

KANSAS FARMER

For the improvement of the Farm and Home

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Western Kansas Dairy Calves Grazing on Wheat Pasture

FARM POWER

Items of Interest About Automobiles, Engines, Tractors, and Motorcycles



1. One of your smallest expenses — lubrication — is your chief safeguard against your heaviest expense—depreciation.

2. Friction is relentless.

The effects of the incorrect oil will not be apparent during the first piston stroke or the second. But when piston strokes run up into the millions—and that does not take long—friction begins to get its due. You need not look for the effect of wear then. You can hear it.

3. Worn motors never "come back."

4. If given intelligent care and scientific lubrication, your car should run better the 2000th mile than the first.

5. No matter how freely a low quality or wrong-bodied oil is used

it can never do the work of the correct lubricant.

6. No one oil will suit all cars. This is absolute.

7. You selected a car that suits you. Now select an oil that suits your car.

8. Though you may want correct lubrication, you will seldom stumble on it by chance.

9. The Lubrication Chart, printed in part below, was prepared only after an engineering analysis of every American car and the leading foreign makes. It is revised yearly to include each season's new models. It represents our professional advice and specifies the correct oil for your car.



Mobil oils

A grade for each type of motor

In buying Gargoyle Mobil oils from your dealer, it is safest to purchase in original packages. Look for the red Gargoyle on the container. For information, kindly address any inquiry to our nearest office.

CORRECT AUTOMOBILE LUBRICATION

Explanation:—The four grades of Gargoyle Mobil oils, for gasoline motor lubrication, purified to remove free carbon, are:

Gargoyle Mobil oil "A"
Gargoyle Mobil oil "B"

Gargoyle Mobil oil "E"
Gargoyle Mobil oil "Arctic"

In the Chart below, the letter opposite the car indicates the grade of Gargoyle Mobil oil that should be used. For example, "A" means Gargoyle Mobil oil "A," "Arc" means Gargoyle Mobil oil "Arctic," etc. The recommendations cover all models of both pleasure and commercial vehicles unless otherwise noted.

MODEL OF CARS	1916		1915		1914		1913		1912	
	Summer	Winter								
Abbott Detroit (8 cyl)	A	A	A	A	A	A	A	A	A	A
Apperson	A	A	A	A	A	A	A	A	A	A
Auburn (6 cyl)	A	A	A	A	A	A	A	A	A	A
Alcoa	A	A	A	A	A	A	A	A	A	A
Avery (Mod. 5 & C. 1 Ton)	A	A	A	A	A	A	A	A	A	A
Briscoe (8 cyl)	A	A	A	A	A	A	A	A	A	A
Bulck	A	A	A	A	A	A	A	A	A	A
Cadillac (8 cyl)	A	A	A	A	A	A	A	A	A	A
Case (Model 6-30)	A	A	A	A	A	A	A	A	A	A
Chalmers (Model 6-40)	A	A	A	A	A	A	A	A	A	A
Chevrolet	A	A	A	A	A	A	A	A	A	A
Chandler Six	A	A	A	A	A	A	A	A	A	A
Cole (8 cyl)	A	A	A	A	A	A	A	A	A	A
Cunningham	A	A	A	A	A	A	A	A	A	A
Detroit (8 cyl)	A	A	A	A	A	A	A	A	A	A
Dodge	A	A	A	A	A	A	A	A	A	A
Empire	A	A	A	A	A	A	A	A	A	A
Federal	A	A	A	A	A	A	A	A	A	A
Ford	A	A	A	A	A	A	A	A	A	A
Franklin	A	A	A	A	A	A	A	A	A	A
Grant	A	A	A	A	A	A	A	A	A	A
Haynes (12 cyl)	A	A	A	A	A	A	A	A	A	A
Hudson	A	A	A	A	A	A	A	A	A	A
Imperial	A	A	A	A	A	A	A	A	A	A
J. H. C. (12 cyl)	A	A	A	A	A	A	A	A	A	A
Johnson (water, 2 cycle)	A	A	A	A	A	A	A	A	A	A
Johnson (water, 4 cycle)	A	A	A	A	A	A	A	A	A	A
Jackson (8 cyl)	A	A	A	A	A	A	A	A	A	A
Kelley (Chesterfield)	A	A	A	A	A	A	A	A	A	A
Kelley (Com'l)	A	A	A	A	A	A	A	A	A	A
Kearsney	A	A	A	A	A	A	A	A	A	A
Kelley Springfield	A	A	A	A	A	A	A	A	A	A
Kelley (6 cyl)	A	A	A	A	A	A	A	A	A	A

MODEL OF CARS	1916		1915		1914		1913		1912	
	Summer	Winter								
King Com'l	A	A	A	A	A	A	A	A	A	A
Kissel	A	A	A	A	A	A	A	A	A	A
King Com'l (Model 48)	A	A	A	A	A	A	A	A	A	A
Knott	A	A	A	A	A	A	A	A	A	A
Lincoln (Model 35)	A	A	A	A	A	A	A	A	A	A
Lozier	A	A	A	A	A	A	A	A	A	A
Marmont	A	A	A	A	A	A	A	A	A	A
Maxwell	A	A	A	A	A	A	A	A	A	A
Mercedes (22-70)	A	A	A	A	A	A	A	A	A	A
Mitcheil (22-70)	A	A	A	A	A	A	A	A	A	A
Mitcheil (8 cyl)	A	A	A	A	A	A	A	A	A	A
Moline	A	A	A	A	A	A	A	A	A	A
National (12 cyl)	A	A	A	A	A	A	A	A	A	A
Oakland	A	A	A	A	A	A	A	A	A	A
Oldsmobile (8 cyl)	A	A	A	A	A	A	A	A	A	A
Overland	A	A	A	A	A	A	A	A	A	A
Packard (12 cyl)	A	A	A	A	A	A	A	A	A	A
Paige (6-40)	A	A	A	A	A	A	A	A	A	A
Paige (6-36 & 38)	A	A	A	A	A	A	A	A	A	A
Pathfinder (12 cyl)	A	A	A	A	A	A	A	A	A	A
Pearson (8 cyl)	A	A	A	A	A	A	A	A	A	A
Pierce Arrow	A	A	A	A	A	A	A	A	A	A
Regal	A	A	A	A	A	A	A	A	A	A
Reo (8 cyl)	A	A	A	A	A	A	A	A	A	A
Saxon	A	A	A	A	A	A	A	A	A	A
Selden	A	A	A	A	A	A	A	A	A	A
Stearns Knight (8 cyl)	A	A	A	A	A	A	A	A	A	A
Studebaker	A	A	A	A	A	A	A	A	A	A
Stutz	A	A	A	A	A	A	A	A	A	A
Voite (4 cyl)	A	A	A	A	A	A	A	A	A	A
White (6 cyl)	A	A	A	A	A	A	A	A	A	A
White	A	A	A	A	A	A	A	A	A	A
Willis Knight	A	A	A	A	A	A	A	A	A	A
Winton	A	A	A	A	A	A	A	A	A	A

YOUR TRACTOR

also may be lubricated efficiently with Gargoyle Mobil oils. On request we will mail you a separate Chart specifying the correct grade for each make and model of tractor.

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A LONG time has passed since the ownership of a motor car was an evidence of wealth. We all drive now. Not merely bankers, head waiters, and master plumbers, but the lower classes also. Even editors of magazines.

The number of automobiles is being added to at the rate of more than a million a year: a million new cars means two million new drivers.

If driving is to continue to be safe and enjoyable for all of us, it must be made so by a tremendous exercise of courtesy on the part of every one.

Let me set down here some observations founded, not on police law, but on common sense plus courtesy.

First—However unflattering it may be to the rest of humanity, I know of no better rule than always to assume that the other fellow is a bigger fool than you are.

Assume that he is going to turn the next corner without giving any signal.

Assume that his wife, who is with him, may at any moment take a fancy to a wild rose at the edge of the road, and have the car brought to an abrupt stop.

Assume, when you turn a corner, that he will be coming around from the other way, too fast and on the wrong side of the road.

In a word, keep a sufficient distance between his car and yours, so that nothing he can possibly do can involve you in trouble.

Second—A horn can be either the voice of salvation or an instrument of torture, according to how it is used.

The courteous driver can make his horn say either "Please be careful" or "Curse you, Charles Montague, get off the road." His horn never says one when it should say the other.

Incidentally, the best drivers blow the horn least.

Third—The courteous driver stays just as close to the edge of his side of the road as it is possible for him to get. He never feels called upon to assert his dignity or to maintain his rights by edging as far out as he can.

He knows that the middle of the road belongs to no man.

Fourth—The courteous driver never uses his blinding headlights except on a road entirely unlighted; and he turns them down at the first sight of an approaching car.

Fifth—The courteous driver recognizes that pedestrians and horse vehicles have rights as well as he. He remembers—however irritating they may occasionally be—that, after all, the road belonged to them for years before it belonged to the motor car.

It is the law of the sea that the sailboat must give way to the rowboat. The powerboat must look out for the sail. Always the stronger must give way to the weak.

What is law for the sea ought to be the self-imposed and cheerfully accepted etiquette of the road.

Finally—The courteous driver—and his wife—make up their minds at what rate they like to travel best, and they jog along happily at that rate, enjoying the view, untroubled and untroubling.

If the occupants of another car desire to travel faster, they let them pass. They never race; never put on full speed when they hear a horn sounded behind them.

Never, under any circumstances, do they push ahead of a car in front by invoking a burst of speed, and then slow up so that their dust spreads over the car behind.

In all the category of meanness, there is no meaner trick than passing a car and then slowing down.

Let me see you drive and I'll tell you what you are.

I can stand by the side of the road and pick out the wife-beaters, and the fellows who are cheating the government on their income tax—the fellows that talk loud in theaters—

—and, thank God, the great overwhelming majority of good husbands and fathers, decent citizens, and courteous gentlemen—the wholesome folk who observe the etiquette of the road.—**BRUCE BARTON**, in Every Week.

Starting a Cold Engine

Difficulty in starting a gasoline engine in cold weather may be relieved by one of the following means:

Fill the water jacket or radiator with hot water.

Heat the gasoline by putting a bottle of it in hot water, being careful to keep the cork off the bottle.

Place a few drops of ether in the priming cup or spark plug hole.

Winter Care of Tires

If an automobile is used only occasionally during the winter, the wheels should be supported by jacks and the tires should be partially deflated.

The tires should be kept free from grease and moisture, as grease is injurious to the rubber and moisture to the fabric.

If the car is laid up for the winter, the tires should be removed. Cuts in the rubber should be repaired in order that moisture may not enter the fabric. The tires should be wrapped in paper or burlap to keep them as dry as possible and to protect them from sunlight. They should be placed in a dry room with the temperature ranging between 40 and 65 degrees.

Inner tubes should be removed and be either deflated or rolled loosely with a slight air pressure left in them. The tubes should then be given the same care as the tires.

The general information contained in the Studebaker Almanac concerning the care and upkeep of automobiles will be of especial interest to thousands of farmers. This advice, compiled by expert mechanics and automobile engineers, will save many a big repair bill and needless expense, if closely followed. It explains in detail the correct method of caring for the car in summer and winter, what to do when anything goes wrong, how to overhaul the motor when occasion arises, etc. Electric motors and stationary engines also come in for their share of attention, and form a ready reference for the farm owner who has these modern conveniences installed on his place.

Air-Driven Motor Cars

Automobile trucks with propellers like an aeroplane are now skimming lightly over the sands of the Moroccan desert transporting troops, food and ammunition supplies for the French army. In addition to the usual rear-wheel drive of motor trucks, the transports have an eight-foot propeller, which makes 1,000 revolutions a minute, at the rear of the car. The propeller is driven by the same engine that operates the rear wheels.

The aeroplane propeller enables the car to travel lightly at a speed of from forty to fifty miles an hour over soft ground and sand in which a heavily-loaded army transport, dependent upon the rear-wheel drive, would sink into the ground up to the hubs and get stuck. When the aero-auto hits a hill or bump it flies through the air, a few inches above the ground. The new machine is not only a great saver in time and wear and tear on the machine, but also it travels so lightly over bad spots in the military roads that it does not leave them corrugated with ruts and impassable for infantry.—The American Boy.

The loosening and losing of burrs on farm machinery often causes the farmer much trouble and delay. The following plan is recommended for preventing the burrs from loosening: Unscrew the tap, paint the threads with white lead, put on the tap again and screw it down tight. After the white lead has set, the tap will remain tight under ordinary vibration. Furthermore it will not rust.

In order to avoid delayed shipments caused by probable car shortage next spring, it will be a good plan to order now such supplies as fertilizers, repairs on machinery, seeds and other things needed for spring work.

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LOAN BOARD NON-POLITICAL

The absolutely non-partisan character of the Federal Farm Loan Board was brought out in the address of Charles E. Lobdell, member of the board, at the recent meeting of the State Board of Agriculture. The Federal Farm Loan Act was non-partisan at its very inception. Commissioners were appointed during President Taft's administration to make investigation bearing on the subject through the farming sections of the country. When the reports were made and the act finally drafted, the Democratic party was in power. It was passed and became a law without party bias, and the board is composed of two Democratic members and two Republican members. The Secretary of the Treasury, who is an ex-officio member, of course changes with administrations.

Mr. Lobdell said that great pressure was being brought to bear on the board to appoint men having political backing or influence. Each bank is to have five directors. From these will be selected a president, a vice-president, a secretary and a treasurer, who will conduct the business of the bank. There are quite a number of other employees also for each bank. It was stated that these jobs will not be handed out as "political plums." Secretary McAdoo is most emphatic on this point. No member of the board has personal candidates for any positions to be filled. None of them have personal or political debts to pay, and even if they had there would be no attempt to pay them at the expense of the Federal Farm Loan system.

Mr. Lobdell said it was a pleasure to the board to find that the members of Congress are generally accepting this policy as the proper one to follow, and although the demand on them for jobs is tremendous, they are not embarrassing the board by urging political appointments. In presenting names for appointment, exactly the same kind of endorsement will be required as would be demanded in filling positions in private loan companies. The only considerations that are to be taken into account are those of efficiency and ability to perform the work required.

Mr. Lobdell was asked if there would not be an endless amount of red tape involved in getting a loan through one of these banks. He explained how simple it is for a group of farmers to organize the local loan association and make application for the money they wish to borrow.

He also explained how attractive the bonds of the banks would be to investors and especially those having small sums to invest. These bonds will be sold with the farm mortgages back of them as security. The absolutely non-partisan manner in which the business of the banks is to be handled is a guarantee of the safety of investments made in bonds secured in this way.

Mr. Lobdell called special attention to the fact that in appraising the land its speculative or selling value would not be considered. The law specifically states that land will be appraised on a basis of its productive value. This, to a certain extent, involves the ability of the man handling the land. One man might make land much more productive than another and because of this fact he could obtain a larger loan for making improvements. No loan can be made for more than 50 per cent of this productive value nor for more than 20 per cent of the value of improvements.

Loans may be made for the following purposes and no other: To provide for the purchase of land, the purchase of equipment, fertilizers, and live stock, farm buildings and other needed improvements, and to liquidate indebtedness. The terms "equipment" and "improvement" are to be defined by the Federal Farm Loan Board.

It is Mr. Lobdell's belief that there is enough money hidden away in the country to finance all of the farm mortgage

business if the investor can be made to feel that he is thoroughly safeguarded in his investment. He considers the plan one of the finest ever devised for the small investor. The advantage to the farmer is principally in being able to borrow money for improvements on long-time notes at low interest rates and with liberal terms as to payment.

LOAN ASSOCIATION FORMED

There has been no great rush to organize farm loan associations in Kansas to take advantage of the new Farm Loan Act. The first, as far as we know, is that recently organized at Larned. Forty-five farmers met in the office of the Pawnee County Farm Bureau and thirteen of them decided to apply for loans aggregating \$68,000. The land security offered aggregated \$202,500 in value. Application was made to the Federal Farm Loan Board for the necessary forms.

This association will make its loan through the Federal Land Bank, which will be located at Wichita. The money is to be used largely in paying off old mortgages. These are probably carrying a higher rate of interest than will the loans made through the land bank.

Since there have been so few organizations formed, it might be assumed that farmers of Kansas having good security to offer have not been greatly handicapped in getting the capital they need on fairly liberal terms. As we become accustomed to this new banking facility there will probably be a good many farm loan associations formed. In some sections of the country the federal land banks will without doubt open up greatly increased possibilities in the development of agricultural lands.

BANKER STARTS PIG CLUB

Jewell County is one of the counties in Kansas where the people seem to have been awakened to the spirit of agricultural progress. A recent example of this is the action of W. A. Matson, a banker and farmer of Jewell City, who is offering to furnish money to every boy in that section of the county to buy a pure-bred, immune pig to feed and develop. The boys will be required to keep records of weights and gains and feed eaten, with its cost. When the pigs are sold they are to pay Mr. Matson the amount loaned and deposit a tenth of the selling price in the bank.

We most heartily endorse this plan of interesting boys in farm life. Feeding the pigs and doing chores will cease to be drudgery to the boy who has a chance to try his hand at this sort of thing. Parents who encourage their boys and girls to get into agricultural club work will find them taking a new and unheard-of interest in things about the farm.

Why not make the boys and girls junior partners and teach them business methods from the start?

BOARD OF AGRICULTURE FUNDS

The secretary of the State Board of Agriculture has practically no money to carry on the work of his department. In making an effort to further the usefulness of this board, providing a suitable appropriation is a point that deserves serious consideration. The state has been entirely too economical in dealing with the Board of Agriculture. The past two years the working funds have been but \$1,500 annually. Agriculture returns the enormous sum of 350 million dollars annually. The sum of \$1,500 is but a pittance for exploiting an industry of such proportions. A third of this appropriation the past year was used in preparing the cuts for the alfalfa book published by the board. In getting out this book, Secretary Mohler and his able assistant, H. W. Doyle, did a splendid piece of work. This alfalfa book is Kansas experience from cover to cover. It is a Kansas book adapted to Kansas conditions, and the information it con-

tains is of great value to farmers of the state. It is an example of the kind of constructive work that could be done for the state if the board had more money available.

Another piece of valuable work is that of tabulating all breeders of pure-bred live stock in the state. The live stock of Kansas now represents a value of 341 million dollars. Promoting the increased use of pure-bred stock has a big influence in increasing the value of the live stock of the state. Through the assessors a start was made last spring in securing the names of these breeders, but it is necessary to verify the facts by sending return post cards to all these parties before the information can be safely used. This cannot now be done because there is no money to be used for the postage.

Giving the secretary a reasonable amount of money to spend in doing the kind of work demanded by the people of the state would result in greatly adding to the usefulness of the board. The secretary should be held to strict accountability for the expenditure of his appropriation. There is very little danger that the money would be foolishly expended. The state can well afford to be more liberal with the State Board of Agriculture.

INTEREST IN SHEEP

We were much gratified to note the real interest taken in the question of sheep at the recent meeting of the Kansas State Board of Agriculture. On another page of this issue we give a portion of the address on the "Farm Flock for Kansas" by A. L. Stockwell of Pawnee County. This was one of the good papers of the meeting. Mr. Stockwell thoroughly understands the handling of sheep and the suggestions offered in his talk were listened to with the greatest interest.

Interest in this question continued through the session. Following the afternoon program Friday, when the query box was opened, it was found that a number of questions pertaining to the growing of sheep had been dropped in the box. It was evident that those present wanted these questions answered. A number took part in the discussion which followed. More genuine interest was taken in the queries pertaining to sheep than in any others. Even after the meeting adjourned a group of men surrounded Mr. Stockwell and continued the discussion.

HORSE BREEDERS MEET

The annual meeting of the Kansas Draft Horse Breeders' Association will be held in Manhattan during Farm and Home Week. The program follows:

Friday, February 9. Forenoon session, 8:30 o'clock:

President's address, Geo. B. Ross, Sterling.

Report of Secretary, C. W. McCampbell, Manhattan.

Appointment of committees.

"Sterility in Mares," Dr. F. F. Brown, Kansas City, Mo.

"Kansas Breeders and Kansas Fairs," A. L. Sponsler, Hutchinson.

"Importance of Community Effort in Horse Production," Prof. W. A. Cochel, Manhattan.

"The Economics of Rural Social Development," Dr. Warren H. Wilson, New York City.

Kansas Percheron sale, 1 o'clock.

One new member was elected on the Kansas State Board of Agriculture at the recent annual meeting, this member being E. I. Burton of Coffeyville, who succeeds Charles E. Sutton. Mr. Burton is a successful and progressive farmer and will be a useful man on the board. H. W. Avery, Dr. O. O. Wolf, and H. S. Thompson were re-elected for another term. J. T. Tredway of La Harpe, who has been president for the last year, was also re-elected.

