

KANSAS FARMER

For the improvement



of the Farm and Home

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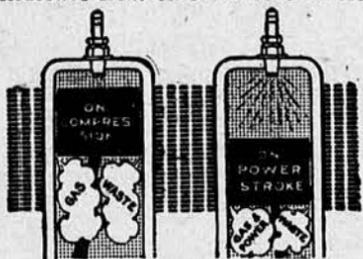
Average Acre Value of Kafir in Kansas for Thirteen-Year Period \$11.41

Gasoline Economy

How it is affected by correct or incorrect body in lubricating oil.

Have you noticed this:

Excessive consumption of lubricating oil is usually accompanied by excessive gasoline consumption. The drawings below indicate how this waste occurs.



In each cylinder the space between the piston itself and the cylinder walls is usually termed the piston clearance.

Each piston is fitted with a number of rings which are free to expand and contract and are designed to fill this clearance.

If the body of your lubricating oil fails to seal the piston rings, two things happen:

First: The oil rapidly works up past the piston rings into the combustion chamber. There it is burned with each explosion. Oil is used up rapidly. Excess carbon deposit results.

Second: With a poor piston ring seal, the gas mixture works down past the piston rings on each compression stroke. Gas goes to waste. On the power stroke the exploding fuel charge also works down past the piston

rings. Gasoline again wastes. Power is lost. Gas consumption mounts up.

Gasoline economy and full power both demand oil which correctly seals the piston rings in your motor.

Different cars demand oils of different body.

In the Lubrication Chart below, which represents our professional advice, you will find specified the correct grade of Gargoyl Mobiloils for your car—the oil which assures a proper piston ring seal.

In use you will find that this oil will maintain full compression and prevent the escape of the expanding gases on the power stroke, thus assuring—

**Gasoline Economy
Power Economy
Oil Economy—**

Preventing the formation of carbon deposits.

If your car is not listed, a copy of our complete Chart of Recommendations will be sent you on request.

An Economical Demonstration.

It will probably cost you less than \$1.00 to fill your crank-case with the correct grade of Gargoyl Mobiloils. You can then watch the results for yourself.

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



CORRECT AUTOMOBILE LUBRICATION

Explanation: The four grades of Gargoyl Mobiloils for gasoline motor lubrication, purified to remove free carbon, are

- Gargoyl Mobiloil "A"
- Gargoyl Mobiloil "B"
- Gargoyl Mobiloil "E"
- Gargoyl Mobiloil "Arctic"

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

MODEL OF CAR	1916		1915		1914		1913		1912	
	Summer	Winter								
Abbott Detroit (8 cy)	Arc									
Apperson (8 cy)	A	A	A	A	A	A	A	A	A	A
Auburn (8 cy)	A	A	A	A	A	A	A	A	A	A
Autumn (4 cy)	A	A	A	A	A	A	A	A	A	A
Autocor (8 cy)	A	A	A	A	A	A	A	A	A	A
Avy (8 cy)	A	A	A	A	A	A	A	A	A	A
Briscoe (Mod. 58 C. 1 Ton)	Arc									
Buick (8 cy)	A	A	A	A	A	A	A	A	A	A
Case (8 cy)	A	A	A	A	A	A	A	A	A	A
Chalmers (Model 6-40)	A	A	A	A	A	A	A	A	A	A
Chandler (Model 6-30)	A	A	A	A	A	A	A	A	A	A
Chevrolet (8 cy)	A	A	A	A	A	A	A	A	A	A
Cole (8 cy)	A	A	A	A	A	A	A	A	A	A
Cummins (8 cy)	A	A	A	A	A	A	A	A	A	A
Detroit (8 cy)	A	A	A	A	A	A	A	A	A	A
Dodge (8 cy)	A	A	A	A	A	A	A	A	A	A
Empire (8 cy)	Arc									
Federal (8 cy)	Arc									
Fiat (8 cy)	B	B	B	B	B	B	B	B	B	B
Ford (8 cy)	E	E	E	E	E	E	E	E	E	E
Franklin (8 cy)	A	A	A	A	A	A	A	A	A	A
Grant (8 cy)	A	A	A	A	A	A	A	A	A	A
Haynes (12 cy)	A	A	A	A	A	A	A	A	A	A
Hudson (8 cy)	Arc									
Hupmobile (8 cy)	A	A	A	A	A	A	A	A	A	A
J. H. C. (air water, 8 cycle)	A	A	A	A	A	A	A	A	A	A
Jackson (8 cy)	Arc									
Jeffery (8 cy)	A	A	A	A	A	A	A	A	A	A
Kearns (8 cy)	A	A	A	A	A	A	A	A	A	A
Kelly Springfield (8 cy)	A	A	A	A	A	A	A	A	A	A
King (8 cy)	A	A	A	A	A	A	A	A	A	A

MODEL OF CAR	1916		1915		1914		1913		1912	
	Summer	Winter								
King Com'l	Arc									
King Car	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 (Model 48)	A	A	A	A	A	A	A	A	A	A
Laurel (Model 48)	A	A	A	A	A	A	A	A	A	A
Lozier	A	A	A	A	A	A	A	A	A	A
Marmon	A	A	A	A	A	A	A	A	A	A
Maxwell	A	A	A	A	A	A	A	A	A	A
Mercer (22-70)	A	A	A	A	A	A	A	A	A	A
Mitchell (22-72)	A	A	A	A	A	A	A	A	A	A
Moline	A	A	A	A	A	A	A	A	A	A
National Knight	A	A	A	A	A	A	A	A	A	A
National (12 cy)	A	A	A	A	A	A	A	A	A	A
Oakland (8 cy)	A	A	A	A	A	A	A	A	A	A
Oldsmobile	A	A	A	A	A	A	A	A	A	A
Overland (8 cy)	A	A	A	A	A	A	A	A	A	A
Packard (12 cy)	A	A	A	A	A	A	A	A	A	A
Reo (6-46)	A	A	A	A	A	A	A	A	A	A
Reo (6-35 & 38)	A	A	A	A	A	A	A	A	A	A
Pathfinder (12 cy)	A	A	A	A	A	A	A	A	A	A
Petrolless (8 cy)	A	A	A	A	A	A	A	A	A	A
Pierce Arrow Com'l	Arc									
Regal (8 cy)	A	A	A	A	A	A	A	A	A	A
Reo (8 cy)	A	A	A	A	A	A	A	A	A	A
Saxon	E	E	E	E	E	E	E	E	E	E
Selden	A	A	A	A	A	A	A	A	A	A
Stearns Knight (8 cy)	B	B	B	B	B	B	B	B	B	B
Studebaker	A	A	A	A	A	A	A	A	A	A
Stutz	A	A	A	A	A	A	A	A	A	A
Veie (4 cy)	A	A	A	A	A	A	A	A	A	A
White (8 cy)	Arc									
Whitely Knight	B	B	B	B	B	B	B	B	B	B
Winton	Arc									

YOUR TRACTOR

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

VACUUM OIL COMPANY, Rochester, N. Y., U. S. A.

Specialists in the manufacture of high-grade lubricants for every class of machinery. Obtainable everywhere in the world.

Domestic Branches: Detroit, Boston, New York, Chicago, Philadelphia, Indianapolis, Minneapolis, Pittsburgh, Kansas City, Kan.

FARM POWER

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

TO tractorize the United States, the tractor will have to be adapted to do the work on a 'hundred and sixty acre farm,' said a prominent agricultural engineer recently. "There are 80,000 farms near that size in Iowa alone." This is a significant statement and one that the tractor manufacturers themselves are recognizing. Each is trying in his own way to design a tractor which is adapted to do the work on a farm of one hundred and sixty acres. How well they will succeed cannot be foretold at the present time, but that they are making progress is very evident to many farmers.

On a recent trip through central Iowa, on which twenty-five tractor owners were visited, the writer became more and more impressed with the fact that some day the one-man tractor will do most of the work on the average farm. The farmers were actually using their tractors for purposes for which, a few years ago, it was considered practically impossible to use them. When tractors were first built they were designed largely for plowing and the plows were designed so that it was necessary to have a plowman, in addition to the engineer on the outfit. The expense of this additional man is not as objectionable on the larger outfits as on the smaller tractors, as the man labor is distributed over a greater territory. With small farms, the addition of the plowman made the cost of plowing greater than with horses. To overcome this objection, tractor plows were designed with automatic power lifts. On these plows, a lever or trip rope is placed within easy reach of the engineer and when the end of the furrow is reached, the engineer trips the rope or pulls the lever and raises the plows without stopping the engine. The wheels on the plow are geared to a hoisting arrangement, which is released at the will of the engineer. The plows are dropped into the furrow by the same device. This eliminates the plowman and makes the tractor and plow a one man outfit.

With that problem practically solved, the tractor manufacturers realized that it is not only necessary to be able to plow with only one man, but that all other operations, such as corn planting, mowing, cutting grain, etc., must be performed without the use of an extra man or with even less men than are required when horses are used. When they are able to do this, they hope to compete successfully with the horse in his own special field. There are two methods by which a tractor could be made to be operated by one man; either control the plow or whatever implement is being used, from the engineer's seat, as is done in the case of the automatic lift plow, or control the tractor from the seat of the implement. The latter method seems to be the more popular among the farmers. V. R. Smith of Greene County, had already changed his tractor to work in this way. He had about eighty acres of oats to cut last year and not enough horses to do the work, so he put on a device of his own by which he steered, started and stopped the tractor from the seat of the binder. He hitched the tractor in front of the binder in the usual way and then extended his steering wheel and rod back over the binder. Two universal joints, taken from an old corn binder and placed in the steering rod, took care of the unevenness of the ground traveled over. Two ropes fastened to the clutch lever and running back to within easy reach of the binder seat completed the control. He was so well satisfied that he has made the arrangement a permanent fixture on his outfit and intends to use it in his next harvest. A number of the manufacturers now make tractors which can be controlled in this way from practically any of the farm implements.

With these tractors it is entirely possible to do practically all of the field labor with tractors. In fact, one farmer, visited on this tour, had actually worked his 160-acre farm with his tractor and a single team of horses during the year of 1915. The tractor which he used was an experimental machine designed especially to do the lighter work about the

farm. This tractor had two drive wheels in front with the motor mounted between them. A triangular shaped frame work extended back from the drive wheels to two trailer wheels in the rear. When the corn planter, cultivator and plows are used they are suspended beneath the frame work, while the binder and discs are hitched to the rear. With this machine every kind of work ordinarily requiring horse labor was performed, the ground was plowed and harrowed, the corn planted and cultivated and all the grain was cut. The only work done by horses on this farm was pulling the mower in haying and the wagon in corn husking time.

It is such light weight, high power tractors as these that will probably "tractorize" not only the farms of Iowa, but a greater part of the farms of the United States.—GEO. W. IVERSON in Iowa Agriculturalist.

Automobile Power Plant

Attachments are now being manufactured, at a low price, which will transform several of the more popular makes of cars into power plants. A series of gears and shafting has been devised which operates a pulley on the front of the car, and makes it possible to turn farm machinery.

By means of these various attachments now on the market, the farmer's automobile can not only be used as a solution of some of the rural transportation problems, but also as a useful and convenient power plant.

One of the smaller cars most popular on the market will develop about twelve horsepower on the brake, and is consequently more than strong enough for the average work required of a farm engine. A gas engine of five or six horsepower is most commonly used on farms for running light machinery.

It is not economical to use a twelve-horsepower engine for furnishing power to a washing machine or a pump. It is best to have a system of shafting which can be arranged to drive several pieces of machinery simultaneously. Corn shellers, feed grinders, fanning mills, and other small pieces of farm machinery can be connected with the system of shafting.

If there is a small electric power plant with storage batteries on the farm, the automobile engine can be made effective in charging the batteries at times when the car is not in other use, but it would not be economical to use the car's engine to store electrical energy in the battery, and then use the electricity to drive small individual motors attached to the smaller pieces of machinery, excepting the washing machine, sewing machine, and the like. The overhead charges are too heavy. Judgment should be exercised in utilizing the automobile as a power plant or a loss of efficiency will result.

The usefulness of the automobile can also be greatly extended by the trailer. The purchase of a trailer makes possible the transporting of milk, cream, garden truck, and even chickens to market. The trailers, which are of various designs, are manufactured by more than a dozen companies. The engine of the average automobile is seldom worked to capacity and consequently there is plenty of tractive power to take care of the light trailer.—F. A. WIRT, K. S. A. C.

During the occasion of the free fair in Topeka, from September 11 to 16, inclusive, the Portland Cement Association conducted a demonstration in concrete road building involving the laying of about 600 square yards of concrete highway pavement. This particular demonstration was held on what had been designated by Governor Capper as Good Roads Day at the fair. Great interest was displayed in the demonstration. Governor Capper himself spent half an hour or more watching the actual progress of the work. Quite a number of road supervisors and engineers from various counties in the state were present at this demonstration and so appreciated its worth that they insisted upon having some of the men under their present to see how concrete roads were built.



KANSAS FARMER

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NEW STOCK RATES DECEMBER 1

Live stock shippers and especially those dealing in pure-bred stock, will be greatly benefited by the new freight classifications which will become effective December 1, 1916. This is a postponement of one month from the date originally announced.

The National Society of Record Associations deserves the credit for winning this fight of the pure-bred live stock breeders against the railroads. There may possibly be some uneasiness due to the postponement of the date on which they new order is to become operative. The reasons for the postponement have been made known to the officers of the above named organization.

Briefly, the railroads in the western classification and in the southern classification have accepted the decision laid down by the Interstate Commerce Commission, details of which were published in our issue of August 12, and are preparing their tariffs and classifications accordingly. The roads in the official classification territory from Chicago east, and south as far as the Ohio River, have petitioned for a rehearing in this case. Their request for a rehearing has been promptly answered by the National Society of Record Associations, and it is not likely that the decision handed down by the Interstate Commerce Commission will be modified, even in its application to the roads in the official classification territory.

Live stock breeders may rest assured that vigilant attention is being given to these matters, but it causes some delay, and this is the reason for the thirty-day postponement of the effective date of the order above referred to.

Proceedings have already been instituted to bring the weights, basic values, rates of increase for animals of higher value than the average, rate rulings on crated animals, and requirements as to attendance on intrastate traffic, into line with the decision just handed down by the Interstate Commerce Commission which pertains to interstate traffic. The railroads in the West have shown a commendable willingness to bring their intrastate regulations and practices into line with the decision of the Interstate Commerce Commission, and, while it will take some time to have the necessary hearings before the various state railway commissions or public utility commissions, the work is being steadily prosecuted, and it will only be a matter of time until stockmen will enjoy the same favorable shipping facilities on intrastate traffic that they have recently obtained on interstate traffic.

AMERICAN ROYAL PLANS

The future of the American Royal Live Stock Show seems to be dependent upon a suitable location. Kansas City is the logical point and the business enterprises located there cannot afford to let such an opportunity get away from them. We are sometimes prone to boast of Western enterprise. In the matter of financing big shows, however, the West does not have a monopoly. Springfield, Massachusetts, wanted the National Dairy Show. Dairying is declining in New England and the business interests wanted this big dairy show in the hope that it would bring about a revival in this important industry. Springfield is a city of only 40,000 population but in seven days they raised \$750,000. Suitable grounds for holding the show were secured and substantial brick buildings have been erected. This is a conspicuous example of enterprise in helping to make a great live stock show possible.

The American Royal is being strongly backed by the various record associations. The Hereford Association has definitely authorized its directors to see the thing through without reference to cost. Shorthorn officials announce that they will set a pace in liberality that will be hard to equal. The Galloway and Angus associations have indicated their

determination to assist in the enterprise of making the American Royal the "world's biggest live stock show." Other large interests are falling into line, and with the financial backing which now seems assured, the Royal has a bright future before it.

SILOS IN KANSAS

Even though 1915 was a year of abundant rainfall and plenty of feed, a good many silos were built in Kansas. The State Board of Agriculture reports that on March 1, 1916, there were 11,343 silos in the state. These figures are secured by the township assessors. This is an increase of 1,631 over the number reported March 1, 1915.

It is in counties where the live stock and dairy interests have made the greatest progress in the past few years, that we find the most silos. Sedgwick County, which has made great strides in developing dairy farming in the past few years, has 425 silos. Reno County comes next with 392; Lyon County has 332, and Sumner 322. In these counties having large numbers of silos, the type of farming is changing rapidly from one of exclusive grain production with its depleting effect on soil fertility, to a system of diversified farming which must of necessity include live stock. The silo is almost indispensable to the most profitable live stock production, and this increase in their use is an indication of the progress being made in the various counties in developing a more permanent type of agriculture.

CREAM SEPARATOR CENSUS

Cream separators, like silos, are quite naturally associated with dairying. Wherever we find separators increasing in number, we can assume that more attention is being given to milking cows. Separators, however, have not increased as rapidly during the past year as have silos. Perhaps the reason is that they

have been commonly used in Kansas much longer than have silos.

According to the figures given out recently by the State Board of Agriculture, cream separators have increased 10 per cent in the period March 1, 1915, to March 1, 1916. On the latter date there were 77,168 in the state. Reno County ranks first, having 1,638. McPherson County comes second with 1,618, followed by Marion with 1,556, Marshall 1,543, Washington 1,536, Sumner 1,520, Jewell 1,521, and Smith 1,501. Most of these counties are prominent as wheat counties, and it is interesting to note the increase in the milking of cows in such counties. Exclusive wheat growing is not a dependable type of farming and many are finding that milking a few cows is a most profitable adjunct to wheat production.

The International Live Stock Exposition will be held at the Union Stock Yards, Chicago, December 2 to 9. For two years it has been impossible to hold this great exposition. This lapse of two years has made breeders realize more fully than ever before what such an exposition means to the industry. The demand for high class, pure-bred animals is stronger than for years. South American breeders are learning that the United States is able to supply them with the best of animals, and the delegation from the Argentine will be larger than ever before. There is every reason why breeders in this country should make a special effort to have a good showing at the International this year. Entries close November 1.

A 1,400-pound horse in pulling a load exerts a pressure on the ground with his hoof of thirty pounds to the square inch. The weight of a 5,000-pound tractor is so distributed over the wide wheels that the pressure produced is only about ten pounds per square inch.

Select Kafir Seed Heads in Field

SEED of the grain sorghums is certain to be scarce in Kansas next spring. Early frosts have prevented many fields from maturing. Failure to use carefully selected seed is responsible for much of this late maturity. Too often the seed used is weak in vitality and fails to produce a stand. This necessitates a second and sometimes a third planting before a satisfactory stand is secured.

These results are almost sure to follow the planting of seed taken from the bin. The early and late maturing heads, the mature and immature, hybrids with cane or broomcorn, all are threshed together. In addition, bin heating may destroy or reduce the vitality of seed so stored.

The remedy for the disappointing results in growing kafir is to select seed heads in the field. In "Sorghums: Sure Money Crops" are the following important statements that are worthy of the most careful consideration of the kafir grower:

"The farmer's principal business is that of growing crops for market or for maintaining and fattening his live stock. His success as a farmer is dependent upon what he can produce in the way of crops from his fields. Then, what is more important than good seed?"

"I am confident that a half day spent in selecting and marking seed heads of kafir, milo, or feterita, another half day spent in gathering the heads, and a day, if necessary, expended in making the final selection and stringing the heads for winter storage, will be all the time needed to carefully select all the seed the quarter section farmer will need for his own use, and a small increase in bushel yield will pay big returns on this expenditure of labor.

"The grain sorghums are the most certain crops now known. They should be maintained and in fact improved to the highest degree of usefulness and dependability."

DAIRY CATTLE IN KANSAS

There never were better opportunities in Kansas for success in breeding and developing dairy cattle than at the present time, according to the members of the Holstein-Friesian Breeders' Association who were present at their recent meeting in Manhattan. At the banquet which was held in the evening following the regular sessions, several members who had recently made trips East, were called upon to relate their experiences and observations. W. H. Mott, the secretary, told of visiting a number of the most noted Holstein herds in the country, among them being the Stevens herd in New York, where he saw the famous bull, King of the Pontiacs. Professor O. E. Reed, who recently made a trip to Massachusetts to buy some Guernseys for the college herd, also visited many herds of note. Mr. Regier of Whitewater had also made a trip East.

All these men expressed themselves as more or less disappointed in the cattle they saw. They were not as big as they should be and they lacked in type and uniformity. Professor Reed spoke of the poor condition in which he found some of the herds. The impression was gained from the remarks was that Kansas can produce better Holsteins than these older states whence we are now getting our foundation stock. The older men present were regretting that they could not start in at the present time and help make Holstein history in our state.

There were about twenty-five or thirty young men present, members of the dairy club and students in dairying at the college, and they listened with the closest attention to what these older men had to say. These young men are planning to take up dairy work as soon as they complete their college course. For several years nearly all the graduates from this department have taken up active work along dairy lines.

What is true of the Holstein breed is true of the other dairy breeds. They have a great future before them in Kansas, and the young man who has any talent along the line of live stock breeding, cannot go amiss in starting to develop a high class herd of dairy cattle at the first opportunity.

HOLSTEIN BREEDERS MEET

On Saturday, October 7, the Holstein-Friesian Breeders' Association of Kansas held a most profitable meeting at Manhattan, being entertained by the agricultural college. There were about forty in attendance at the afternoon session. The most important number on the program was an address by President Waters in which he presented some most convincing arguments showing the economy of the dairy cow and the inevitability of the dairy industry.

Arrangements had been made for an automobile tour over the college farm, and the visiting members were given an insight into the valuable experimental work being conducted.

At the banquet held in the evening there were fifty plates. A number of speeches were made and some association business was transacted. It was decided that a definite advertising campaign would be inaugurated by the association and plans were made for holding an annual consignment sale of Holstein cattle.

NATIONAL DAIRY SHOW

The National Dairy Show which opened its doors to the public in Springfield, Massachusetts, October 12, is the largest exposition of its kind ever held. More than 1,200 dairy animals are being shown. A coliseum has just been completed that has an arena larger than that of Madison Square Garden in New York City. A mechanics hall has also been constructed which is larger than the famous Mechanics building in Boston.

This great exposition is demonstrating the magnitude of the dairy industry in a way in which it has never been shown before.

HALLOWE'EN SUGGESTIONS

By OSCEOLA HALL

HALLOWE'EN, October 31, is a good occasion for a social evening in the country neighborhood. Here are some good suggestions that will help you when planning your program.

One of the first things to do is to arrange for some kind of decorations. This is a simple matter and requires only a little time. Get some black paper and cut out a large number of cats, witches, and owls, from the patterns printed on this page. String them on a black thread and hang them across the room in any way you like. At night it is impossible to see the thread, and the cats, witches, and owls, will wiggle about in the air as if alive. These black images pinned to the window curtains and other draperies, will add much to the effect.

On each gate post you will want a pumpkin with a face cut in it, and a lighted candle inside. Two or three of these jack-o-lanterns in the yard will look spooky at night. Autumn leaves, one or two wheat shocks, and a small bunch of corn stalks will come in handy and add to your decoration scheme.

When inviting your guests, request them to come dressed as ghosts. A costume can be easily arranged by draping one or two sheets for the gown, and by cutting eyes, ears, nose and mouth in an old pillow case, and slipping it over the head and tying it under the chin. Any number of costumes can be made in this way and all look different, if different colored crayons are used for making the facial markings.

If a group of people are to give the party together, choose one as hostess. It will be her duty to welcome the ghost guests as they enter the building. Instead of shaking hands with the guests with her own hand, she will have a white kid glove stuffed with cotton, which she has just taken out of cold water. The make-believe hand is tied onto a stick which the hostess holds in her own hand, her real hand being carefully concealed under the white drapery. On entering, the guest will naturally grasp what he thinks is the hand of the hostess. The cold, wet, slick, puffy hand will always cause a scream of momentary fright. Another ghost will take charge of the coats, etc., and with queer ghostly sounds will request each guest to lay his belongings under the bed, or dresser, or perhaps in a dark closet or cellar way.

One feature of the Hallowe'en party should be the guessing as to the identity of each person. This can be arranged in the form of a contest. Pin a number on each ghost, also give each a card and pencil. Numbers on the cards should represent the corresponding numbers on the ghosts. Then as you think you know



the name of a certain number, write his or her name opposite the corresponding number on the card. When the cards are filled, the hostess will give a signal for all to remove their false faces. The cards will then be looked over, and the one guessing the largest number correctly will be awarded a premium. This should come in the way of a surprise. A big suit box carefully wrapped and containing a penny; a pretty candy box filled with sand, or an empty box with a humorous inscription written across the bottom, will be a fitting reward. Of course all will be eager to see what is contained in the box, and by working it just right the box can be passed along the line; thus each will hold it and read the inscription. This will insure a hearty laugh.

To have a really successful party you must plan your stunts of entertainment beforehand. The apple game always creates lots of fun. Hang three to six apples in an open doorway. Have the strings long enough so that the apples will hang about on a level with the mouths of the players. Then run a stick through each apple, and tie on one end of the stick a piece of cloth covered with lamp black, or some black harmless substance that will smut by merely touching it. The game is played by choosing sides. Each takes his turn and the side that gets the largest number of bites without the players getting black on their faces, is the winner. Another apple game which is just as exciting, is played by placing a tub of water in the center of the room, with a number of apples in it. Again choose sides. A player from one side tries to get an apple out of the water by using his teeth; after three trials, a player from the other side tries. The side get-

ting the largest number of apples, wins. The ring game will also cause a laugh. Place a ring in the center of a pie tin in which is enough flour to cover the ring when lying flat. Then have each guest try to get the ring out of the flour by using the tip of the tongue. This is a bitter pill, but heaps of fun.

Fishing for the wedding ring is a game that all will enjoy. Place a pan of water on a table or chair, and sprinkle some grass, leaves, or other substance that will float in the water. Put a band ring in it. Take four or six little sticks, and tie a string with a bent pin on each, thus making tiny fishing equipments. Give these to the guests according to the number of fishing poles prepared. Each group is given thirty seconds in which to fish for the ring. The ones that are successful will be married before the next Hallowe'en.

The funniest thing I ever saw at a

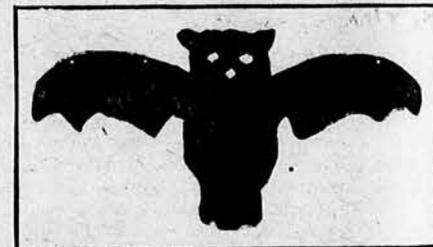


Hallowe'en party, was an arrangement made of an old-fashioned wicker clothes basket. A broom handle, with the broom part cut off, was run through the handles of the basket. That portion of the broom handle that projected from the basket handles, was placed on the bottoms of two chairs facing each other, thus allowing the basket to swing a few inches from the floor. Place a hat or cap on each of the four corners of the chair backs. The trick is to place both feet in the basket, sit on the broom handle, and with a short stick knock to the floor all the hats in quick succession. This stunt is bound to cause excitement.

