heads the celebrated herd of Watt & Foust of Xenia, Ohio, his dam is Full of Promise, who is a granddaughter of Kant Be Beat. This young boar is as fancy as they make them, and is one of the best prospects the writer has seen. He is a show pig, and if fitted and shown would make some of them set up and take notice.

The mature sows are choicely-bred and will be mated to Egypt Lad, and Jumbo Kant Be Beat for early farrow. The seven fall males are extra good ones, with plenty of size, bone, and finish. All of Mr. Steinmeyer's stuff has plenty of bone, good backs, fancy heads and ears and show natural feeding and fleshing qualities.

The dams of the young things in the sale are a strong, vigorous lot, with bone, size, and finish, and known breeding qualities. They are by such sires as Fancy Jumbo by Jumbo Red, Royal Top Notcher, Kansas Wonder, Royal Lad by the Lad for Me, Fancy Duroc by Ohio Chief II, Pathfinder, and other good ones.

Mr. Steinmeyer's offering has been inspected by the writer, and he can rec-

commend it as one of the good ones of the season, and a place where breeders and farmers will find quality, utility, and bargains. Buyers from a distance should go to Alta Vista, where they will find free transportation to the farm. Write Mr. Steinmeyer for a catalogue, and arrange to be his guest Tuesday, March 3.

Combination Poland Bred-Sow Sale.

On Saturday, February 23, will occur the W. A. Davidson and Thos. Collins combination sale of Poland-China bred sows. The sale is to be held at the W. A. Davidson farm, which is two miles north of Simpson, and about five miles northwest of Glasco. Breeders from a distance will find free accommodations at the hotel at either point, and also free transportation from either place to the farm where the sale will be held commencing at the usual hour, which will be about 1 o'clock.

By looking through the list of attractions, which will be found in their nice display advertisement in another place in this issue, you will readily see that the offering is as richly-bred as any that has gone through a sale ring in this part of the State this season.

Both Mr. Davidson and Mr. Collins are well and favorably known to the Poland-China fraternity of the West as men of the soundest judgment and strictest integrity, and their efforts in behalf of the Poland-China has done no small amount in popularizing the medium type of the Poland-China in the central part of the State. For information about the breeding that will be found in this offering you better look up their advertisements at once.

Kansas as a Dairy State.

Kansas with her abundance of alfalfa, wheat, and corn, her rich native pasture, pure water, and mild climate, has probably more natural advantages for dairying than any other State in the Union. Great interest is being manifested in dairying by the farmers in all parts of the State at the present time, and it will be only a question of a few years till Kansas takes first rank as a dairy State. Secretary Coburn's figures seem to indicate an average gross income of some \$13.00 a head for the milk cows of the State. This does not admit of much enthusiasm for dairying as a money-making proposition. But it must be remembered that Kansas is new in the dairy business, and has not yet had time to grade up her dairy herds.

There are only a comparatively few herds of strictly dairy cattle in the State. Of these the Braeburn Herd of registered Holsteins owned by Mr. H. B. Cowles, of Topeka, is doubtless the largest in point of numbers. It is also one of the largest producing herds in the country. The cow Wytje Josephine holds the record so far for milk production, though her claim is hotly contested by several others. She gave last year 13,459 pounds of milk, more than ten times her live weight.

This milk was sold at wholesale for 10 cents per gallon in summer, and 12 cents in winter, and brought \$181.75. Five other cows in the herd each gave a yield for the year that brought more than \$150. The herd has made an av-



Drop Me a Postal

Tell me what kind of a vehicle you need.

I want to write You a Letter

You won't have to buy. I just want to tell you about our Vehicle Factory, operated under our direct supervision, where the entire output is shipped direct to users. I want to explain the difference between our work and others; how we select and tire our wheels; how we brace the back and sides of our seats. I want to "show you" how our shafts are triple braced, and our gears triple braced, and the sills on our bodies are hardwood and larger than ordinary. I want to quote you a price and you will see that this firm has placed me in a position to give vehicle buyers a stronger and more lasting rig than made by others and this at a good substantial saving in the price. I'll also send a copy of our Special Vehicle Catalogue with illustrations in colors and containing testimonials from customers. 300,000 copies ready for distribution. It explains our Two-year Warranty and Guarantee of Satisfaction; our "if not as represented, return it" offer. You know friend, it's not Buggy talk, nor Buggy pictures, nor Buggy shine that counts—IT'S BUGGY WEAR. I can give you the greatest value in a vehicle of any factory in America. Try me. 20,000 did in 1907.

Chicago **Montgomery Ward & Co.,** Kansas City
Runabouts, Buggies, Surreys, Spring Wagons, Farm Wagons, etc.

We will save you from \$15.00 to \$35.00 a rig according to grade and guarantee Satisfaction

At Our Factory

Buggies
\$33.00 to \$90.00

Surreys
\$50.00 to \$150.00

Spring Wagons
\$39.00 and up

Farm Wagons
\$46.80 and up

Two-Year
Warranty

consisted of fifty-two head and the consignors were: Metzinger Bros., Caldwell, Kans.; B. F. Porter, Mayfield, Kans.; Samuel Drybread and Frank Drybread, of Elk City, Kans.; J. W. Gets, Freeport, Kans.; E. E. Kelley, Corbin, Kans.; Ira Rodman, Caldwell, Kans.; and R. D. Allison, Medford, Okla. While the average on this lot was only about \$18, the top on females was \$60 and on males \$49.

February 13 a consignment of thirty-five Poland-Chinas, nine Chester Whites, and one Berkshire was sold. The consignors of Poland-Chinas were: L. O. Shroyer, Bluff City, Kans.; J. R. Roberts, Medford, Okla.; Josiah Lockhart, Nardin, Okla.; E. G. Barnard, Hennessey, Okla.; J. C. Cornell, Nardin, Okla.; Chas. M. Johnston, Caldwell, Kans.; G. M. Hebbard, Peck, Kans.; and L. N. Lydick, Anthony, Kans. Albert D. Grimm, of Caldwell, Kans., consigned the Chester Whites and W. H. Lassel, of Caldwell, Kans., the Berkshires. The top price paid for Polands was \$80 and the average was about \$23. The nine Chester Whites averaged \$18 per head.

February 14, the third day of the sale, forty-one Shorthorns, twelve Herefords, and two Percheron stallions were sold. The Shorthorn consignors were: A. J. Richardson, Belle Plaine, Kans.; H. M. Harrington, Clearwater, Kans.; O. R. Smith and A. L. Bamer, of Belle Plaine, Kans.; L. E. Wooderson and O. S. Rusher, Caldwell, Kans.; S. B. Hovey, Renfrow, Okla.; and J. H. Croft, Warden, Okla. Samuel Drybread, of Elk City, Kans., consigned the Herefords, and J. U. Slade, of Caldwell, Kans., the Percheron stallions.

The last day of the sale was very stormy, which kept away a good many prospective buyers. Too much credit can not be given to Charles M. Johnston, the sales manager, for the able and efficient manner in which he handled these sales. Every comfort was provided for the consignors and their stock, and everything that a man could do was done to make these sales a success. Colonels Sparks, Snyder, and

GOLD FILLED PAIR FREE!



I Don't Want a Cent!

When I say Free I mean Free. I am actually going to give away 5,000 pairs of my famous Gold Filled Spectacles. I am doing this to introduce my spectacles into thousands of new homes.

Already over 100,000 people are wearing my Spectacles. Do YOU want a pair of genuine Gold Filled Spectacles (Guaranteed For Ten Years) exactly fitted to your eyes? If you do, simply send me your name and address and I will send you, by return mail, my perfect and complete eye tester, with which you can test your own eyes as well as the most skilled eye specialist.

Remember these spectacles are FREE, absolutely and entirely FREE. If you want a pair before they are all gone, send me your name and address today. Address **E. O. KOCH, 104 Friend Building, Kansas City, Mo.**



WITTE GAS AND ENGINES

All styles and sizes, any fuel. The most modern gas engine factory in America. Every valve verticle and self seating.

FIVE YEAR BOND GUARANTEE. Easy starting, noiseless and economical. Quick deliveries, complete equipments. Automatic wipe oilers. Get catalog K.

WITTE IRON WORKS CO., 527 W. 5th St. KANSAS CITY, MO.

son of the great show and breeding sire, Kant Be Beat.

On Saturday, March 14, Mr. Woodall will sell, at his farm three miles south of Fall River, a choice consignment of Durocs, consisting of thirty-five head. Most of these will be bred sows and gilts of good blood lines and bred to a good breeding son of the great Kant Be Beat. This offering will also include a few good spring and summer boars and their herd boar, a son of Kant Be Beat. Mr. Woodall's offering will be presented in a condition that will guarantee their future usefulness.

A more extended description of these two good offerings, together with display advertising will appear in the issues of THE KANSAS FARMER of February 27 and March 5. Watch for these and in the meantime get your name on the list for a catalogue which may be had of either consignor and arrange to attend these sales.

Lemon Ford's Polands.

At Minneapolis, Kans., Monday, March 2, Lemon Ford, the popular breeder of Poland-Chinas at that place will sell a draft of bred sows from his notable herd one mile south of town that for individuality, rich breeding and general usefulness both from the farmers and breeders standpoint cannot be duplicated this winter. The offering numbers forty head, and twenty are tried sows of more than ordinary merit. They are sows that Mr. Ford has secured from different herds of popular breeding all over the country, and some of them are sows that he has reserved for his own use but is now selling and guaranteeing to be good breeders and the best of mothers.

Mr. Ford is deservedly very popular at home, and those who know him best, and there are many of them in Ottawa County where he has lived for over twenty-five years, take much pride in what Mr. Ford is accomplishing in the way of a reputation as a breeder of high-class Polands.

Special attractions in this sale is a fine sow sired by Chief Perfection 2d, two by Highland Chief, Jr., and several others that are among the best things that will be offered in the State this season. Of the offering twenty head are immune, having passed through the disease last summer. Trouble Maker, which is a full brother to old Meddler, is one of the great herd boars doing service in this herd. He is indeed a worthy brother to the grand old sire that is known to every Poland-China breeder in the land. Mr. Ford bought him at an extremely long price, and brought him West because he is determined to build the kind of a herd that there is undoubtedly room for at Minneapolis. Another great sire is Three Cheers, which was sired by old Indiana, and is also a full brother to Indiana 2d and the outstanding boar in Mr. Copeland's herd at Waterville, Kans. Everything will be safe to the service of one or the other of these great males for an early March and April farrow. Catalogues are out, and you can get one by dropping Mr. Ford a postal card at Minneapolis, Kans. J.

W. Johnson of THE KANSAS FARMER, will attend this sale, and will handle bids for those who cannot attend. For further information about the breeding look up the fine display advertisement in another place in this issue.

Iams' Horses.

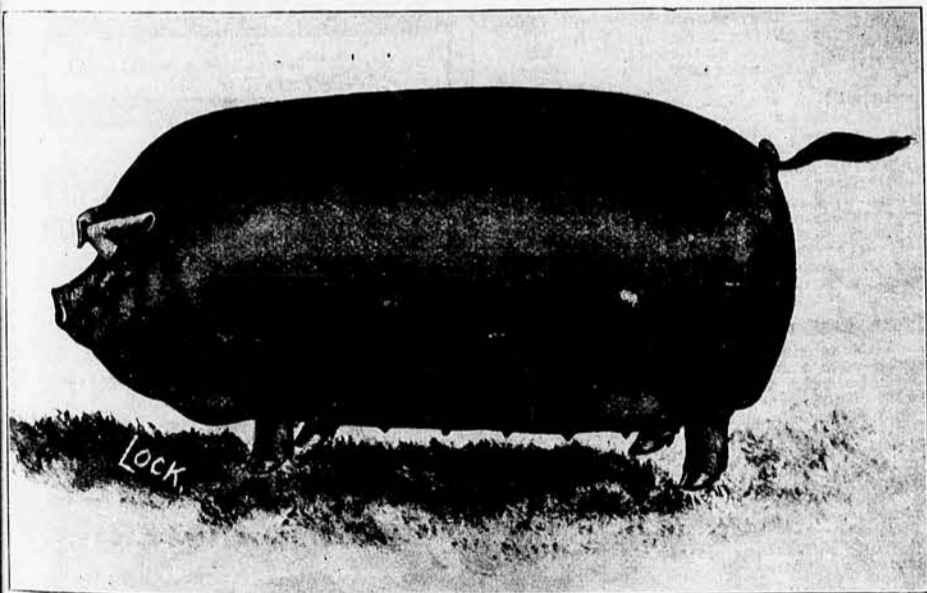
Frank Iams, of St. Paul, Neb., has certainly earned the title of the "big horse man." Not only does he import the biggest of horses but his importations are of the biggest and he is a big prize winner as well. For many years he has been the principal winner at the Nebraska State Fair which is one of the best in the West and within the last five or six years he has been "going some" at other big fairs as well. For instance, he has been a heavy exhibitor at the Iowa State Fair which is at once one of the biggest State fairs and one of the biggest horse shows in the United States, and he has made good. He did the same thing at the Illinois State Fair, which is even a bigger institution. At Nebraska he swept everything before him; at Iowa he defeated the champion Percheron of France besides getting a pocketful of other ribbons—mostly blue—while at Illinois he won on every class shown. Iams is a born horse man. He knows horses and he does his own buying in France as he speaks the language. His last importation required nine cars to transport from New York to St. Paul. He loves horses and takes pride in his but he sells them and each year he sells more than he did the year before. People from all over the West buy Iams' horses because they are good horses; because they are sold at reasonable prices and because they know Iams and have confidence in him.

Iams has just issued his new catalogue, which is one of the best we have ever seen and which contains more good pictures of good horses than any other. It contains 160 pages with 87 pictures done in the finest style of the printer's art. It is a nice book to have in your library even if you do not want to buy a stallion just now, and if you will drop Iams a card he will send you one. It sure is a beauty—just like his horses.

Chandler's Dispersion Sale.

Thursday, March 5, is the date of J. F. Chandler's great dispersion sale of Duroc-Jerseys at his farm, four miles south of Frankfort, Kans. Mr. Chandler, while a young man, is at the same time one of the veteran breeders of Duroc-Jerseys in the West. His herd has been kept up to date at all times by adding new blood of popular breeding by buying both at public and private sales from the best herds in the country. He has during the past month or six weeks decided to go out of the business and disperse his great herd of brood sows and both fall and spring gilts that he has already bred and conditioned for his own herd and most of them are bred for early March farrow.

Among the tried sows will be found three matrons by old Kansas Wonder and out of Improver 2d dams. They are



Owned by S. A. Hands, Thayer, Kans., whose bred-sow sale will be held on February 26. Note his advertisement.

erage gross income exceeding \$100 a head for the last five years with one exception, when a combination of circumstances reduced the year's average to \$82. It has only in recent years been confined to pure-bred animals, but has existed as a business dairy herd for over twenty years, during which time the greater part of the surplus stock has been shipped to Mexico, where there is a large demand for such cattle.

The Wheat Belt Association Sales.

The Improved Stock Breeders' Association of the Wheat Belt held their fifth annual sale at Caldwell, February 12, 13, and 14, as advertised. These sales were well attended by the members and a good crowd of breeders and farmers.

The offerings were good ones and were presented in good thrifty useful condition. There were some high class animals, as well as a number that were not so good among the various consignments.

Owing to the prevailing low price of market stuff, the high price of feed, and some adverse local conditions prices ruled low, and nothing that was sold brought its real value. February 12, the first day of the sale, was devoted to selling Durocs. This offering

Williams did the selling in a manner highly pleasing to all, and everything was made to bring the last cent buyers were willing to give.

Drybread and Woodall Sell Durocs March 13-14.

Samuel Drybread, of Elk City, Kans., and T. I. Woodall, of Fall River, Kans., have claimed March 13 and 14, as the date of their Duroc bred-sow sales.

On Friday, March 13, Mr. Drybread will hold his third annual sale at his Star Breeding Farm, six miles northeast of Elk City. His offering will be one of the best he has ever made and will consist of fifty-five head, forty-eight bred sows and gilts and seven fall boars. These represent some of the most fashionable and desirable families of the breed. These are exceptional individuals and will be well fitted. The females will be bred to such sires as Hanley Lad, a good breeding son of the great Hanley; Star Chief, by Ohio Chief, one of the greatest sires living or dead, and Jumbo Hustler, a

Only One "BROMO QUININE"

That is LAXATIVE BROMO QUININE. Look for the signature of E. W. GROVE. Used the World over to Cure a Cold in One Day. 25c.

safe in pig to Chandler's Wonder, the great herd boar that Mr. Chandler owns and which was sired by Nebraska Wonder. One full sister to old Bessie H. who was out of old Missouri Girl. Three are by Dandy Orion, he by Old Orion. And so they will be found all the way through, the best of individuals and the breeding as rich as you will find in the country. Six spring gilts that had been reserved from the entire crop of the last spring; three by Chandler's Wonder; one by Dotty Boy; two by Headlight, and one by old Improver 2d. The sale will be held at the farm and under cover, and the comfort of Jim's breeder friends will be looked after in good shape. Be on hand and you will find the opportunity of a lifetime to pick up choice breeding and good individuals at prices that will not be high. Catalogues are ready, and you can have one by dropping Mr. Chandler a card at Frankfort, Kans. J. W. Johnson of THE KANSAS FARMER will be there, and you can send him your bids.

Oerly's Good Poland-China Sale.

At Oregon, Mo., on February 10, Mr. F. F. Oerly sold a choice lot of Poland-Chinas on which he averaged \$145.27. The sale was well attended by breeders from several States and the bidding was spirited. The top of the sale was brought by Sister Martha, sired by Prince Alert and bred to Meddler 2d. She went to J. C. Hanna, Middletown, Iowa, at \$675. Meddler, sired by Meddler and bred to Impudence, was taken by Frank Winn at \$475—the next highest price. Taken altogether this was one of the best sales of the season.

- The sales were as follows:
1. Purity by Meddler, Spurling Bros., Pleasant Plain, O. \$180.00
 2. Sister Martha by Prince Alert, J. C. Hanna, Middletown, Iowa. 675.00
 3. Josephine by Phenomenon, Matthews Bros. & Hufford, Ellettsville, Ind. 272.50
 4. Sister Light by Indiana, J. C. Hanna. 100.00

56. Daybreak by Impudence, J. A. Jenkins, Conway Springs, Kans. 86.00
58. Sow, J. V. Cotta. 90.00

Taylor and Williamson's Bred-Sow Sale.

On February 14, 1908, John W. Taylor and Roy C. Williamson held their bred-sow sale at Edwardsville, Kans. The day was a disagreeable one on account of the snow and cold wind. This kept many local farmers from the sale, and a few breeders. The crowd was small, consisting mostly of farmers from the vicinity of Edwardsville, although there were breeders from Missouri as well as Kansas there. Despite the weather conditions and the small crowd, Taylor made as good an average as has been reached by the sales of the last few weeks. It ran a little over \$31. The top of the sale was \$101, going to Arthur Vail, of Hume, Mo., and the next \$100, bought by the same man. The sales were as follows:

Arthur Vail, Hume, Mo.	\$101
H. L. Baird, Edwardsville, Kans.	19
W. McCoy, Wilder, Kans.	23
Arthur Vail.	100
A. V. Wilson, Muncie, Kans.	25
A. V. Wilson.	33
W. C. Dodson, Edwardsville, Kans.	24
H. L. Baird.	24
W. C. Dodson.	22
H. L. Baird.	20
A. V. Wilson.	24
W. McCoy.	24
A. V. Wilson.	32
W. C. Dodson.	23
W. McCoy.	19
J. Trant, Edwardsville, Kans.	20
A. V. Wilson.	23
W. C. Dodson.	20
H. L. Baird.	22
Earl R. Wade, Lamont, Mo.	16
Arthur Vail.	28

Great Combination Sale of Herefords.

The greatest offering of the year in pure-bred Herefords will be the Breeders' Combination Sale of two hundred Herefords, the consignment of eighteen leading breeders, to be held at Kansas

best blood lines of the breed are represented in Mr. Hands' offering, and all will be safe in service for early farrow to Orion Chief, a grandson of Old Orion, Billie KX, by Dandy Wilkes, and Thayer Boy, he by Galesburg Boy, he by Fancy Kant Beat Me.

Mr. Hands' offering is the get of such sires as Neosho Chief, a grandson of the great Ohio Chief, Crimson Wonder Jr., by Crimson Wonder, Hands' Beauty by Missouri Advancer, Admiral Togo by Duroc Reformer, and others. Everything will be well fitted and in the best possible condition to insure their future usefulness. Look up Mr. Hands' advertisement on another page of this issue and arrange to attend his sale.

Annual Meeting of the Wheat Belt Association.

The Improved Stock Breeders' Association of the Wheat Belt held their annual meeting on the evening of February 13, which was well attended by the members. At this meeting the following officers were elected for the ensuing year: President, J. R. Roberts, Medford, Okla.; vice-president, A. L. Bamer, Belle Plaine, Kans.; secretary-treasurer, Charles M. Johnston, Caldwell, Kans.

A change was made in the by-laws of the association, increasing the board of directors to seven and making the officers members of the board. The directors elected were Geo. M. Hebbard, Peck, Kans.; H. E. Fisher, Danville, Kans.; Fred C. Demott, Arkansas City, Kans.; and E. G. Barnard, Hennessey, Okla.

It was unanimously voted to hold the usual annual sale at Caldwell during the week of February, 1909, corresponding to the week on which sale was held this year.

Last Call for Stephenson Bros' Duroc Sale.

On Monday, February 24, Stephenson Bros., of Elk City, Kans., will hold a dispersion sale, and will sell at public auction their entire herd of Durocs, consisting of forty-five sows and gilts, representing the best blood lines of the breed, and their two herd boars, King I Am and Crimson Model.

This is one of the most useful lots of Durocs that will be sold in this part of the State.

The females will consist of fifteen tried sows, by Oom Paul 2d, Crimson Wonder 2d, Second Surprise, Missouri Wonder, Mc's Pride, King Wonder 5th, Cole's Duroc, and Monarch; nine fall gilts by Red Wonder, he by 2d Climax and out of an Oom Paul 2d dam and twenty-one spring gilts by King I Am, Red Wonder, and Star Wonder. These will all be safe in service to King I Am, Crimson Challenger, and a grandson of Ohio Chief. They all have plenty of bone, size, and finish, the tried sows are all good ages, and the gilts are well developed and a remarkably even lot.

The herd boars are good individuals and well bred. King I Am is by Big I Am and out of the prize-winning sow, Bell Hanley; Crimson Model is by Crimson Challenger and out of a good dam.

The offering will be well fitted and presented in the pink of condition. Look up Stephenson Bros' advertisement on another page of this issue and write them for a catalogue and arrange to be present. If you can not come any bids sent to either of the auctioneers or L. K. Lewis of this paper in Stephenson Bros' care will be carefully handled.

Last Call for Sells' Sale of Poland.

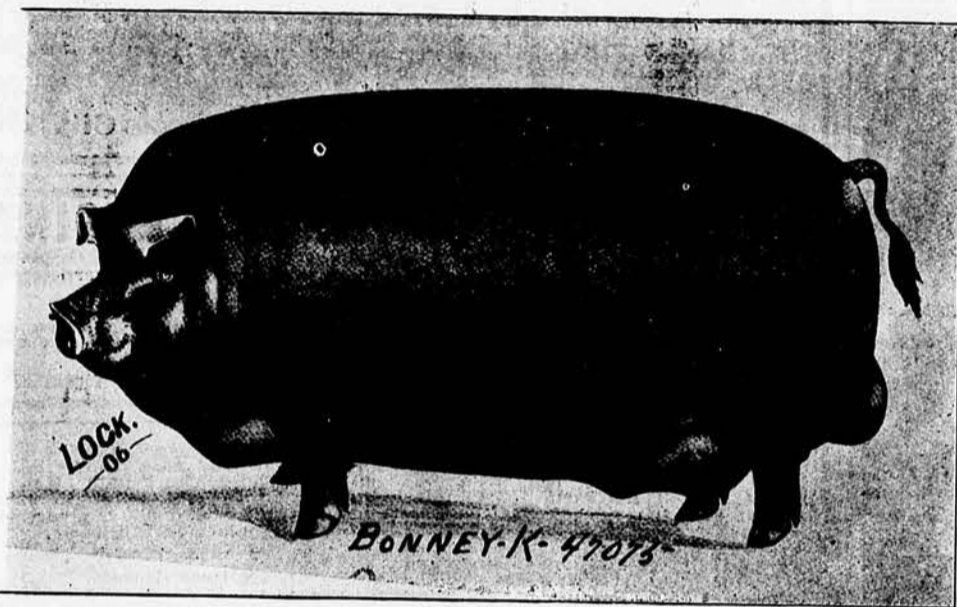
This is the last call for A. K. Sells' bred-sow sale of Poland-Chinas which will be held at Fredonia, Kans., Saturday, February 29. Mr. Sells' offering will be an unusually attractive one and will consist of fifty head—twenty tried sows, twenty-four choice, well-developed spring gilts, and a few good young males. His consignment represents some of the best blood lines of the breed, and the sows will be mated for early farrow to such sires as Corrector Sunshine, Perfect Challenger, Chief Sunshine 2d, Success, and Meddler's Medal.

There will be bargains here for the breeder and the farmer, and Mr. Sells wants you to be his guest Saturday, February 29, and pass judgment on his offering. Look up his advertisement on another page of this issue and write for a catalogue and arrange to come.

Last Call.

So many readers have written in asking for extra copies of the paper containing an editorial on "Sowing and Reaping," and the seed corn advertisement of Funk Bros. Seed Co. that we take this method of announcing that we are entirely out of that issue. However, if those who missed these articles will write to Funk Bros., they will receive the important information as to how to get and plant "Pedigreed Seed Corn" which produces such remarkable yields. A valuable book on corn culture, which is profusely illustrated, will be sent if you mention this paper when writing.

J. F. Staadt, Ottawa, Kans., has from the very beginning enjoyed an enviable trade with Duroc-Jerseys by adhering to the method of having always well-bred hogs of ample size, of good length, strong in feet and limbs, with good backs, good hams, and neat head and ears. During his career as a breeder he has received more nice testimonials from pleased customers than most of the breeders. Mr. Staadt announces his seventh semi-annual bred-sow sale to be held in the stock pavilion, Ottawa,



Bonney K. 47075, owned by R. G. Sollenbarger, Woodston, Kans., whose bred-sow sale will be held on February 28.

5. Busy Bee by Corrector 2d, Richardson & Frawley, Marengo, Iowa. 220.00
6. Meditation by Meddler, F. D. Winn, Randolph, Mo. 475.00
7. Matinee by Meddler, J. V. Cotta, Galesburg, Ill. 170.00
8. Souvenir by Meddler 2d, Ed McDaniels, Parsons, Kans. 150.00
9. Merriment by Mischief Maker, J. C. Hanna. 90.00
10. Affinity by Mischief Maker, A. W. Holland, New London, Iowa. 195.00
11. Idle Dreams by Mischief Maker, F. A. Dawley, Waldo, Kans. 187.50
13. Fancy Chieftess by Chief Perfection 2d, A. Voght, Olathe, Kans. 72.50
15. On's Favor 2d by On and On, W. J. Honeyman, Madison, Kans. 180.00
17. Proud Lady 4th by Perfection E. L. G. W. Lorraine, Elk Falls, Kans. 82.50
19. Sea Nymph by Impudence, Matthews Bros. & Hufford, 200.00
20. Cora Belle by Prince Alert, F. D. Winn. 107.50
22. Madeline by Spellbinder, F. D. Winn. 165.00
27. May Cherry by Corrector 2d, Spurling Bros. 140.00
28. Keepsake Sis by Keepsake, F. D. Winn. 82.50
29. Sow by Keepsake, A. W. Holland. 140.00
31. Rambling Lady by Oerly's Tecumseh Perfection, O. Curay, Oregon, Mo. 40.00
34. Starchy Linen by Meddler, B. N. Richardson, Marengo, Iowa. 265.00
35. Perfection Beauty 1st by Oerly Perfection, F. Brooks, Oregon, Mo. 40.00
37. In Line 2d by Perfection E. L. Richardson & Frawley. 160.00
38. Sow by Keepsake, J. V. Cotta. 120.00
39. G's Delight by G's Perfection, Wayne Cotta. 100.00
41. Sow by Next In Line, A. W. Holland. 100.00
46. Wanda West by Chief Perfection 2d, Dr. Nipps, Pattonsburg, Mo. 72.50
47. On's Keep Meddler by Meddler, J. P. Malone, Chase, Kans. 40.00
49. Thelma by Captivator, J. M. Baler, Elmo, Kans. 37.00
51. Goldie by Dispatcher, F. D. Winn. 40.00
57. Sow by Indiana, A. W. Mel-lard. 50.00

City in the fine stock pavilion on Tuesday, Wednesday, and Thursday, February 25, 26, and 27.

None of these breeders are by any means, thinking of going out of business, but are simply offering at this time, a few of their surplus animals. It will be a splendid time to buy for more reasons than one. One reason is that cattle are as low now or possibly lower than they will ever be again, and another is that they will not have to be carried long on full feed, as grass will soon be here.

This sale is looked forward to each year by breeders all over the country as being an annual event of more than ordinary importance, and the week of this sale is looked upon as rather a holiday, as breeders get together to exchange ideas, to visit, have a good time, and at the same time help themselves. As a very large percentage of the offering is bulls, it will afford the ranchman, or for that matter any one else desiring a carload, a splendid opportunity to fill his wants.

Big prices are not expected, but every animal is going to be sold, no matter what the price may be.

Do not think because so many animals are being offered that they are going to be of inferior type, for such is not the case. There are going to be both bulls and females good enough to go into the very best herds in the land and be a credit to those herds.

The cattle will not be in the high state of flesh that will be a detriment to their breeding, but in just good thrifty breeding condition. Do not overlook this very important sale, but arrange your matters at home so as to attend the same, and if you are in need of good cattle, it will certainly be a most opportune time for you to purchase.

Should you desire any further information relative to the sale address, Secretary C. R. Thomas, 221 West 12th St., Kansas City, Mo.

Last Call for Hands' Duroc Sale.

This is the last call for S. A. Hands' Duroc bred-sow sale which will be held at his farm, 3 1/2 miles southeast of Thayer, Kans., Wednesday, February 26.

The offering which is a choice one will consist of thirty-five head; eight proven sows in the prime of their usefulness, and twenty-seven extra choice well-grown spring gilts. For size, bone, finish, quality, and breeding this is one of the most uniform lots that we have seen this year. Some of the

HORSE OWNERS! USE

CAUSTIC BALSAM.

A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all bunches from horses. Impossible to produce scar or lameness. Send for circulars. Special advice free.

THE LAWRENCE-WILLIAMS CO., Cleveland, Ohio.

SCOURS.

In pigs, calves, colts and sheep by VIT-SCOUR. Send for circular. Natural Remedy Co., Topeka, Kansas.

THE ROYAL HOTEL, Lincoln, Neb.

Modern, fire proof, only American Plan Hotel in the city. Centrally located, 15th and O sts.

HIDES and FURS

Ship them to W. S. Young, Larned, Kansas.

Vincent's Kansas Kolera Kure

will cure alling hogs. Write for free booklet.

McCurdy Bldg. Hutchinson, Kansas

ENLARGED PORTRAITS.

If you have a tintype or photo you would like enlarged send it to us with \$1.00 and we will make you a beautiful enlargement mounted and handsomely crayed on colored. Shipped prepaid. Will positively injure the original in any way. Crescent Portrait Co., 417 East 12th St. Kansas City, Mo.

WIRE FENCE 29c

48-in. stock fence per rod only. Best high carbon coiled steel spring wire. Catalogue of fences, tools and supplies FREE. Buy direct at wholesale. Write to-day. MASON FENCE CO., Box 62 Leeburg, O.

BEE SUPPLIES

We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders.

TOPEKA SUPPLY HOUSE

7th and Quincy, Topeka, Kans.

SHIP YOUR FURS

TO McMillan Fur & Wool Co.

EXPORTERS AND IMPORTERS

200-212 First Avenue North

MINNEAPOLIS, MINN.

OR

119-121 North Main Street

ST. LOUIS, MO.

WRITE EITHER HOUSE FOR CIRCULARS

Fourth Annual Jack Sale

Savannah, Mo., March 5, 1908

24 large black Jacks from 3 to 7 years old, 23 eligible to register. I make a specialty of the large, well bred, big boned, good footed, good head and ears kind; also two good 3-year-old registered Percheron stallions. If you want to buy a Jack that is as represented come to this sale. Write for illustrated catalogue.

G. M. Scott.

THE TRICYCLE

RIDING LISTER

THE ONLY RIDING LISTER

that can be used without a pole. The bottom hangs directly between the wheels and the lister follows the team perfectly. It goes closer to fences than others and can be turned square around with bottom in the ground.

It is frameless and, therefore, lighter than others. Its actual weight is only 350 pounds and draft in proportion.

Seat is just back of the seed can and the operator can see every kernel of corn as it leaves seed box.

No Chance for a Poor Stand. Built in different styles for corn or corn and cotton and with shovel or disc covers.

Write at once for circular telling more about the Tricycle.

ROCK ISLAND IMPLEMENT CO., 1110 W. 15th St., Kansas City, Mo.

Kans., Friday, February 28, 1908. By reference to his advertisement in this issue, it will be noted that he is making a very strong and attractive offering. Mention THE KANSAS FARMER and write for catalogue to J. F. Staadt, Route 3, Ottawa, Kans.

M. M. Johnson, the incubator man, was again elected president of the Nebraska State Poultry Association. The old saying that we can judge a man by the way his neighbors like him, is a good way to pass judgment. Johnson and his Old Trusty incubator seem to have made friends on the expansion order, beginning among his neighbors at Clay Center, Neb., and expanding until his goods are known in every corner of the earth among poultry-raisers.

Sugar Feed.

Farmers and stockmen will be interested to learn of the "opening for business" of the International Sugar Feed Company's \$100,000 plant located at Minneapolis, Minn.

A paragraph in an article written for "Flour and Feed" speaks of the value of molasses or sugar feeds. It reads: "We intend also to show the beneficial effects a ration of sugar has on other animals besides the horse. If anything it is more essential to the meat supply of the people and to the dairy which interests us all. From our own special experience we are prepared to state positively that it makes purer and better milk, more of it, milk that contains more fat and sugar and at a less cost than any other feed."

The feeding value of molasses or sugar in combination with various grains has been recognized for a number of years. There has been, however, a great difficulty in finding a process that would put the molasses in a condition to be conveniently handled on the market and in feeding. The greatest problem to be solved, however, was to so select and proportion the grains and sweetening substance as to produce a scientifically balanced ration especially adapted to various purposes and to the different animals fed.

M. W. Savage, proprietor of the International Stock Food Company, has had his chemists working on this problem for a number of years. The desired results were attained last fall and Mr. Savage incorporated the International Sugar Feed Company. He then secured the services of S. L. Frazier, of Chicago, the father of the saccharine feed business in this country and the inventor of several machines used in the manufacture thereof. The contract for the erection of a \$100,000 sugar feed plant was awarded to the McDonald Engineering Company, of Chicago. In a remarkably short time the plant has been completed and the process of manufacture was begun February 1. The plant is a model of its kind and the engineers say that more work can be done with less manual labor than in any mill of any kind in the world.

It is located on an entire block leased by the company and the building has a floor space of 140 by 160 feet. It is absolutely fireproof, being built of reinforced concrete. Its construction required the use of one hundred and fifty tons of steel and three thousand barrels of cement. The first floor or basement is fifteen feet high and on it is located much of the automatic machinery including ten twenty-five horse power motors, one individual motor being used to each unit of machinery. On this floor there is also a molasses cistern with a capacity of 125,000 gallons.

The molasses from the car tanks is dumped by gravity into this cistern from whence it is pumped by steam pumps to a 6,000 gallon steel tank where it is warmed by coils, pumped to tanks above and flows into the molasses machine on the second floor. The grain is unloaded by power shovels and dumped on the elevator boot from where it is lifted into any one of the fifty-seven bins which occupy the third floor. It flows by gravity from the bins into the Robinson's steel attrition

mills where it is ground. From there it passes into another set of mills and into the mixer where the different materials are combined and passed on to the molasses machine where the feed is processed and made ready to be bagged. This plant has a capacity of three hundred tons of finished product daily and there is room in the building for enough additional machinery to double this capacity.

The sugar feed manufactured will be of various kinds including a balanced ration for cows, one for horses, one for swine and one for chickens. Beside the molasses there will be used in the production of this saccharine feed the best grade of oats, barley, rye, corn, linseed-oil-meal, and some other materials.

Remarkable interest has already been aroused in this plant and the company is already in receipt of a number of large orders for its product and it is freely predicted that it will soon be working at its greatest capacity.

Ed. Miller Is Dead.

Ed Miller, of the Aberdeen-Angus breeding firm of Parrish & Miller, of Hudson, Kans., died a few days ago in Virginia while on a visit to relatives. The immediate cause of his death was pneumonia. Mr. Miller was widely known among pure-bred cattlemen, not only among Angus breeders but among men of all breeds. With his partner, Parker Parrish, Mr. Miller had been an exhibitor at all of the leading shows for the past half a dozen years or more. Their herd of registered Aberdeen-Angus cattle was easily the largest of the breed in the world, and stood up near the top at all times in the show rings. So far as known at present the business of the firm will be continued by Mr. Parrish, probably under the same firm name for the present.

Iron Culverts.

Assaria, Kans., February 11, 1908. THE KANSAS FARMER, Topeka, Kans.

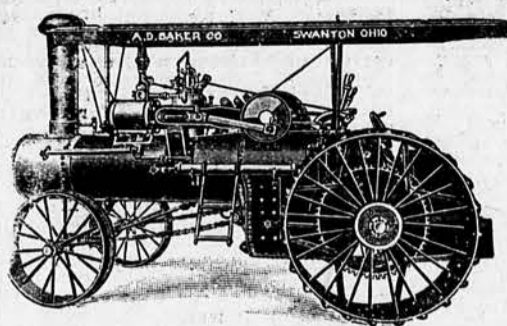
Gentlemen:—Noticing a letter from a gentleman in Hazelton, Kans., a week or two ago concerning metal road culverts, I would like to say in reply that I have had a little experience with these culverts and have found them to be very satisfactory. I have no doubt about their lasting qualities and I think the money that is saved on the time it takes to place one of them in position should appeal strongly to any road officer who wants to spend road money economically. I would like very much to hear from some one if he has ever seen one of the metal culverts broken down. Of course some of the concerns making these metal culverts guarantee them to stand up under any load, but I do not know if all the firms give this guarantee, and for this reason I would like to hear from others because I feel that the time has arrived when a better culvert than wood must be found. I shall be glad to hear from others through the columns of your much appreciated paper. Respectfully,

JOHN B. SMITH, Trustee.
Saline County.

Low Prices on High-Grade Vehicles and Harness.

There are few business concerns in this country that have a stronger hold upon the public than the Elkhart Carriage and Harness Manufacturing Company. For over thirty-five years—over a third of a century—they have been manufacturing vehicles and harness and selling them, not to jobbers, wholesalers, and dealers, but always direct to the people who use them.

Direct dealing would not alone have given them the hold they have upon the public. But they have dealt honorably. They have been manufacturing high-class goods and selling them direct on narrow margins of profit. People all over this country have learned to know this and the result is that the Elkhart Carriage and Harness Manufacturing Company now enjoys the proud distinction of being the larg-



The Prairie Queen SEPARATOR

THE HARD WHEAT SPECIAL

Manufactured by the

Prairie Queen Mfg. Co.
Newton, Kans.

General Agents for the A. D. Baker Engine.

Write for Catalogue.

We have a few second hand engines of different makes on hand for sale at the right price or will trade for land.

Steinmeyer's Duroc Bred Sow Sale

Volland, Kans., Tuesday, March 3

SALE AT FARM 6 MILES FROM ALTA VISTA.

51—Richly Bred Durocs—51

Consisting of 8 tried sows, 36 choice well grown winter yearling gilts and 7 extra good fall boars by such sires as Egypt Lad, a grandson of Ohio Chief, Jumbo Kant Be Beat, a grandson of Kant Be Beat and out of dams by Fancy Jumbo, he by Jumbo Red, Royal Top Notcher, Kansas Wonder, Royal Lad, Fancy Duroc by Ohio Chief 2d, Pathfinder, and other kings of the breed.



The females will be safe in service to a grandson of Golden Rule, out of a Kant Be Beat dam, and to Jumbo Kant Be Beat. Everything will be well grown, and nicely fitted.

Here is a chance for breeders to get something that will add quality and value to their herds, and there are bargains for farmers as well.

Write for catalogue and come to my sale.

H. W. Steinmeyer, .: Volland, Kans.

Auctioneers: Brady and Channal. L. K. Lewis, Fieldman.

Two Great Kansas Sales

BERKSHIRES

90—HEAD, THE BEST OF THE BREED—90

STRONG CITY, Tuesday, March 3

Fifty head of BLACK ROBINHOOD sows and gilts will be sold—daughters and granddaughters of BERRYTON DUKE, the grand champion, IVANHOE, the great REVELATION, LORD BACON, PREMIER LONGFELLOW, and MASTERPIECE. These sows are grand individuals, especially selected for this sale. Bred to these ROBINHOOD KINGS: BERRYTON DUKE 72946, REVELATION 86906, SIR IVANHOE 103092, SIR MASTERPIECE 102594, and GENERAL PREMIER 93894. An offering worthy in every particular of the Guthrie Ranch Berkshires.

Col. I. W. Holman, Auctioneer. Send bids to L. K. Lewis, of The Kansas Farmer. Catalogues are ready and will be sent free.

T. F. Guthrie, Mgr.,
Strong City, Kansas

LAWRENCE, Wednesday, March 4

Forty bred sows and gilts and a few boars of outstanding quality, type and finish, representing the most fashionable and greatest prize-winning blood lines of the breed. MASTERPIECE, STAR MASTERPIECE, PREMIER LONGFELLOW, BEAU BRUMMEL and SUNNYSIDE ROYAL are all represented with daughters of splendid individual merit, bred to such great sires as BERRYTON DUKE JR. and BEAU BRUMMEL. I feel confident they will make you money for the Berkshire future was never brighter.

Col. I. W. Holman, Auctioneer. Send bids to L. K. Lewis of The Kansas Farmer. Write for handsomely illustrated catalogue. Address

Charles E. Sutton,
Lawrence, Kansas

est manufacturers in the world doing business direct with the people. It goes without saying that we think it one of the best places in the country to buy vehicles and harness. The vehicles and harness are known everywhere as high grade. As to prices, no one can read the advertisements regularly appearing in this paper without being convinced that they are right. The company's great catalogue shows two hundred styles of vehicles and sixty-five styles of harness. The time-honored Elkhart plan is to send everything on approval. It costs you nothing if you are not satisfied on style, quality, or price. Write the company for the big catalogue, at Elkhart, Indiana. It means the saving of from a third to a half on the price on everything you may want to buy in the vehicle or harness line.

The Shawnee Alfalfa Club.

The regular monthly meeting of the Shawnee Alfalfa Club will be held in the Commercial Club rooms, 625 Kansas Avenue, Topeka, on the afternoon of Saturday, February 29 at 2 o'clock. Prof. R. J. Kinzer, of the animal husbandry department of the State Agricultural College, will be the principal speaker. The general subject for discussion at this meeting will be "the feeding value of alfalfa," with special reference to alfalfa meal. Professor Kinzer will report the results of the feeding experiments he is now conducting with alfalfa meal and alfalfa hay. It is understood that the more important subject of the report will be that of hog feeding.

Everybody is invited. The meetings are free to all and you are welcome. Bradford Miller, president; I. D. Graham, secretary.

Thrift Talks. A FARMER.

Our Dairy Maid says: that she is more than delighted with our Great Western Cream Separator because since we have been using it, she is able to "make five pounds more of butter each week from our four cows." She says our old customers are willing to pay us 2 cents more per pound than they have been paying since the butter is of such fine quality and made from nice fresh cream. I think that the Dairy Maid is looking for an increase in her wages, and I think I shall be mighty glad to pay her the increase, for she is a good girl and takes pride in her work; then too, it is not costing me any more in any other way to get the results she is getting, since the cows are fed and cared for just the same as before, so it must be the separator and the girl.

Our neighbor's wife who was here last week asked our Dairy Maid why it is my wife has been looking so much better the last few weeks, and she said: "It must be because the work is so much easier since we got the Great Western Separator." Her husband who came along with her asked me why it was my calves seemed to be improving so much more lately; he noticed they were looking better than they did some time before when he was here. My boy and girl, who always feed the calves, said it was the nice warm fresh milk from the separator which made them look so well; that sour milk did not make smooth, sleek, fat calves.

Our neighbors wanted to know more about the machine, so I took them to the milk room and introduced them to our Dairy Maid, who is so pleased to show what the cream separator will do. He and his wife tried it and were surprised to find how easily it runs. I explained: "We cannot give a quart of love out of a pint heart," nor can we gather the Gold of Life with a cheap machine; and the Great Western Separator runs so easily because it is ball bearing. Everybody notices the low supply can, the high crank, the wide base made to catch the waste, that the milk was drawn from the bottom of the bowl and the cream from the top, thus following most closely the laws of nature in cream separation.

We then did a little figuring together and as nearly as we could tell, it seems that our Dairy Maid is in a fair way to make for us from \$75 to \$100 more out of our cream and butter this year than last, which is almost twice the price of a machine of that size. We are all glad to remember that there has not been a time when the farmer was not inclined to give any good information to his neighbor and to enlarge this by cooperation; and we are all being benefited since the demand for our farm products has more than equaled the supply. From the results she is getting, our Dairy Maid cannot understand why any farmer's wife skims her milk by the old process, even though milking only three or four cows. Now, neighbor, if you are milking only two or three cows, listen to what our Dairy Maid advises you, and write quickly, mail the letter before you forget it, to the Smith Mfg. Co., 158 E. Harrison, St., Chicago, Ill., and get their complete book on dairying. This is a condensed history of cattle and contains much that will be of assistance and value to any one who keeps cows. Ask for book No. 22 E-7.

One Hundred and Fifty Post Holes in Ten Hours.

One hundred and fifty post holes four feet deep and ten inches in diameter in ten hours with no trace of tiredness at the day's close is one Pennsylvania farmer's record with the remarkable Iwan Bros. post hole and well auger. This wonderful implement has interlocking crucible steel jaws that simply eat out the soil and do not give the slightest resistance from auction when they are lifted out full. Only three full turns are required to sink these blades, and it is easy to dig a post hole in one minute. This unrivaled labor-saving implement is simple

and durable in construction, and one day's work with it saves enough to cover its cost. It is not breakable in any respect and is found to be an ideal implement for well digging. It received the highest award at World's Columbian Exposition, and was used exclusively by the United States Signal Service in Philippines for telegraph construction. Write Iwan Bros. for more information and mention this paper.

Poultry Pays Big Profits.

It is a well-known fact that poultry pays a bigger profit per dollar invested than any other business. Many women make handsome additions to the family purse by this pleasant and easy occupation which can be looked after in between times of the duties of housewife.

A very handsome and most practical book has just been issued by the Reliable Incubator and Brooder Company, Box 90, Quincy, Ill. It would be useful to the most experienced poultry-raiser, but has especial value to those without training or previous experience.

Any of our readers who are thinking of raising poultry or who want to know about eggs—how to get fertile eggs—how to get bigger hatches—how to raise heavy fowls—how to get broilers ready so as to get top notch prices—or if you want to buy an incubator or know how to guide an incubator, should send for this handsome and practical 136-page book. It is beautifully illustrated. It will be sent free to our readers if they mention THE KANSAS FARMER. Better write for it to-day.

The Prairie Queen Separator.

The Prairie Queen Manufacturing Company, of Newton, Kans., who manufacture the famous Prairie Queen Separators, have an advertisement in this issue of THE KANSAS FARMER to which we invite the attention of any of our readers who may be interested in thrashing machinery. This company manufactures one of the best separators on the market, and they are also general agents for the famous A. D. Baker Engines.

The Prairie Queen Separator is not only a Kansas product, but it is built of the very best material and it has distinctive features that commend it over many machines in the market. Write the Prairie Queen Manufacturing Company for their catalogue and tell them you saw their advertisement in THE KANSAS FARMER.

Eyes Tested by Mail.

The Trusight Spectacle Company, of Kansas City, Mo., whose advertisement appears in this issue, has perfected a plan of testing eyes by mail, and they are successfully fitting a great many people throughout the United States.

They are offering to those of our readers who are interested in spectacles, an opportunity to earn a handsome pair without paying cash for them, and it will be to your interest to write to this concern.

If you are in need of glasses we suggest you write the Trusight Spectacle Company, 104 Friend Building, Kansas City, Mo.

THE SPREADING FAME OF KANSAS SEEDS.

One Carload of Kansas-Grown Alfalfa and Grass Seeds Sent to Argentine Republic.

Our readers certainly will be interested in the fact that the reputation of Kansas grown seeds has penetrated as far as the far-off Argentine Republic. Last week the Barteldes Seed Company, of Lawrence, Kans., shipped a carload of alfalfa and various grass seeds to the Government of the Argentine Republic. This Government makes extensive trials every year for the benefit of its subjects, in which the value of important clovers and grasses is demonstrated. As there are quite a number of States and countries which produce clovers and grasses, Kansas has all reasons to feel flattered that the Argentine Republic will send its order here. The Barteldes Seed Company is recognized the world over as being headquarters for grasses, clovers, and other field seeds of choice quality.

A Scale for Every Farm.

Every farmer can appreciate the advantage of having his own scales right on the farm. He knows then whether he is being allowed full weight for his live stock, just how much his load of corn or hay contains, and in fact he will find at the end of a year that his farm scales have proved one of the greatest conveniences and money-savers he has ever had.

Of all the farm scales it has been abundantly proven that the pitless scale is the most convenient. There is no digging required, the scales can be easily moved, there are no underground beams to clog up and to dig out from frozen dirt and snow in winter and no elaborate scale-house is required.

One of the most satisfactory pitless



scales is the Lightning Pitless Scale, manufactured and sold by the Kansas City Hay Press Co., at Kansas City, Mo. This concern has made these scales for several years and they have been sold throughout the country and give very general satisfaction. Our readers who are interested in farm scales are requested to read their advertisement on page 161 of this issue and to write to the Kansas City Hay Press Company, 129 Mill St., Kansas City, Mo., for descriptive literature.

STANDARD CREAM SEPARATOR AT LESS THAN HALF PRICE

In order to place the MONARCH CREAM SEPARATOR ahead of all other separators in the market to-day I have decided to make this unprecedented offer. I will sell the Monarch Separator at less than half the price at which it has heretofore been sold.

THIS IS WHY I AM DOING IT.

15 DAYS ONLY

The Monarch Separator has always been sold through dealers and now I am selling direct to the farmers for the first time. I have set aside 1,000 machines to be sold at this special introductory price. I will undoubtedly sell all these machines or have prospective buyers for them all within fifteen days and I will not extend this offer longer than that time. If you really want one of the best cream separators made at half the price you would pay the dealer, this is your opportunity. Write me at once if you want to take advantage of this fifteen day offer.