AGRICULTURAL LEGISLATION

The Board of Agriculture at its forty-sixth annual meeting formally petitioned the legislature to enlarge the delegate representation at the meetings which are held in Topeka each year. The present law provides for delegates from county agricultural associations. This usually means that the secretary or some other officer of the fair held by the local agricultural society comes as a delegate to the meeting. Each delegate has a vote in electing the members of the board and in transacting other business of the meeting.

It has seemed for some time that the delegates to the State Board of Agriculture meeting have not been sufficiently representative of the practical farming interests of the state. The papers and addresses given at the annual meeting are full of valuable information related to agricultural progress. It is most desirable that these addresses be heard by as many as possible of those actually engaged in farming operations and in a position to pass on the good things they hear to the people of their respective communities. It is also desirable that the business of the board be directed by those closely in touch with agriculture. The resolution requesting this enlargement of the representation is as follows:

"We, the delegates assembled with the State Board of Agriculture, congratulate this board upon its work for the past forty-six years as a department of state government and would advise no drastic change in the law relating to the character of its organization. Its past is inseparably connected with the history of this commonwealth and constitutes many a bright and valuable page—its present work is efficient and the state is altogether too economical and we would respectfully ask the legislature to increase its appropriation for the advanced and progressive work demanded of the secretary by the people.

"We would further commend to the legislature an amendment to the law, however, which will enlarge the representation to the annual meetings of this board, which may include representatives from the various state breed associations and county farmers' institutes."

The county institutes are organizations of farmers. Nearly every county in the state has such an organization. Many of them hold monthly meetings through the year and all have big annual meetings where the live agricultural and home-making questions of the community are discussed. If these institutes could be represented by delegates there would be no question as to the representation being closely in touch with the farm. There are now a number of pure-bred live stock organizations in the state and these also are actively engaged in promoting an industry that is indispensable to permanency in agriculture. Their representation in the meetings of the board would also greatly add to its strength.

The governor in his message made a plea for increasing the importance and value of the agricultural department of the state. His suggestions followed in the main the report of the Efficiency and Economy Committee appointed by the last legislature, and were that a number of different lines of work would be consolidated in one big department. No details of the proposed consolidation were given.

The greatness of agriculture in this state certainly justifies magnifying the work of the Board of Agriculture. The legislature can well devote some time to revising and improving the present laws and the idea suggested in the resolution quoted above, if incorporated into law, will most assuredly strengthen the work of the board.

A cow testing association was organized in Montgomery County last week. The members will find it to be a great help to them in their dairy business.

KANSAS FARMS NEED SHEEP

By A. L. Stockwell, Before Meeting of Kansas State Board of Agriculture

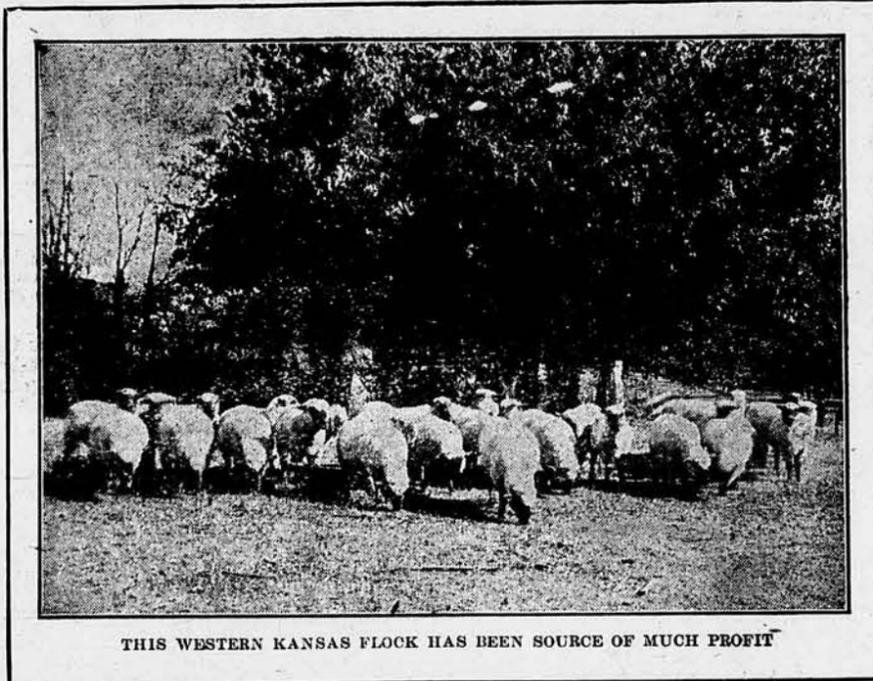
AT PRESENT there is only one sheep to 350 acres on Kansas farms. The Ohio average is one sheep on eight acres. In my own experience on a Kansas farm, all of which is under cultivation, I find need for one sheep to every four acres. We need a million sheep in Kansas today to take care of the weeds and waste of our fields. If the Nebraska State Board of Agriculture can use sheep for cutting weeds on the state fair grounds at a big saving of labor expense and show the handsome profit of nearly \$1,000 besides, and our own agricultural college at Manhattan found their worth in ridding the campus of dandelions and other noxious weeds, you, Mr. Farmer, have a greater need for the "small farm flock."

The farm flock will convert the waste and weeds of our farms into high-priced wool and mutton without displacing any other live stock on the farm. Many of the weeds that are crowding out the grasses in our pastures and meadows are relished by sheep. An instance that came under my observation was a small pasture along a creek bottom that had been used for a number of years as a winter feed lot for cattle. In the summer this pasture was a dense growth of ragweed, ironweed and cocklebur and didn't afford grazing for a single cow. Forty sheep were turned into this lot. After the second year no weeds could be seen and a good turf of grass was the result.

The question of dogs is perhaps causing more farmers to hesitate about handling sheep than any other thing. My farm is situated within a mile of a good-sized town which is not wanting for worthless dogs, and in twelve years' experience in handling sheep I have yet my first loss to sustain from dogs. I find that two dozen sheep bells will generally protect the flock from the average dog, and the shotgun will regulate the more cunning ones.

The fences will suggest themselves after the sheep are once on the farm. These need not be expensive.

There was never a time when the Kansas farmer could slip into the sheep game with better grace than right now. The question naturally arises with a great many who have had no previous experience in handling sheep, "What class of sheep will respond best to one



THIS WESTERN KANSAS FLOCK HAS BEEN SOURCE OF MUCH PROFIT

of limited knowledge?" From my experience and from the observations I have made in visiting a great many other flocks, I would say by all means try the western range ewe.

Let me relate my experience with the range ewe. I have been buying my feeding sheep on the range for several years and I find the flockmasters have a certain percentage of these old ewes that they expect to turn every fall. They are offered for sale in the fall of the year—during September and October—and generally find their way into the feed lots of the corn belt farms. They are the class of sheep the market calls "feeding ewes" and can be bought at a very low price. One reason I prefer this grade of ewes, aside from the cheapness, is that they will raise a greater percentage of lambs than will young ewes. They will be motherly, require less attention, respond to farm conditions and prove big money-makers. Keep them on the farm one year and market both ewes and lambs the following winter. Buy a new flock from

the same source and in this way of handling you will avoid a lot of trouble that is incident to keeping the same flock year after year.

In September, 1914, while I was in the Texas Panhandle buying feeding sheep I was offered a carload of these old feeding ewes by the flockmaster from whom I was buying my feeding lambs. To illustrate how anxious they are to sell the old ewes before going into winter quarters, for fear they will die on their hands before spring, I will relate the conversation that led to the deal. "Stockwell, let me sell you a load of these old ewes. Take them along with your other shipment. I am anxious to close this end of the deal. I will take \$2, with the shelly ones out at \$1.25, and leave it to you as to how many go out at the lower price."

Even though not inclined to buy, one could hardly turn down as fair an offer as this. I bought a load of these old ewes. After getting them home in my lots, I carefully "mouthed" them, to find 200 head with fairly good mouths. These

200 head cost me \$450 laid down. They were "flushed" on alfalfa stubble for about thirty days prior to breeding, thus putting them in first class condition.

They were bred to pure-bred Shropshire rams for March and April lambing. Wool worth \$360 was clipped off their backs just prior to lambing, which greatly reduced my investment. I have always felt it safe to buy an old ewe for \$2 if there was \$1.75 worth of wool growing on her back.

Our losses were something like three per cent on this flock of ewes, and we raised to maturity 193 big husky lambs. This size flock was about double the number that should be kept on a farm the size of mine, where one depends on weeds and waste alone, so it was necessary to give them the run of fifteen acres of rye pasture until June 1, after which time they were put on sweet clover pasture until fall. The lambs were in the feed lot about sixty days prior to marketing, on a ration of alfalfa, silage, and a small amount of corn. On January 14 I sold the entire bunch on the Kansas City market, the lambs selling at \$10.40 per hundred and the ewes at \$7 per hundred.

The gross return from this little bunch of sheep, including the wool, was \$3,150. The original investment was \$450, value of feed consumed and labor estimated at \$600, leaving a net return of \$2,100.

Last year the same class of ewes were selling at \$3 per head on the range and this year at about \$4. Even at these prices the old ewes are showing as great a margin of profit today as when I bought at \$2 per head, for the wool is 10 cents higher and finished lambs fully \$3 per hundred higher than when I closed this deal.

A great many of you are situated so you cannot buy this class of ewes on the range as I do. If you are not located near a feeder who visits the range to buy them for you, I would advise buying them at the river market. Do not be content with anything other than range-bred ewes. Fifty makes a nice bunch to start with and with their increase will make you a single deck at shipping time. A flock smaller than this would make you dependent on the local butcher, which I found not a very satisfactory market.

Agricultural Fairs Educate

Best Method of Teaching is by Means of Object Lesson

THAT the big state fairs of the Middle West are important factors in promoting a better agriculture throughout the land was most strikingly brought out by W. R. Mellor of Nebraska in his address at the annual meeting of the Kansas State Board of Agriculture, which was held in Topeka last week. Mr. Mellor is secretary of the Nebraska State Board of Agriculture and has had a wide experience in fair work. He told of a visit to the great International Exposition at Brussels in 1910. "There were wonderful exhibits of art and historical data," said Mr. Mellor, "a great display of industrial machinery, and a wonderful showing of the making, handling and finished product in munitions of war. The great Krupp guns were the center of attraction for admiring thousands, and the powerful cranes which easily handled great weights, moved massive bars of steel from one place to another with marvelous ease. After viewing these wonders in the preparation of modern warfare, we began to search for the peaceful exhibits in the animal world and agriculture. After making the rounds of the ground and not coming across a single show animal or an agricultural exhibit, we made inquiry for these departments and were surprised at the information that none were there. In the light of recent events we are forcibly led to believe that a people who ignore agriculture as an attraction at

its most representative gatherings do not dwell on the ideal of peaceful pursuits."

"The educational value of a well-rounded fair," said Mr. Mellor, "is not clearly appreciated. The two great Kansas fairs for 1916 held at Topeka and Hutchinson had a combined attendance of more than 300,000, while your great university at Lawrence had an attendance in the 180 days of school held last year, of 400,000. My understanding is that the state provided but \$33,000 for these two fairs in 1916 and yet their aggregate attendance was fully three-fourths that of your splendid university. Many people fail to realize that a large fair is an educational institution. It is true that the stereotyped text books are not used, but the very best method of teaching, which has existed since the dawn of creation, is by object lesson. This is taught at the fair in its concentrated form. The exhibits there typify the finished product in all of its departments. Competent judges are on hand to intelligently select those exhibits of outstanding excellence and the blue ribbon or tag is a notice of the acme of perfection.

"Our farmer patron has unbounded admiration for the beautiful coach, thoroughbred and standard bred light horses, but his chief enjoyment is an examination of those splendid draft breeds characterized by massiveness. In these automobile days he is not so deeply in-

terested in the light harness horse as he used to be, but horses which have weight to move heavy loads easily are still a necessity on the farm. Perfection in the show ring brings to his mind a longing to have something just as good at his home.

"Fully 80 per cent of the pure-bred stock on our farms today can be attributed to the original desire created from showing at our fairs. What is true of stock is true in agriculture, horticulture, art, textiles and domestic products. If this deduction is true, then is not the fair, with its perfected object lessons, an educational institution?"

"Oh, but," I imagine some may say, "the chief province of a fair is the amusement end." This may be true in some instances because certain people go to fairs wholly to be amused, the same as some pupils go to school to have a good time. Many people of biased judgment call attention to the thing which is not pleasing to them in relation to the fair; this same condition is true of the one who finds fault with the school. The person who imagines himself placed in this world for entirely serious purposes is as much out of touch and harmony with his environment as the one whose whole aim is to be amused. A proper amount of each is the happy medium. The boy attending school cannot study all the time, he must attend the football games, the gymnasium sports, the class rallies, the private theatricals, the

dances, the movies and many other forms of amusement, if he is a normal youth. He who attends too closely to his studies is considered by his classmates as a "dig" and he who is at school merely for a good time is little regarded by his classmates. The normal student is the one most admired. If this is true in school life, Mr. Objector, why should it not obtain in other walks also, even at fairs? No man can spend an hour among the exhibits at one of our fairs without absorbing more knowledge than he could glean from books in a week. The eye grasps situations from which intelligent deductions are made.

"If you desire to purchase a new automobile you may read about its beautiful lines, its tonneau, radiator, engine, transmission, levers, finish, etc., for weeks, but a half hour of actual examination gives you the information which a month of book study would not impart. The exhibits at the fair furnish the opportunity for this ease of knowledge to the busy man, he whose duties in life demand so much time that he cannot acquire this knowledge in such a short time at any other place. We therefore come to the conclusion that a careful analysis of such facts will convince the most skeptical that a fair is educational as well as entertaining."

Why not plan for a vacation during the week of February 5-10 and attend Farm and Home Week at Manhattan?

GENERAL FARM INQUIRIES

Something For Every Farm—Overflow Items From Other Departments

SUBSCRIBER A. H. W., of Lincoln County, asks if the Sand Hill plum is propagated and grown as a domestic variety. He states that he has been unable to find this variety listed in any of the nursery catalogs. He also asks whether the fine twigs and trimmings of cedar and pine trees have any value as fertilizer if plowed under among fruit trees.

The Sand Hill plum is not listed in the nursery catalogs for the reason that there are other varieties much better and just as hardy and prolific. The America is a plum that will do well in Lincoln County, and we would advise our correspondent to get this variety if he wants a good bearer of good quality and a plum that will be sure to thrive under the conditions of that section.

The twigs of the cedar and pine will not do the land any harm, but they do not possess any great amount of fertilizing value. The leaves of deciduous trees possess a higher fertilizing value than twigs and tree trimmings. This sort of material helps to lighten a heavy gumbo soil and it is always a good plan to plow under as much vegetable matter as possible in a soil of this kind.

Sweet Clover for Pasture

A Republic County reader writes that he is a renter and has only a one-year lease of the place he is now farming. He needs pasture the coming season for two cows and fifteen or twenty hogs. There is a five-acre field fenced hog-tight that was once in alfalfa but about half of it is nearly killed out. He wants to know if it would be a good plan to disk this field thoroughly and sow sweet clover. If so, what variety, what time of year to sow, and how much seed should be used to the acre.

It is a serious handicap to be on a farm without pasture and have so limited a tenure as to make it impossible to plan for forage crops. Sweet clover can be used very successfully as a pasture for hogs and cows, but cannot be pastured the first season much before June or July. The second year it comes up very early in the spring and will provide pasture through the whole season.

In seeding sweet clover the seed bed should not be too loose. It requires just enough loose soil on top to cover the seed. The disk and harrow can be used on this field in preparing it for seeding to sweet clover and the earlier the disking work is done, the better. Disk at any time during January or February when the ground is in suitable condition for working. The white flowered variety is the best kind to sow. In sweet clover seed there is quite a percentage that has a hard shell. This hard-shelled seed does not germinate readily. It may contain as much as 90 per cent of these hard seeds. If 60 per cent of the seed germinates readily, ten to fifteen pounds of seed to the acre is enough. The germination test can be made and the amount of seed sown based on the percentage that germinates. This can be easily done by counting out a hundred seeds and placing them in some moist soil in a box or pan and keeping it warm by the kitchen stove. Sweet clover seed has strong vitality and these hard-coated seeds will grow next year. It has been seeded any time from January to the first of May with good results. Early spring seeding is preferable—about oats sowing time.

Sweet clover should be pastured heavily enough to keep down the growth so that there will always be fresh new shoots coming on. If allowed to grow rank and tall it becomes woody and is not relished.

If hogs are to be pastured on newly-seeded sweet clover, it may be necessary to ring them to keep them from rooting up the young plants.

For the hogs, our correspondent should make plans for something that will be ready to pasture earlier in the season. It would pay him to fence off an acre or two of this field and put in oats or oats and Dwarf Essex rape. Some arrangement could be made with the owner of the land whereby the fence could remain the property of the tenant and be removed in case he goes to another farm. Rape can be sowed very early in the spring. It will stand quite a severe frost without injury. On rich

land it will make a growth of sixteen to eighteen inches in six or eight weeks. The seed bed for rape should be fine and mellow. If sown broadcast, use from three to five pounds of seed to the acre. The hogs should not be turned in until it is twelve to fourteen inches high. If the hogs are taken off when there are still a few leaves left around the base of each plant, it will put forth a new growth and can be pastured again later in the season.

Oats and rape together make a fine early hog pasture. The best plan is to put the oats in first and after they are up nicely, sow the rape and harrow it in. An acre of rape or rape and oats on good land will pasture fifteen or twenty hogs for two or three months. If the balance of the field is sown to sweet clover it will be ready after the rape is pastured down the first time. The rape field might then be plowed

factor in determining a cow's value. The tests given are high, but the quantity of milk must be considered. The amount of milk produced in a year is even more important than the test. If we were buying cows we would consider a definite record as to the amount of milk given in a year of considerably more value than a butter fat test without any record of the quantity of milk given. The test will increase as the period of lactation advances. Perhaps the samples tested were taken when the cows were almost dry, giving only a few quarts of milk. The test is always high at this time.

In order to get results that can be used in determining the real value of the cow, the test should be made monthly and a composite sample should be taken instead of a sample from a single milking. There is nearly always some variation between the test of the night and

pink kafir have been compared under identically the same conditions. These tests extend over four years. A number of tests were conducted in 1913, but none of the kafir matured seed. The results of the tests have been as follows:

	ACRE GRAIN YIELD	
	Black-hulled Kafir	Pink Kafir
1913 Butler County	27.2	18.7
1914 Average three tests in Allen County	10.6	8.3
1914 Butler County	35.5	33.2
1914 Harvey County	47.3	43.3
1915 Allen County	22.5	29.5
1915 Butler County	42.9	18.8
Average	25.9	21.7

"Black-hulled kafir and pink kafir have been grown at the Manhattan station for a number of years. The comparative yields have been as follows:

	YIELD PER ACRE			
	Black-hulled Silage	Black-hulled Grain	Pink Kafir Silage	Pink Kafir Grain
1915	33,200	54.4	27,140	23.1
1916	25,200	45.1	22,600	43.0

"The black-hulled is to be preferred for Eastern Kansas."

Hog Feeding Records

A farm bureau member in Kansas recently wrote a letter to a friend telling of some results he had secured in feeding hogs. He had kept such accurate account of his work and the financial outcome had been so satisfactory that the county agent secured his permission to publish this letter.