The magic cast is another feature that will be long remembered. The guests are informed that they are to have their fortunes told. The fortune-teller leads them to the door of an adjoining room in which their futures are to be disclosed. On reaching the door the guests are requested to halt while he, the magician, arranges something at the other end of the room. The object is cov-

ered with a cloth, and on reaching it he angrily turns, declaring that he heard them saying among themselves that he was a trickster, and that rather than be accused of such deception, the great wizard would prefer to perish in their presence. At this point the fortune-teller quickly removes the cloth and discloses a barrel on which is written in large letters, "Gunpowder." Striking a match, the seemingly desperate wizard applies it to a fuse that hangs from the bung of the barrel, and assuming a tragic attitude, awaits the result. The guests will be uncertain, but will very likely stay. They watch the fuse burn to the barrel—there is a moment of suspense—then some one who is in on the secret, drops an extension table leaf to the floor in the hall or close by, thus startling the onlookers. At the same time the staves of the barrel fall upon all sides of the head, radiating out like the petals of a sunflower, and from the center the fortune-teller's helper steps out and greets the crowd.

The barrel is easily arranged. It must be large enough to hold a boy in a crouching position. It is necessary to remove one head for the top, and join the parts of the other head by cleats nailed firmly to the inside. Then burn a hole through each of the staves near the bottom head. Tie the staves firmly to the bottom with heavy twine. Near the top of the barrel tie another twine around the outside, and remove all hoops. The only thing that holds the barrel together is the string at the top. Inside the barrel is a boy with a sharp knife, and at the proper time he slips the knife between two staves, cuts the string at the top, and the staves fall to



the floor. When the spectators see there was really no gunpowder in the barrel, they all enjoy a hearty laugh.

By the time these games are played, and the tricks are performed, all will welcome the refreshments. Apples, doughnuts and popcorn are always suitable for Hallowe'en. One or all of these may be served. Sandwiches, pumpkin pie, and coffee will be fitting additions to your refreshment list, if the expense does not make them prohibitive.

Successful Dry-Land Farmer

FARMING can be profitably practiced where the rainfall is very limited. All over the central plains regions there are men who have made marked successes. Almost invariably these have come from adapting methods to conditions and following a diversified type of farming in which live stock has been an important factor.

Some of these successes are of unusual interest. H. S. Grover tells in the Agricultural Review of how fifteen years ago R. F. Roberts came to Eastern Colorado from Kansas and bought a half section of dry land in Yuma County. He had no capital and little of anything else, but as land at that time was a drug on the market, he experienced no difficulty in buying this half section "on time." He paid for this with the crops raised, and bought eight additional quarters, for which he paid in the same way. He is now regarded as one of the leading dry-land farmers in Eastern Colorado, and is able to write his check in six figures.

The success of Mr. Roberts is due largely to his business methods of farming. He builds up his soil through crop rotation, fertilization and a proper system of cultivation. Each successive year he plans to secure a better crop than he did the preceding year. Five hundred acres of his land is enclosed with hog-tight fencing, and it is his custom to plant different fields to Mexican corn,

which he "hogs down," thus saving the labor and expense of gathering and at the same time fertilizing his ground.

After harvesting his crops he turns the hogs in his fields to gather up the waste, and finds that he is well repaid for the trouble. He has succeeded in raising alfalfa on dry land, by raising 140 acres of this nutritious forage crop, which he harvests twice during the season, and which furnishes him an abundance of hay for his live stock.

Mr. Roberts is a strong believer in summer fallowing, but could not understand why it was necessary to secure but one crop in two years. He has solved this problem by listing his ground, planting each alternate row to corn, which he cultivates intensively, and as soon as the corn is laid by, drills the spaces between the corn rows to winter wheat. In this way he grows better than half a crop of corn, summer fallows his land, and harvests a good crop of winter wheat. This system rests the land, conserves the moisture, gives the desired rotation, and enables him to harvest nearly one and two-thirds of a crop instead of one during the two years.

Mr. Roberts studies his soil more closely than many farmers study their children. His experience is that the soil should be kept in the best condition possible, whether it is growing crops or whether it is idle. He never allows the ground to become hard, and cloddy, and

makes it a point to conserve all the moisture that falls. In the spring he double discs his soil as soon as he can get into the field to work the ground. He then either plows or lists eight to ten inches deep, cultivates intensively, keeps out the weeds and at the same time conserves the moisture.

Another strong feature of his success in farming is the fact that he practices diversified and live stock farming, and insists on the best blood that can be secured. He owns an imported Percheron stallion, which he breeds to high-grade draft mares, the colts from which he sells at from \$200 to \$225 each, while at the same time the mares furnish power for operating the farm. He finds that it is as cheap to raise good horses that are always in demand at the highest prices as it is to raise scrubs, for which a market must be found.

He practices the same method of pure-breeding in his hogs and cattle, and whenever he has anything for sale, there is always a buyer at hand.

Mr. Roberts has in no way neglected the making of a home, for the financial end of his enterprises. His large two-story house is commodious, and this year he is installing heating and water plants and adding every other convenience enjoyed by the dweller in the city. He practices the conservation-of energy through having water piped to the dif-

ferent corrals for his live stock and ing of all his produce and the sheltering of his stock. His house is protected from the severe winds by a young grove composed of ash and elm, which gives his place a home-like appearance.

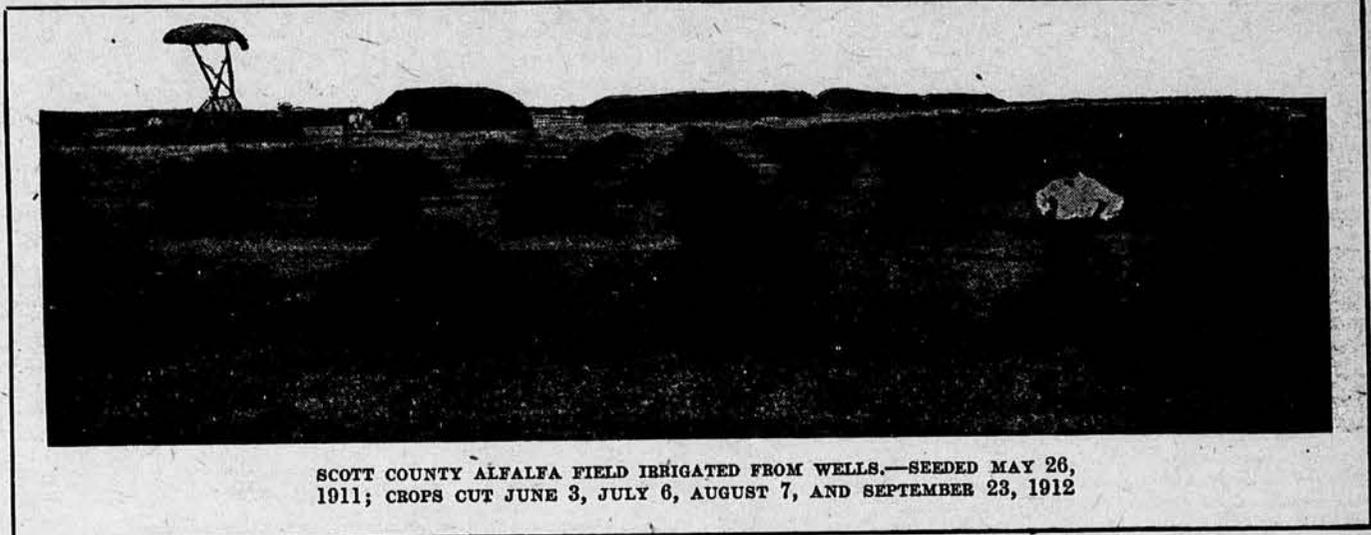
The large cement block modern barn, 84x42 feet, accommodates twenty-six head of horses and a hundred tons of hay. Too many western farmers are negligent in providing ample quarters and feed for their live stock and keeping them growing throughout the year. There is good money in horses, but there are few buyers who want to consider a horse that is thin in flesh.

Last spring Mr. Roberts had safely stored away in his cement granary 400 bushels of good seed corn, which brought him a good revenue.

Proper lubrication is one of the most important points in the successful handling of a tractor. The best grade of oil will be found to be cheaper in the long run than poorer grades, especially in the case of oil used in the motor. If the engine makes use of a splash system, it is good practice to drain the oil out of the crank case at least once a week and replace it with new oil. The old oil may be used for other parts of the machine. The above suggestions are especially important if kerosene is used as a fuel.

IRRIGATION IN KANSAS

Pump Owners Should Operate Plants to Full Capacity—By H. B. Walker, State Irrigation Engineer, Before Irrigation Congress



SCOTT COUNTY ALFALFA FIELD IRRIGATED FROM WELLS.—SEEDED MAY 26, 1911; CROPS CUT JUNE 3, JULY 6, AUGUST 7, AND SEPTEMBER 23, 1912

DOES pumping for irrigation pay? This is a question yet unanswered for many who are considering irrigation in Kansas. Indeed it is a most difficult question to answer. In fact no direct reply is possible. Every farmer must consider the problem of pumping from a broad standpoint and then use his own judgment for a satisfactory answer.

Kansas does not yet have enough data covering continuous records of pumping operations to tell definitely whether the average man is successful or not. Information of this character is needed to put irrigation in its rightful economic place in agricultural development. When it can be shown without question that a pumping plant is a business investment for the average farmer, then it will be an easier matter to borrow money to develop pumping districts.

PUMPING PLANT INVESTIGATIONS

During the last two years I have made investigations of over 125 pumping plants in Kansas for the purpose of studying the methods and practices of farmers who are pumping for irrigation. These investigations were made of typical farms throughout the western third of Kansas. The general opinion among the farmers owning pumping plants is that irrigation is profitable. In very few cases, however, are these conclusions founded upon fact. Nearly everyone "thinks" pumping for irrigation pays, but when it comes to backing these impressions with figures to show net profits there is a lack of definite knowledge.

Among the 125 pumping plants visited, less than 5 per cent of the owners actually knew in dollars and cents whether or not their plant was profitable. Many had good reasons to believe that it was a good investment and in every instance the owners of a plant felt sure that it would pay if carefully handled. In every instance where a man had kept a record, the pumping plant had been a profitable investment. This in itself is encouraging. It was noticeable, moreover, that the man who had kept a record was the most careful operator of his plant.

Judging from the records obtained on the 125 irrigated farms in Kansas, at least 40 per cent of the individual farm pumping plants of the state are not paying investments. We have in Kansas approximately 225 farm irrigation pumping plants. Practically ninety of these plants are not now operated in a way which will produce revenue and the investment is so placed that depreciation is always going on. This inefficiency in operation is not generally due to poor pumping equipment or lack of water, but almost entirely to the indifference of the owner. It must be admitted that an efficient pumping plant is an important factor in successful irrigation, but among the many idle plants in Kansas numerous first class installations are found. A good well with a good pump and suitable power does not insure profitable irrigation. There must be a man behind the plant to consistently and persistently operate the machinery to supply the water for the best yields. The greatest boost for Kansas in the way of irrigation is not more wells and more pumps to throw more water, but more men with practical irrigation experience to operate these existing idle plants.

MUST STUDY IRRIGATION METHODS

The idle plant problem emphasizes the "personal equation" in the success of individual pumping plant operation. With every other factor perfect, if the individual has no natural liking for irrigation, his efforts are almost sure to result in failure. There are many mis-

fits in irrigation work. We must not, therefore, judge pumping by individual conditions, but should form our conclusions more from average conditions. Quite a large number of our idle plants were installed to demonstrate that water could actually be secured in quantities sufficient for irrigation. These demonstrations, so far as they were intended to apply, were successful. It has been definitely demonstrated that the water is there and that machinery can lift it to the surface. The new settler, however, who comes into our pumping district to investigate conditions, views with considerable apprehension the idle pumping plant, and why should he not do so? Every unused irrigation pumping plant represents a dead investment.

It is going to take time and education to remove these misfits in irrigation. We dare not talk irrigation as a sure revenue producer for every man. Careful information should be secured for every one so that the problems and troubles as well as the advantages of well irrigation can be fully realized and understood. With more of such education and information the farmer who is interested in irrigation will be better able to judge for himself his fitness for this type of agriculture. Although I have great faith in irrigation, I feel that under our conditions of development it cannot be recommended for all. Years of experience in Western Kansas farming have shown that live stock farming is generally profitable. If a man wants to engage in live stock farming, there is little need for discouragement.

IRRIGATION SUCCESSES

In a great number of cases irrigation would be more advanced than retarded if some of the investments now placed in idle pumping plants had been placed instead in live stock. It is encouraging, however, to note the successful men who are actually irrigating. The farmers in the shallow water areas who use their best efforts coupled with good horse sense in the operation of their pumping plants are invariably making good.

The practical irrigation farmer watches his crops closely. He does not allow them to suffer from lack of moisture. Neither does he depend upon the natural precipitation. On the other hand he ir-

rigates as if he never expected it to rain. These are the men who are really doing most to put irrigation to the front in Kansas. Encouragement and assistance given to these practical men will have more far-reaching results than a demonstration which simply lifts water from the underflow but does not utilize the water output in a practical manner. The pumping plants of Kansas are distributed over a large area. This means that many of these individual units are isolated so far as irrigation development is concerned. As a result of this isolation, insect trouble and control is much more serious than where there are large areas of irrigated land.

Where large contiguous bodies of irrigated land are located the exposed marginal areas are relatively decreased and insect damage is comparatively less, and their control is simplified. The Garden City district represents the most consistently irrigated large area of land in the state. This contiguous development is a decided advantage for the irrigation farmer, not only in the matter of insect control but where the interests and practices of the farmers are mutual a more rapid progress can prevail.

EQUIPMENT OF PUMPING PLANTS

A majority of the pumping plants in Kansas are shallow water installations, that is, plants where the lift is approximately forty feet or less. The shallow water districts of Kansas are by no means yet developed. In fact we have just commenced to develop this large area of land capable of irrigation.

Other things being equal, the lower the lift the cheaper the cost of pumping the water. The average lift for the plants investigated was approximately thirty-three feet, with a maximum lift of 103 feet. It will be noted from this average that Kansas is developing more rapidly the lands where the depth to water is comparatively shallow.

Kansas farmers should consider low pumping heads as a desirable feature for an irrigation project. This is an economic feature not only in the operation, but also in the reliability of the plant. Where low pumping heads are possible the more simple types of centrifugal pump can be installed. About 75 per cent of the Kansas pumping plants are

equipped with horizontal single-stage, side suction, centrifugal pumps. This is generally considered to be the most simple type of centrifugal pump made. Their simplicity of construction, reliability of operation, comparatively cheap first cost, and relatively long life make them desirable pumps for irrigation work. Two of these pumps were found in the Garden City district which had been in operation every irrigation season for fifteen years with practically no expenses for repairs. Numerous others were reported which had been in service six to eight years with no repair expenses. This is the kind of machinery a farmer wants if it is suitable for his conditions. Where water is found at depths of twenty feet or less, the horizontal centrifugal pump is usually installed.

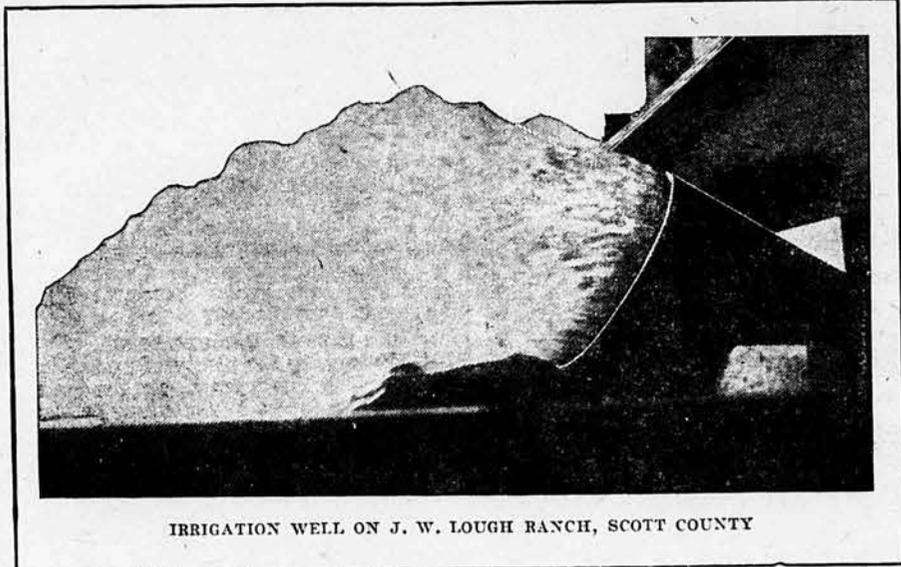
About 25 per cent of the Kansas plants are equipped either with a vertical centrifugal or a turbine type of centrifugal pump. Pumps of these days must be used for installations in the deeper areas. The turbine pump has gained rapidly in popularity during the past four or five years, but as yet these pumps are not giving such uniform satisfaction as the simpler pumps.

COST OF PUMPING PLANTS

The average cost of pumping installations in Kansas as determined on data from over 100 plants is approximately \$75 per horsepower required. Electrically-equipped plants are ordinarily 10 to 20 per cent cheaper in first cost. Taking sixteen typical engine plants and sixteen typical motor plants in the Arkansas River valley I find that the oil engine plants cost \$1,330 per thousand gallons per minute capacity, and the electrically-operated plants cost \$925 per thousand gallons per minute capacity. This gives a decided advantage to the motor-driven plants. It should be remembered, however, that comparisons of this kind are not absolute, but they do indicate in a general way the relative costs of the two types of installations.

Using the data obtained from my investigations, I estimate that Kansas farmers have invested approximately \$400,000 in pumping plant equipment. This is exclusive of corporation investments. These plants, if operated to their capacity, are capable of irrigating 25,000 acres of land. It is doubtful if 8,000 acres of land were irrigated by these plants in 1916. My investigations, which cover about half of the total number of plants in the state, would indicate an acreage of less than 8,000 acres.

To get the most out of their investment, pump owners should operate their plants to capacity. Four hundred thousand dollars is too great an investment for irrigating 8,000 acres. This would not be considered high for gravity systems of irrigation, but with pumping plant irrigation the cost of operation is high, consequently the investment per acre in the plant must be relatively low. An investment of \$400,000 for an area of 25,000 acres is perhaps typical of what would be considered a reasonable investment for pumping plant equipment. Some Kansas irrigators are working efficiently and are well repaid for their efforts, while others are doing very little. An effort should be made to encourage the owners of idle plants to greater activities.



IRRIGATION WELL ON J. W. LOUGH RANCH, SCOTT COUNTY

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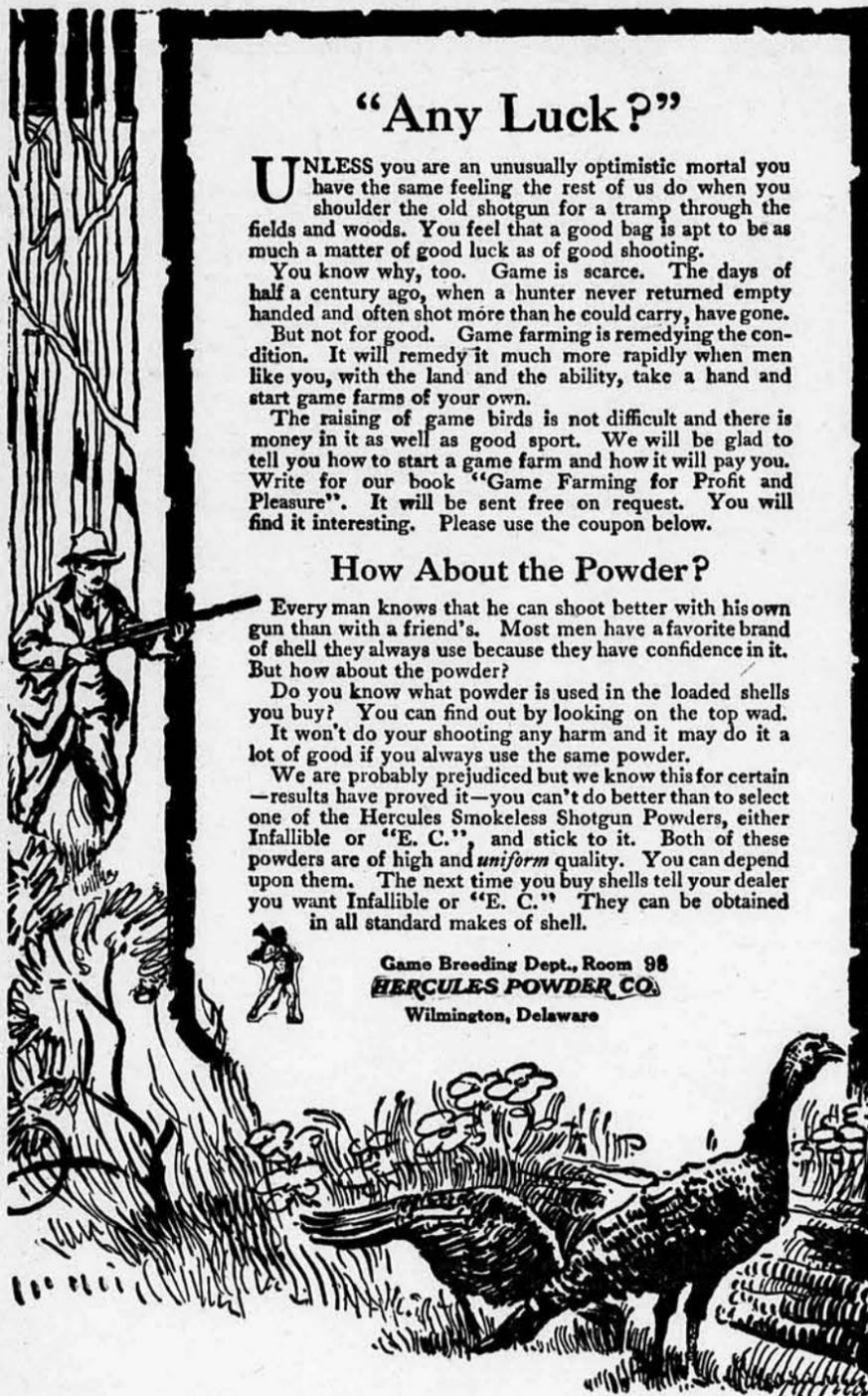
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GENERAL FARM NOTES

Out-Door Wintering of Bees

BEES should be properly wintered so as to insure large, strong colonies in the spring to carry on the season's work. If the colony is strong, it will raise plenty of brood, thus enabling it to take fullest advantage of the honey flow which is to come.

Some of the essential points to be considered are: (1) Protection from cold, (2) plenty of food, (3) plenty of young bees; and (4) a good queen.

PROTECTION FROM COLD

Bees do not hibernate in the true sense of the word. They form a cluster for protection whenever the temperature in the hive drops to 57 degrees. This cluster is formed by some of the bees occupying the empty cells in the comb while the others press together with their heads turned inward and their bodies touching. The hairs on their bodies add to the insulation. The center of this cluster is hollow and moving around in it are those bees which raise the temperature by muscular movements. After a period of activity, the bees in the center of the cluster exchange places with those on the outside of the cluster.

A bee may be compared to a storage battery. It has just so much energy to expend and after that is consumed the bee dies. A colony of bees which has been severely taxed by maintaining the proper temperature within the hive will have but few bees left in the spring to care for the issuing brood or perform their other duties in the hive.

The single-walled hive does not offer enough winter protection in the northern part of the United States. There are on the market double-walled and other hives designated especially for wintering bees. However, the single-walled hive will, if properly packed, prove perfectly satisfactory.

The tendency in wintering bees is towards abandoning cellar-wintering in favor of out-door wintering in packing cases. When properly protected, the bees will be safer than in a cellar and will be in better condition at the time of honey-flow.

Two or more hives may be placed together in one packing case. If this is done, each hive helps keep the other warm.

After the hives are placed in the packing case, the spaces between them and the sides of the case should be filled with some good packing material. This open space should be from six to eight inches, the wider the better.

Insulation may be obtained by using ground cork, chaff, sawdust, shavings, paper, or dry leaves. If leaves are used, they should be well packed down, while sawdust should be lightly poured in to fill the space. A tunnel eight inches wide and three-eighths inch high, should be made from the hive to an outside entrance. These openings, however, should not be on the north side of the case.

These packing cases should be put on soon after the first killing frost and, if the bees are well supplied with stores, there will be no need of disturbing them until late the following spring.

SUPPLY PLENTY OF FOOD

A colony of bees to winter well should have from twenty-five to thirty pounds of stores. Honey is the best winter food for bees and should preferably be the lighter colored honey, such as white clover. Honeydew honey should never be left in the hive for winter. If, after the honey flow ceases, it is found that there are insufficient stores, a sugar syrup should be provided for them. This is made by boiling for fifteen minutes from two to two and one-half parts of sugar to one part of water by volume. One ounce of tartaric acid should be added for every forty to sixty pounds of sugar used.

If the stores are insufficient, this syrup may be fed before freezing weather sets in. If the bees have stored undesirable food, such as honeydew honey, it should be removed and the syrup fed.

PLENTY OF YOUNG BEES

The necessity for plenty of young bees is that they can pass through a severe winter and emerge in the spring in much better condition than older ones.

A good queen will insure having plenty of young bees at the beginning of winter and she will begin brood-rearing in due season in the spring. The colony of a weak or failing queen is not likely to have strength enough to winter well. To winter bees well, they must have

plenty of stores, plenty of young bees, a vigorous queen, and ample protection from the cold.—J. H. MERRILL.

Planting Onion Sets

A California reader asks if spring is a better time than fall to plant the sets which grow on top of winter onions. He tried fall planting last year with rather poor results.

We are not sufficiently familiar with California conditions to advise this reader authoritatively, but Prof. Albert Dickens supplies the following instructions on handling onion sets under Kansas conditions:

"In this state the best success is had by planting top sets in the early spring. They should be well dried out in the fall and kept in sacks or boxes through the winter. If they are put in sacks or boxes when they are green, they are likely to become heated and rot.

"The bulbs that form these sets may be left in the ground during the winter and the top sections of the bulb will furnish green onions in the spring. The bulb or top set onion is what is commonly called the 'multiplier' or potato onion. The bulb, instead of having a single stem or heart, has several, and when growth starts instead of one stem or cluster there are two stems produced. The danger of planting in the fall is that the bulbs may be eaten by insects or small animals or the bulbs may be dried out so that they will not contain sufficient vigor to make a good growth in the spring.

"The bulb may be divided in the spring and the parts set out, but they usually tend to produce a bunch of sets rather than to increase in size. If the divisions of the bulb are set, the tops should be clipped off to prevent the production of bulblets."