E. R. BAILEY, 351 New Nelson Building, Kansas City, Mo.



INCUBATORS AND BROODERS FOR THE WORLD

The Only Incubators and Brooders in America that Hovers the Chicks and Eggs with Feathers the Same as the Hen



On January 13 one of the above machines was taken by express from Blackwell, Okla., to Kansas City, Mo., a distance of 278 miles, and was transferred three times. It was a 125-egg machine and had been sitting 20 days. It had in it 116 eggs when we left Blackwell; the next day noon we had 103 chickens. The machine was on the train 14 hours. It finished hatching in the Coates House during the Implement Dealers' Convention, and was witnessed by 5,000 people. Stop for one minute and consider the marvelous work this machine did. It is an absolute fact that this was a better hatch than it is possible to get with the ordinary machine of to-day with the very best of care. This machine has filled the long felt want and has opened the eyes of the entire poultry world. Write to-day for free catalogue. Don't consider any incubator, nor do not continue to use one that is not giving satisfaction. Write us to-day. Our process is natural—we hatch chicks to live.

THE HEN-FEATHER INCUBATOR CO.
Department H, Blackwell, Okla.

B. N. Welch, Waterville, Kans.

Postponement Sale

Owing to the storm of February 4, which was to have been the date of Mr. Welch's bred sow sale at his farm near Waterville, he thought it best to postpone it until

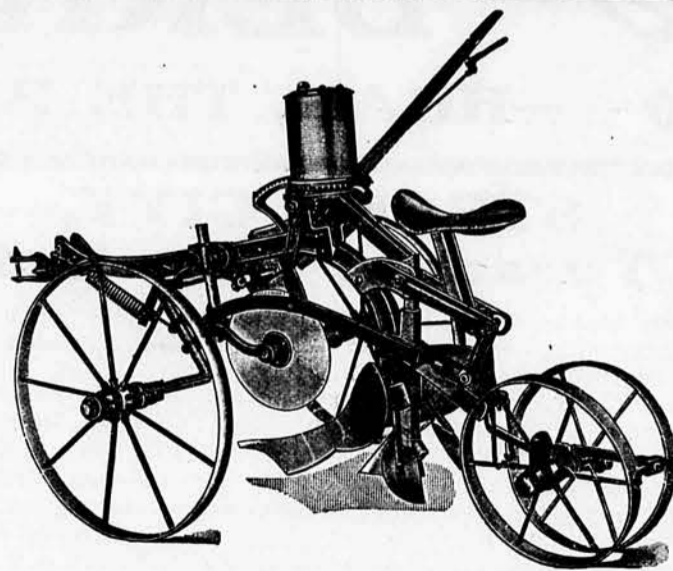
Thursday, February 28.

The sale will be held as formerly advertised, only the date will be the 28th of February. You had better look up his catalogue and arrange to attend. Those who braved the storm on the 4th were loud in their praise of the splendid sows on offer. Address,

B. N. WELCH,

Waterville, - - - - - Kansas

Col. T. E. Gordon, Auctioneer. J. W. Johnson, Fieldman.



A Tongueless Riding Lister.

The illustration shown herewith gives an adequate idea of the tongueless riding lister that is made by the Rock Island Implement Company. This lister is said to follow the team perfectly and it goes close to the fences and turns the seed can and the driver can see every kernel of corn as it passes from the seed box. For full particulars regarding this lister write the Rock Island Plow Co., 1819 West 15th St., Kansas City, Mo.

Dairy Interests

Dual-Purpose Cattle.

Wilkie Blair, Girard, Kans., before the Improved Stock Breeders' Association.

While many other creatures rival the ox as producers of flesh, the cow is par excellence as a lecteal food producer, the goat being about her only rival. A man of intelligence, a feeder of beef cattle who loved his calling, and who knew a good feeding steer regardless of his breeding, and evidently a close observer, in passing through the suburbs into the city, saw on the commons tethered to a stake, a yellow cow, which doubtless had some Jersey blood in her. By a freak of nature this cow's udder was double instead of quadruple, having only two teats. The old man stopped, looked at her, and said: 'I have always contended that these danged little Jerseys started from a goat, and now I know it.'

Whatever may have been the origin of the special dairy cow, the dual-purpose cow did not "start from a goat." But she, as a dual-purpose cow, and her son, the beef steer, have been feeding humanity throughout the past ages. Recently some men, theorists they may have been called, tried to divide her, have tried to divert her calling, and in a measure have succeeded, until a practical feeder is lead to believe that the dairy cow sprung from the goat, while a casual observer, at a

of his observations in Europe, says: "Before I came here I feared that when I saw milking Shorthorns they would not have beauty. I wish any reader could see the herd of cows that go past my window every morning at early day. Great, splendid cows, all with good colors, reds, roans, whites, all with good horns, all carrying a lot of flesh, maybe too much. But they are every one in dairy use. I visited a neighbor with forty cows, unregistered, grand milkers, all of them, and only one or two of them were to be criticized on the score of looks. Some of them were inexpressibly sweet and feminine. The fact is, that a milking Shorthorn is a more beautiful cow than one that is too much on the beef order, for she has a sweeter head, neck, and look. There is a dairy here

or Red Polls, and of these two breeds it is a question very largely of the soil and situation, claiming that the Red Polls do best on the poorer soils and shorter grass, while the Shorthorns do best on the rich valley pastures.

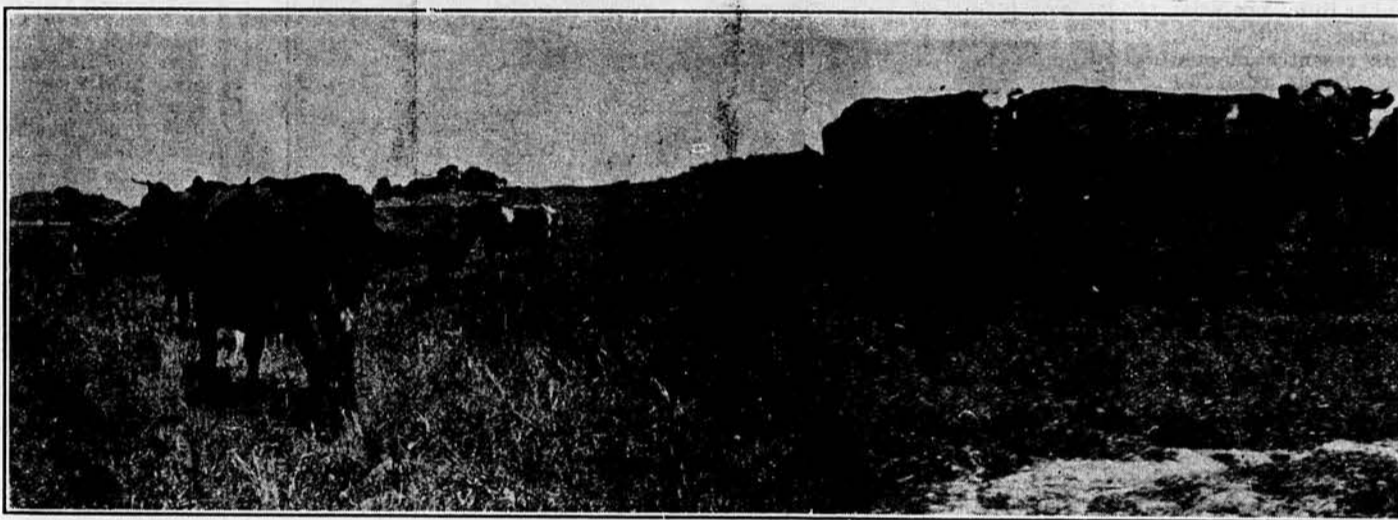
A WISCONSIN HERD.

I recently visited the Red Polled herd of J. W. Martin of Gotham, Wis., where some thirty or forty cows are kept and milked. Here the silo is in use, and Mr. Martin stated that he receives a check for \$200 monthly for milk. This herd has been selected and bred for twenty years with the dual-purpose idea in view, and here may be seen five generations of cows, with both milk and beef increased, and which reproduce themselves with as great certainty as any of the special

milk, where silage is also fed, and butter is made at a creamery, on the farm. Here I expected to see cows thin in flesh and of extreme dairy type, but to my surprise I found them carrying plenty of flesh, smoothly laid on great wide blocks, that would put to shame many a special beef herd, while their large shapely udders and well placed teats could not be excelled by any herd of the special dairy breeds I have ever seen.

RED POLLS NOT DUAL-PURPOSE COWS.

It has been said to me, in these meetings, by a gentleman from the experiment station, that you Red Polled advocates do not demonstrate that your cows are dual-purpose. Now, the Kansas Experiment Station, whatever position it may now have, has ont in



Representatives of a herd of milking Shorthorns that have produced a net profit of \$55 per head per year on the milk alone. This is not a large return and has been beaten many times by grade animals of the dairy breeds. It serves to show, however, that the Shorthorns are good milkers; that a profitable return may be secured in milk from this distinctly beef breed and that the contention of the Shorthorn men that this breed is the real dual purpose breed has some foundation in fact.

fat-stock show, is liable to think that the beef animal, if not related to the hog, actually resembles one.

AT THE FAT-STOCK SHOW.

Here I will say, though expecting to be called down for intimating such a thing, that the fat-stock show is a fake, so long as the champion on foot falls far short of winning when his carcass is placed upon the block. Such is the history of fat-stock shows. An animal to win the championship alive, must be of such a breed or type, and must be so puffed and padded with fat that he is fit for but little more than tallow, while the prize carcass on the block is that of a steer more on the dual-purpose type, not overdone with fat. Something is wrong here. Which is it, the animal or the judges? I leave it to the special beef men to answer. Even in the special beef breeds that cow is most profitable which gives plenty of milk to rear her calf well, and breeders are recognizing the fact more and more.

THE SHORTHORNS IN ENGLAND.

If dual-purpose cattle do not pay, why are they kept on so many of the large farms of England, where feed is scarce and high and labor plentiful and cheap? On these farms the principal thing is milk, and a careful record of each cow's performance is kept, and she must pay her way with a profit. The calves are also considered, and they make excellent steers. Joseph E. Wing, writing in Breeder's Gazette

that gets all its milk from Shorthorn cows. I visited it to see what sort of butter is made from their milk. It is excellent butter, indeed, with enough color for British market. It is not colored artificially at all." You may wonder that I quote this relative to the Shorthorn cow. But my subject is dual-purpose cattle, not Red Polled cattle. I have no row to raise with dual-purpose folks of any kind. It is the fellow who would divert the cow so far from the purpose for which the Great Creator intended her, that sensible men will think she is a descendant of the goat, that I am after.

THE IRVING PARK HERDS.

Mr. Wing tells of the Lord Rothschild's Irving Park herds, where are kept three breeds, the Jersey, Shorthorn and Red Polled. The comparison is as follows: Twenty-one Jerseys gave an average of 6,910 pounds of milk per year; fifty-seven Shorthorns gave an average of 6,706 pounds per year, and thirty-six Red Polls gave an average of 6,743 pounds per year. Here the Jerseys have a little the best of the dual-purpose cows, but not so much as one might think, considering how carefully they are all handled. The manager, Mr. Carr, states: "When the value of the young is considered, the story changes. If one is so situated that he can rear the calves and make them into beef, then the Jersey must take third rank in profit; and the honors come to either the Shorthorns

breeds. Here was bred the Red Polled cow No. 2796 Nonesuch 1st Norf., with an official record from January 1 to October 18, 1903, of 7,277.1 pounds of milk with an average test of 4.51 pounds of butter-fat. Here was bred the Red Polled cow No. 8330 Batriz-E11, 7th-A13, who, in her tenth year, made an official record from January 1 to October 1, 1902, of 7,792.6 pounds of milk with an average test of 3.98 per cent butter-fat. Here also was bred the Red Polled cow No. 8330 Batriz-E11, who has an official 12 months record of 9,475.2 pounds of milk, which made 439.88 pounds of butter. This cow won first prize in the farmer's cow class at the International, 1902, competition open to all breeds. In this competition the butter record of each cow during the period of lactation was to count 35 per cent, her individual merit 25 per cent, and her calf 40 per cent. In 330 days Batriz gave 337.8 pounds of butter-fat, her calf scored 40 per cent, the cow herself scored 19 per cent, her butter scored 35 per cent, making a total score of 94 per cent. The five competing animals were Red Polls, except one, a Shorthorn, and she was selected, developed and shown by the Iowa Agricultural College, and won second place.

AN IOWA HERD.

I also saw the herds of the Hendersons of Central City, Iowa, where three hundred head of Red Polls are kept for dairy purposes, the cows milked and calves hand fed on separated

position it may now have, has not in pose cow. While other stations have kept, experimented with and tested dual-purpose cows, Kansas has been satisfied with a herd of scrubs, which they are grading up with a Guernsey bull. The only friend the dual-purpose cow ever had at the Kansas Station, was D. H. Otis, and the State was too stingy to keep him. Now for the demonstration. No. 18772 Olena-R2 won first prize in cow class for breeding Red Polls at the Illinois State Fair. At the same State Fair, Springfield, a three days' milk test was made with the following results:

	Lbs. milk.	Lbs. butter-fat.
Red Polled.....	128.4	4.533
Holstein Friesian.....	128.3	4.234
Holstein Friesian.....	141.5	4.192
Ayrshire.....	112.2	3.909
Guernsey.....	76.9	3.857
Ayrshire.....	106.1	3.624
Jersey.....	60.55	3.266
Brown Swiss.....	89.3	3.252
Dutch Belted.....	97.2	3.225

The result speaks for itself. A dual-purpose Red Polled cow in competition with six different breeds of special dairy cows cleans the platter as a butter producer. The same cow, Olena, at Milwaukee, Wis., State Fair, 1907, in a three days' test, gave 125 pounds, twelve ounces of milk, testing 5.33 per cent butter-fat. Olena is a Kansas product, and originated in this way: D. F. Van Buskirk, one of the oldest Red Polled breeders in the State, sold to Chas. D. Peck, of Meridan, two Red Polls, male and female; from them Mr. Peck bred Olena, which heifer

was bought by Mr. Van Buskirk and sold to J. W. Martin of Wisconsin, who again sold her to A. W. Popke of Milwaukee, who developed her as a milk cow and showed her with the above results.

Olena is not a handsome cow of the breed, but of fairly good beef form, with large udder and teats. And while excelling the special dairy cows at the fair she will raise a steer that will feed as well, as a steer from a special beef cow, and suckled by a wet nurse.

At the Ohio State Fair, 1907, in a three days official test the Red Polled cow No. 20335, Queen Bess-U43, owned by N. P. Schurtz & Son, Dresden, Ohio, gave 99 pounds of milk, testing 5.3 per cent butter-fat.

Joseph E. Wing, in his tales of English Red Polls, tells of a cow which gave over 5½ tons of milk in a year, and then produced twin bulls.

FROM AN IOWA PROFESSOR.

Professor Kennedy, of Iowa, says: "That there is a dual-purpose animal cannot be successfully contradicted. That these animals are far too few in number for the best interests of the farmers of the middle West, is to be regretted. That the breeders who attempt to perpetuate both beef and milk in the same animal has a most difficult task to perform cannot be denied, but it can be done, and the man who does it will be well repaid for his trouble."

RED POLLED CATTLE AS A DUAL-PURPOSE TYPE.

Breeders of Red Polled cattle have undertaken this difficult task. In fact, they are already far along toward success, as the figures used above will show. But the Red Polled cow is not yet what we desire her to be, nor what we expect to make her in the future. The scale of points recently adopted by the Red Polled Cattle Club of America, will help to bring breeders and judges together on the dual-purpose type. We have the uniform red, the most popular color for cattle, because the most beautiful. We have the polled head. We have the greatest tendency toward quality of any other breed. Let us lose none of these already good traits, but, by careful feeding, careful handling, and careful breeding, perfect them and add to them until we have the ideal dual-purpose animal, the most useful, most profitable, and most beautiful cattle on earth.

THE SELECTION, BREEDING, FEEDING, AND HANDLING.

How shall they be selected, bred, fed, and handled, that this may be accomplished? I would prefer to be told this, rather than to try to tell it to others. I have many notions of how it should be done, but we so often have not the means wherewith to execute our plans. Some years ago, when I was somewhat poorer than now, an old Englishman was visiting me, and of course I took him out and was showing him my little herd of Red Polls, with considerable pride. He did not criticize the cattle, but looked me in the face, and in his brusque Yorkshire brogue said: "You thought to be breadin grades. Honly gentlemen can afford to himprove ha breed." Although I knew full well that by "gentleman" he meant wealthy man, I retorted, "any man can be a gentleman in America." So, while many a breeder may be handicapped by a lack of funds to buy just the kind of cattle he would like to have or build such barns as he needs to shelter them, or to buy the feed that would best develop them, he should remember that the cow which will not pay her way, and at the same time make money for her owner, is not a dual-purpose cow, and to improve her he should be a gentleman, but not necessarily a very wealthy man.

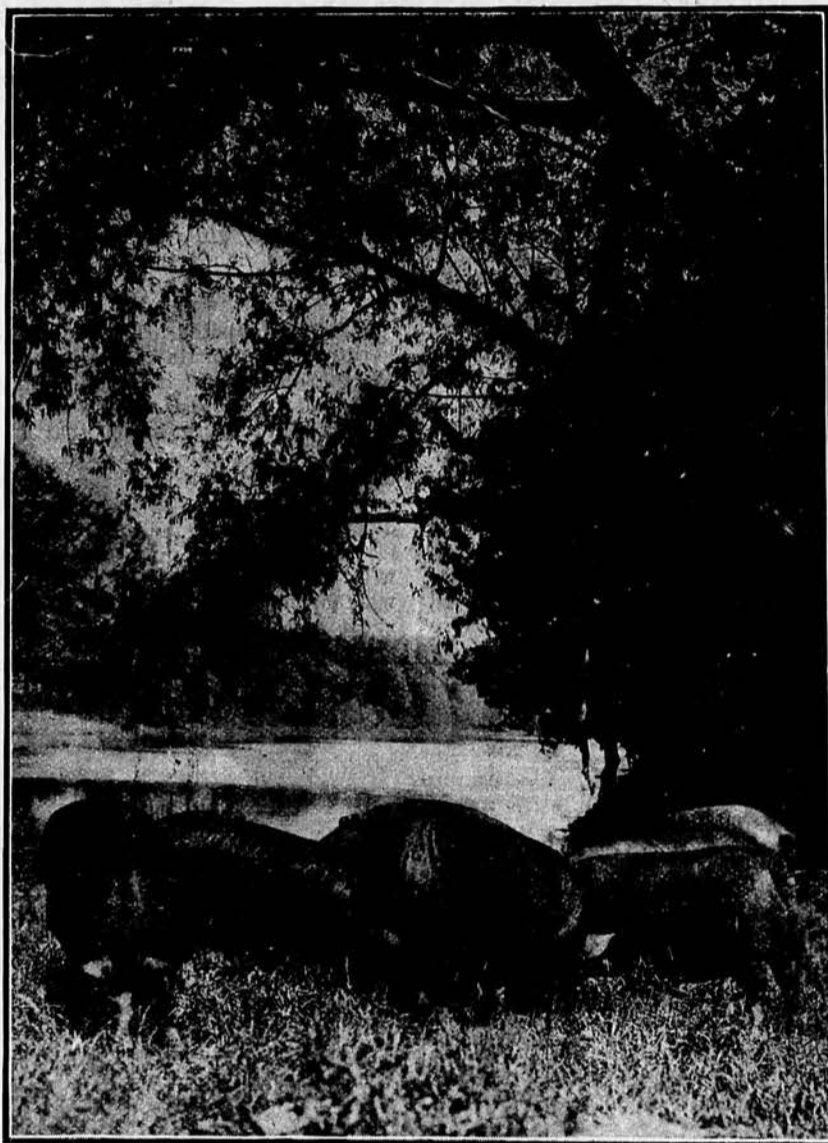
PURCHASE PEDIGREED ANIMALS.

In starting buy the best individuals, with the best pedigree, that your means will permit. By this I do not mean prize winners, with prize winning ancestry, at a long price, when the animals do not suit you (and if one ever succeeds he must have an ideal) any better than some which

could be bought at one fourth the price, but without the show record. Shows have done more to injure the breeds of live stock in America than anything else. Perhaps I should not say it that way, but should say, the buying and using of inferior animals because their ancestors have been prize winners, or have been sold at a real, or fictitious high price, has done more to injure the breeds of live stock in America than anything else. In starting get as near the dual-purpose cow as you can find. Have her fill as near as possible the new standard. Avoid bulliness about the neck and throat in the cow. A feminine look

cow. When you have turned her dry and desire to fatten her, and feed her plenty of fat producing food, and she persists in staying poor, discard her, she is not a dual-purpose cow. Feed her to the crows, sell her to the canners, or to the special-purpose dairyman, he can use her.

Never use a bull whose dam is either ill shaped, or a poor milker. See that his rudimentaries are, as the standard says, large and well placed. His rump should be wide and flat. Avoid the high tail head and the peaked rump. He should have a neat trim head, with a bright prominent eye, but should have a masculine look. The



Swine raising is a necessary part of Dairying and good hogs always pay.

about the head, is very essential. She should have a level, wide back, carrying her width well back, giving her a level flat rump. The sway back, peaked rump, cat ham, and sharp back of the extreme dairy cow, is not essential in a good profitable dual-purpose cow.

HAND FEED THE CALF.

The calf should be hand fed, not starved and stunted, but kept growing, on bone and muscle forming food. The heifer should never become excessively fat, but considerable flesh, with plenty of exercise, will not injure her usefulness as a milk cow. Two of the best milk cows I have were fat all their lives before calving; were grown and fitted for the World's Fair at St. Louis, one of them winning second prize in two-year-old class. They should be bred to calve when two and a half to three years old. Take the calf away and milk her, not for the good of the calf, but to develop the cow. Feed her good, treat her kindly, and milk her. Milk her carefully and milk her dry. If she don't give milk, milk her anyway. Milk her until she does give milk. Plenty of succulent food, and good milkers, have made more milk cows than all the theoretical breeding that the special dairy cow advocates have ever done. If she is a dual-purpose cow she will become thin, while milking, even with good treatment and plenty of feed. Test her milk and see if it is rich. If, with persistent milking and plenty of milk producing food, she gives but little milk, or milk poor in butter-fat, and will get fat, discard her—sell her to the beef man—she is not a dual-purpose

head is indicative of quality. When Thomas Bates, I believe it was, saw Bellviders head sticking out of a barn window, he exclaimed, "Eureka!" Sure enough, on close examination, the bull suited him, was bought and proved a great sire.

AT RENDLESHAM FARM.

Joseph E. Wing says, in telling of the Rendlesham farm: "My visit to Mr. Smith's impressed upon me that our American breeders of Red Polls should be of good cheer; they can make the breed win public favor and bring it extensively into use. The cattle have the merit, none more worthy to fill a large place in the economy of the American stock farm." He also says: "It is a thorny path the breeder of dual-purpose cattle must tread. Any man can learn to judge beef cattle; he can even judge them blindfolded, or he can judge them and never touch them, but when he comes to consider maternity and the manifestations of maternal love that comes with milking, then he needs to be a judge; he needs to be a seer and prophet; he needs to have insight and instinct, and he must be a lover. Such men we have and they are of high type." Verily, the dual-purpose cow is again coming to her own. Years ago the venerable Thomas Shaw championed her cause and baffled the specialists with his sound logic. Over in England a few men are perpetuating, in the Shorthorn, the noble work of Thomas Bates; and soon these dual-purpose Shorthorns will be coming to America. Up at Chicago, at first, the lordly Scotch Shorthorn, the proud White-face, the ebony hued Angus and the

The Whole Truth In A Nut Shell

Middleburgh, N.Y.
Sept. 4, 1907.
I am using your U. S. Separator and am well pleased with it. My U.S. is not out of order every week or two as my neighbors who are using other makes, ARE.
DAVID L. VAN WORM.

It's "Reliable"

And RELIABILITY is "THE quality of qualities." A reputation for RELIABILITY is not won in a day, a month or a year. Consistent performance during the slow testing of time, alone is sufficient to prove that most satisfactory of qualities—RELIABILITY. Each year for past sixteen years, the

U.S. CREAM SEPARATOR

has been adding to its reputation for RELIABILITY which is UNEQUALLED today. Dairymen today choose the U. S. because they KNOW it can be depended upon to do the Best work ALL the time and the Longest time, too. Time has PROVED it.

Mr. Van Worm's few words sum up completely the many reasons why dairymen everywhere are fast exchanging their old style, unsatisfactory or "cheap" separators for the RELIABLE, clean skimming, up-to-date U. S. If you have one of "the other kind," we've a proposition to make you. Just ask us about it, please.



The thirty illustrations in our new catalog enable you to easily SEE why the construction of the U. S. makes it the most RELIABLE and profitable. Won't you send today for free copy? Just ask for "No. 61."

VERMONT FARM MACHINE CO.

BELLOWS FALLS, VT. 482

Eighteen Distributing Warehouses

BOWSER

(Sold with or without elevator.)
Crush ear corn (with or without shocks) and grind all kinds of small grain, and feed. Use Conical Shape Grinders. Different from all others.
LIGHTEST RUNNING
Handy to operate. 7 sizes—3 to 26 h. p. One size for wind-wheel use.
Also make Sweep Grinders; both Geared and Plain.
C. N. P. Bowser Co.
SOUTH BEND, IND.
FEED MILLS

48 ATLAS RIFLE

No. 6A664
Send us \$1.48, and we will send you this genuine Atlas Rifle, model of 1908, 22-caliber, shoots all regular 22-caliber rim fire cartridges. With the rifle we will send free 25 special targets, so that the rifle can be used in a gallery for money making if wanted; has 22-inch barrel, fully rifled, solid extractor, walnut stock, the latest take-down model. It is the exact same Atlas Rifle that has been sold generally at \$3.00 to \$5.00, and is greatly improved for this season. If you don't order this rifle from this notice, don't fail to refer to the Gun Department in one of our latest Big Catalogues. If you haven't a Big Catalogue borrow one, and see what we are now offering in guns, revolvers and ammunition. Do this, or on a postal card addressed to us say, "Mail me your great gun offers." Address, SEARS, ROEBUCK & CO., CHICAGO

VIRGINIA FARMS

\$8 per Acre and up

with improvements. Good productive soil, abundant water supply and best climate on earth. Near railroad and good markets with best church, school and social advantages. For list of farms, excursion rates and our beautiful pamphlet showing what others have accomplished, write to-day to F. H. LA BAUME, Agri. and Ind. Agt., Norfolk & Western Ry., Box EJ, Roanoke, Va.

INVEST IN THE SOUTHWEST

Where Lands are cheap

Where Labor is well paid

WHERE INVESTMENTS YIELD LARGE RETURNS

WRITE FOR LIST OF OPPORTUNITIES

P. H. THOMPSON & CO., FORT SMITH, ARK.

silked coated Galloway were inclined to look askance at the meek dual-purpose Red Poll with her great udder; but now, when the all following gaudy banners march into the arena, to the strains of the bag-pipe and the Scotchman's big drum, beat crossways, they allow the Red Polls, with their cumbersome udders, to march with them, and they seem not ashamed of their company.

We say to the dual-purpose breeder, be honest, courageous and bold; a few more years of breeding, a few more years of testing; a few more years of perfecting, and the thorns in the path will be changed to palm branches; the

a cooperative factory for butter or cheese instead of encouraging parties who would buy the milk or cream or who expected to manufacture for hire?

Ex-Governor Hoard's answer is:

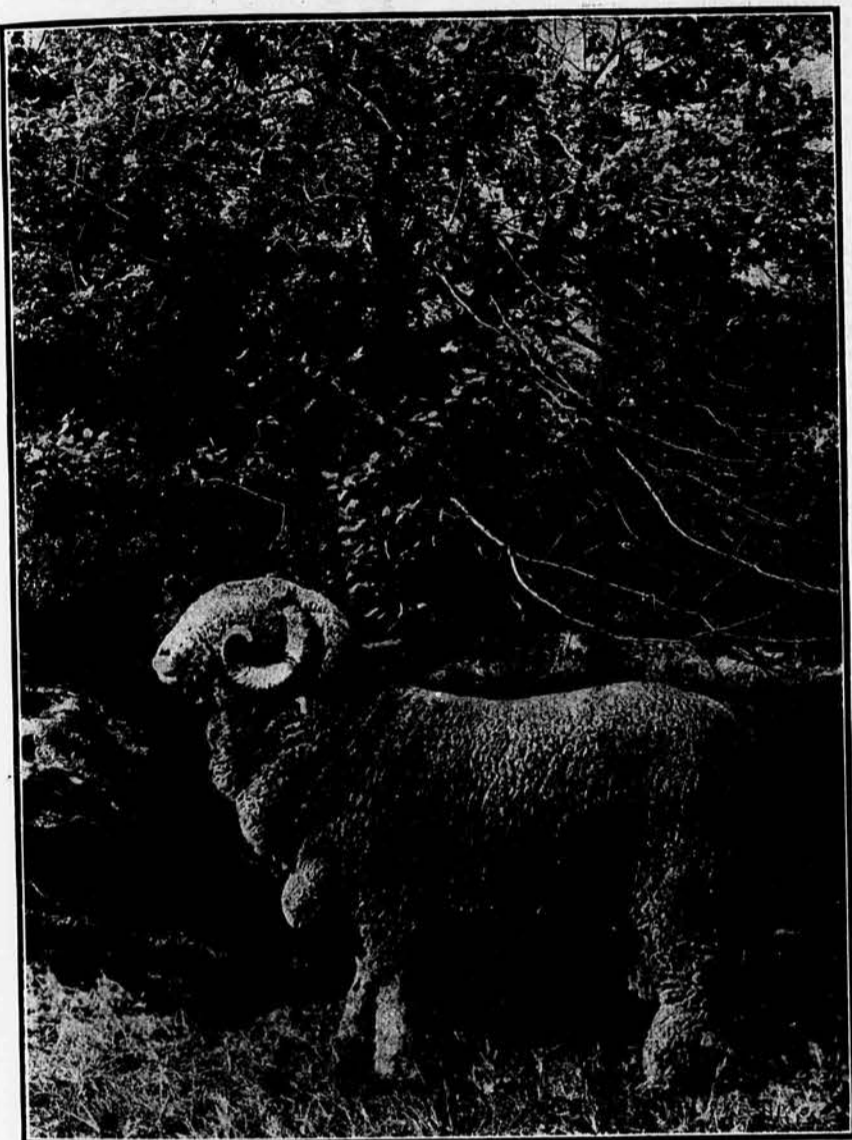
"That will depend altogether upon the kind of men they are. It is altogether a question of men. Any community can cooperate if they will."

Henry Wallace's reply is:

"When the cooperative creamery is properly organized and managed in a business-like way, it is satisfactory."

James Wilson, professor of agriculture and director Iowa Experiment Station, replies:

"Cooperation educates in business



A few sheep may add to the profits of the Dairy Farm.

sneers will be changed to hosannas; the dual-purpose cow will again, as of old, be crowned queen of the bovine tribes.

Centralized or Cooperative Creameries?

ADDRESS OF J. M. WILKERSON, PRESIDENT, BEFORE THE NEBRASKA STATE DAIRY ASSOCIATION.

(Continued from last week.)

"COW CULTURE."

In further comparing the two systems as to which is best under the conditions that exist in Nebraska. I would refer you to our Nebraska State Dairy Association report for 1898, wherein I find "Views of the Leaders" taken from "Cow Culture" by the Honorable F. D. Coburn, secretary of the Kansas State Board of Agriculture, which reads as follows:

"It is desired by its author to present in this report the best modern thought of the men who now are and have been for many years giving closest study, combined with practice, to all matters directly connected with dairying and dairy stock husbandry, either as instructors, managers, or proprietors. Forty-two questions were carefully formulated with a view to having them cover those salient points upon which general information seemed most needed or important."

I will use such questions propounded, which, in my opinion, are appropriate in this discussion.

The first question is as follows:

With a good probability of their having a sufficient number of cows, would you recommend the farmers of a given community to organize and conduct

and dairying. Much depends on the kind of people."

H. B. Gurlier, of Illinois Dairymen and author of American Dairying, answers the question in the following:

"The essential point is to secure first class work. It does not matter much whether it is cooperative or individual enterprise. I know of individual creameries that take four cents per pound for making butter and then net their patrons more per hundred pounds for the same quality of milk, than cooperative competitors that make the butter for cost. There is no business in which inexperience makes greater losses than in the creamery and cheese factory, and the supply of trained and reliable men for this work is short. Milk, cream, butter, and cheese are perishable products hence, constant vigilance is necessary to success."

H. M. Brandt, creamery operator and president Kansas State Dairy Association, states:

"I have yet to see the first successful purely cooperative concern run by farmers. Cooperation must exist on either plan if success would be obtained."

George Morgan, dairymen, and ex-president Kansas State Dairy Association, replies:

"No. In nine cases out of ten it has resulted in failure. Experience has proved that it is always best to put the business into the hands of a practical manager who is financially interested in the enterprise."

J. E. Nissley, ex-secretary Kansas State Dairy Association, replies briefly as follows:

Buy Direct From Our Factory

Saving all expenses and profits of the dealer. Elkhart Buggies and Harness have been sold direct from our factory to the user for 35 years.

We Are the Largest Manufacturers in the World



No. 237. One Horse cut-under Surrey with bike gear, auto seats and 13 1/2 in. cushion tires. Price complete, \$103. As good as sells for \$40 more.

selling to the consumer exclusively. We ship for examination and approval, guaranteeing safe delivery. No cost to you if not satisfied as to style, quality and price. Over 200 styles of Vehicles and 65 styles of Harness.

Send for New Free Catalog.



No. 676. Top Buggy with padded wing dash and Stanhope seat. Price complete, \$57.50. As good as sells for \$25 more.

ELKHART CARRIAGE & HARNESS MFG. CO., ELKHART, INDIANA

WALLACES' FARMER

DES MOINES, IOWA, FRIDAY, JANUARY 10, 1908

VOL. XXXIII

A BRIGHTER OUTLOOK

and it is to be hoped that for the time being the world is clear of the

it with others if they have

attention to the fact that the Studebaker

Bros. Manufacturing Company will be

glad to send their Farmer's Almanac

free to those who mention Wallaces' Farmer when writing them. Be sure to

read their advertisement.

A GOOD AUTOMATIC GATE.

We are pleased to call attention to the

Adams Automatic Gate, advertised else-

where in this issue, as being one of the

automatic gates that we can recommend.

It is ball bearing and the automatic part

is a success. A very light pull on the

rope or wire raises the gate and it opens

from you—not toward you to scare the

team. It closes just as easily and suc-

cessfully, and hogs or other stock can

not open it. The gate, while light, is a

very substantially made, and is also neat

in appearance. It is sold on a guarantee

that it need not be paid for unless satis-

factory, and the price, for an automatic

gate, is very reasonable. An examina-

tion of the gate shows it to be a good

one, and our readers need not hesitate

to order.

THE IDEAL ENGINE FOR THE

LARGE FARMER.

E. W. ADAMS, Sta. A., Topeka, Kans.

BUY YOUR PLOWS AT WHOLESALE
AND SAVE 33 1/3 PER CT.
\$9.80 FOR OUR 12-IN. STEEL BEAM DOUBLE-SHIN PLOW
\$10.55 FOR OUR 14-IN. STEEL BEAM DOUBLE-SHIN PLOW

Order from this ad, or send for great free Implement Catalog, which absolutely guarantees a saving of one-third the dealer's price.

DON'T MISS THIS BIG OPPORTUNITY

We sell Plows from \$1.70 up, Harrows from \$3.35 up, Corn Planters from 75c up, Cultivators from \$2.15 up. We sell Mowing Machines, Hay Rakes, Hay Presses, Hay Tools, Seeders, Grinders—in fact, all kinds of farm implements at just about half the retail price. We sell all kinds of supplies, such as Mower Sections, Knife Heads, Lister Lays, Plow Points, and everything which comes under the head of implements or implement supplies. Send for this Catalog today.

Jones Bros. Mercantile Co., 709 Hickory Street, Kansas City, Mo.

UNGLE'S HOGGETTE

The Great Preventive and Cure for HOG CHOLERA.

Indorsed by more breeders. Has saved more hogs than any remedy on the market.

Ungle's Dip \$1 per gallon in 5 or 10 gallon cans.
Ungle's Flake for lice on hogs 4 1/2c per pound by the barrel.

Cured Their Herd.

Republic, Kans., July 27, 1907.

Ungles' Hoggette cured our herd in the fall of 1906. We would not think of raising pigs without it.

WARD BROS.

Address, **UNGLE'S HOGGETTE CO.,**
Box 749. Lincoln, Nebraska.

Write for printed matter.

Better Roads for Less Money



With the aid of our modern road culvert, made of annealed, corrugated iron, heavily galvanized, roads can be properly and cheaply drained; and consequently, made better. With lumber high in price and getting higher; tile so very unsatisfactory, and stone costing too much for labor in building, the corrugated, galvanized culvert is the best and cheapest to use. It costs no more than tile, stone or wood and is rustless. Guaranteed to stand up under any and all loads. For further information, address

The Corrugated Metal Mfg. Co., Emporia, Kans

FLINT-COAT ROOFING

Write for Samples and Prices. Buy Direct. You Will Save 25 to 50 Percent Every Well Guaranteed Perfect
ROOK ASPHALT ROOFING CO., 609 Y. M. C. A. Building, Chicago

"Would recommend proprietary ownership."

A. G. Eyth, factory operator and ex-president Kansas State Dairy Association, states:

"Where the creamery business is carried on on business principles, I find individual ownership preferable; however, some cooperative plants are successful and satisfactory."

Thus we have the opinions of men in the successful eastern dairy States as well as Kansas, and from their unbiased replies must come to the conclusion that the success of the cooperative system in Nebraska and Kansas is at least very questionable.

Another question propounded is as follows:

From your observation are factories conducted on the cooperative plan more profitable and more satisfactory to patrons than those under private or independent ownership which either buy milk or cream outright or manufacture it on the customers' account?

Ex-Governor Hoard's reply is:

"No. Where a community is intelligent enough to know whether they are well served or not, there is no better method than the proprietary creamery. When they take charge of their own business they must stand the losses from poor judgment on their part."

James H. Wilson replies:

"Both succeed well, but if cooperative some one competent, whole-souled men must give much of his time for nothing."

H. M. Brandt of Kansas, replies:

"To this I must say, private ownership is paying the farmers from one to two cents per pound more for butter



Write Me Today Sure

I sell my Separators on 30 days free trial backed by my \$25,000 Guarantee.

Save 50 Per Cent

GALLOWAY
A Word to Cow Owners
I want to tell you there isn't a farmer in this country owning three or more cows, who can afford to be without a Galloway cream separator, when you can buy one at my low prices and on my liberal terms. Remember, I sell my separators direct from factory to farm at one small profit, so can save you 50 per cent.
Now here is what I will do. I will put one of my New Improved Galloways in your dairy and let you try it 30 days free. If it is not all I claim for it, send it back and I will refund your money and pay freight both ways. You need not send me consent in advance. Or if you wish you can buy a Galloway on six months' time. There is nothing to prevent your owning a Galloway. Just write me for my catalog and special offer. WM. GALLOWAY.

I Want Every Reader of The Kansas Farmer to Get My Special Proposition

THE GALLOWAY

CREAM SEPARATOR Sold Direct From Factory to Farm at One Profit
Get My Prices. Send For My Catalog. Get My Separator.

I believe there are a lot of farmers today who would buy a cream separator if they could get a strictly high-grade, up-to-date machine at a fair price. Now, then, here is your chance. I am selling you a cream separator of the highest quality, and will save you a lot of money on it. I will guarantee it. My separators bear the stamp of Galloway quality and are sold to you the "Galloway" direct from my factory to your farm, and my thousands of satisfied customers are proof that it is "The Only Way."

Now I want to send you my new 1908 cream separator catalog, telling all about the Galloway. With it I will also send you my special proposition which will help the first buyer of a Galloway in any section to pay for a machine without any work or trouble.

Don't buy another make of separator under any conditions until you have first investigated my offer. I can save you from \$35 to \$65 on a strictly high-grade separator—the kind you want in your dairy. This is money you might just as well have to put back in your farming.

GET MY NEW 1908 FREE CATALOG

I will gladly send my catalog to any farmer interested in dairying. It is a beauty and gives a lot of interesting facts about dairying besides telling all about my separators. Now just drop me a postal and let me send it to you by return mail. I want you to know about the Galloway double wing skimming device, the closest skimming, and easiest cleaned bowl in any separator; its low supply can and protected working parts, its simplicity of gearing and beauty of design; its ease of operation and sanitary construction; its high-grade materials—best that money can buy, etc. In fact, there is not a thing about the Galloway that is not fully shown in my booklet. It is impossible to tell you all about my separator here so do me the personal favor to send for my catalog and special proposition and let me save you over 50 per cent on a cream separator. Write me today.

WM. GALLOWAY, Pres., THE WILLIAM GALLOWAY COMPANY
383 Jefferson Street, Waterloo, Iowa

Just write your name and address on margin of this page, tear out and send it to me.



"Five hundred to 800 cows."

Thus we have the unbiased opinion of our most prominent men in Wisconsin, Minnesota, Iowa, and Kansas. Therefore, if in these eastern States where they have special dairy cows and long periods of pasturage which enable them to keep up a good volume of milk during the greater portion of the year, it requires from 300 to 500

In my estimation this last question was especially constructed to apply to the conditions of Nebraska; not only ten years ago, but at the present time, and has the opinions given by these eminent men prove conclusively that it is impossible to operate local cooperative creameries successfully to any extent in Nebraska, especially when you consider that the average number of cows in our dairies will not exceed four or five, and owing to the sparsely settled condition of the great portion of our State, it would not only require the hauling of cream a distance of five or six miles, but in the western parts where the dairy industry has proven of the greatest value to our farmers, it would require a haul of from eight to fifteen miles.

WHOLE MILK SYSTEM GIVEN UP FOR HAND SEPARATOR.

In summing up this question from my point of view, I will say that each system has its place, its advantages and disadvantages. In Minnesota and Wisconsin the cooperative creamery system, so far as the creamery industry in those States has been developed, has proven successful and satisfactory. Yet I don't think their wonderful growth or success is due to the system so much as it is to the inclination of the people toward dairying and the natural advantages they possess. Its disadvantages or possible misfortune lie in the uncertainty of continued cooperation on the part of their patrons, proper management, and their inability to market direct to the retailer, thereby dealing as close as possible to the consumer, also the possible future economic demand of their patrons to abandon the whole milk system in favor of the hand separator.

THE NEBRASKA CENTRALIZED CREAMERY SYSTEM.

The centralized creamery system in Nebraska has been a success and is responsible for the wonderful growth of the industry in our State during the past six years, because it meets the requirements of our people and the nature of the country. Its disadvantages lie solely in the injury that fierce competition is liable to work and the fact that the volume of the centralizer's business in the various communities will not warrant the hire of a practical creameryman to deal directly with the producer, thereby carrying on as high a degree of educational work with the patrons as we would like.

PRaise FOR MINNESOTA AND WISCONSIN.

In conclusion, I have nothing but praise to extend to our friends up in Minnesota and Wisconsin. I congratulate them on the success they have attained. I am sure if they thoroughly understood the conditions in Nebraska, as they exist, they would reciprocate to the extent of congratulating us on our success under entirely adverse and different conditions, and would advise our people to stand by the centralizers, at least until such time as they

can honestly find that the proprietary or centralized creamerymen have not treated them fairly or that they can do better for themselves. Then when we meet in a National convention we can extend to one another the glad hand of fellowship, feeling that we are all engaged in a work that carries with it the highest benefit to this great industry and one that is contributing largely to the growing wealth of our States; we shall then spend the valuable time of our National conventions discussing means of building to greater proportions rather than in controversy that only tears down.



COLANTHA JOHANNA LAD 32481.

Son of the world's champion butter and milk cow, Colantha 4th's Johanna. Official record 365 days, 27,432.5 pounds milk, containing 998.26 pounds butter-fat, equivalent to butter 80 per cent fat, 1,247.32 pounds. Average per cent test of 3.64; seven days, 35.22 pounds, butter 80 per cent fat; thirty days, 138.54 pounds, butter 80 per cent fat. Test conducted by the Wisconsin College of Agriculture.

in Kansas. A conservative private ownership, I believe, can make the farmers most money."

George Morgan, dairyman and ex-president Kansas Dairy Association, has this to say of his observations in Kansas:

"Experienced management is necessary under either system. As a rule, the Kansas farmer has not given dairying much attention, and until he does, he cannot run the business successfully. Purely cooperative dairying to be successful, involves a better knowledge of the business in all its details than will be found in the average community of Kansas."

Another question propounded:

What is the smallest number of cows or average daily milk supply that will justify the building and operation of a creamery?

Ex-Governor Hoard states:

"It will take 300 cows supplying 4,000 to 6,000 pounds of milk, to pay the expenses and leave any profit on the investment."

James H. Wilson states:

"There should be 10,000 pounds of milk daily to justify a good creamery outfit."

John Mathieson, ex-president Minnesota Dairy Association, states:

"Hoard's dairymen has placed the number at 300; that is certainly small enough. I think 500."

George Morgan, of Kansas, states:

cows to furnish a sufficient volume of milk to support a local cooperative creamery, how many of our cows in Nebraska, that are largely bred for beef purposes instead of dairying, would it require to furnish the necessary volume of milk to successfully support and maintain a local cooperative creamery throughout the year, providing the proper management is at hand? Mr. Morgan's estimate of 500 to 800 cows is certainly conservative. The next question propounded was as follows:

Having five to ten cows, is the farmer justified in taking his milk or cream four, five or six miles to a butter or cheese factory rather than attempt working it at home with ordinary appliances?

Ex-Governor Hoard replies:

"I would think not; he had better increase his herd to fifteen or twenty cows."

Henry E. Alvord, Washington, D. C., late Chief of Dairy Division, United States Department of Agriculture, replied:

"Yes, but carry cream rather than milk; the greater the distance, the more expensive and disadvantageous the hauling of milk."

John Gould, of Ohio, dairyman and dairy lecturer, replies:

"No. It takes him all the time to go and come and talk politics along the road."



A \$10 Separator

Would be about as much use to you as a \$10 cow

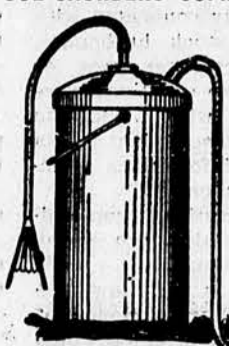
You'd never in the wide world think of trying to run a dairy with a lot of scrub cows, and you know full well it would be just throwing money away to have a separator that wouldn't skim all the cream. If you're like most farmers you've had to work hard for what you've got and you just can't afford to put your good, hard-earned dollars into a separator of any kind until you have at least seen the

Peerless Cream Separator

The only machine with combination of hollow and disc bowl—gives double capacity—the hollow bowl doesn't break the large fat globules—you know that means more butter from every gallon of cream you churn; or a better price if you sell the cream. There are a dozen points where the Peerless Separator is different from all others, and every single point of difference will help you to get more profit out of your dairy. Haven't room to tell you all about it here—but send for our catalog and look it over pretty carefully—it will be money in your pocket. Write us today while the matter is fresh in your mind.

Waterloo Cream Separator Company
Dept. C, Waterloo, Iowa

USE SAUNDERS' GOPHER EXTERMINATOR



To kill prairie dogs, squirrels, gophers, badgers, etc. The apparatus shown in cut forces a fire through carbon bisulphide direct to holes and runways and is the most effective remedy known.

Price, complete with full directions for using, \$5.00.

FLINT SAUNDERS
Lincoln, Kans.

When writing our advertisers please mention The Kansas Farmer.

Skim-milk Calves.

Report of address of T. A. Borman, Topeka, Kans., before Missouri State Dairy Association, Columbia, Mo., January 10, 1908.

It is my observation that many farmers would milk cows—they would not consent to engage in dairying but would milk a few cows and sell the cream—if they felt sure that they could at the same time produce a good calf. It beats the world how small farmers, men who would engage in the most economical use of their land and who should be saving every vestige of fodder and grain and converting it by the cheapest and quickest means into the most concentrated and highly valuable product of the farm, will hang on to the old notion that the most supreme service of a good cow is to rear a calf or two for the feed lot and in the end sacrifice her own body on the butcher's block. This beef idea is an extravagant idea. It is far from economy, and we must admit that in many sections of Kansas, and I doubt not in Missouri, we should be interested deeply in the most economical method of handling our lands. I would not have it understood from this statement, however, that I would convert every farm into an extensive dairy farm. I would, however, have it understood that I would have on every farm a herd of eight or ten cows, which cows can be handled with very great profit to the farmer and which cows will add very largely to a system of maintaining soil fertility together with

their other farming operations. My object is to show how it is possible to rear a calf on the sweet hand separator skim-milk properly combined with grains and which calf at the end of twelve months will be worth as much money to the farmer, either for placing in his feed lot or in selling to some feeder, as the calf which has been reared at its mother's side. I will not resort to any figures to prove that as good a skim-milk calf can be produced at the end of twelve months as the calf which has suckled its dam through the summer and wintered in the usual way. I will not resort to any figures to show the comparative cost of a skim-milk calf twelve months old as compared with a calf raised on the cow at that age. Figures on each of these points abound galore. They can be found in the bulletins of the experiment stations from one end of the United States to the other. I take it for granted that the farmer knows that if a skim-milk calf can be successfully grown that it will represent one-half less to him than the calf which has had the entire and exclusive attention of its dam.

THE HAND SEPARATOR IN THE DAIRY BUSINESS.

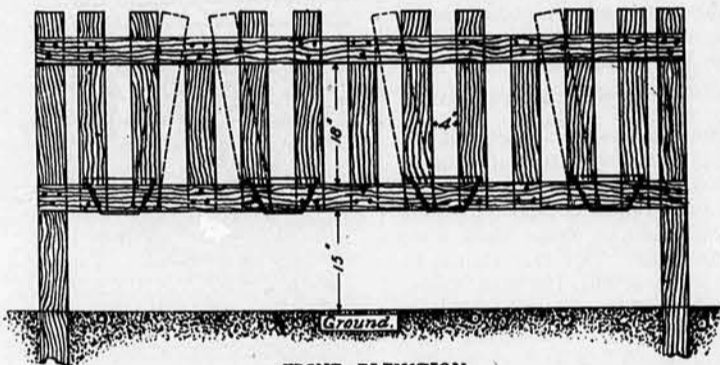
The hand separator which is used entirely in connection with the dairy business in Kansas, and I think in Missouri, has contributed very largely to the successful calf raising. This is so because the milk can at all times be fed warm and at the same temperature

CALF STANCHIONS.

Scale 1/2 ft.



SECTIONAL ELEVATION



FRONT ELEVATION.

a sensible use of the land in the growing of crops. The number of cows which a farmer should milk in Kansas, and I think in Missouri, is dependent entirely upon his help. The measure of the dairy herd should be taken from the standpoint of help alone. Every farm in my State can very easily maintain all the cows his help can milk. I think this will apply in Missouri as well as in Kansas.

THE SALE OF CREAM IS PROFITABLE.