He fed fifteen shoats in a pen 18 x 32 feet, their shelter being a dry barn basement with a southern exposure. They were fed twice a day all the ear corn they would clean up, and bright alfalfa hay was set before them constantly. Although they ate the hay quite greedily, the total amount consumed was not great. They had free access to good fresh water and were given once a day, in addition, a thick slop of oil meal. The letter follows:

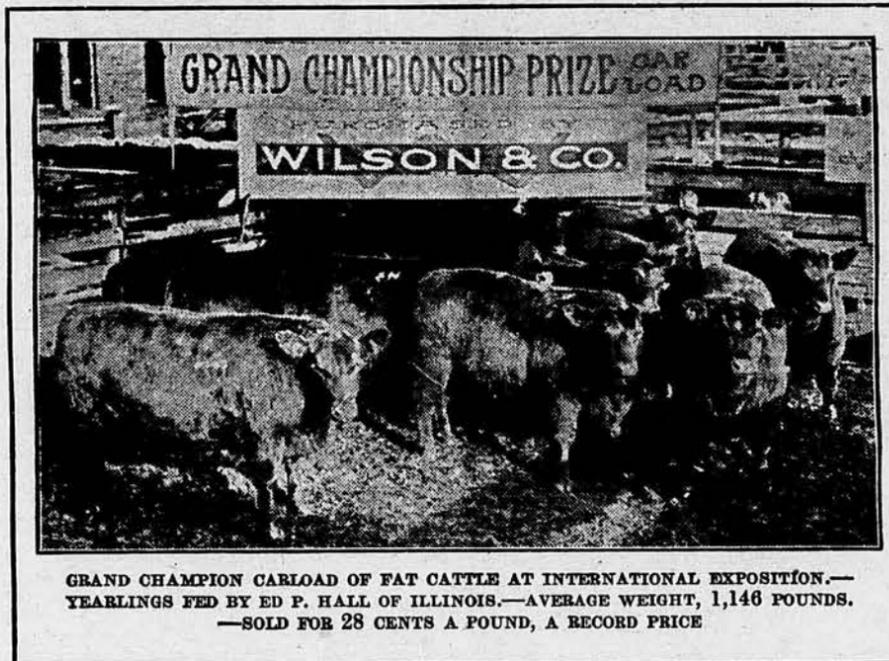
"I am sending you a few figures regarding my stock hog transaction. October 18 I purchased fifteen shoats averaging 133 pounds, paying \$180 for them. I fed them 32 bushels of corn at \$1 a bushel, and 300 pounds of linseed oil meal at \$2 a hundred. The cost of the hogs and feed amounted to \$218. On November 13 I sold these hogs, averaging 174 pounds, at \$8.85 a hundred, the total amount received being \$230.98. This gives me a profit of \$12.98. The gain of 41 pounds a head is figured conservatively because the first weight was made when the hogs were full, and the selling weight was made after an eight-mile haul.

"If I had bought these hogs at eight cents a pound and sold them at nine cents, which were the prevailing prices at time of purchase and sale, the transaction would have figured out as follows: Fifteen 135-pound shoats at eight cents a pound, \$159.60; corn and oil meal \$38—total \$197.60. Selling price of the fifteen hogs averaging 174 pounds, at nine cents a pound, \$234.95, making a profit of \$37.30. As it was, I received \$1.40 a bushel for the corn fed. Taking the purchase price of the hogs and oil meal, at \$136, from the total of \$230.98—the selling price of the hogs—I had \$44.98 left for the 32 bushels of corn fed.

"If I had not kept a record of this transaction, I would have been inclined to think I had lost money. Of course, there is some expense of doing business which is not taken into account in these figures."

Must Count the Interest

A farm business should pay for the capital invested the same as is expected of any other business enterprise. The capital is an expense in running the business. For instance, if the total receipts on a farm are \$3,216, the current expenses \$1,075 and 5 per cent interest on the capital \$2,024, the profit is but \$117 after the expenses and interest are subtracted. Such a farmer would have \$2,141 available for his living, but \$1,724 should be credited to his capital. This leaves only \$117 for his own labor and management in addition to what the farm contributed toward the living. He is living off the interest of his investment.



GRAND CHAMPION CARLOAD OF FAT CATTLE AT INTERNATIONAL EXPOSITION.—YEARLINGS FED BY ED P. HALL OF ILLINOIS.—AVERAGE WEIGHT, 1,146 POUNDS.—SOLD FOR 28 CENTS A POUND, A RECORD PRICE

shallow, harrowed down and sown to Sudan grass. This will grow better in hot weather than will rape, and will make a fine forage to be used either as hay or as pasture.

Milk Test Alone Means Little

Milking a few cows is one of the sure ways of adding to the farm income. This means of securing some money to pay running expenses especially commends itself to the wheat farmer who often has considerable spare time during the winter season.

We have just received a most suggestive letter from G. E. R., a Smith County reader of KANSAS FARMER, who tells of his experience in milking cows. He says:

"I had been farming wheat alone but was not making much progress financially. A year ago last August I decided to purchase some cows and bought some common cows that were due to freshen soon. Since that time six cows have raised eight calves, made a living for my family consisting of my wife and two children and myself. In addition the cows have paid for most of our clothing. We sold some milk to town customers and supplied a restaurant with cream. We received 6½ cents a quart for the milk, and 25 cents a quart for the cream.

"Some time ago I tested my cows and found that two pure-bred Jerseys tested 6.4 per cent each; a cross-bred Jersey cow, 5.3 per cent, and three grade Short-horns, 4.7 per cent, 4.6 per cent, and 5.4 per cent. I was somewhat surprised to find these cows testing so high. I would like to ask whether it is better to test the morning milk or the night milk. Five of these tests were from night's milking and the other was from morning's milk. I am now breeding all my cows and heifers to a registered Holstein bull from a heavy producing cow, and expect to purchase a pure-bred Holstein cow as soon as I am able to do so."

This reader is making a fine beginning, but the test alone is not the only

morning milking. If the interval between milkings is uniform, the variation will be very slight. By the composite sample we mean taking a sample from each milking for one, two, or three days, putting all the samples in a bottle in which has been placed a preservative tablet to keep the milk from souring until it is tested. The only object of making tests is to find out how much butter fat the cow is producing, and a single test might be very misleading, especially if taken when the cow was nearly dry.

Best Kafir Varieties

L. M., Linn County, asks if the pink variety of kafir is adapted to Eastern Kansas, and if so where he can get seed and what time to plant. He says he wants to get a good high-yielding variety of kafir.

Kafir should be planted a few days to a week later than corn. It is customary to begin planting kafir about the time the last of the corn in the neighborhood is planted. Prof. L. E. Call of the Kansas Agricultural College, in writing of the pink kafir, says:

"Pink kafir was developed by the United States Department of Agriculture and has been grown and distributed quite extensively from our Hays Branch Experiment Station. It is a variety that is well adapted to the central part of Kansas, where an early-maturing variety is needed. Pink kafir will mature in from ten days to two weeks less time than the black-hulled kafir.

"It is not a variety that I would recommend for growing in Eastern Kansas except on thin upland soils. On soils of this character that are not strong enough to grow and mature the black-hulled kafir, the pink kafir would be an excellent variety to grow. On soils of reasonable fertility in the eastern section of the state, black-hulled kafir outyields the pink kafir and for that reason should be grown. We have conducted a large number of tests in co-operation with farmers in which black-hulled kafir and

Kansas Farmer Dairy Club

Is Going To Buy Second Cow

I AM mailing you my November reports today, and I am enclosing you a picture of "Vic," the Guernsey bull that I took care of the past summer. Don't you think he is a fine looking fellow?

I have paid \$108 on the price of my cow, "Daisy." I still owe \$26, including interest. I expect to have this all paid off by February first. I am feeding alfalfa and oat straw and still keep the cow on pasture in good weather. You know the prairie pasture is good for stock even in the winter. I have about one and a half loads of oat straw. I got it a load for hauling a load and had to haul it about four miles.

Daisy's calf is doing fine. She eats nearly all the hay that Daisy leaves. I give her some good alfalfa and grain besides.

I like the Dairy Club business fine. I am going to try to get another cow as soon as I get Daisy paid for. I had no idea a boy could make money as fast as he can with a cow, and I am sure that I can handle two nearly as easily as I can one. I think you KANSAS

ter than thirty pounds a day now. I am getting \$2.25 per hundred for the milk at wholesale.

Since we have the barn finished and the colder weather has set in, I keep my cow in most of the time and I think she is doing better for it. At least she seems to enjoy the nice, clean straw to lie on and the water by her side all the time.

I am enclosing a picture of cow and myself which I think is very unsatisfactory, but am going to try in the very near future to get a good one. But as you requested, I am sending this one.—GLEN ROMIG, Shawnee County.

Sold Calf for Good Price

We take KANSAS FARMER and I try to read all I can every week. I have read the paper you sent me.

I sold my calf to papa for \$150 last month.

I will try and send the milk sample to the right place this time. I will also try to get the milk records in sooner next time. The test kept me waiting some this time.—LESTER KINCAID, Logan County.

Good Seven Months' Record

I have not written to you for quite a while, but will now tell you about myself and cow.

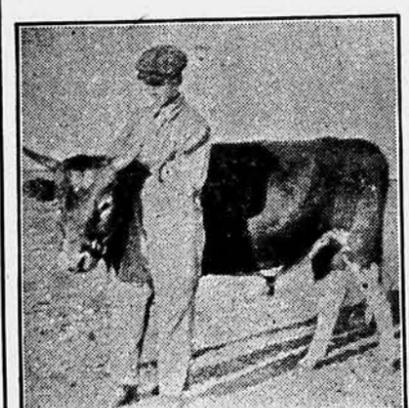
I am fourteen years old and in the first year in high school. I am busy with my studies and do not have much time to write. My cow is doing pretty well now. She has been giving milk seven months and I have received \$134.10 for her milk in that time. I am getting eighteen cents a gallon for her milk now.

I am feeding bran, cottonseed cake, and alfalfa.

I sent in my records for November, December 6.

I will have my cow's picture taken before long and will send you one. I read KANSAS FARMER every week. My father takes it so you will not need to send it to me any more.

I will close, wishing you all success.—FERMER HIDDLESTON, Johnson County.



HARVEY RUSSELL, SCOTT COUNTY, AND THE GUERNSEY BULL WHICH HE ATTENDED LAST SUMMER

FARMER people were great to organize the Dairy Club for us boys and girls. I hope you all have a Merry Christmas.—HARVEY RUSSELL, Scott County.

Judging from the picture you send, you are on very friendly terms with this young bull. It is not always a safe plan to encourage too much friendliness on the part of bulls. They are inclined to be playful but as they get older their play is sometimes apt to be dangerous. We never like to see anyone treat a bull as a pet. You can treat bulls kindly but it should always be with such firmness that they will not attempt to take liberties. Encouraging a bull in his playful tendencies while young is almost sure to result in his becoming dangerous as he gets older. He should never be trusted for you never know when he may become violent. We notice you have a ring in this young bull's nose, and we would suggest that you use it in handling him.

Liberal Feeding Pays

A common mistake in feeding dairy cows is the failure to feed high producing cows enough feed to allow them to produce to their full capacity. This is the poorest kind of economy, since after maintenance is provided for, the remainder of the ration is used entirely for milk production.

In the case of medium producing cows, about 50 per cent of the ration is used for maintenance and the remainder for producing milk. This proportion will run from 60 to 40 per cent, depending upon the milk producing ability of the individual cow. The highest producers, therefore, are the most economical producers, since a larger per cent of their entire ration is available for milk production.

Seven Months' Record Made

Five more days and seven months out of twelve will have passed by and my cow is still able to eat and give milk. I feed her 14 pounds of corn bran and wheat bran in equal parts, daily, and from 25 to 30 pounds of silage, besides alfalfa hay during the day. She has given a little over eight thousand pounds of milk and is giving only a little bet-

Getting Very Good Price

I am sorry I did not send my records promptly, but hereafter I am going to send them in on time.

My cow is doing well. I have been feeding oil meal but have found out that I can get as much milk by feeding bran and shorts mixed and for that reason I am not feeding any more oil meal. It also is producing too much fat. I have been waiting to use corn chops in its place but it is \$2 a hundred pounds, which I think is too expensive.

I sold my calf November 4, when it was twenty-eight days old. It weighed 145 pounds and brought me \$13.05, or nine cents a pound.

I am selling whole milk at twenty-five cents a gallon.—ERNEST WENDEL, Leavenworth County.

We saw Ernest at the meeting in Leavenworth December 8 and talked with him about shorts taking the place of oil meal.

Shorts do not take the place of oil meal. A pound of oil meal contains about three times as much protein as does a pound of shorts, and it is very important to have enough protein in the cow's ration. Protein can be purchased more cheaply in the oil meal than in shorts. Since corn is so high in price, shorts should be considered as a substitute for corn chop.

We have suggested to Ernest that he try the following ration: Four parts bran, four parts shorts and one part oil meal, all by weight, feeding about nine or ten pounds of the mixture daily. Oil meal is not a fattening feed. Shorts contains more fattening material than does oil meal. If the cow is increasing in weight and has the appearance of getting fat, it indicates that she is not using all her feed for milk production. The ration above contains less grain but more protein and not so much fattening material. If she still seems to fatten it may be necessary to cut the grain still more.

If you have not already done so, tell us how you are selling your butter fat—whether in whole milk, cream or butter—and the price you are receiving for it. We will be glad to know this and so will the other members of the club.



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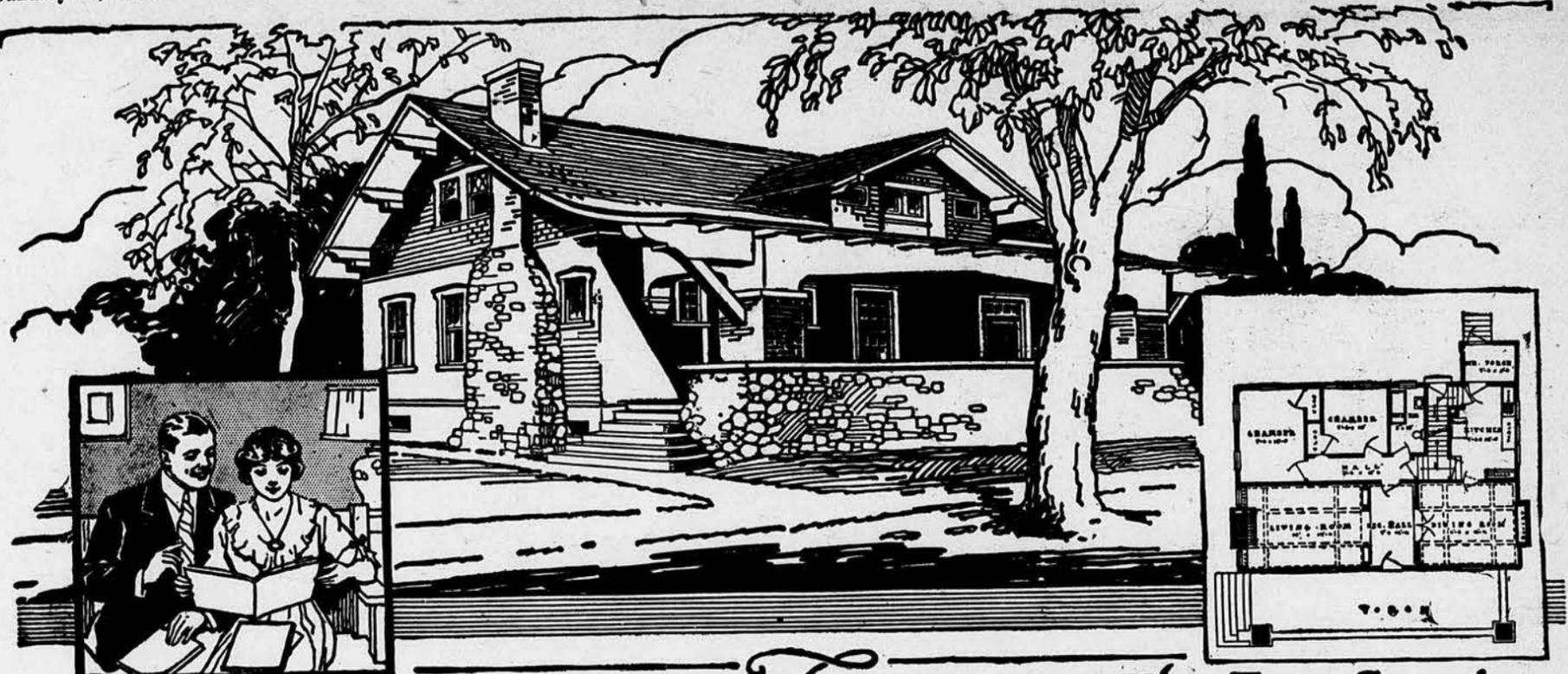
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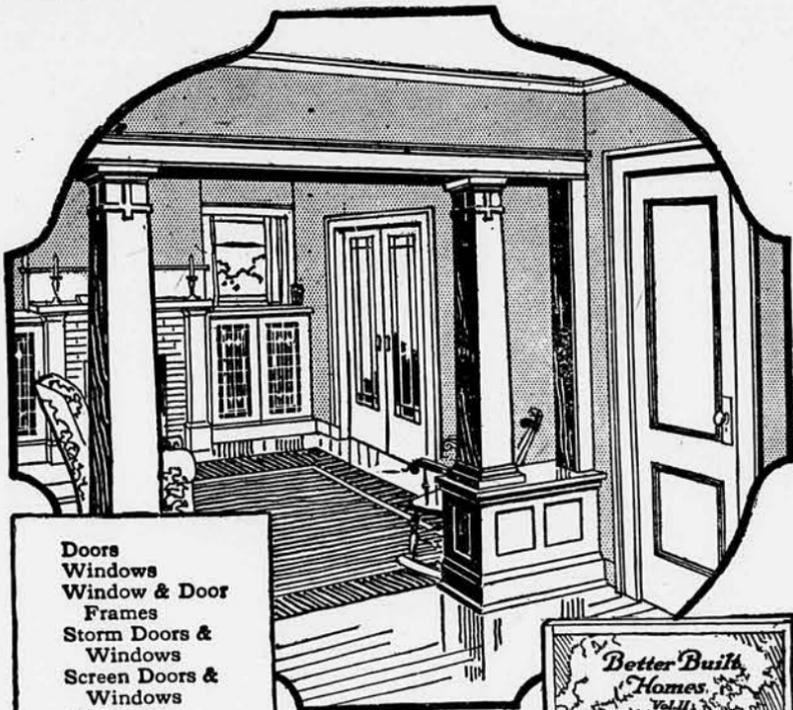
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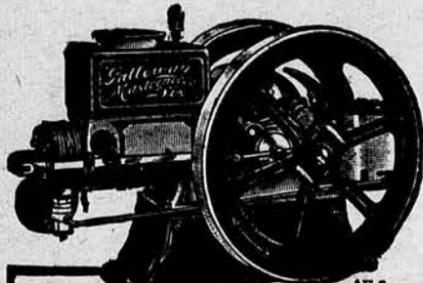
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Dairy Possibilities in Kansas

THE annual cash income of any one of at least half the counties of Kansas could be increased eleven million dollars through the production and sale of dairy products. This statement was made by George W. Marble, of Fort Scott, at the annual meeting of the Kansas State Board of Agriculture, held in Topeka last week. Mr. Marble has been making an exhaustive study of the dairy possibilities in Kansas, his investigations extending over a period of several years. During this time he has built up a good dairy herd of his own.

Mr. Marble said that in producing this increased revenue from dairying, each county would increase the value of its land from twenty to thirty millions, add from 10,000 to 16,000 to its population, and wonderfully improve social conditions and the general conveniences of the farms. According to Mr. Marble's estimates, twenty milk cows could now be kept on every quarter section of land in these counties through the use of feeds that are now going to waste. He included in this waste the difference between the value of the corn crop preserved and fed as silage and fed as dry fodder. In counties adapted to dairying it should be easily possible to maintain the twenty cows in addition to the stock now kept, simply by carefully conserving feed that is now wasted. It would not be necessary to increase the acreage of the crops grown.

Dairy crops and dairy markets are the two principal essentials to success in dairying. Where corn and alfalfa grow as successfully as they do in Central and Eastern Kansas, there can be no question as to the dairy crops. Where such crops can be grown, dairying is the most stable and profitable type of farming that can be practiced, providing there is a market for the products. This is furnished by the creameries and condenseries and near large centers of population through the demand for whole milk. Such is the demand for dairy products that no community in Kansas need fear to go into dairying because of lack of market for the products. Mr. Marble's observations have been that communities in which dairying is developed become increased consumers of dairy products and the creameries and condenseries are compelled to reach out for their milk and cream and pay higher prices than when the community first became interested in dairying.

Mr. Marble has made a personal survey of the Wisconsin dairy centers, this state generally being considered the most advanced dairy state of the West. In this visit he was not seeking proof that Kansas could be a dairy state, but rather looking for reasons why she could not be a great dairy state. He came to

the conclusion that with the advantage of climate, the wonderful adaptability of our soil to the growing of alfalfa and the clovers and the relative low prices of our land, Kansas has a decided economic advantage over Wisconsin in the production of milk. He also visited dairy centers in Illinois. The climate and soil of Illinois and Wisconsin are specially favorable to grain crops, and yet farmers there are so generally engaged in dairying that one can travel through county after county and never see a farm that is not a dairy farm. Two silos and two barns are the usual equipment on these farms. A single silo and a single barn are the exceptions.

Kansas can grow as good corn as Northern Illinois up to the silage stage, but too often shortage of rain during the latter part of the season cuts the grain yield from 30 to 60 per cent. This big annual loss in the corn crop can be saved by the silo and made to yield full returns on farms where dairying is the leading industry.