Hogs Make Profit

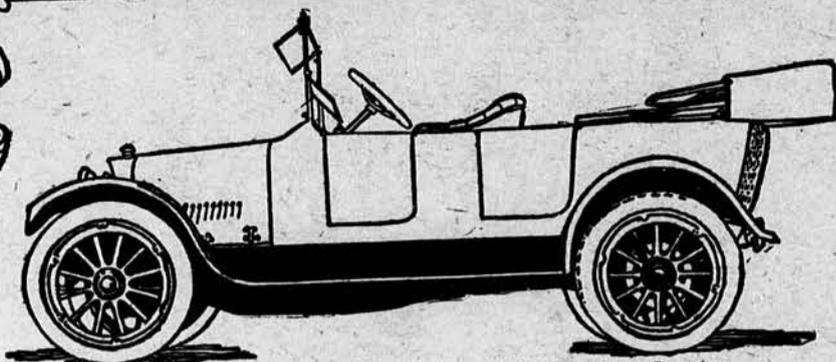
On January 1, 1916, H. J. Mott had on his ranch in Scott County, Kansas, 130 pure-bred Duroc hogs and pigs. Since that date he has sold on the Scott County market 128 head. Their average weight was 238 pounds. The average price received was \$8.88 a hundred pounds. Average amount received per head was \$21.16. Total receipts, \$2,708.25. After selling the above, Mr. Mott has 297 spring pigs now on his ranch.

All of the grain fed during 1916 was purchased in Scott County, none being raised on the ranch except about \$300 worth of milo. For corn, \$714.15 was paid, and \$73.65 for shorts. The total grain fed during the year amounts to but \$1,087.80, leaving \$1,620.45 for labor, alfalfa and profit, besides 110 more pigs now on the ranch than at the beginning of the year.

Mr. Mott attributes this good result to alfalfa. In addition to alfalfa pasture, good alfalfa hay has been fed to these hogs daily, summer as well as winter. Few would believe without actual experience that hogs will eat so much dry hay all of the year, even when running on good alfalfa pasture. The hogs were finished by being fed from four to six weeks on full feed of corn, alfalfa hay and water. The consumption of corn amounted to about seven bushels per head. Pure-bred stock, alfalfa hay, alfalfa pasture, good water and shelter in summer as well as in winter, make hog farming a success in Scott County, even where every pound of grain consumed is purchased. In most seasons plenty of milo and other grain sorghums are raised for hog feeding.

The best book we have seen on the federal farm loan system is that by Herbert Myrick, published by the Orange Judd Company. It is simply written, tells what to do and how to do it, and answers many questions that come to the mind of those desiring to take advantage of the new law.

Mature brood sows will gain in weight on alfalfa pasture alone after their pigs have been weaned. There is no need to feed such sows grain. It is much more economical to maintain on alfalfa alone. The young sow that has not made her growth should be fed grain. They cannot grow out as they should on pasture alone. Too many young sows are stunted in the period following the weaning of the first litter.



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AND ONE DEFECTIVE PART—one, however small or seemingly insignificant—that does not fit absolutely, and you'd have a car that would be less than a Reo in performance—more than a Reo in cost of upkeep.

INFINITE PAINS, WE SAID: Perhaps that's too big a term. But if you could know how great is the task—how unremitting the care—to guard against even one little error creeping into any one of these 8000 places—you'd grant us the word "infinite."

"THOSE PESKY LITTLE TROUBLES that are always happening with other cars, are unknown to the Reo owner," says one Reo dealer, "and that's why the demand for Reos is so great."

WHEN YOU STOP TO THINK about it, the troubles you've had with other cars were not big troubles. Your motor didn't drop out of your car or your transmission strip or your frame break in two.

IT WAS THE LITTLE THINGS that pestered your motoring life—parts shaking loose or getting out of adjustment. Dust in bearings—oil leaks—everywhere. Squeaks and creaks and rattles.

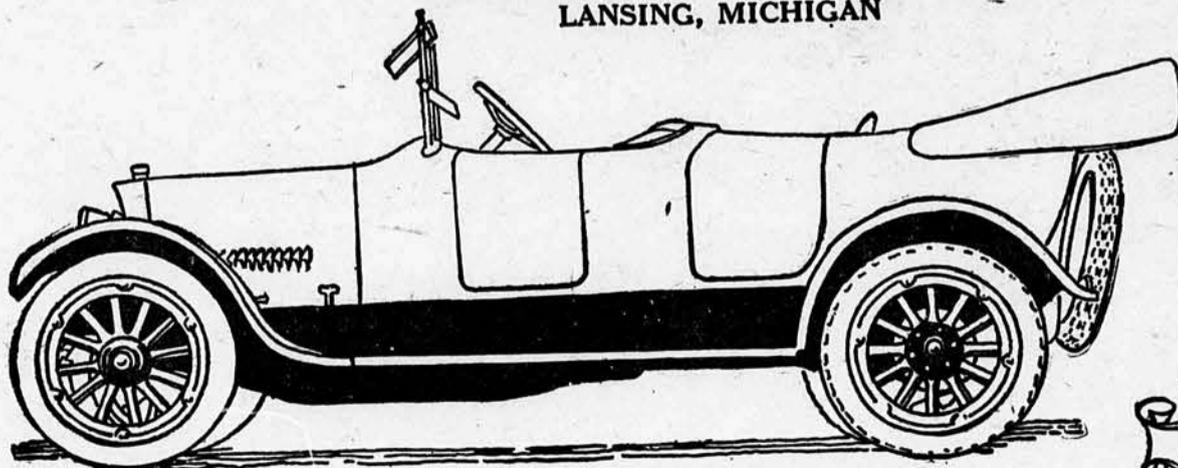
ALWAYS THE DREAD WHEN STARTING out that you might not return. Always the fear when in a hurry that some pesky little trouble resulting from some pesky little defect, of which you were cognizant, might delay you. Wasn't there?

WELL THEREIN LIES the big difference between Reos and other cars—the big difference is in attention to the little things.

IT IS NOT UNCOMMON—in fact—it is the rule—for a new Reo owner to drive his car thousands of miles—a year, two years—without even seeing the inside of a garage or lifting the bonnet to make an adjustment or repair.

HONOR AND FAITH and a Good Intent—these and the attention to little things they dictate—result in Reo Reliability as it is known the world over, "The Gold Standard of Values" in automobiles and motor trucks.

REO MOTOR CAR COMPANY LANSING, MICHIGAN



The New 7-passenger Reo Six Touring Car, \$1150, f. o. b. Lansing

"THE
GOLD STANDARD
OF VALUES"

SPEED



Plowing an Acre in 22 Minutes

Again—with amazing ease—the Wallis "Cub" clinched its leadership—at the great National Power Farming Demonstration at Cedar Rapids. **One and one-half acres! Time 33 minutes!!** Four minutes clipped from the world's speed record—made by the "Cub" itself—at Fremont last year!!! And this wonderful exhibition made ON KEROSENE, too!!!

WALLIS CUB TRACTOR

Mightiest of Medium Weight Tractors [For Farms of 200 Acres or Over]

To perfectly turn your ground, you need speed! To thoroughly cover weeds and trash—to cleanly scour—to finish plowing "on time"—you must have speed! Where will you find greater assurance of real tractor efficiency than in the "Cub's" great records—and daily performances.

And where will you find such assurance of long years of speed—of power—of low upkeep—of real service as the "Cub's" great 1,000 mile Durability Test? No other tractor ever dared attempt that feat!

If you own 200 acres or over—then the "Cub" is your tractor! Our catalog tells why. Write for this book today if you have a farm of over 200 acres.

J-I-Case Plow Works

Selling Agents for the Wallis "Cub"
1074 West Sixth St. RACINE, WIS.

Special Features

Compare the "Cub" with other tractors for power delivered in comparison with its weight.

4,000 lbs. at draw bar guaranteed with 25% reserve power—making 5,000 lbs. maximum (Average pull required for one 14 inch bottom—750 to 1000 lbs.)

—operates 32 inch separator with blower and stacker and self-feeder! —pulls 26 tons of wagon freight on level road.

Turns complete circle in 8 1/2 feet.

All vital working parts absolutely protected from dust and run in continual bath of oil.

Spring Mounting front and rear. Finest special steels. Hyatt Heavy Duty Roller Bearings. Perfect lubricating system.

Successfully Burns Kerosene



Homeless Farm Machinery

OVER fifty million dollars' worth of farm machines stand continuously uncared for in all the weathers of the four seasons. Are yours included? One state has shown that 46 per cent of farmers leave all their machines out under open sky. Only 16 per cent house all their tools. Which class is yours, or are your measures halfway measures? These are severe questions, but it is plain that they demand the asking.

Every traveler in railroad trains is familiar with the succession of ungainly hay loaders he passes, here and there and everywhere, in hay fields and marshes. He sees them because of their giraffe-like proportions as they stand aloft. They speak to him eloquently for countless forsaken fellow machines that he does not see, hidden in fence corners, under trees, in tall grass, behind barns.

A touch of comedy is to be found in the spectacle of the corn grower who, cultivating the final row of the waist-high corn for the final time, dismounts from his cultivator, unhitches and goes away, deserting the faithful weed eradicator, hurrying off perhaps to some harvest picnic. There it stands astride of the end of the row, swallowed up finally by the rustling corn until the corn grower, advancing upon it weeks later with the corn binder, has to stop that he may pull the obstruction out of the way, rusty, rheumatic and forlorn. Who cares! What earthly use is a corn cultivator in September anyway! Nothing but a nuisance!

Hundreds of dollars the individual machine neglecter wastes in the rusting of metals, the rotting of wood, the neglect of complicated mechanism.

Each season finds him out rounding up one by one, as he requires them, the machines he cast aside the year before, and it is no joke to say that occasionally he loses one for a time, somewhere on the broad expanse of his farm. Under his open-air shed, which may be as much as a tree, new troubles beset him, bred in the destructive capacity of the elements. Rusted apparatus rebels and machines wear out before their time.

Now that they have served your 1916 purpose, what have you done with the drill, the planter, the tillage tools, the mower? Now that you have harvested and housed the crops in pleasant, modern machine fashion, where is your mower, your rake, your tedder, your binder? Under cover? Or under sentence of a year's storm-beaten exile until your crying farm need forces you to call upon them again for help?

Whatever the remedy, the fact remains that in the future our farm machines, which are so fundamentally important because they make a living for us and for the world, must be given better care. Already there are signs of the change. The old aristocracy of farm equipment, which has been frankly acknowledging the automobile king, is being leveled as the novelty of the automobile wears off. In the new, real farm-power age, the tractor is the leader, and, because he is a son of the soil himself, he is raising the whole standard of our regard and respect for the farm machine.—Tractor Farming.

Early Corn

Those who have raised corn in regions of light rainfall have noted it tends to turn to flinty types of corn.

We have noticed flint corn at nearly all the fairs we have visited this year. This corn will often mature by July 15th and it frequently yields 15 to 20 bushels per acre.

We have found some people who have made money by using this for finishing the hogs which had been kept on pasture up to July 15. This early corn may supplement milo, feterita and dwarf kafir as summer grain for hogging off. It appears worthy of closer investigation.—J. E. PAYNE, Oklahoma

Feeding Value of Barley

Many farmers of Western Kansas are finding barley a profitable crop. It deserves more attention than it is now receiving. It is especially valuable for horse feeding. The Kansas Experiment

Station has compared barley with corn for work horses. The horses that received corn lost 29.3 pounds each, while those fed on an equal amount of barley gained 8.3 pounds each during the test.

At six experiment stations where barley and corn were fed to lambs, those receiving barley made an average gain of .31 pounds and those fed corn .32 pounds.

In steer feeding experiments a hundred pounds of gain has been produced by 790 pounds of ground barley as compared with 856 pounds of ground corn for the same gain.

Apply Lime in Spring

J. R. Crawford asks if it is a good plan to apply lime to the soil this fall.

While it is better to use lime on some soils at any time of the year than not to apply it at all, the better plan is to apply it after plowing for some cultivated spring crop. The lime can then perform its full function in promoting the growth of the bacteria so essential to soil fertility.

These countless bacteria, so hopeful to clover, alfalfa and other legume crops, work only in the dark and require both water and air for their existence. Also, they can live only in soils either naturally or artificially supplied with lime.

Lime spread on the surface and not stirred into the soil can help the bacteria but little. They would die there for lack of moisture, and the lime would be dissolved and carried into the soil only after a long time. Lime plowed under is also out of reach of the bacteria, which live chiefly in the upper three or four inches of soil where air is plentiful. Hence, applying lime after plowing in the spring and mixing it by cultivation into the soil during the summer make conditions most favorable for the growth of these crops.

Co-operation Benefits

C. F. Davis, of the Colorado Agricultural College, in writing on the subject of "Rural Credits," calls attention to the fact that the principles of co-operation are by no means unknown in the United States. There are many co-operative enterprises in operation.

In 1912 there were in the United States 6,273 building and loan associations with more than two and one-half million members and over one billion dollars of assets, and in 1913 there were 623 mutual savings banks with eight million depositors and four billion dollars of resources.

The building and loan associations and the savings banks are organized to encourage habits of thrift. They reach the people of the cities but do little or nothing to enable the farmer to get money when he needs it at terms which he can meet.

There are in force in the United States twenty-five billions of dollars of policies of, mutual and co-operative insurance not including the 1,867 farmer's mutual insurance companies of various kinds.

The amount of money thus held by co-operative concerns of the United States far exceeds the aggregate of such holdings in all classes of co-operation in the whole of Europe, but though well supplied with urban institutions for thrift and credit, the United States has nothing to compare with the rural co-operative institutions which are being developed in Europe.

With the greatest body of the soundest security known to men—the broad imperishable and immovable acres of a continent—within their keeping, it is the fault of the agricultural class of America if they do not have the most ready access to that amount of the world's money or credit that is needed to enable them to secure the greatest possible returns from their business.

Integrity in ourselves, a confidence in the integrity of our neighbors, a hearty willingness to join with them and to make common cause of our necessities, a firm determination to go slowly but to be always working towards the top; in short, co-operation is the magic word to open the gate to independence and contentment of the farming class of America.

War on Hog Cholera



There's only one way to fight Cholera—VACCINATE! Sanitary methods help to diminish death loss, but Vaccination saves hogs, prevents the spread of disease.

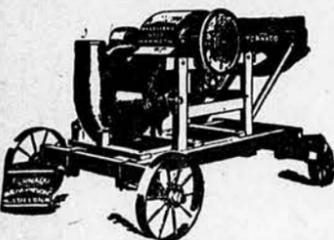
Observe these rules: Keep Hogs Clean; Disinfect Yards and Pens; See That the Water Supply is Pure and plentiful. Vaccinate with

FOWLER'S ANTI-HOG CHOLERA SERUM

Fowler's Serum has the quality of being Uniformly Pure, Potent and Safe to use. Made by competent Veterinarians, under U. S. Veterinary License No. 103. It is Government Inspected and Fowler Inspected. Vaccinate with Fowler's Serum and keep your hogs in salable condition—worth their market price.

Further Information Sent on Request.

Fowler Serum Company
Dept. 19, Kansas City, Kan.



Tornado Fodder Cutters

Have stood the test for thirty-five years. We make them for hand or power use. Any size with any equipment.

NOW is the time to prepare for your Dry Fodder Cutting.

THE TORNADO splits as well as cuts the largest and hardest stalks.

ASK YOUR DEALER ABOUT THEM.

W. R. HARRISON & CO. Mfrs., Massillon, Ohio

HARLEY-DAVIDSON SERVICE STATION

PARTS For Kansas REPAIRING
SHAWNEE CYCLE CO. TOPEKA KANSAS

National Farm Loan Associations

A NUMBER of inquiries have been made relative to the operation of the Rural Credit act passed at the last session of Congress. The members of the Federal Farm Loan Board are now traveling over the United States preparatory to dividing the country into districts and locating the twelve land banks that are to be established. Co-operation among borrowers is the fundamental principle upon which the operation of the loan act depends.

FORMING LOCAL ASSOCIATIONS

A national farm loan association may be organized in any community where ten citizens owning land desire to borrow an aggregate of not less than \$20,000. The land must be unincumbered or the proceeds of the loan must be used, in part, to remove any lien. Loans may be as small as \$100, or as large as \$10,000.

They must first make application, in writing, for a charter to the Federal land bank of the district in which the association desires to do business. This application must be signed by all those desiring to form the association, stating specifically the name under which they desire to do business, the amount each one desires to borrow, the estimated value of the security each one offers, the territory in which the association desires to do business, how the proceeds of the loan are to be used, and other details set forth in the blank forms which are furnished.

The application having been signed, together with another blank form furnished, called an "organization certificate," the applicants become a tentative organization and elect an agent to represent them, called a "secretary-treasurer"; they also select a committee of three, called a "loan committee." This agent will then receive, from each of the applicants, a subscription to the stock of the association they are forming equal to 5 per cent of the loan they severally desire, which is not required to be paid unless the loan is granted. That is, each borrower must subscribe for such stock to the amount of 5 per cent of his own loan and no more.

The application for the charter having been signed, the signatures must be acknowledged before a notary public or other officer qualified to administer oaths, and then it must be forwarded by the secretary-treasurer to the Federal land bank of the district.

Upon its receipt the bank will send its agent to examine into the representations made in the application and, if found satisfactory, a charter will be granted.

Upon the granting of the charter, the individuals signing the application become a body corporate, which gives it the right to do the business authorized by the farm loan act, to extend its benefits to others by taking in new members from time to time, and to have succession indefinitely. New members must be borrowers whose loans may be as small as \$100 or as large as \$10,000.

Let it be plainly understood that farmers can organize at once, but they can not borrow money until the land banks are established.

After the charter is granted the applicants no longer act in their individual capacity, but become merged as shareholders into a corporation, which has a separate existence created by law, under the same name which has been chosen and set forth in the original application and organization certificate. This corporation will have directors and officers selected by the shareholders to do its business in accordance with the by-laws which the shareholders make for their guidance. The active executive officer of the association will be the secretary-treasurer, and his duties are set forth in section 7 of the farm loan act.

POWERS OF ORGANIZATION

These associations are organized for the primary purpose of giving to each borrower the benefit of the combined credit of all its members to the extent of the capital contributed and the limited liability they each incur, and hence the associations are required to indorse every loan made to members. It is also through these associations that the borrowers will ultimately become the owners of the Federal land banks. The association decides whether any loan shall be made or not by refusing the application for every loan which is considered unsafe or even doubtful. No loan can be made unless it is approved by the loan committee after examination of the land offered as security.

The national farm loan associations are not limited as to the number of their members. After one is organized it may serve an entire neighborhood by receiving new members. Each association may obtain in loans for its members twenty times the amount of its stock in the Federal land bank, no matter how large its holdings of stock may become by the growth of the association.

LIMITATIONS IMPOSED

The following restrictions are imposed upon farm loan associations:

1. No loan may be made except upon the security of first mortgages.
2. The amount of the mortgage can not exceed one-half the appraised value of the land and 20 per cent of the per-

manent improvements thereon, which must be insured.

3. The proceeds of the loan must be used for the extinguishment of pre-existing indebtedness or for productive purposes, which includes the purchase of live stock, fertilizers, equipment and improvements.

4. Every mortgage must contain an agreement to pay off the debt—principal and interest—in fixed annual or semi-annual installments.

5. The amount of each installment may be fixed by the borrower, but can not be less than sufficient to pay off the debt in forty years, nor greater than to pay it off in five years.

6. The rate of interest charged any borrower can not exceed 6 per cent per annum.

7. The borrower can not be called upon

to pay the debt except by the installments he originally fixes, unless he defaults, but after five years he may pay off the whole or any portion at his option at any installment period.

"Hogging down" corn is one of the most efficient ways of feeding the hog, in that it saves the labor of harvesting, provides exercise for the hog, and allows him to balance his own ration. Shoats weighing 100 to 150 pounds can be turned into the corn as soon as it is well dented, and do best if they have access to an adjoining field of alfalfa. If this is not available, tankage may be fed in the self-feeder. When the grain is nearly cleaned up, the pigs may be removed and finished in dry lot. Brood sows may take their place in the cornfield to finish cleaning up the grain.

We Must Add \$175 to the HUDSON SUPER-SIX

Here is an issue which we can't evade. So we meet it fairly and frankly, but give you a full month's warning. Every Super-Six will be sold at present prices while they last. If you can get one, get it.

The Super-Six of the present series is built from materials contracted last year. There are only 3500 more to go out, including open cars and enclosed. And part of them are sold.

The next production—starting December 1—will be like the present models. The changes, if any, will be only minor refinements. But materials for that series were contracted this year, and at prices enormously advanced.

So the cars now in process are the only Super-Sixes we can deliver at the present Hudson prices. The advance will be \$175 per car.

No Way Out

Most people know that Hudson profits are amazingly low for our output. Here is the top-place car—the largest-selling fine car in the world with a price above \$1100. Yet it sells way below some fine cars. Still our standards are so high that, despite our big output, profits are very small.

Now these high-grade materials, in one year, have enormously advanced. We must either adopt lower grades of materials, or add the advance to our price.

There is no other way out for fine-car makers whose profits have been fair. This enforced raise means no greater profit to us. So we frankly state the facts.

We shall continue the present-grade Hudson. Next year's models will be the same as this year's; save perhaps in some minor refinements. There will positively be no change in the Super-Six motor. So the added cost—and that alone—will be added to our price.

Good News for Owners

This will be good news for owners. About 25,000 have, or will get, Super-

Sixes at present prices. With this patented motor, where wear and friction are almost eliminated, depreciation is a trifle. And like cars, of the next production, will cost a great deal more. So a Super-Six can be bought now at a saving of \$175.

We have under way of the present production about 3500 cars. Part are open models, part enclosed. Many of them are sold.

But many Hudson dealers, suspecting the advance, have unsold Super-Sixes. If you get one now, you will save \$175. For all Hudson dealers will advance the Super-Six when we start production of the next series.

If you can get one now, go get it.

Next Year's Ruling Car

Next year, as this year, the Hudson Super-Six is certain to hold its supremacy. The Super-Six is controlled by our patents—the motor which added 80 per cent to efficiency. So other cars can't use it.

The Super-Six now holds all the worthwhile records. All the world's stock car records up to 100 miles. It holds the 24-hour record of 1819 miles. It won the Pike's Peak hill-climb—the world's greatest event of its kind.

In September it won the ocean-to-ocean record. It went from San Francisco to New York in 14 hours 59 minutes less time than the next best record.

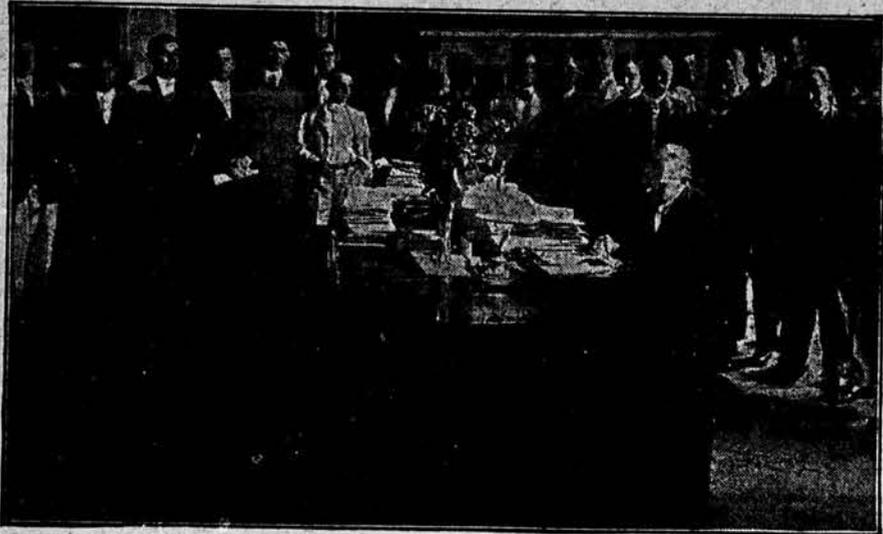
It won all these records because of endurance. Because this invention has so nearly eliminated all friction, vibration and wear.

So every man who knows the facts must concede the Super-Six supremacy. Every test has proved it. If you want such a car—even for next year—now is the time to get it, if you can.

Phaeton, 7-passenger . . . \$1475	Touring Sedan \$2000	Town Car \$2750
Roadster, 2-passenger . . . 1475	Limousine 2750	Town Car Landaulet . . . 2850
Cabriolet, 3-passenger . . . 1775	(Prices f. o. b. Detroit)	Limousine Landaulet . . . 2850



HUDSON MOTOR CAR CO., DETROIT, MICHIGAN



President Wilson Signing the Rural Credits Act

President Wilson Has Won Real Freedom— Has Secured Prosperity— For the Farmer

The Wilson administration is the first that has dared to make common cause with the farmer against the usurer, the fake middleman, and the other human pests who in the past have grown rich on the fruits of the farmer's toil.

FOR the first time in our national history the farmer has been freed from the domination of the extortioner and slavery to the favored few. Under President Wilson the farmer has been treated as a **business man**, and accorded his full rights and advantages. Under the Wilson administration the average annual farm wealth production has been \$10,000,000,000—over a billion dollars more than the best previous showing. And the farmer has enjoyed the financial fruits of his work.

President Wilson Has Maintained Peace With Honor

No greater service has ever been rendered to any country by any man in any time. This alone warrants your supporting him. On the record of his administration's service to **you**, see what has been accomplished. In brief, here is the record:

1—Appreciation of the importance of agriculture has been shown through greatly and intelligently increased appropriations for its support.

2—Greatly increased provision has been made, through the enactment of the Cooperative Agricultural Extension Act, for conveying agricultural information to farmers and for inducing them to apply it.

3—Through the creation of an Office of Markets and Rural Organization, systematic provision has, for the first time, been made toward the solution of problems in that important half of agriculture which concerns Distribution—marketing, rural finance and rural organization. The appropriations for this Office, including those for enforcing new laws designed to promote better marketing, have been increased to \$1,200,000.

4—The United States Grain Standards Act will secure uniformity in the grading of grain, enable the farmer to obtain fairer prices for his product, and afford him an incentive to raise better grades of grain.

5—The United States Warehouse Act will enable the Department of Agriculture to license bonded warehouses in various states. It will lead to the development of better storage facilities for staple crops and will make possible the issuance of reliable warehouse receipts which will be widely and easily negotiable.

6—The Federal Aid Road Act will conduce to the establishment of more effective highway machinery, stimulate larger production and better marketing, promote a fuller and more attractive rural life.

7—The Federal Reserve Act benefits the farmer by guaranteeing better banking, safeguarding the credit structure of the country and preventing panics, making larger provision for loans through national banks on farm mortgages and by giving farm paper a maturity period of six months.

The Federal Farm Loan Act.

8—It was essential, however, that banking machinery be devised which would reach intimately into the rural districts, that it should operate on terms suited to the farmers' needs, and should be under sympathetic management. The need was for machinery which would introduce business methods into farm finance, bring order out of chaos, reduce the cost of handling farm loans, place upon the market mortgages which would be a safe investment for private funds, attract into agricultural operations a fair share of the capital of the nation, and lead to a reduction of interest. These needs and these ideals have been met by the enactment of the Federal Farm Loan Act.

This is not all but it is enough to indicate what has been accomplished.

**That is Why the Farmer Will Vote
To Retain President Wilson In Office**

This advertisement is published and paid for by the Democratic National Committee, 42nd St. Bldg., N. Y.