It is the testimony of thousands of farmers in the western country, who have been milking cows and producing cream for sale to the various creameries, that the sale of cream is profitable. The sale of cream enables the farmer to have a cash income day after day and year after year, and it is this daily cash income which places the dairy farmer in a more independent position than he has ever before attained, and which enables him to pay the running expenses of his farm and maintaining his household without using the money realized in lump sums from the sale of wheat, grain, hogs, etc., which can be placed to his credit either in the bank or, as in Kansas in the years gone by, pay the mortgage, and in these days buy more land, build a better house, and erect a good barn.

THE SWEET SKIM-MILK CALF.

There are many farmers, as we say, who would not object so much to milking cows and patronizing a creamery if they felt assured they could raise a calf with credit to themselves and

and also that it may be fed sweet at practically all times. At just this point I wish to add that in calf feeding the uniformity of the condition of the milk contributes probably more than any other one thing to the successful feeding of the calf. Skim-milk contains all the elements of the whole milk except the fat. The elements necessary to produce muscle, bone, hair, and promote growth of the young animal. The hand separator has taken from the milk only the fat. The fat of the whole milk is not necessarily essential to the growth of the young calf, and 4 per cent milk, which is rather a higher percentage of fat than the average milk from Kansas herds, contains at least 2 per cent more butterfat than is needed by the calf. To illustrate this point I have only to call your attention to the statement made by many farmers which is to the effect that a certain cow in their herd gives thin milk yet she produces a larger and more vigorous calf than the cows in the herd which are recognized as giving the milk containing much more fat. This is evidence in support of my claim that the normal amount of fat contained in cows milk is not needed by the calf.

FAT ALSO IS ESSENTIAL FOR THE CALF.

Skim-milk, as stated, contains all the elements necessary for growth. However, some fat must be fed in connection with milk to produce a certain essential amount of fat in the calf's body and also for the purpose of keep-

NEW 1908 IMPROVED DE LAVAL CREAM SEPARATORS SWEEPING THE FIELD

"Peaches and cream" is what one man says of the new Improved De Laval Separators. Another writes, "You don't begin to claim nearly enough for the new machines," and so it goes—every one who has been the new De Laval Farm and Dairy Separator California reports are arriving in their praise. From Maine to California reports are arriving in every mail telling of how the new De Laval is sweeping the separator field.

Ten New Styles, Ten New Capacities, Ten New Prices.

The new De Laval line has a machine for every size dairy from the smallest to the largest and at a price that will fit every pocket. It includes several new capacities never before offered, making the line by far the most complete ever placed on the market. There is the proper machine for every cow owner, no matter what his requirements may be.

Improved In Every Feature.

The new patented center-balanced bowl with its separate spindle is a triumph in separator construction and the whole machine, from the patented "anti-splash" sanitary supply can to the base, is a lesson in mechanical beauty, simplicity and convenience, operating as smoothly and noiselessly as a watch. Only one tool—a screw-driver—is required to set the machine or to entirely remove its parts. The new De Laval sells on its appearance alone, while back of that are those unsurpassed mechanical and skimming qualities that have made the De Laval the world's standard. Nothing like it has ever been produced before and it is fully ten years in advance of any other separator made to-day.

Place Your Order Early.

Any one owning two or more cows suffers a daily loss if he is not separating his milk with a good separator. Those who are thinking of purchasing separators should not delay until spring or even another week to do so. Your daily losses without a separator will soon pay for one. If you don't know your nearest local De Laval agent send for his name and address and our new catalogue at once and request a free demonstration of one of our own machines in your own home. Don't fail to examine the new De Laval line before you buy, otherwise you must surely regret it later on. Furthermore, it will pay you to act quickly, for although the capacity of the De Laval factory is one half greater than a year ago, it is more than likely that the demand for De Laval machines can not be met promptly a month or so later when cows begin to freshen and grass comes. Don't delay. Write to-day.

THE DE LAVAL SEPARATOR CO.

42 E. Madison Street,
CHICAGO.
1213-1215 Filbert Street,
PHILADELPHIA.
Drumm & Sacramento,
SAN FRANCISCO.

General Offices:
74 CORTLANDT STREET,
NEW YORK.

173-177 William Street,
MONTREAL.
14 & 16 Princess Street,
WINNIPEG.
107 First Street,
PORTLAND, ORE.

ing the calf warm. It will be seen in the first place, therefore, that calves running with their dams are eating more fat than they really need, which results in loss to the owner because it does the calf no good. It is a surplus of fat which the calf does not need, and when butter-fat is selling at an average price of 22 to 23 cents per pound, it can be seen that it will be economy on the part of the farmer to save this fat and sell it. On the other hand if a substitute for this fat can be added to the skim-milk and this substitute is cheaper than butter-fat, as it is, then the farmer is again practicing a system of economy which he can't afford to overlook.

START THE CALF RIGHT.

Now the farmer cannot afford at the present time to sacrifice his chances for a good calf and he need not do so. A calf which will sell at one year old at a good figure is just as necessary on the farms of Kansas, and I think Missouri, as it is for a man to have a cow on his farm. We can't afford, therefore, to start this calf in any other way but to start him right, and by this we mean to feed him well. Even though the farmer is procuring excellent prices for his butter-fat he can't afford to mistreat or stunt the calf during the first two or three weeks of its life. I would, therefore, be as liberal as need be in feeding a young calf whole milk.

MILK FOR THE YOUNG CALF ESSENTIAL.

The calf should by all means have the first milk from the cow. This milk is known as colostrum, and is the feed first intended by nature for the calf. It has certain medicinal qualities which are necessary in putting into action the calf's system, consequently every calf should have its first two or three feeds of the new milk. This milk, however, is not lost for the reason that milk under three or four days old from a cow whose udder is in an unnatural condition, is not fit for sale. A good cow, however, will give three or four times as much milk even from the start, as is needed by the calf, and here is a chance for the farmer who is running things right to get some good hog feed, which feed is worth dollars to him and by giving it to his hogs he does not in any sense rob the calf. Most farmers desire that the newly born calf should take this colostrum direct from its mother's udder. I have no fault particularly to find with this method in ordinary farm practice, but for myself in handling a herd of excellent dairy cows, I would never permit the calf to suck. The calf gains nothing and the farmer loses much in the way of future product and annoyance from the mother if the calf is permitted to suck. However, in ordinary farm practice it is all right to allow the calf to remain with its mother two or three days or if not this long at least to suck a time or two.

TEACHING THE CALF TO DRINK.

When the calf is taken from the cow he must, of course, be taught to drink. The longer the calf remains with the cow the more difficult it is to teach him to drink. For this reason, principally, I would not allow the calf to suck if I could avoid it. However, in giving the calf its first meal artificially which is from a milk pail, let the calf get hungry before you attempt to feed him. A hungry calf will learn to drink much more quickly than a calf which is not hungry. In fact it is next to impossible to make a calf drink until he is hungry. It, therefore, will save wear and tear on the temper and the calf will be treated just as well if he is not allowed to eat until he feels the need of a meal.

When feeding the calf for the first time do not offer him more than half a gallon of milk, and let that be at as nearly the natural temperature as possible. Back the calf into a corner. Stand astride his neck, insert the two first fingers of the right hand in his mouth, and if the calf is hungry he will suck the fingers. If the calf is not hungry he will not suck the fingers, and it is useless to attempt to feed him at this time. When he begins

sucking the fingers lead his head into the pail and he will get a taste of the milk which means that the job is then more than half done, and after a few seconds withdraw the fingers. If the calf fails to drink at the first attempt repeat the operation until he gets a good swallow of milk when the task is completed. The calf when hungry soon finds that he can drink. If at the first feeding the calf should consume a half gallon of milk do not attempt to feed him again for at least ten or twelve hours. Let him get hungry. He won't die from starvation even though he did not drink a drop at the first attempt. This is my plan, and I have reared a good many calves and have seldom ever failed to have the calf drink on the first trial.

NO SKIM-MILK FOR THE YOUNG CALF.

During the first week of the calf's life we would feed no skim-milk even though we had skim-milk warm and sweet from the separator. At the end of the first week we would give the calf a chance to begin eating Indian and Kafir-corn, and to nibble a little hay. A calf will begin to eat corn and hay early in life if given an opportunity. As soon as he has begun to nibble a little corn we would begin to add skim milk to his feed, we would at first add a pint to a half gallon of whole milk and continue to add a pint of whole milk a day until with the skim-milk and whole milk together he is drinking at the rate of a gallon of milk per feed. This stage will be reached at about the end of the first week, and at which time one-half of his daily feed will be skim-milk and the other half whole milk. At the end of the second week the calf will be eating more corn and hay and we would reduce the quantity of whole milk fed, increasing the skim-milk until at the end of the third week the calf would be on a ration of skim milk and corn. By this plan the calf should be doing as well as though he were sucking his dam, the calf would have entered upon a life of thriftiness, economy, and profit to his feeder and owner.

FLAXSEED JELLY A SUBSTITUTE FOR BUTTER-FAT.

It is pertinent at this point to talk about the use of substitutes in the milk to replace the fat in whole milk. I do not believe in feeding fat substitutes in the milk. Flaxseed jelly is a good substitute for butter-fat, but there is trouble in its preparation. The usual way of feeding it is in the milk and by so doing the calf is drinking something which he ought to masticate before it enters his stomach. I know of people who mix linseed-meal in the milk which the calf drinks. I do not believe in this. Linseed-meal in the first place is more expensive than corn chop and in the second place the kind of linseed-meal we buy these days has a result of increasing the quantity of skim-milk in the calf's ration. It is in effect the same as feeding more skim-milk to the calf. The feeding of anything in the milk has a tendency to indigestion and scours. There are numerous calf meals on the market which are intended to take the place of fat in normal milk and calves at experiment stations and even on farms have been successfully reared on them, but I do not believe in the use of these feeds because they are unnecessary, and increase the cost of feeding the calf. With all the good feeds necessary grown on our farms and these feeds better adapted to our needs, why buy these feeds which are high priced and which increase the cost of the calf's ration and many of which have no merits? In my opinion, as stated before, the value of fat in whole milk is not so great but that the farmer can afford to use the butter-fat under my plan above outlined when the calf is young and thereby eliminate entirely the necessity of buying prepared feeds. The oil in corn chop is a substitute good enough for the whole-milk fat, and is a cheaper food than any other which the farmer can obtain.

DO NOT OVERFEED.

In feeding calves, as in feeding all other animals, no hard and fast rules can be made to govern the quantity to be fed. Calves, like children, are often of delicate appetite and not good feeders. In such a case the quantity of feed should be reduced in some instances much below the standard I have above set. Let the calf feeders' axiom be to not overfeed at any time. Stop feeding before the calf gets all he will eat or drink. Make the calf lick the pail clean. He will do it if given a chance, and if he will not clean the pail he is getting more milk than he needs.

THE TROUBLE OF OVERFEEDING.

Overfeeding causes indigestion and scours in calves, and more calves die from overfeeding than from starvation. To do well the calf must have a good appetite. This he cannot have if he is overfed. This is particularly true while the calf is young. In times gone by we have heard it asserted by farmers that skim-milk poisoned calves. Skim-milk in proper quantities never killed a calf, but skim-milk taken down in gorging quantities will kill calves or any other animal and so will corn, clover, hay, alfalfa, or anything else which the calf craves and of which he eats enough to gorge himself.

The pot-bellied, cat-hammed, stunted and miserable calf creatures to be seen on many farms, not so frequently now as formerly, are the result of improper judgment used in feeding the baby calf. The calf so described is a disgrace to the owner, and he should feel ashamed of himself for having produced the like. Books and papers containing the experience of the best and most successful feeders can be had, and the experiences are so plain and the directions so simple that any man who fails to avail himself of these and makes one of God's innocent little creatures so miserable as some skim-milk calves, is deserving of punishment in the hereafter.

THE RATION—COMPOSED OF SKIM MILK.

At the end of the third week of the hand-raised calf's existence, if handled in accordance with our suggestion, he should be on a ration composed wholly of skim-milk, eating some corn chop and nibbling hay. The calf should be thrifty, the eye bright, the coat glossy and smooth, and the calf active. If properly and wisely fed until this date the calf will be all this and even more, hungry, playful, and lusty.

INDIGESTION CAUSED BY OVERFEEDING.

The aim in calf feeding should always be to prevent scours, and this is one of the things which should be watched closely. This ailment in skim-milk calves is the result of indigestion brought on, as a rule, by overfeeding, but also by feeding skim-milk in poor condition and from dirty pails. Every feeder of skim-milk to calves must sooner or later learn this lesson. He must learn that if the calf has the scours the feeder is not doing his work right. In the case of scours, reform your system of feeding instead of purchasing the many remedies advertised, and in dairy farming one of the important qualifications is the learning not only of making but of saving money. There are numerous and most excellent home remedies for scours and I do not venture a recommendation. In our experience of rearing several hundred pure-bred calves we have not had to exceed a dozen cases of scours, and these were in our early experience. One or two raw eggs broken into a calf's mouth have cured such cases. The feeding of dried blood in small quantities either in the milk or in the corn feed is a good remedy when the bowels become too loose. In this connection I wish to say that the feeding of Kafir-corn either in the chopped heads or meal is the best grain known to me for feeding while the calves are drinking milk. If I were raising skim-milk calves I would plant enough Kafir-corn at least for the use of my calves while they were drinking milk. Kafir-corn has a constipating effect which

Know "Great Western" Separators—First FREE BOOK

Sign this—tear it out—mail to us below— Good for our new 1908 "Cream Science" No. 2234

Name.....

P. O.



We Manufacture the Davis OUR FREE CATALOGUE

Tells How You Can Easily Save \$20 to \$50

on the first cost of a standard high-grade cream separator by straight factory buying. Tells why and how you may make your cows pay you \$10 to \$15 more per cow per year while cutting your dairy work in two. Fully describes the latest improved 1907 model

DAVIS SEPARATOR

the easiest running, easiest cleaned, most durable standard separator made and tells why it is. Contains valuable separator information that has cost us thousands of dollars, yet it's free to you—if you write today and mention catalogue 125. Write now. This offer may not appear again. Davis Cream Separator Company, 54-O North Clinton Street, Chicago, Illinois. Cut this out, sign and mail at once.



This celebrated fence can be erected at HALF THE COST of netting; requires NO TOP OR BOTTOM RAIL and only HALF AS MANY POSTS. Easily stretched over any kind of ground NO SAG OR BAG TO IT. Receives STRONGER endorsement than all other poultry fences combined. More than 10,000 dealers who are handling the M. M. S. POULTRY FENCING fully attest to its enormous sale and superior merit.

DON'T be talked into a substitute and then kick yourself with regrets afterwards; save money, worry, annoyance and disappointment by insisting upon and taking no other than the M. M. S. Poultry Fence. Let us send you free our 50 cent book of useful information; tells all about the poultry business, contains many rare and valuable receipts; in fact, it is an encyclopedia of valuable information, and should be possessed by every farmer, stockman and fancier; it is free; write for it today. THE KALB FENCE CO 739 SHUKERT BLDG., KANSAS CITY, MO



Get the FREE BOOK "EASY DIGGING" today and learn about the wonderful last-digging Iwan Post Auger that bores right into the hardest clay or gumbo. Works equally well in dry or wet soil. Easiest Auger to unload. Saves cost in two days. Makes post setting a snap.

THE IWAN AUGER is made on the only successful, scientific principle. Has sharp double blades of hardest steel. Digs twice as fast as any other Auger. Money back if it doesn't "make good." Write this very day for "Easy Digging" to IWAN BROS., Dept. G, STREATOR, ILL.

THINK OF IT! An Enlarged Portrait, Framed, for 50 cents. Write for terms. Life is short. Do it now! NATIONAL PORTRAIT CO., Chicago, Ill.

offsets the laxative tendency of skim-milk.

REGULARITY IN FEEDING NECESSARY.

Regularity in feeding, both so far as the hour of feeding is concerned and in the regular condition of the milk, is a most excellent preventative for scours. As stated before, regularity in feeding must be the watchword. Regularity in the hour of feeding, regularity in quantity of feed, regularity in quality and condition of the milk. After the calf is a month old, I think it makes very little difference whether the milk is fed sweet or sour, warm or cold, but it does make a difference in the calf's health and condition and gain if he is fed at irregular hours and is given warm milk at night, cold milk in the morning, or sour milk one day and sweet milk the next. When three or four months old if the calf is still drinking milk, and he should be, if there is no other use on the farm for the milk, it makes very little difference whether the milk be fed regularly and in proper condition provided he is not overfed. The milk, in my opinion, should always be fed as promptly after separating as possible. It should not be dumped from the separator into sour barrels or cans and there allowed to decompose before it is fed. This will mean scours and poor condition just as sure as can be.

ROUGHAGE A NECESSITY.

Because you have an abundance of skim-milk and are in a position to give the calf practically all the skim-milk he wants, do not conclude that milk is all he requires. Aside from the corn and the milk ration see that he gets plenty of hay. The calf needs hay. He must have roughage to aid digestion and distend the stomach if he is to become a heavy feeder and that is what you want either in the case of a steer if he is to be profitable consumer, or in the case of a heifer if she is to produce as a cow the most and cheapest milk. Steers in feed lots fed on corn alone have died in twenty days. Heavy milkers on an excess of grain with insufficient roughage, go dry. The calf must have hay and fodder in liberal quantities, and if he eats these bulky goods, he must not be kept filled with milk or corn.

SUPPLY CLEAN WATER AS WELL AS MILK.

While the young calf is confined to a box stall or pen and is drinking skim-milk daily do not forget to offer him water. At a week old the calf will drink liberally of water. In fact he will drink more water than milk. Give him a chance to drink water. He needs it. You may think the milk is thin and he needs no water, but milk does not take the place of water in his requirements. We have seen calves leave the milk pail for water. Nature has so constituted the calf and the feeder will do well to adhere as closely to nature's laws as possible. You may feed your hogs the wettest kind of slop but you know they need water clean and fresh to thrive and the calf is no exception to the rule.

THE REARING OF THE HEIFER CALF FOR A DAIRY COW.

In calf feeding at the end of four or five months is the parting of the ways for the steer and heifer calf. If the heifer is to be reared with the view to making her a dairy cow of greater value than her mother, then she must be fed for milk production. This is an important item if farmers are to produce their own cows which is the cheapest and best way known to me for securing a dairy herd. To the unobserving it would seem incredible that a heifer calf could be ruined for future usefulness in the dairy by the manner in which she is handled the first few months of her life. We know that the heifer calf can be ruined. She can be stunted and made an animal of small capacity. Her digestive apparatus can be ruined, and she can be made a finicky feeder, one of those animals not eating abundantly and never finding that which is good enough to eat. The heifer calf while feeding should not be allowed to become fat. She should be kept slick and glossy, full of vitality and muscular. If you educate the heifer calf to

put her food on her back in the shape of fat she will have that tendency when she becomes a cow. Therefore, she should not be fed too much corn. She should be fed the flesh-forming goods. She should be fed large quantities of the best roughage that her stomach may distend that she may handle large quantities of fat when she be required to do so as she will when she becomes a milch cow. If there is a surplus of skim-milk on the farm the heifer can utilize this to exceptionally good advantage. I have reared calves which had a drink of skim-milk twice per day from the day they were born and continuing until they became mothers and were being milked, and I consider that such skim-milk was never fed to greater advantage. These calves were growthy, in the best of health, and excellent feeders. It is wonderful what a pail of skim-milk night and morning will do for the cow which is producing milk.

THE STEER CALF.

In case of the steer calf, which will become a feeder, while he should be growthy he should be kept reasonably fat. He is the calf which should have the corn and should have the fat making foods. He should be reared in just the opposite direction, as compared with the heifer calf. It will not hurt the steer calf even to have his drink of skim-milk when he is six or seven months old if there is a surplus but skim-milk can not be utilized to as good advantage as in the case of the heifer.

THE BEST SKIM-MILK CALVES.

The best skim-milk calves are those which are born in the fall of the year. Their young life is spent at a more favorable season. The milk they get, as a rule, will be in better condition than the milk which the spring calf will get. They will not be annoyed by the flies and the hot weather. They will not have a chance to eat grass when so young. Grass for the right young calf is not the best for him. A calf is like a child, he will eat things which he likes, often to the detriment of his general health. The fall calf, if properly handled, will go on to the grass in the spring, and will make good gains thereon and will profit his owner at the end of a year far ahead of a calf born in the spring.

DAIRY BREEDS.

If you select dairy blood for your herd one of the things which should attract your attention when you make your final decision is the vitality of the breed you select. This shows up particularly strong in the calf during the first few months of his life. Dairy breeds, as you know, are not all equal in vitality. My experience in raising calves on skim-milk has been confined principally to the rearing of Holstein calves. I want to say in this connection in our own herd a calf never sucked its mother, and in this way, after ten or twelve years of breeding, the sucking instinct was largely bred out of the calves. These calves were easily taught to drink. The calves of this breed, without exception almost, are calves of great vitality, and one reason of our success in raising calves on skim-milk may have been very largely on account of the vitality of the calf rather than of any superior knowledge displayed in the handling of the calves. It was my observation however, that our neighbors, who were equally intelligent feeders handling calves of less vitality, very seldom met with the success of ours. I say, therefore, that in selecting a breed, this matter of vitality is a thing which should be taken into consideration.

CARE IN FEEDING VERY ESSENTIAL.

Not all of the success of rearing skim-milk calves depends upon the feed or upon the breed. Very much, indeed, depends upon the care of the calf, and feed without proper shelter will avail but little. The calf must be made comfortable in warm as well as cold weather. If he is not failure will result. Let your feeding arrangement be such that each calf gets his share. Do not, as I have seen on many farms, pour the milk into a tub or a trough and let the calf fight for his share.

CREAM PROFITS

If you are selling your whole milk to the Creamery you are not getting as much profit from your cows as you should. In fact you are losing 50 per cent. Without increasing your feed bills one penny or milking another cow you can double your cream profits. This is demonstrated by thousands of dairymen and farmers every day in the year.

The Sharples

Tubular Separator

gets all the cream in the milk—it skims out every cent of profit, so that you can turn it into cash. Here's one letter that tells the story of how to double your cream profits:

Union Mills, Ind.
GENTLEMEN:—We have a Sharples Tubular. Before we bought it, we had been selling our milk to a creamery at Union Mills, getting not more than \$3.00 a month, but since we have the Tubular, we have been getting twice more, and are so satisfied with the Tubular.
MRS. JOHN C. MILLER

Such proof as this ought to convince you that a "Tubular" will be a money-maker for you. The extra profit will soon pay for the separator while it will keep right on earning these big profits for years. Write today for our new catalog and free copy of that valuable book, "Business Dairying." Ask for book No. 165.

THE SHARPLES SEPARATOR CO.,

West Chester, Pa. Toronto, Can. Chicago, Ill.

There is no chance for disagreement on this point. This is not feeding. It will be found advisable summer or winter to arrange that each calf can get his individual share of the feed, in a yard in the summer time, or in a pen in the winter. If you have plenty of time it will be found advisable to tie each calf at each feeding. Tie around each calf's neck a ring two inches in diameter with a light rope. Give each calf a place at a post and staple to the post two feet above the ground a rope not more than eight or ten inches long with a swivel snap in the end. Have these ropes far enough apart to prevent the calves from reaching each other and you will have no trouble from the calves sucking one another's noses or ears. Keep the calves tied until the milk is licked from their chops and noses. If the calves be of about equal size they may be turned loose to a trough in which is the grain food. Do not permit calves four months old to be loose in the same pen with calves two weeks old. Separate the calves into pens according to age and size.

STANCHIONS REALLY NECESSARY.

Under this plan of handling calves there is nothing which will prevent a careful farmer from rearing the best skim-milk calf, but it involves more labor and more patience than many farmers can spare or afford. Time on the dairy farm is money just the same as in the factory. The farmer who is rearing a half dozen calves per year can't afford to be without stanchions. Stanchions are as necessary in feeding calves as is an improved stall in making the dairy cow comfortable. Every farmer knows what a stanchion is, and

these can be built out of scrap lumber on a bad day at very little cost. If calves are fed in an open pen in summer time I would build a stanchion in the lot. I would also have a set built in the calf barn. Stanchions are not so expensive but what the farmer can afford two sets. At meal time each calf will have his head in the stanchion and the calf waiting to be fastened. The feeder closes the stanchion and the calf is secure. The feed is given the calf according to his requirements and desires of the feeder. If the calf is a slow eater it is not molested by the greedy calf next to him. Stanchions on the dairy farm will expedite greatly and overcome many of the obstacles and disagreeable things in feeding calves.

SHELTER SHOULD BE PROVIDED.

The calves should by all means have a comfortable winter shed. The shed need not be expensive, but should be roomy and well ventilated, well drained, and dry. A dirt floor with a good slope is as good as needed. The floor should be well bedded with wheat straw, which is the best absorbent obtainable on the Kansas farm. The manure should be removed often and the floor kept sweet. The sheds should be well lighted, and a south front is best. A south slope is the ideal location. Close the shed on the north entirely but have either a big window on the south or the shed partly open. Let the calves bed be dry. He can stand a good deal of cold if he is kept dry.

GOOD TREATMENT PAYS.

It is surprising how a calf will respond to good treatment. A thrifty calf is a money-maker. If he is not

CREAM WANTED!

After sixteen years of successful business, the Lincolnville Creamery Co. has reached the conclusion that the best creamery method is to go direct to the producer and give him the profits or saving that is made by cutting out the cream-buyer and roadman with his big expense. This expense should be a profit, and belongs to the producer. So we are going to give you Kansas City top for your cream delivered to Lincolnville, Kans., which will make you about two cents per pound more money. Your check is returned to you the same day the cream is received. Give us a trial shipment and be convinced.

THE LINCOLNVILLE CREAMERY CO., Lincolnville, Kans.

thrifty and kept growing every day of his calfhood the unfortunate owner is only himself to blame. The calf should be kept growing all the time. When he is not growing and gaining in flesh he is a money-loser. A farmer who does produce a 6-months-old skim-milk calf in the prime of condition and which will weigh 550 pounds is not doing his duty in raising calves. He yet has something to learn.

I am cognizant of the fact that thousands of good calves have been reared without the use of stanchions and by the old ways of feeding skim-milk but it must be admitted that thousands upon thousands of poor calves which have given the dairy business a black eye, have also worried along and made in the end fairly good beef or just an average cow under the old methods. I believe that the methods I have suggested are improvements on the old ways of feeding skim-milk. My plan will save labor and give good returns for the labor expended.

"IT IS BRAINS THAT ARE NEEDED."

It is the inclination of the young man employed in feeding calves and dairy farming to follow the footsteps of his father. The dairy farming of to-day, including the dairy itself in order to satisfy the man who engages in it, must produce greater profits than twenty-five years ago. The use of more brains and less muscle will make both a better paying business. Manual labor comes cheap. The brains which direct the manual labor costs more each year. In every walk of life it is brains that are needed. Milking cows and rearing calves on skim milk will pay abundantly for intelligent brain work. It is the experience of every reading, studying, and thinking dairyman that it pays to be this kind of a dairyman.

Dairy Farming.—Why and How.—The Milking Machine.

H. Van Leeuwen, Ottawa, Kans., before the Kansas State Dairy Association.

The young man choosing a profession or business, should carefully consider the question, and, if wise, will do so. That many do not is very apparent. We need only to look about us and we can find ample proof. We find preachers and doctors that should be blacksmiths or farmers. We find farmers that are failures, that would make successful physicians or merchants.

We shall not take the time to show, or attempt to show, what is required to make a successful physician, merchant, or preacher, but in the past years of experience as a cheese-maker, butter-maker, dairy school instructor and dairyman, we have met successful as well as unsuccessful dairy farmers. We have spent a considerable time with these men right on their farms, for even when in the factory or creamery, we always took a great interest in the all important end of our business which was the cow end, for we well knew that if the cows were not producing milk at a profit, our business must suffer, as the farmers would discontinue dairying, and in many instances condemn the business, and even the creamery man, because of his failure to produce milk at a profit. We have known of patrons whose cows were not averaging \$1.50 per month and others whose returns were over \$7 at the same factory, and when a boy at school was always enquiring into the why and wherefore, hence when we had decided upon cheese making and butter making and found these great variations in the returns of our patrons, we began to investigate as to why this great difference.

We have come to the conclusion that we should do a great deal of dairy farming in Kansas, and the question of success lies almost entirely with the man behind the cow, or rather let us say the man before the cow, for he should be there a great deal of his time, properly feeding her.

Do we hear some one say, "Well, now, if you are going to lay down a lot of rules and requirements to make a successful dairyman, I must be counted out." Yes, a great deal is re-

quired, but if we are not right, let us get right and then the battle is half fought. Friends, let us recognize the fact that to handle a cow and get the greatest possible profit out of her, requires a great deal of skill in feeding and caring for her, and that it is possible for us to get ideas from men, such as Henry and Hoard of Wisconsin, Heacker of Minnesota, and a score of others who have devoted the best and greater part of their lives to the study of the dairy cow.

SUCCESSFUL DAIRY FARMERS.

To make successful dairy farmers then, we would say, we must be willing to admit that "We don't know it all," and show a willingness to learn. How many times have you picked up some of our leading dairy papers and found some business man who left town for the dairy farm and in citing his experience, read something like this: "I observed my neighbor, who has farmed all his life, milking eight or ten cows, and so got a small herd of cows for myself, in my business I always kept accounts, so naturally enough do the same thing on the farm, and I soon learned my cows were not profitable—didn't pay for their feed, and so had a talk with my neighbor, but to my surprise learned—he milked some cows—didn't know how many—didn't know how much milk they gave—didn't know exactly what they ate. About this time I was willing to give up cows, when a copy of Hoard's Dairyman found its way into my home." A discovery that the men behind the cows didn't know much about the animal he was handling—a talk with the neighbor—the neighbor, like so many of our Kansas dairymen, makes it plain that he and his father before him, and his grandfather before him, always kept just about such cows and handled them about as he does and they all did fairly well and guessed he knew about as much as these dairy paper men anyway. With the result that he gave up getting any help from his neighbor, had his cows milk weighed and tested and found none profitable. Question: Why? Cows no good? No, but they were not being fed the proper amount of the right kind of feed to produce milk at a profit.

Friends, don't condemn the faithful old cows you have until you give them the necessary amount of feed to produce the milk.

"The feeding problem is studied and when the cows are properly fed, one-half proves profitable—the other half is sold and the money is used to buy one good bull out of a good officially tested cow of the breed of his choice and the victory of producing milk at a profit is won."

The dairy farmer to be successful, then, must be willing to give his cows some careful thought and attention. He must use system in his business and this will be no detriment to his other farm operations. Regularity is necessary. It is a business that brings in an every day revenue, hence an every day business. One should be clean, neat, and particular in details, should be a lover of nicely kept stock, and if we do not naturally possess these qualifications, or are willing to strive to possess them, we had better leave the dairy business alone.

Now we do not mean that every farmer in Kansas should become a dairy farmer, but we do believe that every farmer in Kansas who will give the dairy sufficient thought, and time to make it a profit, should keep five or more cows depending on circumstances.

THE PROFIT.

You ask why we say at a profit. Because we don't believe any man should work at anything without a profit. If you cannot dairy at a profit, you might raise corn and wheat or practise medicine, or it may be that you are so constituted that you can not manage any business for yourself because you will not keep persistently at it and pay sufficient attention to detail work, and may find it necessary to plow corn, carry the hod, curry horses, and clean out the livery barn, or do so for some one else.

Now this may seem a little rough,

CONGO

NEVER-LEAK ROOFING



When you put on a roofing it is because you want to protect as well as cover your building and its contents. Many roofings merely cover.

Congo covers and protects.

Some roofings are merely paper "treated" in some manner and shortly after being laid they go to pieces or dissolve in the first hard rain.

Congo is different. There isn't a particle in its composition that can be affected by water, heat or cold. It will not dry up, rot or rust.

A Congo roof never leaks, and for durability it is not equalled by any other.

Write for Free Sample and prove for yourself its superiority.

United Roofing and Manufacturing Co.,

Successors to Buchanan-Foster Co.

537 West End Trust Building, Philadelphia. SAN FRANCISCO.

but honestly we can take you to a place where the boy in the barn at \$8 per week is making more money than a man less than two miles from this barn who works fourteen hours a day on his 160-acre farm and milks from thirty to forty cows, and the fault is not entirely with the cows. Do you know that the most profitable cow Professor Heacker ever owned was picked up on such a farm as above described, by him for the small sum of \$25.00, as the owner said, "She is a scrawney poor thing, and no good." She has a record of producing butter-fat at a feed cost of 2 cents per pound, for one week, but as this was with feeds at a much lower price than at present, it would mean a feed cost of about 5 cents, or with butter-fat at 25 cents, it would mean 500 per cent profit. Professor Heacker renamed this little cow, that is if she was thought enough of to have a name at all. He called her "Fortune" because, as he said, a herd of twenty-five bought like her would make any man a fortune if properly fed and cared for. Rest assured she received a properly balanced ration, was handled kindly, was milked and fed regularly and well housed.

WHY SHOULD WE DAIRY IN KANSAS?

You ask why we should dairy in Kansas? In reply will say, while to many it may seem unnecessary to give any thought to preserving the fertility of our soil, still it is never too early to even if we are just breaking up some of this rich prairie sod. It is a shame the way some of our fine land is abused. It will stand continuous grain farming, hauling off between three and four dollars worth of fertility for every ten dollars worth of corn, wheat, or oats produced and sold for several years, but in time the farm will suffer. How few farmers realize this, but let us say we must realize this and adopt stringent measures to save our soil or we will be in the condition of so many of our Eastern farmers. They, as you well know, must add every year from one to three dollars worth of commercial fertilizers per acre as well as save all the manure from their farm stock and dairy herd. Let us, we beg you, commence to so care for the soil of our great State as to avoid this disastrous condition. Ten to twenty cows properly handled will be the means of saving your farm, and at the same time guarantee your running expenses of the farm and a good living. The cow money is as sure as the governments bonds and if crops are light, you do not run behind. If crops are good and a bunch of steers or hogs are sold all the money is not needed to pay up the debts of the poor year.

We are centrally located and have good railroads and marketing facilities which enable us to get good prices, and if butter and cheese can be produced on the high priced farms of the East, we certainly should make a profit

160 Acre FARMS in Western Canada FREE



Illustration Showing Mixed Farming Scene in WESTERN CANADA

Some of the choicest lands for grain growing, stock raising and mixed farming in the new districts of Saskatchewan and Alberta have recently been opened for settlement under the REVISED HOMESTEAD REGULATIONS.

Entry may now be made by proxy (on certain conditions), by the father, mother, son, daughter, brother or sister of an intending homesteader. Thousands of homesteads of 160 acres each are thus now easily available in these grain-growing, stock-raising and mixed farming sections.

There you will find healthful climate, good neighbors, churches for family worship, schools for your children, good laws, splendid crops and railroads convenient to market. Entry fee in each case is \$10.00. For pamphlet "Last Best West," particulars as to rates, routes, best time to go and where to locate, apply to

J. S. CRAWFORD
125 W. 9th St., Kansas City, Mo.
Canadian Government Agent

Stock & Poultry FENCE

Many styles and heights; Diamond or Square Mesh; prices low. Sold direct to you. 30 days free trial, freight prepaid. Catalogue free. KITSILMAN BROS., Box 61, Muncie, Ind.

BROWN PAYS THE FREIGHT

HEAVIEST FENCE MADE
All No. 9 Steel Wire. Well galvanized. Weighs 16 lbs. per 100 yds. 15 to 250 yds. delivered. We send free sample for inspection and test. Write for fence book of 138 styles. The Brown Fence & Wire Co., Cleveland, Ohio.

Beautify Your Front Yard with a "Cyclone" Fence and Gate

At moderate cost, you can have the most stylish, up-to-date and durable ornamental fence in your neighborhood. We want to send you our great FREE Ornamental Fence Book, which describes and illustrates all the latest styles of fences, gates, trellis, tree guards. Prices lower than you think. Send today.

Cyclone Fence Co., Dept. 33, Waukegan, Ill.



SHIMER STEEL FARM FENCE

The only fence perpetually tight. The crimp in the wire does it. Can't sag, bulge or loosen from the tie wires. Made of high carbon, crimped, spring steel wire. Never needs repairs.

Requires only half the usual number of posts. Agents Wanted in every community to take orders for Shimer fence. Permanent employment. Liberal profits. Write for proposition. Address nearest factory.

Box 285, Coffeyville, Kan., or Spring Steel Fence & Wire Co., Box 285, Anderson, Ind.

The Old Reliable Anti-Friction Four Burr Mill.

Double the capacity of other mills. 2-horse mill has 24-ft. Grinding Burrs all grinding at once, and grinds from 25 to 60 bu. per hour. 4-horse mill has 30 feet of Grinding Burrs and grinds from 60 to 80 bu. per hour. Absolutely no Friction or Gearing. Will earn cost in 3 days. The largest ear of corn to these mills are like pop-corn to other mills. We manufacture the most durable and fastest grinding line of mills sold, including our famous Iowa No. 2, for \$12.50.

Bovee Grindor & Furnace Works, Waterloo, Iowa.

Try Mine With the Money in Your Own Pocket Nothing to Pay Down To Try My Wagon Box Spread-er

Bill Galloway Says

For You To Get Your Pencil Now and Write Him a Postal or Send Him This Free Coupon For His New, Big, 1908 Free Book About Fertilizing—and The Red Hottest Spreader in The World.

Get your name and address down to me now and I'll prove to you that you can't afford to be without one of my Galloway Wagon Box Manure Spreaders. I'll prove it and make you bound you won't have any other kind. That's the idea. Get your name down to me once and then it's "up to me" to interest and prove to you the claim made by me and the users of my Galloway Spreaders that it's "the Champion of the World." In fact, it's the only practical wagon box manure spreader made today. Worth \$25.00 to \$50.00 more than any other. Is the only endless apron force feed spreader made and is 5 times as durable as any other spreader made. Is the lightest draft spreader made, and will save your horses—save half your time or your men's time—get you larger and better crops. Pay for itself quickly in so many ways that you'll be bound to get one when you read my valuable and interesting Free Book for 1908. Hand labor is high—every foot of soil pays better if properly spread with Manure that costs you nothing except for help and time to spread it right. Now look here. This is your chance. Decide to write me and get my Free Fertilizer Profits and Galloway Manure Spreader Book for 1908, and let me make you the first one in your district—my Special Money Making Proposition. My letter and Free Spreader Catalog will tell you all the superior points—splendid construction and about the practical exclusive value parts of my Galloway Wagon Box Spreader and about my Complete Spreader. I'll make you a personal proposition that you'll be sure to take me up on when you read my new, Free Book for 1908 about my

GALLOWAY

Endless Apron Force Feed Wagon Box Attachment Manure Spreader—Fits Any Wagon Truck

What do you know about spreaders? I can hear you say "Just about the average." That's it. That's why I want to talk to you. There are about 15 Red Hot Facts I'll send you proof of in my Free Book with 100 or 200 other points that will "put you wise" to "average" spreader weak spots. I've had all the spreaders made tested to work besides mine. I tell you how in my Free Book. I'll tell you about their gears and the simplicity of my spreader. I'll tell you why wheels front and back should tread. Tell you why the reach on your truck saves strain on the box and repair bills of other spreaders. Tell you why Galloway Malleable Parts are simple and guaranteed for 25 years. Tell you about my exclusive force feed. About my seven distinct patents that are exclusive and make my Galloway the only Spreader perfectly adjustable to your wagon gear. Send you scores of letters from practical farmers whose experience with my Galloway Spreader will interest you, be of greatest value to you, and prove claims that I know will convince you. Now I want you to investigate first—try my Galloway 30 Days Free next—and buy last. That's my way. Buy when you are satisfied. My special proposition to you comes in my letter to you with my Big, Free 1908 Book.

Spend one cent now to save \$50.00 by writing me a postal—or enclose the free coupon above in an envelope, and get your name and address down here to me, now—today so I can send you a thousand Red Hot Facts about Fertilizing—Money Saving—Money Making—and the practical "horse sense" proof on the manure spreading proposition.

**William Galloway, President
The William Galloway Co.
389 Jefferson Street, Waterloo, Iowa**

Write Your Name to Me Below, Fold, or Tear This Out and Mail Today

William Galloway,
389 Jefferson Street, Waterloo, Iowa.
I want to know how "Brain, Sweat and Energy" make your Galloway Spreader and judge for myself what I think of it. Send me your Big, Free Book for 1908—postpaid.

Name.....

P.O.....

State.....

**Spend
1 Cent
To Save
\$50.00**

**30
Days
Free
Trial**

**Gold
Bond
\$25,000.00
Guarantee**

**Get
My
Special
Proposition
Price**

Read What This Man Says:

Claremont, Minn., Dec. 29, '07.
Wm. Galloway, Waterloo, Ia.
Dear Sir:—I must say this spreader bought of you last spring is a Grand der. I have spread all kinds of manure—even hard, frozen chunks and it scatters every-thing. You can't break it. My neighbors all have large ones and always breaking down, but the Galloway is the one you can't break. My pair of 8-year-old colts weigh 950 lbs. each and they handle it easy. The big ones take 4 horses every time. Wishing you a happy and a prosperous new year, I remain,
Yours truly,
D. HISSAM.

here. But no matter how high the price, we must study the costs of economical production if we would make the greatest profit possible. Of course, any old kind of a cow running on free range making butter to sell at 40 cents per pound would be profitable and some of our early settlers did this. A few years ago a book could be produced with almost any old printing press, crude machinery, and sold at a profit because the book sold for \$2. To-day the book is sold for 50 cents, and because the manufacturer has carefully studied the cost and method of production, still produces the book at a profit. Now Mr. Farmer, if we would produce the milk at a profit, we must make as careful a study of our business as the merchant or manufacturer does of his. Why should we not? We must admit it requires more skill and brains to run a farm properly than any other business on earth, and we fear less is given to it.

THE WATER SUPPLY.

If we have decided to keep cows, let us keep them at a profit to us. To produce milk profitably, they should have an abundance of good water, for milk is composed of 8 per cent water. Do you know the amount of water a good dairy cow requires per day? The Holstein cow at the Ontario Station the day she produced 96 pounds of milk, drank 200 pounds of water, or about 25 gallons. We believe that in our climate we can allow our stock to go out of the barn for water, at least there are but few days in the winter they could not go out for water without loss or injury. With us we believe it advisable to have good pasture and pasture a great deal. True with the high-priced Eastern land, soiling crops cut and fed green daily, produces more feed per acre, but this adds labor and expense that we should eliminate. We do believe, though, that we should have some crop, such as oats, cow-peas, Kafir-corn, or sorghum growing that we can use if grass was short. If not needed, they can be cut as hay or thrashed and ground and used as a grain feed. We should provide ample barn room for our cows, bull, young stock, and feed, both grain and hay.

GOOD SHELTER.

Do you know that from 30 to 70 per cent more feed is re-

quired to produce the same results where stock is exposed to the weather, in fact even then we can not keep up our stock as we can with good shelter. Now great, fine, expensive barns are not necessary, but we should construct good, warm barns.

BALANCED RATIONS.

We must have an abundance of rough feed, by that we do not mean corn fodder entirely, but corn fodder, clover, alfalfa, cow-peas, oat hay, and the like. Look up our balanced rations and you find they take from 20 pounds to 30 pounds hay daily for a cow giving from 20 pounds to 30 pounds of milk. Figure the number of cows and the average number of days you must feed and you will find that it will require more hay than you first estimated on. Do we hear some one saying: "Hold on there, Mister, don't go to talking balanced ration to me." In reply we will say, "Well, you just keep out of the dairy business then, for the best cow God ever allowed to live can not produce milk without feed." But you say, "I will feed her and feed her well, and I am sure I am feeding my cows more now than you are. Why, I feed all the timothy hay, corn fodder, ground corn chops, and Kafir-corn my cows will eat, and at present prices my cows get 20 cents worth of feed or more per day." Well, no cow can produce milk on such feed at a profit. There is not in this feed sufficient protein to produce 25 pounds of milk and if a part of this corn and timothy hay was exchanged for clover or alfalfa and cottonseed-meal, gluten-meal and bran even at present high prices, we would provide sufficient protein to allow the cow to produce a full flow of milk. We hear someone else saying, "Well, you needn't talk balanced rations to me. Why my cows are producing \$7.50 each per month and I never looked at a balanced ration. I feed all the alfalfa hay and corn fodder they want and give them a good double handful of corn- and cob-meal and a handful of cowpea-meal raised last year, night and morning." A balanced ration though without your knowledge, nevertheless.

We should consider the different dairy breeds of cattle and after having properly fed the cows on hand and found the boarders (that is the ones

that do not pay a profit) sell them and purchase a good, strong, vigorous, healthy bull out of a cow that has proved herself a good producer. Do not hesitate to pay a good price and we would prefer to buy a male out of an officially tested cow.

Why is it, that farmers that would not think of breeding a fine large Clydsedale or Norman mare to a trotting horse, or a fine driving mare to a Norman horse, will take a fine good milk-producing cow and breed her to a Hereford or Shorthorn bull and if he gets a heifer calf and keeps her for a milk cow and then wonders why she is not a good cow, will say: "Why, her mother was a good, fine milk cow."

If you can possibly afford the expenditure would advise the purchase of two pure-bred heifers and then it would be but a short time until you would have a pure-bred herd.

TEST YOUR HERD.

Now because you have tested out the cows and have a pure-bred sire, does not mean that you should not weigh and test occasionally and especially young heifers. We should make three to five day tests every six or eight weeks, and weigh the milk at the same time, for by this method we can with little work determine the approximate value of the cow. We have just made a comparative test of two cows on our place, and we believe we will give the results as it may be the means of getting rid of some of the unprofitable cows. We purchased of J. B. Irwin of Minnesota, three pure-bred Holstein heifers, the dams of two of

go Beauty Canary No. 73077 H. F. H. B. and "Blue" on the Van Leeuwen and Roe Farm in Anderson County, Kans. Beauty, as we call her, was on the train six days coming from Minneapolis, Minn., and there was no attendant with her, so she was poorly cared for, as any one who has shipped any stock well knows. Five days after her arrival she dropped a handsome bull calf out of Mr. Irwin's \$44,000 bull. The two heifers that are due to calve next spring are bred to the same animal, "Sir Korndyke Hengervald de Kol."

After being fresh four days we commenced weighing and testing, and a five days test in duplicate showed 45 per cent, and the last two days she gave 42 pounds each. We tested this the second time in duplicate and got 45 per cent again. After such handling we consider this a splendid record for a 3-year-old heifer with second calf. Beauty is a fine, large cow, mostly white, shows splendid dairy points, dished face, thin neck, good shoulders, large milk veins and an excellent udder both fore and rear, and she has a rich yellow skin. If any defect so far as we can see, she is a little undersized in paunch or belly, but this may be due in part at least to her poor care on her trip. A good dairy cow should have a good large barrel, as she must have capacity to handle feed if she is to be a large producer. A cow can not be a good producer with a trotting horse stomach. We fed this cow a ration composed of the following feeds:

FEED COST OF BLUE'S RATION.

Kind of feed.	Pounds of feed.	Protein per 100 pounds.	Protein in ration.	Per 100 pounds.	Cost.
Cottonseed meal.	5 2-3	37	2.1	\$1.50	\$0.085
Bran.	2 1-3	12	.3	1.20	.028
Timothy and clover hay.	25	4	1	.40	.10
Total feed cost.					\$0.213
Value of total production.					.108
Total daily loss.					.105

them have official records of 16½ and 17½ pounds of butter, each, per week, as three-year-olds. We also have a bull out of a 17½ pound officially tested three-year-old heifer, 71 days after calving.

A COMPARISON.

We give a comparison between Vir-

You will note we are feeding this cow an expensive ration and entirely too much, but she has had a very poor chance to do her best, and now we are trying to help her all we can. It is not right that she should be charged up with this ration but we will do so. We think she should, and will, produce a

TREES THAT GROW
 Apples 5c, Peach 5c, Plums 15c, Cherries 17c. Best quality, good bearers, grafted stock, not seedlings. Concord Grapes \$2.50 per 100, Forest Tree Seedlings \$1.00 per 1,000 up. We pay the freight.
GERMAN NURSERIES & SEED HOUSE
 A complete line of Vegetable and Flower and Farm Seeds. Our large illustrated catalog free.
GERMAN NURSERIES
 Box 85, BEATRICE, Neb.

40 VARIETIES of Berry Fruits that it pays to plant. My 26th annual Catalogue tells the truth about them. B. F. SMITH, Box 7, Lawrence, Kans.

STRAWBERRY PLANTS
 The best varieties. Write for catalog. W. W. Thomas, Anna, Ill.
THE STRAWBERRY PLANT MAN.
 Rhubarb and Asparagus roots.

TREES AT LOW PRICES
 True to name. Free from disease. 20 Grafted Apple-trees for \$1.00. 25 Budded Peach-trees for \$1.00. 40 Concord Grape-vines for \$1.00. 25c due bill and catalog free. Fairbury Nurseries, Box 1, Fairbury, Nebraska.

STRAWBERRIES
 Millions of plants—108 VARIETIES. Best of the standard and new kinds. Healthy, Vigorous Plants, true to name, packed to carry anywhere at popular prices. Catalogue free.
W. F. ALLEN
 41 Market St., Salisbury, Md.

Reid's Yellow Dent

(MARTIN'S TYPE)
 Winner of 1st prize at Precinct, County, State Fair and State Corn Show; also gold medal winner at St. Louis and Portland, and winner of 1st prize at the National Corn Show at Chicago, 1907, in class E, Nebraska, and 2d prize and sweepstakes at the Kansas Corn Show, 1908. Write for prices.
Ed Flaharty, R. 2, Seneca, Kans.

SEED CORN

Pure-bred Hildreth Yellow Dent, the kind that wins premiums for yield and quality. Ask for prices and get Haney's "How to Grow 100 Bushels Per Acre." Address

THE DEMING RANCH, Oswego, Kans.

TREES of all kinds AT WHOLESALE PRICE. Save agents commission of 40 per cent by ordering direct from us. Premium with each order free of from 1 to 4 trees; roses, shrubs or other stock. Stock Guaranteed first class. Certificate of Inspection furnished. Don't delay, send for price list now. Address
WICHITA NURSERY, K-y G. Wichita, Kans.



The Great World's Fair Prize-Winning Corn
 Send to the old reliable seed-corn breeder for your seed corn and other field seeds. **John D. Ziller, Hiawatha, Kans.** Also breeder of Poland-China hogs and Barred Plymouth Rocks. Send for catalog.

12 GRAPE-VINES 50c.
 For 50c, cash with order (stamps will do) we will ship you, all charges paid, one dozen first-class grapevines as samples: 3 Concord, 2 Vines, 2 Catawba, 3 Niagara, 2 Moore's Early 1 Delaware.
 If we get your order on or before Feb. 1, we will add free as a premium 1 Baby Rambler Rose (or your choice of roses).
IOWA NURSERY CO., DES MOINES, IOWA.

GOOD SEED BRINGS GOOD CROPS
 ESTABLISHED 1870.