Two-Year-Old Jersey Record

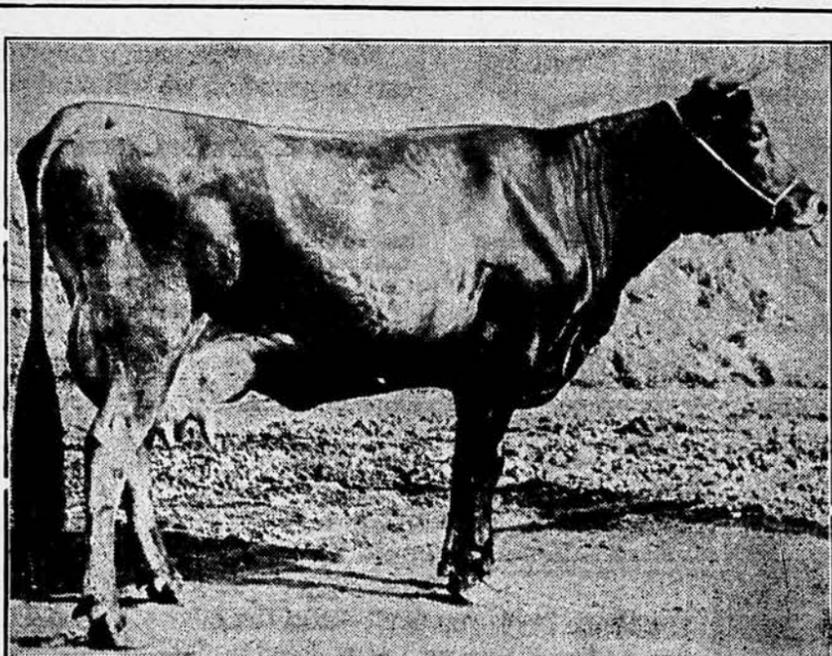
Irene's Cherry 285828 has earned the title of world's champion senior two-year-old Jersey. She went on test at two years and eleven months of age, and in the ensuing 365 days produced 12,567.7 pounds of milk, containing 749.87 pounds of fat. This means 882.2 pounds of 85 per cent butter and easily exceeds the record which was made by Lad's Lady Riotress Irene, the former champion.

The new champion is a direct descendant of Loretta D. and Ida Marigold. It will be remembered that Ida Marigold was the "best cow of any breed" in the cheese test at the World's Columbian Exposition at Chicago and St. Louis, and Loretta D. was pronounced "best cow of any breed" in the tests for economic production of butter fat and butter and economic production of milk for all purposes of dairying" at the St. Louis Exposition.

This young heifer is owned by F. D. Underwood, Wauwatosa, Wisconsin.

Missouri Josephine Sarcastic, a daughter of Missouri Chief Josephine, has just completed a year's record of 21,273 pounds of milk containing 584.98 pounds fat. This is equivalent to 731 pounds of butter. There are now four animals in the University of Missouri herd with records of over 20,000 pounds of milk in a year.

The great loss from the fermentation and leaching of manure in the open yard may be largely avoided by hauling the manure to the field as fast as it accumulates.



IRENE'S CHERRY.—RECORD AS TWO-YEAR-OLD, 12,567.7 POUNDS OF MILK AND 749.87 POUNDS OF BUTTER FAT

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Percheron Breeders Meet

THE annual meeting of the Percheron Society of America held in Chicago December 4 was attended by a large number of breeders from all parts of the United States and Canada. There were 304 members present at roll call, approximately 4,000 more by proxy, and many more members came in after the roll call was taken.

President White in his opening address reviewed in a comprehensive way the healthy condition of the Percheron trade. He laid stress on the fact that the elimination of importations had led American breeders to give better care to weanlings, yearlings, and two-year-olds, and that dealers, purchasing Percherons in this country at earlier ages than had been the custom, had themselves been surprised at the splendid outcome of their American-bred colts when given the same care and attention they had formerly given imported horses. He also called attention to the fee of \$100 for registration of horses imported after July 1, 1916, stating that this had been passed by the board of directors in the belief that it was for the best interests of American breeders, in that it was calculated to discourage the importation of the poorer horses.

Mr. White then briefly reviewed the litigation pending against the Percheron Society. He stated that the cases involved the right of a recording association to control its registrations in such manner as to protect the purity of the breed; that the principle involved was a vital one affecting every record association in the United States, and every breeder of pure-bred live stock, and that for this reason the officers felt that the case should be fought through until decided by the Supreme Court of the State of Illinois.

Subsequently the breeders present adopted a resolution of confidence in the officers and directors, especially relative to their position in the litigation referred to. This was passed with but one dissenting vote, that one being from the attorney representing the suits against the society.

Secretary Dinsmore in his annual report stated that 9,044 registrations had been made during the year, an increase of 6 1/2 per cent over the preceding year. One hundred forty imported horses were recorded, but only 59 of these were brought over during the past year. Of the total registrations 2,014 were registered from Illinois and 1,772 from Iowa, so that these two states contributed 41.8 per cent of the grand total. Ohio came third with 747 registrations, Kansas fourth with 653, and Nebraska fifth with 466 registrations.

Eight hundred forty-seven new members were added during the year and the membership is now in excess of 8,000 breeders.

Transfer certificates issued during the year totaled 9,467, an increase of 38 per cent over the preceding year. Illinois and Iowa led in number of Percherons purchased and most of the horses bought in these two states were bought within their own borders. Montana, at the other extreme, purchased 65 per cent of her Percherons from other states.

In the election of four directors for the ensuing three years, C. F. Curtiss of Iowa, W. S. Dunham of Illinois, and U. L. Burdick of North Dakota were elected to succeed themselves, and Arthur Colegrove of Girard, Kansas, was elected to succeed John L. DeLancey of Minnesota, who was not a candidate for re-election.

The income of the society for the year was reported as \$52,237.10, and the normal expenditures as \$46,597.01. Extraordinary expenditures due to the special litigation amounted to \$16,939.87.

E. B. White was re-elected as president, U. L. Burdick was elected vice-president, and C. M. Jones treasurer. Wayne Dinsmore continues as secretary. President White was elected to represent the Percheron Society in the National Society of Record Associations.

Cheap Shed for Stock

I was up to the farm the other day and examined a shed that the boys have been making—50 feet long, 20 feet wide, open to the south. It is the best cheap shed I ever saw for warmth and comfort for loose cattle, colts and mules. Two rows of heavy posts were set about two feet apart on three sides. Eight feet out of the ground on inside of both rows heavy wire cattle fencing was nailed on very tight and filled with old last year's straw, tramped down as one

would press baled hay. A row of ridge posts were set through the center. All posts were set six or seven feet apart and the roof was covered with a foot or more of straw, on brush, and hedge brush over that to hold it in place. As Kansas has very little rain in winter, the leakage is small. No animal can tear it down and if well packed it will make a warm shed all winter.—E. W. BROWN, Clay County.

Feeding Brood Mares

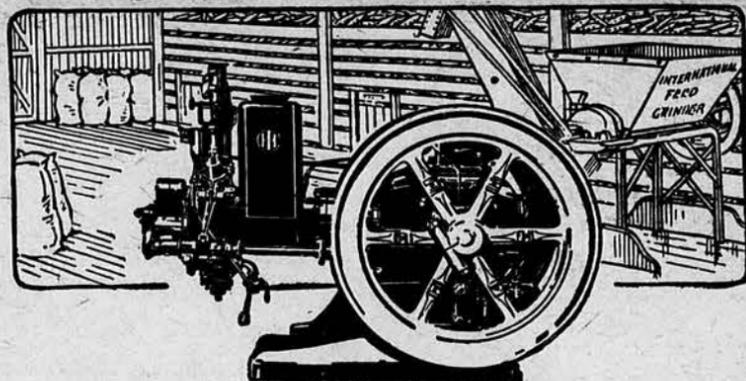
In seasons of high priced grain there is always the temptation to feed scant rations to stock that is being carried through the winter. The mares in foal are apt to suffer from this policy of scant feeding.

Dr. C. W. McCampbell of the Live Stock Registry Board calls attention to the fact that in years of high priced feeds there is always more than the usual number of complaints of mares losing their colts.

This condition is due primarily to two reasons. The mare owner being desirous of carrying his mares through the winter as cheaply as possible, depends largely upon such roughages as prairie hay, cane, kafir, and corn fodder. This kind of a feed is constipating, and such a condition prolonged often causes abortion.

When feeds are as high as they are at present, one is tempted to reduce the amount given, especially the grain portion of the ration, but he usually finds this to be expensive economy in the case of the brood mare. In order to raise the maximum number of colts the brood mares must be well fed and cared for, and if one is compelled to rely largely upon cheap roughages, bran and linseed oil meal should be added to the ration.

It takes feed to make a big horse. Are your draft bred colts getting enough grain to keep them growing?



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IT pays to buy a Mogul kerosene engine, both because it is a good engine and because it operates on kerosene. It takes about five gallons of fuel to run a 4-H. P. engine at full capacity for ten hours. Five gallons of gasoline costs close to \$1.00. The same amount of kerosene costs only 40 cents or so. That is a big saving. It makes Mogul power wonderfully cheap.

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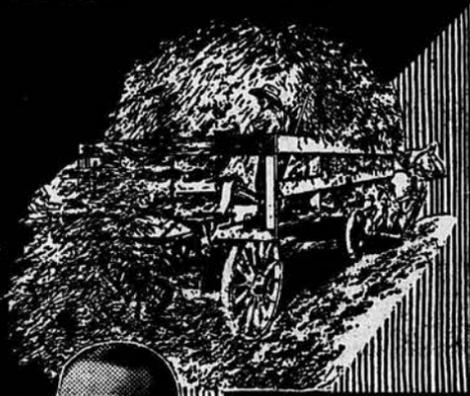
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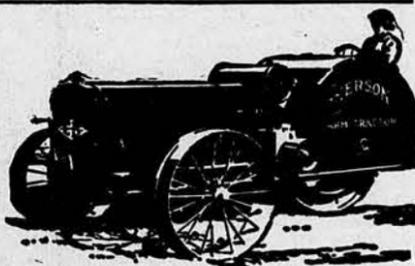
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A WELL-SELECTED butchering outfit and a convenient place for working are important considerations at hog-killing time. A handy and complete "kit" or outfit consists of two butcher knives, two "bell" or candlestick scrapers, a meat saw, and a sharpening steel. The meat saw is for sawing down the backbone and cutting up the carcass. The candlestick scrapers have detachable handles, and are used to remove the hair and scurf from the hogs. A long waterproof apron, which will protect the clothing, can be had at a small cost.

PREPARATION FOR SLAUGHTER

A 24 to 36-hour fast, plenty of water, careful handling, and rest before slaughter are all important in securing meat in the best condition for use, either fresh or for curing purposes. Food in the stomach decomposes very rapidly after slaughter, and where the dressing is slow the gases generated often affect the flavor of the meat. Water should be given freely up to the time of slaughter as it keeps the temperature normal.

It is highly important that the animals be not excited in any way sufficiently to raise the temperature of the body. If the animal becomes heated, it is better to allow it to rest over night before killing than to risk spoiling the meat. It is also essential that the hog be carefully handled so as not to bruise its body. Careful handling before and after slaughter greatly improves the quality of the meat.

POINTS ON KILLING

It is customary on the farm to stun hogs before sticking them, although in some localities this is not done. Another method is by shooting the hog through the head with a small rifle. After stunning by a heavy blow on the center of the forehead immediately above the eyes with an ax, the eight-inch straight-bladed knife is inserted into the hog's throat in the under portion of the neck, to a point just in front of the chest cavity, but not into this cavity. The knife is given a twist and sideward motion to sever the blood vessels and allow the blood to flow. By laying the hog on one side and elevating the ham end, it will bleed freely.

EQUIPMENT FOR SCALDING

A barrel is the receptacle commonly used for scalding. If it is set at the proper slant, with the open end against a table or platform of the proper height and the bottom securely fastened, there is little danger of accident. A strong table about twenty inches high, built for the purpose, would be a very desirable thing on which to work, though it is not absolutely necessary. A box often serves very well. The water for scalding should be heated to the boiling point. This will allow for a reduction of temperature when the water is put into a cold barrel. Be careful not to have the water so hot as to cook the skin of the hog. If the water is too hot the hair is likely to set. A small shovelful of hardwood ashes added to the water aids materially in removing the scurf from the body, though it has no effect in loosening the hair. A lump of lime, a handful of soft soap, a little pine tar, or a tablespoonful of concentrated lye has the same effect.

HOW TO SCALD A HOG

The hog should not be scalded before life is extinct, or the blood vessels near the surface of the skin will be cooked, giving a reddish tinge to the carcass. While being scalded the hog should be moved constantly to avoid cooking the skin. Occasionally it should be drawn out of the water to air—when the hair may be "tried." As soon as the hair and scurf slip easily from the surface, scalding is complete. If it is suspected that the water is too hot, scald the hind end of the hog first. If the water is too hot and you overheat the head, you will be adding to the trouble of scraping—the part most difficult to clean. When the water is about right, begin by scalding the head.

The scraping and cleaning of the hog's skin should be done as soon as possible after removal of the animal from the scalding vat. Scraping a cold hog is a difficult, if not an impossible, task. Where it is necessary to reverse the position of the hog in the barrel to complete scalding, the portion scalded should be cleaned before attempting to scald the other end of the hog.

When the hair starts readily, remove the animal from the water and begin scraping. The "bell" scraper should be used with a long, sweeping movement

over the sides and ends while the hog is still hot. The head and feet should be cleaned first, as they cool quickly. Pull the ears through the hands to remove the bulk of the hair. Grasp with the hands the lower portions of the legs and twist to assist in cleaning them. Use the "candlestick" scraper for removing the skin and scurf from the flat surfaces and as much as possible from the other parts and finish the cleaning of the entire carcass, removing all hair, scurf, and dirt by rinsing with hot water and shaving with the large knife.

Cut the skin on the side of the tendons so that a gambrel stick may be inserted. The next step is to hang the hog by his hind legs by means of the gambrel stick high enough so that his head clears the ground. Wash down with hot water, shave over any unfinished patches and wash the entire carcass again to remove all loose hair and scurf.

Occasionally a hog is killed that is too large to scald in a barrel. If it is covered thickly with blankets or with sacks containing a little bran, and hot water poured over it, the hair will loosen readily.

REMOVING THE ENTRAILS

In removing the entrails, first split the hog between the hind legs, separating the bones with the knife. This can easily be done if the cut is made directly through the union of bones between the hams. Run the knife down the center of the belly, holding the intestines back with the fingers of the left hand and guiding the knife with the right. There is little danger of cutting the intestines in this way. Split the breastbone with the knife or an ax and cut down through the sticking place to the chin. Cut around the rectum and pull it down until the kidneys are reached, using the knife wherever necessary to sever the cords attaching it to the "bed." Remove the sexual organs, then cut across the artery running down the backbone, cut around the diaphragm (skirt) and remove the intestines, stomach, and "pluck," that is, heart, liver and lungs, with a backward and downward pull—grasping the mass of organs near the union to the backbone and diaphragm, sever attachments with a knife where necessary. In this operation the windpipe down to the head should be removed with the pluck. Do not disturb the kidneys or the leaf fat in carcasses to be shipped, except in warm weather, when the "leaf" may be removed to allow quicker and more thorough cooling. If the hog is to be cut up on the farm and not intended for shipment in carcass form, it is advisable to loosen the leaf fat from the abdominal wall, allowing it to remain attached to the carcass at the ham end. Open the jaw and insert a small block to allow free drainage; then wash out all blood with cold water and sponge out with a coarse cloth. In hot weather the backbone should be split to facilitate cooling. It is good practice to do this also where the hog is to be cut up on the farm and not intended for shipment. The fat should be removed from the intestines before they get cold. Since it is strong in flavor it should not be mixed with the leaf fat in rendering.

Duroc-Jersey Fieldman

The president of the National Duroc-Jersey Record Association writes that at the last meeting of that association the stockholders decided to do more promotion and publicity work than they had been doing in the past. To this end they created the office of field secretary, and appointed to that position R. L. (Bob) Hill, of Columbia, Mo. Mr. Hill is a graduate of the Missouri Agricultural College, has fitted himself particularly along live stock lines and since leaving school has been actively engaged in breeding pure-bred Durocs.

The plan is to have Mr. Hill attend stock breeders' meetings, fairs, and get into territory that is new in the swine breeding business. He will, from time to time, submit to the agricultural press articles which will assist in the general upbuilding of the hog business.

"We appreciate the good work KANSAS FARMER is doing for the swine industry," says Mr. McLain, "and we want to co-operate with you, and to this end we would be glad to have you give space to such of Mr. Hill's articles as may be of service to your readers.

"Our general idea is first to assist in the building up of the hog business, and second to push the Duroc-Jersey breed."

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WHEN WRITING TO ADVERTISERS PLEASE MENTION KANSAS FARMER

Programs Live Stock Meetings

The annual meetings of most of the state live stock and agricultural associations of Kansas will be held in Manhattan during the State Farm and Home Week. The detailed programs of these meetings follow:

KANSAS SWINE BREEDERS' ASSOCIATION
Tuesday, February 6. 2 o'clock. Agricultural Building, Room 6.

"The Business of Selling Pure-Bred Swine," F. B. Caldwell, Howard, Kan.
"Feeding the Pure-Bred Pig," J. V. Evvard, Associate Chief in Animal Husbandry, Iowa State College, Ames, Iowa.
"Inheritance of Size of Litter in Swine," Prof. E. N. Wentworth, Kansas State Agricultural College.

Business session.
KANSAS CROP IMPROVEMENT ASSOCIATION
Tuesday, February 6. Forenoon session, 8:30 o'clock, old chapel, main building.

"Pasture Management," Ralph Kenney, Assistant Professor of Crops, Kansas Agricultural College.

"Cultivation to Conserve Moisture," W. W. Burr, Professor of Agronomy, Nebraska Agricultural College, Lincoln, Neb.

"Forage Sorghums," H. N. Vinall, Office of Forage Crops, U. S. Department of Agriculture, Washington, D. C. General assembly, Auditorium.

Afternoon session, 2 o'clock:
President's address, W. G. Shelley, McPherson, Kan.

"Factors Influencing Yield of Wheat," L. E. Call, Professor of Agronomy, Kansas Agricultural College.

"Sudan Grass," Mr. Vinall.
"More Profitable Crops," W. W. Burr. Business session.

KANSAS SHEEP BREEDERS' ASSOCIATION
Wednesday afternoon, February 7, 2 o'clock, in Agricultural Building, Room 6.

"Handling Western Lambs," J. B. Baker, Emporia, Kan.

"Sheep Feeding Experiments," Prof. W. A. Cochel, Kansas Agricultural College.

"Sheep Breeding," F. R. Marshall, in charge of sheep investigations, U. S. Department of Agriculture.

Business session.
KANSAS STATE DAIRY ASSOCIATION
Wednesday, February 7. Forenoon session, Live Stock pavilion, 8:30 o'clock. President's address, P. W. Enns, Newton.

"Experimental Work with Dairy Cattle," O. E. Reed, Professor of Dairy Husbandry, Kansas Agricultural College, and J. B. Fitch, Associate Professor of Dairy Husbandry.

Business session.
General assembly, Auditorium.
Afternoon session, old chapel, main building, 2 o'clock:

"Profitable Methods of Marketing Butter Fat," Theo. Macklin, Instructor in Agricultural Economics, Kansas Agricultural College.

"The Breeding of Holstein Cattle," John B. Irwin, breeder and owner of the world's champion Holstein cow, Minneapolis, Minn.

"Suggestions for Control of Diseases in Dairy Cattle," L. W. Goss, Professor of Veterinary Medicine, Kansas Agricultural College.

KANSAS IMPROVED STOCK BREEDERS' ASSOCIATION

Thursday, February 8. Forenoon session, old chapel, main building, at 8:30 o'clock:

"The Product of the Grade Herd," Dan D. Casement, farmer and stockman, Manhattan, Kan.

"The Bovine Family and Its Domesticated Forms," (illustrated), R. K. Nabours, Professor of Zoology, Kansas Agricultural College.

"Some Problems in Cattle Breeding," E. N. Wentworth, Professor of Animal Breeding, Kansas Agricultural College.

General assembly, Auditorium.
Music—Selections by Department of Music, Kansas Agricultural College.

"From Range to Feed Lot," Hon. John Clay, Chicago, Ill.

Afternoon session, 1:30 o'clock:
Business meeting.

"The Breeding of the Grand Champion," R. H. Hazlett, farmer and breeder, El Dorado, Kan.

"The Outlook for the Live Stock Breeder," Hon. John Clay.

"The Breeding of Pure-Bred Cattle" (illustrated by examples from the college breeding herd, judging pavilion), W. A. Cochel, Professor of Animal Husbandry, Kansas Agricultural College.

Grand live stock parade of breeding and show animals of beef and dairy cattle, horses, hogs, and sheep, in judging pavilion.

Headquarters for stockmen, Agricultural Building, Room 10.