MILKING MACHINE TESTS

THE South Dakota Experiment Station has done some very comprehensive work in testing the value and practicability of the mechanical milkers. For five years Prof. C. Larsen of this station has used machines of different makes under all kinds of conditions. The results are given in a bulletin recently issued.

Seven different kinds of machines were used, the length of time for the different outfits ranging from seven months to five years. The machines studied and tested were the Hinman, the Calway, Sharples, Burrell-Lawrence-Kennedy (B. L. K.), Perfection, Empire, and Waterloo Boy.

Professor Larsen in his introduction to this bulletin, says:

"In the field of progressive dairy farming, there are few lines of endeavor that mean so much as successful mechanical milkers. Further, there are few things in the dairy field that have advanced so rapidly, created so much interest, and attracted the attention of the public and practical dairy farmer as has the successful milking machine.

"The interest is partially manifested by the many questions that are asked about mechanical milkers. The following are taken from letters to this department:

"Do milking machines injure the cow's udder and teats? Do the milking machines tend to dry up the cows? Is it necessary to strip the cows after the milking machine? Are the cows difficult to accustom to machine milking? Will the milking machine save enough time so that it will pay to invest in a mechanical milker? How many cows should a person own before milking machines will pay? Is it costly to keep up the repairs of the milking machine? How much and what kind of power are required to operate a milking machine? Is it difficult to keep the milking machine clean and sanitary? What is the cost of installing a milking machine? Can the milking machines be installed and operated successfully in an ordinary farm barn? Is milk drawn by milking machines cleaner than milk drawn by hand? What kind of a milking machine is best?"

As a result of the practical tests made some valuable suggestions are offered for the benefit of those interested in mechanical milkers. The summary, which contains these suggestions, covers nine points, which are as follows:

1. Before the milking machine is installed, cull out the cows having very uneven quarters, and teats that are extremely small and extremely large. Even though the milking machines have a large range of adaptability in this respect, uniformly shaped udders and teats are advantageous.

2. The operator should know how each cow in the herd gives down her milk, and how she milks mechanically, and adjust the work of the milking machine according to the individual cow.

3. The cows that give only a small amount of milk and habitually release their milk little by little are not best suited for mechanical milking.

4. Breed and raise cows that are adapted to mechanical milking by, first, selecting a herd sire that comes from ancestors having good udders and teats and that milk well, or select a tried bull that is known to put good udders on his daughters; secondly, by not raising the daughters of the cows that have abnormally shaped mammary organs and that are known to give down the milk irregularly.

5. The operator of the milking machine should understand how to adjust the parts and the working of the milking machine to the different cows. He

should have a mental picture of how each cow in the herd releases the milk, and how the work of the machine harmonizes with the cow. The machine and the cow must work together and not at cross purposes.

6. The operator should take time to prepare the cow. He should see that the teats are all in normal condition. With most cows the machine should not be attached until the cow has given down her milk.

7. With some cows, and near the end of the milking process, the teat cups will climb upwards. The lower part of the quarter is thus wedged into the upper part of the teat cup. This may shut off the flow of milk. The operator should gently pull down on the teat cups to release this grip or pressure before the machine is entirely detached. If this bothers much, a weight may be suspended from the lower part of the teat cup during milking. By gently lifting and pressing the halves of the udder in the latter stage of milking just previous to detaching, it will help the machine to milk the cow dry.

8. If the above points are observed, many cows need no stripping. The operator soon learns from the amount of milk, and from the looks of the cow's udder, whether the cow is milked clean. However, to be sure, the operator should try every cow by hand. It may be done by shutting the vacuum off and stripping directly into the teat cups, holding the cups in the left hand and stripping with the right; or it may be done by stripping into the pail.

9. The different parts of the milking machine should be kept sanitary by thorough cleaning, and by keeping the parts in a disinfectant solution between milkings such as previously described.

Dairy Herds Lead

In Leavenworth County a farm survey has been made of a district where considerable attention is given to dairying. The comparison made between the herds brings out some interesting results. It is evident that in this district cows of dairy breeding are bringing more profitable returns than scrubs or dual-purpose cattle.

The table shows the value of the dairy breeds in this community. Not only did the scrub and dual-purpose cows return much less than the dairy-bred cow, but the labor income of the owners of the former was very much less than that of the latter. Notice how closely the figures correspond in the comparison of 1914 and 1915 records.

A pure-bred Guernsey bull has just been purchased by one of the owners of dairy-bred cattle. Gradually the value of the pure-bred sire is being recognized and the quality of our dairy stock is improving faster than any other line.

The soil on many farms contains a sufficient quantity of plant food, but is so devoid of organic matter that the food is unavailable to the plant. A soil thus lacking in vegetable matter will not retain water, but packs and bakes. Practically all the manure produced on a dairy farm may be returned to the soil. This will add humus, thus making the soil more productive. It may be profitably applied to alfalfa as a surface dressing or in the field where silage or soiling crops are grown.

The 1916 National Dairy Show is now being held in Springfield, Mass., closing October 21. The association went east this year to get together in "Sunny New England" the greatest national show of dairy cattle and dairy products and machinery that has ever been held anywhere in the East.

DAIRY HERDS LEAD IN LEAVENWORTH COUNTY COMMUNITY

Breed of Cows	Number Farms Surveyed		Receipts per Cow		Labor Income	
	1914	1915	1914	1915	1914	1915
No dairy receipts.....	13	10	0	0	—\$140.64	—\$364.8
Scrubs.....	18	29	\$51.78	\$47.53	279.40	283.4
Dual-purpose.....	19	12	50.76	48.03	144.70	—176.8
Dairy.....	22	27	88.26	70.42	486.4	402.8

Kansas Farmer Dairy Club

Treatment For Inflamed Udder

ONE of our Dairy Club members, Theresa O'Mara, Anderson County, has had to face difficulties ever since she joined the club, but these she has accepted as things which might happen to anyone milking cows and has dealt with them as best she could—and which we wish to add has been very well indeed. Believing these difficulties and the way she has handled them will be of interest to the other club members, we are here reproducing her last two letters:

"I received the blanks sent me and enclose same herewith properly filled out. Also find enclosed money order for \$2.59 covering cost of scales plus postage. The scales reached me a few days ago.

"I must now tell you something about my cow. I have named her 'Delphi of Whitewater Falls.' I took the name 'Delphi' from her ear mark, and 'Whitewater Falls' is the name of the farm from which I purchased her. Delphi is a grade Holstein and weighs about 1,400 pounds.

"She presented me with a large male calf September 4. I am feeding him six quarts of whole milk a day. He is doing nicely.

"However, I have been having some trouble with Delphi. After she freshened one quarter of her udder seemed very much inflamed and would give no milk. We called the veterinarian and he seemed to think this quarter was spoiled last year when she had her first calf. Mr. Robison did not know this, as he had brought her from New York about two months before I purchased her. The inflammation spread into all of the udder. It has meant a great deal of work and care, but she is getting better. She is still off her feed, as the veterinarian prescribed bran mash while in this condition. For this reason I did not start my milk record until today—September 11—and since she is not yet on a ration I cannot expect much from her. However, I hope to remain in the contest even though she is giving milk from only three quarters, unless you object.

"I hope to have some pictures taken later and will then send them."

We are glad to have this member remain in the club and have written her so. We are sorry she has had so many unfortunate experiences in getting started in her club work, but the patience with which she works out each difficulty will mean much to her—not only in the Dairy Club work, but in everything she undertakes. A few days later we received this letter:

"In my last letter I told you of the trouble I was having with my cow's udder. I am glad to tell you it is much improved now, but the one quarter will never give milk. I had been bathing it six and eight times a day with warm water and rubbing with olive oil—as much as could be rubbed in—but I am not doing this any more. Now I am wondering if I was partly to blame for this condition. Should I have milked her before she freshened? I walked her eleven miles from the shipping point home and thought that might have caused some of the inflammation. Whatever the cause, I am anxious to know what to do so I can prevent this trouble when she freshens again.

"When one quarter is spoiled, does that reduce the cow's capacity one-fourth?"

"I am milking three times a day now. Would it be all right to milk but twice and will that cause her to give less milk? She is giving about 39 pounds.

"I attended a cow meeting held at the school house last week. It was for the purpose of getting farmers interested in the dairy business and securing enough cows so that a condensery can be built in the county seat. One hundred twenty-five cows were pledged. Several men with dairy experiences gave talks and the meeting was very interesting.

"I am anxious for this month to close so that I can have some idea what I can expect in a month's work. But of course this month's work will not be complete."

There is nothing better for this trouble than bathing with hot water and rubbing with oil. It is barely possible the cow should have been milked before she freshened. Sometimes the udders of very heavy milkers become so full that some inflammation sets in and it is necessary to draw off a part of the milk to relieve the pressure. Sometimes a

cow's udder becomes inflamed at this time as a result of lying on wet or cold ground. This cow should be watched when she again freshens and if too much inflammation appears, some of the milk should be drawn off and the hot water treatment given.

We do not believe because one quarter of the udder is spoiled the cow's capacity is reduced one fourth. The tendency is for the other quarters to produce slightly more than they would if the udder were complete. This member would probably get a little more milk by milking three times a day, but if her cow is giving only 39 pounds the difference would probably be slight.

We were glad to learn of this member's interest in the dairy meeting and wish others would write about things of the kind which they attend.

Bulls with Records

A most valuable demonstration of the value of records in buying dairy bulls was made at the Ohio State Fair. Buying a bull without knowing the record of his dam is like trading "sights unseen" and is pretty sure to result in a heavy loss to the farmer. With the cooperation of the State Board of Agriculture, twelve cows were brought from the Winona Cow Testing Association, Columbiana County, where they have been on a test for four years.

Six aged cows and a daughter of each were shown. Three daughters were sired by Bull A and three by Bull B. The cows bred to Bull B had average records of 327.3, 292.9 and 322.5 pounds of butter fat, while their daughters sired by Bull B have estimated records of 326.7, 242.0, and 296.6 pounds, respectively. The average decrease in production was 26.4 pounds per cow for each year.

The three other cows bred to Bull A had records of 300.6, 345.5 and 365.2 pounds of butter fat, respectively. The average increase was 47.9 pounds more than that of their dams.

If the dams of the low-producing daughters had been bred to Bull A, it is safe to assume that the daughters would have produced 74.3 pounds of butter fat more than their estimated records. On the other hand, they produced 26.4 pounds on the average less than their dams, while the other three made records of 47.9 pounds more than their dams, the sum of these two amounts being 74.3 pounds.

Dairying and Soil Fertility

No other type of farming removes so little from the soil as dairying. The products sold have so condensed the feed that the greater part of its fertilizing value is left to enrich the soil for future crops. A ton of butter contains 50 cents worth of plant food. A ton of milk \$2.09, a ton of wheat \$7.75, a ton of corn \$6.75, a ton of clover hay \$9.07, and a ton of alfalfa hay \$9.50. These figures are based on the prices of fertilizers two years ago. They are now much higher in price, due to war conditions. The figures given show why dairy farms grow richer and more productive instead of poorer. Denmark each year buys 20 million dollars worth of oilmeal, cottonseed meal and bran from the United States. During the past 25 years the acre yields of Danish farms have increased 50 per cent. The only products they export are butter, cheese and bacon. They have been building up their soil through the purchase of fertility hauled off the farms of this country.

We call your attention to these facts so you will realize that this dairy work in which you are interested is one of the abiding industries. It will endure and come in where grain farming can no longer be profitably followed.

Has Fine Heifer Calf

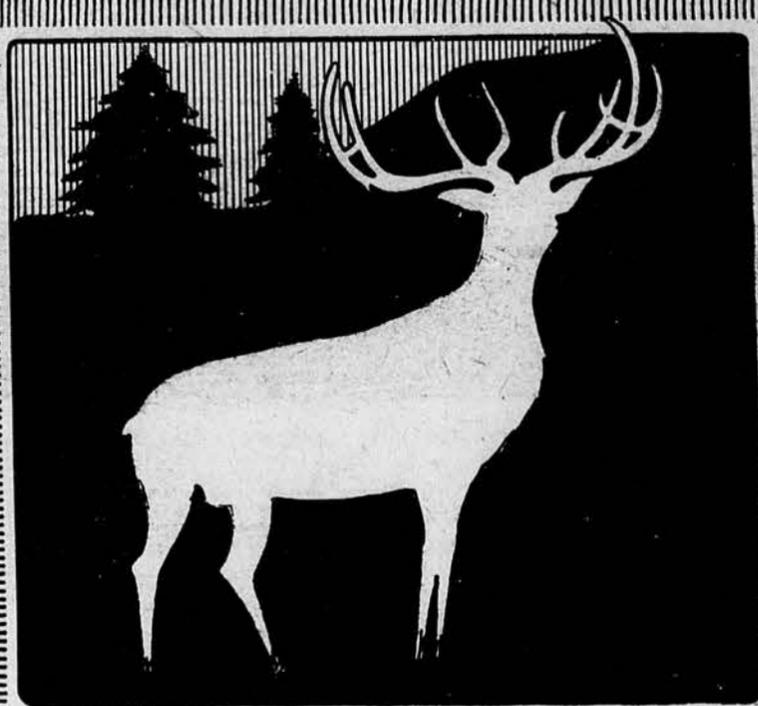
Thought I would write to let you know my cow freshened August 23 and she has a fine heifer calf.

I have asked Mr. Ross to come out and see her and take a picture of her and her calf.

I began saving her milk and keeping my record August 28. Enclosed you will find the other blank which I have filled out.

I am feeding my cow one part bran and one part oats. I also give her some green corn fodder.—ERNEST ASBURY, Leavenworth County.

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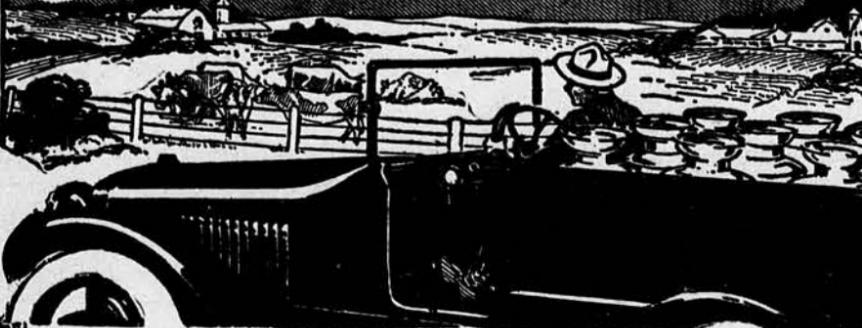


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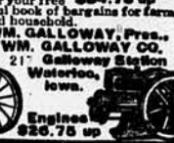
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Dairy Show to Become Permanent

EVER since the Southwestern Jersey Breeders' Association has been organized its most enthusiastic boosters have had visions of a great show of dairy cattle at Kansas City. The beginning was made by the showing of seven Jerseys at the American Royal several years ago. It will be remembered that the American Royal stock show, which means so much to the beef cattle interest of the Middle West, started as a Hereford cattle show.

Dairy cattle are destined to take an important place in the agricultural development of the territory tributary to Kansas City, and this show will mean as much to the dairy interests as the Royal Stock show does to the beef-cattle men. This first exposition did not begin to have the attendance it deserved, but that will improve with time. There is plenty of enthusiasm back of the organization, and we would urge that every KANSAS FARMER reader interested in dairying make up his mind to remember the show next year. Boost for it, plan to exhibit some cattle or dairy product, if possible, and arrange to attend by all means.

There were a good many educational features in addition to the showing of cattle. The Missouri State Dairy Association held a meeting and a number of resolutions were passed having to do with the dairy live stock interest of the country. The extension division of Missouri University had an exhibit that brought out the food value of dairy products in a striking manner. Even people in the country fail frequently to appreciate the food value of milk. In the big convention hall, where the judging was done, a banner was displayed upon which appeared in large letters, the motto, "Eat a quart of milk every day." Comparisons were made of the food value of a quart of milk at 10 cents with other foods, such as eggs, cabbage, potatoes and steak. The food equivalent of 40 cents worth of steak was given as one and a half quarts of milk.

The most sensational exhibits of cattle were made by Jersey breeders. Ten herds were represented, and the classes often contained from ten to fifteen entries. It was a beautiful sight when the nineteen aged Jersey cows were lined up for the judge. The well-formed udders carried by nearly all the Jersey cows shown is worthy of special comment.

The Holsteins were fewer in number but all the herds entered were of high character. So close was the competition in placing the aged cows that the judge asked to have them milked dry before making the awards.

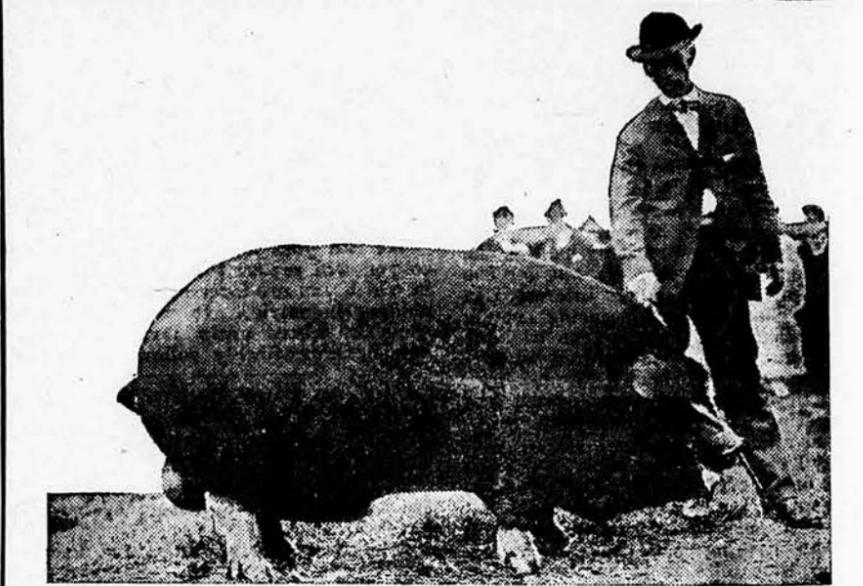
Some of the most famous Ayshire cattle in the country were shown, one Kansas herd, that owned by Dr. F. S. Schoenleber being among them.

The Guernseys were not represented in large number, but visitors had the opportunity to see some cattle of this breed that gave a good idea of these high-quality or dairy cattle. Two herds were shown.

Two herds only of Brown Swiss were shown, one being the Kansas herd of Dahlem & Schmidt. The awards follow. Considerable space is required for print-

ing these awards, but we feel that the dairy interests of our state are coming to the front so rapidly that our readers will appreciate having this information supplied in full.

- Holstein-Friesians.**
- Judge, H. H. Kildee, St. Paul, Minn.
- Aged Bulls**—1, Messer Farms, Waterloo, Iowa, on Hengerveld King; 2, Baird Bros., Waukesha, Wis., on Bardian Segis Sir Prize; 3, David Coleman & Sons, Denison, Kan., on Buffalo Aguinardo Doede.
- Two-Year-Old Bulls**—1, Messer on King Segis Johanna Ormsby.
- Yearling Bulls**—1, Baird on Nockdair King Segis Perfection; 2 and 3, Messer on Skylark Colantha and Segis Pontiac Combination.
- Senior Bull Calves**—1, Dr. Roberts, Waukesha, Wis., on Roberts' Abbecker Pontiac; 2, Baird on Farsee Hengerveld Segis; 3 and 4, Messer on Korndyke Pontiac Ormsby and King Segis Kastra Ormsby; 5, Coleman on Prince Segis Korndyke.
- Junior Bull Calves**—1 and 3, Baird on Nockdair Segis Fobes Boy and Nockdair Segis George; 2, Messer on Skylark Pontiac Bettina; 4, S. C. Lindsey, Carthage, Mo., on Lindsey King Pontiac America.
- Senior and Grand Champion Bull**—King Segis Johanna Ormsby.
- Junior Champion Bull**—Nockdair King Segis Perfection.
- Aged Cows**—1 and 4, Messer on Fay Jewel Beauty and Marie Hengerveld DeKol; 2, 3 and 5, Witte on Jessie of Home Farm, Orchard Hill Pauline Gerben and Gudulge Gerben Wayne.
- Four-Year-Old Cows**—1, Lindsey on Springs Farm Keyes Pontiac 2d.
- Three-Year-Old Cows**—1, Messer on Jewel Walker Gerben of Cedarside; 2 and 3, Lindsey on S. F. America Pontiac 2d and Rodora Topsy; 4, Baird on Nockdair Segis Prairie Flower.
- Two-Year-Old Cows**—1, Baird on Nockdair Segis Netherland Prize; 2, Lindsey on Royal Editha DeKol; 3 and 5, Witte on Beautiful Josephine and Queen Korndyke Fobes; 4, Messer on Buffalo Portia Doede.
- Senior Yearling Cows**—1 and 3, Messer on Nellie Segis Pontiac and Lady Winters Segis; 2, Baird on Nockdair Segis Longfield Rosa; 4 and 5, Coleman on K. S. P. Pearl Pauline and Queen Lincoln Doede.
- Junior Yearling Cows**—1 and 3, Witte on Astle Korndyke 2d and Leda Hengerveld De Kol Mead 2d; 2, Baird on Nockdair King Segis Valentine; 3, Coleman on Miss Nichols DeKol.
- Senior Heifer Calves**—1, Messer on Jessie Tritomin DeKol 4th; 2, Coleman on Kansas Star Inara; 3 and 5, Baird on Nockdair Segis DeKol Blossom 2d and Nockdair Segis Logfield Gem; 4, Witte on unnamed entry.
- Junior Heifer Calves**—1 and 3, Baird on Nockdair Segis Cornucopia and Nockdair Segis Gelsche; 2, Messer on Eudora Maid Pontiac Ormsby; 4, Witte on Bonnie Gudulge Lass; 5, Lindsey on unnamed entry.
- Cow With Mature Official Record**—1, Messer on Marie Hengerveld DeKol; 2, Witte on Gudulge Gerben Wayne.
- Cow With Immature Official Record**—1, Messer on Marie Hengerveld DeKol; 2, Baird on Segis Sonora DeKol Princess.
- Senior Champion Female**—Jewel Walker Gerben of Cedarside.
- Junior and Grand Champion Heifer**—Nellie Segis Pontiac.
- Aged Herds**—1, Messer; 2, Baird.
- Young Herd**—1, Baird; 2, Coleman; 3, Messer.
- Calf Herd**—1, Messer; 2, Baird; 3, Witte.
- Get of Sire**—1 and 4, Messer; 2 and 5, Baird; 3, Witte.
- Produce of Cow**—1, Messer; 2 and 4, Lindsey; 3, Baird; 5, Coleman.
- Advanced Registry Cow with Two Offspring**—1, Lindsey.
- Dairy Herds**—1, Witte; 2, Messer; 3, Lindsey.
- Jerseys.**
- Judge, William Forbes, Waterloo, Iowa.
- Aged Bulls**—1, F. J. Bannister, Kansas City, Mo., on Noble Handsome Prince; 2 and 4, E. C. Lasater, Fairfurlas, Texas, on Noble's Eminent Lad and Village Knight; 3, H. C. Young, Lincoln, Neb., on Stockwell's Champion; 5, White City Jersey Farm, Tulsa, Okla., on He'll Do Viola's Golden Jolly.
- Two-Year-Old Bulls**—1, Bannister on Flora's Queen Raleigh; 2, White City Jersey Farm on Distinction's Noble Oxford; 3 and 4, Lasater on Eminent's Noble of F. and Windsor Nobleman of F.; 5, Mrs. Nelle Fabyan, Geneva, Ill., on Golden of Fern of Riverbank.
- Yearling Bulls**—1 and 2, Lasater on Aldan's Noble of Texas and Lady Windsor's Aldan; 3, Bannister on Golden Fern Pathfinder; 4, White City Jersey Farm on Silver-