Our Specialties: Alfalfa, Clover and Timothy Seed, Blue Grass. Our Seeds are not only Tested so that we know they will grow, but they are True to Name. Northern grown and big yielders. Everything for field and garden. A big 74-page catalog No. 10 tells all about our

TESTED SEEDS
 how to spray fruit trees; also our line of Spray Pumps, Poultry Supplies, Special Bordeaux Mixtures, Dispersant, Arsenate of Lead, etc. It is sent free. Write for it to-day.
MISSOURI VALLEY SEED CO.,
 110 South Fourth St. St. Joseph, Mo.

SEED CORN

Boone Co. White and Hildreth Yellow Dent.
IMMENSE YIELD, HIGH QUALITY.

Our corn took 1st in County; 1st and 2d in Boys' County Contest; 4th and 6th in Boys' State Contest; 2d in Capper Contest; 2d at State Corn Show; 2d, 3d and 6th at National Corn Exposition; 1st and 2d in Yield-per-acre Contest, 1907. Best acre, 114 bushels, 49 lbs. corrected weight, which constitutes the record for Kansas. Best 10 acres, about 1100 bushels, field weight. All corn carefully tested for germination.

Carefully selected ears in crates, \$2.50 per bushel; 2d grade shelled, \$1.50 per bushel, f. o. b. at Leavenworth.

J. M. GILMAN & SONS,
 ROUTE 1, LEAVENWORTH, KANS.

full flow of milk on about one-fourth less feed and we expect to cut her feed down. She has been gaining some in milk, and on morning of December 3 she gave 23 pounds of milk, 4 per cent, which is equivalent to 1.15 pounds of butter. For the .348 cents worth of feed in one day Beauty gave us 42 pounds of 45 per cent, or 189 pounds butter-fat or 2.36 pounds of commercial butter. Figuring the butter-fat at 28 cents gives us 53 cents, and 38 pounds of skim-milk at 20 cents per 100 pounds, or .075, total, .605 cents less the total daily cost of \$0.348 leaves a daily profit of \$0.257.

The calf was sold at seven days old for \$105, and as he received four days milk after we commenced saving milk before we shipped him, he cost us 74 cents, or a profit of \$104.26.

"Blue" is a hard proposition to describe, but we can find her in almost every dairy herd in Kansas, and even in the best dairy States in the United States. You have all seen her kind, neither a milk cow nor a good beef animal. Some of them show good beef points, but they have no business in a dairy. Then you ask, "Why do we have such cows in the dairy herd?" A good dairy cow, bred to a sire of the beef type will produce such an animal about three-fourths of the time. Occasionally we may get a good milk cow, and occasionally a good feeding steer. But as she was a good cow we saved her heifer calves and the "Blues" are the result. Again you do, just as we were foolish enough to do, buy her with a herd, because she is cheap, or you attend a sale and see her going too cheap you think and buy her.

"Blue" came fresh last September. She is giving us 9 pounds to 10 pounds of milk per day, testing 32 per cent. Figuring this at 10 pounds, we receive 32 pounds of butter-fat per day at 28 cents we have .09 cents per day. Nine pounds of skim-milk at 20 cents will give us \$0.018; total daily production, \$0.108. Feed cost of Blue's ration:

Kind of feed.	Lbs. of feed.	Protein per 100 pounds.	Protein in ration.	Price per 100 pounds.	Cost.
Alfalfa meal.	10	12	1.2	\$1.20	\$0.12
Cottonseed meal.	5 2-3	37	2.1	1.50	.085
Bran.	2 1-3	12	.3	1.20	.028
Oil meal.	1	30	.3	1.50	.015
Alfalfa hay.	25	10.8	2.7	.40	.10

Value of calf to-day \$3. Cost of milk, skim-milk, and feed is fully \$3, and still we are doing like so many of our Kansas friends in the dairy business, keeping that cow and calf.

We all have excuses for having such poor excuses of cows in our herd and if we have not, we should try to "rake" up one some way. We realized that "Blue" was not much good, but we had plenty of grass, and very busy, so never sold her last summer when we could. Never had weighed and tested her milk, so did not realize how expensive she was. We will now get rid of her and calf as soon as possible.

The calf from such a cow is worth nothing, so all we have to consider is the milk.

OUR LOSS.

We trust you have followed us closely in the report of these cows, and now let us figure how many "Blues" we would need to keep to lose the profit of one Beauty. We have a daily profit on Beauty of \$0.257, and as feed cost will be very much less next summer we should have a profit of \$50 for the year. Add to this the net profit on calf, \$104.26, giving us a total profit of \$154.26.

We have a daily loss on Blue of \$0.105, but as she may produce milk for a while next summer at actual pasture cost, she will do well if she don't lose us more than \$12.50 per year. No doubt if we keep an actual record she will show more of a loss than this. At this rate we must keep twelve cows like Blue to lose the profit on Beauty. Now, of course, if you are fortunate enough to possess a herd composed mostly of Beautys you can have a few Blues and still have a profitable herd. We are wondering now what you consider such a cow as Beauty worth. We hesitate a little on telling you what we consider her worth but a neighbor of ours was over to our place last week and in talking to him about cows, (and

we talk cows, milk, butter, and cheese a great deal. Just can't help it) and he said he was milking eight cows and after figuring we decided they were paying a profit of \$12 per year each. We showed him Beauty and asked him what he thought of her. "Oh, a very good cow," he said. But when we intimated that if he thought his cows worth \$40 each, Beauty should be worth \$520, he couldn't figure it that way. Even when we showed him it would require thirteen of this kind to produce the same profit as one like Beauty he could not see it.

A small barn costing \$600 to \$1,000 would accommodate twelve Beauties, one man with but little help could grow and store their feed and one man could easily care for this herd. Eighty acres of land would be sufficient and at \$520 each this herd would cost \$6,240 and produce a yearly profit of \$1,851.12. One hundred and fifty-six of the \$40 kind would cost the same and produce the same profit, but it would be quite a chore milking, feeding, and cleaning out the barn which would have to be 270 feet long and 32 to 36 feet wide. Figuring 80 acres for each twelve cows, it would require 1,040 acres. It would require one hundred forty-four "Blues" to lose what the herd of twelve Beauties would make.

KEEP GOOD COWS.

We have tried to make it plain that we must keep good cows, but it is not necessary to buy a large herd of expensive pure blood officially tested cows to produce milk at a profit, but rather than keep such as some of us do, and if we do not get a pure-bred dairy sire and build up gradually, we had better get rid of our entire herd and get one good sire and two officially tested cows and commence right.

OUR IDEAL.

Let us get a picture in our mind of what we consider our ideal in a dairy cow and then strive to build up a herd like her. When we get this cow, save

all her offspring and we could do wonders. We understand that Mr. Gillett's herd and his Colantha 4 Johanna, that has in the last ten months and nine days produced 23,981.4 pounds of milk and 875.7 pounds butter-fat or an equivalent of 1,094.6 pounds of butter, is the result of just such work as above described. She is still giving 65 pounds of 4 per cent milk. Old Johanna was a great cow, and last year eighteen cows, all her offspring, produced over 15,000 pounds of milk each.

OUR AIM.

Larger profits is what we are all after, and the dairy farmer should be no exception to the rule. Just now there is considerable being said about the prices we are receiving for Kansas cream and it is just and right that we should be familiar with the market value of our products and be sure that we are receiving same.

THE CREAMERY SYSTEM OF KANSAS.

Let us consider carefully before we urge, recommend, or advocate a change in the creamery system of Kansas. With sufficient cream in a community it may be possible and undoubtedly is possible to get one or even two cents better returns for our butter-fat. These conditions will adjust themselves without much thought on our part. We certainly would not at present, at least, advise an investment in a creamery by the farmers to get this possible one or two cents. Why not, you ask. Don't you think there is room for improvement in our creamery system? Yes, we will admit, but we also do believe on the whole we are getting about all such cream as we are producing and delivering is worth. Now, we do not lay the blame though for the condition of this cream with the farmers, but with the creameries of Kansas, where it justly belongs. Not the centralizers alone, but with the centralizers, cooperative and individ-

FRUIT TREES CHEAP AS \$5 per 100
 Freight Paid. Catalog Free
RELIANCE NURSERY, Box 888 Geneva, New York

HEALTHY TREES Honest in Quality. We pay Freight. Apple 5c, peach 5c, cherry 15c; budded and grafted. Concord grapes \$2.00 per 100. Forest seedlings \$1.00 per 1000. Nursery and seed catalog free.
CALBRAITH NURSERIES, Box 32 Fairbury, Neb.

STARK Nurseries Pay Cash Weekly AND WANT MORE SALESMEN EVERYWHERE. BEST CONTRACT, BEST OUTFIT. LARGEST NURSERIES—WITH AN 82-YEAR RECORD.
STARK BROS., LOUISIANA, MO.

SEED CORN Reid's Yellow Dent, Boone County White, strictly select, pure-bred seed. Bred for purity and high yield. Send at once for catalog giving methods of breeding, etc. Pure re-cleaned Texas seed only.
S. G. TRENT, Hiawatha, Kans.
 Member of Kansas Corn Breeders' Association.

BLIZZARD BELT EVERGREENS
 We grow them by the million. To prove they are healthy and vigorous we offer 6 fine Spruces 3 yr. old free to property owners. Mailing expenses 5c, which send or not. A postcard will bring them. Catalogue free.
The Gardner Nursery Co., Box 22, Osage, Iowa.

Free to Farmers
 Prof. Holden's Great Corn Book, A B C of Corn Culture. Best Farm Paper for one year, Farm News, and our Big 1908 Seed Manual, worth \$2.00 to any up-to-date Farmer, all sent free. Send 15 cts. to help cover cost of mailing.
 Our 1908 Catalog of Field, Garden and Flower seed Free, write today.
A.A. Berry Seed Co., Box 105 Clarinda, Ia.

GOOD SEEDS THE BEST EVER GROWN

Prices lowest of all. Postage paid. A lot of extra packages given free with every order of seeds I fill. Send name and address for my FREE big catalog. Over 700 engravings of vegetables and flowers.
R. H. SHUMWAY, Rockford, Illinois

GREGORY'S SEEDS

have earned a world-wide reputation. Thousands of farmers and gardeners rely upon them absolutely because they are sure growers. If you have never planted them, just try them this year. Our new catalogue helps solve all the problems of planting—will be likely to set you right when in doubt.
IT'S FREE. Write for a copy.
J. J. H. GREGORY & SON
 MARLBOROUGH, MASS.

Try the New Red Majestic Tomato

The greatest vegetable novelty of the season. The largest, most productive and finest flavored. When we introduced the pink Majestic three years ago, it proved to be just what we claimed, and hundreds of customers reported fruits weighing 3 to 7 lbs. each, and crops of 100 to 150 lbs. grown on one plant. This new variety is fully equal to it in every respect but will be preferred by many on account of its bright red color. The seed is scarce this year and sells at 40 cents per packet of 100 seeds. We desire, however, to place our catalogue in the hands of everyone who has a garden and will send a trial packet of 25 seeds FREE if you will mention this paper. Also a copy of our large, beautifully illustrated catalogue. A postal card request is sufficient.
Iowa Seed Co., Des Moines, Ia.

HEIDER

2, 3, 4 and 5-Horse Eveners
For SULKY, GANG and DISC PLOWS
 Ask Your Dealer for "Heider" Eveners, or Write Us
HEIDER MFG. CO.,
 Mfrs. of all kinds of Eveners, Ladders, Etc.
 Dept. 6. **CARROLL, IOWA.**

VARICOCELE
 A Safe, Painless, Permanent Cure GUARANTEED. 30 years' experience. No money accepted until patient is well. CONSULTATION and valuable BOOK FREE, by mail or at office.
DR. C. H. COLE, 218 Walnut St. Kansas City, Mo.

nal. One is just as bad as the other, and if they do not, and that right soon, demand a better grade of cream, cream that will make extras and pay us extra for it, we would advocate any system, even the Farmers Cooperative, which is the hardest proposition on God's earth that a man ever went up against to manage. But any shrewd successful business man placed in charge of a poorly-managed, run down business, any farmer taking a poorly-managed run down farm, looks about him to see where changes, immediate changes, will place the business or farm on a profitable base. If he don't get immediate results he is considered a failure.

Now our dairy herds in Kansas are a failure, at least the majority are. That is, they do not pay a profit. While we will admit that in the manufacturing system there is room for improvement, still we think we can see changes on the farm that would make dollars and dimes in the change of manufacture, and like the wise business man or farm manager, let us first give our attention to such changes and improvements that will produce the greatest results. And to changes and improvements over which we have entire control, such as breeding, feeding, and care of the herd. Let us produce a fine quality of milk or cream and if under the present creamery system (none of which are ideal because they are all seemingly at least encouraging the production of a low, poor grade of cream), we do not then get all it is worth let us devolve some system that will pay us all it is worth.

THE GREATEST DRAWBACK.

In our prosperous State of Kansas one of the greatest drawbacks is the milking. Not only is hand milking expensive but it is difficult to obtain good milkers. But the problem is solved and we have a successful milking machine. We, as farmers, hesitate to adopt the milking machine, it really seems too good to be true. The same feeling existed though when the reaper, binder, corn binder, and other improved farm machinery was being introduced. But to-day, all up-to-date, successful farmers use them as they will the milking machines in the near future. These machines all passed through the experimental stage, and were adopted universally. The milking machine, while improvements will yet be made on them, has passed the experimental stage and is ready for general use.

STUDY THE MILKING MACHIN.

It is right that we should carefully study any new machine or method before its adoption. After carefully investigating the milking machine as we did before installing, you must admit that it does milk and milks satisfactorily. Cows take kindly to it which is plainly shown by the peaceful, contented way in which they chew their cud while the machine is in operation. We refer to the only successful machine we have seen in operation, the B-LK-Machine, which has mild pulsating movement which is almost identical to the calf's sucking the cow. A large number of conservative, careful dairymen, after thorough testing, do not hesitate to recommend the machines and we have had the machines in use continuously since last June and at this time do not hesitate to say they are a boon to the dairymen of the West especially, where successful milkers are almost out of the question.

POWER TO PRODUCE THE VACUUM.

Admitting that they are a success the next point to consider and one that is worthy of consideration is this, are they practical in the hands of the average dairy farmer. We must have a power of some kind to produce the vacuum. A gasoline engine seems to be the most practical power and there are so many uses for it on the farm that they are almost considered a necessity and it is not right that we consider it as a part of the milking machine investment. The gasoline engine of to-day is not a difficult piece of machinery, not any more so than many other machines on the farm. Time was, when to be a successful farmer the important question was this, is he a

good worker and good to horses? Now it is fully as important to be successful in handling machinery.

The tread power and steam jet exhauster are also used. The machine proper, consists of a vacuum pump, that is not as difficult as a little pitcher pump to keep in order, and the pails with their domes which contain a very simple pulsator piston that gives us the relief between each suction. There is a small escapement spring device and the only breakage we have had is an occasional small escapement spring, which costs three cents each. These are easily changed and any boy with a small screw driver can do this in a few minutes.

As for the life of the machine, will say they show but very little wear and outside of an occasional rubber tube, mouthpiece, curtain, or piston leather which costs twenty-five cents or less each there can not be much wear.

THE COST CONSIDERED.

When the cost is considered some hesitate as to whether they should install the machines, or not, \$300.00 will install a two pail outfit exclusive of power, and if you wish to charge up the milking machine investment with the power, you will have a total investment of \$40.00. This at 7 per cent interest is \$28.00 per year or \$2.33 per month, or 7 1/2 cents per day. A two pail outfit will handle from twelve to forty cows and the gasoline and repairs will cost from four to fourteen cents per day, depending on number of cows milked. One man can milk from twenty to twenty-four cows per hour with two pails, so the labor cost is reduced one-half and a saving from 15 cents to 45 cents per day is realized. If thirty to forty cows are milked, an additional \$75.00 invested in another pail will affect a greater saving for after a man becomes familiar with the machine he can operate three pails, milking six cows at a time and but little if any more gasoline is used.

CARE OF THE MACHINES.

Are the machines difficult to keep clean and sweet? This is an important item. In answer will say we have our milk room in basement of barn. In the hay mow we have a 25 barrel galvanized iron tank that catches water from the roof of barn. This is piped to our milk room where we can get a pail of cool water to pump through the machines just the minute we are through milking. We also run water to cooling tank of our little three and a half horse power Olds engine. To a pail of the hot water drawn from this tank is added one pint cup of a solution made of Wyandottes Dairyman's Cleaner and Cleanser and rainwater and pump this through our machines and place the rubber parts in a weak brine or lime water until ready to use again. We have a small dynamo and have electric lights, use the engine also for running separator and small feed grinder. If we did not use the machines we think it would be almost impossible to go back to the dangerous expensive lanterns and hand separating. The dynamo cost us about \$60.00 or an interest investment of 1 1/4 cents per day, and our lanterns, globes and oil cost us twice that to say nothing of the time spent trying to keep the globes clean enough so that we could tell if the lanterns were lighted or not.

CONCLUSION.

In conclusion, we would say let us spend some of our energy getting things right on the farm for the economical production of milk and cream that is superior to anything produced in the world, and then, if our present creamery systems don't, won't, or can't pay us fancy prices for our fine cream we will be ready to adopt a system that can and we will then be so thoroughly posted as to our needs and values that we will not be a tool to be used to build a building that is disgraced with the name "Creamery" but which is not fit to make a high grade axle grease in and pay for same twice what a good up-to-date creamery would cost.

We are not excusing the creameries in the least for the present conditions but even now we do believe that fine

THE OAT WONDER--

Emperor William Oats.

Are you aware, Mr. Farmer, that Germany grows more oats than nearly the whole of Europe put together, outside of Scotland, England and Russia? That Germany, a country smaller than Texas, piles up more bushels of oats than Italy, France, Sweden, Norway, Spain, Austria, Holland and Denmark together?



Why is this? It is not because Germany has better land or more careful farmers, but because Germany sows only heavy yielding varieties. When we were in Germany several years ago we obtained this oat in one of the rich valleys of the Rhine. We saw it growing there. It completely captivated us. We brought it to America, distributed it for trial in twenty different states in the union, and everywhere it has proven itself peer of any grown the past season.

Our Emperor William Oat is a wonder, almost as wonderful as the Emperor himself, and no farmer will want to be without it. In good oat years it will weigh from 38 to 48 pounds per measured bushel. Catalog tells. Trial package, 6 cents.

Macaroni Wheat No. 5639.

The purest, best, finest Macaroni Wheat on earth. It is largely used by millers in mixing. It would be ashamed of itself to return less than 40, 50 or 60 bushels per acre on any farm in America.

Silver King Barley.

Out of sixty sorts tested at the Wisconsin Agricultural College, Salzer's Silver King lead all in yields. That's a record we are proud of. Catalog tells.

Big Seed and Plant Book Free.

We publish the most original seed catalog in America. It bristles with seed thoughts. Gladly mailed to intending buyers FREE.

Or, if you will remit 10c. for postage, we will send you a remarkable lot of farm seed samples, including Little Dollar Grass, the twelve-ton hay wonder, Esparsette, the dry soil luxuriator, Speitz, the 80-bushel cereal prodigy, Silver King Barley, yielding in Manitowoc County, Wisconsin, 173 bushels per acre; Victoria Rape, Bromus Inermis, Salzer's Northern Grown Alfalfa, etc., etc., and if you send 14 c. we will add a package of new farm seeds, never before seen by you; or send 20c. and we will add a package of Emperor William Oats.

JOHN A. SALZER SEED CO. LA CROSSE WIS.

THE MAN WHO WINS

is the man who thinks. Thinking planters realize that the first cost of the seeds is a small item as compared with the final results. Think about the difference in yields when sowing good or poor seeds.

THE SEEDS WE SELL

are good seeds only. Fresh, clean, pure and of highest vitality. Will you be classed with the thinking planters, or with those who don't care? Better write for our catalog to-day. It will make you think, and will help you procure valuable new varieties of Vegetables gratis as Premiums with early orders.

THE BARTELDES SEED CO. BOX 5, LAWRENCE, KANSAS
Branches at Denver, Colorado, and Oklahoma City, Oklahoma.



TESTED SEED

THE KIND TO PLANT

OUR LARGE 1908 SEED CATALOG

Gives complete and accurate descriptions of OUR TESTED SEED. It is the most complete catalog we have ever issued, containing

OVER 1000 VARIETIES, 300 FINE ILLUSTRATIONS

Of Vegetable, Field and Flower Seed, Roses, Plants, Shrubs, Poultry and Bee Supplies. Our trade doubled last year. This book tells why. Write for it today—it is FREE.

ZIMMERMAN SEED CO., 623 Quincy St., Topeka, Kan.

SEED CORN 146 BU. ACRE

DIAMOND JOE'S BIG WHITE:—A Strictly new variety: None like it. It is the Earliest and Best Big White Corn in the World—Because it was bred for most Big Bushels, not fancy show points; because grown from thoroughbred inherited stock; every stalk bears one or more good ears; Because scientifically handled, thoroughly dried and properly cured and had the most rigid examination. Big Seed Catalog FREE. It tells about all best farm, grass, Garden and flower seed grown. Send for it today. Address RATEKIN SEED HOUSE, Shenandoah, Iowa.

ALFALFA SEED

MOBETH & KINNISON

Highest award St. Louis Exposition, Kansas-grown. Crop of 1907. Also Cane and Millet; Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices. GARDEN CITY, KANS.

THE STRAWBERRY ALWAYS PAYS.

The past season when almost all other fruit was practically a failure, the Strawberry made us a big profit. We have 45 acres in new fields and have the best lot of plants we ever grew. All our fields are now under mulch and are sure to come out in the spring in first-class condition. We also grow large quantities of all other small fruit plants. Our new catalog will be ready to mail early in January. It will give you all the information you need. Write for free copy. Address

F. W. DIXON, - - - Holton, Kansas

Acorn Brand

Standards for the seed quality that is a 'little better than seems necessary.' This quality will be maintained, and any seeds bearing Acorn Brand will prove satisfactory. Catalog and Special Offer for the asking.

ROSS BROTHERS SEED HOUSE, Wichita, Kans.

Our ALFALFA seed is Kansas grown, non-irrigated, has not been adulterated and is of the best quality obtainable. Ask for samples and prices.

KHERSON SEED OATS

THE NEW KHERSON OATS were originally imported from Russia, by the Nebraska State Experimental Station, and have proven one of the surest croppers and largest yielders as well as best sorts ever introduced into this country. THEY DO NOT RUST OR LODGE as many other sorts do, and are fully two weeks earlier than others. In addition to these we have the New Sensation, Early Champion, Lincoln, Texas Red-Rust-proof and other extra early sorts. Prices 50 to 75c per bushel, bags included. Write for our Big Illustrated FREE Catalog. A postal will bring it. Address

RATEKIN SEED HOUSE, Shenandoah, Iowa.

high grade cream is in demand and will be paid about all it is worth. It is an awful fact to admit but the truth never the less and that is that we can produce a very inferior article of cream and from any creamery in the State get much more than we consider it worth. We believe we are safe in saying any centralizer, cooperative or individual creamery in the State will receive this stuff and pay more than it is worth. We believe the creameries mean right, but something in the way of a change is needed on their part as well as on the farms, to get the greatest profit, pleasure, and satisfaction out of the Kansas dairy industry. Let us all work together to make Kansas creamery butter, as it well should be, the finest butter in the world and we will guarantee that the profits will be satisfactory to all farmers as well as creamery men. And the pleasure and satisfaction which we will all share alike will be almost better than the profits.

Let us all work for this end.

Tuberculosis in the Dairy Herds.

Prof. J. C. Kendall, before the Kansas Veterinary Medical Association.

There is no more vital subject before the dairy world to-day, than the subject of tuberculosis. It is given more and more thought and study, by our best scientists and investigators. City, State, and Government officials, who are trying to do their full duty, find this one of the most perplexing problems brought to their office for solution. The public in general is beginning to awaken, as never before, to a realization of its universal bearing, not only from an economical standpoint, but on the health and life of our people. The dairymen of the country, who have in the past been inclined to look with disfavor and doubt, upon the extent and seriousness of this subject, are beginning to realize that they must heed the warning, which has been given them so often in the past. In fact, this question of the best method of handling and controlling the ravages of this "White Plague," which has but one rival among men, and which holds probably without doubt, an equal place of importance among the diseases of cattle, holds to-day, and should continue to hold, the most prominent place, as a subject for consideration, by every man, woman, and child in the country, until such times as its ravages shall be checked.

THE PRESENT SITUATION.

In discussing this subject of Tuberculosis in Dairy Herds before an audience of veterinarians it would be out of place for me even to attempt to treat the subject from the scientific standpoint of the veterinarian. Therefore we shall not try to take up and discuss the many and often-times conflicting arguments, as to whether tuberculosis bacillus has the power of producing spores; whether bovine bacillus, is different from the human bacillus, and if so to what extent; or whether the so-called tuberculosis bacillus, can even be classed among the true bacteria. We shall simply state briefly, what we consider to be the present situation and desirable steps to take, looking to the stamping out and preventing the spread of tuberculosis, among the dairy herds of Kansas.

CHARACTERISTICS.

In order to discuss this subject intelligently, it will be necessary to state briefly some of the characteristics of the tuberculosis bacillus. Tuberculosis bacillus lives within a wide range of temperatures, and is not as easily destroyed, as many kinds of bacteria. Heating the medium in which the bacillus exists, to the temperature even to that of boiling water, can be done without destroying them. In other words, the bacillus has the characteristics as far as resistance to adverse conditions goes, as that of the spore producing bacteria. Further than this, the organisms after being dried, will live for months and yet when conditions become favorable, will take on new life and continue their deadly work.

While we have seen that the bacillus will withstand, during the dormant

state extremes of temperature and other adverse conditions, the range of temperatures within which these organisms will develop and multiply, is comparatively narrow. It was formerly supposed to be within very narrow limits. The temperature between 84° and 105° appears to be necessary for their growth. It was formerly supposed that these organisms were paracitic in their habits, and would not live outside of the living tissue. While it is known to-day, that they can be grown on a number of different culture medias. A very important characteristic which this bacillus possesses, and one very fortunate for man, is that they do not develop in water and in milk.

TUBERCULOSIS DIFFERENT FROM OTHER DISEASES.

Tuberculosis differs both in man and animal, from a great many other diseases, in that it is not confined to any particular set of organs, but may affect many or become generalized. The tuberculosis bacillus, besides affecting man, flourishes in a number of different animals, and for this reason is no doubt more readily distributed.

BOVINE TUBERCULOSIS.

We are to consider this subject from the standpoint of bovine tuberculosis, and we regret that we have not more reliable data and information as to its general distribution. But owing to the methods employed in collecting this data, too much importance should not be put upon this kind of evidence. We find all kinds of statistics offered to show the prevalence of this disease among cattle. In Copenhagen, Denmark it is claimed that some 30 per cent of the adult cattle are affected with this disease, of course this shows that the disease is distributed irregularly. Some herds have a few or no animals affected, others as high as 90 or 100 per cent of the animals being afflicted with the disease. Conditions are much the same in the United States, many herds being entirely free from the disease, others where nearly every animal in the herd is affected. While we find the disease much more prevalent in the older dairy sections in the East, it is spreading rapidly all over the country, and quite largely through the shipping of breeding stock.

THE DISEASE ON THE INCREASE.

Indications seem to point towards the increase of bovine tuberculosis. Of course part of this increase must be credited to the fact, that the subject is given more prominence, and more cases are investigated, but in spite of these facts, evidence seems to show that the disease is on the increase. The loss of the farmer by means of this disease among his dairy cows, when we consider the manner in which it spreads through the entire herd, rendering them worthless within a few years, is something enormous, and especially is this true amongst the high-priced breeding stock of the country. Highly-developed and highly-fed animals, such as we find amongst the breeding animals and the show animals of the country, seems to be more susceptible to tuberculosis.

TREATMENT FOR TUBERCULOSIS.

We can instruct the farmer and dairyman in the value of ventilation, proper feeding, care, and exercise and plenty of sunlight, as a means of keeping the animals in a healthy condition, which by the way is the most effective means of holding the disease in check, as it is important in preventing other animals in the herd from becoming affected, if an active case exists in even a single animal in that herd. There are so many ways by which infection takes place, that to undertake to prevent the spread of the disease, is impossible, except through complete isolation of the affected animal. From the dairyman's standpoint, there is to our mind, but one way of handling this disease, and that is to test the animals in the herd with the tuberculin test, removing all affected animals, thoroughly disinfecting the premises and permitting no animals to be introduced into the herd, before they have been subjected to the tuberculin test. In this way the disease

can be stamped out, and the herd kept free from the disease. In many States, laws have been passed which will recompense the farmer in part at least, for all animals that are slaughtered as a result of being diseased. This offers the dairyman an encouragement to clean out his herd, when if he was obliged to stand the entire loss of condemned animals, he would hesitate a long time.

DR. BANG'S PLAN.

Dr. Bang, of Copenhagen, Denmark, has proposed a plan of handling this question, which certainly has merit. The herd is tested, reacting animals are taken from the herd, prepared for the butcher, except those showing by a physical examination that they are in advanced stages of the disease. These animals are taken out and slaughtered at once. In case of valuable animals, the calves are taken from their mother, when a day old, and given the milk from healthy cows. In this way healthy animals have been raised from a diseased herd. This is possible since the disease is not hereditary, but a germ disease. Where the reacting animals are butchered under the Bang method, many of them will pass inspection. In this way, quite a financial gain for the farmer is possible over the method of condemning and slaughtering all reacting animals immediately.

TUBERCULOSIS IN KANSAS HERDS.

We would not expect under the existing condition in Kansas, that tuberculosis would be as prevalent as in the Northern States, where animals have to be housed so many months in the year, or in the more specialized dairy sections of the country, and yet some recent investigations seems to show that the dairy cows of Kansas, are far from being free from this dreaded disease. In fact these tests of the dairy cows, supplying some of our cities with milk, has developed the fact, that there are alarming numbers of such animals, that react to the tuberculin test. Therefore it behooves the Kansas stock and dairymen, to awaken to the seriousness of the situation before it is too late. Why should they not profit by the experience of other sections of the country, and check this disease before it has become generally distributed among our cattle. That the disease can be stamped out and kept out of our herds, there is no question. If this is true, a systematic and organized effort by the stockmen of the State, and no more important and valuable movement could be undertaken, than one which would relieve our dairymen from this enormous yearly loss, and free our milk supplies from suspicion. There is no more effective way of bringing this about, or at least checking the spreading of this disease, than the passage of a State law, which would compel every animal brought into the State to be free from tuberculosis.

DISEASE BROUGHT FROM OUTSIDE HERDS.

My reason for taking this position, is that as we have seen before, the disease seldom develops from within the herd, but is brought in from outside sources, and this usually through the purchasing of animals. If the farmer can stamp out this disease and prevent its introduction into his own herd, by not allowing untested animals to mingle with his herd, the same method could also be applied to the State as a whole, and with like effectiveness. We have statistics which shows that last year, 107 of only one breed of cattle, was brought into the State. It is reasonable, to suppose that most of these animals were distributed as individuals, or at least in very small numbers in different places all over the State. By these means, if only the average number of such animals were afflicted with tuberculosis, and we would expect to find the percentage higher among animals of this class, then here and there all over the State, through the introduction of breeding stock, we are establishing each year, many new centers of distribution for this dread disease. If we could put a stop to this one source alone of introduction, it would accomplish untold value to the dairy interests of the State. Why wait

A Square Deal

Is assured you when you buy Dr. Pierce's family medicines—for all the ingredients entering into them are printed on the bottle-wrappers and their formulas are attested under oath as being complete and correct. You know just what you are paying for and that the ingredients are gathered from Nature's laboratory, being selected from the most valuable native medicinal roots found growing in our American forests and while potent to cure are perfectly harmless even to the most delicate women and children. Not a drop of alcohol enters into their composition. A much better agent is used both for extracting and preserving the medicinal principles used in them, viz.—pure triolein refined glycerine. This agent possesses intrinsic medicinal properties of its own, being a most valuable antiseptic and antiferment, nutritive and soothing demulcent.

Glycerine plays an important part in Dr. Pierce's Golden Medical Discovery in the cure of indigestion, dyspepsia and weak stomach, attended by sour risings, heart-burn, foul breath, coated tongue, poor appetite, gnawing feeling in stomach, biliousness and kindred derangements of the stomach, liver and bowels.

Besides curing all the above distressing ailments, the "Golden Medical Discovery" is a specific for all diseases of the mucous membranes, as catarrh, whether of the nasal passages or of the stomach, bowels or pelvic organs. Even in its ulcerative stages it will yield to this sovereign remedy if its use be persevered in. In Chronic Catarrh of the Nasal passages, it is well, while taking the "Golden Medical Discovery" for the necessary constitutional treatment, to cleanse the passages freely two or three times a day with Dr. Sage's Catarrh Remedy. This thorough course of treatment generally cures the worst cases.

In coughs and hoarseness caused by bronchial, throat and lung affections, except consumption in its advanced stages, the "Golden Medical Discovery" is a most efficient remedy, especially in those obstinate, hang-on coughs caused by irritation and congestion of the bronchial mucous membranes. The "Discovery" is not so good for acute coughs arising from sudden colds, nor must it be expected to cure consumption in its advanced stages—no medicine will do that—but for all the obstinate, chronic coughs, which, if neglected, or badly treated, lead up to consumption. It is the best medicine that can be taken.

SALT CITY BUSINESS COLLEGE

HUTCHINSON, KANSAS
POSITIONS SECURED FOR GRADUATES. STUDENTS ENROLL EVERY WEEK. THOROUGH COURSES. TUITION REASONABLE. PENMANSHIP AND SHORTHAND TAUGHT BY MAIL. OWNED AND CONDUCTED BY BANKERS, STATESMEN AND PROFESSIONAL MEN. THE LEADING BUSINESS COLLEGE IN KANSAS. NO SUPERIOR SCHOOL IN AMERICA. SIXTY-FOUR PAGE CATALOGUE FREE. WRITE TODAY.

LAWRENCE
Business College
Lawrence, Kansas.
38th YEAR.
Thorough Commercial and Short-hand Courses.
GOOD POSITIONS for graduates.
Write for FREE Catalogue.
Lawrence Business College, Lawrence, Kans.
Address Lock Box F.

PREPARATORY SCHOOL FOR BUSINESS
WHITMORE
BUSINESS COLLEGE
Book-keeping, Shorthand, and Business Courses. 100% of positions, big wages, pleasant work for young men and women. Don't delay—Start now. Special Rates. Write A. R. Whitmore, Pres., St. Joseph. For Particulars & Catalogue.

KANSAS CITY BUSINESS COLLEGE
Dement, Graham, Pitman or Gregg Shorthand Bookkeeping, Telegraphy. Twice as many teachers of Shorthand constantly employed as any other school in the city. Individual instruction. Position secured for graduates. Address CHAS. T. SMITH, Prop., 928 Walnut, Kansas City, Mo.

Pay When You Are Well

for Piles and Gonor. No knife or ligature. Not detained from work. Call or write. Will furnish treatment.

W. J. LANKFORD, M. D.,
Phone 728, Hedrick Bldg. OMAHA, KANS.

PERFECTLY DEVELOPED BUST
I have the safe and true SECRET for perfectly developing the Bust, making thin cheeks, neck and arms plump and beautiful. Write for information; I send it sealed, FREE.
DELMAR ASSOCIATION, 24 East 23d St., New York.

Res. Tel. 775. Office Tel. 192

L. M. PENWELL,
Funeral Director and Licensed Embalmer.

511 Quincy St. Topeka, Kansas

HENRY W. ROBY, M. D.
SURGEON.
730 Kansas Ave. Topeka, Kans.

until our herds contain 30, 50, and 90 per cent diseased animals, before starting in on a crusade of slaughtering and stamping out of this disease. Why not start a movement of preventing and looking to the introduction and spread of this disease, which not only means a financial loss, but threatens even life itself.

"HUMAN AND ANIMAL TUBERCULOSIS."

The Second Interim Report of the Royal Commission on "Human and Animal Tuberculosis" was issued in January, 1907. It presents the conclusions of the commission after thorough and extensive investigations covering more than five years.

The report is signed by Sir Michael Foster, Prof. G. Sims Woodhead, Prof. Sidney Martin, Sir John McFadyean, and Prof. Rubert Boyce.

The following is an extract:

"There can be no doubt but that in a certain number of cases, the tuberculosis occurring in the human subject, especially in children, is the direct result of the introduction into the human body of the bacillus of bovine tuberculosis; and there also can be no doubt that in the majority at least of these cases, the bacillus is introduced through cows milk. Cows milk containing bovine tubercle bacilli, is clearly a cause of tuberculosis and of fatal tuberculosis in man."

"A very considerable amount of disease and loss of life, especially among the young, must be attributed to the consumption of cows milk containing tubercle bacilli."

"Our results clearly point to the necessity of measures more stringent than those at present enforced being taken to prevent the sale of the consumption of such milk."

"TUBERCULOSIS MUST BE STAMPED OUT."

In conclusion will say, that tuberculosis can be stamped out of the herds, and if systematic and cooperative work be carried on, all over the State. The State can become freed from tuberculosis in much the same way that they are freeing the tick-infected States from ticks. This was done by establishing quarantine lines between counties, and extending them as rapidly as the disease was stamped out, and permitting only healthy animals to be admitted into non-infected areas, the State could in a few years of this systematic work, drive tuberculosis and its accompanying dangers and evils, outside of its borders. The very fact that tuberculosis is not so general within this State, is all the more reason why immediate steps should be taken to prevent its spread. To accomplish this, State aid should be given the farmer, in order that the burden may not fall too heavily upon the dairymen of the State. This would certainly be for the interests of the public.

When this work is begun within the State, laws should be passed, preventing affected animals from being brought in from other sections. In view of the present knowledge on the subject of tuberculosis, and the dangers from children and invalids consuming the milk from animals, suffering with tuberculosis, it is not wise to permit dairymen, furnishing milk for public consumption, to keep among his herd, animals which are suffering from tuberculosis, and that will make such a supply a menace to the health and life of the people.

An Equitable Basis for the Assessment of Pedigreed Stock.

S. C. Hanna, Howard, Kas., before the Improved Stock Breeders' Association.

I am well aware of the difficulties that attend the assessment of this class of live stock. These difficulties arise from the fact that the speculative margin of value in pedigreed stock has so much wider range than it has in the common stock of the country, and this margin is created by elements that are of too indefinite and intangible a character for valuation.

The public markets for horses, cattle, hogs, and sheep establish a basis of valuation for all classes of common stock, and while this market basis has a speculative margin susceptible of

considerable fluctuation, these fluctuations are narrower, and more easily estimated in a conservative valuation.

The elements that enter into the value of pedigreed stock are peculiar to the business of fine stock breeding. The family history of certain blood lines, which has made them fashionable, the character and reputation of the breeder, his success in growing and caring for his stock, his ability as an advertiser and as a salesman, all contribute materially to their value. On what basis can you estimate and assess these qualities? The average assessor has no knowledge of these factors, which make up a considerable part of the value of registered stock. He sees one breeder making a sale average of \$25.00 for his registered hogs, and another making an average of \$60. This difference is due to those peculiar elements of fashion, fancy and speculation which are altogether too fluctuating and uncertain to afford any just basis of valuation for taxable purposes.

Some contend that the breeder who introduces better blood among the live stock of his section, confers a great benefit on the community, and should therefore be somewhat favored in his assessments; that his registered stock should not be assessed on any higher basis than the common stock of that section. While there may be some justice in this view of the matter, I apprehend that the breeder who invests in this class of stock, at a higher valuation, considers them worth the increased price, and makes the investment from a standpoint of profit, and not from any philanthropic motives. He, therefore, can not reasonably object to having them assessed on a higher basis.

After many years of close observation of this subject, I have come to the conclusion that the fair way to arrive at an equitable basis of assessment, is to eliminate, so far as possible, the speculative margin of value; that uncertain and intangible value which can not be measured or estimated. It seems to be that this would place the assessment of registered stock on a basis that would be reasonable, and satisfactory to the breeder and to the government.

Eliminating these intangible values, my conclusion is that the fairest basis we could devise would be to assess all registered stock at double the value of the common stock of the same breeds. If cattle they should be assessed at double the value of the average cattle of the county in which the assessment is made. If they are horses apply the same rule, and also for hogs, sheep, and all kinds of registered stock. On an average, one year with another, this will prove to be a fair basis. It will eliminate the values that accrue from the personal ability of the breeder, from fashion, fancy and speculation, and place that class of live stock all on the same basis throughout the State.

I fully realize, that no basis of assessment can be devised that will prove to be exactly equitable, as between all classes of property. The best that can be done is to approximate as closely as possible to a just basis.


A careful consideration of all the fluctuations in value of registered stock, through a term of years, will show that these fluctuations, after eliminating the speculative margin, have been in about the same proportion as the fluctuations in the value of the common stock of the same classes, and that the proportion of two to one, for actual value, will nearly always hold good.

I would therefore respectfully suggest that our State Tax Commissioners establish that basis for the assessment of registered stock throughout the State.

DISCUSSION.

Senator Harris: One of the points raised had a judicial decision a great many years ago in Kentucky, when the assessors undertook to assess a man according to the sales he was making. It was carried up to the Supreme Court, and the Supreme Court decided that a pedigree was absolutely a thing

Three generations of Simpsons have made



EDDYSTONE PRINTS
Founded 1842


Ask your dealer for
Simpson-Eddystone Black & Whites

The never-fading old "Simpson" Prints made only in Eddystone.

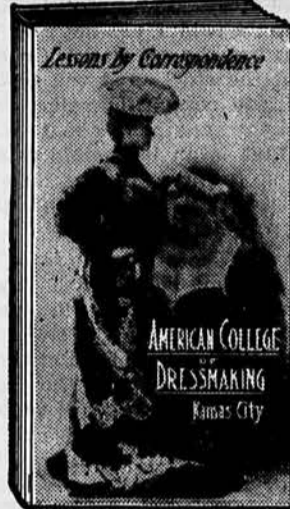
Not a "little better" but by far the best. Most beautiful. Most durable. Most economical. Absolutely fast color. Standard for 65 years. Some designs in a new silk finish.

If your dealer hasn't Simpson-Eddystone Prints write us his name. We'll help him supply you. Decline substitutes and imitations.

The Eddystone Mfg. Co., Philadelphia
Established by Wm. Simpson, Sr.



A WOMAN CAN \$5000⁰⁰ A YEAR



Learn Dressmaking at Home

Many women nowadays are earning \$100 a week—\$5000 a year by dressmaking. One woman, the head designer of Chicago's largest retail dry goods house, earns \$10,000 a year. Salaries of \$25.00 to \$50.00 a week are common. We teach you by mail and put you in a position to command the largest salary of any woman in your locality, or you can start in business for yourself. Become a Graduate Dressmaker. The regular Diploma of this College is issued to all who complete this course of lessons. The American System requires no charts or patterns. These lessons will teach you how to draft your own patterns and make your own clothes and enable you to dress far better at one-half the usual cost. They teach you how to DESIGN, CUT, FIT, MAKE, DRAPE and TRIM any garment, including children's clothing. This College is endorsed by all high grade Fashion Magazines—Designer, Designer, McCall's Pictorial Review, New Idea Woman's Magazine, Modern Frisilla, Housekeeper, Good Housekeeping, etc.

This book will be sent to you free. At an expense of hundreds of dollars this college has published 10,000 of these copyrighted books to advertise the AMERICAN SYSTEM OF DRESSMAKING, and while they last—will send you a copy FREE. Write for it today. One copy only to each woman.

AMERICAN COLLEGE OF DRESSMAKING
272 College Building. KANSAS CITY, MO.

FREE

FOR THE CLUB WOMEN.

Your Own Club Magazine For Only Half Price
THE CLUB MEMBER

Published monthly in Topeka by some of Kansas' brightest club women at 50 cents per year, may now be had with The Kansas Farmer, each for one full year, for only \$1.25. The Club Member is the only magazine of its kind published in Kansas. It is edited by and for club women. It is bright and interesting. Send one dollar and twenty-five cents and receive this Kansas woman's magazine and The Kansas Farmer, each for a whole year. Address

The Kansas Farmer Co., Topeka, Kans.

DIRECT FROM REFINER TO CONSUMER.

FARMERS and ALL OTHERS who use kerosene, gasoline, lubricating oils and greases, WHY do you BUY at RETAIL when you can BUY at WHOLESALE, and SAVE the MIDDLE MAN'S profit? Do you know it is the middle man who FORCES trust made goods on YOU? Do you know it is the merchant or middle man WHO FORCES POOR OILS ON YOU? Do you know WHY HE DOES IT? BECAUSE HE makes a larger PROFIT from these trust made oils and those who make poor slush goods than HE can make by handling GOOD honest GOODS.

The merchant and the middle man cares only for his profit; the larger his profit, the poorer the oil he forces UPON YOU. DIRECT from the REFINER to the CONSUMER should be your motto. To the people of Kansas, see what we can save you. If your kerosene costs you now at your store 10c per gallon, we can save you from 20 per cent to 25 per cent. If it costs you 12c, we can save you 40 per cent to 45 per cent. If it costs you 15c, we can save you 70 per cent to 75 per cent. If it costs you 20c, we can save you 120 per cent to 125 per cent.

DO THESE FIGURES INTEREST YOU? Is not money saved as good as money earned? Do you wonder the merchant or middle man FIGHTS YOUR BETTERING YOUR CONDITION BY BUYING DIRECT FROM THE MANUFACTURER. NOT only do you save from 20 per cent to 125 per cent, but you get BETTER OIL than you ever used before. WE GUARANTEE IT TO GIVE SATISFACTION IN LAMPS OR INCUBATORS OR MONEY REFUNDED. REMEMBER we make axle grease, cup grease, harness oil, harvester oil, castor machine oil, cylinder oil, dynamo oil, red engine oil, cream separator oil, black oil, metal roof paint for bridges, or iron works, poultry disinfectant. WE CAN SAVE YOU FROM 50 per cent to 200 per cent ON ALL THESE GOODS. You use them all. Do you want to save this profit for yourself, or do you want the middle man to have it. To those living in adjoining States, on account of high interstate freight rates, WE CAN'T SAVE SO MUCH, but can SAVE SOME and give you the best goods YOU EVER USED.

We can furnish 30 gallon or 60 gallon galvanized iron tanks, with brass faucet, at manufacturer's cost. They will last a lifetime. IF NECESSARY, CLUB TOGETHER, buy direct from Refinery, get good goods, honest goods, and SAVE MIDDLE MAN'S PROFITS. Our Refinery is located on the Santa Fe Railroad. WE MAKE PROMPT SHIPMENT. Send for prices and further information. SAMPLE sent those who WANT to SAVE the MIDDLE MAN'S PROFIT. YOURS FOR A SQUARE DEAL. HONEST GOODS AT HONEST PRICES. Address,

THE SUPERIOR REFINING COMPANY, Longton, Kans.

J. H. McCULLOUGH, Pres.,
Solomon, Kans.
J. S. CANADA, Vice-Pres.,
Minden, Neb.

BOTH PHONES
1849 West.

E. R. BRALL, Sec'y & Mgr.,
Kansas City, Kansas.
P. W. GORREL, Treas.,
Kansas City, Kansas.

CAPITAL STOCK, \$50,000

The Farmers Terminal Grain Co.

**Receivers and Shippers of
Grain and Mill Products**

Board of Trade Building.

KANSAS CITY, KANSAS.



LIGHTNING PORTABLE WAGON and STOCK SCALE

All above ground. Steel frame, only eight inches high. Octagon levers. Tool steel bearings. Compound beam. Most accurate and durable. Write for catalogue and price.

KANSAS CITY HAY PRESS COMPANY,
129 Mill Street, Kansas City, Missouri

which could not be reached. It had that intangible character which made it impossible for any assessor to judge. But the general practise at that time in Kentucky was about as suggested here. Pure-bred cattle were assessed at about twice what the ordinary cattle were, and for about thirty years, in Leavenworth County, I had made that arrangement with the assessors there.

Secretary Heath: Your secretary has received more complaints of taxation of pedigreed stock through Kansas than any other one subject, because of lack of uniformity. In some places it practically amounted to driving people out of business because of ignorance and stupidity of assessors, who thought that because breeders had made some good sales they ought to pay about five times as much as on ordinary stock.

Mr. Sutton: You may take the best herd of horses, cattle, hogs, or anything else that you can find in the State of Kansas. That herd has been gathered together by the use of a whole lot of brains, usually. It may have been built up through years and years of hard work, and when the breeder goes to that herd to buy anything, he not only goes there to pay for the reputation; he goes there to get an animal that carries not only the pedigree, but the reputation of the man that has built up that herd. It does not seem to me these cattle ought to be taxed any more than the highest priced ordinary cattle.

Secretary Heath: Take it up in Northwest Canada, they transport all those cattle free and exempt them from taxation.

Senator Harris: I merely want to say in reply to what Mr. Sutton says. I do think, even if you destroy the pedigree, you still have a class of cattle, horses, or hogs that are very much better than ordinary cattle.

Mr. Blair: I disagree with Mr. Hanna's views on this question of a double valuation on pedigreed stock. We would thereby give up the principle for which we are fighting. We have had this trouble down in Harvey County for some years, and we have a little stock breeders association down there. Three of us were delegated to go before the county commissioners and the assessors, and had a general meeting, and presented the matter to them, and I prepared a little paper which I read to them, and it was also published in THE KANSAS FARMER some years ago. Now, I believe, as suggested here that each State, county, or township ought to pay a premium to a man for bringing a good registered animal into a community.

Mr. Dowling: We have had lots of trouble about this same thing up in

Kokomo Woman Gives Fortune

To Help Women Who Suffer.

In the past few years Mrs. Cora B. Miller has spent \$125,000 in giving medical treatment to afflicted women. Some time ago we announced in the columns of this paper that she would send free treatment to every woman who suffered from female diseases or piles.

More than a million women have accepted this generous offer, and as Mrs. Miller is still receiving requests from thousands of women from all parts of the world, who have not yet used the remedy, she has decided to continue the offer for awhile longer, at least.

This is the simple, mild, and harmless preparation that has cured so many women in the privacy of their own homes after doctors and other remedies failed.

It is especially prepared for the speedy and permanent cure of leucorrhea or whitish discharges, ulceration, displacements or falling of the womb, profuse, scanty or painful periods, uterine or ovarian tumors or growths; also pains in the head, back, and bowels, bearing down feelings, nervousness, creeping feeling up the spine, melancholy, desire to cry, hot flashes, weariness and piles from any cause, or no matter of how long standing.

Every woman sufferer, unable to find relief, who will write Mrs. Miller now, without delay, will receive by return mail free of charge, a 50-cent box of this simple home remedy, also a book with explanatory illustrations showing why women suffer and how they can easily cure themselves at home without the aid of a physician.

Don't suffer another day, but write at once to Mrs. Cora B. Miller, 128 Miller Building, Kokomo, Ind.

Northwestern Kansas, but I can not agree with Mr. Blair about this. There is just as much difference in pure-bred stuff as there is in grade stuff. These ought not to be assessed at the same value. Col. Robison has no doubt right on his farm grade Percheron horses that he would not think of selling for less than one hundred, two hundred, or three hundred dollars; I have no doubt of it; there is in any community almost, where there has been this pure-bred stuff kept for any length of time. Assess each animal at its actual worth.