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50c Combination Collection
Consisting of 2 pks. Radish, 2 pks. Lettuce, and 1 pkg. each of Asparagus, Wax Beans, Beets, Cabbage, Carrots, Spinach, Turnips, Parsnips, Peas, Tomatoes, Nasturtium, Artichokes, Corn, Beans, Zinnia, Sweet Peas. All varieties are best seeds for your locality.
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We desire to make this department just as helpful as possible, and believing that an exchange of experiences will add to its value, we hereby extend an invitation to our readers to use it in passing on to others experiences or suggestions by which you have profited. Any questions submitted will receive our careful attention and if we are unable to make satisfactory answer, we will endeavor to direct inquirer to reliable source of help. Address Editor of Home Department, Kansas Farmer, Topeka, Kansas.

"Speak a shade more kindly
Than the day before;
Pray a little oftener,
Love a little more."

Each high achievement is a sign and token of the whole nature's possibility. What a piece of the man was for that shining moment, it is the duty of the whole man to be always.—PHILLIPS BROOKS.

Remember the dates of Farm and Home Week at the Kansas Agricultural College—February 5 to 10. If you can attend, you will find there many interesting sessions.

The bed spread or top quilt can be kept unwrinkled and clean much longer if it is turned back or removed each night. By folding it double and then once again, it will not be necessary to take it off. See that the folds are straight so that there will not be wrinkles. All this takes much less time and strength than is required to wash either a bed spread or quilt, and the spread or quilt will not wear out so quickly, either.

Working Conveniences

Many housekeepers might have more of the conveniences that greatly reduce the drudgery of housework, if they would express a desire for them and a willingness to use them. Men are constructed differently. There are those who see and understand the needs of the household as well as does the housewife, and will provide them voluntarily. Then there are those who, though they do not see them, if their attention is called to these needs, they are provided promptly. And the third class is made up of those who neither see the needs nor are easily convinced regarding them.

We have known women who through their indifference were responsible for placing their husbands in the second or third class mentioned. A new convenience was brought home and without giving it a trial they would declare they could do the work easier and more quickly in their old way. Nothing will more surely kill the interest of the thoughtful husband in household conveniences.

The housewife should have all the conveniences for doing her work better and more easily, that the farm business will afford. This is what the farmer does regarding the machines and tools for the outside work. In fact, many times these machines and tools are bought on the theory that they will pay for themselves, which they do. So will the conveniences for making the housework lighter.

Housekeeping and home-making are a part of the farm business, the same as are the outdoor operations, and should be provided for as adequately.

Reading Is a Habit

A taste for good reading cultivated early in life, is one of our greatest blessings. To the man or woman who enjoys reading and who has learned to choose the best, few of the wonders and beauties of the world are barred. The reader need never be alone, for it is always possible to have at least a few of his book friends near him. These he can choose according to his mood and they will minister to his need in an almost human way.

With some, the reading habit is a natural one. With others it is possible of acquirement if thought is given to it early enough. The creation of a love for good reading is very important in the child's training. All his leisure hours should not be spent reading, for play hours are essential to the normal development of all children. But reading is as helpful to the development of the mind as play is to the body. As each day's exercise causes the body to grow normally, so will good daily reading exercise the powers of the mind and give it strength and development. Building character—the highest type

of manhood and womanhood—is the biggest and most important work there is, and we each have a part in it to the extent that we seek to guide childhood in the direction of the best influences. Through good literature the child can be surrounded with many of these best influences.

Keep the Mouth Clean

We do not refer this time to brushing the teeth—almost everyone does this. This is a warning against putting dirty things from the outside into the mouth.

How many of us moisten our thumbs with our tongues before turning the pages of a book or newspaper? But do we ever stop to think where the paper or book has been before it has come to us? It may have become contaminated with disease germs even in our own possession, but surely we have no way of knowing what it has passed through before reaching us.

Those who have made a study of this matter and who ought to know as they have carried on experiments in order to find out, tell us that we moisten postage stamps in our mouths at our own risk and that even they carry disease germs though the gummy substance used on them is supposed to be pure. But postage stamps pass through many hands before they reach ours. If postage stamps are dirty, surely it is not safe to moisten envelope flaps with our tongues.

Yes, all these things have been done for years and we may not know of a single case of sickness resulting from any one of them. But there may have been hundreds about which we did not know. A sure preventive in each of the cases mentioned, would be a small sponge kept in a small cup where it would be handy to get when needed for any of these purposes. It is far easier to keep a sponge clean than it is to take care of a sick person.

Some weeks ago we referred to the filth that accumulates on money and the dangerous practice of holding it in the mouth. At first thought it would seem there is no comparison between the dirt on money and that on clean postage stamps or new envelopes, and yet all pass through many hands and are exposed to dirt that should not be carried to the mouth.

Bulletin on Bedbug

Farmers' Bulletin No. 754 of the U. S. Department of Agriculture, gives interesting and valuable facts about the bedbug. At some time in almost every housekeeper's experience this troublesome pest makes its appearance, much to the chagrin of the housewife. She should not feel so disgraced as she usually does, but can successfully fight this enemy. The bulletin gives the history and habits of the bedbug and the remedies which have proven effective in ridding the house of it. This bulletin can be secured by writing the Division of Publications, U. S. Department of Agriculture, Washington, D. C.

English Rocks

- 1 1/2 cupfuls brown sugar
- 3 eggs, well beaten
- 1 cupful butter, or part lard
- Pinch of salt
- 1/2 cupful milk
- 3/4 pound raisins, chopped
- 3 cupfuls flour
- Chopped English Walnuts
- 1 teaspoonful soda
- 1 teaspoonful cinnamon

Drop from spoon in buttered pan and bake in moderate oven.

Sour Cream Waffles

- 1 cupful sour cream
- 1 cupful sifted flour
- 1 tablespoonful white cornmeal
- 2 eggs beaten separately
- 1/2 teaspoonful soda
- Pinch of salt

Sift salt and soda with flour. Mix beaten egg yolk and cream, flour, cornmeal, and stiffly beaten egg whites. Thin batter with water if necessary to run quickly and smoothly on hot greased waffle iron.

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OVERLAND RED

A Romance of The Moonstone Canon Trail

(Chapter XXXI, "Night"—Continued)

She reassured the trembling Boyar, who fretted sideways and snorted as he passed the spot where the snake had been coiled in the trail.

At the edge of the Old Meadow the girl dismounted, allowing Boyar to graze at will. She climbed to the low rounded rock, her first while throne of dreams, where she sat with knees gathered to her in her clasped hands. The pony paused in his grazing to lift his head and look at her with gently wondering eyes.

The utter solitude of the place, far above the viewless valley, allowed her thought a horizon impossible at the Moonstone Rancho. Alone she faced the grave question of making an unalterable choice. Collie had asked her to marry him. She had evaded direct reply to his direct question. She knew of no good reason why she should marry him. She knew of no better reason why she should not. She thought she was content with being loved. She was, for the moment.

The Old Meadow, that had once before revealed a sprightly and ragged romance, slumbered in the southern night; slumbered to awaken to the hushed tread of men and strange whisperings.

Down in the valley the coyotes called dismally, with that infinite shrill sadness of wild things that hunger, and in their wailing pulsed the eternal and unanswerable "Why?" challenging the peaceful stars. Something in their questioning cry impelled Louise to lift her hands to the night. "What is it? What is it up there—behind everything—that never, never answers?"

The moon was lost somewhere behind the ragged peaks. The night grew deeper. The Old Meadow, shadowed by the range above it, grew dark, impenetrable, a place without boundary or breadth or depth.

"Got a match, kid?"

Louise raised her head. Some one was afoot on the Old Meadow Trail. She could hear the whisper of dried grasses against the boots of the men as another voice replied, "Sure! Here you are." And Louise knew that Collie was one of the men.

About to call, she hesitated, strangely curious as to who the other man might be, and why Collie and he should forgo together in the Old Meadow, at night.

"Never mind," mumbled the first speaker; "I thought I wanted to smoke, but I don't. I want to talk first—about the Rose Girl."

Louise tried to call out, but she was interrupted by Overland's voice. The two men had stopped at the lower side of the great rock. She could hear them plainly, although she could not see them.

"Collie—we're busted. We're done, Chico. I ain't said nothin' to Billy yet. He's got money, anyway. This here only hits you and me."

"What do you mean, Red?"

"I mean that the Rose Girl Mining Company, Incorporated, Jack Summers, President and General Manager, don't belong to us and never did. We been sellin' stock that ain't ours and never was."

"How's that?"

"I was goin' to write. But I ain't no hand to write about business. Writin' po'try is bad enough. You recollect them papers and that dust Billy tried to find, out there by the track?"

"Yes."

"Well, I found it all. Since the company is workin' the claim now and I didn't have so much to do, I got to thinkin' of them papers. I went out there, paced her off down the track, guessed at about where it was, and found 'em."

"Found them?"

"Yes, sir. There was that little bag almost atop of the sand, account of wind and rain. Then there was a record of the claim, our claim. It's been filed on before. We made a mistake and filed on the wrong section. When me and Billy went to file, I noticed the clerk said something about havin' neighbors on the next claim, but I was scared of answerin' too many questions, so I give him some cigars and beat it."

"Who owns our claim, then?"

"That's the queer part of it. You know the guy we give the water to—the one that died out there. He owns the claim, or he did. It belongs by rights to his girl now. His name was Andre Lacharme."

"Lacharme?"

"Yes, Louise's pa. Recollect your boss tellin' us how the Rose Girl's daddy was missin' out in the Mojave? Then they was a letter—old and 'most wore out—from Walter Stone himself. It was to him—her pa—tillin' him about the little Louise baby and askin' him to come to the Moonstone and take a job and quit prospectin'. That's where we stand."

Louise, breathless, listened and could not believe that she was real, that this was not a dream. Andre Lacharme! Her father!

"I seen a lawyer about it," resumed Overland. "He said it was plain enough that the claim belonged to the dead prospector or his girl, now. You see, we worked the claim and kep' up the work accordin' to law. What we made ain't ours, but I'm mighty glad it's hers. 'Course, we earned what dust we dug, all right. Now I'm leavin' it up to you. Do we tell her or do we say nothin', and go on gettin' rich?"

"Why do you put it up to me?" asked Collie.

"Because, kid, you got the most to lose. Your chance is about gone with the Rose Girl if you let go the gold. Sabe? The little Rose Girl is wise. She ain't give two cents for money—but she ain't foolish enough to marry a puncher that's workin' for wages on her uncle's ranch. And when she gets all me and Billy made and your share, she'll be rich. That won't be no time for you to go courtin' her. It ain't that you ain't good enough for any girl. But now—days things is different. You got to have money."

"Do you think Louise would take the money?" asked Collie.

"I don't know. But that ain't it. We either give it up—or we don't. What do you say?"

"Why—to tell Louise, of course. I meant that right along. You ought to know that."

"You givin' it up because you had some fuss with her, or anything like that?"

"No, Red. I say tell her, because it's square. Did she stop to ask questions when I was in trouble? No. She went to work to help me, quick. I guess we care more for her than a whole carload of gold."

"Well, I guess. Once I wouldn't 'a' stopped to worry about whose gold it was. But knowin' the Rose Girl—knowin' what she is—why, it's makin' me soft in me morals."

"What do we do now, Red?"

"I'm goin' to beat it. Back to the dusty for mine."

"You don't have to do that, Red."

"That's just why I'm a-doin' it. I like to do what I like."

"Quittin' now seems like saying, 'I'm whipped,'" said Collie. "Quittin' after givin' up our money to her looks like we were sore—even if we do it and smile. She would feel bad, Red. She'd think she drove us off."

"No, I reckon not. She'll see that I always been a good daddy to you and put you right in this case. It was all right when you had a chance. It ain't now. It ain't fair to her, neither, because she's like to stick to any promises she might 'a' made you."

"Why don't you ask Store for a job?" said Collie.

"What? Me? After bein' President of the Rose Girl Mining Company, in—Say! They's no half-way house for me. It's all or nothin'. Why, I don't even own the Guzzard. Could you stand it to see her every day, and you just a puncher workin' for the Moonstone? She would smile and treat you fine, and you'd be eatin' your own heart out for her."

"No, I couldn't," said Collie slowly. "Red, I guess you're right."

Collie's perspective was distorted through sudden disappointment. The old life of the road . . . the value tomorrows of indolence . . . the sprightly companionship of Overland Red, inventive, eloquent . . .

"Red, if I come with you, it's because I can't stand seein' her—after everything that has happened. It is square to her, too, I guess."

"I ain't askin' you, Collie, but there's nothin' like ramblin' to make you forget. It's got hard work beat to a mush, because when you're ramblin' you're 'most always hungry. Listen! Love is when you ain't satisfied. So is an empty stomach. A fella's got to eat. Do you get that?"

"Yes. But, Red, you said you loved a woman once. You didn't forget."

"No, kid. I didn't. Once I didn't do nothin' else but remember. I got over that. It's only accidental to circumstances pertainin' to the fact that I remember now. You never seen me cry in my soup, did you?"

"But you're different."

"That's the blat every yearlin' makes till he grows up and finds out he's a cow jest like his ma. I ain't different inside. And bleedin' inside is dangerouse than bleedin' outside. Listen! Remember the little fire beside the track, when we way 'way up in the big hills? Remember the curve, like a snake unwindin' where she run round the hill, and nothin' beyond but space and the sun drippin' red in the ocean? Remember the chicken we swiped and eat that night? And then the smokes and lookin' up at the stars? Remember that? Listen!

"It's beat it, bo, while your feet are mates, and we'll see the whole United States. With a smoke and a pal and a fire at night, and up again in the mornin' bright, with nithin' but road and sky in sight and nothin' to do but go."

"Then beat it, bo, while the walkin's good; and the birds on the wires is sawin' wood. If today ain't the finest for you and me, there's always tomorrow, that's goin' to be. And the day after that is a'comin'. See! And nothin' to do but go."

"I'm the ramblin' son with the nervous feet, that never was made for a steady beat. I had many a job for a little spell; I been on the bum, and I've hit it swell, but there's only one road to Fare-ye-well, and nothin' to do but go."

"With nothing to do but go," whispered Collie. "Red, we've always been friends?"

"You bet your return ticket!"

"And we are always going to be," said Collie. "I guess that settles it. I—I wish Saunders—had—finished me."

Louise, numb from sitting still so long, moved slightly.

"What's that?" exclaimed Collie.

"Jest some of your little old ideas changin' cars," replied Overland. "You'll get used to it."

"No; I heard something."

"You'll be seein' things next. Got a match? I'm jest dyin' for a smoke. Remember when she give us the makin's and you got hot at me?"

Overland cupped the flame in his hands and lighted his cigaret. The soft glow of the match spread in the windless air, penetrating the darkness. For an instant, a breath, Overland saw a startled face gazing down at him; the white face of the Rose Girl!

"Great Snakes!" he cried, stepping back as the flame expired.

"What's the matter, Red?"

"Nothin'. I was just thinkin'. I burned my mitt. Come on, Collie. Brand'll find a bunk for me tonight. I reckon. We'll tell the boss and the Rose Girl all about it tomorrow."

[To be Continued.]

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FARM AND HERD.

Robinson & Shultz, of Independence, Kansas, owners of Albechar Holstein Farm and one of the noted herds of pure-bred Holstein cattle now assembled, recently purchased 134 head of pure-bred Holsteins from noted herds in the East and shipped them to Independence by express. They now have a herd numbering 160 head. Their herd is headed by the great bull, Sir Juliana Grace DeKol, a sire of wonderful individuality and great record breeding. The sire's dam, Queen Juliana Dirkje, was until recently the world's champion three-year-old yearly butter cow. The dam, Grace of Portage DeKol, has a yearly record of 924 pounds butter and 22,087 pounds milk. Their recent purchase includes daughters and granddaughters of the world's best sires.

J. W. Smith, of Courtland, Kansas, announces February 1 as the date of his sale of stallions, jacks and jennets. Mr. Smith has been breeding jacks for over twenty years. The jacks that are catalogued for this sale are a good lot. A number of them are descendants of the famous Limestoe Mammoth. The offering includes aged jacks and a lot of well grown two and three-year-olds.

We have just received a catalog of the offering of Holstein cattle to be sold at public sale at Omaha, Neb., February 6. This is Mr. Glissman's tenth annual sale. The offering consists of eighty-five head, including a lot of A. R. O. cows with records up to 22 pounds.

Marketing pure-bred live stock is a difficult problem for the small breeder. Because of this fact the department of animal husbandry in the Kansas State Agricultural College holds breeders' sales at Manhattan with a view to being of service to these men. "Because the small breeders have only a few animals for sale, buyers are not so readily attracted as they are to places where there are large numbers of individuals from which to make selections," commented Dr. C. W. McCampbell, associate professor of animal husbandry. "A representative of the animal husbandry department solicits entries to the sales at the college, checks the pedigrees of the animals, inspects them, and accepts only reliable individuals. No charge is made for personal service, barn room, or for the use of the sale pavilion. This line of work is meeting with hearty approval from the breeders. The Breeders' Hereford sale held last winter was a decided success, and the Breeders' Percheron sale to be held February 9 promises to be the best Percheron sale ever held in Kansas."

W. B. Wallace, of Bunceon, Mo., will hold his King Joe bred sow sale on Wednesday, February 7, 1917. King Joe sold for \$1,250, the highest price ever recorded for a big-type Poland China boar at auction. King Joe sired G. & A.'s King Joe, the world's junior champion boar at the National Swine Show. King Joe pigs sold up to \$200 at six months of age and sows bred to him have never averaged below \$100 per head. Litters by this great sire will add value and prestige to any herd. His produce is half sold when farrowed.

Carl Miller, of Belvue, Kansas, is claiming February 9 and 10 for his Hereford sale at Alma, Kansas. The list of bulls includes two 4-year-old bulls, one sired by Recorder 228038 and one sired by Beau Belton, son of Beau Brummel 144610, also include 25 bulls right at two years old, three bulls by Beau Anxiety 351368, two bulls by Blanco 369614, one by Onward Lad, one by 5,000 Fred Real, several bulls by Laredo Boy and one by Prince Rupert 60th, one by Sir Paul 387866 and by Discoverer 11th by Disturber. The heifers are mostly sired by his herd bulls, by Belvue Hoxie 446581, a son of Laredo Boy. Several by Beau Belton 144610, a son of Beau Brummel, making the heifers granddaughters of Beau Brummel, Beau Mystic 37, several by others by Simpson 199-217, several by Hills Pride. There will be about 35 head of bred heifers in the offering, bred to Lord Arthur 499612, by Beau Beauty the Second, Gay Lad 9th 386873. The entire sale offering will consist of 250 head or more. This will be the inaugural sale of the new \$4,000 sale pavilion.

A. A. Meyer, of McLouth, Kansas, owner of the noted Lone Cedar Poland China herd, reports a good demand for his class Poland China breeding stock at very satisfactory prices. Mr. Meyer has lately sold a number of hogs to go to good herds and is receiving some very complimentary letters from the breeders who purchased them. Meyer's Orange, the boar that has been in use in this herd, is one of the outstanding sires now in service.

T. R. Maurer, a widely known breeder of Holstein cattle, formerly of Ashland, Ohio, has located at Emporia, Kansas, with his great herd of registered and high grade Holsteins. This herd is noted for production and the registered cows and heifers are from noted sires. Among them are granddaughters of Pontiac Korndyke, all of them from high record dams. At this time there is a number of cows and heifers in the herd bred to one of the best sons of Rag Apple Korndyke 8th, the world's champion bull. There are also several young bulls in the herd by this sire.

Augra's Lillon of the Maples is the name of a three-year-old registered Guernsey cow which has just returned with her baby calf from a tour of the state. She has been used for demonstrating the breed on the Kansas dairy train since November 15. This train is in connection with the extension school sent out by the Kansas Agricultural College, stopping in different towns. On January 1, Margaret De Lubin, an imported cow which dropped a heifer calf on Christmas morning, took the above cow's place and will be out on this train until March 1. These cows are insured for \$400 each against accident or death while on trains. Both are owned by R. C. Krueger, Burlington, Kansas.

H. O. Sheldon, manager of the swine department of the Deming Ranch at Oswego, Kansas, writes that they have claimed March 14 for a bred sow sale. The Deming Ranch has on hand about 400 head of Poland China hogs. A large number each year are sold on mail orders but all the culls go to the stock market. The herd under the management of Mr. Sheldon is fast gaining in popularity and is recognized among hog men as one of the good herds in the corn belt. A feature of the herd at this time is 100 fine fall pigs and the choice spring boars.

We have just received Volume 89 of the Shorthorn Herd Book. This volume contains the pedigrees of animals culmed before February 2, 1916. It contains the pedigrees of bulls from No. 437001 to 448000; cows from No. 217001 to 236000.