CALDWELL'S BIG BOB, GRAND CHAMPION POLAND CHINA BOAR AT TOPEKA, FIRST IN CLASS AT NATIONAL SWINE SHOW, OMAHA, AND CLOSE CONTESTANT FOR CHAMPIONSHIP.—OWNED BY FRED CALDWELL, HOWARD, KANSAS

ine's Extol; 5, Fabyan on Combination's Premier Jr.
 Senior Calves—1, Lasater on Sultan's Eminent Lad; 2, Bannister on Society Lad; 3, Robert Blackburn, Dayton, Ohio, on Fenadora's Raleigh; 4, J. E. Jones, Liberty, Mo., on Prince of Interest; 5, Fabyan on Ocean Blue Chieftain.
 Junior Calf—1, Lasater on Miss Nora's Village Knight; 2, Jones on King Finance; 3 and 4, Blackburn on Mabel's Noble Raleigh and Duke of W's Gay Lad.
 Young and Grand Champion—Bannister on Noble's Handsome Prince.
 Junior Champion—Lasater on Sultana's Eminent Lad.
 Aged Cows—1, Lasater on Female Aldan's Golden Fern; 2, Nelle Fabyan on Manor's Blossom; 3, White City Jersey Farm, Tulsa, Okla., on Ozouf Farm Princess; 4, Nelle Fabyan on Rose Vanetta; 5, Bannister on Beechland's Champion Lily.
 Four-Year-Old Cows—1, Bannister on Warder's Fern Blossom; 2 and 5, White City Jersey Farm on Noble's Cocotte and Fern's Phillipa; 3 and 4, Bannister on Agatha's Maiden Fern and Golden Fern's Shy Lady.
 Three-Year-Old Cows—1, Bannister on Golden Fern's Silver Thread; 2, Lasater on unnamed entry; 3 and 4, Jones on Financial Lad's Lovely Sweet and Financial Count's Queen; 5, Robert Blackburn on New Wave.
 Two-Year-Old Cows—1, Bannister on Unquilted's Lina; 2, White City Jersey Farm on Oxford's Gamboque Queenie; 3, Lasater on Constance of Falfurrias; 4, H. C. Young on Lad's Rosy Y.; 5, Blackburn on Mon Plaisir's Jolly May.
 Senior Yearling Heifer—1 and 5, Bannister on Fern's Oxford Ever and Golden Fern's Jolly Beauty; 2, Lasater on Aldan's Mary of LeMota; 3, Blackburn on Minnetta's Sultana; 4, White City Jersey Farm on You'll Do Fern Duleet.
 Junior Yearling Heifer—1 and 3, Bannister on Houpla's Banola and Cowslip's May Day; 2, Lasater on Eminent Lad's Brightness; 4, Blackburn on Lady Raleigh Noble; 5, White City Jersey Farm on You'll Do Champion Rilla.
 Senior Heifer Calves—1, Lasater on Aldan's Noble Jessica; 2, Bannister on Noble's Champion Gauntlet; 3, Blackburn on Prue's Milk Maid; 4, Fabyan on Ocean Blue's Cowslip; 5, White City Jersey Farm on Starlight of Windsor Place; 6, You'll Do Champion Riatress.
 Junior Heifer Calves—1, Lasater on Cowslip's Noble Queen of Falfurrias; 2, Bannister on La Cima's Louise; 3, Fabyan on Golden Killarney; 4, Blackburn on Lady Noble's Raleigh; 5, White City Jersey Farm on He'll Be Jolly Ray; 6, Blackburn on Fairy Boy's Double Gem.
 Cow with Mature Official Record—1, Bannister on Beechland's Champion Lily; 2, Lasater on Aldan's Golden Fern; 3, Jones on Gold Majoram.
 Cow with Immature Official Record—1, Young on unnamed entry; 2, Lasater on Majesty's Flo of Falfurrias; 3, Blackburn on Raleigh's Dorothy; 4, Jones on Financial Lad's Golden Sweet; 5, Bannister on La Cima's Dolores.
 Exhibitor's Herd—1, Bannister; 2, Lasater; 3, White City Jersey Farm; 4, Young; 5, Blackburn.
 Breeder's Young Herd—1, Lasater; 2, Bannister; 3, Young; 4, Blackburn; 5, Jones.
 Get of Sire—1 and 3, Bannister; 2, Lasater; 4, White City Jersey Farm; 5, Jones.
 Produce of Cow—1, Lasater; 2, Young; 3, Jones; 4, Bannister; 5, White City Jersey Farm.
 Dairy Herd—1, Bannister; 2, Fabyan; 3, White City Jersey Farm; 4, Lasater; 5, Jones.
 Senior and Grand Champion Female—Aldan's Golden Fern.
 Junior Champion—Houpla's Panola.
Guernseys.
 Judge, L. S. Gillette, Ames, Iowa.
 Aged Bulls—1, W. W. Marsh, Waterloo, Iowa, on Rochampton Crocus 3d; 2 and 3, Wilcox & Stubbs, Des Moines, Iowa, on Imported Patricia's Son and Penwyn of Rosendale.
 Two-Year-Old Bulls—1 and 2, Marsh on Allysum's Oliver and Rochampton Crocus 5th.
 Yearling Bulls—1, Marsh on Plato's Prince of the Prairie; 2 and 3, Wilcox & Stubbs on Francis Holden of Fairview and Glenrock Quito.
 Senior Calves—1 and 3, Wilcox & Stubbs on King Bell 5th and Holden's Bell Boy; 2, Marsh on Figtree Nonpareil.
 Junior Calves—1, Marsh on Nonpareil's Blossom; 2 and 3, Wilcox & Stubbs on Holden's Dairyman and Holden's Duke.
 Senior and Grand Champion Bull—1, Marsh on Allysum's Oliver.
 Junior Champion Bull—Marsh on Plato's Prince of the Prairie.
 Aged Cows—1, Marsh on Daisy 3d of Vaux Renier; 2 and 4, Wilcox & Stubbs on Francis Rose of Fairview and Imp. Ruth 2d of Warrenton; 3, Nelle Fabyan, Geneva, Ill., on Polly of Hielstead.
 Four-Year-Old Cows—1, Wilcox & Stubbs on Imp. Daisy Bell of Fairview; 2, Marsh on Fleurie De Tertre.
 Two-Year-Old Cows—1, 3 and 4, Marsh on Polly of Waveland, Hartfield Rose of the Counture and Jedetta's Queen of Iowa; 2, Wilcox & Stubbs on Pride of Village View Farm.
 Senior Yearling Heifer—1, Marsh on Mar's Blossom of the Prairie; 2, Marsh on Figtree of the Prairie; 3, Wilcox & Stubbs on Holden's Lady 4th.
 Junior Yearling Heifer—1 and 3, Marsh on Mac's Fern Leaf and Cherry of the Prairie; 2 and 4, Wilcox & Stubbs on Bell Black Spot and Daisy's Lulu Bell of Fairview.
 Senior Heifer Calf—1 and 3, Marsh on Phoebe Snow of Iowa 2d and Boppeep's Daisy of the Prairie; 2 and 4, Wilcox & Stubbs on Richesse of Fairview and Holden's Hazel.
 Junior Heifer Calf—1, 2 and 4, Wilcox & Stubbs on Margaret Rilma, Holden's Daisy and Princess Rilma; 3, Marsh on unnamed entry.
 Senior Champion Cow—Marsh on Polly of Waveland.
 Grand Champion Cow—Marsh on Mar's Blossom of the Prairie.
 Senior Advanced Registry Cow—1, Wilcox & Stubbs on Princess Rose of Fairview.
 Junior Advanced Registry Cow—1 and 4, Marsh on Imp. Daisy 3d of Vaux Renier and Fleurie De Tertre; 2 and 3, Wilcox & Stubbs on Princess Rose of Fairview and Daisy Belle of Fairview.
 Champion Advanced Registry Cow—Marsh on Imp. Daisy III of Vauv Renier.
 Exhibitor's Herd—1 and 3, Marsh; 2 and 4, Wilcox & Stubbs.
 Get of Sire—Marsh on get of Hayes Oliver; 2, Wilcox & Stubbs on get of Holden 4th.
 Produce of Cow—1, Marsh; 2 and 3, Wilcox & Stubbs.
 Dairy Herd—1, Marsh; 2, Wilcox & Stubbs.
Ayrshires.
 Judge, L. S. Gillette, Ames, Iowa.
 Aged Bulls—1, Adam Setz, Waukesha, Wis., on Bargenoch Rising Star; 2, William Galloway, Waterloo, Iowa, on Auchenbrain

Good Gift; 3, Dr. David Roberts, Waukesha, Wis., on Robert's Cavalier.
 Two-Year-Old Bulls—1, Setz on Cavalier's Kilnford Ringmaster; 2, Galloway on Willowmoor Peter Pan 26th; 3, Roberts on Roberts' Fairy Duke.
 Yearling Bulls—1 and 3, Setz on Cavalier's Lord Roseberry and Cavalier's Fond Stamp; 2 and 4, Roberts on Roberts of Hamline and Roberts of Waukesha.
 Senior Bull Calf—1, Galloway on Cavalier's Lord Stuart; 2, Roberts on Roberts' Pride Cavalier; 3 and 4, Galloway on Dalpeddar Good Gift and Lessnessock Spencer; 5, Dr. F. S. Schoenleber, Manhattan, Kan., on Queen's Actor.
 Junior Bull Calves—1 and 2, Setz on Cavalier's Kilnford Marquis and Cavalier's Kilnford Gloster; 3, Roberts on Roberts of Dousman.
 Senior and Grand Champion Bull—Bargenoch Rising Star.
 Junior Champion Bull—Cavalier's Lord Stuart.
 Aged Cows—1 and 4, Setz on Imp. Kilnford Bell 3d and Imported Kilnford Bell 4th; 2, Roberts on Value's Pride of Oak Valley; 3, Galloway on Dalpeddar Lady Taylor; 5, Roberts on Kirkhouse Eddie 6th.
 Four-Year-Old Cows—1, Setz on Bargenoch Carnation.
 Three-Year-Old Cows—1, Setz on Lady Margaret; 2 and 4, Roberts on Belle Roberta and Queen Roberta; 3, Galloway on Princess.
 Two-Year-Old Cows—1 and 4, Roberts on Roberta of Scotland and Roberta Dehila; 2, Galloway on Lessnessock Carlton; 3, Setz on Cavalier's Pet; 5, Schoenleber on Zella's Tulip.
 Senior Yearling—1 and 2, Galloway on Nona Spencer and Cavalier's Ruby; 3 and 4, Roberts on Roberta Value's Pride Cavalier and Roberta of Hartland; 5, Setz on Cavalier's Rosewood.
 Junior Yearlings—1, Galloway on Rose Good Gift; 2, Roberts on Roberta Cavalier Belle; 3, Setz on Cavalier's Rose Leaf.
 Senior Calves—1, Setz on Cavalier's Lavender; 2 and 3, Galloway on Good Gift's Nona and Sylvia Good Gift; 4 and 5, Roberts on Roberta Southwich Cavalier and Roberta Belle of Waukesha.
 Junior Calves—1 and 2, Setz on Cavalier's May Flower and Cavalier's Lady Bountiful; 3, Galloway on Lady Margaret 2d; 4, Schoenleber on Aca 3d.
 Official Record Cows (record begun at five years or over)—1, Setz on Kilnford Bell 3d; 2, Roberts on Value's Pride of Oak Valley.
 Official Record Cows (record begun at two years and under five)—1 and 3, Setz on Kolnford Bell 4th and Hillhouse Maude 2d; 2, Roberts on Bell Roberta.
 Champion Official Cow—Setz on Kilnford Bell 3d.
 Senior and Grand Champion Cow—Setz on Kilnford Bell 3d.
 Junior Champion—Galloway on Nona Spencer.
 Exhibitor's Herd—1, Setz (herd headed by Bargenoch Rising Star); 2, Galloway (herd headed by Auchenbrain Good Gift); 3 and 4, Roberts (herds headed by Roberts' Cavalier and Roberts' Fairy Duke).
 Breeder's Young Herd—1, Setz; 2, Galloway; 3, Roberts.
 Calf Herd—1, Setz; 2, Galloway; 3, Roberts.
 Get of Sire—1 and 4, Setz; 2, Galloway; 3 and 5, Roberts.
 Produce of Cow—1 and 2, Setz; 3, Galloway; 4 and 5, Roberts.
 Advanced Registry Cow—1, Setz; 2, Roberts.
 Dairy Herd—1, Setz; 2, Galloway.
Brown Swiss.
 Judge, L. S. Gillette, Ames, Iowa.
 Bull Three Years or Over—1, Ayers on Merney's Second Son; 2 and 3, Dahlem & Schmidt on Royal Lad and Glover.
 Senior Yearling Bull—1, Ayers on Merney's Nephew; 2, Dahlem & Schmidt on Sunflower Boy.
 Junior Yearling Bull—1, 2 and 4, Ayers on Columbus A. Toney and Bobbie; 2, Dahlem & Schmidt on Madaline's Buster Brown.
 Cow Four Years and Over—1, Ayers on Browney B.; 2 and 3, Dahlem & Schmidt on Princess Velva's Pet and Dolly Dimple.
 Cow Three Years and Over—1, Dahlem & Schmidt on Madaline; 2, Ayers on Zella.
 Cow Two Years and Under Three—1 and 2, Ayers on Linda Long and Zella's Merney; 2, Dahlem & Schmidt on Pearl of Highland.
 Yearling Heifer—1, 2 and 5, Ayers on Master's Alpha, Chris Rubel and Trixie of Highland.
 Heifer Calf—1, 3 and 4, Ayers on Jane C., Columbus Merney and Columbus Brownie; 2 and 5, Dahlem & Schmidt on Opal of Highland and Pearl Francis.
 Senior and Grand Champion Bull—Ayers on Merney's Second Son.
 Junior Champion Bull—Ayers on Merney's Nephew.
 Senior and Grand Champion Cow—Ayers on Brownie B.
 Junior Champion Cow—Ayers on Master's Alpha.
 Aged Herd—1, Ayers; 2, Dahlem & Schmidt.
 Young Herd—1, Ayers; 2, Dahlem & Schmidt.
 Calf Herd—1, Ayers; 2, Dahlem & Schmidt.
 Get of Sire—1, Ayers on Columbus; 2 and 3, Dahlem & Schmidt on Royal Lad and Glover.
 Produce of Cow—1, Ayers on Merney; 2, Dahlem & Schmidt on Rosalia D.
 No breeder should expect every calf dropped to develop into an animal suitable for the breeding herd. Too many insist on selling every male calf for a bull. The breeder who will ultimately produce the best cattle, command the highest prices and satisfy customers, must keep his knife sharp and use it freely. We have too many scrub bulls already and are not ready to have this number swelled by "pure-bred scrubs." We need more pure-bred steers.
 Concrete floors for granary and corn crib will not cause grain to become musty if the concrete is allowed to dry out for two or three months, according to investigations carried on by the agricultural engineering department of the College of Agriculture, Lincoln, Neb. Once the concrete becomes thoroughly dry it will not absorb moisture from the soil and transfer it to the grain. This conclusion was reached as a result of correspondence with sixty-five farmers who have had experience with concrete floors in buildings for storing grain.

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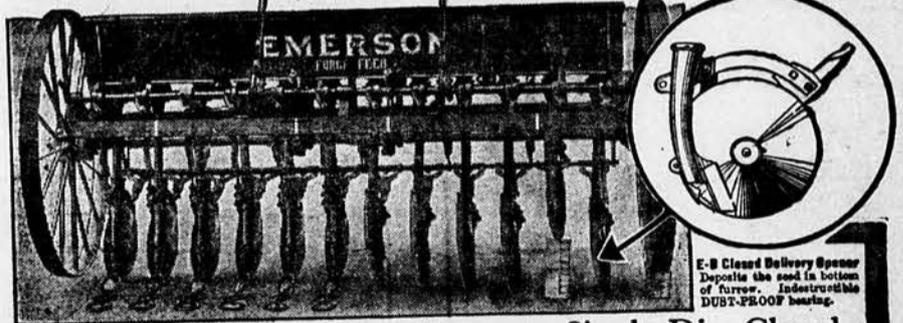


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American Royal Stock Show

THE American Royal this year was distinctly a beef cattle show. From this standpoint it was a pronounced success. Many of the breeders regret that it has been necessary to drop the showing of horses, hogs, and sheep at this premier live stock show of the Middle West. Kansas City is the center of the big farm and live stock business of this country. During the show, W. L. Nelson of the Missouri State Board of Agriculture, called attention to the fact that a circle drawn around Kansas City with a 200-mile radius, would include more herds of pure-bred stock than can be found in any similar area in the United States. It would include more than half of the corn area of the United States, and in this same area is grown practically all of the winter wheat in this country. Within a few miles of Kansas City are the centers of hog production, horse and mule production, and cattle production. In fact it is the center of the agricultural prosperity of the United States.

A number of different plans are under consideration for taking care of the Royal. It has been a difficult problem to work out. It is to be hoped that before another year rolls around it will be possible to put on the greatest and most complete live stock exhibition ever witnessed in this country.

At the show this year there was not room to properly display the different breeds of beef cattle. The Angus cattle were hid away under the balcony of Convention Hall, and were probably overlooked by many of the visitors. While the exhibits of this breed were not large in number, they were fully up to the standard of all previous Royal shows in quality and uniformity. Balthrope & McAdam of Holton, and Sutton & Porteous were the only Kansas exhibitors. The junior and the grand champion Angus bull was Epistos, shown by C. D. and E. F. Caldwell of Burlington Junction, Mo. Blackcap Bertram, Caldwell's two-year-old bull, was senior champion. The senior and grand champion female was Pride Petite, also shown by Caldwell. The junior champion female was Queen or Rosemere 5th exhibited by Congdon & Battles of North Yakima, Washington.

Only two herds of Galloway cattle were shown. These were also quartered in the space under the balcony. Breeders of Galloways claim they are all sold out on bulls, and many who have formerly exhibited this well known beef breed did not have herds out this year because they were sold so low on stock. The senior and grand champion bull of the breed was Myrtle's Standpatter, owned by O. H. Swigart & Sons, Salisbury, Mo. The junior champion bull was Viceroy, shown by H. and G. Croft, Bluff City, Kansas. Othello's Nell, belonging to Swigart, was the senior and grand champion female. Croft's Gwendoline 2d was junior champion female.

The big annex across the street from Convention Hall housed the Shorthorns and Herefords. They divided the space about equally. Herefords on one side of the main driveway and Shorthorns on the other. These two breeds are strug-

gling for supremacy and much good-natured rivalry exists between the breeders of these famous breeds of beef cattle. During the judging some of the younger classes were so large that the line extended almost the full length of the arena, Shorthorns being judged on one side and Herefords on the other.

W. A. Dryden of Brookline, Ontario, judged the Shorthorns. Thirty-three herds were represented, among them being the most famous herds of Shorthorn cattle in this country. Several Kansas breeders were contending for the prizes, and while no championships came to this state, the animals shown were all good enough to attract attention even in such a show as the Royal. Tomson Brothers of Carbondale and Dover, had a well fitted herd, also H. H. Holmes of Great Bend, H. M. Hill of Lafontaine, and John Regier of Whitewater. Tomson Brothers won first in class on their white two-year-old bull, Village Marshall, that has won championship honors at all previous shows of the season. The senior and grand champion bull of the show was Pride of Albion, shown by Frank R. Edwards of Tiffin, Ohio. Owen Kane of Wisner, Nebraska, won the junior championship on Faultless Dale. The white two-year-old, Lady Violet 7th, shown by Reese & Son, Pilger, Nebraska, was the senior champion female. The beautiful roan junior yearling, Viola, shown by W. C. Rosenberger of Tiffin, Ohio, was junior champion female and in a very close contest was finally made grand champion female.

In the Shorthorn sale, nine bulls and twenty-nine cows were sold. No phenomenal prices were paid, but it was considered by breeders an exceptionally good sale. The cattle were bought by men who needed them and were willing to pay the prices they bid to get them. The top of the sale was \$1,075 paid by Grimes & Vorelli of Kingfisher, Okla., for the two-year-old bull, Sultan Mine 2d. The nine bulls sold averaged \$539. The top cow of the sale was Maxwellton Rosewood 6th, a yearling heifer bought by Anoka Farm for \$890.

The Shorthorn Breeders' Association futurity brought out a large number of entries. The champion futurity bull calf was Faultless Dale shown by Owen Kane. The champion futurity heifer calf was Barmpton Flower, shown by Rapp Brothers of St. Edward, Nebraska. This heifer was also made grand champion futurity calf of the show and awarded the W. R. Nelson trophy.

There were fully as many herds of Hereford cattle shown as Shorthorns. The judge was John W. Van Natta of Lafayette, Indiana. To Kansas came the honor of showing the grand champion bull. Bocaldo 6th owned by R. H. Hazlett of El Dorado, has not been defeated this season, and was carried through to senior and grand championship honors at the Royal. The junior champion was Gay Lad 40th owned by Harris & Son, Harris, Mo. The senior and grand champion female was Juliet, exhibited by E. H. Taylor, Jr., of Frankfort, Ky. The junior champion was Belle Blanchard,

(Continued on Page Seventeen)



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Cleaning Hen Houses of Vermin

LICE and mites can be kept under control by the use of vigorous measures involving the thorough scrubbing and disinfecting of the hen houses. Every bit of droppings left on the floor, roosts, or dropping boards, or in the crevices, harbors mites. Droppings and litter must, therefore, be removed frequently.

A standard disinfecting material recommended by the agricultural college poultry department is one part cresol to thirty-three parts water. This ought to be applied once in every three to six days and it will get rid of chicken mites.

After the house is thoroughly cleaned, the following whitewash is a good one to use:

Slake one bushel of lime in twelve gallons of water thoroughly and in another vessel dissolve two pounds of salt and one pound of sulfate of zinc in two gallons of water. After they are completely dissolved, mix the two together and add two pounds of sweet skim milk. The whitewash is then ready to be applied to the house.

A good lice powder to use for old hens is made of three quarts of gasoline and one quart of cresol stirred in common building cement. The mixture must be allowed to dry before using. It is too strong to use on small chickens.

It is always advisable to get rid of the old hens. When an ordinary hen has lived her second year she has outlived her usefulness. Therefore she ought to be sold. It does not pay to keep hens until they die of old age.

Leg Color and Egg Production

The Maine Experiment Station has shown that the coloring matter giving the yellow color to the yolk of eggs is the same as that producing yellow legs. This led to a study of the relation of leg color to high egg production. It was found that hens ordinarily having yellow shanks are much bleached out after periods of heavy laying, and furthermore the heavier the laying has been, the greater will be the amount of bleaching. In consequence of this it is possible to go through a flock at the end of a laying year and pick out at once by the color of the shanks those birds which have been extremely heavy layers from those which have been drones. The drones will be the birds which at the end of the season have bright yellow legs, such as one is accustomed to see in pullets which have not yet begun to lay. On the other hand, birds which have done a hard year's work and produced many eggs will have shanks completely white or nearly so. Examination at the Maine station of many hundreds of birds, whose trap nest records were

known, made it possible to say positively that no bird which had been a high producer could have bright yellow legs at the end of the laying season. "Two hundred egg" hens always have white legs at the end of their pullet year.

This point is one which can be of a great deal of value to the poultryman when he is culling his flock in the fall and deciding which of his pullets he will keep over to use as breeders the next year. If he has no trap nest records the color of the shanks furnishes him one of the best indications he can have as to the way in which these pullets have laid during their first year of life. His first selection should always, of course, be on the strength and constitutional vigor, but after having picked out the good strong healthy birds he should then choose from among those the ones which show the whitest legs. Poultrymen often make a mistake on this point. One frequently hears of a poultryman practicing just the opposite—that is, when he culls his hens in the fall for the breeders of the next year, he will pick out carefully those which have yellow legs. By doing this he is systematically picking out the poorest layers in his flock to use as breeders, whereas if he takes those with the white legs he is systematically picking out his best layers for breeding purposes.

Feeding Moulting Hens

Old hens will not lay in the winter unless they are properly fed during the moulting season.

The hens are now shedding their feathers, and the growth of the new feathers should be helped, otherwise when winter overtakes them they will not lay, are apt to be in poor condition. A good ration for hens all the year around contains bran, beef scraps, corn meal, sour milk, etc. Oil meal, which is specially good at moulting time of the year, is left out of this year-around mixture. Oil meal has a peculiar element in it which is necessary for feather building and is not found in any of the others mentioned.

The following mixture is recommended as a stimulant to feathering:

Sixty pounds of corn chops, 60 pounds of wheat bran, 20 pounds of meat scraps, 15 pounds of old process oil meal.

This ration should be fed in connection with two or more kinds of grain—simply to make a variety. When the moulting is over the mash may be changed to the following:

Sixty pounds of corn chops; 60 pounds of wheat bran, 30 pounds of wheat shorts, 20 pounds of meat scraps.

Rainfall In Kansas, September, 1916

Reports furnished by S. D. Flora, Observer, U. S. Weather Bureau

County	Report														
Cherokee	0.65	Cherokee	0.57	Cherokee	0.16	Cherokee	0.54	Cherokee	0.61	Cherokee	0.59	Cherokee	0.63	Cherokee	0.35
...

THIS was the driest September Kansas has experienced in the past eight years, but, taking the state as a whole, there was almost as much rain as in the two months of July and August this year, combined. The greater part of the month's rain fell on the 11th and 12th, when downpours of from three to five and a half inches occurred in several localities in the central and eastern counties. After these dates there were only light, scattered showers, and the ground was dry again by the end of the month in almost all parts.

Help Your Molting Hens They Will Pay You Back

Hens can't lay when molting; they are too busy making feathers. And at this critical time they are in danger of contracting disease because of weather changes, lack of plumage and weakened condition.

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will help a lot, too. Used in stormy, cold weather as a preventive, it will keep the flock free from troublesome colds, roup and similar disorders. If these troubles have already appeared, Pratts Roup Remedy will save the birds. Rousy hens will not lay, and will give the disease to the rest of the flock.

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A Romance of The Moonstone Canon Trail

SYNOPSIS OF PRECEDING CHAPTERS

A lonely prospector, thinking always of his wife and child left behind, follows the lure of the desert in his search for gold. In the desert town men begin to notice the regularity of his comings and goings. They are green with envy and decide to beat him out of his claim. Meanwhile, in the lonely canon he hoarded the little yellow bits. As weeks rolled by the water decreased; he carefully stowed his gold in a pouch and prepared to leave the canon. After a fateful search he finally comes to a railroad. Here he is found by a man, who gives him water, but being so exhausted the water is of no avail—a flash comes over him and his vision is forever darkened. Louise Lacharme and Boyar of Moonstone Ranch accidentally come upon the camp of Overland and Collie (whom Overland has picked up along the way). Tenlow, the detective, finds the prospector by the railroad and rides up to the camp to arrest Overland, whom he suspects; but after some strenuous arguing, Overland tactfully leaps on Boyar and, through precarious moves, escapes the detective. Tenlow's horse slips and rolls headlong to the bottom of the cliff, leaving Tenlow lying halfway down the hillside. Having turned toward the foothills, Overland releases Boyar and disappears in the brush. At the suggestion of Louise, Collie goes for the doctor and is afterward arrested. Louise tells Walter Stone, her uncle, about the arrest, and finally coaxes him to go with her and get Collie. Walter Stone, being a very influential ranchman and having secured Collie's release, takes him back to the ranch, where he gives him work to do. After several days work with Williams, the foreman of Moonstone Ranch, Collie learns the "ins" and "outs." He finds Overland Red in the mountains near the ranch. Overland goes to Los Angeles and is grubstaked and returns to find the streak of gold. Arriving at the desert town he finds the man who grubstaked him already there, and is persuaded to let him go with him in search of the gold. They discover the lost mine and staked their claim, discover gold. His partner, Winthrop, improves his health. Overland gives one-fourth the mine to Collie, who is still at Moonstone Ranch. Louise has company from the East, a Doctor Marshall and wife.

CHAPTER XVIII.

A RED EPISODE.
DOCTOR MARSHALL'S offhand designation of the buckboard as "a team in a hurry" was prophetic, even until the end.

What Boyar could not accomplish in the way of equine gymnastics—in harness, Apache, Collie's pony, could.

Louise was a little fearful for her guests, yet she had confidence in the driver. The Marshalls apparently saw nothing more than a pair of very spirited "real Western horses like one reads about, you know," until Dr. Marshall, slowly coming out of a kind of anticipatory haze, as Boyar stood on his hind feet and tried to face the buckboard, recognized the black horse as Louise's saddle animal. He took a firmer grip on the seat and looked at Collie. The young man seemed to be enjoying himself. There wasn't a line of worry on his clean-cut face. "Pretty lively," said the doctor.

Collie, with his foot on the brake and both arms rigid, nodded. Moonstone Canon Trail was not a boulevard. He was not to be lured into conversation. He was giving his whole mind and all of his magnetism to the team. Boyar and Apache took advantage of every turn, pitch, steep descent, and ford to display the demoniacal ingenuity inspired by their outraged feelings. They were splendid, obedient saddle-animals. But to be buckled and strapped in irritating harness, and hitched to that fourwheeled disgrace, a buckboard!

Anne Marshall chatted happily with Louise, punctuating her lively chatter with subdued little cries of delight as some new turn in the trail opened on a vista unimaginedly beautiful, especially to her Eastern eyes.

Young Dr. Marshall, in the front seat with Collie, braced his feet and smiled. He had had experience, in an East-Side ambulance, but then that had been over level streets. He glanced over the canon road and his smile faded a little. It faded entirely as the front wheel sheared off a generous shovelful of earth from a sharp upright angle of the hill as the team took the turn at a gallop. The young physician had a sense of humor, which is the next best thing to courage, although he had plenty of his kind of courage also. He brushed the earth from his lap.

"The road needs widening there, anyway," commented Collie, as though apologizing.

"I have my—er—repair kit with me," said the genial doctor. "I'm a surgeon."

Collie nodded, but kept his eyes rigidly on the horses. Evidently this immaculate, of the white collar and cuffs and the stylish gray tweeds, had "sand."