Gov. Glick: I raised pure-bred Shorthorns for thirty-three years. I never had any trouble with assessors. They came around. Some of them said, "This is pure-bred stock? Yes, it is pure-bred stock. Well, what is your value on it. I said I am not the assessor, you are the assessor. Go out and look at the stock, and you assess it at what you regard its value. He does not know anything about your pedigree; that is an intangible thing. It gives value to the animal because it traces his pedigree back way into the past ages, you might say.

Mr. Terry: The governor says he has never had any trouble with assessors. I have not either. He came around and said what he was going to assess stock at, and I let it go at that. He came around and said we are going to assess your horse at \$5.00 for every dollar service fee, and put it down. That's all there was to it. Next horse something, Jack something. You have full-blooded mares, too? We will put her down at \$100. But the idea that they will turn right around and go to the next neighbor, that has a team that will sell for \$500, and assess them at \$25.00. There's something wrong. Because I have a mare that has got a certificate, this mare shall pay taxes on \$100 or \$125 (last year they had one at \$160 and one at \$140), but my neighbor has horses that look just as well, bring three-fifty to five hundred dollars, but they are assessed at the usual price of good work horses, \$25.00 to \$30.00. The highest in our county last year was \$40.00, outside of pedigreed stock. I say there is nothing right about that. Every man is willing to pay his pro-rata.

The Farm Dairy, the Cooperative Creamery, the Skimming Station, the Hand Separator, and the Centralized Creamery.

Excerpts from address of W. W. Marple, of Chicago, before the Kansas State Dairy Association.

The making of butter on the farm (especially where the dairy was small), and finding a market for it, has always been a difficult and generally an unsatisfactory proposition, both on account of the labor and the results. There was a time when country butter, sold in Kansas, Nebraska, and Missouri, as low as 6 cents a pound in trade, and at the same time, good butter was worth 25 cents cash in Philadelphia, and the cost of getting it there, only a little over a cent. Notwithstanding this low price, the merchant who bought it, lost money on it. But could only refuse at the peril of losing his trade and being boycotted. Do I need to explain what the trouble was? You say quality. That is probably true and yet it might be wise for you to be assured, that the person who made it has gone to that land from whence no traveller ever returns, before you say so. I remember distinctly (in my brief experience behind the counter of a country store) of buying butter that had been delivered in a jug, and I was expected to say that was nice butter. The woman who made this 6 cent butter, was not to blame, neither should she be censured for thinking it was good. Butter-making is a science, and she had never been taught the first principles of how to make butter, nor had she learned what good butter was. She could only be governed by taste, and we would call it an uncultivated or veiated taste, and yet our opinion of her taste is probably no worse, than her verdict of a man's taste, who chewed tobacco or smoked cigarettes. This is not all. If she had been proficient in the

art of butter-making, although her knowledge of the science, may have been complete, she had an immovable barrier, and that was conditions and appliances.

THE MARKET FOR GOOD BUTTER.

There is another thing, that has always impressed me in connection with the making of butter on the farm, where conditions were unfavorable and facilities were poor, that is the finding a market. The woman who takes her butter to the store to trade out, seldom does it without being humiliated by the attitude of the merchant, and whether she is conscious of the quality of her butter or not, she can not help but feel a degree of embarrassment. On entering a store, she says—"Are you buying butter to-day?" He hesitates because he is afraid it isn't good, so he says—"I'm pretty well stacked up. I expect I've got about as much as I can handle," but at the same time he starts for the bucket or basket and uncovers it, and keeps talking. Probably he will say, "How much have you?" and by this time he has his nose as close as he can get it, without getting grease on it, and he has dug his thumb-nail into it and put a little piece in his mouth, and if its good, he swallows it and says, "Oh I guess being as its yours, and there ain't a great deal of it, I will take it." If it isn't good, he tries to hide behind something on the counter, and spit it out, then he says, "Well I'll tell you, I don't have a very big trade on butter, and there is a good deal of it, so I guess I better not take it, but you'll have no trouble to get rid of it, because it's nice butter." He thinks he did that slick, but he didn't. There wasn't a move escaped her and she divined his very thoughts.

To my mind, it is almost criminal to allow a woman to be put in a position of this kind, and I congratulate you citizens of Kansas, that provisions have been made, through the establishing of centralized creameries in your State, that makes it unnecessary. Provisions that enables the Kansas farmers' wife in the most secluded section and the most remote from market, to exchange the raw material out of which she used to make butter, for a circulating medium, that permits her to enter the marts of trade, on equal footing and equal dignity with queens and princesses.

THE FIRST CREAMERY.

The almost interminable drudgery and unsatisfactory and detrimental conditions, together with the incomplete appliances and the conclusion that an additional expenditure, would not be justified as well as the difficulty in finding a market for a small and uncertain amount, in connection with the making of butter on the farm, without doubt had much to do with starting the first creamery. It has been a long time from one point of view, and but a little while from another, since a few neighbors concluded to have their butter made at one place, and by one person, and put on the same market at the same time. Twice a day they hauled their milk to this place and put it into a large vat or pan, around which a generous supply of cold water was kept, and it was allowed to stand there for from 12 to 24 hours, when the cream was skimmed off and churned and the dairyman went and got his skim-milk.

This was an improvement over the old way, because the quality was improved, and it was uniform and the quantity was increased. There was one kind of butter from the community, instead of a dozen kinds. This worked for a time with general satisfaction and many of these places, were started and the business was stimulated, but there were objections to this method, it got irksome. There was a great deal of work connected with it, and finally the old time crocks and pans were brought into requisition, and as in days of yore, the cream was raised and skimmed at home, and it was taken to the churning place once a day, instead of the whole milk, twice a day.

This seemed to relieve the situation some, and from an economic standpoint, it was without doubt a step for-

A Human Match Factory.

The body of the average man contains phosphorus sufficient to make 483,840 matches, enough to fill about 6,000 boxes, allowing eighty matches to the box. Phosphorus is one of fourteen elements entering into the composition of the body. It is divided among the bones, flesh, nervous system, and other organs. Without phosphorus the brain would be weak, the body feeble, and the bones would disintegrate leaving man a squidy invertebrate squirming in the dust. The perfect health of the human body requires a perfect balance of the constituent elements of which it is composed. The carbon, iron, lime, sulphur, sodium, etc., must all be replaced as they are used up in human energy. Take all the iron from the blood and the circulation stops. That's death. Change the proper proportion of these substances to each other, destroy their natural balance in the body, and you destroy the balance of health.

THE FOOD WE EAT.

Where do these essential elements of vital force come from? From the food we eat. How are they extracted and distributed to the several organs they sustain? The are extracted and distributed by the stomach and other organs of digestion and nutrition. What happens when the stomach is "weak"? The food is only partly digested and assimilated. And then what? Then the balance of health is destroyed and there's blood "trouble," nerve "trouble," lung "trouble," heart "trouble," or some other "trouble" with the vital organs of the body. Pain is the hunger cry of the starved organs. What then is the logical first step to health?

Put the stomach and organs of digestion and nutrition into a condition of sound health. That is just what is done by Dr. Pierce's Golden Medical Discovery and that is just the secret of the many marvelous cures effected by this remedy.

No medicine can make fat or flesh. Food alone can make them. Only the stomach and its allied organs can extract from the food the elements that make flesh and fat and sustain life. "Nerve foods," "blood-making" medicines, are mere fads and fallacies. The stomach and organs of digestion and nutrition prepare and distribute the food.

Dr. Pierce's Golden Medical Discovery is not a cure-all. It does one thing. It cures diseases of the stomach and organs of digestion and nutrition. The rest Nature does. Nature feeds the nerves, enriches the blood, heals the lungs and restores the falling vital powers. "Golden Medical Discovery" only removes the obstructions disease has put in Nature's way.

There is no alcohol in "Golden Medical Discovery" and it contains neither opium, cocaine nor any other narcotic. Doctor Pierce holds no secrets from you—he tells you that the "Discovery" contains the following ingredients: Golden Seal root, Queen's root, Stone root, Black Cherry-bark, Bloodroot, Mandrake root and Chemically Pure Glycerine.

From "Organic Medicines," by Grover Coe, M. D., of New York, we extract the following: "Hydrastis (Golden Seal) exercises an especial influence over mucous surfaces. Upon the liver it acts with equal certainty and efficacy. As a cholagogue (liver invigorator), it has few equals. In affections of the spleen, and abdominal viscera generally, it is an efficient and reliable remedy. Also in scrofula, glandular diseases generally, cutaneous eruptions, indigestion, debility, diarrhoea and dysentery, constipation, piles and all morbid and critical discharges."

F. Ellingwood, M. D., says of Stone root (Collinsonia), "stimulates the stomach, acts as a tonic to enfeebled muscular structure of the heart and has a direct influence upon atonic (weak) and dilated or otherwise impaired conditions of the veins. It is a specific remedy in piles. In catarrhal gastritis, where the circulation is defective, it, either alone or combined with hydrastis, is of first importance. They increase the appetite and greatly improve the digestion and assimilation of food. Good for rectal pains and piles of the pregnant woman. Is a heart tonic of direct and permanent influence. Excellent in the bicycle heart, in rheumatic inflammation and clergyman's sore throat."

American Dispensary says of Blood root, "stimulates digestive organs, increases action of heart and arteries—stimulant and tonic. Very valuable as a cough remedy—acts as a sedative—further valuable as an alterative."

The People's Common Sense Medical Adviser is a valuable work for frequent consultation and is free from technical terms. It contains over one thousand pages. It is sent post paid, on receipt of sufficient in one-cent stamps to pay cost of mailing only, 21 stamps for a copy in flexible paper covers, or 31 stamps for a cloth-bound copy. Address Doctor R. V. Pierce, Buffalo, N. Y.



RANGER REVOLVING BARBED WIRE

THE ONLY ROTARY BARB MADE DURABLE. STRONGEST. MOST EFFECTIVE. AND HUMANE.

WRITE US RODS YOU CAN USE. WE NAME PRICE DELIVERED. KLEFS MFG. CO. KANSAS CITY, MO.

ward, but alas that unending task of carrying milk up and down stairs, to the milk house or cave, and the washing of pans and crocks was creating a feeling of unrest, and as the business seemed to approach its final doom, there was placed on the market, what the originator was pleased to call a "separator." It was a tin can within a larger one, with sufficient space between them, to put cold water, in order to facilitate the raising of cream. When these were introduced, the creameries or churning plants, provided themselves with teams and sent out over the country gathering up the cream at the farmers' door, and paying him for it by the gauge. There were two prominent features about this system that appealed to the producer, First, it was much easier to take care of the milk, and next it relieved him of the trouble of delivering the cream.

Certain seasons of the year time was valuable to him, and this was an important consideration. He pronounced it the most satisfactory plan that had yet been adapted, and he increased his herd of cows and took better care of them, and a new impetus was given to the business.

During all of these years, the inventive genius of man, that seemed to have been sleeping, was at work and when the old gathered gravity cream system seemed to have reached its zenith, the dairy and creamery world, was astounded to learn that a machine had been invented, that through the application of centrifugal force, cream was separated from the milk while it was fresh and sweet.

THE POWER CREAM SEPARATOR.

This was the Power Cream Separator, that immediately began to be introduced into creameries, all over the country and the original plan of hauling milk to the creamery, was begun with the decided improvement of having to go only once a day, and being able to return with the skim milk. This machine gave the advantage to the dairyman of getting all of the butter-fat out of the milk, which was an increase of from 15 to 30 per cent and it gave the business a boom, the like of which it had never had.

INAUGURATING OF COOPERATIVE CREAMERIES.

While cooperative creameries had been operated previous to this time, I believe it is fair to say, this was the beginning of the inauguration of cooperative creameries, on a large scale and it was the commencement of a piece of dairy and creamery history, that is as dark as the historical black Friday on Wall Street, and thousands of victims were caught in the whirlpool of popular sentiment, created by unscrupulous and designing manufacturers. Would that it could be blotted from the pages of American dairy history. No section of country escaped them. Kansas was loaded with them, Nebraska had them everywhere, and even Missouri, where it is said they have to be shown was not immune.

DAIRYMAN ENCOURAGED.

Mr. Edmunds of Greeley, Nebraska, a man of wide experience from Vermont, told me he took charge of a creamery, at that time when the sentiment was up to high pressure and he had one enthusiastic patron who told him he was going to buy a car-load of cows and go into the business extensively. This was encouraging to the operator and in a few days, he found his man had gone to Omaha and bought a car-load of cows. After waiting several days he was surprised to note that the quantity of milk this man was sending, was not increasing any, and one evening he drove over to his place about milking time, and found him out in the lot, where he had lassoed one of his cows, and thrown her down and tied her and was trying to milk her.

It is true, these were extreme cases, but there were thousands of very similar instances, during the cooperative creamery craze. Business men were interested on the grounds that it was bringing a factory to his town, and his trade would be increased through the trade of the hands that worked in it.

Some men went into the deal, because they got stock for influence, others took hold of it on the promise of a position, others did it for the good of the country. Some went in like some people join the church, just because somebody else had, and some took hold of it, because of a promise of increased returns from their cows in a legitimate way.

BIRTH OF THE CREAMERY.

Meetings were held, associations were formed and the outcome was the birth of a creamery. Many of them were still-born and have been still ever since. There were two prominent and stereotyped excuses for the failure of these creameries. One was they cost too much, the others were badly managed. These accusations may both be true. In most instances, they doubtless were, but they were not the cause at all. The result would have been the same in most of instances, if they had cost nothing, and had been managed by an experienced man. It is true, that in many instances, communities that had built a creamery, were imposed upon with noncompetent butter-makers. You must remember, that the sudden and rapid building of creameries, created a demand for butter-makers in excess of the supply, and when they run out, these building companies that agreed to furnish a butter-maker, had to get them out of blacksmith shops, or anywhere that they could induce a man to change his profession.

THE GREAT CAUSE OF THE FAILURE OF THE COOPERATIVE CREAMERY.

The one great cause of cooperative creamery failures was a lack of business. The amount of milk accessible was not commensurate with the expense in the operation of a creamery, that cannot be avoided, and this expense varies comparatively little, whether the receipts are large or small. When the amount of butter manufactured is limited, the expense per pound becomes excessive and the price paid for the raw material must necessarily be low. This is unsatisfactory, because it is unremunerative to the dairyman, and the inevitable result is a general suspension of milking and a dead creamery to be referred to as a prima facie evidence that dairying does not pay.

MILK SUPPLY SUFFICIENT TO SUPPLY A CREAMERY.

There is an erroneous idea (generally speaking) about the amount of milk or cream necessary to support a creamery. It takes a large quantity to insure the minimum cost of manufacturing. I heard a man say the other day that he was advised by a creamery promoter, who was trying to raise stock for a cooperative creamery in his locality, that 200 cows would insure a very nice business and 100 would do. In that State, the average production is 125 pounds of butter to the cow, so if he got the maximum number he mentioned of average cows, the creamery would make 25,000 pounds of butter a year, or about 70 pounds a day, including Sunday. I would put the minimum of average cows at 1,000 at least, in order to get the cost of production at a figure that would meet competition.

THE SKIMMING STATION.

The theory of the skimming station was that it could be built cheaper and operated cheaper than a creamery, and that in consequence it could be made far reaching in its influence, because of the fact that they would be justified in smaller communities, and the people in the remote sections would enjoy all the benefits of a creamery so far as a market was concerned. The same course was pursued in Nebraska. The Burlington railroad taking the initiative in encouraging and assisting the work. My connection with this work in both Kansas and Nebraska gave me a very thorough knowledge of conditions and the influence of the centralized creamery in relieving this never to be forgotten stringency. It gave the citizens of Western Kansas new hope; it opened up the way for him to convert buffalo grass into money; every cow that gave a quart of

No need of days when you are not at your best. No need of headaches, dullness, irritability. A Cascaret, taken in time, avoids them.

All women need Cascarets.

Simply because they don't exercise enough. They don't eat coarse food, or enough fruit and green vegetables.

Those are Nature's ways for keeping the bowels active. But very few women employ them.

The next best way is Cascarets.

Nearly all the minor ills of women can be avoided by Cascarets alone.

There is no need to have headaches, depression, bad breath, bad complexion.

The remedy is Cascarets.

Not in large doses—unless you wait too long. The best way is one Cascaret at a time—just when you need it.

One every day, perhaps.

It is simply a matter of keeping clean inside, as you do on the outside.

You don't use soap in large quantities, and rarely. You use it frequently, regularly, just as you need it.

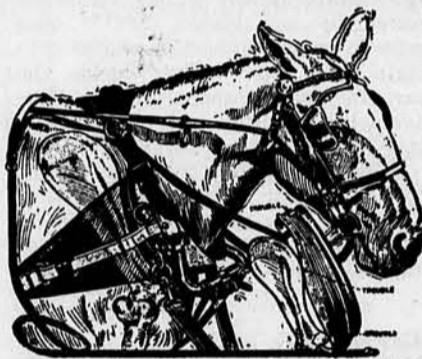
Do the same with Cascarets.

Then you are always well, always at your best.

Cascarets are candy tablets. They are sold by all druggists, but never in bulk. Be sure you get the genuine, with CCC on every tablet. The price is 50c, 25c and

Ten Cents per Box

806



new, Double set for \$21.50. Let us hear from you.
HUMANE HORSE COLLAR CO.,

SORE NECKS OR SHOULDERS

Are impossible if you use the "Whipple" Humane Horse Collar. Insist on having your new harness equipped with them. Five thousand farmers bought them last season and not one will again purchase an old-style collar. Dealers not selling them may try to talk you out of purchasing Humane Collars; they want to sell their old-style collars and can never sell you sweat pads nor gall cures if you use the Humane Collar—a good reason why you should have them. We ship on fifteen days' trial. One collar fits every horse or mule. Before you buy another collar write for price and testimonials. Recommended by all Veterinary Surgeons and State Experimental Farms. We can also sell you an Emergency Harness.

1921 So. 13th St. OMAHA, NEB.

OAT NUTRIMENT

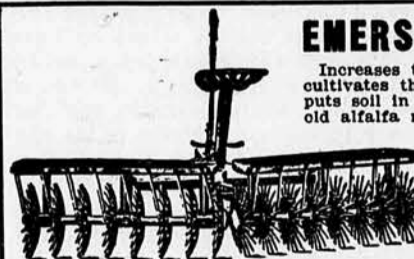
An Invaluable Feed in the Developing of Young Stock.

A Bone Maker, A Muscle Developer, A "Flesh" Producer, Prevents Scouring in All Kinds of Young Stock.

Oat Nutriment is a cooked product of our cereal mill and is guaranteed to contain no drugs. It contains 20 per cent of Protein and 8 per cent of Fat. Stock breeders will find its use invaluable in fitting their show herds. Price \$1.90 per hundred, F. O. B. Atchison. Special prices on car lots.

Atchison Oat Meal & Cereal Co.,

ATCHISON, KANS.



EMERSON'S ALFALFA RENOVATOR

Increases the yield of alfalfa, kills weeds and crab grass, cultivates the ground around the plant without injuring it, puts soil in condition to catch and hold moisture. Gives an old alfalfa meadow a new lease on life.

Will pay for itself twice over on ten acres in one season. No man with alfalfa on his farm can afford to be without one. Use it after each cutting if desired. Write us for further information and testimonials from users.

Address EMERSON-NEWTON COMPANY,
1318 West 11th, Kansas City, Mo.

Topeka Business College

The School that always gets you a good position in

BOOKKEEPING
SHORTHAND
TELEGRAPHY
CIVIC SERVICE or
FIREMANSHIP

Address

TOPEKA BUSINESS COLLEGE, Topeka, Kansas

milk was milked and the milk taken to the skimming station to have the cream separated to be shipped and the milk taken home to raise calves, and feed the pigs.

THE FARM SEPARATOR.

The next step on the line of progress in the development of dairy interests in Kansas, was the introduction of a farm separator, this marked an epoch in the history of dairying not only in Kansas, but everywhere, that was of the greatest importance. It was the knee-plus ultra of convenience and economy for the man who milked. It was the climax to a long, varied experience in dairying and getting the product of the dairy on the market. It was the greatest boon to the dairyman that had yet been offered him. It enabled him to prepare his cream for market, on his own farm, when it was most convenient, with the least labor and in the shortest time, and more than this, it left the best quality of fresh, sweet skim-milk for raising calves and feeding pigs.

It removed the necessity of long hauls of milk to the creamery or skimming station every day, and the hauling back of skim-milk that was of uncertain value because of its condition. The farm separator and its introduction into Kansas met with a good deal of opposition, adverse criticism, and generally men were told, and by some good authorities, to go slow. Creamery men fought their introduction because it meant a depreciation of property to them and many were fearful of the results. Commission men and butter dealers gave notice they wouldn't handle the butter made from hand or farm separator cream. But notwithstanding all this, the farmer concluded he would decide one thing for himself and an avalanche of sentiment spread over the country. Thousands of machines were sold and the edict went forth from the man behind the cow that the farm separator had come to stay.

Whatever might have been the reason for the centralized creamery previous to this time it now became a necessity, conditions demanded it. There was no legitimate reason why the isolated farmer in the western wilds of Kansas, the sand hills of Nebraska or the Ozark mountains of Missouri, whose only or principle dependence was the product of a few cows, should be excluded from the best market just because there wasn't people and cows enough in his community to warrant a local manufacturing plant. I believe the centralized creamery men have shown a disposition to develop the business and raise the standard through cooperation with educational institutions and dairy educators, dairy trains, with the best dairy authorities to lecture, have been run. Institutes have been held, dairy associations have met, dairy commissioners have been appointed, affiliations have been made and in all these the centralized creameries have cooperated and assisted. This is a centralized effort with a unity of purpose for better results.

The Dairy Phase of Agricultural Economics.

A talk given by R. M. Washburn, State Dairy and Food Commissioner, Missouri, December 31, 1907, at Manhattan, Kans., before the Kansas Dairy Association.

Whenever there is any competition at all, economy is one of the factors of success in any business; whether it be that of running a farm, railroad, or a shoe-shining stand. The farmer of Kansas is now the competitor of the farmer of Missouri, of Illinois, of New York, even of India, South America, Siberia, and China. The more railroads and steamships, the more thorough the distribution of useful material and consequently the more universal the competition.

When the ranchman could herd all over the State; when the farmer had the right to plow all the land he could defend; when the lumberman slashed out the finest, and left 85 per cent of the forest to become the victim of some fire, then economy was not necessary, therefore was little practised. These pioneer conditions developed

wasteful men on earth. But these conditions are changing rapidly and with each newcomer to the country, and the building of each new railroad, economy as a factor in success becomes more and more important. Moreover, during the past forty years, other changes have been taking place. Machines for manufacturing have been invented and one by one the necessary articles for the home are purchased instead of being made at home.

THE FARMER LOSING HIS INDEPENDENCE.

The farmer of to-day is not the independent and self reliant man that he was fifty years ago. Spinning and weaving and making of men's clothing and shoes are no longer done in the farm home. Likewise knitting, cheese-making, and soap-making are lost arts to the majority of our farmers' wives. In many sections even the making of bread and butter is being forgotten. These things are now being done in large factories by trained specialists. The American woman has been emancipated. It, too, is not uncommon to see a farmer draw a load of hogs to town and sell them at from 4½ to 6 cents a pound and buy ham and bacon at 12 to 18 cents a pound, merely because he does not know how to cure his meat, though his father and grandfather knew these things well. Moreover, our standard of living has increased; many of the luxuries of yesterday are the necessities of life to-day. Now the young man demands an education; he leaves home early and is a bill of expense instead of a producer. The girl must be educated in order to make a living alone or to be attractive to the men of her class. This change is not wholly to be regretted by any means, but it does make it imperative that the farmer obtain more cash money during the year. Increased transportation and refrigeration facilities solve this in a measure, but now, as never before, the problem of how to grow bigger crops, how to increase the producing power of the soil, how to prevent the many little wastes which have been is of vital importance.

THE ECONOMY OF DAIRYING.

Dairying is a hard time industry. Whenever or wherever it becomes difficult to make a living there dairying meets with favor, provided of course, there is a market for the products. It meets with favor because there is money in the business, first from the sale of cream. Under the present conditions throughout the middle West the plain cow, handled in a plain way, will produce from \$30 to \$70 worth of cream per year. This is not very much, but it is \$30 or \$70 better than letting the calf run with the cow all summer, which at the end of the season is worth on the average of \$15. A real good cow will produce more. The yearly production of the cow will just about equal the price of a full grown steer of equal quality. When the money is obtained from the steer he is gone forever; the cow on the contrary, is right here, ready to do as well the next year, ready to keep it up for ten or twelve years. This is certainly a case of "eating the cake and keeping it." With the present large corn farms and scarce labor here in the West the steer calves should probably be kept for beef-making purposes. These can be raised by hand on skim-milk and a little grain and be made to be worth more at the end of the season than the ordinary calf that runs with the cow. Where is the wisdom of feeding 25 cent butter-fat to the calf that never will be worth over 5 or 6 cents per pound, especially since the fat of grains will do this youngster just as well? The calf that has been raised by hand and taught to eat and drink is in far better condition to continue growth into a profitable feeder than the one which roams with its mother all summer.

HOG RAISING.

Hog raising is a part of dairying, for we have no animal which will consume skim-milk to any better advantage than the pig. Skim-milk furnishes the bone and muscle part of the diet in easily digestible form and puts the animal in condition to make best use of the corn. In carefully conducted

tests it has been clearly and repeatedly shown that the pig receiving skim-milk and corn will produce pork for about 65 per cent of what it costs to produce it when fed on corn and blue grass. There is money in the dairy industry from the sale of cream, in the use of skim-milk for raising calves and for raising pigs.

The economy of this industry again shows itself in the upbuilding of the land, providing that manure be drawn to the fields as it should be and which is more conveniently done with cows than with steers. It benefits the soil first, in returning to the soil those mineral plant foods which were removed from the soil by the crop. Second, it improves the soil by adding humus, which is necessary to it, if it is to be properly aereated and of proper moisture-retaining quantities. A soil without humus is sick. Third, the value of farm yard manure on the soil is a medicinal one. Those modest little bacteria found in decomposing barn-yard manure, aided by the air which is permitted by the loosening of the soil, help greatly in breaking down the original particles of soil, thus rendering them available to the next crop. It also exercises a corrective influence by destroying the injurious fungus and bacteria. Manure then has three values: The mineral, the medicinal, and the mechanical. There are people, however, even whole counties, who feel that the milking of the cow and hauling of manure is the most menial and degrading of occupations. In many places they stand out against the introduction of this industry. They forget that they might just as well try to stop the blowing of the wind and the ebbing of the tide. Either America is going to be an exception to the world's rule, or the dairy business will some day be the chief business of the farmer from one end of the country to the other.

DAIRYING IS INEVITABLE.

The steps in the development of a new country are first, the use of the game found. When this becomes scarce large herds of very ordinary domestic cattle furnish the food, but as the country becomes more thickly populated competition becomes more keen, ranges become smaller, an animal must be raised to produce food more cheaply. The well-bred beef animal accomplishes this. But as people become yet more numerous, farms smaller in size, a yet larger producing animal must be maintained and then comes the dairy cow. When the West was content with the Texas type of range animal, New York, Pennsylvania and Connecticut were the fine beef-producing centers of the United States. Now the West is producing fine beef and the East is engaged in dairying. All Europe was once a producer of beef. Now the farmer of Europe is the dairyman primarily with beef making as a secondary industry. Our Northern States have turned to dairying within the last fifteen years. Missouri is now turning. The beef animal is still in the majority, but is on the decrease. A few more years of the healthy growth which is so characteristic of an industry in Missouri, and that State will be among the dairy States of the country. Same with Kansas. As a whole, the man or the Nation which consumes liberal quantities of food of animal origin will be the leader. Such is the history of man. The cost of producing these different animals is a matter of more than passing interest. The cost is greatest with beef. Next comes mutton with pork following closely, then dairy products, then poultry, costing the most to produce a pound of beef and the least to produce a pound of flesh on poultry. The economy of the hen is because of her ability to live on insects and stray seeds which are lost to larger animals. Yet the selling price of these on the market for the past twenty-five years has been the exact reverse; poultry selling the highest per pound, with dairy products, then pork, then mutton and last beef. Notice the substance which is the most expensive to make has brought the least on the market, thus giving an exceedingly narrow margin for profit. This lack of profit of the beef animal is the primary



Dairyman's Profit

Give a cow good food and power to fully digest it and she in return will give you ample reward at the pail. Noted authorities tell us that something to correct digestive troubles becomes a necessity if the maximum flow of milk is to be maintained, because overfeeding, sooner or later, impairs the stomach and nerves, preventing necessary secretions of gastric juices.

DR HESS STOCK FOOD

puts the cow in condition to pay. It is the prescription of Dr. Hess (M. D., D. V. S.) and besides tonic elements contains iron for the blood and nitrates to cleanse the system. It shortens the time required to fatten an animal, gives appetite for roughage, and shows its value by lessening the per cent. of nutriment lost in the droppings.

Sold everywhere on a written guarantee.

Costs a penny a day for horse, cow or steer.
100 lbs. \$5.00 { Except in Canada
25 lb. pail \$1.60 { and extreme
West and South

Smaller Quantities at a Slight Advance.

Where Dr. Hess Stock Food differs in particular is in the dose—it's small and fed but twice a day, which proves it has the most digestive strength to the pound. Our Government recognizes Dr. Hess Stock Food as a medicinal compound and this paper is back of the guarantee.

If your dealer cannot supply you, we will.
DR. HESS & CLARK, Ashland, Ohio
Also manufacturers of Dr. Hess Poultry
Panacea and Instant Louse Killer.

BEFORE YOU BUY A MANURE SPREADER

SEE that its frame and sills are made of oak; that it has a ball and socket joint on front axle to prevent racking and twisting and steel braces and steel truss rods to guard against warping and sagging. See that the apron does not run backward and forward on hilly ground but insist on a positive and continuous apron drive.



"A boy can run it!"
See that it is practically automatic and so simple that any boy who can drive a team can run it as well as any man and control its every operation without leaving the seat. The

Appleton Manure Spreader

has all these improved features and many others equally important. Write to-day for free catalogue of special prices and terms.

APPLETON MANUFACTURING CO.
19 Fargo Street, Batavia, Ill., U. S. A.

THE LARGEST AND BEST LINE OF WELL DRILLING MACHINERY

in America. We have been making it for over 20 years. Do not buy until you see our new Illustrated Catalogue No. 41. Send for it now. It is FREE.

Austin Manufacturing Co., Chicago

\$10.00 Sweep Feed Grinder.

We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

\$14.00 Galvanized Steel Wind Mill.

CURRIE WIND MILL CO.,
Seventh St., Topeka, Kansas

AUTOMOBILE FOR SALE

A five-passenger, side-entrance, 20 H. P. Touring Car, 1907 Model, slightly used but in good condition. This car is made by one of the best concerns in the country, and bears the manufacturers' guaranty. Speed 45 miles per hour and a good hill climber. Address,
R. V. McMILLAN, Box 87, Detroit, Mich.

cause for the vanishing of the beef industry. The Missouri and Kansas beef feeder is now in competition with the ranchman of South America. Sheep and hogs occupy peculiar positions. They are adapted to peculiar conditions, and will remain for an indefinitely long time where these conditions are favorable for their growth. As a bringer-in of cash the beef animal is inefficient when compared with the other domestic stock. Sooner or later, and apparently sooner, the beef industry as a primary industry of the farm will be a thing of history. Another interesting point in this comparison of farm animals is the relative inefficiency of the beef animal compared with the dairy animal as a producer of human food. "Let us assume that we full feed a steer for 300 days, and that his average daily gain for that time is 2 1/4 pounds, making a total gain of 675 pounds. In the same length of time a dairy cow of quality equal to that of the steer above assumed would produce, at the very least, 6,000 pounds of milk. The dairy cow will require for the production of her annual milk output less grain, less hay, less grass and less range than will the steer in the production of its 675 pounds of gain in weight.

"Let us, however, inspect these total annual products more closely.

"Assuming that the 675 pounds gained by the steer have the composition shown by Jordan in his studies of the composition of the gain made on animals from 17 to 27 months of age, we would have the following detailed exhibit:

	Per cent.	Pounds.
Water.....	42.4	286
Fat.....	37.5	253
Protein.....	14.1	95.5
Ash.....	6.0	40.5

Total dry matter.....386.0

The 6,000 pounds of milk produced by the cow in the same length of time might be safely estimated on the basis of.

	Per cent.	Pounds.
Water.....	86	5160
Butter-fat.....	4.6	276
Milk sugar.....	4.75	285
Casein and albumen.....	3.65	231
Ash.....	.80	48

Total dry matter..... 840

"The water in the meat and in the milk is of no more value for food than that which comes from the cistern or spring, and we are therefore, primarily interested in the quantity of dry matter produced.

"It will be observed that the cow's output of dry matter is 840 pounds as compared with 386 pounds for the steer."

But this is not all, the quantity produced by the steer must be again reduced because of the non-digestibility of a portion of the best food, while the dairy food is perfectly digestible. Again we notice that the fat which has cost so much in corn to produce is the first portion discarded at the time of slaughter, is cut off and used for soap-making purposes. When the meat is weighed up to the consumer a protest is usually made at being given so much fat; in the kitchen even more fat is trimmed and when it reaches the table, if any portion of the roast is left it is very likely to be clear fat; this is either fed to the dog or burned. In round numbers it is safe to say that as a producer of human food the cow is three times as efficient as the steer. This in itself furnishes reason for the ultimate abandonment of the beef animal as a single purpose creature. If then the farmer is up against either going into the dairy industry or selling out to somebody who will go into it and if there is money in the business as has been shown.

TO WHAT EXTENT SHOULD THE FARMER OF KANSAS AND MISSOURI ENGAGE IN DAIRYING?

Answering this question briefly I would say to just as great an extent as is possible with the labor at his command. He should begin with cows that he has and milk them. When they freshen again, raise their young by hand and keep on milking the cows. If there is but one man on the farm who can be depended upon to milk, ten cows will be a sufficiently large number. If there are two, make the number anywhere from fifteen to twenty-

five, depending upon the quality of these men as milkers. There is no danger of over production. With the transportation and refrigeration facilities at present provided, this country could just as well sell butter in the foreign countries. It is being sold now to some extent, though not to as great an extent as would be profitable. Neither is our own country as thoroughly provided with these articles as it should be.

VITAL POINTS IN ECONOMY.

Allow me to briefly mention some of the points which the dairy farmer or balanced farmer, as you please should heed: Well-bred stock will, as a rule, give better returns from the feed consumed and the labor bestowed than scrub stock. Just as a family who has for generations worked in the forest can swing an axe or draw the saw with greater accuracy and easier than the man who has spent three generations at the desk; so the animal which has been selected, bred, and fed for many generations for a specific purpose is better qualified to do that work than one having never engaged in that business. With well-bred stock so common it is now the height of folly to neglect making use of it. Most of our stock now has a liberal amount of good blood.

SELECTION OF STOCK.

No matter what breed or what family be chosen, a continual thinning out process will have to be practised in order to secure best results. It is not necessary to weigh the cow's milk and test it every day. An easy and sufficiently accurate method is to weigh the milk morning and night for three days at the middle of each month, then by adding a cypher to the total of these three days milk the quantity produced that month is known. The milk should be tested three times during the year, say at the beginning, the middle, and the last of the lactation period. With the quantity of milk produced estimated (and recorded in a book so large that it will not get lost), the value of that animal can be quite easily determined. This selection should be done, first, to be able to dispose intelligently of the poor individuals, and second, in order that the calves of only the truly best cows may be kept. It pays to save seed from the best whether it be seed wheat, seed corn or seed cows.

FEED LIBERALLY.

The first portion of a food consumed by the cow is appropriated by her for the maintenance of her own body. If a quantity of food only sufficient for this maintenance be given she cannot for any length of time, continue to give milk. If it cost 15 pounds of food a day to keep the cow and she receives but 15 pounds she cannot yield a profit. If she receives 20 pounds of food a day there are 5 pounds of overflow of surplus food, which can be used for the production of milk. If she consumes 25 pounds a day she has 10 pounds of overflow food or twice as much with which to make milk as when she received only 20 pounds of food a day. As a general proposition and a safe rule, when the cow is fresh in milk, the more food she can be induced to consume up to the point of losing her appetite the more cheaply she will produce milk.

RATIONAL RATIONS.

Rational rations includes concentrated food in a reasonable quantity. The cow's paunch is not big enough to hold hay sufficient to produce the quantity of milk which she is capable of producing. In order that she have sufficient food material a portion must be given in the concentrated form. The composition of a cow's milk is fixed by nature, and nothing that the cow or the feeder can do will materially change this composition. If, then, the cow must give milk of a fixed quantity, it is only reasonable that she be given food which contains the properties necessary for making this milk and it is only reasonable and economical to give the food in about the proportions required by the work to be done. An ideal ration would be corn silage, corn fodder, alfalfa hay, corn chop, and a little cottonseed-meal or linseed-meal,



Paint Can Be Easily Tested

Many people do not realize that good paint, the kind which wears and stays bright, is simply *metallic lead* reduced to a form in which it can be applied with a brush. Lead in this form is called "White Lead."

Likewise, many people who *do* know that the best paint is "White Lead and Linseed Oil," mixed fresh for each job by a good painter, are totally ignorant of the fact that much of the paint which they think is "Pure White Lead and Linseed Oil" is so grossly adulterated that if tested it would yield no metallic lead whatever. Such paint will not wear like genuine White Lead, and is very expensive in the end.

We desire to place in your hands, at our expense, the means of telling pure White Lead from counterfeit. Any man, woman or child can make the test—we want you to make it *now*, before spring painting begins.

You need not take anyone's word for paint. Test it yourself. No one else is half so deeply interested as you, if you have to pay the painting bill.

How to Make the Test

Subject the sample of supposed White Lead to the flame of a candle, gas jet or spirit lamp. Intensify the flame by use of the blowpipe. If globules of metallic lead appear, the White Lead is pure. If you can bring out no metallic lead, it shows that the White Lead has been adulterated.

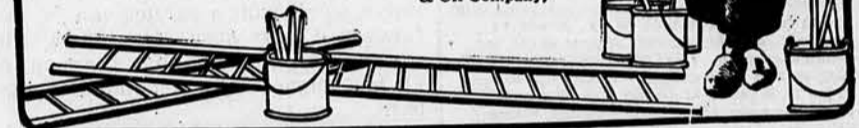
FULL WEIGHT KEGS

The Dutch Boy Painter on a keg guarantees not only purity, but *full weight* of White Lead. Our packages are not weighed with the contents; each keg contains the amount of *White Lead* designated on the outside.

Write us for Test Equipment 23 and we will send free a blowpipe and detailed instructions for making this test.

NATIONAL LEAD COMPANY

in whichever of the following cities is nearest you:
New York, Boston, Buffalo, Cleveland, Cincinnati, Chicago,
St. Louis, Philadelphia (John T. Lewis & Bros. Co.),
Pittsburgh (National Lead & Oil Company)



CALIFORNIA OR THE NORTHWEST



NOW is the time to go. Only

\$30.00

Every day, March 1st to April 30th, 1908, to San Francisco, Los Angeles and many other California points.

To Portland, Seattle, Tacoma and many other Oregon and Washington points.

Tickets good in Tourist Sleeping Cars.

By taking a tourist sleeper, passengers can materially reduce the cost of a Pacific Coast trip without sacrificing the slightest degree of comfort. Tourist Sleeping Cars run through daily

—VIA—

UNION PACIFIC

For reservations and all information Inquire of

F. A. LEWIS, City Ticket Agent,
or J. C. FULTON, Depot Agent.

PLYMOUTH ROCKS.

EGGS—White Rock, White Langshan, R. C. Rhode Island Red, Buff Orpington, \$1 per 15, \$4.50 per 100. Mrs. Lizzie B. Griffith, Route 3, Emporia, Kans.

30 WHITE PLYMOUTH ROCK cockerels for sale. Eggs from prize winners \$2 per 15, \$5 per 45. J. C. Bostwick, Hoyt, Kans.

TWENTY-FIVE BARRED ROCK cockerels bred from high scoring stock. Price \$1.50 each; 3 for \$4.00. Eggs, \$1.50 for 15. Mrs. George Clark, Route 6, Topeka, Kans.

DUFF'S BARRED ROCKS—Choice standard stock by standard mating. We breed them now exclusively, and have the very best. Eggs and stock in season. Write your wants. A. H. Duff, Larned, Kans.

WHITE PLYMOUTH ROCK pullets; fine stock \$1 each. W. L. Bates, Topeka, Kans.

YOU CAN HAVE EGGS the year round if you raise Buff Rocks. My birds took five first prizes out of six entries at the Nebraska State fair, 1907. They also scored 90 points and better by Rhodes. Fifteen eggs for \$1.25. For other information address H. M. Stephens, Munden, Kans.

BARGAINS—Having sold all my last years W. R. Breeders, I have 2 or 3 dozen fine pullets that I will sell at \$1.00 each or \$10.00 a dozen, while they last. Also one 360 egg Cyphers incubator, good order, for \$18; also two 100 chick Bates brooders, (none better), ready to run for \$5.00 each. W. L. Bates, Topeka, Kans.

CLOSING OUT SALE of Bearman's White Rocks at bargain prices. 35 Barred Rock cockerels, \$2 to \$5; America's best strains females, \$1.50 to \$2. Eggs, \$2 per 15; \$5 per 45. Write soon. ORDER QUICK. Chris Bearman, Ottawa, Kans.

BARRED PLYMOUTH ROCKS—90% to 98% cockerels. Score cards; only a few left. Entered 9 at Eureka show and won special for most part colored birds scoring 90 and over. Eggs \$1.50 per 15. Mrs. Chas. Osborn, Eureka, Kans.

EVERGREEN POULTRY FARM—Barred Plymouth Rocks exclusively. Cockerels for sale \$1.50 to \$2.50 each. Eggs in season. E. Leighton, Effingham, Kans.

BARRED ROCK cockerels and pullets for sale from high scoring birds \$1.00 and up. Write your wants. Mrs. W. A. Schreier, Argonia, Kans.

BUFF PLYMOUTH ROCKS Exclusively—Forty pullets for sale at \$1.00 and \$1.50 each; \$10 and \$15 per dozen. Incubator eggs a specialty. Circular free. W. T. Ferris, Box 406, Effingham, Kans.

FOR SALE—Barred Plymouth Rock cockerels from my prize winners, at reasonable prices. Eggs in season. Peter Reber, Neosho Rapids, Kans.

WHITE ROCK COCKERELS from high-scoring stock \$1.50 each. Mrs. E. E. Williams, Sabetha, Kans.

White Plymouth Rocks EXCLUSIVELY.

For 16 years I have bred W. P. Rocks exclusively, and have them as good as can be found anywhere. I sell eggs from first-class, high-scoring stock at live and let-live prices. \$2 per 15, \$5 per 45, and I pay the expressage to any express office in the United States.

THOMAS OWEN, Sta. B., Topeka, Kans.

LEGHORNS.

EGGS FOR HATCHING.

S. C. Brown Leghorn eggs for hatching from pure-bred, high-scoring birds, at 75c per sitting of 15 eggs. Special prices on incubator lots. A few cockerels left going at \$1 each. L. H. Hastings, Quincy, Kans.

S. C. BROWN LEGHORNS—Eggs from first prize birds scoring up to 95. \$2 for 30. Cockerels \$1 and \$2 each. Score cards. S. McHarg, Box F, Wakita, Okla.

STATE FAIR WINNERS—Rose Comb Brown Leghorn cockerels for sale. Eggs for hatching. Write for prices. Rapid delivery. Rufus Standiford, Reading, Kans.

STANDARD-BRED S. C. Buff Leghorns founded by stock of prize-winners of Chicago and St. Louis World's Fairs, and have taken first wherever shown. Stock for sale; eggs in season from pens scoring 90 to 95. No. 1 pen, \$2.50 for 15; No. 2, \$1.80 for 15. S. Perkins, 801 E. First St., Newton, Kans.

FOR SALE—White Leghorn cockerels, very fine birds. Price \$1 and \$1.50. Eggs in season. Mrs. Lena Osborn, R. 3, Emporia, Kans.

S. C. W. LEGHORNS and B. P. ROCKS—Eggs now ready from our 19 mated pens. No more pullets or hens for sale. A few cocks and cockerels at reduced prices. Send for catalogue of S. C. W. Leghorns and B. P. Rocks. Elenora Fruit and Poultry Farm, Centalla, Kans.

GALVA POULTRY YARDS

R. C. W. Leghorn and White Wyandotte stock for sale. Eggs in season. First pen Leghorns headed by first cockerel Madison Square Garden, N. Y. Write your wants. JOHN DITCH, Prop., Galva, Kans.

BLACK LANGSHANS.

BLACK LANGSHANS EXCLUSIVELY—Cockerels \$1.00 each. Eggs in season. H. C. Cohoe, Buffalo, Kans.

BLACK LANGSHAN COCKERELS—\$1.50 and \$2.00. O. S. Allen, 729 Horn St., Topeka, Kans.

BLACK LANGSHANS FOR SALE—Fine farm-raised stock. Also Toulouse geese. Write for prices. G. H. Hutley, Route 2, Maple Hill, Kans.

BLACK LANGSHANS EXCLUSIVELY—Eggs \$1 per sitting of 15, 30 for \$1.50, 100 for \$4. M. B. Turk egg eggs 30c each. Mrs. D. A. Swank, Blue Mound, Kans.

PURE BRED WHITE LANGSHANS for sale. Hens \$1.25, pullets \$1 each; also a few Silver Spangled Hamburg cockerels. Mrs. John Cooke, Greeley, Kans.

Tenneholm Black Langshans

of Superior quality. Some cockerels with scores of 88% to 94%, out from 1/4 to 1 1/4 for weight. Write for prices on birds and eggs.

Mrs. E. S. Myers, Chanute, Kans.

Black and White Langshans.

Winning 1st pen five times in five shows this season, including State Fair and State Show. Won 12 ribbons on sixteen birds at Topeka State. Eggs, \$2 for fifteen. Eighteen years a breeder. H. M. Palmer, Florence, Kans.

giving of the corn silage about one or two quarts a day less than she would like to have, and giving her all of the clover she is capable of consuming. Mix the grain in about the proportion of one part cottonseed or linseed-meal to five parts corn chop and feed this mixture approximately one pound to every three pounds of milk the cow gives.

Economical feeding includes liberal quantity of succulent material and sufficient quantity of grain with an approximate balance of food nutrients.

BODILY COMFORT.

The more comfortable a creature be kept the less food she will consume for self support; also the more contented in mind she can be kept the less will be required for her maintenance. Remember that we are dealing with one of the most delicate of animal functions. Remember, gentlemen, that it is of her motherhood that we are making merchandize. The commercial value of sympathy and kindness cannot well be measured. From my own experience in handling nervous and fussy cows I think I am entirely safe in saying that the excellent records of the best cows are at least from 10 to 25 per cent due to kindness and what might be termed "cooperative sympathy" existing between the cow and her handler.

LABOR.

Another item in economical production is that of labor, not the hiring of a man for a few dollars less a month, but the arranging of the work and the stables so that one man can accomplish the maximum of work. Some dairymen, for instance, wheel the manure out and dump it, then may be the same day, may be the next week, fork it into a wagon and draw it into the fields. Others arrange a side walk elevated over the wagon, thus enabling them to dump directly into the wagon. For a small sum a carrier can be arranged. I have seen several which worked well, thus enabling the man to fill his wagon while remaining in the barn.

Another method, which when practical, is even better, is to drive the wagon or the manure spreader through the barn, pitch the manure directly from the gutter and then take it directly to the field. A half hour saved each day at chores is worth more than a half hour work at night. Right here let me mention the double advantage in having the cows with their tails to the center of the barn. One advantage is that of easy cleaning into a wagon driven directly through. The other is in keeping the sides of the barn clean. If the cows face each other, they are bound to have their tails away from each other or next to the barn wall. The slipping and spattering will in a few days, even, dirty the sides of the barn and keep it in a continual muss.

LARGER PRICES VERSUS SMALLER COST.

A short time ago I received a letter from a city milk man asking my advice regarding the raising of the price of milk. He held, and very properly, that with the present cost of production he could not afford to continue with the present price of milk. One thing is certain, whenever the price of milk or butter is advanced there is a prompt, vigorous, and universal howl. Yet there never occurs any complaint when the dairyman reduce the cost of production. If it costs the dairyman 5 cents per quart to produce milk and he is selling it at 6 cents, 83 1/3 per cent of the selling price is consumed by the cost of production. If the selling price be raised to 7 cents per quart and the cost of production would remain the same, then only 71 2/5 per cent of the selling price is consumed by production. On the other hand, if the selling price remained at 6 cents and the cost of production be reduced 1 cent, from 5 to 4, then only 66 2/3 per cent of the selling price will be consumed by the cost of production, thus we see that reducing the cost of production 1 cent is doubly preferable to raising the price of selling. When I examine the records made by our best dairymen and our best dairy farmers and compare these records with the average there is such a tremendous gap that I am thoroughly convinced that within

the next few years milk and butter will be produced for 60 per cent and may be 50 per cent of what it is now costing to produce it. This reduction in the cost of production is going to be brought about by better selection of stock and more rational feeding and the growing at home of most of the feeds fed. The well-bred cow is a success; selection of stock is a success; the silo is a success; the manure spreader is a success; the centrifugal hand separator is a success, and farming will be a success whenever and wherever our new conditions are met by methods to fit.

Raising the Calf Instead of Buying It.

Rodney A. Elward, Castleton, Kans., before the Improved Stock Breeders' Association.

Shall we raise our calves or buy them? This question confronts a majority of the stock-raisers and feeders in the eastern two-thirds of the State at least. With a constant increase in the value of the pasture and feed-producing lands the calf question is steadily growing more and more acute. When land was cheap, and pasture therefore cost but little, the calf problem was not acute, though even then it was sometimes considered better policy to buy the calves from the range country to the West, where the cows could be supported throughout the year at smaller expense than in the corn belt.

Now, however, the cost of keeping a cow the year around, which of course, must be done if we are to raise our own calves, has so increased that it is becoming important to decide wherein the best business policy lies.

Unfortunately, I am not able to furnish any exact figures on the cost of the calf at weaning time, on our farm in Reno County, because we have never kept an accurate record of the amount of feed consumed by our cows during the winter. Indeed, the cost of keeping the cow during the winter varies so much in different localities, and under different conditions, that any figures on the subject which might be good on one farm or in one locality, might be of little value in another locality or on another farm in the same neighborhood. The cost of summer pasture can, of course, be approximately determined by the current charges for pasturing the same class of cattle. This cost, like the winter keep, will vary in different localities.

I believe, however, that most Reno County farmers would agree with me that in our county at present the cost of summer pasture will be about \$6 for a mature cow with calf by the side. We think that it costs us on our farm about the same amount to feed her through the winter. The winter cost, however, includes a moderate feed of corn and cottonseed-meal, as calving time approaches in the spring. It should be understood that we try to have our cows calve before going to the pastures. This cost includes also the estimated value of corn stalk pasture. Based on these estimates, which may be wide of the mark, the cow costs from twelve to fifteen dollars per year for her board alone. Add to this two and a half dollars for the estimated interest on the capital invested in the cow, and you have at least fifteen dollars, which I believe to be the lowest reasonable estimate of the cost of keeping a cow one year in our part of the State. To make things even, then, our calf should be on the average be worth fifteen dollars at weaning time. Otherwise he had best be bought, for he will not pay for his mother's board for the year.