THE MILLER HEREFORDS Are Ready for Their THIRD ANNUAL SALE

In the New Sale Pavilion at
Alma, Kansas, February 9-10

SIXTY PROMISING YOUNG FEMALES
THIRTY-FIVE PRIME YOUNG HERD BULLS
Two Carloads Coming Two-Year-Old Range Bulls

Good railway facilities. Outstanding hotel accommodations. Extra large offering of cattle that will give you a pleasant surprise when you see them, and a sale to be held in the new \$4,000 heated sale pavilion at Alma, Kansas, on February 9 and 10, right in the heart of the Hereford community of the world, including Kansas. You are cordially invited. Don't forget the date. Write for catalog today.

CARL MILLER, BELVUE, KANS.

75 Registered Holstein-Friesians 75

At Auction

Rock Brook Farm's Tenth Annual Sale of Registered Holsteins will be held at Union Stock Yards Sale Pavilion

South Omaha, Nebr., Tuesday, February 6th

Included in this offering will be daughters of Sir Pontiac Rag Apple 49334, a 31-pound bull; Kalmuck Skylark Johanna, a son of Katy Gerben; King of the Pontiacs Johanna Lyons 129656, a son of King of the Pontiacs 39037 and King Segis Helen Pontiac, a son of King Segis Pontiac, out of a daughter of Hengerveld DeKol, making him a brother to the \$50,000.00 King Segis Pontiac Alcartra, as well as a lot of cows and heifers in calf to above bulls. A lot of the cows will be fresh at time of sale and milking heavy. A lot of A. R. O. cows with records up to 22 pounds. In all a high class offering with every animal over six months old tuberculin tested and every animal guaranteed a breeder.

No better offering of Registered Holsteins will be sold this season. For catalog, address

HENRY C. GLISSMAN, Sta. B, OMAHA, NEBR.

Add 20% to Your Crops

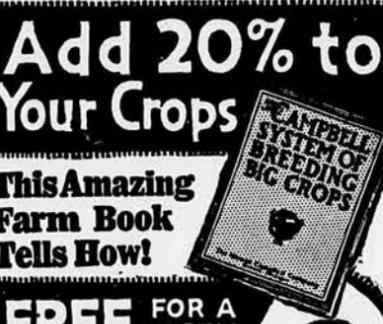
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Most amazing farm book ever written. Worth hundreds of dollars to any farmer. Explains wonderful discovery—"The Campbell System of Breeding Big Crops!" Your Wheat, Oats, Corn, Timothy, Clover and other crops increased 20 per cent in a single season! 600,000 farmers use this easy way. Send postal at once for Free Book.

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Also get facts about this wonderful Gas Power or Hand Machine. The Chatham Seed Grader and Cleaner. Cleans, grades, separates and sacks any grain seed! Any grain seed or rankest mixture! All in a single operation! Takes out all dust and trash and wicks weed seed! Separates the poor, sticky seed—sacks big healthy fellows, ready for sowing or market. Handles up to 60 bushels per hour! Beats going to the elevator or bothering neighbor. Thousands in Use! No Money in Advance! 30 Days' Free Trial! Long Time Credit! No Advance in Price! Send postal for amazing Free Book and Big Offer NOW. MANSON CAMPBELL CO., Dept. 225 Detroit, Mich. Dept. 225 Kansas City Dept. 225 Minneapolis




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One hundred acres rich Kaw Valley farm, no waste, one-half mile to station, two miles to good town and high school; fine improvements. Write or telephone. B. L. FOWLER, Executor, PERRY, KAN.

Virginia Farms and Homes

Free Catalogue of Splendid Bargains. E. B. CHAFFIN & CO., Inc., Richmond, Va.

MONTANA LANDS

Free map of Montana and free information regarding the grain and stock land of northern Montana. Write North Montana Immigration Ass'n, Dept. K-F, Havre, Mont.

160 ACRES rich dark loam soil, 5-room house, large barn, crib and other improvements, well and cistern. For immediate sale, \$65 per acre. Possession at once. Eighty acres close to town, good 6-room house, number one barn, 1 1/2 acres fine orchard, 25 acres tame grass, well watered. Price \$5,200. Possession at once, if wanted. MANSFELD LAND CO., Ottawa, Kansas.

40 ACRES, 5 miles McAlester, city 15,000. 23 acres fine bottom, cult.; fair improvements. \$26 per acre. Terms. SOUTHERN REALTY CO., McAlester, Okla.

BEST BARGAIN ON THE MAP

112-Acre Farm, near Topeka, only \$55 per acre. Terms. J. E. THOMPSON (The Farmer Land Man) Tecumseh, Shawnee County, Kansas

40 1/2 ACRES FINE BOTTOM LAND

Matagorda County, Texas. Will grow corn, alfalfa, cotton, potatoes, any vegetable or fruit. Level and above overflow. Twenty acres cultivated, balance elm, pecan and hickory timber. One mile of railroad switch. \$25 per acre if sold at once. Terms. C. E. MYERS, OWNER, STERLING, KAN.

Please Mention Kansas Farmer When Writing to Advertisers.

Classified Advertising Reliable Poultry Breeders

HELP WANTED.

BE A GOVERNMENT FARMER. GOOD pay steady, interesting job. Write Central Institute, 44-F, St. Louis.

BOYS, GIRLS, SEND US THIRTY OR more names of farmers who will need seed corn this spring and we will send you a nice premium free. Seed Corn Armstrong's, Shenandoah, Iowa.

MAN OR WOMAN TO TRAVEL FOR old established firm. No canvassing; \$1,170 first year, payable weekly, pursuant to contract. Expenses advanced. G. G. Nichols, Philadelphia, Pa., Pepper Bldg.

WANTED—MEN 18 OR OVER. RAILWAY mail clerks. \$75 to \$150 month. Vacations. Chance for farmers. List government positions open, free. Write immediately. Franklin Institute, Dept. T82, Rochester, N. Y.

WANTED—DAIRY AND FARM HAND, February 15. Single. Must be steady and a dry hand milker. Must be willing to feed and care for registered Holsteins so as to develop their best qualities. Steady employment. Give experience, wages expected, age and nationality in first letter. Harry W. Mollhagen, Bushton, Kansas.

AGENTS WANTED.

WE PAY \$80 MONTHLY SALARY AND furnish rig and expenses to introduce guaranteed poultry and stock powder. Bigler Company, X 671, Springfield, Ill.

CATTLE.

SEE KRUEGER'S GUERNSEY ADVERTISEMENT in this issue.

REGISTERED HOLSTEIN BULL READY for light service. G. E. Berry, Garnett, Kan.

FOR SALE—TWO REGISTERED SHORTHORN bulls. Write for breeding. R. C. Watson, Altoona, Kansas.

POLLED JERSEYS—BREEDERS' NAMES of Chas. S. Hatfield, Secy., Box 40, Route 4, Springfield, Ohio.

FOR SALE—AN EXCELLENT REGISTERED Shorthorn bull, of serviceable age. Red in color. C. W. Merriam, Columbian Building, Topeka, Kansas.

TWO FULL BLOOD HOLSTEIN COWS, one four, the other two years old. Both of the King Segis strain. Leland N. McAfee, Route 8, Topeka, Kansas.

HIGHLY BRED HOLSTEIN CALVES, either sex, 15-16ths pure, crated and delivered to any station by express, charges all paid, for \$20 apiece. Frank M. Hawes, Whitewater, Wis.

FOR SALE—REGISTERED GUERNSEY females, all ages; also a few males and grade cows, guaranteed right in every particular. Address Clovernook Farm, Whitefish Bay, Wis.

TWO GUERNSEY BULLS FOR SALE—One three years old, the other one year. The older a proven breeder and the other in fine condition for spring service. Both registered. Priced right if taken at once. M. I. Patterson, Victoria, Kansas.

GOATS

FOR SALE—MILCH GOATS. BURR Fleming, Eminence, Kansas.

REAL ESTATE.

TRADES EVERYWHERE—EXCHANGE book free. Bersie Agency, El Dorado, Kan.

CHOICE IMPROVED QUARTER, 100 cultivated. Close to town, church, school. E. Hillier, Republican City, Neb.

FARMING OUR FERTILE FLORIDA lands means growing crops the year round. Sandy loam with clay subsoil, ideal for early vegetables, oranges and grapefruit, live stock and staple field crops. Tract in prosperous community, close to transportation and Dixie Highway. Our book, "Farming in Florida," points way for right man to make big profits. Write for free copy today. O. P. Swope Land Company, Oviedo, Seminole County, Florida.

YOUR CHANCE IS IN CANADA.—RICH lands and business opportunities offer you independence. Farm lands, \$11 to \$30 acre; irrigated lands, \$35 to \$50; twenty years to pay; \$2,000 loan in improvements, or ready made farms. Loan of live stock; taxes average under 20 cents an acre; no taxes on improvements, personal property, or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, General Superintendent, Land Branch, Canadian Pacific Ry., 234 Ninth Ave., Calgary, Alberta.

BUSINESS CHANCES

FREE FOR SIX MONTHS—MY SPECIAL offer to introduce my magazine, "Investing for Profit." It is worth \$10 a copy to any one who has not acquired sufficient money to provide necessities and comforts for self and loved ones. It shows how to become richer quickly and honestly. Investing for Profit is the only progressive financial journal and has the largest circulation in America. It shows how \$100 grows to \$2,500. Write now and I'll send it six months free. H. L. Barber, 431.28 W. Jackson Boulevard, Chicago.

WANTED—TO BUY.

WANTED, A GOOD DOG TO KEEP bums away. O. A. Wiley, Route 1, Florence, Kansas.

HONEY.

PURE ALFALFA HONEY, DELICIOUS flavor; two 60-pound cans, \$12.75. Wesley Foster, Producer, Boulder, Colo.

HONEY FOR SALE, BOTH COMB AND extracted. Write for prices. Nelson Overbaugh, Frankfort, Kansas.

MISCELLANEOUS.

FOR SALE—RICE POP CORN, CROP OF 1915; good popper; \$3.25 per hundred. Nelson Overbaugh, Frankfort, Kansas.

YOU CAN MAKE A GOOD LIVING in your back yard raising Belgian Hares. Full particulars and price list of all breeds, 10c. W. G. Thorson, Aurora, Colo.

FOR SALE—16-HORSEPOWER GASOLINE engine on steel truck; good as new. Double seated carriage, rubber tires, good as new, cost \$480, or will trade either of the above. Make me an offer. H. W. McAfee, Route 8, Topeka, Kansas.

TREES, SEEDS AND PLANTS.

SEED CORN—BOONE COUNTY WHITE. Carefully selected. \$2.50 per bushel, shelled. J. W. Taylor, Edwardsville, Kansas.

ALFALFA SEED, CHOICE, RECLEANED new crop at \$8 per bushel. Write for samples. C. Markey, Belle Plaine, Kansas.

NO. 1 WHITE BLOSSOM SWEET CLOVER seed at farmers' prices. John Lewis, Hamilton, Kansas.

BLACK-HULLED WHITE KAFIR SEED, \$2.25 for 70 pounds in head. H. W. Chestnut, Kincaid, Kansas.

SWEET CLOVER WANTED. GIVE quality and lowest price. Best propositions accepted. Standard Seed Co., Eureka, Kan.

TEN ELBERTA AND FIVE CHAMPION peach trees, postpaid, \$1. Send now. Wellington Nurseries, Dept. C, Wellington, Kan.

ASK US FOR PRICES ON GENUINE Texas red seed oats. We will buy your prairie hay and cane seed. Lewis & Knight, Dallas, Texas.

TIMOTHY SEED—FANCY, NEW CROP, recleaned timothy seed at \$2.50 per bushel. Write today for samples. Watson Bros., Seed Merchants, Milan, Mo.

FIFTY CENTS WILL BRING YOU 12 large roots of Mammoth Rhubarb that will give you at least one dollar in value first season. Catalog free. Arkansas Nursery Company, Dept. KF, Fayetteville, Ark.

SITUATION WANTED.

MARRIED MAN, STRICTLY SOBER, wants job on farm by the year where house and garden is furnished. Have had experience. G. I. Bardwell, Vesper, Kansas.

WANTED—WORK ON DAIRY FARM BY man 37 years old, experienced. Jersey farm preferred. Good references. Mark Johnson, Bronson, Kansas.

WANTED—PLACE TO WORK ON FARM by the month, anywhere in U. S., by young man who understands all kinds farm work. A. A. Rieff, Route 1, St. Peter, Minn.

DOGS.

COLLIE PUPS—U. A. GORE, SEWARD, Kansas.

FOX, WOLF AND COON HOUNDS; rabbit dogs. Reasonable. J. P. Tindall, Lees Summit, Mo.

COLLIE PUPS FROM GENUINE STOCK dogs that drive from the heel. Best of breeding. E. L. Dolan, Route 2, Platte City, Missouri.

AIRDALE—THE GREAT TWENTIETH century dog. Collies that are bred workers. We breed the best. Send for list. W. R. Watson, Box 128, Oakland, Iowa.

FINE BRED SCOTCH COLLIES, SETTERS, fox hounds, blood hounds, bull terriers, Bostonians, spaniels, poodles, fox terriers and toy dogs. Fancy poultry, pheasants, pigeons, parrots, canaries. Pets all kinds. We buy all kinds live animals, birds and pets. Circular free. Detroit Bird Store, Detroit, Mich.

THE STRAY LIST.

TAKEN UP ON THE 20TH DAY OF May, 1916, by A. L. Jasper, Santa Fe, Haskell County, Kansas, one red heifer calf, no brands. A. R. Henage, County Clerk.

TAKEN UP BY H. R. ERDMAN, NORTH Fifth Street, Kansas City, Kansas, on January 8, 1917, one red steer, weight 800 lbs., cross on hip. Appraised at \$40. William Beggs, County Clerk, Wyandotte County.

TAKEN UP BY F. A. HEUSTIS, FARMER Township, Wabaunsee County, Kansas, one 4-year-old red steer with white face, scissor brand on right hip, valued at \$50. November 13, 1916. L. B. Burt, County Clerk, Wabaunsee County, Alma, Kansas.

HORSES AND MULES.

FOR SALE—REGISTERED PERCHERON stallion, 6 years old. Two Catalonian Jennets. W. M. Dice, Tecumseh, Kansas.

SALE OR TRADE FOR YOUNG STOCK, 15-16ths Belgian stallion 9 years old, weight 2,000 pounds; 85 per cent breeder. W. G. Shideler, Silver Lake, Kansas.

SHETLAND AND WELCH SPOTTED stallion, 650 pounds, 4 years, extra stylish driver. Might trade for good young jack. Lewis Cox, Concordia, Kansas.

WISCONSIN LAND FOR SALE

LANDOLOGY, A MAGAZINE GIVING the facts in regard to the land situation. Three months' subscription free. If for a home or as an investment you are thinking of buying good farm lands, simply write me a letter and say, "Mail me Landology and all particulars free." Address: Editor Landology, Skidmore Land Co., 301 Skidmore Bldg., Marinette, Wis.

Auld Bros., of Frankfort, Kansas, owners of one of the good herds of Red Polled cattle, report a good demand for Red Polled breeding stock at satisfactory prices. A feature of their herd at this time is the fine lot of 1916 fall calves.

PLYMOUTH ROCKS.

BARRED ROCK COCKERELS AND PULLETS. Nat. A. Owens, Traer, Iowa.

BARRED ROCK EGGS—WILL PLEASE, \$1 postpaid. Mrs. Geo. Kennedy, Edmond, Okla.

BARRED PLYMOUTH ROCK COCKERELS, pure-bred. Just a few at \$3 to \$5 each. Ben Vigus, Severance, Kansas.

NOTICE, POULTRY BOYS.—WHITE Rock cockerels for sale, \$1.25 and up. Frank B. Pfeifer, Hays, Kansas.

WHITE ROCKS, SIZE AND QUALITY. Prices reasonable. Write G. M. Kretz, Clifton, Kansas.

FOR SALE—BUFF ROCK AND BLACK Langshan roosters, good ones, \$1.50 each. Newton Coffman, Rosendale, Mo.

WHITE PLYMOUTH ROCKS—ILLINOIS state show winners. Stock for sale. Prices reasonable. Circular free. Wm. Goodwin, Route 32, Chilliocthe, Illinois.

PRIZE WINNING BARRED ROCK COCKERELS for sale. Eggs for sale in season. F. N. Davis, 508 Fillmore St., Topeka.

CHOICE BARRED PLYMOUTH ROCK cockerels and pullets, \$2 to \$3 each. E. Leighton, Effingham, Kansas.

A FEW GOOD WHITE PLYMOUTH Rock cockerels for sale. Mrs. J. R. Bowman, Chase, Kansas.

BARRED—FIRST PEN ST. LOUIS SHOW. First cockerel and cock, State Fair exhibition; breeding males. J. K. Thompson, 205 The Drive, Topeka.

FOR SALE—EXTRA FINE BARRED Rock cockerels. Cockerel mating. Pure Thompson strain. Sired by \$25 bird. \$3.50 to \$5 each. G. W. Romberg, Red Oak, Iowa.

PETTIS' BARED ROCKS—WINNERS Missouri State Show, 1916. Cockerels, \$2 to \$5. Egg producing. Booking orders. Mrs. P. A. Pettis, Wathena, Kansas.

BARRED PLYMOUTH ROCK COCKERELS, Bradley strain. Parks 200-egg strain. \$3 to \$5 each. Eggs in season. Gem Poultry Farm, Haven, Kansas.

BARRED ROCK COCKERELS, FROM prize winning stock, \$1.50 to \$3.00. Write today. Satisfaction guaranteed. R. D. Ames, Walton, Kansas.

LINDAMOOD'S BARRED ROCK COCKERELS are better than ever. Nicely marked, strong boned. Order now for coming season. Prices, \$3 to \$5 each. Sent on approval. C. C. Lindamood, Walton, Kansas.

PURE BARRED ROCK COCKERELS—Large, vigorous, well marked birds, heavy laying strain, \$1.50 each. Choice large pen birds, \$3 each. S. R. Blackwelder, Isabel, Kansas.

BARRED PLYMOUTH ROCKS, RHODE Island Reds. Fine lot of birds now ready for shipment. Prices reasonable. Quality guaranteed. Eggs in season. Tom Leftwich, Winfield, Kansas.

BLUE RIBBON WINNERS, MISSOURI and Kansas state shows. Barred Rocks, Ringlet strain. Eggs and stock for sale. Satisfaction guaranteed. Hartman's, Route 1, Webb City, Missouri.

ORPINGTONS.

S. C. BUFF ORPINGTON COCKERELS, \$1, \$2 and \$5. J. W. Falkner, Belvue, Kan.

BUFF ORPINGTON COCKERELS, \$2 TO \$5 each. Mrs. J. L. Taylor, Chanute, Kan.

EXTRA GOOD BUFF ORPINGTON COCKERELS, \$1.50. Pullets for sale. Mabel Teagarden, La Cyme, Kansas.

MY BUFF ORPINGTONS STILL WIN, Omaha, December, 1916. Fine cockerels or pullets. H. T. Farrar, Axtell, Kansas.

WHITE ORPINGTON COCKERELS FROM state winners, \$2, \$3, \$5. John Vanamburg, Marysville, Kansas.

A FEW GOOD BUFF ORPINGTON COCKERELS for sale. Mrs. C. F. Cooper, Nickerson, Kansas.

GOOD BUFF ORPINGTON DRAKES FOR sale, \$1.25 to \$2.50 each. John A. Huber, La Crosse, Kansas.

TURKEYS.

EXTRA GOOD BOURBON RED TURKEY toms, prices reasonable for immediate sale. Julia Haynes, McDonald, Kansas.

FOR SALE—MAMMOTH PURE BRONZE turkeys. Some two-year-olds. Nora Holmes, Fredonia, Kansas.

GOOD PURE-BRED MAMMOTH BRONZE toms. Eggs in season. Sadie Litton, Peabody, Kansas.

BOURBON RED TURKEYS, LARGE with splendid color and markings. Mrs. Elmer Nicholson, Route 5, Wellington, Kan.

OAK HILL FARM—PURE-BRED M. B. turkeys from high scoring stock. Pure-bred Duroc pigs. Lawson, Missouri, Route 2.

SARVER'S FAMOUS NARRAGANSETT turkeys, large boned stock, unrelated. Sunlight Poultry Farm, Mt. Moriah, Mo.

FOR SALE—M. B. TURKEYS, BIG, growthy fellows. Buff Rock cockerels and White Indian Runner drakes. No better blood anywhere. G. W. Perkins, Newton, Kansas.

MAMMOTH BRONZE TURKEYS, "GOLD-BANK" strain. Beautifully bronzed, pure white edging, big boned, splendid birds, \$6 to \$10. Mrs. Iver Christenson, Jamestown, Kansas.

GUINEAS.

PEARL GUINEAS, \$1 EACH. CLIFFORD Barrans, Lenox, Iowa.