"They're a little fussy—but I know 'em," said Collie, as Boyar, apparently terror-stricken at a mania that he had passed hundreds of times, reared, his fore feet pawing space and the traces dangerously slack. Louise bit her lower lip and quickly called Anne's attention to a spot of vivid color on the hillside. To Dr. Marshall's surprise, Collie struck Apache, who was behaving, smartly with the whip. Apache leaped forward, bringing Boyar down to his feet again. The doctor would have been inclined to strike Boyar for misbehaving. He saw Collie's wisdom and smiled. To have punished Boyar when already on his hind feet would have been folly.

At the top of the next grade the lathering, restive ponies finally settled to a stubborn trot. "Mad clean through," said Collie.

"I should say they were behaving well enough," said the doctor, not as much as an opinion as to relieve his tense nerves in speech.

"When a bronc' gets to acting ladylike, then is the time to look out," said Collie. "Boyar and Apache have never been in harness before. Seems kind of queer to 'em."

"What! Never been—Why! Huh! For Heaven's sake, don't let Mrs. Marshall hear that."

Walter Stone and his wife made the Marshalls feel at home immediately. Walter Stone had known Dr. Marshall's father, and he found in the son a pleasant living recollection of his old friend. Aunt Eleanor and Louise had visited with Anne when they were East. She was Anne Winthrop then, and Louise and she had found much in common to enjoy in shopping and sightseeing. Their one regret was that Louise would have to return to the West before her marriage to the young Dr. Marshall they all admired so much. There had been vague promises of coming West after "things were settled," as Anne put it. Which was merely another way of saying, "After we are married and have become enough used to each other to really enjoy a long trip West."

The Marshalls had arrived with three years of happiness behind them, and apparently with an omen or so of happiness to look

forward to, for they were quiet, unassuming young folks, with plenty of money and no desire whatever to make people aware of it.

The host brought cigars and an extra steamer chair to the wide veranda. "It's much cooler out here. We'll smoke while the girls tell each other all about it."

"I should like to sit on something solid for a few minutes," said the doctor. "It was a most amazing drive."

"We're pretty well used to the canon," said Stone. "Yet I can see how it would strike an Easterner."

"Indeed it did, Mr. Stone. There is a thrill in every turn of it, for me. I shall dream of it."

"Were you delayed at the station?" queried Stone.

"We wired," said the doctor. "It seems that the telegram was not delivered. Miss Lacharme explained that messages have to wait until called for, unless money is wired for delivering them."

"That is a fact, Doctor. Splendid system, isn't it?"

"I am really sorry that we put Miss Lacharme to so much trouble. She had to scare up a team on the instant."

"Price, the storekeeper, brought you up, didn't he?"

"I don't think so. Miss Louise called him 'Collie,' I believe. He'd make a splendid army surgeon, that young man! He has nerves like tempered steel wire, and I never saw such cool strength."

"Oh, that's nothing. Any one could drive Price's horses."

The doctor smiled. "The young man confided to me that their names were 'Boyar' and 'Apache,' I believe. They both lived up to the last one's name."

"Well, I'll be—Here, have a fresh cigar! I want to smoke on that. Hu-m-m! Did that young pirate drive those saddle-animals—drive 'em from the station to this rancho—Whew! I congratulate you, Doctor. You'll never be killed in a runaway. He's a good horseman, but—Well, I'll talk to him."

"Pardon me if I ask you not to, Stone. The girls enjoyed it immensely. So did I. I believe the driver did. He never once lost his smile."

"Collie is usually pretty level-headed," said Walter Stone. "He must have been put to it for horses. Price's team must have been out."

"He's more than level-headed," asserted Dr. Marshall. "He's magnetic. I could feel confidence radiating from him like sunshine from a brick wall."

"I think he'll amount to something, myself. Everything he tackles he tackles earnestly. He doesn't leave loose ends, to be picked up by some one else later. I've had a reason to watch him specially. Three years ago he was tramping it with a 'pal,' a boy tramp. Now see what he's grown to be."

"A tramp! No!"

"Fact. He's done pretty well for himself since he's been with us. He had a hard time of it before that."

"I served my apprenticeship in the slums," said Dr. Marshall. "East-Side hospital. I think that I can also appreciate what you have done for him."

"Thank you, Doctor,—but the credit belongs with the boy. Hello! Here are our girls again." And Walter Stone and the doctor rose on the instant.

"I think I shall call you Uncle Walter," said Anne Marshall, who had not met Walter Stone until then.

"I'm unworthy," said the rancher, his eyes twinkling. "And I don't want to be relegated to the 'uncle' class so soon."

"Thankawfully," said Louise.

"Jealous, mouse?"

"Indeed, no. I'm not Mrs. Marshall's husband."

"I have already congratulated the doctor," said Walter Stone, bowing.

"Doctor," said Anne, in her most formal manner. "You're antique. Why don't you say something bright?"

"I do, every time I call you Anne. I really must go in and brush up a bit, as you suggest. You'll excuse me, I'm sure."

"Yes, indeed,—almost with pleasure. And, Doctor, don't wear your fountain-pen in your white vest pocket. You're not on duty, now."

In the shadows of the mountain evening they congregated on the veranda and chatted about the East, the West, and incidentally about the proposed picnic they were to enjoy a few days later, when "boots and saddles" would be the order of the day. "And the trails are not bad, Anne," said Louise. "When you get used to them, you'll forget all about them, but your pony won't. He'll be just as deliberate and anxious about your safety, and his, at the end of the week as he was at the beginning."

"Imagine! A week of riding about these mountains! How Billy would have enjoyed it, Doctor."



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(Continued on Next Page)



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AMERICAN ROYAL STOCK SHOW
(Continued from Page Fourteen)

the sensational yearling heifer shown by Engle & Son, Sheridan, Mo. The first prize carload of fat cattle were Hereford steers shown by A. E. McGregor, Washington, Kansas. They sold for \$14.10 a hundred, the highest price ever paid for a champion load of steers at the Royal. The previous high record was \$12.85 made in 1913. The Hereford Association sale was a remarkable success. The general average for fifty head sold was \$854.30. The eighteen females averaged \$906.66, and the thirty-two bulls \$824.84. The top of the sale was \$3,000, paid by W. I. Bowman of Ness City, Kansas, for imported Shucknall Monarch. The high prices for this large number of bulls indicates the strong demand for high class steers to develop Hereford herds in various parts of the country. The Kansas Agricultural College made the largest winnings in the fat steer classes. The college had the champion Shorthorn steer, and won all sixteen firsts, eight seconds, and eight thirds. Some of the leading breeders of the country had steers in the show, although the number exhibited was not as large as at previous shows. The reason for this is that the demand has been unusually strong for bulls the past year or two. The other Kansas exhibitors in steer classes were R. H. Hazlett of El Dorado, who won first in the yearling Hereford class, and D. D. Casement, Manhattan, who had the champion grade Hereford. The carlot exhibits were all shown at the stock yards. It is a decided handicap to have the show separated as it now is. The real test of the results in breeding beef cattle are shown in the production of market cattle, and it is important that visitors see these market cattle. The interest in this feature of the Royal is certain to be lessened unless some arrangement can be made whereby the complete exhibition can be made at a central point.

"Nope. The Guzzuh is me little old racin'-car. I christened her that right after I got so-as I could climb on to her without her pitchin' me off. She's some bronc', she is."

Overland Red, despite his outward regeneration, was Overland Red still, only a little more so. His overwhelming apparel accentuated his peculiarities, his humorous gestures, his silent self-consciousness. But there was something big, forceful, and wholesouled about the man, something that attracted despite his incongruities.

Anne Marshall was at once—as she told Louise later—"desperately interested." Dr. Marshall saw in Overland a new and exceedingly virile type. Even gentle Aunt Eleanor received the irrepressible with unmistakable welcome. She had heard much of his history from Collie. Overland was as irresistible as the morning sun. While endeavoring earnestly to "do the genteel," as he had assured Winthrop he would when he left him to make his visit, Overland had literally taken them by storm.

Young Dr. Marshall studied him, racking his memory for a name. Presently he turned to his wife. "What was Billy's partner's name—the miner? I've forgotten."

"A Mr. Summers, I believe. Yes, I'm sure. Jack Summers, Billy called him in his letters."

"Just a minute," said the doctor, turning to Overland, who sat, huge-limbed, smiling, red-visaged, happy. "Pardon me. You said Mr. Jack Summers, I believe. Do you happen to know a Mr. Winthrop, Billy Winthrop?"

"Me? What, Billy? Billy Winthrop? Say, is this me? I inhaled a whole lot of gasoline comin' up that grade, but I ain't feelin' dizzy. Billy Winthrop? Why—" And his exclamation subsided as he asked cautiously, "Did you know him?"

"I am his sister," said Anne Marshall.

Overland was dumbfounded. "His sister," he muttered. "The one he wrote to in New York. Huh! Yes, me and Billy's pardners."

"Is he—is he better?" asked Anne hesitatingly.

"Better!—Say, lady, excuse me if I tell you he's gettin' so blame frisky that he's got me scared. Why, I left him settin' on a rock eatin' a sardine sandwich with one hand and shootin' holes in all the tin cans in sight with the other. 'So long, Red!' he hollers as I lit out with the burro to cross the range. 'So long, and don't let your feet slip.' And Pom! goes the .45 that he was jugglin' and another tin can passed over. He takes a bite from the sandwich and then, Pom! goes the gun again and another tin can bites the dust, just as free and easy as if he wasn't keepin' guard over thirty or forty thousand dollars' worth of gold-dust and trouble, and jest as if he ain't got no lungs at all."

"Billy must have changed a little," ventured Dr. Marshall, smiling.

"Changed? Excuse me, ladies. But when I first turned my lamps on him in Los, I says to myself if there wasn't a fella with one foot in the grave and the other on a banana-peel, I was mistook. And listen! He come out to the Mojave with me. He jest almost cried to come. I was scared it was v'llets and 'Gather at the River,' without the melodeum, for him. But you never see a fella get such a chest! Search me if I knows where he got it from, for he wasn't much bigger around in the works than a mosquito when I took him up there. And eat! My Gosh, he can eat! And a complexion like a Yaqui. And he can sleep longer and harder and louder than a corral of gradin' mules on Saturday night! 'Course he's slim yet, but it's the kind of slim like rawhide that you could hobble a elephant with. And, say, he's a pardner on your life! Believe me, and I'm listenin' to myself, too."

"His lungs are better, then?"

"Lungs? He ain't got none. They're bel-luses—prime California skirtin' leather off the back. Lady, that kid is a wonder."

"I'm awfully glad Billy is better. He must be, judging from what you tell me."

"I wisht I'd 'a' had him runnin' the 'Guzzuh' instead of that little chicken-breasted chaffer they three-shelled on to me in Los Angeles. I hired him because they said I'd better take him along until I was some better acquainted with the machine. The Guzzuh ain't no ordinary bronc'."

"The 'Guzzuh'?" queried Dr. Marshall.

"Uhuh. That's what I christened her. She's a racer. She's sixty hoss-power, and sometimes I reckon I could handle sixty hosses easier at once than I could her. We was lopin' along out in the desert, 'bout fifty miles an hour by the leetle clock on the dashboard, when all of a sudden she lays back her ears and she bucks. I leans back and keeps her head up, but it ain't no use. She gives a jump or two and says 'Guzzuh!' jest like that, and quits. I climbs out and looked her over. She sure was balky. I was glad she said somethin', if it was only 'Guzzuh,' instead of quittin' on me silent and scornful. Sounded like she was apologizin' for stoppin' up like that. I felt of her chest and she was pretty much hot up. When she cooled off, I started her easy—sort of grazin' along pretendin' we wasn't goin' to lope again. When she got her second wind I give her her head, and she let out and loped clean into the desert town, without makin' a stumble or castin' a shoe. Paid three thousand for her in Los. She is guaranteed to do eighty miles on the level, and she does a whole lot of other things that ain't jest on the level. She'd climb a back fence if you spoke right to her. A sand-storm ain't got nothin' on her when she gets her back up."

"Your car must be unique," suggested Walter Stone.

"Nope. She ain't a 'Yew-neck.' I forget her brand. I ain't had her very long. But

I can run her better now that that little two-dollar-and-a-half excuse they lent me in Los. He loses his nerve comin' up the canon there. You see the Guzzuh got to friskin' round the turns on her hind feet. So I gives him a box of candy to keep him quiet and takes the reins myself. I got my foot in the wrong stirrup on the start—was chokin' off her wind instead of feedin' her. Then I got my foot on the giddap-dingus and we come. The speed-clock's limit is ninety miles an hour and we busted the speed clock comin' down that last grade. But we're here."

"Dr. Marshall and Walter Stone gazed at each other. They laughed. Overland smiled condescendingly. Anne Marshall had recourse to her handkerchief, but Louise did not smile."

"Does Billy ever drive your car?" asked Anne Marshall presently.

"He drives her in the desert and in the hills some. He drove her into a sand-hill once clean up to her withers. When he came back—he kind of went ahead a spell to look over the ground, so he says—he apologizes to her like a gent. Oh, he likes her more'n I do. Bruck two searchlights at one hundred dollars a glim, but that's nothin'. Oh, yes, Billy's got good nerve."

Overland shifted his foot to his other knee and leaned back luxuriously, puffing fluently at his cigar.

"Billy did get to feelin' kind of down, a spell back. He had a argument with a Gophertown gent about our claim. I wasn't there at the time, but when I come back, I tied up Billy's leg—"

"Goodness! His leg?" exclaimed Anne.

"Yes, ma'am. The Gophertown gent snuck up and tried to stick Billy up when Billy was readin' po'try—some of mine. Billy didn't scare so easy. He reaches for his gun. Anyhow, the Gophertown gent's bullet hit a rock, and shied up and stung Billy in the leg. Billy never misses a tin can nowadays, and the gent was bigger than a can. We never seen nothin' of him again."

"Gracious, it's perfectly awful!" cried Anne.

"Yes, lady. That's what Billy said. He said he didn't object to gettin' shot at, but he did object to gettin' hit, especially when he was readin' po'try. Said it kind of bruck his strand of thought. That guy was no gent."

Walter Stone again glanced at Dr. Marshall. Aunt Eleanor rose, bidding the men good-night. Louise and Mrs. Marshall followed somewhat reluctantly. Stone, Algepp, appeared to return with cigars, whisky and seltzer, which he placed at Overland's elbow. "My friend Dr. Marshall is an east-erner," he said.

Overland waved a comprehending hand, lit another cigar, and settled back. "Now I can take the hobbles off and talk nacheral. When you gents want me to stop, just say 'Guzzuh!'"

[To be Continued.]

OVERLAND RED
(Continued from Page Sixteen)

"Yes. But I believe he is having a pretty good time where he is."

"We wish he could be here, Anne," said Louise. "I've never met your brother. He's always been away when I have been East."

"Which has been his misfortune," said Dr. Marshall.

"He writes such beautiful letters about the desert and his mining claim—that's his latest fad,—and says he's much stronger. But I believe they all say that—when they have his trouble, you know."

"From Billy's last letter, I should say he was in pretty fair shape," said the doctor. "He's living outdoors and at a good altitude, somewhere on the desert. He's making money. He posts his letters at a town called 'Dagget,' in this state."

"Up above San Berdoo," said Walter Stone. "And he straightway drifted into reverie, gazing at the bright end of his cigar until it faded in the darkness."

"Hello!" exclaimed Dr. Marshall, leaning forward. "Sounds like the exhaust of a pretty heavy car. I didn't imagine any one would drive that canon road after dark."

"Unusual," said Stone, getting to his feet. "Some one in a hurry. I'll turn on the porch light and defy the mosquitoes."

With a leonine roar and a succeeding clatter of empty cylinders, an immense racing-car stopped at the gate below. The powerful headlight shot a widening pathway through the night. Voices came indistinctly from the vicinity of the machine. Before Walter Stone had reached the bottom step of the porch, a huge figure appeared from out the shadows. In the radiance of the porch-light stood a wonderfully attired stranger. Frock coat, silk hat, patent leathers, striped trousers, and pearl gaiters, a white vest, and a noticeable watch-chain adorned the driver of the automobile. He stood for a minute, blinking in the light. Then he swept his hat from his head with muscular grace. "Excuse me for intrudin'," he said. "I seen this glim and headed for it. Is Mr. Walter Stone at lee-sure?"

"I'm Walter Stone," said the rancher, somewhat mystified.

"My name's Summers, Jack Summers, proprietor of the Rose Girl Mine." And Overland Red, erstwhile sheriff of Abilene, cowboy, tramp, prospector, gunman, and many other interesting things, proffered a highly engraved calling-card. Again he bowed profoundly, his hat in his hand, a white carnation in his buttonhole and rapture in his heart. He had seen Louise again—Louise, leaning forward, staring at him incredulously. Wouldn't the Rose Girl be surprised? She was.

"I can't say that I quite understand—" began Stone.

"Why, it's the man who borrowed my baby!" exclaimed Louise.

"Correct, Miss. I—I came to thank you for lendin' me the cayuse that time."

Walter Stone simply had to laugh. "Come up and rest after your trip up the canon. Of course, you want to see Collie. He told me about your finding the claim. Says you have given him a quarter-interest. I'm glad you're doing well."

"I took a little run in to Los to get some new tires. The desert eats 'em up pretty fast. The Guzzuh, she cast her off hind one the other day. I was scared she'd go lame. Bein' up this way, I thought I'd roll up and see Collie."

"The 'Guzzuh'?" queried Stone. "You rode up, then?"

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Classified Advertising

HELP WANTED.

GOVERNMENT FARMERS NEEDED.—Big salaries. Permanent job. Light work. Write Osmont, 44 F., St. Louis, Mo.

LADY OR GENTLEMAN TO TRAVEL for old established firm. No canvassing. Staple line. \$18 weekly, pursuant to contract. Expenses advanced. G. G. Nichols, Philadelphia, Pa., Pepper Bldg.

THOUSANDS U. S. GOVERNMENT JOBS open to farmers, men and women. \$65 to \$150 month. Common education sufficient. Write for list positions easily obtained. Franklin Institute, Dept. P-82, Rochester, New York.

AGENTS—A ONE-CENT POST CARD will put you in touch with an \$80 a week proposition selling aluminum utensils and specialties direct to consumer. Don't let one cent stand between you and prosperity. Div. A. N. P., American Aluminum Mfg. Co., Lemont, Ill.

WANTED—MARRIED MAN TO WORK on farm. Must be good with horses and machinery. Wife able to board extra help when needed. State price per month. Experience and reference in first letter. Steady job for right man. Ed Warner, Buckhill, Kansas.

REAL ESTATE.

WE OWN 400 FARMS IN FERTILE Pawnee Valley; all smooth alfalfa and wheat land; some good improvements; shallow water. Will sell eighty acres or more. E. E. Friell & Sons, Larned, Kansas.

FREE GOVERNMENT LAND. 300,000 acres in Arkansas now open for homesteading. Send 50 cents for revised township map of state and copy Homesteader's Guide. L. E. Moore, Little Rock, Ark.

FOR TRADE OR SALE—HOTEL SMALL Kansas town. Nets owner, above expenses, fifteen hundred dollars a year. Will trade for live stock and farm machinery. Lloyd B. Smith, 1516 Euclid Ave., Topeka, Kan.

160 ACRES IN PHILLIPS COUNTY, Kansas; 100 acres in cultivation, all fenced, fair improvements, good soil, close to town; on phone and mail route. Priced worth the money. Write. E. M. Hillyer, Republican, Nebraska.

BEAUTIFUL CENTRAL NEW YORK farm, 52 1/2 acres, to settle estate, this homestead. Rich, level land, good improvements, fruit, best markets and roads. A bargain at \$110 acre. Stock and tools if desired. Address A. J. Atwater, Leavenworth, Kan.

FOR SALE—560-ACRE FARM NEAR Logan; 240 acres bottom land, 35 acres alfalfa, running water, timber in abundance; six-room house, good barn, cattle shed, natural feed lots, three silos, two wells and wind mills. Price, \$37,500 an acre. Owner will make very reasonable terms. Write us for land list. McAuley & Eldred, Logan, Kansas.

POULTRY.

CORNISH INDIAN GAME COCKEREL \$2. Maggie Johnson, Route 1, Peru, Kansas.

WHITE ROCKS, SIZE AND QUALITY, priced reasonable. Write G. M. Kretz, Clinton, Kansas.

R. C. BUFF WYANDOTTE COCKERELS for sale cheap before winter. G. G. Wright, Langdon, Kansas.

PRIZE SINGLE COMB BUFF LEGHORN cockerels, twelve for \$10. Mrs. S. F. Crites, Florence, Kan.

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

FAWN-WHITE RUNNER DUCKS, R. C. W. Leghorn cockerels, \$1 each, six for \$5. Mrs. McCurdy, Diller, Neb.

COCKERELS FOR SALE—ANCONA, \$1; Blue Andalusian, \$1.25. Mrs. John F. Smutny, Irving, Kansas.

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

R. C. Brown Leghorn cockerels, \$10 per dozen if taken soon. Mrs. Griswold, Tecumseh, Kansas.

SINGLE COMB RHODE ISLAND RED cockerels for sale. Mrs. Fred Schuppach, Downing, Missouri.

SINGLE COMB WHITE LEGHORN cockerels, Black Langshan cockerels and fawn and white Runner drakes, \$1 each. Earl Summa, Gentry, Mo.

COCKERELS FOR SALE—ROSE COMB White Leghorns, first premium winners; all big-boned type. F. J. Nesetrlil, Munden, Kansas.

BARRED ROCK COCKERELS, LARGE early hatched, \$2 each. Exhibition males, \$5. Best blood lines. M. E. Lane, Clinton, Missouri.

MY BEAUTIFUL BUFF ORPINGTONS for sale cheap. Winning cockerels, pullets, hens. Buy the best now. L. S. Weller, Salina, Kan.

BARRED ROCKS—LAYING STRAIN. Pen averaged 160 eggs since January 1. Cockerels for sale cheap. J. P. Farnsworth, 224 Tyler St., Topeka.

SPLENDID RINGLET BARRED ROCK yearling cocks, \$3 each. Goldbank Mammoth Bronze turkeys, big-boned lusty young toms, \$5 up. Harper Lake Poultry Farm, Jamestown, Kansas.

S. C. BROWN LEGHORN COCKERELS in lots of twelve or more at a special low price. From greatest layers, none better. Satisfaction guaranteed. Mrs. C. Boudoux, Carona, Kansas.

POULTRY WANTED.

PAYING FOR EGGS, 32c; BROILERS, 20c; H. hens, 15c; turkeys, 18c. Coops loaned free. The Copes, Topeka.

CATTLE.

REGISTERED JERSEY CATTLE, PERCY Lill, Mt. Hope, Kan.

HOLSTEIN CALVES, HIGH GRADES, either sex. Kansas express prepaid, \$22.50. L. D. Arnold, Manhattan, Kan.

HIGH CLASS REGISTERED BROWN Swiss cattle for sale, both male and female, at reduced prices. Write or call. Dahlem & Schmidt, R. R. 2, El Dorado, Kansas.

FOR SALE—TWENTY GOOD REGISTERED Shorthorn cows, thirty early calves, eight yearling bulls. Frank H. Yeager, Bazaar, Kansas.

FOR SALE—REGISTERED YEARLING Jersey bull. Dam by Financial Count, 45-pound cow. Never dry. Also few cows, heifers and bull calves. Sayda Polo Jersey Farm, Parsons, Kan.

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.

WANTED—TO BUY.

DESIRE 20 TO 100 CHOICE GRADE Holsteins, tick free and tuberculin tested. Only those having reasonably priced cattle need apply. K. L. Wickett, Roff, Okla.

ENGINES.

FOR SALE—ONE 15-HORSEPOWER IN- ternational portable engine, good running order, built-in magneto, circulating cooling system. Cheap for cash. Ray Brinkman, Stillwell, Kan.

MISCELLANEOUS.

WANTED—TRACTOR COMPANIES SEND literature. Number of farmers interested. Address Nixon E. Baird, Lamesa, Texas.

SUITS \$3.75, PANTS \$1.00, MADE TO measure. For even a better offer than this write and ask for free samples and styles. Knickerbocker Tailoring Co., Dept. 530, Chicago, Ill.

DAIRYMEN—DR. CLARK PURITY Milk Strainer will remove muck, hair, dandruff, fine manure and all other sediment from milk, and no other strainer will. Write for particulars. Purity Stamping Co., Battle Creek, Mich.

NURSERY STOCK.

PLANT THIS FALL. BUY DIRECT AND save agents' commission and middlemen's profits. Fruit book free. Address Wichita Nursery, Wichita, Kansas, Box K. F.

DOGS.

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

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.

HORSES AND MULES.

CLOSING OUT SALE OF FORTY HEAD of Shetland Ponies. Geo. Ald, Gallatin, Mo.

FOR SALE—IMPORTED SIX-YEAR-OLD bay imported Belgian stallion, 2,150 pounds, 11 1/2 and 12 1/2 bone, show type. Also registered 15-hand six-year 1,100-pound jack, 8 and 9-inch bone, quick, intelligent. High class stuff. Absolute guarantee. Part trade, ten years' time if needed, or cash. Sayda Polo Jersey Farm, Parsons, Kan.

FARMS WANTED.

FARMS WANTED—HAVE 7,000 BUYERS. Describe your unsold property. 514 Farmers Exchange, Denver, Colo.

WANT TO BUY GOOD FARM, WELL located, direct from owner. Give description. A. Notung, Box 754, Chicago.

HOGS.

O. I. C. PIGS, PURE-BRED, READY TO wean, \$10 each. Joe Fox, Greeley, Kansas.

QUICK SALE—EIGHT POLAND CHINA weaned pigs, \$50. Fine herd boar and bred sow. Frank Barrington, Sedan, Kansas.

HONEY.

ONE 60-POUND CAN CLOVER, \$6.25; case of two cans, \$12.00; two, \$11.75; five, \$11.50. Light amber, one 60-pound can, \$5.25; two, \$10.00, f. o. b. Center Junction, Iowa. Cash with order. Satisfaction guaranteed. W. S. Pangburn.

FINEST EXTRACTED HONEY, GATH- ered by bees and sent to you direct from the hive. Rich, smooth, delicious. Purity and weight guaranteed according to law. Following prices are f. o. b. Hotchkiss, Colo. One can containing 60 pounds net, \$5; case of two cans, \$9.50; two to four cases, \$9 each. Special price on larger lots. Ten cents brings sample. Frank H. Drexel, Crawford, Colorado.

PET STOCK.

FERRETS—BREEDER OF ENGLISH and Fitch Ferrets. Write for prices. H. G. Hardy, Wellington, Ohio.

FERRETS, SINGLE, PAIRS AND DOZEN lots. Guinea pigs, rabbits, Toulouse geese, fox terriers and Angora kittens. Jewell, Spencer, Ohio.

SHEEP

FOR SALE—THREE REGISTERED Shropshire rams, also 25 high-grade lambs, fifteen-sixteenths. C. D. Wood & Sons, Elmdale, Kansas.

Please Mention Kansas Farmer When Writing to Advertisers.



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.