There is another side to the question, however, and by far the most important. That is quality. If any one of us is raising inferior calves, from poor quality cows and grade bulls, he had better buy his calves by all means, because in Western Kansas, and adjacent territory, calves of excellent quality can be bought, and most feeders will agree with me that they are the cheapest at any price. Among the kind of stock-raisers who compose this organization, however, quality can be assumed, for the calves bred by members of this association will be at least

GREIDER'S FINE Poultry Catalogue
for 1908 is larger and better than ever. Tells all about pure-bred poultry and illustrates 60 varieties. Contains 10 beautiful chromes of leading breeds—pretty enough to frame. Tells of best Louse Killer, how to cure diseases, make money. Only 10c postpaid. Send to-day for a copy.
B. H. GREIDER, Rheems, Pa.

SUCCESSFUL HATCHES
and healthy, vigorous chicks are always a certainty with **RELIABLE INCUBATORS**
30 years' experience and practical demonstration in crystallized in the one perfect machine. Double heating system, double ventilating, economical—all explained in our interesting poultry book. Write today. Reliable Incubator & Breeder Co., Box 353 Quincy, Ill.

125 Egg Incubator \$10
and Brooder Both For \$10
If ordered together we send both for \$10 and pay freight. Hot water, copper tanks, double walls, double glass doors. Our free catalog describes them. Wisconsin Incubator Co., Box 17, Racine, Wis.

WHO Runs Your Incubator?
—You, or the Incubator? If it is not capable of adjustment to a degree that enables you to control it in every detail, then it runs you, and its success as a hatchery is determined absolutely by outside conditions, and results are never certain. The
"MANDY LEE"
Incubator is under control of the operator all the time. There is no incubator better built than the "Mandy Lee," none with so many exclusive and patented features that you know are essential to good results every day in the year.
The "Mandy Lee" Brooder furnishes direct contact heat to the backs of the chicks—Hovers "em like a hen"—Nature's method.
Write for handsome new catalog; also new booklet, "20 Years with Poultry." Get the "Lee" habit now!
GEO. H. LEE CO., Box 49, Omaha, Neb.

\$7.15
Buys the Best
120-Egg Incubator Ever Made
\$4.35 Buys the Best 100-Chick Brooder
Both Incubator and Brooder, ordered together, cost but \$11.00. (Freight prepaid East of Rockies.) Incubator is double walled all over, copper tank and boiler, hot-water heat, self regulator, nursery, high legs, glass door. Brooder is the only double walled, hot-water brooder made. No machines at any price are better. Write for our book today, or send the price now under our guarantee and save waiting.
Satisfaction Guaranteed.
Belle City Incubator Co. Box 18, Racine, Wis.

Big Poultry Book FREE

There's big money in raising chickens. Some of our customers make as high as \$50 to \$100 a month. We'll tell you how they do it. We have published a big book on poultry raising. It is not a puzzling scientific work, but a plain common sense book made up mostly of the experiences of people who started in with little knowledge of the business and how they have won out and are making good money. It is the kind of information that's worth hundreds of dollars to any one interested in poultry raising. It tells all about

Queen Incubators

why they are so popular—why so many thousands find them the greatest money making hatcheries on the market. Here's a sample.

"I don't want to set another hen. It is much cheaper, less bother and I get a greater number of chicks to eggs set with my Queen. Last May, in one month I sold over \$60 worth of poultry and eggs. I make big profits from my chickens."—Mrs. C. ARNER, Pleasant Hill, Mo.

This big 100-page Free Book will show you how to do as well or better. We give 90 days trial and a 5 year guarantee on Queen machines. You run no risk. Write for this month's special low prices from \$7.50 to \$17.50 according to size. Freight paid. A postal brings book by return mail, postpaid.

QUEEN INCUBATOR CO., Box 28, Lincoln, Neb.

When writing our advertisers please mention The Kansas Farmer.

CORNISH INDIANS.

CORNISH INDIANS—A few cockerels cheap. Eggs. Write L. C. Horst, Newton, Kans.

RHODE ISLAND REDS.

S. C. RHODE ISLAND REDS, EXCLUSIVELY—All firsts at State Fair. Eggs—prize pen, \$2; stock, \$6 per 100. Belle Tyler, Haven, Kans.

FOR SALE—Single Comb Rhode Island Red cockerels; pure-bred and fine birds. Also eggs in season. Mrs. G. M. Townsend, R. 3, Phillipsburg, Kans.

ROSE AND SINGLE COMB RHODE ISLAND REDS—I won 1st, 2d, 3d, 4th and 5th on cockerels, 1st hen, 1st pen and 4th pullet; also color special on cockerel at Kansas State Poultry show at Topeka, January, 1908. Stock \$1 and up. Eggs, \$1, \$2, and \$3 per 15. A. A. Miller, Route 4, Eagle Hill Ranch, Platte City, Mo.

FEW CHOICE R. C. Rhode Island Red cockerels, \$1.00. Mrs. J. C. Bally, Spring Hill, Kans.

PURE-BRED R. C. Rhode Island Red cockerels at reasonable prices. A. L. Scott, R. 1, Larned, Kans.

MINORCAS.

IMPORTED S. C. BLACK MINORCAS—The world's greatest laying strain. Eggs \$1.50 per 15; cockerels \$2 and \$3; hens \$1 and \$2. Beautiful circular 5c. Address Geo. Kern, 817 Osage St., Leavenworth, Kans.

WYANDOTTES.

GOLDEN WYANDOTTES—Prize winners. For eggs write Geo. W. Shetley, 1620 Poyntz, Manhattan, Kans.

GOLDEN WYANDOTTES—Eggs for hatching from my prize winning stock. From 1st prize pen, eggs \$2 per sitting; 2d pen \$1.50. Eggs from prize winning M. B. turkeys \$3 per 9. Satisfaction guaranteed. Mrs. A. B. Grant, Emporia, Kans.

WHITE WYANDOTTES, S. C. W. Leghorns, W. H. turkeys; hens, cockerels and pullets from high-scoring stock at reasonable prices. Write A. F. Hatley, Route 2, Maple Hill, Kans.

BROWN'S WHITE WYANDOTTES—Ahead of everything; stock for sale; eggs in season. I have the English Fox Terrier dogs. Write me for prices and particulars. J. H. Brown, Clay Center, Kans.

WHITE WYANDOTTE EGGS

From winners at Kansas State, Nebraska State, Missouri State, and St. Joseph big Interstate Shows. Males score to 96, females to 96½. Eggs \$1.50 to \$10 per sitting. Catalogue free.

BRIDGEMAN & YORK,
Box 102. Forest City, Mo.

BLACK SPANISH.

FOR SALE—Whitefaced Black Spanish. Hens, \$2 each. Cockerels \$2 each. Pullets \$1.50 each. Chas. Hobbie, Tipton, Kans.

BUFF ORPINGTONS.

ORPINGTONS—Breeders eggs and baby chicks. Catalogue free. Satisfaction guaranteed. W. H. Maxwell, 1996 McVicar Ave., Topeka, Kans.

LARGE BUFF ORPINGTONS—Eggs for sale, \$1.25 for 15. Mrs. Frank Henning, Route 1, Garnett, Kans.

ORPINGTONS—1,000 to sell to make room. Catalogue free. W. H. Maxwell, 1996 McVicar Avenue, Topeka, Kans.

CHOICE Buff Orpington and B. P. Rock cockerels. Cockerels and bred bitches. Send for circular. W. B. Williams, Stella, Neb.

BRAHMAS.

Light Brahma Chickens

Choice pure-bred cockerels for sale. Write or call on

Chas. Foster & Son, Eldorado, Kans. Route 4

TURKEYS.

MAMMOTH BRONZE TURKEYS—Large frame, fine color. Only few. Won't last long. Stamps for Blue Print of turkey. M. S. Kohl, Benton, Kans.

BRONZE TURKEYS for sale. Mrs. F. R. Lutz, Route 1, Box 49, Lyons, Kans.

FOR SALE—Mammoth Bronze turkeys. Inquire of T. M. Fleming, Fontana, Kans.

FULL BLOOD, big boned, Mammoth Bronze turkeys for sale. Mrs. Bert Howard, Rural Route 5, Paola, Kans.

FULL BLOOD, big boned Mammoth Bronze turkeys for sale. Mrs. Bert Howard, Route 5, Paola, Kans.

M. B. TURKEYS AND ROVEN DUCKS—Have a choice lot for sale from prize-winning stock. Won 14 premiums in two shows; 11 firsts. Address Mrs. A. E. Harness, Speed, Mo.

FOR SALE—An extra fine bunch of young M. B. turkeys from stock scoring up to 96 points. I took 1st cock, 1st cockerel, 1st and 2d hen, 1st and 2d pullet, 1st and 2d pen at Central Kansas Poultry show at Newton, Kans., this fall. Extra prices on young stock up to February 15. Eggs in season \$4 per 11. G. W. Perkins, Route 4, Newton, Kans.

DUCKS.

EGGS FOR HATCHING—Mammoth Pekin ducks, White or Barred Plymouth Rocks, per sitting or 100. Farm raised. Guarantee satisfaction. Write us. R. W. Weaver Company, Route 9, Wichita, Kans.

MISCELLANEOUS.

PEACOCKS FOR SALE—Single or pairs. Mrs. G. Thierer, Alma, Kans.

AGENTS—To sell and advertise our Poultry Com pound; \$35 weekly; rig furnished. Franklin Manufacturing Company, Norwalk, Ohio.

THE PRACTICAL POULTRY KEEPER—A book every poultry raiser should have. Contains 62 pages. Fully illustrated. By Mail 10c. Address, B. D. McQueney, Co., Dept. G, 767a Lafayette Ave., Brooklyn, N. Y.

Salmon Faverolles

are unexcelled as layers both winter and summer, as broilers on account of early maturity and quality of flesh. Weight, hens 6 to 7 lbs., cocks 7 to 8½ lbs. Eggs \$2 for 15. A. R. Ainsworth, Newton, Kans.

equal if not better than any they can buy.

Assuming, therefore, that the quality of your calves is fully as good as any you would buy, comes the question, aside from that of cost which every man must in the nature of things decide for himself, of proper handling and care. Calves are babies, infants, and in some degree at least, as sensitive as we were when deprived of our mother's milk. Weaning, any experienced mother will tell us, is a critical time in the life of the little human. From experience we know that it is as critical with calves and colts. Abrupt changes and rough treatment at weaning time, I fully believe, will do more harm to the calf than is generally believed. It is a time when any sudden change of location, diet, or treatment should be avoided whenever possible. If we do not avoid these sudden changes the calf will lose flesh rapidly and experience a sudden check in growth, which it will take half the winter to recover. By proper management with the calves we raise ourselves these sudden changes can be avoided, and the calves taught to consume grain and roughness before the cows are taken away. By getting them on feed before weaning, and letting them get accustomed to their winter quarters before weaning, there is a gradual change from pasture to feed lot conditions, and no stoppage of growth or loss of flesh of any importance.

In the case of purchased calves, however, all this careful transition from pasture to winter conditions is impossible. With most of us the calves must be purchased at a distance and a railway journey must be had. To the little fellow, just forcibly taken from its mother, this traveling on the cars must be a terrible experience. It alone is enough to check his growth for a long time. When he arrives in the winter quarters he is lost, bewildered, and desolate without his mother. He does not know what grain and roughness are, and for days, and sometimes weeks he goes wholly or partially without feed and constantly mourns for his mother. He loses flesh and stops growing. That delicate calf fat is partly or wholly lost, and when he begins to gain again all that lost flesh must be replaced at dead expense to his owner, while the home-raised calf is growing and getting fat. I believe that it is generally the case, and I know it is the experience on our farm, where every year home-raised and imported calves are wintered together, that the purchased calves never catch up with the home-grown in point of flesh or growth.

One more point worthy of consideration is the fact that if we desire we can raise better calves than we can buy. It is possible to purchase well-bred calves most years, but as a rule those who have topy bunches of calves either will not sell, or hold them so high that it would be cheaper to raise the. We control the parentage of our home-grown calves. We can use bulls which have the qualities we desire. In the corn belt we can have early calves which in the fall will be considerably larger and better able to stand the winter rigors than range-bred calves, which must in the nature of range conditions, or even Western Kansas conditions must or at least should come after grass. In conclusion I believe that the whole question might perhaps be summed up in this way. It is cheaper to raise the calf if he is a good one. It is cheaper to buy him if he is a scrub, and a scrub is not cheap at any price.

DISCUSSION.

Col. Robison: I agree with that part of the paper which says the price varies very greatly in raising a calf. This in Reno County is much higher than it would be in Butler County. The price of summering a cow in our county for the season is about \$3, so it reduces to about one-half the price for summering as mentioned in the paper, and the winter price I think would compare in about the same way.

It would cost from a dollar to a dollar and a half a month to carry a cow over in good condition. We have a good many calves shipped in here. Last year there was shipped in one bunch from the Higginbotham Cattle Company of Old Mexico something over a thousand head that weighed a little over 400 pounds when they came in, and cost about 3½ cents. This year the same company shipped in between 700 and 800, a little lighter weight, but selected more for quality, and those calves came in good shape this year, and are doing exceptionally well. Last year the thousand or more that were brought in were fed corn and alfalfa, a little cottonseed-meal, etc. Nearly all went to market before the winter was over. Those calves were raised 160 miles from a railroad station. Anybody knows that to try to drive a bunch of calves without their mothers would be like trying to drive a bunch of quail, so they drove their mothers to the station with the calves. The quality is good. They are not as large and stocky quite as the average calf grown in Kansas, but the breeding of those calves is good. Those Old Mexico calves are about the same quality as the best from Colorado or Utah. I don't see how we are to raise the calf here unless, as our brother says, it is an extra good calf. Those calves could be laid down there this year and last year for about 1½ to 2 cents a pound less than the same calves brought when put on the market. The company is well satisfied with shipping the Mexico calves, and think the calf should leave Old Mexico before it is a year old, as the duty is much less on a calf than it is on an old animal, as the duty is fixed by the age.

A. C. Shinn, Ottawa: The day of these great herds in Texas and Mexico is passing. To bring it down, this matter of calf growing to a more practical basis, it will be where a man tills well on to a hundred and sixty acres instead of the many thousands. Debating it from the standpoint of the small farmer, we want to combine the growing of calves with use of the milk at the same time, and we can do that very well in our Eastern Kansas country, and any other, as the land is cut up into smaller bodies then it would make a different question from the one discussed, more particularly in the paper, where they handle them by the

SCOTCH COLLIES.

SCOTCH COLLIES of the very best breeding, have the intelligence of human. For particulars address, DEER LAKE PARK, SEVERY, KAN.

SCOTCH COLLIES—Pups and young dogs from the best blood in Scotland and America now for sale. All of my brood bitches and stud dogs are registered, well trained and natural workers. Emporia Kennels, Emporia, Kans. W. H. Richards.

Scotch Collies.

Fifty-seven Collie puppies just old enough to ship. Place your orders early, so you can get one of the choice ones.

Walnut Grove Farm, Emporia, Kans.

INCUBATORS AND BROODERS.

Incubators and Brooders

If you want a good incubator in a hurry write to the undersigned. He keeps the Old Trusty Incubator (hot water) and the Compound (hot air), two of the best incubators made. Also the Zero brooder, no better made. It pays to buy a good brooder. No use hatching chicks without a good brooder to raise them. The Zero will raise every chick you put in it.

THOMAS OWEN, Sta. B, Topeka, Kans.

INCUBATOR BARGAIN.

I have six Hiawatha Incubators, guaranteed hatching, for sale at \$6.00 for the 120 egg size, and \$8.00 for the 240 egg size, if taken at once, cash with order. Edith Shaw, Box K. Hiawatha, Kans.



Hatch Chickens by Steam with the EXCELSIOR INCUBATOR Or WOODEN HEN
Simple, perfect, self-regulating. Hatch every fertile egg. Lowest priced first-class hatching machine. GEO. H. STAHL, Quincy, Ill.

REAL PROFITS Proved in Poultry

Guaranteed best hatcher is Cyphers Incubator proved so by beginners, experts and Agricultural Experiment Stations. Write to prove it by our FREE 215-page Book, illustrates what others are doing towards making Poultry Pay Big Profits. Money-Back Guarantee. Cyphers Incubator Co., Buffalo, N. Y. N. Y., Boston, Chicago, K. City, Oakland, Cal., London.



Start Early



profits are greatest for the man who markets his chickens early. Do not be satisfied with old, easy going methods. Get the best equipment—produce the best and make the most money. Write for our new book "Incubator Why?" telling why our machines turn 90 per cent of the eggs into chickens and why we can do better for you on price. Please say whether interested in beginners' outfit or large machines. GEORGE ERTLE CO., Quincy, Ill.

HURRY UP and Send Your Name to JOHNSON

INCUBATOR MAN
His book on poultry raising will make money for you, and his famous

"Old Trusty" Incubator

is guaranteed to give 75% or better hatches; to use less oil and give less bother than any other incubator made. It is absolutely automatic. Runs itself and pays for itself. No superfluous parts. Sold on



40, 60 or 90 Days Trial, Freight Prepaid

Don't pay two prices. Get Johnson's direct offer. No matter where you live, Johnson can help you succeed. He ships promptly. Get his big free book, 176 pages. Every page a poultry sermon. 300 pictures and good, helpful chicken sense. Hurry up and send your name to

M. M. JOHNSON, CLAY CENTER, NEBRASKA

HATCH ALL INCUBATORS AND BROODERS



THOUSANDS USED—FREIGHT PAID
DIRECT TO FARMERS Lowest Prices

Send us your name and two of your friends who want Incubators and Brooders and get the

HATCH-ALL FREE INCUBATOR BOOK AND FACTORY PRICES
HEBRON INCUBATOR CO., Dept. 10 Hebron, Nebr.



The Townsend Automatic Trap Nest

Awarded first premium Kansas State Fair, 1906-07. Invaluable to poultry raisers. The hen, on going in, closes the gate behind her, shutting out all other fowls. At any time she wants out for food or exercise, she can easily release herself. By simply lowering a latch, it is converted into a "Trap Nest" that is absolutely reliable. These nests are manufactured under our own patent. Write us for information and testimonials from users. AGENTS WANTED. Address

P. G. TOWNSEND & CO., 629 E. 6th, Hutchinson, Kans.

hundreds or even by the thousands. To produce the calf on a small scale you would say let two suck on one cow and you would milk the other cow, and you would get, on the late scale of prices, pretty good profits. In the olden times, years back, when I did the milking myself, the price was not good enough to pay very well. Taking butter to market and trading it at the store for 8 to 12 cents a pound made it a very up-hill business. But now with the methods in vogue, we grow the calves so as to place two calves on one cow, and as the cow gradually begins to fall later in the fall we have a fine calf or two good calves raised by one cow, and the other cow you have milked and furnished the creameries and butter men at a good profit all during the season. Now, we fellows that make a cow raise two good calves, made a good cow and sold the calves at a profit to you gentlemen to feed, if we do not wish to feed them ourselves so that they will go immediately to putting on fat when you take them. I bought a nice little calf that was running with the cow and thought now she does look fine, and it was a fine calf, but it was finer when I got it than it was months afterwards, and it is pretty near always that way. I remember one calf, very nice calf; I could have gotten \$12 for it from the butcher, but I kept it over and got \$13 (laughter). It is things of this kind you have got to consider, and we fellows who handle small tracts of land have got to study, now that they are cutting up the big ranges.

Mr. True: I think, gentlemen, it is a safe proposition that you can raise calves for feeding purposes profitably on small farms, at least in Kansas, but not by raising one calf on one cow. I experimented once, practised raising calves for feeding purposes, and did not milk the cows, and did not raise one to the cow, but bought the calves from persons who had well-bred calves to sell; bought good ones. Bought some in Topeka, and some in other places, and raised by seeding the cows well, plenty milk-forming feed. Putting two calves on one cow you can have a fine milker without drawing the milk by hand, and by taking the cow's first calf and putting two calves on she gets the habit of letting any calf suck her that wants to without much resistance, and we frequently have raised three calves on a cow during a period. But never milked the cows for commercial purposes, but developed fine cows by putting two calves on a cow, and find it profitable to raise three calves on a cow during a season, and on our farm we could winter the cows and summer them for less than \$10. Summer them for about \$4.

Governor Glick: Do you let the calves run with the cows?

Mr. True: No, sir.

A Member: Who did you buy these calves of?

Mr. True: I live down in Jefferson County, with little towns around me, and there are a good many people that milk there. Some have good cows, and they are continually giving out the word that they have a calf to sell.

Mr. Potter: What did you feed these calves besides milk?

Mr. True: Summer pasture; along in the winter some alfalfa, millet, or anything we had.

A Member: Feed them any bran?

Mr. True: No; never did. Alfalfa is the greatest thing to keep them going; make bone and flesh.

Mr. Potter: I must confess I am a little astonished at the theory advanced here to-night. Really the first time I saw it demonstrated a man could eat his pudding, and still have it. I asked the Colonel to find out what he was raising the calves on. This is the first time I ever saw it defended by an intelligent audience that you could raise something out of nothing. The fact is, every pound of beef is made up of so much protein, so much carbohydrates, etc., and you can't get that unless you put it into the calf. Now there are calves and calves, and I would like to see a sample of calves more of them raised on one cow. The cow that raises one calf and does it in good shape

is a grand, good cow, and it is a shame to ask her to take two.

Colonel Robison: I would like to ask Mr. Potter what he would do if his cow had twins?

Mr. Potter: I would do like you breeders do; I would get a nurse cow; get a cow that has lost its calf. The point I want to raise, brother breeders, is this. The first proposition is, you can't raise something on nothing. You cannot raise a calf without feed. The next proposition I want to make is this: You cannot afford, where feed is as expensive as it is in the Eastern half of Kansas, to raise feeders. That is why I asked my friend what he did with them. I wanted to know whether he was raising feeders or raising beef.

Mr. Shinn: I had a three-year-old heifer that raised two calves one year and kept two families in milk and butter, all they wanted. I sold one calf for \$60 and the other for \$32. The next year she raised one calf of her own and three others, making four calves, bringing them all through in fine shape, and I was offered \$100 two or three times during the season for the cow, and the calves were worth from \$50 to \$100 apiece, and I can not see why a man cannot, on good grass, do better than what he (Potter) speaks of. I have tried it for thirty years. I have got cows that you can not turn on pasture with less than three calves without their bag will spoil.

A Member: What stock of cows do you keep?

Mr. Shinn: I raised cows bred from a Jersey and a Shorthorn.

Governor Glick: I fed cattle thirty-five years and went through all the various conditions that our friends have talked about. I have raised the calves and I have bought the calves, and my experience was this. I never could buy a calf that would grow and feed out with the calves I raised myself. I never allowed the calves to run with their dams. The calves then learned to eat, and when they went in to winter quarters they were ready to eat. I never could buy a calf that would fatten off as well as those that I raised. Now, perhaps I did better by them when they were young. I made it a point always to feed my calves in the fall when winter was coming; I taught them to eat, and it don't take much. There are thirty-two quarts of corn in a bushel, and one quart a day don't cost much, but it makes a good deal of flesh on your calf; it keeps him growing, and when he goes out in the spring and goes out on grass he keeps on growing. He don't have to spend half the summer putting flesh on that he lost during the winter without being well fed, and when I raised calves that way and made feeders of them I always found it was profitable. I never put two calves on one cow, but I have seen any number of cows that would give milk enough to raise two calves and raise them well. This country is settling up very fast, and the beef cattle of this country have got to be raised on the farms, and the farmers have got to learn to raise their own calves. The ranges are being closed out very fast.

Mr. True: Why do you assume that you cannot raise two calves on one cow?

Governor Glick: I do not. I never let the calves run with the cows. My hired men milked every cow in the yard. The purpose was that the cow should perpetuate the milking qualities. Letting the calves run with the cows soon destroys that. I have raised grade steers that at 3 years old I have turned off weighing 1,600 pounds, and I have fed them just that way. When they came in in the fall every calf was fed grain. Those calves, when they went on grass in the spring were in good flesh, and they didn't have to make up what they might have lost if they had not been well fed during the winter.

Mr. Harrington: I understand the question we are discussing here to-night is, which is the most profitable, to raise the calf or to buy or to feed him. I have learned that I can buy a calf cheaper than I can raise him, and I am not afraid that there won't be any place to buy calves while I live. I

Do You Like Honest, Square Dealing?

Dr. Pierce's world-famed medicines are put out under the belief that publicity is the best possible guaranty of merit, and that the most intelligent people generally want to know what they take into their stomachs, whether it be as food, drink or medicine. Although it was a bold step to take, and quite out of the usual practice of makers of proprietary medicines, yet Dr. Pierce, some time ago, decided to publish broadcast and on all his bottle-wrappers all the ingredients entering into the composition, or make-up, of his celebrated family medicines. A square deal is therefore assured every one using his medicines, for one knows exactly what he or she is paying for when purchasing them, since every ingredient is published in plain English on the bottle-wrappers and the correctness of the same attested under solemn oath. These several ingredients are selected from among the very best known to medical science for the cure of the various diseases for which these medicines are recommended.

The most eminent and leading medical teachers and writers of all the several schools of practice have endorsed each of the ingredients entering into Dr. Pierce's medicines in the strongest possible terms. The makers of Dr. Pierce's medicines believe that intelligent people do not wish to open their mouths like a lot of young birds and gulp down whatever is presented to them, either in the way of food, drink or medicine, without knowing something of the properties and harmless character of the agents employed. They believe that health is too sacred a heritage to be experimented with, and that people should not take medicines of the composition of which they are kept in ignorance. Dr. Pierce's medicines are made wholly from the roots of plants found growing in the depths of our American forests. They are so compounded that they cannot do harm in any case, even to the most delicate woman or child. By open publicity Dr. Pierce has taken his medicines out of the list of secret nostrums, of doubtful merit, and made them REMEDIES OF KNOWN COMPOSITION. They are therefore, in a class all by themselves, being absolutely and in every sense non-secret.

By this bold step Dr. Pierce has shown that his formulas are of such excellence that he is not afraid to subject them to the fullest scrutiny.

There is a badge of honesty on every bottle of Dr. Pierce's medicines in the full list of its ingredients duly attested as correct under solemn oath.

No other medicines put up for general use through druggists can make claim to any such distinction, and none other than Dr. Pierce's medicines have any such professional endorsement of their ingredients. Such professional endorsement should have far more weight with the afflicted than any amount of lay, or non-professional, endorsement, or testimonials.

Of course, the exact proportion of each ingredient used in Dr. Pierce's medicines as well as the working formula or manner of preparing the same, and the specially devised apparatus and appliances employed in their manufacture, are withheld from publicity that Dr. Pierce's proprietary rights may be fully protected from such unprincipled imitators as might be piratically inclined.

The preparation of these medicines without the use of a drop of alcohol, so

generally employed and yet so harmful, in the long run, to most invalids when its use is long continued, even in small doses, cost Dr. Pierce several years of careful study and labor, with the aid of skilled pharmacists and chemists to assist him. Naturally, he does not care to give away his scientific and exact processes for preparing these medicines, but he does want to deal in the most open manner with all his patrons and patients, and under this frank, open and honest way of dealing, they may know exactly what they are taking when using his medicines.



What Do They Cure? This question is often asked concerning Dr. Pierce's two leading medicines, "Golden Medical Discovery" and "Favorite Prescription."


The answer is that "Golden Medical Discovery" is a most potent alterative or blood-purifier, and tonic or invigorator and acts especially favorably in a curative and healing way upon all the mucous lining surfaces as of the nasal passages, throat, bronchial tubes, stomach, bowels and bladder, curing a large per cent. of catarrhal cases whether the disease affects the nasal passages, the throat, larynx, bronchia, stomach (as catarrhal dyspepsia), bowels (as mucous diarrhea), bladder, uterus or other pelvic organs. Even in the chronic or ulcerative stages of these affections, it is often successful in effecting cures.

The "Favorite Prescription" is advised for the cure of one class of diseases only—those peculiar weaknesses, derangements and irregularities incident to women. It is a powerful yet gently acting invigorating tonic and strengthening nerve. For weak, worn-out, over-worked women—no matter what has caused the break-down, "Favorite Prescription" will be found most effective in building up the strength, regulating the womanly functions, subduing pain and bringing about a healthy, vigorous condition of the whole system.

Women suffering from diseases of long standing, are invited to consult Doctor Pierce by letter, free. All correspondence is held as strictly private and sacredly confidential. Address Dr. R. V. Pierce, Buffalo, N. Y.

Dr. Pierce's Medical Adviser (1000 pages) is sent free on receipt of 21 one-cent stamps for paper-covered, or 31 stamps for cloth-bound copy. Address as above.

<p>12-16 Tongueless No Eveners \$21.95</p>  <p>Steel Frame, Oscillating Scrapers 50c. Dust Proof Boxes and High Standards with Oil Holes on top.</p>	<p>12-16 Harrow only \$16.95</p> 	<p>Tongueless Disc Harrow</p> <p>No neck or side draft—no jerking or pounding of tongue. Pivoted truck adjustable up or down. Wheels turn under tongue. Turns square corners—uniform depth. Can be attached to any of our Disk Harrows and many other makes. Send for full description and Big Free Catalogue, and tell us what you want when you write.</p> <p>Hapgood Plow Co., 1019 Front Street, Alton, Ill.</p> <p><i>The only plow factory in the world selling direct to the farmer at wholesale prices.</i></p>
--	---	--

<p>Page Fence Protects Stock</p> <p>Your stock is secure behind a Page Fence. The cross bars in every Page Fence are continuous and closely woven around every horizontal strand. The bars can't come off or spread apart. Page Fence saves you money—requires few posts and staples. Before you buy your fence, learn more about a Page. Send for catalog and folder.</p> <p>PAGE WOVEN WIRE FENCE CO., Box 718, ADRIAN, MICH.</p>	
--	---

	<p>SMOKE YOUR MEATS IN THE NEW WAY, USING WRIGHT'S CONDENSED SMOKE</p> <p>A liquid made from hickory wood. Imparts the delicate flavor that is peculiar to meats smoked with hickory wood. USED BY APPLYING THE CONDENSED SMOKE WITH A BRUSH. Send 10c and names of five who cure meat and we will mail you sample free. Sold only in square quart bottles with metal cap. Never in bulk. At druggists, 75c per bottle. Bottle smokes a barrel.</p> <p>FREE BOOKLET on curing meats Be Sure You Get "Wright's Condensed Smoke."</p> <p>Made by THE E. H. WRIGHT CO., LTD., 112 W. FOURTH ST., KANSAS CITY, MO.</p>
---	--

am not afraid that the range country is going to be so small that there will be no calves to sell. I feed cattle and raise a few Shorthorns, and I raise them up, and sell them to the pack-milk. Now, if I had a cow that won't raise two calves, I don't think she is a good one. I have got some cows that we have either got to put two calves on or milk to keep the bag from spoiling. But when I can buy calves I think it is better to buy them. When I can go to Omaha or Kansas City and buy calves for \$7 I think it is cheaper than raising them. I finish them up, and sell them to the packing house, and that is where I get my money.

A Member: When do you buy them; in the spring or fall?

Mr. Harrington: I generally buy in August. I buy 2-year-olds and generally put them off the next August. I generally put them on blue grass, and always run them there till fall or winter.

A Member: They are really 2½ years old when you sell them?

Mr. Harrington: Yes; always.

Mr. Elward: Where do you buy them?

Mr. Harrington: I buy them in Omaha. Now, my idea is this, farmers, if you are going to do as Brother Shinn says, use the cow milk and raise a calf and combine the two; why rather than that I would just throw the cow overboard and raise sheep. There is more money in sheep than there is in the cow and calf. It is the money you are after. If you study up the situation and find somebody else can raise a calf cheaper than you can, buy of him. I don't recommend raising calves on hundred-dollar land unless you raise good ones.

The Hand Separator and Farm Dairy Development.

E. W. CURTIS, KANSAS CITY, MO.

An interesting phase of dairying in the West, particularly during recent years, has been the relation of the hand separator to the farmers' dairy development. In fact, the progress of dairying in Kansas was very limited until the advent of the hand cream separator.

I believe if every dairyman of Kansas would strike a trial balance today, crediting up the gross returns from his dairy herd for the past twelve months, including such items as pay received for butter or butter-fat, value of calves and pigs raised on skim-milk, and value of manure; also charging against his gross returns such items as feed consumed, interest in money invested, charge for the aging of the cow, occasional loss of calves, charge for time consumed in caring for cows, etc., we would find that at least 50 per cent of our dairy farmers are really losing money as a result of their dairy operations. If this is true under modern conditions, and there is no question but that the above figures are conservative, I am quite sure that ten years ago, before the hand separator was brought into general use at least 80 per cent of our dairy farmers were not finding their investment in dairy cows profitable. Under old conditions the farmer spent about one-fourth of the value of his product to get it hauled to the creamery and the skim-milk was very unsatisfactory as feed for calves and pigs. On the whole it is safe to say that under the modern hand separator system dairying is at least twice as profitable as it was ten years ago. This profit is entirely outside of increase in value of dairy products in general. Ten years ago the farmer received for butter-fat a price varying from ten cents in the summer time to eighteen cents in the winter time. In 1907 the price of butter-fat to the Kansas farmer ranged from seventeen to thirty-two cents, and there are some who say the price should have been higher.

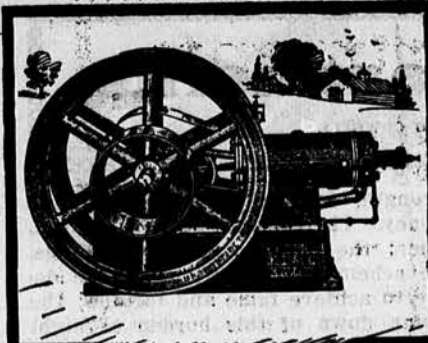
But the advent of the hand separator has developed a new set of problems for the dairy farmer and dairy manufacturer or creameryman. There are in round numbers 50,000 cream separators in daily use in Kansas. These separators belong to 50,000 farmers. A large number of these men

and women are true and earnest seekers after dairy knowledge. Their desire is to produce as perfect a product as their conditions will allow. In other words they so care for their separator and the cream that they deliver it pure and sweet, and it is the creameryman's fault if he does not make fancy butter of it.

There are, however, thousands of dairymen in Kansas who do not take proper care of their cream separators or other dairy utensils. They do not take the proper care of their cream and their deliveries at the creamery are so far apart that the creameryman needs an introduction each time they come. The quality of the cream delivered is such that the butter made is an "undergrade" and the fact that a large proportion of the butter in our big markets is undergrade and is sold at a reduction in price of from two to ten cents per pound shows that there is a large quantity of poorly cared for cream being sold.

The cream buyer may make suggestions to the dairy farmer who delivers poor cream as to how the quality may be improved. But he is often met with the reply "I will take my cream to the other buyer or ship it myself." In this way the cream buyer is bluffed into taking a grade of cream that will make poor or even rotten butter. The reputation of the dairyman is lowered, the reputation of the creamery is lowered, and the reputation of Kansas as a dairy State is lowered.

As stated before the hand separator has brought us new problems to solve. The problem of inducing all dairy farmers to deliver a sweet, high-grade cream is an important one for the future of the dairy industry. It may be that the butter-eating public will tire of eating second-grade butter and



FARMERS are getting over doing things the hard, slow way. The very general use of farm powers is an example.

As a matter of fact, the farmer has as great need of a reliable power as the mechanic.

Take the average barn for illustration. Locate one of the simple, dependable I. H. C. gasoline engines, such as is shown here, outside the barn door, or within the barn, for that matter, and what a world of hard labor it will save! You will have a power house on your farm.

It will shell the corn, grind feed, cut ensilage, turn the fanning mill, pump water, run the cream separator, elevate hay to the mow, and do a dozen other things.

The old way was to use the horses in a tread power or on a circular drive, to operate a complicated system of gear wheels.

The consequence was that most of the hard power jobs were hand jobs.

I. H. C. engines, being so simple, so efficient, so dependable, and furnishing abundant power at so little cost, have

INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U.S.A.

A Reliable Power as a Farm Help

established a new order of things. Any one who will carefully consider the matter must see that they are money makers and money savers.

They make short, easy, pleasant work of what always has been hard, slow work.

They save the farmer's strength, save him wages of hired men, save time, and enable him to do more work and make more money out of his farm than ever was possible before.

There is no doubt that on the average farm an I. H. C. gasoline engine will more than repay its first cost each year.

The nice adaptation of these engines to all farm duties is one of their most excellent features.

They are built in—

VERTICAL, 2 and 3-Horse Power.
HORIZONTAL (Stationary and Portable), 4, 6, 8, 10, 12, 15 and 20-Horse Power.

TRACTION, 10, 12, 15 and 20 Horse Power.
AIR COOLED, 1-Horse Power.

Also sawing, spraying and pumping outfits.

There is an I. H. C. engine for every purpose.

It will be to your interest to investigate these dependable, efficient engines. Call on the International local agent, and get catalogs and particulars, or write the home office.

INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U.S.A.

(Incorporated)

cows, in the college herd. They are also making out rations and feeding these cows, with a view of determining the most satisfactory and economical ration for each individual in the herd. Both classes have their time

vigorous agitation of the butter granules, and they will very quickly unite to sufficient size to permit a thorough removal of the buttermilk.

J. C. KENDALL

Alfalfa for Dairy Cows.

D. H. Otis, professor of animal nutrition at the college of agriculture at the University of Wisconsin, formerly of Kansas, has just completed a special study of the value of alfalfa as a feed for dairy cows. An experiment which he conducted, showed that young cows not giving milk can be kept in good condition during the winter and gain from 1.25 to 1.5 pounds per day when fed nothing but alfalfa hay.

"In composition alfalfa is nearly, if not quite, equal to bran, pound for pound," says Professor Otis, discussing its nutritive value. "The excellent feeding value of alfalfa lies in its high content of digestible protein. With an average yield of four tons, alfalfa will produce 880 pounds of digestible protein per acre. If this amount of protein is supplied from oil-meal, which is usually purchased for its protein content, it would require 1.5 tons which would cost at present \$52.50."

"A summary of feeding trials with dairy cows shows that alfalfa can be made to take the place of at least one-half of the grain usually fed our dairy cows, and as the nutrients needed by dairy cows can be produced much more cheaply with alfalfa than with grain, the cost of producing milk may be greatly reduced by its use."

"The cash returns from feeding this crop at the various experimental stations range from \$10 to \$20 per ton. With four tons per acre, these figures show excellent returns from the land devoted to alfalfa. A conservative estimate would indicate that the Wisconsin dairy farmer can increase his profits from 50 to 75 per cent by a liberal, but judicious, use of alfalfa grown upon his own farm."

A New "Factory to Farm" Separator

A new member of the "factory to farm" fraternity is introduced to the readers of THE KANSAS FARMER this week in the person of Chas. Speelman, manager of the Chas. Speelman Company at Kansas City, which is offering the Speelman Cream Separator for direct sale to our readers.

Mr. Speelman is one of the most widely-known cream separator salesmen in the United States and his proposition for selling to the farmers has been involved after years of experience in handling the various makes of cream separators now on the market. He has a plan now in operation by which one man in each township can earn a machine from him and all our readers who are interested in cream separators are requested to read his advertisement on page 184 of this week's FARMER and write to him, addressing the Chas. Speelman Company, 305 New Nelson Bldg., Kansas City, Mo.



SIR KORNDYKE HARTOG DEKOL 38781.
Senior herd bull in Brachurn Holstein Herd, at three years. Owned by H. B. Cowles, Topeka, Kansas.

gradually learn to eat oleomargarine or some other imitation of pure butter.

Let us all then strive in a broad way to build up the quality and reputation of Kansas butter. It can be done by every dairy farmer making an earnest effort to deliver only fine, sweet, clean cream and every buyer and creameryman making an earnest and honest effort to produce the highest possible quality of butter.

The Dairy Short Course at Manhattan.

J. C. KENDALL, PROFESSOR OF DAIRY HUSBANDRY, STATE AGRICULTURAL COLLEGE.

The short course in farm dairying and commercial creamery work at the Kansas State Agricultural College, is about half completed, and while the number in attendance is not quite as large as in some former years, the enthusiasm of the class and the interest manifested in all parts of the work, make up for the lack of numbers.

Cream is brought in from the surrounding country, sampled, graded, pasteurized, ripened, and churned by the students. Records and tests are kept of the entire process, to determine the proper temperatures to use, where losses occur, and how they can be avoided.

The farm dairy boys are busy separating, ripening and churning cream, meeting as nearly as possible the requirements of farm conditions. They are keeping complete records of the milk yield and fat content of the dairy

taken up in the class rooms and laboratories from early in the morning until 4 or 5 p. m.

Butter Will Not Gather.

I want to ask you about preparing cream to churn. Our butter has gotten so it will not gather. It will churn in about 15 minutes but it will not gather. Will you tell me how I may remedy the matter?

FRED D. SCOVILLE

Johnson County.

Difficulties in churning can usually be attributed to some of the following causes:

Animals far advanced in the lactation period, cause the fat globules to be smaller, and contain a larger percentage of hard fats, and accompanying this, is to be found usually a viscous condition of the cream. Cows fed on food producing hard fats, dry foods, also tend to produce a hard fat. The temperature is the most important factor affecting the ease of churning.

Succulent food and the cream from the milk of animals that are fresh, ripening the cream more thoroughly, and churning at a higher temperature, any one or all of those will assist in making the churning less difficult.

Often in churning, the gathering of the butter granules is accomplished with difficulty, and that seems to be the trouble which you are having in churning. A little higher temperature will tend to overcome this difficulty. Some recommend the adding of a little dry salt at this time. We have found it practicable to draw off a portion of the buttermilk, or to divide the churning. This will permit a more

Home Departments

CONDUCTED BY RUTH COWGILL

MY BEAUTIFUL SECRET.

I have learned a beautiful secret,
I know not how or where;
But I know it is sweet and precious,
And true, and glad, and fair;
And that God in heaven reveals it
To all that have ears to hear.

And I know that ere I learned it
My way was weary and hard;
And somewhere in life's music,
There was always that which jarred,
A hidden and dreary discord
That all its sweetness marred.

But my Harp of Life was lifted
By One who knew the range
Of its many strings—for he made it—
And he struck a key-note strange;
And beneath the touch of the Master
I heard the music change.

No longer it faltered and faltered,
No longer sobbed and strove;
But it seemed to soar and mingle
With the song of heaven above;
For the pierced hands of the Master
Had struck the key-note—love.

Thy heart's long-prisoned music
Let the Master's Hand set free!
Let him whisper his beautiful secret
To thee—as he hath to me!
"My love is the golden key-note
Of all my will for Thee."

—Edith Gilling Cherry.

Individuality.

One of the charms of nature is its ever varying scenes, lack of sameness, and the differing of one thing from another. The closest observer is unable to find even one leaf just like another. How stupid it would be if all our trees were live oaks, though they are beautiful trees. How wearisome it would be if all our flowers were roses or pinks, or dahlias. The Maker of heaven and earth is all wise and His handiwork shows forth His wisdom. Humanity differs one from another in feature, form, and characteristics and this difference is called individuality. Each individual is made after a pattern of its own. Each one must live his own life, think his own thoughts in his own peculiar way, and not try to be some one else or become soured and unhappy because he is not like some one else. If you are only a common plant, be the best of the kind. Many persons make a failure of life and spoil its beauty by trying to be some one else, or by acting like another whom they admire.

Sometimes we hear persons repining because they are not talented or pretty like this one or that. It is a waste of time and energy to do so for one can not make one's hair black or white nor add one cubit to one's stature. Instead of trying to be like Mrs. A., who is so clever, and who by her wit and humor entertained her friend so delightfully, let us examine ourselves and find in what peculiar characteristic we excel, or wherein lies our charm. Perhaps we can not be witty or humorous, and if we should try we would make a flat failure, and our jokes would fall flat, but we can be dignified and gracious, which is just as charming and better for every day use. We may envy our friend who is a fine talker. We can at least be an interested and appreciative listener, which is rare and if all were talkers it would be a bad state of affairs.

It is well to be contented with ourselves and our conditions when we can not change them. Many a woman patterns after another whose purse is larger and whose circumstances are widely different, and is unhappy because she can not cope with her. Happiness does not come from the possession of many things but in the right use of what we have whether much or little and in contentment, and to try to keep up with banker Brown's wife when your circumstances compel you to live on a small income would be absurd and foolish, and would bring misery and ruin to the home.

How to Live.

Toil, trouble, worry, struggle, false tastes, work incessant—the battle for wealth never satisfied, never ending. The gratification of one desire only creating another. The great city is the maelstrom which sucks in life,

strength, health, nerves, brain, and money. The constant battle with each other; the bickerings, the plannings, the scheming, the jealousies, the desire to achieve fame and fortune; the laying down of this burden at night and taking it up in the morning. Work, only work, to gain what? Nothing but our board and clothes, and a few unsatisfying pleasures. To be admired, spoken of; to cut a figure in some direction; to be loved or feared or envied by others. Burn the candle at both ends; destroy your nerves; weaken your body; turn night into day; play the villain, the hero, the saint or the hypocrite, as the occasion requires, for what to get? A little fame or notoriety, which is unsubstantial, fleeting and useless. Then your bones are laid in the ground and by the next setting sun you are forgotten.

Is the game worth the powder? The bone, sinew, and brain of the country flee to the city to try their strength in the unnatural and unnecessary struggle for the folly of fame and fortune. For this the woods, the fields, and the water are deserted. The beauties of nature and communion with nature's God are forsaken. The birds, the beasts, the growing things, the running water, the quiet home are no longer comforts; they have lost their attraction for fashion, furor, and folly. The cut of your coat becomes more important than the purity of your thoughts. "What will somebody say," is of more consequence than "What ought I to do?"

After the battle is fought, what have you gained? Perhaps a little money for others to quarrel over. All the rest is vanity, only vanity and vexation of spirit.

The nearer you keep to Mother Earth, the nearer you are to God and true happiness. The study of nature and nature's works is the most satisfying and the greatest source of true happiness, with prospects before you of lake and river, woods and cultivated fields, books and a few choice friends. When you have saved enough to live on frugally you may rest from your labors, except enough to keep you in good health, mind and muscle, with your horses, cattle, and sheep, pigs, ducks, geese, chickens, pigeons, turkeys, and dogs, your boat, fishing rod and gun, you have achieved true happiness, for you are contented, free from strife, contention and discord, and the most independent man in all the world. You are at peace with God and man. You have fought the good fight, and when your work is done you can look back on a useful life well spent and with a clear conscience and hopeful spirit you are ready to meet your Maker. Your friends will remember you and miss you. You have without design achieved fame and fortune in your little world, and the community will say, "There is a useful, kind-hearted man gone to his reward." Who shall say that such a man has not achieved all there is worth getting in this world, or that he has lived in vain?

Such is human life. Which is the best way to live?—Robert E. Frazer, in Detroit News.

Use, Do Not Abuse.

W. C. M'GINNIS, PEKIN, ILL.

Once I had a good home; a father who had numerous business dealings; a mother who set a tableful of various toothsome viands, and we also had numerous callers, and often at meal times. There were six boys, and no girls, so that many burdensome home duties fell upon our good mother. The preachers often stopped with us. Mother gladly served the purported good, who could bring good into homes where they went.

Now I see her in mind—cooking, toiling, sweating, on Saturday evenings, mostly so on those preceding the "Big Meeting Days." Saturday nights, she was often so tired, and worried,

**SUCCESS
PROFIT**

Warner Hog Fence

is a 24 inch barbed wire margin fence which will protect your crops. Bars are woven as the integral part of the fence. Will turn stock better than a 30 inch smooth margin fence and saves you the expense of installing individual barbed wire at the bottom.

To crawl under a **WARNER HOG FENCE**, the hog must raise the whole fence. Reasonably priced and sold on its merits.

Warner Fence Company
OTTAWA, KANSAS.

"Behind the Warner Fencing is the Warner Guarantee."

that she could but poorly rest, so tired was she from preparing extra things for the preachers' coming.

Sabbath mornings, unrested, she often remained at home from church to do the extra work required. Sometimes she was permitted to go to church, unrested, to hear the preacher dilate on "the rest that remaineth to the people of God!" The meeting dismissed, home she hurried, labor and unrest remaining with her, while the rest walked and talked with leisure, pleasure, and ease, as they pleased.

Now at home, she hurried hither and thither to have all things for their pleasure and palates, while they departed in the parlor, on the portico, or on the lawn. We helped some; boys could go on errands, but rarely could we prepare dainties or serve. All things good and ready, down sat the preacher to various edibles—pies, cakes, jellies, preserves; articles many and—last but not least—chickens, much! They surely delighted themselves, partaking freely of their favorite dishes, commending the taste, joking, and laughing. Did they consider the great price that brought all this to them? Mother denied herself of really necessary things that they might have many things not at all necessary. They rested and feasted, she worked and fasted. She served at the table carefully until all well-served, and their after-chat finished, she could take some plain, well-earned food. Graciously she served, looking to their every pleasure. She felt that custom demanded all this, that the guests expected such things, so with great labor and little rest, she prepared and served them willingly. She said she greatly wished it were not that way; she felt that it would be much better for the health and happiness of all if it were always this way: "Plain living and high thinking, holiness, wholeness, health."

Now, was there not a most excellent Christian work that those preachers could have done in the home, as well as in the pulpit? Could they not well and very righteously have expended some of their free breath and speech in stating positively their decided preference for plainer, easier-prepared foods; declaring truly that such are

vastly better for the bodies and souls of all? Did not Jesus, their Master, live very plainly, and did He not do many good deeds in the homes? Is it not the minister's place to "minister to the bodies and souls of men"—and women?

And are there not good suggestions here for all? Should not every one be a minister—of good ever, of evil never? If guests all cultivate and affirm simple tastes and true pleasures, there will be less labor for the server's body, less labor for the eater's bodily organs, more ease and less disease. Eat to live, do not live to eat; meet to have "a feast of reason, and a flow of soul," do not meet to eat, to eat, as do so many.

"Rich pies and cakes—bad pains and aches; many dishes—many diseases." The pains, aches, and diseases come not alone to the eater, but also much to the laborer for the eater.

Hygienists inform us that it is better to have not more than three kinds of food taken at one meal. God commands us to glorify Him in body and in spirit which are His—to reach the highest possible health, strength, usefulness, and happiness. Obeying that command, we must go out and take in all the good that we can find by the way of good and learned men—all good gifts.

Hygienic instruction is of God, through His instruments, and is for the good of body, mind, and soul. Body, mind, and soul are closely connected, each affecting the others. Duty demands the studying and right treatment of each. Whatsoever things are true, honest, just, pure, lovely, of good report, think on these things. These truths belong there.

"Evil is wrought by want of thought, as well as want of heart." Sad experiences shows that many do loved ones harm at the table. The hospitable and table are too closely associated. Hospitable (from a word meaning guest), means kind to guests—doing them only real good, anywhere, anyway, not placing before them and urging unto them foods that will harm them. Righteousness and "right useness" must be associated.

When writing The Kansas Farmer, please give full name and address.