ANCONAS.

FOR SALE—SINGLE COMB MOTTLED Ancona cockerels, Sheppard strain, from sweepstakes winners; \$1 up. Write me your wants. Frank Glenn, Newton, Kansas.

LEGHORNS.

SINGLE COMB BROWN LEGHORNS—Pullet mating only. Tiff Moore, Osage City, Kansas.

CHOICE R. C. BROWN LEGHORN cockerels, \$1.50. Lots of six reduction. Mrs. Griswold, Tecumseh, Kansas.

S. C. W. LEGHORN COCKERELS FROM Young's \$20 eggs. Elsie Thompson, Manhattan, Kansas.

S. C. BROWN LEGHORN COCKERELS, strictly pure bred, \$1.50 each, \$15 per dozen. Order early before they are gone. Mrs. L. H. Hastings, Thayer, Kansas.

S. C. W. LEGHORN COCKERELS FROM hens with records over two hundred eggs; one, two, three dollars each. Baby chicks, 12 1/2¢ each. Eggs, \$5 per hundred. Hyperion White Leghorn Farm, Route 1, Des Moines, Iowa.

LANGSHANS.

BIG BLACK LANGSHANS, FANCY AND utility cockerels and pullets. Guaranteed. H. Osterfoss, Hedrick, Iowa.

BLACK LANGSHAN COCKERELS FROM blue ribbon and sweepstakes winners. Mrs. D. A. Swank, Blue Mound, Kansas.

RHODE ISLAND REDS.

CHOICE ROSE COMB RHODE ISLAND Red cockerels. Mrs. C. H. Jordan, Wakarusa, Kansas.

QUALITY SINGLE COMB REDS—BARGAINS if ordered soon. Mrs. Elmer Nicholson, Route 5, Wellington, Kansas.

COCKERELS, S. C. R. I. REDS, GOOD size, good color. Price \$1.50. Mrs. Joseph Greene, Bernard, Iowa.

FOR SALE—EXTRA FINE LARGE SINGLE comb Rhode Island Red cockerels, \$3.50 to \$5 each. A. K. Romberg, Red Oak, Iowa.

FINE ROSE COMB RED COCKERELS, \$2. Baby chicks, 10 cents. Order now. Lilly Robb, Neal, Kansas.

ROSE COMB REDS EXCLUSIVELY. Cockerels for sale. Bean strain. M. L. Fickett, Puxico, Mo.

BRED TO LAY S. C. REDS, CHOICE large, deep red, hen hatched, farm raised cockerels. Best I ever raised. Satisfaction guaranteed. \$1.50 to \$3.50. Belmont Farm, Topeka, Kansas.

ONE HUNDRED ROSE COMB RHODE Island Red cocks and cockerels, sired by roosters costing \$15 to \$35—\$2, \$3.50, \$5 and \$7.50 each. A few higher. Order at once. They will go fast. Our pens mated for 1917 are the best we ever had. W. R. Huston, Red Specialist, Americus, Kansas.

WYANDOTTES.

EXTRA CHOICE ROSE COMB SILVER Wyandotte cockerels, \$2 each, six for \$10. Mrs. Phillip Schuppert, Arrington, Kansas.

SHUFF'S "BEAUTY" SILVER WYANDOTTES, Cockerels, \$2, \$2.50, \$3, \$4, \$5; hens, \$1.50, \$2. Mrs. Edwin Shuff, Plevna, Kansas.

FOR SALE—100 PURE-BRED S. L. WYANDOTTE chickens; good laying strain, from best stock obtainable. Write for prices. S. L. Hill, Route 3, Burlington, Kansas.

BRAHMAS.

HIGH SCORING LARGE EARLY hatched Light Brahma cockerels. Geo. Pratt, Wakarusa, Kansas.

LIGHT BRAHMA COCKERELS—100 good heavy birds, have won prizes at leading shows. Can surely furnish you quality. Schreiber Farm, Sibley, Iowa.

POULTRY WANTED.

OLD PIGEONS, \$1; GUINEAS, \$5 DOZEN delivered February 3. The Copes, Topeka.

NO. 1 TURKEYS, 24c; HENS, 16c; ducks and geese, 13c. Coops free. The Copes, Topeka.

DUCKS AND GESE.

WHITE EMBDEN GESE, EITHER SEX, \$2.25 each. Mrs. Wm. Dieter, Fulton, Mo.

GESE, EMBDEN, TOULOUSE, CHINA; turkeys, ducks. All leading breeds of poultry. Emma Ahlstedt, Roxbury, Kan.

FOR SALE—WHITE CHINA GESE, \$10 a pair. Mrs. James Peterson, Route 1, Hays, Kansas.

CHOICE WHITE EMBDEN GESE AND White Runner Ducks. Roger Smith, Centertown, Mo.

R. C. Krueger, of Burlington, recently sold to J. E. Pitt, of Hewan, Kansas, a registered Guernsey bull of May Rose breeding. Mr. Pitt was formerly engaged in dairying in Oklahoma and on coming to Kansas brought his entire herd of grade Guernseys along and expects to engage in that line in Chautauque County. The remarkable part of Mr. Pitt's herd is twenty-eight females that are daughters of one registered bull, but they are not for sale.

R. I. Little, of Des Moines, Iowa, one of the leading horse men of that state, reports his horses doing well and a good demand for high class stallions. Mr. Little has been in the business for years and show horses from his herd have been consistent winners at all the principal fairs since 1871, and some of the greatest prize winners since that time were from his herd.

KING JOE BRED SOW SALE

At Bunceton, Mo., Wed., Feb., 7

50 ■ Head of Sows, Fall Yearlings and Spring Gilts ■ **50**

The tops of the produce of my herd, including a number of my best herd sows and the largest growthy yearling and spring gilts I ever sold in a public sale.

All Bred to King Joe No. 70282 for February and March Litters

They represent the blood of the world's champion, Long Big Bone, Black Big Bone 2d, A Wonder, and other noted sires.

BREEDERS SHOULD NOT FAIL TO TAKE ADVANTAGE OF THIS CHANCE TO BUY KING JOE BLOOD.



THE WALLACE KIND

I want to mail you my catalog. It is brim full of hog talk, nicely illustrated, ready to mail on request. Send for one today. Kindly mention Kansas Farmer.

W. B. WALLACE, - - BUNCETON, MISSOURI

O. W. DEVINE WILL REPRESENT KANSAS FARMER AT THIS SALE.

Albechar Farm Holsteins

Herd Headed by Sir Juliana Grace De Kol, of World Record Breeding

We have recently acquired a number of Holstein females so that our herd now numbers 160 head, from which selections may be made. We can offer females from calves up to full age cows, priced singly or by the carload. We have daughters and granddaughters of King Segis Pontiac Parthenea, King Segis Pontiac, King Hengerveld Model Fayne, Pontiac Korndyke, Pontiac Aaggie Korndyke, and Sir Juliana Grace De Kol; twenty-five A. R. O. cows included in the herd. Nine heifers bred to a son of Pontiac Korndyke and Polly Posch. Address

ALBECHAR HOLSTEIN FARM

ROBINSON & SHULTZ,

INDEPENDENCE, KANSAS

GALLOWAY CATTLE.

GALLOWAY BULLS

SIXTY yearling and two-year-old bulls, strong and rugged; farmer bulls, have been range-grown. Will price a few cows and heifers.

E. E. FRIZELL, Frizell, Pawnee Co., Kansas

HAMPSHIRE HOGS

ATTEBERRY'S HAMPSHIRE HOGS

Bred sows, \$25 to \$30 each. July gilts and boars, \$10 each for 30 days. Choice individuals. ATTEBERRY & SONS, Lancaster, Mo.



ANGUS CATTLE

EDGEWOOD FARM

ABERDEEN-ANGUS CATTLE. Twenty-five young bulls, also some good cows and heifers for sale. All registered.

D. J. WHITE, CLEMENTS, KANSAS. Main line of A. T. & S. F. Ry., 145 Miles West of Kansas City.

P. M. ANDERSON'S POLAND CHINA SALE

IOWA KING BRED SOW SALE

LATHROP, MO. FEB. 1, 1917

FORTY HEAD, as good as will be sold in Missouri, bred to or carrying the blood of the great Iowa King 67584. Sows sired by such noted boars as Iowa King, Smooth Columbus, Superior Jumbo, Master Orphan, King Jumbo, Long Wonder, Long Jumbo 2d and Long Wonder Boy and bred to four of the best boars I could mate them to—Iowa King, King Jumbo 2d, Anderson's Big Bone by the grand champion Long Big Bone, and Smooth Columbus 2d by Smooth Columbus. Write for catalog. Sale in heated pavilion, no postponement.

P. M. ANDERSON, - - LATHROP, MO.

AUCTIONEERS

Col. H. S. Duncan, Col. J. Zack Wells, Col. J. W. Matthews, Col. N. M. Rogers

JACKS, JENNETS AND STALLIONS

COURTLAND, KANSAS
Thursday, Feb. 1, 1916

Mammoth Jacks and Jennets



At my farm adjoining Courtland, I will disperse my herd, including seven jacks, six jennets and two stallions. The Percheron stallion, Teddy, is included.

J. W. SMITH, COURTLAND, KANSAS
Auctioneers, L. R. Brady and J. W. Shotwell.

The jacks include the herd jack, Solitario, and the outstanding two-year-old, 16½ hands, Kansas Wonder. The herd jennets include the splendid show and breeder, Dandy, the dam of Kansas Wonder and others bred to Solitario.

HORSES AND MULES.



Percherons and Belgians

SIXTY-FOUR HEAD REGISTERED STALLIONS AND MARES. THIRTY STALLIONS AND THIRTY-FOUR MARES AND COLTS.

To close up a partnership, the thirty-four mares and colts must be sold by March 1, 1917. I mean business. Come and see me. J. M. NOLAN, Paola, Kansas

PIONEER STUD FARM

Established 1870

FIFTY REGISTERED STALLIONS AND MARES

JUST ARRIVED—A new shipment of stallions and mares. If you are in the market for a good Percheron stallion or mare, now is the time. We can show you more bone, size, action and conformation than you will find elsewhere. Write or come today.

C. W. LAMER & SON

SALINA, KANSAS

PRAIRIE VIEW STOCK FARM

Has 40 big, black Mammoth jacks and jennets. Every jack my own raising; two to six years old, 15 to 18 hands high, extra heavy bone, big bodies. I can sell you a better jack for \$500 to \$600 than most speculators can for a thousand. Come and see for yourself. They must sell. ED BOEN, LAWSON, MO. 35 Mi. E. of K. C. on C. M. & St. P. 40 Mi. S. W. of St. Joe, on Santa Fe

40 Head Percheron Stallions 40 Jacks and Jennets

Two to six years old, heavy bone, right in every way. Imported Spanish Jack, weight 1,200 pounds, at head of jennet herd. Come and see us. We mean business. Prices reasonable.

J. P. & M. H. MALONE

CHASE KANSAS

SIX BREEDS DRAFT STALLIONS Pedigree and guarantee with each, \$450 and up. Time given. E. L. LITTLE, Good Block, Des Moines, Ia.

Barn Full of Percheron Stallions and Mares. Twenty-five mature and aged jacks. Priced to sell. AL. E. SMITH, Lawrence, Kansas.

POLAND CHINAS

Poland China Boars and Gilts

Twenty-five early spring boars and twenty-five gilts. Sired by I Am King of Wonder and Watt's Kings. WM. WATT & SON - GREEN CITY, MO.

OWA KING BRED SOW SALE FEB. 1

Will Sell 40 Head of Tops. Am offering now some choice herd boar prospects, June and July pigs. All immune. Send for catalog of sow sale and price on boars. P. M. ANDERSON, LATHROP, MISSOURI

TOWNVIEW FARM

Big-Type Poland Chinas. For Sale—25 summer and fall gilts, sired by Miller's Sioux Chief and out of Lady Longfellow. Bred for late spring litters. Also 25 summer boars. Come and see my herd. C. E. GREENE - PEABODY, KANSAS

DEMING RANCH POLANDS

Twenty strictly high class boars, bred the same as our grand champion sow and other prize winners. They are herd headers. Also gilts and bred sows and 150 fall pigs. All immune.

THE DEMING RANCH H. O. Sheldon, Herdsman Oswego, Kansas

Size and Quality Poland

Poland China boars and bred gilts for sale. I have six gilts bred to farrow in March that weigh 275 pounds each. Price, \$35 each. Four boars of same weight, \$25 each. Lot of summer and fall pigs, \$15 and \$10 each, the big kind. OTTO PLAGAMANN, EUREKA, MISSOURI

ARKELL'S BIG POLANDS

April and March bred gilts by Longfellow Again and Chief Big Bone, weight 225 to 275 pounds. They are bred to Arkell's Big Timm. Also a few bred sows. Priced right. JAS. ARKELL, JUNCTION CITY, KANSAS

OLD ORIGINAL SPOTTED POLANDS

Stock of all ages, sired by seven of the very best boars of the East and West. Priced right. Write your wants to the CEDAR ROW STOCK FARM A. S. Alexander, Prop. Burlington, Kansas

Lone Cedar Poland China Herd

Good spring boars by Meyer's Orange and out of mature sows, at farmer's prices for thirty days; also fall and spring gilts, bred or open. Weaning pigs cheap. All immune. A. A. MEYER - McLOUTH, KANSAS

LANGFORD'S SPOTTED POLANDS

Boars—Serviceable age, guaranteed to please. Breeding stock, both sexes. T. T. LANGFORD & SONS, Jamesport, Mo.

G. W. Overley, of McCune, Kansas, claims February 22 as the date of his sale of jacks, jennets and Percherons. He will also sell a number of drivers and ponies.



FAULKNER'S FAMOUS SPOTTED POLANDS

THE WORLD'S GREATEST PORK HOG.

ANNUAL BROOD SOW SALE, WEDNESDAY, FEBRUARY 14, 1917

Sixty big spotted tried sows and yearlings bred for February, March and April farrow. You know the kind. Catalog tells all. Ask for it. Address H. L. FAULKNER, BOX K, JAMESPORT, MISSOURI

HORSES AND MULES.

Home-Bred Draft Stallions, your choice \$500 with the exception of two. Also mares for sale. A. Latimer Wilson, Creston, Iowa

PERCHERONS-BELGIANS Imported and home-grown mature stallions, ton and heavier, 3-year-olds, 2-year-olds, yearlings. Produce of 62 imported mares and noted prize winning imported sires. Farmers' prices. Fred Chandler, R. 7, Chariton, Ia. (Above Kansas City.)

PERCHERONS FOR SALE

Five head pure-bred Percherons—Two mares, one 2-year-old stallion, two last spring colts. All good ones. Low price to the man that takes all. J. W. BARNHART, BUTLER, MISSOURI

JACKS AND JENNETS

15 Large Mammoth Black Jacks for sale, ages from 2 to 6 years; large, heavy-boned. Special prices for fall and winter sales. Fifteen good jennets for sale. Come and see me. PHIL WALKER, Moline, Elk County, Kansas

DUROC JERSEYS.

A HERD BOAR

We offer the splendid herd boar, Gold Medal 175231, also spring boars by him and the great boar, Country Gentleman 132541. All double immune. Prices reasonable. W. E. HUSTON - AMERICUS, KANSAS

TWENTY FIVE SPRING BOARS

Sired by Crimmon Wonder Again Jr., first prize boar at Topeka, Feb. 1916, and G. M.'s Crimmon Wonder. Big rugged fellows ready for service. Immunized and priced to sell. G. M. SHEPHERD - LYONS, KANSAS

GUARANTEED DUROC BRED GILTS

Immune Duroc gilts with size, bone and stretch. Guaranteed in farrow. Shipped to you before you pay. F. C. CROCKER, BOX K, FILLEY, NEB.

Wood's Durocs

Gilts bred and open. Boars all sold. A nice bunch of gilts to select from. September pigs of both sexes. Prices reasonable. W. A. WOOD & SON, ELMDALE, KANSAS

ROSE HILL HERD DUROCS

For Sale—Thirty spring gilts bred for March and April farrow; ten boars for service; a few fall pigs. All immune, eligible to record. Out of prolific sows and by boars of state fair prize blood. S. Y. THORNTON, Blackwater, Missouri, on Missouri Pacific Ry.

FARM AND HERD.

C. M. Albright, of Overbrook, Kansas, owner of one of the high class herds of Polled Durham cattle in Kansas, reports his herd doing well. This year Mr. Albright raised a very fine lot of calves by Belle's Hero by Roan Hero. Belle's Hero is a very fine individual and has proved to be one of the great breeders now in service.

George McAdam, of Holton, Kansas, owner of one of the great herds of Aberdeen Angus cattle in this state, reports his herd doing well. This herd is noted for its richly bred cows, including such cows as Miss Pride, a full sister to Pride Petett, the champion cow last three years; Lena Mc., a half sister to Barbara Woodson, former champion; Blackcap Lady B., one of the best Blackcap bred cows living. It was her April bull calf that was selected to head the Texas A. & M. College herd.

Dwight Williams, Omaha, Neb., manager of the Nebraska Holstein Breeders' Sales Company, has claimed February 21 as the date of their next breeders' consignment sale. Eighty head of registered Holsteins from the best herds in the state have been catalogued for this sale. The offering includes twenty cows with Advanced Registry official milk and butter records.

H. B. Cowles, the Topeka Holstein man, writes us that bulls of his Braeburn Herd are rarely left with him long enough to reach breeding age. One such advertised recently in Kansas Farmer brought three orders in four days. He went to Oliver C. Evans, Dawn, Mo. Generally buyers who want Braeburn bulls have to catch them young, and do part of the raising themselves.

HOLSTEIN CATTLE.

Clyde Girod, At the Farm.

F. W. Robison, Cashier Towanda State Bank

HOLSTEIN FRIESIAN FARM, Towanda, Kansas

Pure-Bred Holsteins, all ages, strong in the blood of the leading sires of today, headed by Oak De Kol Bessie Ormsby 156789. Special offering of choice young pure-bred bulls, ready for service, from tested dams. Let us furnish you a bull and improve your herd. TWENTY-FIVE pure-bred females, young useful Holsteins with A. R. O. records from 12 to 26 pounds butter in seven days.

BEFORE YOU BUY, TALK WITH US

We have an especially large, choice selection of extra high grade young cows and heifers due to freshen this fall and early winter, all in calf to pure-bred bulls. These females are large, deep bodied, heavy producers, with large udders, all well marked individuals and the right dairy type. Our offerings are at prices that challenge comparison for Holsteins of their breeding and quality. High grade heifer calves, \$25. Send draft for number wanted. Let us know what you want in Holsteins, and we will be pleased to send you descriptions and prices. Keep us in mind before purchasing. Wire, write or phone us.

GIROD & ROBISON --:--:-- TOWANDA, KANSAS

MAURER'S HOLSTEIN FARM

Offers everything in Pure-Bred and High-Grade Holsteins. A number of registered cows and heifers from noted sires such as granddaughters of Pontiac Korndyke, with high record A. R. O. dams. Also a number of cows and heifers bred to one of the best sons of Rag Apple Korndyke 8th, the world's champion bull, and several male calves by the same sire with good record dams, at bargain prices. Write your wants in Holsteins to

T. R. MAURER, EMPORIA, KANSAS Farm Located Three-Fourths Mile West of Town on Sixth Avenue

HOLSTEINS and GUERNSEYS

Registered and high grade cows and heifers—service bulls. Carload or less. High grade calves, \$18.00 each crated. Write us. We have what you want. Address EDGEWATER STOCK FARM - FORT ATKINSON, WISCONSIN

Purebred Registered HOLSTEIN CATTLE

Fifteen thousand dollars in prize money, for milk and butterfat production, was distributed among breeders of registered Holstein-Friesian cattle during the year ending April 30, 1916. The official supervision, by the Advanced Registry Office of the Holstein-Friesian Association, of all regularly conducted tests, and the award of liberal prize money have proven a mighty stimulus and an educational factor of great value, in the promotion of interest and progress in the breeding of Holstein cattle.

Send for FREE Illustrated Descriptive Booklets. The Holstein-Friesian Association of America F. L. Houghton, Sec'y. Box 114, Brattleboro, Vt.

TREDICO FARM HOLSTEINS

Breed 'em from "Tredico Truth Herbert Oak" ancestry; largest type. Champion of "National Dairy Show." Good udders and no extreme angles of hard forcing records. George C. Tredick, Route 2, Kingman, Kan.

Breeders' Directory

ANGUS CATTLE. Geo. M. McAdam, Holton, Kan. Geo. A. Deitrich, Carbondale, Kan. D. J. White, Clements, Kan. RED POLLED CATTLE. Mahlon Groenmiller, Pomona, Kansas. HOLSTEINS. C. E. Bean, Garnett, Kansas. DORSET-HORN SHEEP. M. C. LaTourrette, Route 2, Oberlin, Kan. JERSEY CATTLE. J. B. Porter & Son, Mayetta, Kan.