Old Age

"It is too late!" Ah, nothing is too late. Till the tired heart shall cease to palpitate. Cato learned Greek at eighty; Sophocles wrote his grand Oedipus, and Simonides bore off the prize of verse from his competitors. When each had numbered more than four-score years; And Theophrastus at fourscore and ten. Had but begun his "Characters of Men." Chaucer, at Woodstock with the Nightingales. At sixty wrote the "Canterbury Tales"; Goethe, at Weimar, tolling to the last, Completed "Faust," when eighty years were past. What then? Shall we sit idly down, and say The night hath come; it is no longer day? The night hath not yet come; we are not quite Cut off from labor by the falling light; Something remains for us to do or dare. Even the oldest tree some fruit may bear. For age is opportunity no less. Than youth itself, though in another dress; And as the evening twilight fades away The sky is filled with stars, invisible by day. —Henry W. Longfellow.

White silk gloves and white crepe de chine waists should be washed in tepid water. After washing and rinsing and squeezing—not wringing—crepe de chine should be rolled in a turkish towel for an hour or so and then ironed with a medium hot iron, on the wrong side. Silk gloves should be dried in the dark.

By putting potatoes that are to be baked, in boiling water and letting them stand five minutes, the time required for baking will be lessened. Clean baked potato skins are appetizing and can be made more so by rubbing with butter or fresh ham or bacon fryings before putting them in the oven.

The care of house plants through the winter often becomes burdensome, especially where there is not even heat and they must be moved every night to keep them from freezing. But if you have decided to take your plants to the cellar, save at least one good bloomer of a bright hue, for the room where you will see it oftenest during the winter season. It will add more cheer than you thought possible for one plant to bring. If small enough for the dining table, see that it is put there frequently where all members of the family will see and enjoy it.

We recently read a paragraph in a farm exchange that set us thinking. It was this: "If you ever expect to have thrifty young timber for future use, don't go about hacking down every bush in sight, for bushes in time make the mighty, towering trees of the forest." The thought that came to us was how applicable this is to humanity. Children that are continually "hacked down"—scolded, criticised and blamed—instead of being encouraged to grow and develop, will not be the dependable timber of the future. In spite of such nagging they may turn out reasonably well, but because of it they will fall short of their greatest usefulness.

Draining Dishes

We were some time accepting the truth that dishes can be drained as dry as though wiped with a dishtowel. In fact, we were convinced only by trial, and regret that we did not make the trial long before, as it has resulted in the saving of much work. After washing and rinsing the dishes, if placed carefully in a wire basket, they will dry quickly and thoroughly. By placing carefully in the basket, we mean so that air can reach every piece, and which will not be the case if two plates or saucers are placed together. With a little practice, it will be easy to arrange them so all water will drain off and the air will have a chance to do its work. If you do not have a kitchen sink and slanting drain board attached to it, a clean dish towel under the basket will absorb the water and keep it from running off the table onto the floor. The dishes should not be left out while the kitchen is being swept, but the necessity for this can be avoided by sweeping before washing the dishes. A piece of

cheesecloth or other thin covering can be thrown over them to protect them from the flies.

Give this method a trial before declaring it impractical or more bother than wiping the dishes.

How Do You Spend Sunday?

Is Sunday a day of rest on your farm as it was intended to be, or is it a time for doing numerous little odd jobs that are crowded out of the week days? It is so easy to spend extra time on the chores Sunday morning when it is not necessary to hurry to the fields, and this practice soon becomes responsible for "tinkering" away the day.

Sunday should be set apart as a day of rest and change from the work filling the other six days of the week, when the mind can be free to dwell on those things pertaining to life other than the bodily sustenance. Sweeter and more influential will be the memories of childhood if this one day is spent in quiet fellowship one with another, by members of the family.

The temptation to spend Sunday as any other day may be avoided by getting into the habit of cleaning up and changing clothes early in the day. Then, so far as possible, there should be a definite plan for each Sunday.

It may be you have kept the women folks from church by seeing to it that each Sunday morning brings its bit of fence mending or repair work at the barn. Of course, there are times when it may be necessary to do a job of this kind, but an emergency is entirely different than a yearly practice. In addition to changing clothes early in the day, ask the women folks if they would like to go to church, and then cheerfully hitch up and take them. This can never do you harm and it may in some unthought-of way do you good. Anyway, it rescues Sunday from labor and the diversion will be beneficial.

A Puzzling Trick

A glass one-third full of water, an ordinary silver half dollar and a piece of glass cut out in a circle the same size as a half dollar, together with an ordinary handkerchief are all that you need for this trick. Show your friends the handkerchief and the real half dollar and place the half dollar in the center of the handkerchief, letting the handkerchief fall over your hand. As you do this, using both hands under the handkerchief, you let the real half dollar drop in your other hand and you put the piece of glass in place of it. Now ask someone to take hold of the handkerchief on the outside and feel the coin. What they feel is the glass, but they do not know the difference. Place the handkerchief, still holding the coin inside, over the glass of water and tell them to drop the coin. The glass drops into the water and strikes the bottom with a metallic tinkle and everyone is certain the coin is there, but when you remove the handkerchief no coin is in sight. This is because the piece of glass cannot be seen under the water.—The American Boy.

Dishonesty in Children

We are of the opinion that the blame for dishonesty in children should usually rest with the parents or those older than they with whom they come in contact and whose unreasonableness concerning wrong-doing make the children fearful of telling the truth. The parent or teacher who realizes the importance of being the child's confidant and who takes the time to hear the child's story through and to reason with him regarding the misdeed, will generally glean the truth from him. An honest confession is a substantial basis for a quiet reproving talk that will be more lasting in its effects and more kindly thought of by the child, than will punishment administered without knowing all the facts in the case. To gain and keep the confidence of a

child—be his real friend—means everything in teaching him the difference between right and wrong.

Old-Fashioned Rag Rugs

Indeed, they are old-fashioned and new-fashioned, too. They were popular in the days of our grandmothers and for the last year or two they have been constantly displayed in the furniture and carpet stores of our cities. There are the woven rugs and the braided rugs and the designs and colorings are many. These rugs are inexpensive, pretty and durable.

When used on smooth, bare floors in bedrooms, they add much to the sanitary qualities as well as to the effect.

Rag rugs can be made to contribute to the carrying out of a color scheme in a room to good advantage. The combination of blue and white is especially pretty.

It is probably easier to accumulate rugs for the hit-and-miss rugs, and these with borders of solid colors, are nice to use in front of the kitchen stove, as they will not show the soil quickly. We believe in the use of soft, washable rugs in the kitchen on those spots where the housewife must stand much of the time, for they make the standing less tiresome.

We have seen many beautiful home-made rag rugs at fairs this fall, which

we take as a sign that many are learning the art of making these reminders of olden times.

Oatmeal Cookies

- 3 cupfuls oatmeal
- 2 cupfuls flour
- 1 cupful sugar
- 2 large cooking-spoonfuls milk
- 1 cupful butter
- 1 teaspoonful soda

Roll thin, cut, and bake in a hot oven.

Spice Cake

- 1 cupful sour cream
 - 1 cupful sugar
 - 1 1/2 cupfuls flour
 - 3 eggs
 - 1 level teaspoonful soda
 - Pinch of salt
 - 1 teaspoonful cinnamon
 - 1/2 teaspoonful allspice
 - 1/2 teaspoonful cloves
 - 1/2 teaspoonful nutmeg
 - 1/2 cupful chopped raisins
- Bake in two layers and use boiled icing.

Apple Roll

- 2 cupfuls flour
 - 1/2 teaspoonful salt
 - 1/2 teaspoonfuls baking powder
 - Sift these together
 - 2 tablespoonfuls butter
 - 1 egg
 - 1 tablespoonful sugar
- Milk enough to make soft dough. Roll out long and lay on tart apples sliced thin or chopped fine. Make a roll of this. Put this in baking dish with cooled syrup made of 2 cupfuls sugar and 2 cupfuls of water. Use the syrup as sauce.

FASHION DEPARTMENT — ALL PATTERNS TEN CENTS

This department is prepared especially in New York City, for Kansas Farmer. We can supply our readers with high-grade, perfect-fitting, seam-allowing patterns at 10 cents each, postage prepaid. Full directions for making, as well as the amount of material required, accompanies each pattern. When ordering, all you have to do is to write your name and address plainly, give the correct number and size of each pattern you want, and enclose 10 cents for each number. We agree to fill all orders promptly and guarantee safe delivery. Special offer: To anyone ordering a pattern we will send the latest issue of our fashion book, "Every Woman Her Own Dress-maker," for only 2 cents; send 13 cents for pattern and book. Price of book if ordered without pattern, 5 cents. Address all orders for patterns or books to Kansas Farmer, Topeka, Kansas.



No. 7865—Boys' Suit. Cut in sizes 2, 4 and 6 years. Although very proud of his "catch," the novelty of this new suit has not worn off, for it is in "sport style" and very effective in fabric combination. Either straight or bloomer trousers may be buttoned to a waist that slips on over the head, or have front closing as illustrated. Long or short sleeves may be used. No. 7904—Ladies' Shirt-Waist: Cut in sizes 36 to 44 inches bust measure. For comfort-lovers to admire, this waist was designed. It is enough in its favor—this season—that is in a model for stripes, but it is interesting to note that the becoming collar is in line with the revers, which the fronts provide by rolling back to be faced with the plain material. No. 7885—Girls' Dress: Cut in sizes 6, 8, 10 and 12 years. Linen, gingham or serge can be used to make this dress with the collar and cuffs of contrasting goods. The dress closes at the back and has a three-gore plaited skirt. No. 7886—Ladies' Dress: Cut in sizes 36, 38 and 40 inches bust measure. This will be the choice of the discerning woman who is looking for an exceptionally dainty and dignified model for dressy wear. The fronts of the blouse separate just enough to display a surplice vest in separate material. The skirt is cut in three gores. No. 7900—Ladies' Skirt: Cut in sizes 24 to 32 inches waist measure. With that open-air smantress that bespeaks "sport," this skirt in four gores and with front closing, is an excellent model for poplin, pongee or alpaca, for real summer weather. A stitched seam down the center front is noticeable. No. 7907—Misses' Sport Dress: Cut in sizes 14, 16, 18 and 20 years. A new idea in a sport dress that displays very good taste and shows the continued prominence of stripes. The belted blouse very full and flaring in its line below the waist has the serviceable and attractive sailor collar in contrasting note. The gathered skirt is cut in one piece.

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TOPEKA BARBER COLLEGE, the one place where you can learn the barber trade (earn while you learn). Write today. **Topeka Sanitary Barber College, Topeka, Kansas.**

Please Mention Kansas Farmer When Writing to Advertisers,

Real Estate For Sale

160 Acres, 2 1/2 miles from city high school; 80 acres cultivation; 10 acres alfalfa, 15 acres hog pasture, 40 acres grass, balance pasture; 6-room house, cellar, cistern and well; barn for 8 head with loft, corn crib, coal house, hen house. Phone and R. F. D. Price, \$45 per acre. \$3,200 to run five years at 6 per cent.

RENTSTROM'S AGENCY, Osage City, Kan.

161 1/2 ACRES, 65 a. bottom and in meadow; 20 a. in alfalfa, fenced with wire, fair improvements, watered creek and 4 springs, 8 miles south of Mansfield, Mo., 1 mile to school and church. A bargain at \$3,000. Terms.

AVERY & STEPHENS, MANSFIELD, MO.

360 ACRES, all smooth, fine laying land, 15 acres timber, 6-room house, good barn, stock scales, double corn crib, well and cistern; No. 1 stock and grain farm. Special price for immediate sale. Write for full description and list of farm bargains. **MANSFIELD LAND CO., Ottawa, Kansas.**

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LEARN TO DRIVE AND REPAIR AUTOMOBILES AND TRACTORS Big demand for trained men. Earn from \$75 to \$150 per month. Learn in 6 weeks by the

SWEENEY SYSTEM of practical experience. You do the real work in machine shop, factory and on the road. No books used. Tools free. **FREE** Big 64 page catalogue with views of men at work in largest and best equipped auto school in world. Send name today. Address

SWEENEY AUTO SCHOOL 1103 East 15th Street, Kansas City, Missouri.

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With our regular course in Morse Telegraphy and R. R. Station Work. Four to five months required. Earn \$50 to \$150 per month. Positions guaranteed; earn board while learning. **Wichita Telegraph College, Desk Y, Wichita, Kansas.**

— OTTAWA —
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FOR EXCHANGE Smooth section of land in Greeley County, Kansas, clear of encumbrance. What have you? **W. C. BRYANT - ELK CITY, KANSAS**

TWENTY ACRES, ONE MILE CITY LIMITS McAlester, city 15,000. Ten acres strictly first class dry bottom land; eight acres cultivation. \$25 per acre. Terms. Fine for vegetables, fruit and poultry. **SOUTHERN REALTY CO., McAlester, Okla.**

247-ACRE STOCK FARM BARGAIN Nearly all bottom and alfalfa land; 110 a. cultivated, 40 a. pasture, 80 a. meadow; 5-room house, basement, barn 32x74 with large hay mow; abundance water. This is a snap. Worth \$75, price \$50. **M. T. SPONG - FREDONIA, KANSAS**

SITUATION WANTED.

EMPLOYMENT ON A STOCK FARM desired during winters. Ivar Stwejord, Oak Mills, Kansas.

WANTED—WORK ON A STOCK FARM in Kansas. References exchanged. T. G. Bridgeman, Swan Quarter, N. C.

Wilver Dell Poland Chinas

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Thursday, October 26

Great Boars Represented

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Out of the twenty-five head sired by the leading sires. Nothing has been spared to make them good and big and smooth, and because of their rich heritage of breeding on both sire and dam's side, they certainly had the advantage of a good start. This offering of forty-five head has been selected from close to 200 head, and we have been very careful that nothing but the very tops go in this sale.

The Entire Offering is Cholera Immune

The Sale Will be Held at Wilver Dell Farm

Eight miles south of St. Joseph on the DeKalb Rock Road. Free automobile transportation to and from the sale. Dinner served at the farm. Call at the German-American Bank in St. Joseph as soon as you arrive.

WALTER W. HEAD, St. Joseph, Mo.

Write Today for the Catalog and Mention Kansas Farmer

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Fred B. Caldwell, Howard, Kans.

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G. C. Wheeler, Live Stock Editor
 W. J. Cody, Manager Stock Advertising.
 O. W. Devine, Representative

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CLAIM SALE DATES.

Percheron Horses.
 Nov. 15—Harris Bros., Great Bend, Kan.
 Feb. 9, 1917—Breeders' Combination Sale, Manhattan, Kan.

Holstein Cattle.
 Oct. 24—John J. Ledy, Robinson, Kan.
 Nov. 6—E. R. Violet & Sons, Altoona, Kan.

Shorthorn Cattle.
 Oct. 26—W. A. Forsythe & Son, Greenwood, Mo.
 Nov. 22—Tomson Bros., Carbondale and Dover, Kan.
 Nov. 23—H. C. Lookabaugh, Watonga, Okla.
 Dec. 8—Tom Stanton, Wheaton, Ill.
 April 4-5, 1917—Central Shorthorn Association at Stock Yards Pavilion, Kansas City, Mo.

Herefords.
 Oct. 24-25—W. I. Bowman & Co., Ness City, Kan.

Jerseys.
 Oct. 28—J. E. Jones, Liberty, Mo. Sale at farm.

Poland Chinas.
 Oct. 14—T. J. Dawe, Troy, Kan.
 Oct. 16—Walter B. Brown, Perry, Kan.
 Oct. 18—Fred G. Laptad, Lawrence, Kansas.
 Oct. 19—P. M. Anderson, Lathrop, Mo.
 Oct. 19—W. W. Oliver, Guilford, Mo.
 Oct. 19—H. B. Walter, Effingham, Kan.
 Oct. 20—James Arkell, Junction City, Kan.
 Oct. 21—O. W. Long, Craig, Mo.
 Oct. 24—Leonard & Russell, St. Joseph, Mo.
 Oct. 23—Forest Rose, Hemple, Mo.
 Oct. 25—U. S. Byrne, Saxton, Mo.
 Oct. 27—T. E. Durbin, King City, Mo.
 Oct. 28—H. H. Foster, King City, Mo.
 Oct. 31—Harry Wales, Peculiar, Mo.
 Oct. 31—W. R. Webb, Hiawataha, Kan.
 Nov. 1—Fred B. Caldwell, Howard, Kan.
 Nov. 6—A. R. Enos, Ramona, Kan.
 Nov. 9—Herman Groniger & Sons, Bendena, Kan.
 Feb. 22—A. J. Erhart & Son, Ness City, Kan. Sale at Hutchinson, Kan.
 Feb. 23—F. Olivier & Sons, Danville, Kan.
 Feb. 28—Clarence Dean, Weston, Mo.

Spotted Polands.
 Oct. 24—Everman Poultry Farm, Gallatin, Mo.

PINE LUMBER

Complete house and barn patterns, shipped direct to you from mill, at big money-saving prices. Send me your list for estimate and I will make you very low prices. Address

JAMES MURDOCK, Heavener, Okla.

Durocs.
 Oct. 18—Fred G. Laptad, Lawrence, Kansas.
 Nov. 3—W. W. Otey & Sons, Winfield, Kan.
 Feb. 10—W. W. Jones, Clay Center, Kan.

O. I. C. Hogs.
 Oct. 31—Allen Bros., Russell, Iowa.

O. F. Fitzsimmons of Wilsey, Kansas, one of the successful Poland China breeders, reports his herd doing well and his young stock growing out fine. This year Mr. Fitzsimmons raised the best lot of pigs in the history of his herd. They are out of choice big-type dams and were sired by Blue Hadley and Geo. Garnett, two of the good sires now in service.

George McAdam of Holton, Kansas, owner of one of the good herds of Angus cattle in this state, reports the sale of Black Cup Senator, a very fine bull, to the Texas A. & M. College. Mr. McAdam has a richly bred herd and had his show herd on exhibition at the American Royal Stock Show last week.

J. P. Mast of Scranton, Kansas, owner of the famous Butter Bred Holstein herd, reports that his herd is making a splendid record again this year. Mr. Mast has one of the heavy producing and profitable herds in this state and his herd never fails to land a big share of the prizes in butter-fat contests where they are entered.

G. T. Florida & Sons of Sweetwater, Tenn., recently sold to R. A. N. Walker of Jonesboro, Tenn., twelve head of jacks and Jennets as a foundation herd. Among the lot was the Jennet, Lady Ringnet, at \$2,500, also the many times champion jack, Greenlight, at a long price. The total price for the twelve head was \$17,000.

Farmers and breeders of Percheron horses will be interested to learn that C. W. Lamer of Sallina has sold one-half interest in the Pioneer Herd at Lindsborg, Kansas, to his son, H. B. Lamer. The firm name will be C. W. Lamer & Son. H. B. Lamer is a young man with a lot of ability and a natural lover of a good horse. He will have entire charge of the farm at Lindsborg. The Pioneer herd was started in 1870. C. W. Lamer's father led behind a covered wagon from Illinois a Norman stallion, a son of old Louis Napoleon, the first stallion ever imported to America. From that date to the present time the Pioneer Percheron Farm has remained in the Lamer family and it has been recognized for a number of years as the headquarters for good Percherons. Nothing but the very best imported stallions are placed at the head of this herd of both imported and home-bred mares.

Those who try to solve the market proposition by going in and out of the live stock business as the market changes and use no regular system which they follow year after year regardless of prices, generally are losers. In other words, those who try to get in on the slump and out on the jump usually get in on the jump and out on the slump. Many farmers maintain, however, that they can hold over and break even during the bad periods and secure very good prices during years when prices are good and feeding conditions are more favorable.

STATEMENT OF THE OWNERSHIP and management of Kansas Farmer, published weekly, at Topeka, Kan. For October 1, 1916. Required by the Act of August 24, 1912.

State of Kansas }
 County of Shawnee } ss.

Before me, a notary public in and for the state and county aforesaid, personally appeared Chas. C. Younggreen, who, having been duly sworn according to law, deposes and says that he is the vice-president and manager of Kansas Farmer and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management of the aforesaid publication for the date shown in the above caption.

Editor—T. A. Borman, Topeka, Kan.
 President—Albert T. Reid, Topeka, Kan.
 Vice-President and Manager—Chas. C. Younggreen, Topeka, Kan.
 Publisher—The Kansas Farmer Company, Topeka, Kan. (A corporation.)
 Names and addresses of stockholders holding 1 per cent or more of total amount of stock:

- T. A. Borman, Topeka, Kan.
- A. T. Reid, Topeka, Kan.
- M. A. Low, Topeka, Kan.
- E. B. Cowgill, Topeka, Kan.
- Joab Mulvane, Topeka, Kan.
- S. H. Pitcher, Topeka, Kan.
- John R. Mulvane, Topeka, Kan.
- E. W. Rankin, Topeka, Kan.
- O. W. Devine, Topeka, Kan.
- C. C. Younggreen, Topeka, Kan.
- E. T. Guymon, Hutchinson, Kan.
- W. C. Richardson, New York, N. Y.
- J. R. Johnson, Clay Center, Kan.
- W. F. Evans, St. Louis, Mo.
- Dean R. Low, Bartlesville, Okla.
- F. W. Barteldes, Lawrence, Kan.

Known bondholders, mortgagees, and other security holders, holding 1 per cent or more of total amount of bonds, mortgages, or other securities:

None.

(Signed) CHAS. C. YOUNGGREEN,
 Vice-President and Manager.
 Sworn to and subscribed before me, this 4th day of October, 1916.
 S. H. PITCHER,
 Notary Public.
 My commission expires March 17, 1919.

ROPP'S NEW CALCULATOR

A BOOK OF GREAT VALUE TO EVERY FARMER FREE

This book is the greatest time and labor saver ever offered the American farmer. It is also a great money-saver and money-maker. It shows you how to accurately and instantly figure out any problem that may come up—how to figure estimates, wages, taxes and interest on any sum of money, any number of days, at any rate—tells bushels and pounds in loads of grain; correct amount at any price; weight and prices of live stock; contents of cribs, wagons, bins, etc. It is a "lightning calculator" always ready when you want it. Bound in red cloth covers, 160 pages, pocket size. One copy of this famous book free to all who send 25c for a three months' subscription to



KANSAS FARMER
 TOPEKA, KANSAS

Handy Book of Facts Things Every One Should Know

356 Pages, 6x8 in Size, Fully Illustrated.
 110 Different Subjects

Including average temperature and precipitation, water power, farm crops, great war, income tax, national parks, banking, pensions, tariff, public lands, army and navy, all the subjects of common interest.

While they last we will send this invaluable book free, postage paid, to any one who sends just \$1.00 for a year's subscription to KANSAS FARMER. If you are already a subscriber, time will be extended one year. Address

KANSAS FARMER, TOPEKA, KANSAS

Officer—I want one of those dogs about so high, and about so long. A sort of greyhound; but it isn't quite, because its tail's shorter, and its head's bigger, and the legs aren't quite so long, and the body's thinner. Do you keep that sort?

Dealer—No, sir; I don't. I drown 'em.—The Sketch.

Webb's Poland China Sale

At Hiawatha, Kansas

Tues. October 31, 1916

FIFTY HEAD OF CHOICE BIG-TYPE POLANDS, TWENTY-FIVE SPRING BOARS, TWENTY-THREE SPRING GILTS, AND THREE TRIED SOWS THAT ARE PROVEN PRODUCERS.

This entire offering was sired by boars that are noted big-type sires, including Big Price Jr., a son of the \$1,000 Big Price; Big Bone Standard, Big Bob Wonder, Mc's Big Joe, King Wonder, Columbus Defender, Big Superbia 2d, and other great boars. The dams of the offering are strictly big-type with great size and quality. This offering will interest breeders wanting strictly high-class herd material. The sale will be held at the farm just at the edge of town. Send at once for catalog, as I am revising my mailing list and may miss you.

W. R. WEBB, Hiawatha, Kansas

POLAND CHINAS

POLAND CHINAS.

OLIVER'S POLAND CHINA SALE

GUILFORD, MISSOURI, OCTOBER 19

Forty head choice big-type Poland, consisting of five big high-quality fall boars, seventeen choice spring boars, two yearling sows with litters by Big John B, also sixteen choice spring gilts. The offering is sired by such boars as Big John B, Big Halfton 2d and A Wonder Price and out of A Wonder Equal, Big Halfton 2d, Capital and Iowa King dams. Send for catalog at once.

W. W. OLIVER - GUILFORD, MISSOURI

DEAN'S MASTODON POLANDS

Big high-quality spring boars, sired by Big Bone Model by Long Big Bone, champion Iowa State Fair. Others by Smooth Black Bone by Smooth Big Bone, also champion Iowa State Fair. Dams of offering all by noted big-type sires. All have great size and quality. If you want size and high quality, I have them. All immune.

CLARENCE DEAN - WESTON, MISSOURI

GRONNIGER & SONS POLAND CHINA SALE

BENDENA, KANSAS, NOVEMBER 9, 1916

Forty-five head choice big-type Poland, consisting of nine fall boars, eighteen choice spring boars, and eighteen choice spring gilts. Sired by Futurity Rexall, Big Bob 2d and Shamrock. Send for catalog at once.

HERMAN GRONNIGER & SONS - BENDENA, KANSAS

J. O. RILEY & SON'S SPOTTED POLANDS

Sale October 17, 1916. Will sell the tops of 100 head of choice spring boars and gilts. A few extra good fall gilts, also a few choice fall boars. The offering is one of the best we have ever had. Send for catalog now.

J. O. RILEY & SON - CAINSVILLE, MISSOURI

MONSTER POLAND CHINA BOARS

Big growthy fellows by Big Bone Model, litter mate to grand champion Iowa State Fair, 1915, and Smooth Black Bone, a son of the 1,070-pound grand champion Iowa State Fair 1914. All out of A Wonder bred dams. All immune. Priced to sell.

R. L. WILLIAMS - WAKARUSA, KANSAS



Faulkner's Famous Spotted Poland

We are not the originator, but the preserver of the old original big-boned Spotted Poland. The oldest and largest herd on earth. Every hog recorded in the recognized records. Breeding stock for sale at all times.

H. L. FAULKNER, Jamesport, Missouri

Palmer's Immune Poland

Immune Poland China boars for sale. Two fall boars and ten spring boars, sired by Big Bob Wonder 71999, Caldwell's Big Bob 76436 and Sir Dudley, junior champion Kansas State Fair at Hutchinson, 1915.

C. B. PALMER, Route 5, MARION, KAN.

At Reduced Prices

On account of severe drouth and having to buy high priced feed, I have reduced prices on my Perfection Spotted Poland. Boars ready for fall service; bred gilts; spring pigs and some brood sows at sacrifice prices for quick sale. Free circular.

THE ENNIS STOCK AND DAIRY FARM, Horline, Mo. (Just South of St. Louis)

ARKELL'S POLANDS

Big high quality March and April boars, sired by Chief Big Bone, Longfellow Again and the champion Big Timm. These boars are out of big high quality sows and are fine prospects.

JAMES ARKELL, JUNCTION CITY, KAN.

FARM AND HERD.