The Young Folks

SMILE A LITTLE.

Smile a little, smile a little,
As you go along,
Not alone when life is pleasant,
But when things go wrong.
Care delights to see you frowning.
Loves to hear you sigh;
Turn a smiling face upon her,
Quick the dame will fly.

Smile a little, smile a little,
All along the road;
Every life must have its burden,
Every heart its load.
Why sit down in gloom and darkness
With your griefs to sup?
As you drink Fate's bitter tonic
Smile across the cup.

Smile upon the troubled pilgrims
Whom you pass and meet;
Frowns are thorns and smiles are blossoms
Oft for weary feet.
Do not make the way seem harder
By a sullen face,
Smile a little, smile a little,
Brighten up the place.

Smile upon your undone labor;
Not for one who grieves
O'er his task, waits wealth or glory;
He who smiles achieves.
Though you meet with loss and sorrow
In the passing years,
Smile a little, smile a little,
Even through your tears.

—Selected.

Overcoming Difficulties.

Many young men when they reach their "teens," find, much to their regret, that they lack the ability to carry on a life work that will bring to them the returns which their efforts seem to warrant. The lack of this ability, can, in the majority of cases, be traced to the lack of education.

Only two reasons can be offered by the young man who finds himself in this position; first, his inability to secure an education or second, because of his careless or disinterested attitude. In other words, he does not possess an education because of financial difficulties during his early years, or because he did not work diligently to take advantage of his opportunities.

When I reached the age of seventeen years, I found myself numbered among the first of these two classes of men. Born the son of very poor parents, reared in a country where our schools were few, and beset by many unfortunate circumstances, including the death of my father when I was but nine years of age, I came to a full realization at this date that the seven or eight terms of schooling that I had received were inadequate to carry me safely through the struggle of life. I also realized the fact that there was no time to sit down and ponder over the question of what I had missed; to stop and discuss the mistakes of the past; but that I should at once set about to correct the errors I had made. Possessing no financial means, and being ignorant of the ways of the world, the prospect was not bright. However, I concluded that there was no logic in the argument that, because I had permitted seventeen years of my life to slip by without making any progress, I should not grasp the present and future opportunities and make the best of them.

My first step was to settle down to hard labor on a farm for a few dollars each month, and by practicing self-denial, lay aside sufficient money to carry me through some school. I had not at that time decided just what particular line of work I would take up, having in view only an educational pursuit whereby I could add to my then imperfect knowledge.

For some months I worked both early and late, until I had a little sum set aside. I then found that the business college offered itself as a stepping stone for young men of my calibre; and I took up the study of book-keeping and stenography in one of the St. Louis schools. By dint of hard study—shorthand by day, bookkeeping at night—at the end of five months, I found myself possessing the rudimentary requirements necessary for a stenographic position. I accepted a position, and with the determination to overcome obstacles still clinging to me, I made progress in my new work, and a nominal increase in

salary was my reward at the end of my third week's work. This added encouragement, and I worked the harder. After sometime, however, I found that I had a great affinity for the study of law, but again I found myself without sufficient funds to enable me to attend a day school for three years during which time I would be at a great expense without any income. While seeking a solution of this problem, I learned that St. Louis had a night law school which offered instructions to men in my position. This made the way clear—I could continue in my present employment during the day and thus defray my expenses, and attend the school at night, and during spare time in the morning, read law. I commenced school at once and am now in my second year. One more year and the struggle will be over, and I shall know how far I have succeeded. While my success in this undertaking is not complete, I am confident of my ability to overcome difficulties, and now have every reason to believe that the future has something better in store for me. I have also learned that "where there is a will, there is a way" and when you have met and defeated one obstacle, another will confront you, but by strict compliance with the laws of progress, no young man's future need be destroyed because of financial depression, social environment, or other less important conditions, if only the young man will be persistent in his efforts to succeed.

—I. A. N., in Spare-Moments.

The Way of Success.

Boys like to talk about what they expect to do in the way of making a living and it is a good thing to consider. But boys, while it is important to choose the occupation you are best suited for, it is more important to develop the ability necessary to succeed in the thing you are going to do. In a back number of the Saturday Evening Post is an interesting account of how a boy made hundreds of dollars selling kindling. He had the stuff in him that led to success:

I had been raised, he says, on a Nebraska farm, and I knew the value of dried sunflower stalks as kindling wood. Wild sunflowers spring up voluntarily on waste or untilled ground, and on Kansas or Nebraska soil grow eight or ten feet high. The large woody stalks when dry, burn quickly, and with intense heat.

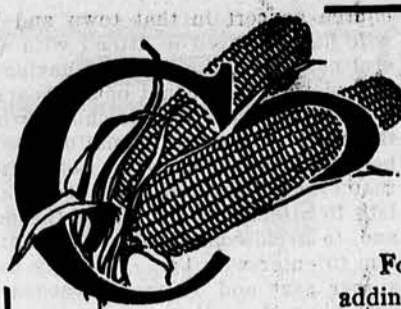
Sunflower "patches" were at one time common, but land is valuable now, and the obnoxious sunflower has been almost exterminated. Only one patch remains in the vicinity of our city. This tract of waste land, known as the "big slough," is low and boggy, and at times in the year partially covered with water. On the drier portions of the swamp, sunflowers grow in profusion. In late summer the swamp is a gorgeous expanse of yellow blossoms. When frost comes the blossoms have died away, the leaves fall, and the bare, straight stalks dry out in the autumn sun and wind.

The "big slough" belongs to an eccentric non-resident who will neither drain the land nor offer it for sale. In answer to my letter offering to buy the exclusive right to cut dry sunflower stalks he wrote that he would grant me the right gratis as long as sunflowers grew on the land, provided I would tell him what I expected to do with them. I explained to him my plans in full, and, at his request, I have written him frequently, reporting the success of my venture.

The stalks are harvested between the first of December and the first of May. The work of cutting them into pieces 18 inches long and binding them with wire into bundles is performed by a very simple machine invented for the purpose by a mechanic of our city.

Each bundle retails for ten cents, and contains enough kindling to last an average family one week. Every grocer in the city handles our kindling. We do a strictly wholesale business.

We sold last year, in round numbers, thirty thousand bundles, netting me over fifteen hundred dollars for my year's work. We estimate that we sup-



CORN

NOT NUBBINS

For sound, heavy, mature ears, try adding 50 pounds Muriate of Potash per acre, broadcast, to your other fertilizer or manure, and find out how to raise corn instead of stalks. For swamp lands, broadcast per acre, 100 to 200 lbs. of Muriate of

POTASH

To drive away root-lice and cut-worms drill in with seed 75 lbs. Kainit per acre.

Write for our special free book on "Value of Swamp Land."

Address office nearest you:

GERMAN KALI WORKS, Monadnock Building, Chicago
New York—93 Nassau Street Atlanta, Ga.—1224 Candler Building

CROUP! CROUP!

Barnes' Croup Grease

A Sure Cure For Croup.

Relieves cold, cold on the lungs, and prevents pneumonia and diphtheria. Sold by all druggists. Price 25c and 50c.

Mfd. by NATIONAL CHEMICAL CO., Caney, Kans.

If not in drug store, mailed postpaid on receipt of price.

plled about six hundred families with kindling wood. There are perhaps ten thousand families in our city who use kindling wood, but our business is limited by the supply of sunflower stalks.

The Little Ones

LITTLE JOHNNY ON G. WASHINGTON.

George Washington was the greatest man
That ever lived on earth,
Exceptin' pa;
And so we all do all we can
To celebrate his birth
'Cause he was good and brave and true;
There wasn't nothin' he couldn't do
If it was right and he wanted to;
He licked a king and a whole lot more,
And no one was ever as wise before,
Exceptin' pa;

George Washington was Virginia's son,
The noblest and the best,
Exceptin' pa;
We give him praise for the things he done
And the brave heart in his breast.
He licked King George, and he licked him bad,
And so we should always all be glad;
His country was all the children he had—
He took it when it was weak and new,
And nobody else could of pulled it through,
Exceptin' pa;
—S. E. Kiser.

LIKE HIM.

Dear little boys, whose birthdays come
With Washington's to-day
You may not be the president
(Although, perhaps you may);
But each who does the best he can
May be, like him, a noble man.
—Youth's Companion.

The Wisdom of Tramp.

In a southern city lives a lady whose fondness for animals is known by everybody who knows her. One day, within the past four months, as she was passing along the street, there approached her with a show of the most abject apprehension, one of the meanest looking little black dogs of the Scottish terrier breed that one could imagine.

The lady held out her hand to the little fellow and he followed her. It was not long until the little fellow was thoroughly at home, and in a few weeks he responded knowingly to his new name, "Tramp," which seemed to so well fit his case.

He was an appreciative little fellow, and as soon as his spirits had been revived by good food and kindness, it became evident that he was well-bred in addition to his other qualities. To see him dance around on his hind legs at the approach of either of his benefactors was enough in itself to show that he realized that he was in good hands.

Now it happened that one night the man of the house had an engagement to sing with a male quartette in a

THE REV. IRL R. HICKS Almanac and Magazine

Should be in every home in the land. His weather predictions can be had only in his own publications.



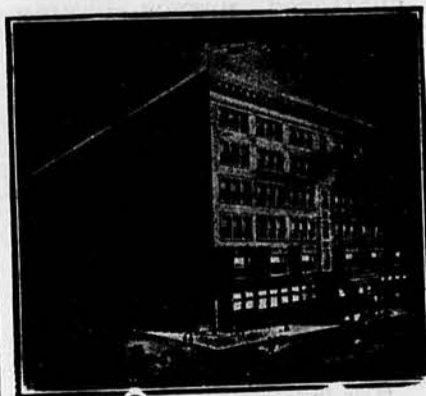
No other publisher is permitted to print them in any form, either with or without credit. His 1908 Almanac excels all former editions in beauty and value, and sells for 35 cents, postpaid. His monthly magazine, WORD AND WORKS, contains his weather forecasts for each month, together with a vast amount of the best family reading and costs \$1. a year, one almanac with each subscription. Every earthquake and serious storm for 20 years has been predicted by Prof. Hicks. You cannot afford to be without these publications.

\$1.50 Pays for the Almanac, the Magazine and Kansas Farmer for one year. Address all orders to

The Kansas Farmer Co.,
Topeka, Kansas.

HOTEL KUPPER

11th and McGee St.
Kansas City, Missouri



One of the newest and most centrally located hotel in the city. Absolutely modern in every detail. European Plan, \$1 per day and up

The Blossom House

Kansas City, Mo.

Opposite Union Depot. Everything first-class. Cafe in connection. Cars for the Stock Yards, the up town business and residence parts of the city and for Kansas City, Kans., pass the door. Solid comfort at moderate prices. A trial will please you.



"SPECIAL MERIT" SCHOOL SHOES

"WEAR LIKE IRON"

Mayer "Special Merit" School Shoes are expressly made for the hard knocks and severe wear of healthy, romping school children. They are made of thoroughly seasoned upper leather and tough, old-process and time-seasoned soles, the strongest and most durable material obtainable—that's why they "wear like iron."

Plenty of room for growing feet, sensibly shaped shoes, strong enough for the hardest everyday use, dressy enough for Sundays. Your dealer will supply you; if not, write to us. Look for the name and trade-mark on the sole.

F. Mayer Boot & Shoe Company
MILWAUKEE, WIS.



Spasms St. Vitus' Dance

Many persons who suffered untold agonies from epilepsy, fits, spasms, and St. Vitus' Dance are today well. The strengthening influence of Dr. Miles' Nervine upon the shattered nerves having restored them to perfect health.

"I endured agony that words cannot express from St. Vitus' dance, which followed a very severe spell of rheumatism. I doctored with a physician; but the more I took of his medicine the worse I got. My mother's devotion saved me. After she had become almost heart-broken, as well as physically exhausted from constant care, by the advice of a neighbor she procured a bottle of Dr. Miles' Nervine. From the first dose to the last a continual change for the better was noticeable, and when I had taken eleven bottles I was well, and in robust health."

EDWARD D. REAM,
North Manchester, Indiana.

"Our little boy Harry, had spasms for three years, and although we doctored with many physicians, he continued to grow worse until he had ten spasms in one week. About that time our attention was called to Dr. Miles' Nervine. We began giving it to him. His improvement seemed slow, but when he had finished the fourth bottle the spasms had disappeared, and have not been seen now for years. We shall always recommend Dr. Miles' Nervine."

MRS. BELLE M. TINDALL,
Hastings, Neb.

Dr. Miles' Nervine is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails, he will refund your money.

Miles Medical Co., Elkhart, Ind.

church concert in that town and his wife had arranged to attend with several neighbors, the husband having to precede her on account of a rehearsal. She was just entering the church when the hot breath of an animal on one of her hands announced the sad tidings that Tramp was there, too. It was too late to attempt to get rid of the dog, and, to avoid confusion, she permitted him to enter with her. The lady took a rear seat and Tramp proceeded to curl himself on the seat by her side and soundly sleep. The heavy pipe-organ introductory and the violin solo that followed did not disturb him.

Then the male quartette came on for its number and Tramp still slept until a place was reached in the selection where his master had a bass solo. As the first note of the solo rang out Tramp sprang to his feet, pricked up his ears and began looking about. There was something familiar about the sound. He soon located it, and, with his hind feet on the seat and his fore paws on the back of the seat in front of him, the little fellow stood through the solo, gazing steadfastly at the singer and knowingly turning his head to one side and the other as much as to say, "I know that feller, and he is all right."

The solo ended, Tramp dropped back into his improvised bed on the seat and slept the sleep of the just until the end of the program.

One peculiarity of the incident was that the dog had probably never before heard his master sing, and yet there is no doubt that the quick ear recognized the sound of his voice.—L. A. Warner, in *Pets and Animals*.

Club Department

Officers of the State Federation of Women's Clubs.

President.....Mrs. Eustace H. Brown, Olathe
Vice-President.....Mrs. O. H. Trott, Junction City
Rec. Secretary.....Mrs. F. B. Wheeler, Pittsburg
Cor. Secretary.....Mrs. Charles C. Shoales, Olathe
Treasurer.....Mrs. C. W. Landis, Osborne
Auditor.....Mrs. M. S. Munson, Eldorado
General Secretary.....Mrs. C. C. Goddard, Leavenworth
General Director.....Mrs. W. A. Johnson, Topeka

Our Club Roll

Excelsior Club (1902).....Potwin, Butler Co.
Women's Literary Club (1902).....Osborne, Osborne Co.
Women's Club (1902).....Logan, Phillips Co.
Domestic Science Club (1898).....Osage, Osage Co.
Ladies' Social Society No. 1, (1898).....Minneapolis, Ottawa Co.
Challito Club (1902).....Highland Park, Shawnee Co.
Cultus Club (1902).....Phillipsburg, Phillips Co.
Literature Club (1903).....Ford, Ford Co.
Star Valley Women's Club (1902).....Iola, Allen Co.
West Side Forestry Club (1903).....Topeka, Shawnee Co., Route 8.
Fortnight Club (1903).....Grant Township, Reno Co.
Progressive Society (1903).....Rosalia, Butler Co.
Pleasant Hour Club (1899).....Wakarusa Township, Douglas Co.
The Lady Farmer's Institute (1902).....Marysville, Marshall Co.
Women's Country Club.....Anthony, Harper Co.
Richardson Embroidery Club (1902).....Madison, Greenwood Co.
Prentiss Reading Club (1903).....Cawker City, Mitchell Co.
Cosmos Club.....Russell, Kansas.
The Sunflower Club (1906).....Perry, Jefferson Co.
Chaldean Club (1904).....Sterling, Rice Co.
Jewell Reading Club.....Osage Co.
The Mutual Helpers (1906).....Madison, Kansas.
West Side Study Club (1904).....Delphos, Ottawa Co.
Domestic Science Club (1904).....Berrington, Shawnee Co.
Mutual Improvement Club (1903).....Vermillion, Marshall Co.
Cllo Club (1897).....Columbus, Kansas.
Centralia Reading Circle.....Nemaha Co.
White Rose Branch (1907).....Syracuse, Kansas.
Cedar Branch (1907).....Lookaba, Oklahoma.
Y. W. C. A......Princeton, Franklin Co.
Silver Prairie Club (1907).....Waukegan, Kansas.
(All communications for the Club Department should be directed to the Club Department, Kansas Farmer, Topeka, Kans.)

Program.

Responses—Souvenir postal cards.

1. Yellowstone Park.
2. Niagara Falls.
3. The Grand Canon.

This time we have a program on the native scenery of our own country. A souvenir postal card of some place of interest in America may be passed around by each member as her name is called and something said about it. It will be refreshing to learn about these places of interest mentioned above in the program. If some one has visited any place of interest it will be delightful to have her tell about it. But descriptions of them, given from reading about them—or just reading the original will be found to be enjoyable. If possible have pictures of the places described.

West Side Reading Club.

Our club meets the first and third Thursdays of each month. The officers are elected the first meeting in January. The officers elected for this

year are, president, Mrs. Laura White; vice-president, Mrs. J. H. Woodworth; secretary and treasurer, Mrs. Judith Baldwin; critic, Mrs. Anna Hollis.

At our meeting January 16 it was decided to hold our next meeting on January 29 and have a dinner, a Kansas Day program, and to invite the men to be present to help with both dinner and program.

According to arrangements, we met at the home of Mr. and Mrs. C. H. Clark on Kansas day. Most of the members and their husbands were present. There were several invited guests present also. A bountiful dinner was served, each member preparing a part of the dinner, after which there were toasts responded to by the gentlemen. Here are some of the subjects: "The Kansas Club Women," "Kansas Schools," "Kansas Wheat and Corn," "The Kansas Hen," "Kansas Climate," and "What I Like Best in Kansas."

A program of songs, reading, and recitation was responded to. A very enjoyable day was spent.

Delphos, Kans. JENNIE EAMES.

Farmers' Bulletins.

Domestic science clubs will find the Farmers' Bulletins, which the United States Department of Agriculture have printed about foods, of value to them in their study. They may be obtained free by sending to the Secretary of Agriculture at Washington, D. C. Following is a list:

- No. 23. Foods: Nutritive Value and Cost.
No. 25. Peanuts: Culture and Uses.
No. 29. Souring and Other Changes in Milk.
No. 34. Meats: Composition and Cooking.
No. 42. Facts About Milk.
No. 63. Care of Milk on the Farm.
No. 74. Milk as Food.
No. 85. Fish as Food.
No. 93. Sugar as Food.
No. 112. Bread and Bread-making.
No. 121. Beans, Peas, and Other Legumes as Food.
No. 128. Eggs and Their Uses as Food.
No. 129. Sweet Potatoes.
No. 131. Household Tests for Detection of Oleomargarin and Renovated Butter.
No. 142. Principles of Nutrition and Nutritive Value of Food.
No. 166. Cheese-making on the Farm.
No. 175. Home Manufacture and Use of Unfermented Grape Juice.
No. 183. Meat on the Farm; Butchering, Curing, etc.
No. 232. Okra: Its Culture and Uses.
No. 234. The Guinea Fowl and Its Use as Food.
No. 241. Butter-making on the Farm.
No. 249. Cereal Breakfast Foods.
No. 252. Maple Sugar and Sirup.
No. 254. Cucumbers.
No. 256. Preparation of Vegetables for the Table.

Gold Medals for Feed Mills.



The C. N. P. Bowsher Company, South Bend, Ind., have four gold medals in a neat plush frame hanging in their office where all may see who come. It is quite the common thing, we admit, to smile at the fellow who pins medals on himself, but after all, if he has acquired the right to do it, and has enough medals, the reasons why may be worth at least a passing notice.

At first glance looking at gold medals is just about as interesting as examining some of those twenty dollar gold pieces, which may happen to not belong to you, which trust not in God nor man either, so far as recorded, and which display the eagle in his flight as suggestive of how swiftly and easily they will get away from you. What you need is to have the reason for the ideas of the designer explained in order to fully appreciate the beauty of the



Gives Surprising Results

No pest is quite as discomfiting to an animal as the common sheep tick—they actually suck the very life blood of the sheep. All sheep have ticks. Why let the tick eat up your profit? Kill him on the spot.

Instant Louse Killer

is guaranteed—your money back if it does not do as we claim.

It is a powder which may be used in zero weather, and in less time than it takes to prepare a dip. No slop, no muss, no danger. It is the formula of Dr. Hess (M.D., D.V.S.) and destroys lice on horses and cattle, bugs on cucumbers, squash and melon vines, cabbage worms, rose slugs, etc. It is also a disinfectant and deodorizer. In cans with perforated top. Look for the word "Instant" on the can.

Sold on a written guarantee.

1 lb. 25c. } Except in Canada
3 lbs. 60c. } and extreme
West and South.

If your dealer cannot supply you we will forward 1 lb. can by mail or express, prepaid, for 35 cents.

MANUFACTURED BY
DR. HESS & CLARK,
Ashland, Ohio.

design. Despite the fact that the fellow who does not get them pool-pooches the idea that medals represent anything, the public in its sober moments thinks differently.

The Bowsher Company writes us these gold medals were awarded them at Chicago in 1893, Atlanta in 1895, Omaha in 1898, and St. Louis in 1904, for the best exclusive display of feed mills made at those expositions. The mills themselves were declared the most simple in construction, lightest in draft, and most efficient in operation, in the humble judgment of the committee of awards.

Medals do not come without effort; and continued and intelligent effort is needed to keep pace with the times and secure these awards against the world four times in succession. Not every wind that blows has caused the Bowsher Company to change its design or its sterling methods of doing business; no great boom has ever swamped its factory; but they have grown steadily in all departments and stuck to the paths of conservative optimism with both feet.

Their line of feed mills is complete. They have mills for all classes and for all purposes; for belt from two to twenty-five horse power, and in sweep style for both two and four horses, either geared or plain. All these embody in their design those exclusive features of the Bowsher mills which make them light running, easily handled, and dependable to operate at low cost. Their mills will even grind soft corn.

Circulars illustrating and describing the mills will be gladly sent free to all who address The C. N. P. Bowsher Company, South Bend, Ind.

A Splendid Poultry Fence.

The M. M. S. Poultry Fence which is advertised in this issue is an illustration of an old principle in fence making applied to a new fence and resulting in a splendid low-priced article.

This fence is very simply constructed, the wires which form the foundation all



running straight along the fence in such manner that in setting it up the tension is all horizontal. As a result the fence is not stretched out of shape in the setting, and it remains straight and symmetrical.

In addition to this feature, the top and bottom rail which are necessary wherever ordinary poultry netting is used, are done away with and the cost of building the fence is lessened to that extent. The posts can be placed sixteen to twenty-five feet apart and here again is a lessened cost. There is no strain on the meshes and they retain their shape and size, while a cable composed of two wires is placed at every foot in the height of the fence, adding great additional strength.

The makers of this fence assert that it is the cheapest and the most durable poultry fence on the market. It is handled by the DeKalb Fence Co., 739 Shukert Bldg., Kansas City, Mo., who will send a catalogue with full description on receipt of a postal card mentioning this paper.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisement for short time will be inserted in this column without charge for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

SEEDS AND PLANTS.

POP CORN—White pearl, yellow; white rice. Write for prices. H. G. Mosher, Topeka, Kans.

FOR SALE—Sixty day oats cleaned, 75 cents per bushel. C. E. Cheney, Manchester, Kans.

POTATOES—5 choice varieties. Kansas grown; not irrigated. 75 bushels and 75 bushels from 2 bushels seed grown by two of our patrons the past two years. Ship via the Santa Fe, Missouri Pacific or Frisco. Prices, etc., write Louis Bauer, Route 2, Sterling, Kans.

WE ARE IN THE MARKET for red clover, timothy, alfalfa, millet, cane and other seeds. If you to offer please write us. The Barteldes Seed Co., Lawrence, Kans.

ASPARAGUS ROOTS, any quantity. Prices low, write us. R. W. Weaver Company, Route 9, Wichita, Kans.

SEED CORN—Hildreth and Kansas Sunflower Highest yielding varieties at Kansas Agricultural College. See circular 12, by Prof. Ten Eyck. Write me for prices. J. J. McCray, Treasurer Kansas Corn Breeders Association, Manhattan, Kans.

SEED CORN—C. E. Hildreth, Altamont, Kans. Originator, breeder and grower of Hildreth Yellow Dent corn. First prize at fairs and corn shows. "1908 to 1906 the Hildreth has produced the largest average yields at Experiment Station."

WANTED—Seed sweet corn. Barteldes Seed Co. Lawrence, Kans.

Kansas City Stock Market.

Kansas City, Mo., Feb. 17, 1908. Attempts were made to depress prices on heavy steers last week, but were without success, that class selling better during the week than they have heretofore. Light steers closed the week 10@15c higher, and cows and heifers advanced 15@25c. Best stockers and feeders met a ready sale at 10@15c higher prices. The supply is only 7,000 cattle, market strong to 10c higher, in spite of a big run and a break of 10c at Chicago to-day. No fancy steers are here to-day, top \$5.55, although many sales lately have been at \$5.50@5.75, and prime steers would bring close to \$6. Bulk of the steers sell at \$4.80@5.30, as a good proportion are in only fair flesh, being pushed forward because of the advance in corn prices. There is a brisk demand for the she stuff, some choice Hereford heifers selling last Friday at \$5.65, and four loads of choice heifers to-day at \$5.15, cows at \$3.25@4.65, bulk of heifers \$3.75@4.75, bulls \$3@4.25, calves 25@50c above a week ago, top veals \$6.60. There is a limited demand from the country for good fleshy feeders at \$4.50@5, plain feeders \$4@4.50, stockers \$3.75@4.50, common stockers \$3@3.50, with a fairly large accumulation of the latter class on hand late last week. Total shipments to the country last week 300 car loads.

Lower provisions last week were the excuse for a lower tendency in the hog market. Several thousand hogs accumulated in the yards last few days of the week, whose owners refused to accept the reduced prices, but the situation revived a little Saturday and everything was cleaned up at a shade above the low point of the week. Lower prices have cut down the run to-day, as expected, to 8,000 head, and the market is 5@10c higher, top \$4.37½, bulk \$4.15@4.32½. Reports indicate plenty of matured hogs to come, and slightly better prices are looked for, as packers are making good money on the present basis, and desire to keep them coming. Light hogs made the biggest gain to-day.

The mutton market closed at the best point of the week on Friday, but is weak to 10c lower to-day, supply 12,000 head. Buyers take them freely, and the situation is healthy. Top lambs to-day sold at \$6.85, only 15c below top at Chicago to-day, and fair to good lambs bring \$6.40@6.75, wethers \$5@5.25, yearlings \$5.50@6.25, ewes \$4.60@5. A big string of half fat feeding yearlings, 93 pounds, sold to-day at \$5.35. J. A. RICKART.

Grain in Kansas City.

Kansas City, Mo., Feb. 17, 1908. Receipts of wheat in Kansas City to-day were 37 cars; Saturday's inspections were 29 cars. Shipments, 64 cars; at year ago, 102 cars. Prices were somewhat irregular, averaging unchanged for hard and about ¼c lower for soft wheat. Sales were made slowly. The sales were: Hard Wheat—No. 1, 1 car 96c, 1 car 95½c, 1 bulkhead car 95½c, 1 car like sample 93c, nominally 92½@96c; No. 3, 1 car 94c, 1 car 93½c, 2 cars 93c, 1 car 92½c, 2 cars 92c, 1 car very poor 88c, nominally 90@94c; No. 4, 2 cars 93c, 1 car 91c, 1 car 90c, 1 car 89c, 1 car 88c, 1 car 86c; rejected, 1 car 84c. Soft Wheat—No. 2, red, nominally 98@99c; No. 3 red, 1 car 96c, nominally 95½@97½c; No. 4 red, 1 car 95c, 1 car 93½c, nominally 93@96c. Durum Wheat—No. 2, nominally 81@82c. Mixed Wheat—No. 2, 1 car 94c; No. 3, 1 car durum 80c.

Receipts of corn were 66 cars; Saturday's inspections were 33 cars. Shipments, 18 cars; a year ago, 33 cars. Prices were mostly unchanged. The sales were: No. 2 white, 5 cars 54c; No. 3 white, 7 cars 54c; No. 2 mixed, 4 cars 54½c, 11 cars 54c; No. 3 mixed, 13 cars 54c; No. 4 mixed, 1 bulkhead car 53½c; No. 2 yellow, 1 car 55c; No. 3 yellow, 2 cars 54½c, 1 bulkhead car 53½c.

Receipts of oats were 18 cars; Saturday's inspections were 12 cars. Ship-

CATTLE

FOR SALE—4 Shorthorn bulls, all richly bred, One a pure Scotch. Registered and of serviceable age. Call or address C. W. Merriam, Topeka, Kans.

FOR RED POLLED BULLS full of World's Fair blood address D. F. VanBuskirk, Blumound, Kas.

FOR SALE—Four registered Shorthorn bulls, 1 and 2 years. Address E. D. Haney, Courtland, Kans.

REGISTERED Holstein-Friesian bull for sale; 3 years old. J. E. Huey, R. 6, Sta. A, Topeka, Kans.

FOR SALE—28 head of registered Aberdeen-Angus cattle. These are the good kind, and are mostly cows and heifers. I am changing my business and these cattle will be sold at bargain prices. Call on or write Frank Wasson, Clearwater, Kans.

FOR Red Polled bulls or heifers, write to Otto Young, Uica, Ness County, Kansas.

SPECIAL SALE—5 straight Oriskany Short-horn bulls for sale at bargain prices for quality. H. W. McAfee, Topeka, Kans.

SWINE

12 LARGE Duroc-Jersey growthy gilts, weighing 275 pounds, sired by Ohio Chief Jr. and bred to a good son of Kant Be Beat. A. G. Dorr, Osage City, Kans.

FOR SALE—Four young Duroc boars bred in the purple. Write for prices and breeding. R. L. Taylor, Emporia, Kans.

KANSAS HERD OF POLAND-CHINAS—I have lost my health and will sell my entire herd of 40 head for \$400. F. P. Maguire, Hutchinson, Kans.

FOR SALE—Duroc-Jersey pigs, both sexes, March and April farrow, by Financier 46801. Raised for usefulness. Farmers' prices; pedigree furnished. Also R. I. Red cockerels. Ben Warren, Maple Hill, Kans.

TWO HERD BOARS FOR SALE—Joe Cannon by Red Raven and out of Faust's Pride, a Kant-Be-Beat sow, and Colossal by Golden Rule, the boar at the head of Watt & Faust herd. Grant Chaplin, Green, Kans.

HORSES AND MULES.

FOR SALE—One Canadian Clyde, one Shire, one Percheron. Your choice, cheap for cash, or will trade one for good jack. Will give or take difference. L. Cox, Concordia, Kan.

FOR SALE—Jack, black with white points. Registered, 6 years old. J. W. Stormont, Dighton, Kans.

FOR SALE OR TRADE—A fine trotting bred stallion, 16 hands, 1,200 pounds, sorrel, fine style and action. Broken to harness and saddle. A bargain. Jas. Hildreth, Dighton, Kans.

FOR SALE CHEAP, or trade for land or town property, an extra good grade German coach stallion, 5 years old, dark bay, 1,400 pounds. J. W. Robinson, Seneca, Kans.

FOR SALE—Five-year-old Jack, 16 hands high, weight 1,000 pounds. Good foal getter. U. J. Smith, Clyde, Kans.

PERCHERON, BELGIAN AND SHIRE Stallions Imported by Burgess, Wenona Ill. For sale at Dawson, Neb. \$700 to \$1200 registered Draft stallions \$400 each. LeRoy Judd, Dawson, Nebraska.

FOR SALE—13 jacks and jennets, 13. Unlucky number! First buyer gets a bargain to break the hoo-doo. Don't write, come quick. Also 2 draft stallions. J. C. Strong, Moran, Kans.

FOR SALE—My stallions, jacks, brood mares and colts. R. E. Cowdrey, 112 Quincy St., Topeka, Kans.

PERCHERON STALLION FOR SALE—Owing to circumstances I am forced to sell my 7-year-old registered Percheron stallion. He is sound, kind, big, has a fine action and is a perfect show horse. Will fully guarantee him. Terms: Cash, approved notes, or will trade for cattle. J. B. Weldon, Eureka, Kans.

TWO JACKS FOR SALE—3 and 4 years old, Missouri bred. Address S. C. Hedrick, Tecumseh, Kans.

FOR SALE—One black team, 6 and 7 years old, weight 2600 pounds. Mr. and Mrs. Henry Schrader, Wauneta, Kans.

POULTRY.

S. C. R. I. REDS EXCLUSIVELY—Specials for shape and color. A first and nine other premiums at Kansas State Show. R. B. Steele, Sta. B, Topeka, Kans.

FOR SALE—Fine Buff P. Rock cockerels. Price \$1.50 to \$2.50. Eggs \$1 per sitting. Mrs. C. J. Clinkbeard, Wilmore, Kans.

BLACK LANGSHANS EXCLUSIVELY—Absolutely pure. Eggs for sale, \$2 per sitting of 15. Unfertilized eggs replaced at half price. B. P. Speelman, Beloit, Kan.

EGGS from Toulouse and Emden geese; Pekin, Rouen and Muscovy ducks; peacocks; Bronze and White Holland turkeys, Buff, White and Barred Plymouth Rocks; White, Brown and Buff Leghorns; Houdans; Buff Cochins; Cornish Indian game; Buff, White and Silver Laced Wyandottes; Rhode Island Reds, Buff Orpingtons, S. S. Hamburgs, Black Langshans, White Brahmas, Buff Cochins, Bantams, Seabright Bantams; Pearl and White Guinea; Dogs and fancy pigeons. I am going to make it a specialty in furnishing eggs this year by the setting; 50 and 100 geese eggs, \$1 per setting. Duck eggs, 18 for \$1. Poultry eggs, 15 for \$1. Write for free circular. D. L. Bruen, Platt Center, Nebr.

EGGS from a high scoring laying strain of R. C. Brown Leghorns and Mammoth Pekin ducks 15 for \$1. Incubator lots specialty. Mrs. J. E. Wright, Wilmore, Kan.

Buff Plymouth Rock Eggs

I won 1st cock, 92½; 2d hen, 92; 3d pen, 184; at the Kansas State Show, 1908. Eggs from these birds for sale at \$3 per 15. Satisfaction guaranteed. GEO. H. GARRETT, 1308 Logan St., Topeka, Kans.

ments, 8 cars; a year ago, 12 cars. Prices were unchanged to ¼c lower. The sales were: No. 2 white, 2 cars 49c, nominally 49@50c; No. 3 white, 3 cars 48½c, 4 cars 48c, 2 cars color 48½c, 1 car color 48½c, 1 car color 48c; No. 2 mixed, 1 car red 50c, nominally 48@48½c; No. 3 mixed, 3 cars 48c, 2 cars 47½c, 1 car 47c.

Barley was quoted at 65@75c; rye, 74@78c; flaxseed, \$1.03@1.05; Kafr-corn, \$5@91c per cwt.; bran, \$1.01@1.03 per cwt.; shorts, \$1.01@1.03 per cwt.; corn chop, \$1.05@1.08 per cwt.; millet seed, \$1@1.10 per cwt.; clover seed, \$10@15 per cwt.

When writing our advertisers please mention The Kansas Farmer.

REAL ESTATE

REAL ESTATE

FARM LOANS

Funds to lend at current rates on productive farm lands in Oklahoma, Southeastern Kansas and Southwestern Missouri.

Liberal Terms Prepayment Privileges

Call on or write to us for information.

THE DEMING INVESTMENT COMPANY, Oswego, Kansas

Branch Offices—Oklahoma City, Perry, Enid and Muskogee, Oklahoma.

SPECIAL

Six quarter sections 20 miles from Topeka, ¼ mile from good railroad town. All in wild meadow. This is the last of a large ranch. It can be had for \$25.00 per acre.

Ind. Telephone 1847. L. E. ANDERSON & CO, Topeka, Kans. 800 N. Kansas Ave.

A LITTLE GEM.

80 acres, 2½ miles from a good railroad town in Sedgewick County, 60 acres in cultivation, 2 acres timber, a good orchard, running water, some alfalfa, 5 room cottage, nearly new, painted white, white picket fence around the garden, good barn, will hold 10 horses, hay mow fork, granary, wagon shed, this barn is new, cow barn, hog-house, implement shed, corn-crib, chicken house, cattle corral, some bog pasture, all buildings good and painted, one-fourth mile to school, from 1 to 3 miles to churches, a high school in the town, only 2½ miles. This is all good land and a bargain at \$3,800. Terms: We have larger ones and nearly as good. The Nelson Real Estate & Immigration Co., 137 N. Main St., Wichita, Kans.

A Bargain.

320 acres good alfalfa and corn land, good orchard, good improvements; 240 acres in cultivation. Sumner County, Kans., 5½ miles from railroad station. A bargain if taken soon.

Neal A. Pickett, Arkansas City, Kans.

A SPECIAL BARGAIN

360 acres 5 miles from Ottawa, Kans., 300 acres second bottom, 60 acres upland, 150 acres tame grass, 5 acres alfalfa, 40 acres fine timber, 25 acres in wheat, balance under plow and pasture, fenced and cross-fenced, 8½ miles hog fence, 10-room house, well, cistern, large barn, cribs, scales, granary, implement house, hog houses, feed yards with living water and timber protection, ¼ mile to school, 2 to church, fine neighborhood. Price for thirty days, \$65 per acre. Terms to suit. M. E. Ford, Enterprise, Kans.

MR. STOCKMAN

Why stay on that high priced ranch, when you can get a big range for little money in the healthiest climate and best stock country on earth? Rich land, fine grass, abundant water. Join the American colony in the beautiful highlands of Mexico. Let us show you what Kansas ranchmen think about the country. Write for photos and description of ranches and farms. J. W. Magill & Co., Topeka, Ks.

MISCELLANEOUS.

WANTED—Every owner of stock, poultry, etc., to send 50 cents for particulars how to become their own veterinary, and other valuable information and formulas that will save and make money. Worth several times amount asked. This offer is made to introduce our famous Carbolic Salve. Two ounce box free with every order. Money back if not satisfied. Rural Supply Co., Linden, N. J.

BOSTON HISTORICAL POST CARDS—10 beautifully colored, for 25 cents (silver). Old South Church, Washington Elm, King's Chapel, Paul Revere's Home, Boston Common, Harvard Stadium, etc. A. M. Anderson & Co., 3 Home St., Malden, Mass.

WANTED—A lady housekeeper for three gentlemen. Will be furnished a good home and good wages. Must be single and agree to remain a year or more. German descent preferred. References required. None under 21 years need apply. Address O. W., Baileyville, Kans.

WANTED—Girl for general housework. Small family. \$4 per week. R. J. Linscott, Holton, Kans.

FOR SALE—A Remington Typewriter. A machine now in use at The Kansas Farmer office. It is in good condition. Will sell for \$30, as it is to be replaced with a new machine. Call, or write to The Kansas Farmer Company, Topeka, Kans.

WANTED—By experienced agricultural college graduate, a position as manager of an up-to-date dairy farm. Preferably in Kansas or Colorado. E. E. Greenough, Manhattan, Kans.

WANTED—A second-hand traction engine, not less than 16 horse power. Dr. W. D. Barker, Chanute, Kans.

Stray List

Week Ending February 13.

Chase County—W. B. Penny, Clerk. HEIFER—Taken up by E. P. Allen, in Diamond Creek tp. (P. O. Elmdale), one black 2-year-old heifer, also one red and white 2-year-old heifer; valued at \$25.

McPherson County—J. O. Sturtevant, Clerk. HORSE—Taken up by M. A. Wain in Battle Hill tp., January 10, 1908, one 900 pound dapple gray horse, 4 feet 8 inches high, diamond on left shoulder, A T on left hip; valued at \$50.

Week Ending February 20.

Greenwood County—W. H. Bonnett, Clerk. MARE—Taken up by W. H. Edwards, in Janesville, tp., November 1, 1907, one 12-year-old bay mare, 3K on left shoulder; valued at \$20.

Elk County—J. L. Logsdon, Clerk. STEER—Taken up by W. A. Jackson, in Oak Valley tp., January 20, 1908, one 3-year-old dark red steer, crop out of right ear; valued at \$40.

Shawnee County—S. G. Zimmerman, Clerk. STEER—Taken up by James Maskill, in Roseville, December 30, 1907, one 2-year-old red steer, both ears cropped, part of tail off, brand on left side that cannot be made out; valued at \$25.

\$200 TO \$300 PER MONTH in the real estate business. \$10 capital will start you. Experience unnecessary, as I prepare you and appoint you my special representative. Write for my free book. C. H. Gray, Pres., 1867 Century Bldg., Kansas City, Mo.

"Do You Want to Own Your Own Home?" If so we can sell you 103 acres 4 miles from station, 60 acres of timbered bottom land under cultivation, with good house and barn, large orchard of all kinds of fruit, two good wells, fine feed lots, also watered by creek and pond, for \$32.50 per acre with \$1200 cash, balance in 10 years with privilege of prior payment. Hurley & Jennings, Emporia, Kans.

BARGAIN—240 near Emporia, fine alfalfa bottom farm; \$7,000 improvements. Priced low, \$3,500 will handle. L. R. Krehbiel, Lorraine, Kans.

WRITE J. D. S. HANSON, HART, MOH., for best list of fruit, grain and stock farms.

800 ACRE stock ranch for sale or trade. Has two sets of improvements and two orchards. Mr. and Mrs. Henry Schrader, R. 1, Box 6, Wauneta, Kans.

QUARTER SECTION of fine land in Sherman County, close to Goodland, to trade for part horses, cattle or mules. T. J. Kennedy, Osawatomie, Kans.

Eighty acres, Anderson County, three-fourths of a mile from Amiot. Four-room house, barn for ten head of stock, good soil, location and water. Price, \$3,500. B. F. Fridley, Amiot, Kans.

\$250 WILL BUY 60 acres; Christian County, Southeast Missouri. Perfect title; terms \$10 monthly. W. M. B. Williams, Mt. Vernon, Ill.

Farm Bargains in East Kansas

Write for new land list describing farms that are offered at bargain prices. Corn, wheat, clover and alfalfa land.

MANSFIELD BROS., Garnett, Kans.

MISSOURI FARMS FOR SALE

Everman has a farm for every man. Write for description and price list.

John W. Everman, Gallatin, Mo.

Farm Opportunities Near SALEM, OREGON

on the beautiful Willamette River. Hcp, walnut and fruit farms pay \$200 to \$500 per acre net; dairy farms pay \$200; improved farms \$25 to \$300 per acre; unimproved, \$5 to \$25. Excursion rates to Salem in March and April. For information on and hard facts address BOARD OF TRADE, ROOM 24, SALEM, OREGON

Real Estate Wanted

WANTED—Would like to hear at once from owner having good medium size farm or small business for sale in any good prosperous locality. Please give price and description and reason for selling. State when possession can be had. No agents need reply. Address

Lock Drawer 984, Rochester, N. Y.

NOW IS THE TIME TO GET A HOME IN SUNNY COLORADO

They are coming here by the hundreds for health, happiness, homesteads and low priced lands. I locate homesteaders and sell land, in this the most healthful climate in the United States. Elevation 3500 feet; better for lung troubles than higher altitudes. This is the coming wheat producing country of the middle west; one crop pays for the land twice over. Come over the Mo. Pac. Ry. and get off at Sheridan Lake, 14 miles west of the Kansas line and let me show you. S. R. Smith, Sheridan Lake, Colo.

A Cheap Wheat Farm in Stanton Co., Kans.

160 acres level as a floor. Deep, black soil, ready for the plow. In German settlement south part of the county. Price only \$800.

ALBERT E. KING, McPherson, Kans.

R U LOOKING



For a bargain? I have these direct from the owners, and they will pay your expenses if not found as represented. In Kan., Mo., Okla., Nebr., Colo. and Tex., 897 farms, 78 ranches, 61 stocks of goods, also lumber yards, hotels, mills, elevators, phone plants, horses, cattle, etc. I have some splendid farms and ranches to exchange for

rentals and merchandise. When you wish to buy sell or exchange, I would like to hear from or see you.

FRANK GEE, Lawrence, Kans.

DUROC-JERSEYS

DUROC-JERSEYS

DUROC-JERSEY

Bred Sow Sale, Tuesday, Feb. 18, '08

JNO. W. JONES & SON, Concordia, Kans.

BLUE VALLEY HERD REGISTERED DUROC-JERSEYS

Breeders of high-class, pure-bred Durocs. Leading strains of Duroc families represented in our herd. All correspondence given immediate attention; and young stock for sale at all times.

WATTS & DUNLAP.

Martin City, Mo.

MADURA DUROCS.

BROOD SOWS—Some fine brood sows bred to Major Roosevelt and Miller's Nebraska Wonder, he by Nebraska Wonder.

FRED J. MILLER, Wakefield, Kans.

CHOICE REGISTERED Durocs, P. C. and O. I. C. hogs; Shorthorn, Jersey and Gallopway cattle; 40 varieties of poultry and pet stock at farmers' prices; stamps for catalog. A. Madsen & Sons, Atwood, Kans.

OAK GROVE HERD OF DUROCS

Herd headed by Choice Goods H. 3471 by Hunt's Model and Corrector's Model 3481. I have for sale a few choice males of spring and fall farrow that will be priced worth the money.

SHERMAN REEDY, Hanover, Kans.

HILLSIDE DUROCS AND HEREFORDS

Choice boars ready for service. Bred gilts and fall pigs, both sexes. Mc's Pride III, Oom Paul V, and Crimson Knight 62579 in service. 6 good Anxiety bred Hereford bull calves. Prices to correspond with the times.

W. A. WOOD, Elmdale, Kans.

PEERLESS STOCK FARM

DUROC-JERSEY HOGS

FOR SALE.

R. G. Sollenberger, Woodston, Kans.

PIGS SHIPPED ON APPROVAL

300 head of Durocs, all ages, representing the blood of Combination, Valley Chief, and a son of Kant-Be-Beat.

T. L. LIVINGSTON, Burchard, Neb.

Silver Lake Durocs.

Fifty fall pigs will be priced right, either sex. Bred gilts will be priced right on mail orders. Bred sow sale Feb. 19. Boars in service, Lone Jack 30291, Paul Jumbo 42209.

W. C. WHITNEY, Agra, Kans.

B. N. WELCH,

Breeder of DUROC-JERSEYS. Crimson Chief 49609 heads my herd. Young stock for sale.

Waterville, Kansas.

Howe's DUROCS; 100 early spring pigs, the best I ever raised. Improver, Top Notcher, Sensation and Gold Finch blood lines. Call or write.

J. U. HOWE, Route 3, Wichita, Kans.

EUREKA MANOR HERD OF DUROC-JERSEYS.

Choice breeding stock; the best I ever raised. Fall and spring boars, fall and spring gilts, and tried sows, bred or open. Prices the lowest, quality and breeding the best. Herd headed by Eureka Tip Top 43641 sired by the great World's Fair grand champion Tip Top Notcher 20729 and Olathe Chief 61623 by Ohio Chief 8727, the world's champion. Write your wants or call and inspect my herd.

J. F. ENSOR, Olathe, Kans.

SPECIAL!

I have a car of long yearling bulls, a car of bull calves, a car of yearling heifers and a car of heifer calves for sale. These cattle are all in good growing condition and are mostly reds. They were sired mostly by Baron Ury 2d 124970, Bold Knight 179064 and Headlight 243806.

C. W. TAYLOR, R. 2, Enterprise, Kans.

Wall Street

Might have taken you in had I not come to your rescue with a few sows carrying the blood lines of Kruger, Buddy K., Tip Top Notcher, Crimson Wonder and Ohio Chief, bred for early farrow to Secret Prince 68211, A. B. Top Notcher 47323, Big Chief's Special 68213, Top Notcher Model and Billy K., Jr. Write me your wants.

G. W. COLWELL, R. 2, Summerfield, Ka.

Klondyke Durocs

One April 20, 1907, male at \$15.50; 5 October 22d, cherry red, at \$8.50 each. The blood of Hunt's Model 20177, Prover 63589, Improver 2d 13365, Sam Advance 63587, Proud Advance 23549 in herd.

G. E. Newton, Whiting, Kans.

Ralph Harris Farm Duroc-Jersey Herd

Kansas Advancer 67427 and Crimson Advancer 67425 at head. At the American Royal, 1907, with 3 entries, we took reserve grand champion sow; champion sow under 12 months; let and 2d sows under 12 months, and 2d in junior yearling sows. We look for excellent pigs by our new herd boars.

Ralph Harris, Prop. B. W. White, Mgr. WILLIAMSTOWN, KANS.

Farm station, Buck Creek, on the U. P., 45 miles west of Kansas City.

K. & N. Herd Royally Bred Duroc-Jersey Swine

Have a few gilts that I will sell at reasonable prices, bred for April farrow. Also a few fall boars of September, 1907, farrow. Write for prices and descriptions.

R. L. WILSON, Chester, Neb.

Deer Creek Durocs

100 pigs of March and April farrow by sons of Ohio Chief, Tip Notcher and Kant Be Beat. Ready for shipment after July 1.

BERT FINCH, Prairie View, Kans.

Fairview Herds Durocs and Red Polled

Some good young boars by Crimson Challenger 43877 for sale. No females or Red Polled cattle for sale now.

J. B. DAVIS, Fairview, Brown Co., Kas.

CRIMSON HERD OF DUROCS.

Herd boars, Red Perfection by Leona's Chief, Allean Gold Dust by Parker Mc., and Red Pathfinder by American Royal. Iowa Girl still farrowing good litters. The best blood lines of the breed with size and quality combined. Spring pigs for sale. J. W. Reid, Fortia, Kas.

ATTENTION

Hog raisers of every kind. Had you forgotten that this is just the time to buy that male pig to head your herd? Well, it is a fact and you had better get in line and come to the Rosebud and get something fine.

ROSEBUD STOCK FARM, Rathbun & Rathbun, Prop., Downs, Kas.

Elk Valley Durocs

Herd headed by Doty Boy 29279, a son of the champions Goldfinch and Dottie. My sows are by prize-winning boars. Choice pigs of both sexes for sale.

M. WESLEY, Bancroft, Kans.

CUMMINGS & SONS DUROCS

100 topy pigs of early March farrow, by Lincoln Tip, Junior Jim, Tip Top Notcher Jr., Kants Model, Beautiful Joe and our herd boar OH HOW GOOD, second prize winner at Nebraska State Fair. Sale in October; write or visit.

W. H. CUMMINGS & SON, Tecumseh, Neb.

Vick's DUROCS are bred for usefulness. Choice young stock for sale by such great boars as Vick's Improver 47385, Red Top 32241, Fancy Chief 24823 and other noted sires. Correspondence invited. Visitors coming to Junction City and phoning me will be called for. W. L. VICK, Junction City, Kans.

CHASE COUNTY HERD OF DUROCS.

Golden Chieftain, a grandson of Ohio Chief 5727A, Harter's Choice, a granddaughter of Crimson Wonder and first and grand champion sow at St. Joseph, 1907, and others of the best breeding. Young stock for sale at all times. J. H. GAYER, Route 1, Cottonwood Falls, Kans.

Stadt's Durocs

A fine line of sows and gilts bred to Long Wonder, Nelson's Model, and a son of Kant Be Beat, at public sale prices less expenses. Also 2 or 3 good spring boars at panic prices if taken soon.