RED POLLED CATTLE.

RED POLLED CATTLE FOR SALE—Twelve cows and heifers. I. W. POULTON, Medora, Kan.

Red Polled Cattle

A few 1916 fall bull calves for sale. Also a few cows and heifers. AULD BROS. - FRANKFORT, KANSAS

RED POLLED BULLS

FORTY yearling bulls, big rugged fellows, sired by ton sires; a registered and priced reasonably. Will sell a few females. E. E. FRIZELL, Frizell, Pawnee Co., Kansas

POLLED DURHAM CATTLE.

POLLED DURHAM BULLS

Choice bull calves out of Belle's Hero, he by Roan Hero. Reds and roans. Also a few heifers and cows bred to this same bull. C. M. ALBRIGHT, OVERBROOK, KANSAS

HOLSTEIN CATTLE.

REGISTERED HOLSTEINS

We want to cut down our herd. Will sell ten or twelve choice cows, most of them young, also a few heifers. M. E. MOORE & CO. - CAMERON, MO.

HOLSTEIN COWS

Holstein cows, springers or bred heifers. Very large, good markings, out of best milking strains, bred to pure-bred bulls of the very best blood. Special prices on carload lots. J. C. ROBISON, TOWANDA, KANSAS

CORYDALE FARM HERD

Offers for sale four bull calves two to four months, sired by Jewel Paul Butter Boy 94245. These calves are all nicely marked and from good milkers. L. F. COBY & SON, BELLEVILLE, KAN.

Butter Bred Holsteins

Buy your next bull calf from a herd that won the butter test over all breeds. J. P. MAST - SCBANTON, KANSAS

The Cedar Lane Holstein Herd

We are now offering some exceptionally good bulls of serviceable ages at very attractive prices. These calves are sired by our 29.4-pound grandson of Pontiac Korndyke. T. M. EWING, INDEPENDENCE, KANSAS

Wichita Holstein Herd

High grade and registered cows, some heifers and heifer calves at reasonable prices. Bull calves at \$10 and up. Wichita Holstein Herd, R. 4, Wichita, Kan.

HOLSTEIN CALVES

Registered and high grade Holsteins. High grade heifer calves two to four weeks old, \$20. delivered. We can supply you with anything in Holsteins.

CLOVER VALLEY HOLSTEIN FARM Whitewater - Wisconsin

BONNIE BRAE HOLSTEINS

Registered bulls from calves to 6 months old. Best breeding and good individuals. IRA ROMIG - TOPEKA, KANSAS

Braeburn Holsteins A. R. O. BULL CALVES

H. B. Cowles, 608 Kansas Av., Topeka, Kan.

LILAC DAIRY FARM

Route No. 2, Topeka, Kansas.

BREEDERS OF PURE-BRED HOLSTEINS

Bulls from A. R. O. cows, all ages, for sale.

GOLDEN BELT HOLSTEIN HERD

Herd headed by Sir Korndyke Bess Hello No. 165946, the long distance sire. His dam, grand dam and dam's two sisters average better than 1,200 pounds butter in one year. Young bulls of serviceable age for sale. W. E. BENTLEY, MANHATTAN, KANSAS

HOLSTEIN BULL CALVES

Out of A. R. O. dams. Three, six and eight months old. Priced reasonable. P. W. ENNS - NEWTON, KANSAS

HIGH-GRADE HOLSTEIN CALVES beautifully marked, 15-16ths pure, \$20 each. Write us. Fernwood Farm, Wauwatosa, Wis.

REGIER'S HOLSTEINS

Holstein-Friesian A. R. O. bulls ready for service. World's record blood flows in their veins. G. REGIER & SONS, WHITEWATER, KAN.

HOLSTEIN CALVES—Ten heifers and two bulls, 15-16ths pure, beautifully marked, 5 weeks old, from heavy milkers. \$20 each, crated for shipment anywhere. Write EDGEWOOD FARM, Whitewater, Wis.

LOWMONT SHORTHORNS. Brawith Heir 351808 heads herd. Inspection invited. E. E. Heacock & Son, Hartford, Kan.

BIG BOB WONDER BRED SOW SALE FEB. 6, 1917

At the Great National Swine Show at Omaha, Big Bob Wonder sired the world's champion senior yearling, second prize senior yearling sow, third prize junior yearling sow, second and sixth prize senior sow pigs, and the most valuable prize in any show—FIRST ON GET OF SIRE, FIRST ON PRODUCE OF SOW.

At the KANSAS STATE FAIR at TOPEKA The grand champion boar, the grand champion sow, first and third prize junior yearling sows, first and fourth prize senior sow pigs, third on young herds, FIRST ON GET OF SIRE, FIRST ON PRODUCE OF SOW. KANSAS FUTURITY—Second prize fall boar, fifth prize spring boar, first, second and third prize fall sows.

**IN OUR BRED SOW SALE TO BE HELD AT
EFFINGHAM, KANSAS, TUESDAY, FEBRUARY 6, 1917
WE WILL SELL FORTY HEAD**

of immuned tried sows and fall gilts, practically all of which will be either sired by or bred to Big Bob Wonder. Five selected sows all bred to him, and thirty fall gilts pronounced by all who have seen them to be the best bunch ever sired by one boar sired by him.

The Big Bob Wonder gilts will be bred to Wonder King, the noted son of Long King's Equal that I selected to cross on these gilts, and Eclipse Model, an outstanding son of Wonder Master by Wonderful out of a Grand Master dam.

A special train will be run from Atchison to the sale and will return in time to make all connections. Write for the catalog, mentioning Kansas Farmer. O. W. Devine will represent this paper at the sale.

H. B. WALTER & SON, Effingham, Kan.

HEREFORD CATTLE.

HEREFORD CATTLE.

GUERNSEY CATTLE.

GUERNSEY CATTLE.

WALNUT BREEDING FARM



Hereford Cattle, Shropshire and Cotswold Sheep, Berkshire Hogs. Thirty-five grandsons and granddaughters of Beau Brummel 10th for sale. Some extra herd headers at reasonable prices, breeding considered. Come and see my herd. Satisfaction guaranteed.

LEON A. WAITE, WINFIELD, KANSAS



HEREFORD CATTLE

FOR SALE 35 BULLS, 10 MONTHS TO 2 YEARS OLD, 20 COWS AND HEIFERS.

Best breeding families. Bred to an Imported British bull. Come and see me. Sale barns right in town.

T. I. WOODDALL, HOWARD, KANSAS

STAR BREEDING FARM---HEREFORD PLACE

FOR SALE--100 BULLS 50 EARLY BULL CALVES 30 COMING 2-YEAR-OLDS 20 COMING 3-YEAR-OLDS

Herd headers and range bulls. Ten yearling heifers, twenty heifer calves and a carload of good cows. The very best breeding represented. Come and see me.

SAMUEL DRYBREAD, ELK CITY, KANSAS

HEREFORD CATTLE

150 Head in Herd. A few cows and heifers for sale. Also a lot of farm and range bulls. Priced reasonable.

B. M. BROWN, FALL RIVER, KANSAS

HEREFORDS AND PERCHERONS

Choice 2-year-old bull, weight 1,600 lbs.; extra good bull calves. One May calf, weight 600 lbs., outstanding herd header prospect. Two choice yearling Percheron stallions. Priced to sell.

M. E. GIDEON - EMMETT, KANSAS

JERSEY CATTLE.

JERSEY CATTLE.



SEVENTY HEAD REGISTERED JERSEYS

FORTY COWS AND THIRTY HEIFERS FOR SALE.

Nothing over five years old. Richly bred Fox Signal and Fern Lad families. All bred to choice registered herd bull. Must reduce herd.

N. L. DUCHESNE - GREAT BEND, KANSAS

REDHURST JERSEYS

Grandsons of Golden Jolly and Noble of Oaklands for sale. Also a few fancy cows and heifers of same breeding. Write.

REDMAN & SON - TIPTON, MISSOURI

Bargains in Jersey Cows

From one to a carload of good, young, registered Jersey cows, mostly fresh or soon due. Offered at sacrifice prices because short of feed and cannot winter. Also a few open heifers and young bulls. Write your wants or come and see this stock.

The Ennis Stock & Dairy Farm, Horine, Mo. (Just South of St. Louis.)

LINSCOTT JERSEYS

Kansas First Register of Merit, Estab. 1878. If interested in getting the best blood of the Jersey breed, write me for descriptive list. Most attractive pedigree.

R. J. LINSCOTT - HOLTON, KANSAS

\$50 Noble Stockwell's Torono \$50

Sire, Noble Stockwell. Dam, granddaughter of Hood Farm Torono. She milked 32 1/2 pounds milk daily, 2 years old.

BISONTE FARM - LAWRENCE, KANSAS

Registered Jersey Bulls, butter-bred, from high producing cows. Photo furnished. Maxwell's Jersey Dairy, Route 2, Topeka, Kan.

DORNWOOD FARM JERSEYS

Fine young bulls from Register of Merit and imported cows; descendants of Fontaine's Eminent, Pegasus 80th of Hood Farm, and Golden Fern's Lad.

DOENWOOD FARM, Route 1, Topeka, Kan.

PLEASE MENTION KANSAS FARMER WHEN WRITING TO ADVERTISERS

A GUERNSEY BULL

in a grade herd in Minnesota increased its production 24%.

Guernsey Grade Cows produce butter most economically.

It has that wonderful natural yellow color.

Write for our Booklets

The American Guernsey Cattle Club Box R-K Peterboro, N. H.



REGISTERED GUERNSEY BULL CALVES FOR SALE
Grandsons of Imp. Masher's Sequel A. R. out of first class cows. Tuberculin tested.
R. C. KRUEGER - BURLINGTON, KANSAS

SHORTHORN CATTLE.

AUCTIONEERS.

Barber Shorthorns

Villager Junior and Curley Dals Head Herd.

For Sale—Twenty coming yearling bulls, 20 yearling bulls, 40 cows and heifers, Scotch and Scotch topped. We have what you want. Come and see our cattle. Three hundred head in herd.

F. C. Barber & Sons SKIDMORE - MISSOURI

PEARL SHORTHORN HERD

Pearl, Dickinson County, Kans.

For Sale—Twenty bulls, 8 to 10 months old, red, white and roan. Can ship over Rock Island, Union Pacific, Missouri Pacific or Santa Fe. Come and see my herd.

C. W. TAYLOR - ABILENE, KANSAS

Shorthorn Heifers

For Sale—Six Scotch-topped heifers and one Scotch-topped bull, April and May calves, good ones, weight about 500 pounds, bull 600 pounds; all reds.

CHARLES HOTHAM & SON, Scranton, Kas.

OUR HERD BULL

Abbotsford Lad 2d 395841, pure Scotch, deep red and a good breeder, three years old, priced to sell quick. We are keeping every heifer calf sired by him, also some young bulls six to ten months.

CHESTER A. CHAPMAN, Ellsworth, Kan.

GEDAR HEIGHTS SHORTHORNS

For Sale—Ten herd bulls from seven to eighteen months old. Scotch and Scotch-topped. Priced reasonable. Come and see my herd.

HARRY T. FORBES, Bell Phone 59-N-1, Route 8, Topeka, Kansas.

Sycamore Springs Shorthorns

Master of Dale by the great Avondale heads herd. A few young Scotch bulls and bred heifers for sale.

H. M. HILL - LAFONTAINE, KANSAS

RIVERSIDE SHORTHORNS

Headed by Prince Valentine 4th 342179.

Families represented, Orange Blossoms, Butterflies, Queen of Beauty and Violets.

H. H. HOLMES, Route 1, Great Bend, Kan.

OHIO IMPROVED CHESTERS

O. I. C. Serviceable Boars—Yearlings sows and gilts bred for March farrow. Summer and fall pigs. G. P. Andrews, Dansville, Mich.

The catalogs are out announcing the bred sow sale of H. B. Walter & Son on February 6, 1917. Forty choice fall yearling gilts sired by Big Bob Wonder will be sold in this sale. They will weigh around 400 pounds and are the real big-type Polands. Twenty tried sows bred to Big Bob Wonder also will be offered.

Live Stock and Farm Auctioneer

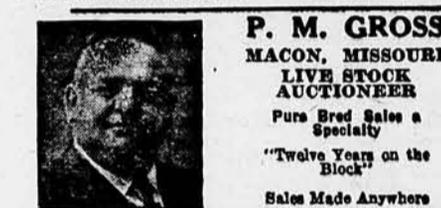
Write or wire for date. I can please you.

LAFE BURGER, WELLINGTON, KANSAS

FRANK J. ZAUN Live Stock Auctioneer. Write or wire for date. Independence, Missouri

LESTER R. HAMILTON Live Stock Auctioneer. Write for terms and date. Clarkdale, Mo.

P. M. GROSS MAON, MISSOURI LIVE STOCK AUCTIONEER. Pure Bred Sales a Specialty. "Twelve Years on the Block" Sales Made Anywhere



AYRSHIRE CATTLE.



AYRSHIRE MILK

Some milk is too rich in butter fats for health—other milk is too lean.

is STANDARD—3.94 per cent grade. It is the RIGHT milk for babies and invalids, just as it comes from the cow. Passes all city and state requirements. Write for information and names of nearest breeders.

AYRSHIRE BREEDERS' ASS'N

C. M. Winslow, Sec'y 33 Park St. Brandon, Vt.

AYRSHIRE BULLS

Age two weeks to two years, priced to move quickly at \$40 to \$80. Worth double. Bred for high production. All pure-bred and sure to get high producing heifers. Herd of nearly a hundred, established in 1906, located at Linwood, Kansas, near Kansas City. Tuberculin tested yearly, never found a reactor. Milk test over 4 per cent.

Dr. F. S. SCHOENLEBER, Manhattan, Kan.

W. B. Wallace, of Bunceton, Mo., will sell at public auction on February 7, sixty sows and gilts. Twenty-six head of these are sired by Model Big Bone, Grand Mammoth and Big Wonder. One gilt is sired by Caldwell's Big Bob, one by Fessey's Timm, one by Long Big Bone and one by Long Wonder Big Bone. Most all will be bred and safe to King Joe.

The W. C. Kenyon & Sons Farms, Elgin, Illinois, is the home of one of the great Holstein herds in that state. This herd is noted for its heavy producing dams. One feature of the herd at this time is the large number of choice high grade cows and heifers and a number of good service bulls.



The Book of Dairy Books

It's the book, because it's the authority on the breed—the beautiful, ever-paying Jersey.

This book, "About Jersey Cattle," goes way back to the beginning of the breed, shows how it was line bred and protected from mixture by law, and shows why it has developed into the most economic and most persistent milking of all breeds. It gives tests, yields, etc., proving that the Jersey is the money cow—the "Giant of the Dairy."

The book is free but worth a lot. Send a postal for your copy today.

The American Jersey Cattle Club
375 West 23rd Street, New York City

120 Jersey Cows and Heifers

Pure-bred and high grade. Forty bred yearlings, superior individuals, all from profitable dams, now for sale.

J. W. BERRY & SON, Jewell City, Kansas



The "Plow In Hand" Your Guide to the Original and Genuine

J. I. Case Power Lift TRACTOR PLOWS And Other Power Equipment

The J. I. Case Heavy Duty Power Lift Tractor Plow pictured above is master of them all for heavy plowing service as thousands of satisfied users know.

Tremendous plowing strength is "built in" under the rigid "Plow in Hand" standards.

With this mighty plow heaviest work is done with remarkable ease! Severest plowing conditions are made simple!

Yet, with all its wonderful strength, this master plow is light of weight and "handles" easily from the seat of any standard tractor!—a compliment to the skill of the J. I. Case Engineering Department.

The power lift feature is remarkably simple and of usual J. I. Case efficiency.

Simple Power Lift

A mere pull on the rope and the bottoms automatically leave or enter the ground; not one at a time or all at once, but in pairs—just as you want them. Stones and stumps are thus easily avoided! Should you hit one, the J. I. Case "Pin Break" device prevents breaking of share or bending of beams. Bumpers attached to each gang prevent beams from swinging out. Gauge wheels assure beautiful, uniform furrows.

In this great J. I. Case achievement finest materials only are used. Frame is of structural steel. Beams are of channel steel. Everything is powerfully riveted and braced for heavy service. All parts must pass the inflexible J. I. Case inspections and strenuous field tests which have set a standard of "plow quality" for the world.

Medium Duty Tractor Plow

Another member of the celebrated "Plow in Hand" line. A High Level Lift Plow that is not only extremely simple and easy to operate—from any tractor seat—but, is extremely light draft.

Quick—Simple—Positive—Power Lift!

A mere pull of the rope raises the bottoms—another pull lowers them. All power-lift parts above the frame and easy to reach—and away from dust and trash. Direct chain drive—no loss of power.

Built throughout to "Plow in Hand" standards—backed by the reputation of all J. I. Case implements for real farm service. Write for catalog.

Other "Plow in Hand" Power Equipment

- J. I. Case Power Lift Disc Plows;
- J. I. Case Two and Three Bottom Enicars;
- J. I. Case Tractor Tandem Disc Harrows;
- J. I. Case Power Smoothing Harrows.

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THE marvelous growth in sales of Case "Plow in Hand" implements has only been possible by building a plow, a corn planter, a disc harrow or whatever kind of a tool that bore the J. I. Case "Plow in Hand" trade mark, just a little bit better than anyone else thought it necessary to make them—by rigidly inspecting every complete implement before it went out of the factory and by giving every user quick and accurate service.

With each and every one of these principles followed out to the letter and backed by sound business and financial management, the J. I. Case "Plow in Hand" line has grown, under my personal guidance, through the past thirty years, into one of the largest independent implement concerns in the world.

What has been said of Plows and Tillage tools applies equally well to Wallis "Cub" Tractors. This premier Tractor now the center of public interest is built under the rigid standards of quality, which I have insisted upon and maintained in the manufacture of Plows and Tillage tools for over a quarter of a century, and, as President of the Wallis Tractor Co., I pledge you a continuance of that policy.

Get acquainted with your local J. I. Case Dealer. He is worthy of your implicit trust and respect.

Faithfully yours,
H. M. Wallis

President J. I. CASE PLOW WORKS
WALLIS TRACTOR COMPANY

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Wallis "CUB" Tractor Mightiest of Medium Weight Tractors

Great Reserve Power! Wonderful Durability! Low Upkeep! These things determine the ultimate economy of any tractor. And these things the Wallis "Cub," built to the high standards of the "Plow in Hand" line, gives you.

What the "Cub" Will Do

The "Cub" delivers 4000 lbs. constant pull at the draw-bar on only 80% of its tremendous power, holding 20% in reserve for emergencies. It does heaviest work with amazing ease, without racking its powerful engine.

Working easily it will plow 30 acres a day, using 8 bottoms where draw-bar pull is 500 lbs. per bottom or—22 acres using 6 plows where draw-bar pull is 650 lbs. per bottom—or 15 acres a day using four bottoms, where draw-bar pull is 1000 lbs. per bottom. It will disc 40-45 acres a day—run a 32 in. separator with stacker, blower and self-feeder—or haul 20 tons of wagon freight! The "Cub" will handle heaviest pull 1—or stiffest belt work on your farm, on only 80% of its power.

Special "Cub" Features

Positive protection from dust; spring mounting front and rear. Finest materials only; Hyatt Heavy Duty Roller Bearings. Special steels and alloys; Virgin Babbit Metals. Perfect lubricating system. Turns complete circle in 8½ feet. And many others.

Find out at once about the nationally famous Wallis "Cub." Our catalog is a revelation of real tractor economy. Write for it today!

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J. I. CASE "PLOW IN HAND" LINE

J. I. CASE COMBINATION COULTER AND JOINTER!

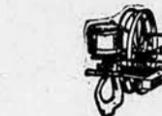
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HARROWS



PLANTERS



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| J. I. Case Walking Plows | J. I. Case Transplanters (Cabbage, Tobacco) |
| J. I. Case Sulky and Riding Gang Plows | J. I. Case Drills and Listers |
| J. I. Case Smoothing Harrows (Power or Horse) | J. I. Case Walking or Riding Cultivators (Shovel and Disc, single and double row) |
| J. I. Case Disc Harrows (Power or Horse) | J. I. Case Stalk Cutters. |
| J. I. Case Single and Double Row Planters (Corn, Cotton, Kaffir Corn, Peas, etc.) | |



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- Catalog Power Plows and other Power Equipment.
- Wallis "Cub" Tractor.
- "Cub" Calendar of Conquest.
- "Tips on Soils." What other implement is of particular interest?
- Catalog General Tillage Tools.
- Plowed 1½ acres in 33 minutes!

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"QUALITY GOES IN BEFORE THE NAME GOES ON"