DeWitt Lee announces a public sale to be held at his farm near Grantville, October 20. His offering will include some high-class registered Jersey cows and heifers, also Duroc hogs.

Mahlon Groenmiller of Pomona, Kansas, owner of the famous Coburn herds of Red Polled cattle and Percheron horses, writes that both herds are doing fine. Mr. Groenmiller is one of the good boosters for improved live stock on every farm and his herds have furnished foundation stock for many of the good herds of Percheron horses and Red Polled cattle now assembled.

Catalogs are out for the Poland China sale to be held by Walter W. Head of St. Joseph, Mo., October 26. Forty-five head of select Poland from Mr. Head's famous Wilver Dell herd have been cataloged for this sale. Practically the entire offering is out of big-type sows that were tops of the best big-type sales held during the winter sale season of 1916 and sired by the best sires of the breed. Mr. Head recently purchased a one-half interest in the great boar, Model Big Bob, owned by S. L. Leonard, and this boar will now be used in the Wilver Dell herd.

W. J. Harrison of Silver Lake, Kansas, has succeeded in building up one of the good herds of pure-bred Duroc hogs in this state. Mr. Harrison started right by commencing with good foundation stock of the right type and by careful mating has developed a type that is profitable. This year he raised a very fine lot of pigs that are good herd material prospects.

PUBLIC SALE

OF OUR REGISTER OF MERIT HERD

SATURDAY, OCT. 28

For fifteen years we have been breeding Jerseys for production and beauty. We believe we have as good a producing herd as there is in America. The herd has been located in Missouri but one full year, yet we hold three Missouri state records for milk and butter production. We are the only private herd holding more than one state record (the State College holding two). Our R. of M. work during the past year is as follows: Seven cows over 6 years old, 10,383 pounds milk, 580 pounds butter; three cows 4 years old average 9,574 pounds milk, 579 pounds butter; seven cows 2 years old, 6,908 pounds milk, 445 pounds butter. Total, seventeen cows average 8,791 pounds milk, 524 pounds butter in one year.

These cows without doubt will sell at very reasonable prices, as there are few island cows in the sale and the rich man will not be attracted. They are too large to be used as playthings. Financial Countess Lad weighs 1,800 pounds. His daughters in Register of Merit average 492 pounds butter as two-year-olds. Every one is very high in butter fat test. We breed for size of frame, udders, teats and production.

Don't miss this sale if you need a bull backed for generations by large producing cows with large teats, or cows that will increase your cream check.

Write for catalogue.
J. E. JONES, Liberty, Mo. Formerly of Nowata, Okla.
On Electric Line from Kansas City, Missouri. Eleven Miles Out. Cars Every Hour.
B. C. SETTLES, SALE MANAGER, PALMYRA, MISSOURI

Shorthorn Sale

At Sale Pavilion, Ottawa, Kans.

Thursday, November 1

I am leaving the farm and will sell my entire herd of thirty head of cows and heifers. One herd bull. Several cows have calves at foot and are bred again to my herd bull, Searchlight Bloom by Searchlight. My cattle are not fat, but are regular producers and will make money for anyone who will care for them. Sale at Ottawa. For folder write

F. W. WILSON, Wellsville, Kan.

HORSES AND MULES.

HORSES AND MULES.



DEIERLING STOCK FARMS

Have fifteen large, heavy boned, black, registered Jacks, 15 to 18 hands high, good heads and ears, good style, good breeders. I have a number of Jacks sired by the champion, Pride of Missouri, also several other good herd prospects. In my 1914 sale I sold the champion of Kansas State Fair, 1915, Eastern Lightning, also Demonstrator, first prize aged Jack Missouri State Fair. Reference, People's Bank. Written guarantee with each animal. Have a number of Percheron stallions for sale, also saddle stallions. Barn in town. Wabash Railroad. **WM. DEIERLING, QUEEN CITY, MISSOURI.**

PIONEER STUD FARM

Established 1870

FIFTY REGISTERED 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 see elsewhere. Write or come today.

C. W. LAMER & SON - SALINA, KANSAS



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

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

REGISTERED PERCHERONS, 39 heavy 3 and 4 yr. stallions, 68 rugged 2 yr. olds, 41 yearlings. Can spare 25 reg. mares, 24 reg. Belgian stallions. Sires and dams from France and Belgium.
FRED CHANDLER, R. 7, Chariton, Iowa
Above Kansas City.

HEREFORD CATTLE.

Herefords and Percherons

Two choice Hereford bulls, 2 and 3 years old, well marked, both will make ton bulls. The 3-year-old weighs 1,950. Also, some choice yearling Percheron stud colts.

M. E. GIDEON - EMMETT, 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

AUCTIONEERS.

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

JOHN D. SNYDER
Experienced Auctioneer, wants your sale.
Write or wire. Hutchinson, Kansas.

MODERN HEREFORDS

ROBERT H. HAZLETT
HAZFORD PLACE, EL DORADO, KANSAS
 World's Largest Herd of Direct Descendants of Beau Brummel, Anxiety 4th and Don Carlos.
 WILLIAM CONDELL, Herdsman.

SHORTHORN CATTLE.

Shorthorn Bulls

For Sale, Ten Shorthorns

Eight months to two years old. Reds and roans. Large rugged fellows from heavy milking families of Shorthorn cows. Will offer these bulls at farmer prices. Come and see them. They are priced to sell.

H. W. ESTES, Sitka, Kan.

SHORTHORN COWS

Owing to shortage of feed I must sell seventeen registered Shorthorn cows, heifers and calves. A little thin but hearty and healthy. Also a few good bulls up to 20 months. **WM. B. PARKER, Lakin, 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.

LOWMONT SHORTHORNS.

Brawlin Heir 351808 heads herd. Inspection invited. **E. E. HEACOCK & SON, Hartford, Kan.**

DUROC JERSEYS.

W. R. CROW & SON'S

DUROCS

We offer foundation material, herd boars and show stock of the large, smooth type. Our herd won more first premiums and grand championships than any Duroc herd shown in 1916.

W. R. CROW & SONS, HUTCHINSON, KAN.

PATTERSON'S DUROCS

FOR SALE—Fifteen head of good spring boars, Col. and Crimson Wonder breedings. Priced to sell and satisfaction guaranteed.

ARTHUR A. PATTERSON, Ellsworth, Kan.

TWENTY FIVE SPRING BOARS

Sired by Crimson Wonder Again Jr. first prize boar at Topeka Fair, 1916, and G. M.'s Crimson Wonder. Big rugged fellows ready for service. Immunized and priced to sell.

G. M. SHEPHERD - LYONS, KANSAS

Immune Duroc Jerseys

April boars for farmers and breeders at \$20 each. Plenty of quality and the best of breeding. Satisfaction guaranteed.

A. S. GRABLE, JR. - DEARBORN, MO.

DUROC JERSEY BOARS

For Sale—Fifteen spring boars, two fall yearlings, sired by Wonder of Kansas. All are large and smooth. Priced right and satisfaction guaranteed. Write your wants.

K. HAGUE - NEWTON, KANSAS

PUBLIC SALE

At farm, three miles northeast of Grantville, October 20. Offering will include one Registered Jersey sow with litter, four spring boars and three spring gilts. All immune. Mail bids treated fairly.

DEWITT LEE - GRANTVILLE, KAN.

QUARANTEED DUROC BOARS

Duroc boars with size, bone and stretch. Immune and guaranteed breeders. Shipped to you before you pay.

F. C. CROCKER, Box K, Filley, Nebraska

DUROC JERSEY HOGS

Ten choice spring boars, real herd headers, the tops from forty head. Thirty-five spring gilts. Priced to sell.

W. A. WOOD & SON, ELMDALE, KANSAS

REGISTERED DUROC BOARS

Spring farrow, big type, from choice stock. Write me before you buy.

BRICE NEWKIRK, Route 1, Strawn, Kan.

PURE-BRED DUROC BOARS

Best breeding, choice individuals, priced right.

W. J. HARRISON, Silver Lake, Kansas.

POLLED DURHAM CATTLE.

Polled Durham Cattle

HOME OF THE CHAMPION TRUE SULTAN. SEE MY SHOW HERD AT THE LEADING STATE FAIRS

Ed. Stegellin
 STRAIGHT CREEK - KANSAS

RED POLLED CATTLE.



RED POLLED CATTLE

FOR SALE—Twelve cows and heifers.

I. W. FOULTON, Medora, Kan.

RED POLLED CATTLE

FOR SALE—1915 bull calves by Rose's Grand Champion 17998, a 2,400-pound bull; also a few good cows and heifers.

AULD BROTHERS, FRANKFORT, KAN.

OHIO IMPROVED CHESTERS

O. I. C. PIGS

For sale, 65 head March pigs, either sex. Two fall yearling boars, sired by Wilcox's White Giant. Prices reasonable. Write today.

DAN WILCOX, CAMERON, MO.

O. I. C. HOGS—Any kind, priced to sell.

Barred Rocks or Black Minorcas, hens, pullets or cockerels.

J. L. ALVEY - BILLINGS, MO.

CHESTER WHITE HOGS



CHESTER WHITE HOGS

For Sale—Spring boars and gilts from state fair winners.

COLEMAN & CRUM Danville - Kansas

CEDARVALE CHESTER WHITES

Extra good fall yearlings by Milligan 24457, first prize big Missouri State Fair 1912. Choice spring pigs by Milligan, Wonder Chief and W. P. Sweepstakes. All immune.

J. S. KENNEDY - BLOCKTON, IOWA

SHEEP.



SHROPSHIRE RAMS.

Chandler's aged ram won first prize and championship at Iowa State Fair, 1916. Weight and wool always win. One hundred yearling rams and ewes for sale.

C. W. CHANDLER, Kellerton, Iowa



REGISTERED SHROPSHIRE RAMS

Yearlings and two square built, rugged, hardy bucks with weight, bone and heavy fleeces. Quick shipping facilities and priced cheap. 412 head. Above Kansas City.

HOWARD CHANDLER, Chariton, Iowa

RAMBOUILLETT SHEEP

A lifetime experience proves the Rambouillet is easily the best sheep for Kansas conditions. We offer choice individuals either sex, with good bone, size, form and fleeced.

E. D. KING, Burlington, Kansas.

Doyle Park Shropshires

Twenty ram lambs and seven yearlings, all registered. Can also spare a few ewes.

Doyle Park Stock Farm, Peabody, Kansas

Breeders' Directory

- ANGUS CATTLE. Geo. A. Detrich, Carbondale, Kan. D. J. White, Clements, Kan.
- SHORTHORNS. C. H. White, Burlington, Kan.
- RED POLLED CATTLE. Mahlon Groenmiller, Pomona, Kansas.
- HOLSTEINS. C. E. Bean, Garnett, Kansas.
- DORSET-HORN SHEEP. E. C. LaTourette, Route 2, Oberlin, Man.
- JERSEY CATTLE. J. B. Porter & Son, Mayetta, Kan.

FARM AND HERD.

Catalogs are out for the Poland China sale to be held by W. R. Webb of Hiawatha, Kansas, October 31. This year Mr. Webb has cataloged fifty head of choice spring boars, spring gilts and tried sows. A glance through the catalog shows a great line of big-type breeding among the sires. Represented are Big Price Jr. by the noted Big Price, Big Bone Standard, Big Bob Wonder, Mc's Big Joe, King Wonder, and a number of other noted big-type boars.

James Arkell of Junction City, Kansas, is among the Kansas Poland China breeders that have succeeded in building up a herd of the popular type that has attracted the attention of Poland China breeders and feeders in a wide territory. He has the big smooth kind that are profit-producers. This year he raised a choice lot of spring pigs by such boars as Chief Big Bone, Longfellow Again and the champion Big Timm.

F. W. Wilson of Wellsville, Kansas, has decided to quit farming and has claimed November 1 as the date of his closing-out sale. At that time he will sell at the fine stock pavilion at Ottawa, Kansas, thirty head of working Shorthorn cows and heifers. This herd is headed by Searchlight Bloom, a son of the noted Searchlight. This bull sold for \$550 when only a yearling in the C. S. Nevius sale and is said by good judges of Shorthorn cattle to be one of the best sons of Searchlight.

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

TORREY'S HOLSTEINS

High grade cows and heifers and registered bulls. The best breeding. Call and see them.

O. E. Torrey - - - - Towanda, Kansas



IN MISSOURI

Price Segis Walker Pietertje 123955 heads herd. Dam 30.13 lbs. butter in 7 days, milk testing 5.07 per cent. A. R. O. of dam, granddam and ten nearest dams of sire, 29.75 lbs. Six of these are 30-lb. cows. His five nearest dams all test over 4 per cent. Bulls 2 to 8 months old, \$150 to \$350. Always have cows and bred heifers for sale. Everything registered Holsteins. Tuberculin tested.

S. W. COOKE & SON, MAYSVILLE, MO.

FOUR BULLS

Two of serviceable age. Priced very reasonable. Pictures and description on application. A Tredico bull will improve your herd.

TREDICO FARM, Route 2, Kingman, 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.**

JERSEY CATTLE.

Fairview Farm Jerseys

Attractive prices on heifers in milk and cows from two to six years old. All bred to my great herd bull, Cretesia's Interested Owl 114512, whose sister holds the Jersey milk record. His granddam won the A. J. C. Club gold medal this year. They will interest any one wanting good Jerseys. Inspection invited.

R. A. GILLILAND - MAYETTA, KANSAS

JERSEY BULLS

For Sale—A few exceptionally good calves from very fine Register of Merit dams; also two very fine yearlings. Satisfaction guaranteed. Let us sell you your next bull.

ROLLA OLIVER, Box 701, St. Joseph, Mo.

Must Reduce Herd

Forty head of registered cows, heifer and bull calves for sale. Of the best blood lines among the breed.

I am a member of the Southwest Jersey Cattle Breeders' Association.

SWEET SPRING STOCK RANCH

Box 241 Monett, Missouri

Butter Bred Holsteins

Buy your next bull calf from a herd that won the butter test over all breeds.

J. P. MAST - SCRANTON, KANSAS

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 pedigrees.

R. J. LINSKOTT - HOLTON, KANSAS

Jersey Cows and Heifers

140 head to select from, pure-bred and grade. 20 heavy springers, bred on farm.

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

SMITH'S JERSEYS

For Sale—Two extra good registered Jersey cows, due to freshen about August 25, fit to enter Kansas Farmer contest. One 2-year and three coming yearling bulls, good individuals.

S. S. SMITH, Clay Center, Kan.

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**

JERSEY BULLS

For Sale—From six weeks to six months old, sired by Imported Sultan's Trinity King, son of Western King. Dams, Financial King, Loretta D. Eminent and Sparta Herotas breeding.

Dr. J. H. Lomax, Station D, St. Joseph, Mo.

PUBLIC SALE

At farm three miles northeast of Grantville, October 20. Offering will include one choice registered Jersey cow, one registered Jersey heifer calf, also one pure-bred Jersey cow not registered. Mail bids treated fairly.

DE WITT LEE, Grantville, Kansas.

HOLSTEIN CATTLE.



HOLSTEIN CATTLE

One of the greatest investigations among dairy breeds was made by experts of the Wisconsin Experiment Station. Prof. F. W. Wolf states that the "Holstein cows produced considerably more milk solids and fat than the cows of other breeds (19.5 per cent more butterfat than the Guernseys and 35 per cent more than the Jerseys), and they also give larger net returns for feed consumed."

In all dairy breed competitions where Holsteins entered have been representative, they have produced a greater net profit for butter than any other breed entered. There's big money in the big "Black and White" Holsteins.

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

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

BONNIE BRAE HOTSTEINS

A fine bunch of high grade two-year-old heifers coming fresh. Also a few young cows and one well-bred registered bull old enough for light service.

IRA ROMIG, Station B, TOPEKA, KANSAS

SUNFLOWER HERD REGISTERED HOLSTEINS

Offers young cows due this summer and fall by 29 and 33-pound sires. Several EXTRA young bulls both in breeding and individuality. They are bound to please.

F. J. SEARLE, Oskaloosa, Kan.

23-HOLSTEIN-FRIESIAN BULLS-23

Best of sires. A. R. C. dams, fourteen over 20 pounds. Seven of the others from heifers with records of 14.89 to 19.3 pounds. The kind you want. We have only two cows in the herd with mature records less than 20 pounds.

Breeders for Thirty Years.

McKAY BROS., Waterloo, Iowa

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.

CHOICE HOLSTEIN BULLS

Registered bull calves out of A. R. O. cows. Also a few heifers. Best breeding. Choice individuals. Price reasonable.

BEN SCHNEIDER, NORTONVILLE, KAN.

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

THE CEDAR LANE HOLSTEIN HERD

Headed by a 29.4-pound grandson of Pontiac Korndyke. Bull calves, nearly ready for service, sired by above bull, for sale at reasonable prices. Also a limited number of bred cows.

T. M. EWING, INDEPENDENCE, KANSAS

CORYDALE FARM HERD

Herd sire, Jewel Paul Butter Boy No. 94345, who's eight nearest dams average A. R. O. 25.95. Eight bull calves for sale from 2 to 9 months old.

L. F. CORY & SON - Belleville, Kansas

HOLSTEINS BACKED BY RECORDS

Registered bull calves, also a few choice heifers. All modern bred with good butter fat inheritance.

GEORGE C. PRITCHARD

Route 2 - Topeka, Kansas

BRAEBURN HOLSTEINS

Four females to spare before stabling time. Always A. R. O. bull calves.

H. B. COWLES, 608 Kansas Ave., Topeka, Kan.

HOLSTEIN BULLS, "REGISTERED"

Two ready for service. Smith & Hughes, Breeders, Route 2, Topeka, Kansas.

When Writing to Advertisers, Please Mention Kansas Farmer

GREAT SHORTHORN SALE AT FARM, WEDNESDAY, OCTOBER 25, 1916

48 HEAD COWS AND HEIFERS

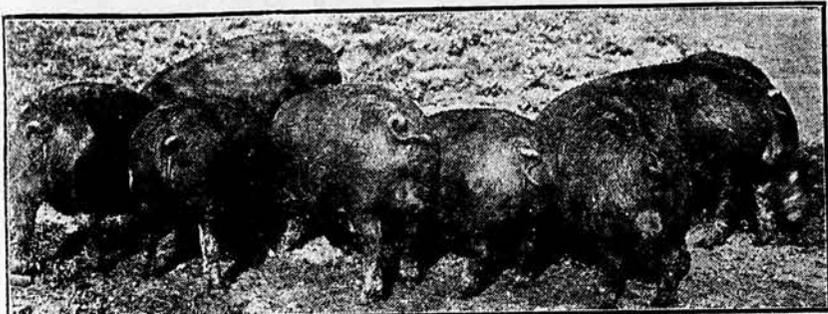
We are selling as good stock as we are retaining. We will submit for your appraisal in this sale a line of pure Scotch cows and heifers that challenge criticism. They are from the most approved tribes. We offer to you Rosewoods, Princess Royals, Clippers, Missies, Duchess of Gloster, Secrets, Mary Anne of Lancaster, "Marr" Emmas, Wimples, Broadhooks, Butterflies, Lavenders, Gold Drops, Jealousies, and Mauds; all of which have been tried and found true by leading breeders of Scotland and America.

The calves at foot (six of them) are by Villager Jr. (one of the best breeding sons of Imp. Villager) and by Victoria's Sultan, a great son of Missie's Sultan. About twenty of the females will calve between now and January 1, 1917. Ten choice Scotch bulls, herd headers. Send for catalog today.

F. C. BARBER & SONS, Skidmore, Mo.



T. E. Durbin's Poland Sale



More of Sievers' Champion Blood in

THE OLD TRUSTY HERD

Than in any herd in Missouri. This year's boar and gilt offering from this herd is better than ever. This, the fifth sale of the big Missouri circuit, will be held at

KING CITY, MO, FRIDAY OCT. 27, 1916

The Get of the Mammoth Two-Year-Old Trusty King

features this offering. They are better than ever, showing more size, more quality. Fifty head by this great boar and other outstanding attractions by HILLCREST BLACK BONE by the 1916 champion, Long Big Bone. BIG BONE MODEL by the 1915 champion, Black Big Bone 2d. MODEL BIG BONE 2D by Long Big Bone.

REAL HERD BOAR PROSPECTS

THE GRAND MASTER LITTER

Out of Big Nellie by Big Joe, the \$330 top of the Leet-Hassler sale last winter, are winners. Two boars and two gilts of exceptional worth.

The herd books contain no better pedigrees. No sale this fall will show boars and gilts carrying more size or of better conformation. If you want the very best in big Polands, come to this sale and let me show you.

The catalogs are ready and will be sent upon application by mentioning Kansas Farmer. Write today to

T. E. DURBIN, KING CITY, MISSOURI

O. W. Devine will represent Kansas Farmer at this sale.
Cols. Harriman and Gibson, Auctioneers.

U. S. BYRNE POLAND SALE

LONG JUMBO 2D 74013

Sired by the noted 1,100-pound Long Jumbo. This great boar, together with B Wonder, the best boar ever produced by A Wonder out of Pawnee Belle, have made the Broadview Herd famous for extreme size and quality. The get of these two fine boars sell in our big annual fall sale, at farm one mile from

SAXTON, MISSOURI, WEDNESDAY, OCTOBER 25

25 BOARS 20 GILTS

THE BEST LOT WE EVER RAISED
All spring farrow but three. Sired by Long Jumbo 2d, B Wonder, Model Big Bob, Leonard & Russell's great boar—Big Tecumseh 2d and a son of the champion, Smooth Big Bone. These are out of our famous sows—Pawnee Belle, Jumbo Wonder 2d, Windom's Choice, &c.

SPECIAL ATTRACTIONS
Three December boars by Long Jumbo 2d out of Pawnee Belle. Outstanding in every respect. Herd headers here. A crack litter by Model Big Bob out of a Long Jumbo 2d gilt, a daughter of Jumbo Wonder 2d, Windom's Choice, &c. Jumbo 2d-B Wonder cross.



Write Today for Catalog, and Mention Kansas Farmer.

U. S. BYRNE, SAXTON, MISSOURI

Greatest Fall Sale Offering

SELLS ON THE FARM NEAR

Effingham, Kan., Thursday, Oct. 19

40 HEAD

19 Spring Boars, 1 Fall Boar, 15 Spring Gilts, 5 Fall Gilts

THE GET OF THE SENSATIONAL SIRE

BIG BOB WONDER

The Outstanding Feature of This Great Sale Offering.

Five Head by the \$1,250 Wallace Boar, King Joe

The dams of the offering are our best breeding sows and include daughters of Long King's Best 61555, Expansive 34723, Moore's Halvor and Bloemendaal's Big Chief.

Among the attractions will be a few outstanding fall gilts by Big Bob Wonder.

EVERYTHING IMMUNE

We want you to receive our catalog, and attend this sale. Send for catalog today, and mention Kansas Farmer.

H. B. WALTER & SON

EFFINGHAM KANSAS

Iowa King 67584

First Prize Aged Boar Missouri State Fair 1915, Features My Big Sale to Be Held at

LATHROP, MO., THURSDAY, OCT. 19

FIFTY HEAD OF IMMUNE TOPS

Sired by Iowa King, Superior Jumbo 65435, Missouri Boy 77981, Long Wonder Boy, King Jumbo and Long Wonder, out of the very best bred and best individual sows.

This Is the Best Offering I Have Ever Sold

They are right in breeding, individual merit, size and quality. Selected from a large crop, and all tops. Three fall boars, twenty-three spring boars and twenty-four spring gilts.

Sale in town, two blocks from Burlington depot. No postponement. Come, rain or shine. Catalogs ready. Mention Kansas Farmer.

P. M. ANDERSON, LATHROP, MO.



EVERMAN'S FAMOUS BIG Boned Spotted Polands

SALE OCTOBER 24.

Sixty head of sows, the tops of 237 head. Orders taken NOW for spring boars at \$25, to be shipped at once. Write for catalog.

EVERMAN POULTRY FARM, R. 5, GALLATIN, MO.

MENTION KANSAS FARMER WHEN YOU WRITE.

W. I. BOWMAN & CO. HEREFORD SALE

AT FARM NEAR NESS CITY, KANSAS, TUESDAY AND WEDNESDAY, OCTOBER 24 AND 25, 1916



ONE HUNDRED BREEDING COWS AND HEIFERS

EIGHTY BIG, STRONG-BACKED, HEAVY-BONED BULLS

Sons of Generous, Perfection Fairfax, Generous 5th and Imported Farmer. This is one of the best lots of cattle we have ever sold, and we invite the public to come and buy some of this good seed. This sale will be the great Hereford event of the fall season. Catalogs are now ready to mail. Send for one today. We want you to attend our sale and see our cattle.

W. I. BOWMAN & CO., NESS CITY, KANSAS

SHORTHORN CATTLE SALE

At Stock Yards Pavilion, Kansas City, Mo.

THURSDAY, OCTOBER 26, 1916



FIFTY FEMALES—THE VERY CREAM OF OUR HERD OF PURE SCOTCH CATTLE

Twenty Cows with Calves at Foot

A number safe in calf to The Choice of All, one of the noted sons of Choice Goods, and Vermillion, one of the great breeding bulls. We also will offer an exceptional lot of heifers sired by the above bulls and bred to Fair Acres Stamp; also a few open heifers.

Ten Bulls—Real Herd Header Prospects

And a clean lot of cattle that any breeder can use. Catalogs are ready to mail out. Send for one today and arrange to attend our sale.

Free Conveyance from Greenwood or Pleasant Hill, Mo.

For Catalog, write

W. A. FORSYTHE & SONS,

Greenwood, Mo.

Holstein Dispersion Sale

Have sold my farm and will sell at public auction my entire herd of Registered and High-Grade Holsteins, consisting of

**FORTY-FIVE COWS FROM THREE TO EIGHT YEARS OLD
FORTY-FIVE HEIFERS, YEARLINGS AND TWO-YEAR-OLDS
A FEW SPRING CALVES, ONE HERD BULL AND ONE YEARLING BULL**

At Farm Near
**Robison,
Kansas**



FARM SCENE ON JOHN J. LEIDY FARM

Tuesday,
**October
24, 1916**

All my cows are clean and all right. Several very heavy milkers with proven records. All the cows and heifers old enough to breed will be bred to my herd bull, Cornucopia Pontiac Wayne. His dam was the champion cow of Nebraska for two years and only recently lost the championship. Every cow sold with an absolute guarantee. We have been in the dairy business fifteen years and we never owned a better lot of regular producing and heavy milking cows. Come to the sale and bring your dairy expert with you if you want good cattle. We have them and they will be sold to the high bidder. Will also sell twenty brood sows bred for October litters, and 160 head of stock hogs, will weigh from 140 to 160 pounds sale day. Farm four miles from Robison, Kansas, on the St. Joseph & Grand Island Railway, and six miles from Hiawatha, Brown County, Kansas, on the Missouri Pacific and St. Joseph & Grand Island Railways.

FREE CONVEYANCE FROM EITHER ROBISON OR HIAWATHA, KANSAS. For Folder and Other Information write

JOHN J. LEIDY, Robison, Kansas

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