J. F. STAADT, Ottawa, Kans.

Lamb's

HERD OF DUROCS is built along the most fashionable blood lines and is noted for the individuality of its make-up. 50 fine pigs sired by the great Hanley, Lincoln Top, Buddy L. by Buddy K. IV, Crimson Jim, Ambition and other great sires. We invite correspondence with prospective buyers.

Elmer Lamb, Tecumseh, Nebr.

Timber City Durocs

Fall and spring boars by You Bet 31111, Doty Wonder 41889, Geneva Chief 8049, Rose Top Notcher 54059, and others. Sows bred to the above boars for sale. Over 400 head in herd. Write your wants.

SAMUELSON BROS., Bala, Kans., and Cleburn, Kans.

ROSE LAWN Duroc-Jerseys

I have several high-grade Lincoln rams for sale.

L. L. VROOMAN, Rose Lawn Place, Topeka, Kans.

Capital Herd Duroc-Jerseys.

Young boars and gilts for sale from such sires as Missouri Goldfinch, Lord Wonder and Parker Boy, with excellent breeding on dam's side. All are good thrifty pigs. Call or write.

J. S. White & Son, R. 3, Topeka, Kans.

FOUR-MILE HERD DUROCS

Choice fall boars by Orion Jr. 31497 and Ohio Chief 2d 41197. 50 spring boars, growthy, heavy bone, good feet, nice color; sired by the above named males, and E's Kant Be Beat 57543, Crimson Chief 31263, Rose Top Notcher 54059, You Bet 31111, Tip Top Notcher 27726, and other noted sires. Sows of the best and leading families. Write or visit herd. Visitors met at trains.

E. H. Erickson, R. 1, Olsburg, Kans.

DUROC-JERSEYS

Gold Standard Durocs
10 extra spring boars, and 40 choice gilts open, or bred to a good son of Kant Be Beat at panic prices.
CHAS. DORR, R. 2, Osaage City, Kans.

PLEASANT VIEW DUROCS

70 early pigs by Quality King 59331, Orion Boy 42137, and W's Top Notcher 59333. Also some choice tried sows at farmers' prices.
THOS. WATKINSON, Blaine, Kans.

PRAIRIE QUEEN DUROCS

70 early springs that are tops, by the great Kant Be Beat, Alex Heir, and Wilkes Echo, out of daughters of Ohio Chief and Village Pride, and other good ones. G. H. Ramaker, Prairie View, Kans.

Orchard Hill Herd Duroc-Jerseys

A few good spring boars yet for sale. Dispersion sale February 23.

R. F. NORTON, Clay Center, Kans.

Grant Chapin's Durocs

FOR SALE—Some very choice young boars of April and May farrow sired by Model Chief. Again and out of my best producing sows. Some of them herd headers.

GRANT CHAPIN, Green, Kans.

POLAND-CHINAS

FAIRVIEW STOCK FARM

BRED SOW SALE—45 head of high grade Poland-Chinas—40 choice bred sows and gilts, 5 extra good boars; at Fredonia, February 29. Send for catalog.

A. K. SELL, R. 2, Fredonia, Kans.

BOARS, BOARS.

Choice spring males at right prices, by Grand Chief, Masterpiece, Nonpareil, Choice Chief, E. L. 2d, and other noted sires. Call on or write.

THOS. COLLINS, R. 4, Lincoln, Kans.

Stalder's Poland-Chinas

I have pigs for sale from the leading strains of the country. Prices reasonable. Write for full particulars.

O. W. STALDERS, Salem, Neb.

GOOD POLAND-CHINA'S

I. B. Good, Route 2, Peabody, Kansas
Offers bred Poland-China gilts by Faultless Jr. 2d and Happy Prince bred to Big Bone Chief. Also fall pigs of either sex by Big Bone Chief. Prices reasonable.

Maple Valley Herd Poland-Chinas

Some fine gilts bred for April farrow that were sired by On The Line 113401s and Col. Mills 42911, and are bred to Mendlers Dream 43921. Also some choice young boars; one fine Shorthorn bull calf; B. P. R. eggs \$1.50 per 15. Have 120 Poland Chinas and can fill any kind of order. C. P. Brown, Whiting, Kans.

Erie Gas Light Herd POLAND-CHINAS.

Headed by Sunshine Chief 2d by Chief Sunshine 3d, dam, Queen Perfection, Margarette C. Mayflower, Ideal Sunshine 3d and other great sows in herd. Stock for sale.

J. K. MAHAFFEY, Erie, Kans.

JOHN BOLLIN,

Route 5, Leavenworth, Kans.
Breeds and Sells Poland-Chinas
Popular . . .

The State and World's Fair winning boars Nemo L's Dude and The Picquet in service. Bred sows and serviceable boars for sale.

SUNNY SLOPE POLANDS

A number of spring pigs, either sex, the farmers' kind, at bottom prices. Gilts will be sold bred or open. Also a litter of Scotch Collie pups, the great watch and cattle dog.

W. T. HAMMOND, Fortia, Kans.

Becker's POLAND-CHINAS. 30 bred sows and gilts by Dandy Rex, Emperor Chief, Black Boy; and bred to Dandy Rex and Trouble Maker 2d. Prices reasonable.

J. H. BECKER, Newton, Kans.

CEDAR GROVE HERD

Of pure-bred POLAND-CHINA HOGS
We will have some bargains this season to offer the public. J. A. HEBREW, Stockton, Kans. Mention Kansas Farmer when you write.

WELCOME HERD POLAND CHINAS

Headed by the \$1,000 TOM LITTON. Sows in herd—Springtime by Meddler 2d, a \$710 gilt bred to Perfect Challenger; Cherry Blossom by Perfection E. L., a \$310 gilt bred to S. P.'s Perfection; Eloquence by Corrector, a \$180 sow bred to Meddler 2d; Maxie by Chief Perfection 2d, a \$365 gilt bred to Meddler 2d. Stock for sale at all times. Write us or come and visit herd.

JOSEPH M. BAIER, Elmo, Kans.

Young Boars For Sale

Chief Enterprise at head of herd.

Am offering 35 head of spring boars sired by Chief Enterprise. Heavy boned, growthy, thick fleshed, and in splendid condition. This stuff will be priced right. Write me for further information.

ISAAC TISON, Mound City, Mo.

POLAND-CHINAS

A. M. Jordan
Alma, Kans.

POLAND-CHINAS of modern breeding. "Advance" by Chief Perfection 2d, and "Grand Mischief" in service.

SIGLER'S

Our Poland-Chinas are rich in breeding and individuality. Our prices are right and we respectfully invite correspondence with prospective buyers.

A. R. SIGLER, Pickrell, Neb.

The Useful Type of Poland-Chinas

Herd headed by Filate Chief 43565 by John-son's Chief 35774, and Major King 43564 by Major M. 31527, a 1000-pound hog.

E. D. MORRIS, Bern, Kans.

POLAND-CHINAS. SHORTHORNS.

A few thrifty young bulls and boars of the best breeding from champion and prize-winning families. Prices reasonable for quick sales.

R. M. BUCK, R. 2, Eskridge, Kans.

E. L. Keep On Poland-Chinas.

Pigs by the world's record breaker, E. L.'s Keep On, Meddler 2d, Perfect Challenger, Masticator, On Time, Maximus, Highland Chief Jr., Polman's Meddler, Skybo, Grand Perfection by Grand Chief; and out of sows by Meddler, Chief Perfection 2d, Perfect U. S. and Perfect I Know, Keep On Perfection by Keep On, Sir Darkness by Chief Perfection 2d, Cecil by Mischief Maker, Conviner by Chief Perfection 2d, Philanthropist by Expansion Lamp-lighter, Big Boy by Perfect U. S., Peace Maker by Mischief Maker, and Sunflower Perfection. Herd in care of H. J. Rickley. Address all communications to Dr. B. P. Smith, Longford, Kans.

A. B. GARRISON Summerfield Kansas

Breeder of Poland-Chinas That Win

where size, bone and quality are the chief requirements. 110 early pigs by Prince You Tell, my 1000-pound show boar, and Gold Medal, a grandson of Expansion. Write for description and prices.

CHESTER-WHITES

O. I. C. SWINE

For Sale—August and September pigs, either sex. Their breeding is of the best. Also White Wyandottes. Write your wants. S. W. ARTZ, Larned, Kans.

Andrew Carnegie Herd O. I. C.'s

Proven sows bred for fall farrow. Also 50 early pigs ready for shipment after July 15. Prices reasonable.

G. S. GODLOVE, Osaage, Kans.

O. I. C. The World's Best Swine

Spring pigs for sale, singly, in pairs or trios, properly mated and sired by Norway Chief Enterprise at head of herd. Chief, our first and sweepstakes, and other good boars. Write for our tree booklet. Some snaps for first orders. Address

THE FISHER LIVE-STOCK CO., Hastings, Neb.

BERKSHIRES

Berkshires

Of both sexes for sale. Herd headed by Imported Baron Compton 89195.

W. J. GRIST, Osawkee, Kans.

Ridgeview Berkshires

—FOR SALE—

One aged and one yearling boar and spring pigs of both sexes.

MANWARING BROS., Route 1, Lawrence, Kans.

GEO. W. BERRY, High-Class Berkshires

R. F. D. No. 4, Lawrence, Kans.

Breeder of Masterpiece, head of the superb Masterpiece family; also Black Robinhood, head of the great Black Robinhood family.

For Sale—Show pigs and herd headers, fall of 1907 farrow. Choice boars and gilts at moderate prices.

Knollwood Berkshires

Headed by Pacific Duke 56691, dam Marjorie 37491 by Baron Duke 23d 50000, a son of Baron Lee 4th, the sire of Lord Premier and Duchess 120th 23675, grand dam of Premier Longfellow. Stock of all ages for sale. All stock guaranteed as represented.

E. W. MELVILLE, Eudora, Kans.

BOX ELDER HERD BERKSHIRES

Special price on 150 to 200 pound boars for 15 days only. One-fifth off the regular price. These pigs are by Master's Longfellow 80364 and Legal 80371.

C. G. NASH, ESKRIDGE, KANS.

BERKSHIRES**Guthrie Ranch Berkshires.**

The Guthrie Ranch Berkshire herd, headed by Berryton Duke, assisted by his prize-winning son, Revelation, and his half-brother, Baron Duke. Size, bone and quality for the farmer; style and finish for the breeder. A few extra good boars and over one hundred fall pigs to choose from.

T. F. GUTHRIE, Strong City, Kans.

King's Berkshires

Have weight, quality and constitution developed by rustling for the best pork producing food on earth, alfalfa and blue-grass, supplemented with a light ration of grain and mill-feed. They are bred right and best of all are priced right. Write for anything in Berkshires to

E. D. KING, Burlington, Kans.

MOREAU VALLEY FARM BERKSHIRES

The Home of Moreau Duke 84409

A few choice gilts bred to Moreau Duke 84409, one of the greatest producing sons of premier Longfellow 68600, out of prize winning dams. Prices reasonable.

Jones & McGinnis, Enon, Mo.

RED POLLS**RED POLLED BULLS.**

Sired by Nebraska's greatest show and breeding bull, Falstaff 5th, weight 2700 pounds. The young bulls are the kind that weigh from 900 to 1000 at 12 months. In shipping we can make good connections with all Kansas railroads. Geo. P. Schwab & Son, Clay Center, Neb.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON, Route 1, Pomona, Kans.

Foster's Red Polls.

Some choice young bulls and heifers, also a few good cows for sale. Prices reasonable. Chas. Foster & SON, Eldorado, Kans.

RED POLLED CATTLE AND POLAND-CHINA SWINE

Best of breeding. Write or come and see. CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

GALLOWAYS**CAPITAL VIEW GALLOWAYS**

Over 200 head. Extra lot of young bulls by Imp. Baillie of Lockside 23524, Lost Boy of Platte 12633, and Tip Top 22260.

G. E. CLARK, 2301 Van Buren St., Topeka, Kans.

JERSEYS**Linscott's Jerseys**

Established 1878. Registered in A. J. C. C. My herd has outgrown the carrying capacity of my farm and to reduce it in numbers, offer for sale any animal, with a very few exceptions, in the herd for from \$25 to \$125. Remember this is from the largest and oldest herd of registered Jerseys in Kansas. Young stuff both sexes for sale at all times. Correspondence and inspection invited.

R. J. LINSOTT, Holton, Kans.

POLLED DURHAMS**Polled Durhams FOR SALE**

Double Standard Polled Durhams. Choice young bulls sired by Kansas Boy X 2585, brother to first prize winners last two years. Write or come and see stock.

D. C. VanNice, Richland Kans.

ABERDEEN-ANGUS**Allendale Stock Farm**

Pure-bred Aberdeen-Angus cattle. All leading families represented. A few good herd bulls for sale.

W. A. HOLT, Savannah, Mo.

When writing our advertisers please mention The Kansas Farmer.

SHORTHORNS

SHORTHORNS and POLAND-CHINAS. FOR SALE—A few choice Scotch heifers by the pure Scotch bull Cruickshank Clipper and out of our best cows. Also a number of splendid gilts of the good growthy kind, bred for March and April farrow. Prices reasonable. Farm adjoins depot. Call or write. Geo. B. Ross & Sons, Aiden, Kans.

New York Valley Herds of Shorthorn Cattle and Berkshire Hogs.

No hogs for sale at present but will sell some extra fine Scotch-topped bulls and heifers from 8 to 18 months old. Come and see my stock and be convinced.

J. T. BAYER, Yates Center, Kans.

Scotch Topped Bull.

For Sale or Trade—My 4-year-old herd bull, Maud's Duke of Wildwood 218428; has scale and quality, is a good individual and a sure breeder. Also choice Duroc spring gilts for sale.

T. J. DAVIS, Nickerson, Kans.

SELDEN STOCK FARM

Scotch and Scotch topped Shorthorns for sale. 8 young bulls from 8 to 24 months old, all reds and good quality. Sired by Baronet of Maine Valley 178876 and Secret Emporer 232647. Prices reasonable. Inspection invited.

HOADLEY & SIGMUND, Selden, Kans.

Providence Farm Shorthorns

Blythe Conqueror 224431, full Scotch show bull at head of herd, sire and dam both imported. Scotch and Scotch topped individuals, both sexes for sale. To make room will give special prices for next 30 days. A few choice young bulls, cows with calves at foot and cows and heifers bred and young heifers not bred. Foundation stuff a specialty.

J. L. STRATTON & SON, 1 mile Southwest Ottawa, Franklin Co., Kas

Shorthorns and Poland-Chinas

For Sale—7 bulls from 8 to 18 months old (6 of these are straight Scotch), a few pure Scotch and Scotch-topped heifers from 8 months to 2 years old. These are by our pure Scotch bull, Cruickshank Clipper, and out of our best cows. Also some topy spring boars, and a few choice gilts bred for spring farrow. Prices reasonable. Farm adjoins depot. Call on or write

GEO. B. ROSS & SONS, Aiden, Kans.

WESTLAWN SHORTHORNS

A few extra choice bulls, 6 to 18 months old, by my straight Scotch bull, Lankland of Orange and out of heavy milking dams. Prices reasonable.

E. B. GRANT, R. 9, Emporia, Kans.

Prospect Farm Shorthorns

The oldest Shorthorn breeders in Kansas. The largest herd of Cruickshanks in Kansas. Herd headed by Violet Prince 145647 and Orange Commander 220590. Young stock of both sexes and some cows for sale. Quality and prices right.

H. W. McAFEE, Bell Phone 59-2. Topeka, Kans.

HEREFORDS**Maplewood Herefords**

The great 2,400 pound Dale Duplicate 2d, Chief herd bull, son of the great Columbus. High-class stock for sale.

A. JOHNSON, Clearwater, Kans.

STAR BREEDING FARM Herefords and Durocs.

Judge Spencer 97224, a prize-winner at the American Royal in 1906, heads Hereford herd. Hanley Lad 4823 by Hanley 42345, heads Durocs. For sale, choice stock of both breeds, any age or either sex, at rock bottom prices.

SAM'L DRYBREAD, Elk City, Kans.

HIGH-CLASS MODERN HEREFORDS.

The great Protocol 2d 91715, Printer 69684, Beau Beauty 192235 and Beau Brummel 10th 167719, head of herd. Choice young stock of both sexes for sale.

Hazford Place, Robt. H. Hazlett, Eldorado, Kans.

HOLSTEIN-FRIESIANS**Somerheim Farm Breeds HOLSTEIN-FRIESIAN CATTLE, POLAND-CHINA SWINE.**

Stock for sale at all times. Jas. B. ZINN, Box 348, Topeka, Kans.

THE LILAC FARM.

We have a fine lot of bull calves sired by Lilac Fraterje Sir De Kol, 1st prize bull Topeka State Fair, 1905, which we are offering for sale at a very reasonable price. The Lilac Farm, Hughes & Jones, Proprietors, R. 2, Topeka, Kans.

HOLSTEIN BULL CALVES

from large producing dams. You can increase your profits 50 per cent with this class of stock. Address

E. B. COWLES, 608 Kansas Ave., Topeka, Kans.

HORSES AND MULES**OAKLAWN FARM**

Largest and Choicest Collection

**PERCHERONS FRENCH COACHERS**

To be found on this continent

Included in our last importation, which arrived February 5th, 1908, are the tops of twenty of the greatest breeding establishments of France. Nearly every stallion has been approved and subsidized by the French government for the season of 1908.

Most reasonable prices and terms Safest guarantee

DUNHAM & FLETCHER Wayne, Du Page County, Illinois

JACKS! JACKS!

147 Big Black Kentucky Mammoth, Imported Catalonian and Malaya Jacks, 40 Jennets, 30 saddle and harness stallions, 40 saddle mares, Tamworth and Poland-China hogs. Our catalogue is the finest ever issued by any jack breeder. Our prices are right and you will positively buy if you visit our farms and mean business.

J. F. COOK & CO., Lexington, Ky. We will open a branch barn in Central Kansas the first of March.

For Sale.

5 big jacks from 3 to 5 years old, 15 to 16 hands, all good ones; also 4 Percheron stallions, two 2 years old, weighing over 1800 pounds each at 29 months old and will weigh a ton at 3 years old. Is that the kind you want?

JOE FOX, Greeley, Anderson Co., Kans. (On Mo. Pas. Ry.)

Percheron Horses

Stock for sale. Come and see us or write your wants.

F. H. Schrepel, Ellinwood, Kas.

Jacks, Jennets, Stallions

30 black jacks of good ages, heavy boned and up to 16 hands high; 38 jennets; stock nearly all of my own raising and acclimated. Also several draft stallions and one saddle stallion for sale. Prices reasonable.

PHILLIP WALKER, Moline, Elk Co., Kans.

JACKS.

I have the largest line of big, first-class, imported and home-bred Jacks in the world. Mules are getting higher and in greater demand than ever. If horses get higher, mules will get higher still, just the same. RARE MULES. If you do not like mules, remember I stand in the front rank with the finest line of extra big imported Percherons, Belgians and American-bred ton stallions, at lower prices than you can find them anywhere. All stock guaranteed 65 per cent breeders. W. L. DeCLOW, Cedar Rapids Jack Farm, Cedar Rapids, Iowa.



F. W. POOR, Potter, Kans.

FOR SALE**PIKE COUNTY JACK FARM.**

Largest importer and breeder of Mammoth Jacks in the United States. Every stall in my barns has a big Mammoth Jack, 15 to 17 hands high, 1,000 to 1,300 lbs., that I will sell on one and two years time to responsible parties. If my Jacks are not just as I represent them I will pay all railroad expenses.

LUKE M. EMERSON, Bowling Green, Mo.

THE BROWN FARM

Horses—Cattle—Swine—Poultry.

Silkwood 12324, in stud, race record 2:07; Guideless, record 2:07 1/2; sire of two in 2:10 and of eleven with records better than 2:25. Fee, \$25 to insure. Pasture and feed reasonable. Registered Shorthorns and Jerseys. Large strains. Several Jersey bulls for sale. O. I. C. Swine. Choice boars and gilts for sale. R. I. Red chickens, both rose and single comb. Eggs \$1 per 14, \$5 per 100. Correspondence, inspection and patronage solicited.

T. O. BROWN, Prop., Reading, Kans.

AUCTIONEERS**JAS. W. SPARKS**

Live Stock Auctioneer MARSHALL, MISSOURI Twenty years selling all breeds.

E. E. POTTER, Sterling, Kansas, Live Stock Auctioneer.

Pure-bred stock sales a specialty. Best of references. Write, wire or phone for terms and dates at my expense.

John Daum Nortonville, Kan. Live Stock Auctioneer

Fine stock a specialty. Large acquaintance among stock breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

Jas. T. McCulloch, Live - Stock - Auctioneer Clay Center, Kansas.

I am making a study of your herd and best interests from a public sale standpoint. I am conducting sales for many of the best breeders in Northern Kansas and want to make your next sale. Selling pure-bred live stock at auction is my business.

Col. T. E. Gordon, Live-Stock Auctioneer Waterville, - Kansas

References—Those for whom I have sold.

EDUCATION IS ESSENTIAL IN EVERY LINE.

I have the natural qualifications for an auctioneer and have had the benefit of a term of training in the American Auction School located at Chillicothe, Mo., which school provides a thorough course not only in practical auctioneering but also stock judging and other things that very successful auctioneers should know. My terms are reasonable for good service.

W. C. CURPHEY, Abilene, Kans.

R. L. HARRIMAN

Live Stock Auctioneer BUNCETON, - MISSOURI

PURE-BRED STOCK SALES.**Shorthorns.**

March 17—T. K. Tomson & Sons, Dover, Kans., at Kansas City, Mo.

Herefords.

February 25, 26, 27—Combination sale of Herefords at Kansas City, Mo., C. A. Stannard, Mgr. March 26, 27, 28—Fine Stock Pavilion, Kansas City, Mo. R. T. Thornton, Manager.

Poland-Chinas.

February 21—B. F. Ishmael, Laredo, Mo. February 24—Howard Reed, Frankfort, Kans. Feb. 25—L. D. Arnold, Abilene, Kans. Feb. 26—W. H. Bullen, Belleville, Kans. February 27—D. O. Bancroft, Downs, Kans. March 3—Bred sows at Clyde, Kansas. Geo. E. Smith, Agenda, Kans. March 6—Hales & Hughes, Severy, Kans. Mar. 12—W. L. Popliff, Emporia, Kans. February 4, 1909—F. G. Nies & Son, Goddard, Kas.

Duroc-Jerseys.

February 21—J. F. Ensor, Olathe, Kans. February 22—Geo. Kerr, Sabetha, Kans. February 22—E. M. Myers, Burr Oak, Kans. February 23—J. B. Davis, Fairview, Kans. February 24—Stephenson Bros., Elk City, Kans. February 27—D. O. Bancroft, Downs, Kans. March 4—Burt Finch, Prairie View, Kans., at Norton, Kans. March 5—J. F. Chandler, Frankfort, Kans. March 13—Sam'l Drybread, Elk City, Kans. March 14—T. J. Wooddall, Fall River, Kans.

Berkshires.

March 3—T. F. Guthrie, Strong City, Kans. March 34—G. W. Berry & T. F. Guthrie. March 4—Chas. E. Sutton, Lawrence, Kans. February 28—T. J. Congdon, Pawnee City, Neb.

Percherons.

Feb. 22—D. E. Reber, Morrill, Kans. February 28—R. J. Ream & Co., Kansas City, Mo. March 12—R. J. Ream & Co., Denver, Col.

Jacks and Jennets.

March 2—W. J. Finley, Higleyville, Mo. March 3—Limestone Valley Jacks and Jennets L. M. Monsees & Sons Smithton, Mo.

Combination Sales.

Mar. 4-5-6—Breeders' Sale of horses, C. W. Hurt, Arrowsmith, Ill. March 10-12—Wichita, Kans., D. R. Mills, Mgr. March 19—O. P. Hendershot, Hebron, Neb., Percheron brood mares, Kentucky Jacks and Shorthorn cattle. Apr. 24—Kansas City, Mo., D. R. Mills, Mgr.

When writing our advertisers please mention The Kansas Farmer.

Kansas Farmer Advertisers Get Best Results

FRANK IAMS'

"Peaches and Cream" stallion and mares are best investments for deposits, you have in "banks" and can't draw out. Wait me around again Willie, then buy a stallion and two mare of Iams. They will make us 40 per cent and we will know where our money is. Iams will accept our certificate of deposit drafts, certified checks or bankable notes. Iams and his winners and sons of winners "stirs up the animals." He hypnotizes the buyers with a "horse show" of bargains. Owing to bad crops, Iams' cash, his 26 years experience, he is selling more and better horses than ever. "Willie," buy an "Iams stallion" this fall, save \$300 and get choice of

160 Percherons, Belgians and Coachers 160

Two to six years old, wt. 1700 to 2550 lbs., 50 per cent black boys, 50 per cent tan stallions. All registered and approved. Mamma, Iams is a hot advertiser, but he has "the goods." He sells "toppers" at \$1000 and \$1,500, so good they need not be "peddled" or put on the "auction block" to be sold. He has on his selling clothes, they fit all buyers. No men with money or bankable notes get away from Iams. He buys owns and sells more stallions than any man in the U. S. saves thousands of dollars to stallion buyers. He is not in the stallion trust. Iams places 1,000 or \$1,500 insurance.



\$1,000 — SAVED AT IAMS' — \$1,000

Ikey, what a rich graft these "aliek stallion salesman" are working on the honest farmer, selling fourth-rate stallions at \$2,000 and \$5,000! Iams sells "top-mechers" so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallion yourself. Take no "gold brick stallion salesman's word." Iams has "the goods" you read about. His establishment is worth going 2,000 miles to see. Iams makes competitors "holler." He is knocking "high prices out" Xmas tree. Iams saws weds, "butts in," sells more stallions each year. He takes every statement good. Georgie, dear, buy a stallion of Iams. His \$1,800 stallions are much better than our neighbors paid those Ohio men \$4,000 for. Then I can wear diamonds. Iams speaks the languages, buys direct from bre. ers, pays no buyers, salesmen or interpreters, has not two to ten men as partners to divide profits with. Iams guarantees to sell a better stallion at \$1,000 to \$1,500 than are sold to stock companies for \$2,500 to \$5,000 by aliek salesmen, or pay you \$500 for your trouble, you the judge. Iams pays horses freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth.

References—St. Paul State bank and Citizen's National bank.

ST. PAUL, NEB.



Just returned home with a grand lot of European stallions—Percherons, Belgians, Shires and German Coach. In all of our 21 years importing we have never landed a better lot; big, strong, massive fellows, heavy bone, good actors and sound as gold dollars; ages, 2, 3, and 4 years old. As to prices, there is no concern in the United States can sell an honest, all sound and all right stallion for less money than we can. Come and see us and examine our stallions.

When you arrive in Lincoln, take the State Farm or Interurban street car. Inquire for Sullivan's barns. If impossible to come at once, write us for further information concerning our stallions.

THE LINCOLN IMPORTING HORSE COMPANY,
A. L. SULLIVAN, Mgr. LINCOLN, NEB.



Robison's Percheron Sale

Seventh annual sale, Wichita, Kas.,
February 18, 1908.—40 mares,
20 stallions. Catalogs
ready January 15.

J. W. & J. C. ROBISON, Towanda, Kans.



FRANK WASSON,
Importer and Breeder of
Percheron and Shire Horses
Stallions of age and quality to suit any buyer that wants a good money maker.
Prices right and terms easy. Write for particulars today
or come and look them over.
FRANK WASSON, Clearwater, Kansas

Breeders' Fifth Annual Sale

200--HORSES--200

Bloomington, Illinois, March 4, 5, and 6, 1908

Sale will be held in Coliseum

On Wednesday, Thursday, and Friday, March 4, 5, and 6, we will sell 200 imported and home-bred Registered Percherons, French Draft, Shires, Clydesdales, Coach, and Trotting Horses, Stallions, Mares and Fillies.

A number of these imported last year. The following are the consignors: D. Augustin, Carlock, Ill.; A. J. & F. R. Dodson, L. F. & W. A. Boyle, H. S. Hoyman, Sannissippi Farm, Ed Hodgson, A. J. Glick & Son, C. E. Moots, R. D. Humphrey, Fenton Imp. Co., Farmers' Horse Co., J. W. Cavanaugh, Galesville Horse Co., M. L. Ramseyre, Burgess & Son, L. D. Young, F. E. Waters, Chas. Ewing, Simon King, Henry Knoche, C. E. Smith, A. R. Fry, A. & J. Parks, Chas. Sprague, D. A. Albright, S. Herbert, J. P. Wilson, J. J. Glichrist, Welsh, Weakly & Peck, S. E. Naffzinger, W. J. Naffzinger, Henry Moll.

This will be one of the largest sales of stallions ever held in the State. These are consigned by the very oldest breeders and importers in the State, and out of the very best families and show herds. We don't claim to have all of the prize-winners of France, England, or Scotland, but we do claim to sell you horses that were good enough to win at St. Louis, Springfield, Chicago, and other large shows in 1905-6-7. Catalogues ready February 12.

Our Sixth Annual Sale, October 28-29, 1908.

C. W. HURT, Mgr., Arrowsmith, Illinois

COL. D. L. BROWN, Auctioneer.

MONSEES'

Jack and Jennet SALE

THE 31ST AUCTION SALE AT
Limestone Valley Farm,

Six miles east of Sedalia, main line M. K. & T. and Mo. Pacific R. R., and two miles north of Smithton, main line Mo. Pacific Railroad.



TUESDAY, MAR. 3, 1908

50 Head of High Class Registered Jacks and Jennets 50

Remember Limestone Valley Farm has produced the champions of the world for twenty years. Every animal guaranteed to be as represented. Nothing priced or sold privately after being catalogued. There will be a special train from Sedalia to Smithton on day of sale, leaving Sedalia at eight o'clock, a. m., and returning at six o'clock, p. m., making connections with all trains east and west on the Missouri Pacific, and north and south on the M. K. & T. Come to Sedalia and then to Smithton. Free conveyance from Smithton to farm. If interested, write for catalogue and come to the sale. You will not be disappointed but highly pleased. We shall be glad to meet you. Respectfully,

L. M. MONSEES & SONS, Smithton, Pettis Co., Mo.

Watson, Woods Bros. & Kelly Company, Lincoln, Nebraska

PERCHERONS — SHIRES — BELGIANS



Low prices and good horses talk with more reason than big ads. We do business on our own money, pay no interest, no salaries. Our expense is so small compared with the number of horses we import that we are enabled to sell a better horse for \$1,000 than other importers ask \$1,200 to \$1,400 for. We give a 60 per cent guarantee and furnish life insurance if desired.

FARMERS' CHECKS HONORED

If you want to put a little money where it is absolutely safe and will yield from 20 to 25 per cent per annum, write for full particulars to

Geo. S. Murray, Formerly Professor Commerce, Kansas State Normal School, Emporia, Kansas

W. A. DAVIDSON

Simpson, Kans.

THOS. COLLINS

Lincoln, Kans.

Selling a select draft of Bred Sows from their two good herds at the W. A. Davidson farm 2 miles from Simpson and 5 from Glasco, on

Saturday, February 29, 1908

THE OFFERING WILL BE FEATURED WITH SUCH CHOICE THINGS AS 3 good ones by Chief's Masterpiece, 4 by Nonpareil, 4 by Medal Taker, he by old Meddler, 4 by E. L. 2d, 1 by L's Chief, 1 by Sunflower Perfection, 2 by old Woodbury, 1 by Perfect Likeness, 1 by C's Perfection and out of Simply Grand, which makes her a half sister to Grand Chief, 5 by Glasco Chief, 3 by Grenadier, he by Grand Chief, 4 by Mischief Perfection, he by Mischief Maker, and 1 by Admiral Togo. Everything bred for early farrow. to

THE FOLLOWING BOARS:

Chief's Masterpiece (by Grand Chief), Money Musk (by Choice Chief), Advance Guard and Pilot, two great young boars by Meddler 2d. Also a few to P. I. K. by S. P. Perfection. Also a few to Glasco Chief. Sale to be held in a new sale pavilion at W. A. Davidson's farm near Glasco and Simpson. Free accommodations at either place for breeders from a distance. Catalogues are now ready. Address either

W. A. Davidson, Simpson, Kans.,
or Thos. Collins, Lincoln, Kans.

Auctioneer, John Brennan. J. W. Johnson, Fieldman.

J. F. Chandler's Dispersion Sale of Duroc-Jerseys

The sale will be held at farm 4 miles south of
Frankfort, Kans., Thurs., March 5

Mr. Chandler's herd of Durocs is one of the oldest and best known in Northern Kansas and he has kept abreast of the times in the way of fashionable breeding and the best of individuals. In his dispersion sale on the above date will be found valuable tried sows bred for early farrow and gilts both spring and fall that are being reserved for the herd. Among the tried sows are three by Kansas Wonder and out of Improver 2d dams, 1 by Improver 2d, 1 full sister to old Bessie H. and whose dam was old Missouri Girl. Three by Dandy Orion, he by old Orion. All of the tried sows, excepting a few that are by him are safe to the service of Chandler's Wonder by Nebraska Wonder and a boar that has been talked about considerably by those who have known him best. Seven of the ten fall gilts that will be sold are by Chandler's Wonder and are safe to the service of Combination Jr., he by Combination and he by Bell's Chief. Six great reserved spring gilts, 3 by Chandler's Wonder, 1 by Dotty Boy and 2 by Headlight. Also one dandy by Improver 2d. The sale will be held under cover at the farm. You are Mr. Chandler's guests while at Frankfort. Catalogues ready to mail you as soon as you send us your address.

J. F. CHANDLER,

Frankfort, Kansas

Auctioneers: Frank J. Zaun, Independence, Mo.; W. H. Trosper, Frankfort, Kans. J. W. Johnson, Fieldman.

COME TO

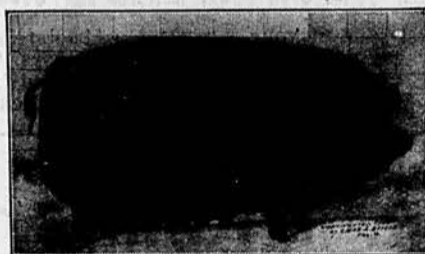
EMPORIA, KANSAS

TO THE GREAT

DUROC-JERSEY BRED SOW SALE

WEDNESDAY, MARCH 10, '08

40 head sold to the highest bidder. 25 smooth, fancy, mellow, spring gilts, 15 large, fine tried sows and fall yearlings, bred to the six great prize-winning herd boars that head their famous herd. The Kansas



Farmer will be represented at this sale by J. W. Johnson and L. K. Lewis. Any bids sent to them in care of Jones & Son at Clinton Hotel by February 27 will be treated fair. Parties coming to sale stop at Clinton Hotel. Write for catalogue to the owners.

JNO. W. JONES & SON,
 Concordia, - - - Kansas

FINDLEY'S Jack and Stallion Sale

—AT—

Fair Grounds, Higginsville, Mo.,
Monday, March 2, 1908.

25 Big Black Mammoth Jacks 25
18 Stallions 18

There are included in the offering eighteen tried jacks 4 to 9 years of age, standing from 14½ to 16 hands high. Two coming 3 year old jacks, three coming 2 year olds and two coming yearlings.

Two Percheron stallions, 5 years old by imported sires, one grade Coach 4 years old.

If you are interested in really high class jacks or stallions do not fail to attend this sale for I can show you the goods and you buy them at your own price.

For further information address

W. J. FINLEY, Higginsville, Mo.

Auctioneers: Col. Jas. W. Sparks, Col. R. L. Harriman.



Great Three Days Auction



200—HEAD—200

Herefords

Kansas City, Mo., Feb. 25, 26, 27, 1908

CONTRIBUTED by twenty of the leading breeders in the Western corn belt, including Cargill & McMillan, R. T. Pence, R. C. Willson, L. Pinet, R. T. Thornton, Guggell & Simpson, B. H. Downing, J. V. Brook, J. W. Lenox, Makin Bros., Steele Bros., T. P. Whittenburg, J. O. Bryant, J. J. Early, Jones Bros., W. B. Waddell, Fred Perkins, and Frank Rockefeller.

Herd Bulls, Farm and Ranch Bulls, Bred Cows, Helpers, and Cows With Calves

CATTLE for everybody and at your own price. Absolutely the best lot sold in a spring sale at Kansas City in recent years. This will be the greatest opportunity of this season. Your choice from the leading herds. Catalogues are ready and will be sent on application.

For catalogues address

C. R. THOMAS,

221 W. 12th St.

Kansas City, Mo.



G. A. STANNARD,

Manager,

Emporia, Kas. Kansas



Ensor's Duroc-Jersey Bred Sows At Auction

At Olathe, Kans., Tuesday, February 25

30 Head Choicely Bred Duroc-Jersey Hogs 30

14 Fall Yearlings, 13 Spring Gilts, 3 Tried Sows.

Sired by Eureka Tip Top, Mo. Gold Finch, O. K., by Buddy K. 4th, Oriole by Orion, Gold Finch Climax, and other good hogs.

SPECIAL ATTRACTIONS.

No. 1 in catalogue, a fall yearling by Eureka Tip Top, out of Silvia, by Chief Perfection, bred to Olathe Chief.

No. 14, fall yearling by Eureka Tip Top, that is a full sister to the gilts that were in my show herd this fall.

No. 25, sow by Mo. Gold Finch, out of Goldie Wonder, by 2d Climax.

No. 26, spring gilt by O. K. by Buddy K. 4th, and out of Windsor Doty, tracing to the famous old show sow, Doty.

No. 28, gilt by Oriole by Orion.

These sows are bred to Olathe Chief by Ohio Chief out of Helen Blazes, Gold Finch Climax by Mo. Gold Finch, Eureka Tip Top by Tip Top Notcher out of Gold Dust Pink. There will also be included in this sale one boar by Eureka Tip Top out of Lucetta, tracing to Van's Perfection and old Higgins Model.

For catalogues address,

J. F. ENSOR, Olathe, Kans.

Zaun and James, Auctioneers. Send mail bids to Geo. E. Cole, of The Kansas Farmer in my care.

Poland-Chinas AT AUCTION.

Fredonia, Kan., Saturday, Feb. 29

(Sale will be held at fair grounds.)

50—Head—50

Representing some of the best blood of the Poland-China breed. 20 proven sows in the prime of their usefulness, 24 fancy fall and spring gilts, 6 topy spring and summer boars. Among the females, there will be 7 bred to Corrector Sunshine, 4 to Perfect Challenger, 1 to Chief Sunshine 2d, 1 to Success, and 1 to Meddler's Medal. My offering has size and quality and will be presented in the pink of condition. Write for catalogue and come to the sale.

A. K. SELLS, Fredonia, Kans.

Auctioneer, Col. Snyder. L. K. Lewis, Fieldman.

DUROC-JERSEY BRED SOW SALE

THAYER, KANS., WEDNESDAY, FEB. 26

(Sale at farm, 3½ miles southeast of Thayer.)

35---Choice Sows and Gilts---35

8 proven sows all under 3 years old and 27 fancy, extra well grown spring gilts. Most of these are by a great breeding grandson of Ohio Chief, and they will all be safe in service to Orion Chief, a grandson of Orion and Billies K. X. by Dandy Wilkes.

COME AND BE WITH US ON SALE DAY. I feel sure you will be pleased with my offering. Write for catalogue.

S. A. HANDS, Thayer, Kansas.

Cols. Zaun and Herod, Auctioneers. L. K. Lewis, Fieldman.

Bullen & Son's Bred Sow Sale, February 26

Forty head of big Poland-Chinas consisting of tried sows, fall yearlings and spring gilts. The spring gilts by Pan Famo will be bred to B's Hadley by Big Hadley. Fall gilts by Sultan by Mogul (the sweepstakes boar at Lincoln in 1905, and Creation, the second prize winner at Lincoln in 1906) will be bred to our two large boars, Pan Famo and Prince Wonder by Pan Famo. Pan is a yearling past and has 10½ inch bone. Prince Wonder is a spring pig and has 8½ inch bone. Sale to be held one mile south of Belleville, Kans., at farm. Free entertainment for breeders at Rock Island Hotel. Free transportation to and from depot. Write for catalogues.

John Brennan, Auctioneer.

Staad's 7th Semi-Annual Duroc-Jersey Brood Sow Sale

—IN SALE PAVILION—

Ottawa, Kans., Friday, February 28, 1908

Six tried sows, 25 fall yearlings, 4 spring gilts, also 2 good young boars. Fourteen bred to Watt's Top Notcher by Kant Be Beat. Seven bred to Long Wonder, the 1,000-pound Nebraska State Fair winner. Three bred to Nelson's Model, first in class Nebraska State Fair; three bred to Hunt's Model, the noted World's Fair winner. Balance bred to splendid sons of old Long Wonder.

Send for catalogue to

J. F. STAADT, Prop., Ottawa, Kans.

Auctioneers: Col. J. W. Sparks, Marshall, Mo.; Col. W. C. Sparks, Ottawa, Kans.; Col. Homer Rule, Ottawa, Kans. Clarence Smith, Clerk.

A. B. Skadden, Frankfort, Kansas,

Selling At Auction

34 Spring Gilts 6 Tried Sows

February 25, 1908.

Sale will be held under cover at farm, 3 miles west of town.

Sires of Offering: MICHAEL 55675 by ST. PAUL, DAN B. 65095, PAT FLINN 28619 by TROTT'S CHOICE, VAN'S PERFECTION 11571.

In this draft of good ones will be found 5 gilts by the grand dam, KATIE S. 169496, and 2 tried sow and 2 gilts by Kanna 111146, one of the best mothers thus far recorded. As individuals both sows and gilts are hard to beat, possessing as they do extra length and bone, fine backs and good feet. A larger, smoother type cannot be found in the West and they are in excellent condition. To see them is to buy. On sale day these sows and gilts will be safe in pig to the following herd boars:

RED WONDER by Nebraska Wonder, dam by Big Chief Ohio, B. N.'s CHIEF by Crimson Chief, CHET T. by Chief Orion, dam by Kansas Wonder.

Breeders attending sale, stop at Savoy Hotel. Transportation to and from farm. Catalogues ready.

A. B. SKADDEN & SON,

Frankfort, - - - Kansas

Auctioneers—John Brennan and W. H. Trospen. J. W. Johnson, Fieldman.

J. M. Williams will sell Durocs at Frankfort, Kans., Feb. 26, 1908.

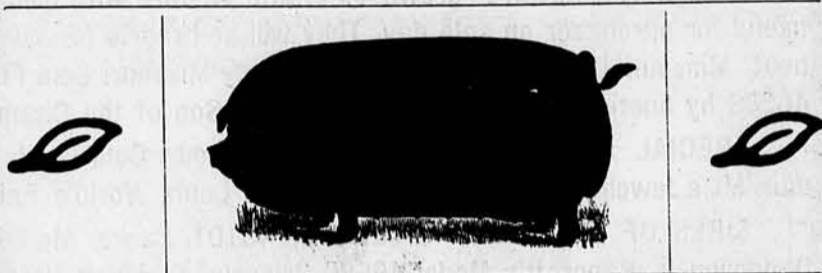
Stephenson Bros. Duroc Dispersion Sale

Elk City, Kan., Monday, February 24

(Sale at the farm five miles west of town.)

45-HEAD-45

15 proven sows, 9 fall gilts, 21 spring gilts. By such sires as King I Am, Red Wonder, Star Wonder, Oom Paul 2d, Second Surprise, Mo. Wonder, King Wonder 5th, Mc's Pride, Cole's Duroc, Monarch, Crimson Wonder 2d, and 2d Tip Top Notcher. These are bred to King I Am, Crimson Model, and a grandson of Ohio Chief. This is a most useful lot of Durocs with



plenty of size, bone, and finish, and known breeding qualities, and representing the best blood lines of the breed in both sire and dam. Our two herd boars, King I Am and Crimson Model, will be included. Buyers from a distance stop at the Cottage Hotel at our expense. Send bids to L. K. Lewis, who will represent this paper. Address for catalogue

Stephenson Bros., Elk City, Kan.

Auctioneers, Cois. B. F. Boland and G. T. Metcalf.

PUBLIC SALE Cattle and Horses

I will sell at public sale at my farm 4 miles south and one mile west of Abilene, 1 mile north and one-half mile east of Acme, on

Tuesday, Feb. 25, 1908

commencing at 10 a. m. sharp, the following property:

19 Head of Horses

Pair iron gray mares coming 2 years old, weight 11 to 12 hundred lbs., pair bay mares coming 2 years old, bay yearling colt, black yearling colt, bay colt coming 2 years old, weight about 1,300 lbs., foundations for a fine stallion, black, 4 year old mare in foal to the Holland Company's horse, carriage mare well broke for family use in foal to the D. J. Baer stallion, 8 year old Shire brood mare well bred, weight about 1,500 lbs., in foal to Wm. Hanson's horse; this mare is hard to excel for quality and usefulness; gray Norman mare 3 years old, pair Shire geldings coming 3 years old, bay Belgian gelding coming 3 years old, weight about 1,400 lbs., bay Shire gelding coming 4 years old, weight about 1,500 lbs., fine Shire mare coming 3 years old, weight about 1,400 lbs., good farm team, mule about 9 years old.

12 Head Pure-Bred Angus Cattle

A few of those handy, hornless, hustling kind that always do you good. Registered cow 4 years old due to calve by day of sale, registered cow 2 years old with second calf at her side (registered), 6 pure bred cows (not registered) but fine breeders, all bred to herd bull and some with calves at side; registered yearling bull, 2 yearling bulls (not registered), herd bull (Rutger Heather Lad 85373) selected from Chas. E. Sutton's famous herd at Lawrence, Kans. Papers furnished with all registered stock. Nine 2 year old Shorthorn heifers in calf, 4 steer calves, 4 yearling calves, family cow.

TERMS: All sums under ten dollars cash. Purchases exceeding ten dollars a credit of ten months on approved notes. Free lunch at noon. Buyers from a distance entertained free.

E. S. ENGLE, Abilene, Kansas.

J. N. Burton, Auctioneer.

LEMON FORD

Minneapolis, Kansas

Selling a Select Draft of

Poland-China Queens

Minneapolis, Kans., Mon., March 2

20 Tried Sows that have proven themselves worthy. 20 Fall Yearlings and promising Spring Gilts.

A WORD ABOUT THE OFFERING.

This splendid offering should attract breeders and farmers from all parts of the Middle West. The sows and gilts in this sale are tops from my big herd and great care has been taken in their selection. There will be sows in this draft representing the leading blood strains and are excellent individuals sired by such famous males as Kansas Chief 28250; Highland Chief Jr. 23364; Keep Coming 2d 37115, a grandson of Keep On; Victor Perfect 39804; Wonder's Perfection 2d 36750, Bright Sunshine 39030, and others. They have been bred to Trouble Maker 41420, a brother to Meddler; Three Cheers 47492, a brother to Indiana 2d by Indiana; and Hurry On 42047, a son of On and On. These are the boars now in service in my herd. Of the offering 20 head are immune sows and gilts, and in the lot are some that will suit the big hog men of the North. In type the majority are quick maturing and are just the right size.

SPECIAL ATTRACTIONS: One Chief Perfection 2d sow; two by Hil and Chief Jr.; two by Kansas Chief; one by Bright Sunshine; eight by Keep Coming 2d. Write for catalogue. Free entertainment for breeders from a distance.

Lemon Ford, Minneapolis, Kansas

Auctioneers: John Brennan, G. W. Barker. J. W. Johnson, Fieldman.

D. O. BANCROFT

DOWNNS, KANSAS

Selling a Select Draft of Duroc-Jersey Bred Sows at His Farm South of
Town in His Own Sale Pavilion,

THURSDAY, FEBRUARY 27, 1908

14 Fall Yearlings--20 Spring Gilts--6 Tried Sows

This offering has been grown on alfalfa pasture with plenty of range for exercise and will be in best possible condition to be useful for purchaser on sale day. They will be bred to farrow in March and April to Ohio Major 14747-A, 36357-N, by Kantbe-beat, Missouri Gold Finch's Climax 64837 by Missouri Gold Finch, Chief 68927 by Rosebud Chief by Ohio Chief, Bancroft's Model 46589 by Auction Boy 3d, and Champion by Son of the Champions.

SPECIAL ATTRACTIONS: 1 gilt by Missouri Gold Finch, dam Nelly's Climax by 2d Climax; 1 gilt by O. K. by Buddy K. 4th, dam Mc's Jewell by Joe, first in class at St. Louis World's Fair; Ruby B., a sow of great size and bone by Parker Mc.

SIRES OF OFFERING: Great Orion 43101, Parker Mc 29283, Athol Improver 32969, De Soto II 35531, Edward H. 21651, Dandelion II, Bancroft's Model 46589, Missouri Gildfinch 49199, O. K. 48383, Rouser Mc 42675, Max B. 55387.

Breeders, stop at Mullen's Hotel. Free transportation to farm.

D. O. BANCROFT, . . . Downs, Kansas

Auctioneers: John Brennan, Jeffery Wright. J. W. Johnson, Fieldman.

R. G. SOLLENBURGER

WOODSTON, KANSAS

40---Royally Bred Duroc Sows---40

DATE-FRIDAY, FEB. 28-AT WOODSTON

4 sired by Improver 2d, dam by Field Marshall, Jr., 2 sired by Belles Chief 2d, dam by Kansas Wonder 2d, 6 sired by Rosebud Chief, dam by De Soto 2d, 1 sired by Red Raven, dam by Golden Rule, 1 sired by Colossal, dam by Chapin's Duroc, 3 sired by Kansas Wonder, dam by Improver 2d, 3 sired by Havelock Wonder, dam by Auction Boy 3d, 1 sired by O. K., dam by Joe, 4 sired by Choice Goods I Am, dam by Field Marshal Jr., 2 sired by Auction Boy 3d, 3 sired by Field Marshal Jr., balance by sires of equal note. This offering surely contains as much breeding as any of them and we will try and have it in shape to do the buyers good.

About half of the offering is bred to Bonny K. 47075, whose sire was Billie K., and his dam Lady Clay. Bonny K. traces direct to Duroc Challenger, Red Chief I Am, Orion Chief, Duroc King (the sire of Improver 2d), Protection, Higgins Model and Ohio Anna. He surely carries the blood of almost all the noted winners and has proven himself a producer. Chief Improver 63573, to whom several of this offering are bred, was sired by Belles Chief 22727, who was sired by Red Chief I Am and out of the famous Nebraska Belle. Chief Improver's dam was by the old champion Improver 2d, and out of Miss Morton by Morton's Prince. A few are bred to Model Wonder, who, at 18 months, weighed over 700 pounds and is as smooth as they grow.

SIRES OF OFFERING: Improver 2d, Red Raven, Bell's Chief 2d, Rosebud Chief, Colossal, Havelock Wonder by Crimson Wonder, Choice Goods I Am, Kansas Wonder, O. K. 48383, Chapin's Duroc, Auction Boy 3d, Field Marshal Jr., and others.

R. G. SOLLENBURGER, - - - Woodston, Kansas

Auctioneers: Cols. Brennan, Travis, Kramer.

D. O. Bancroft sells the day before at Downs. Attend both sales. Send bids to J. W. Johnson in my care. Best of railroad connections can be made.