

KANSAS FARMER

For the improvement  of the Farm and Home cop 2

Volume 52, Number 21

TOPEKA, KANSAS, MAY 30, 1914.

Established 1863. \$1 a Year

LET the Guernsey partisans applaud the wonderful performance of their champion, for tomorrow a new claimant for championship honors may appear.

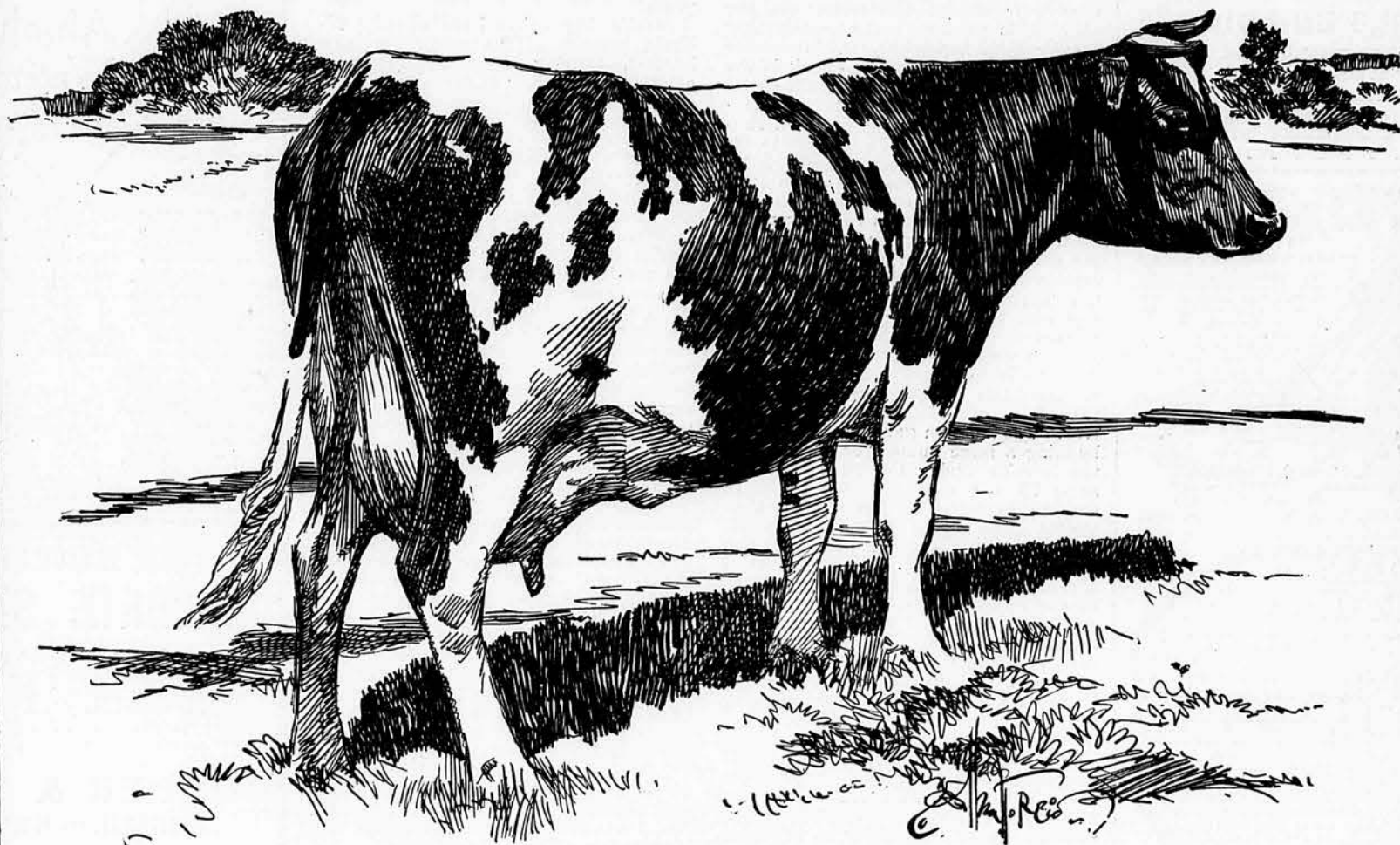
Six gallons and one quart of 5.4 per cent milk every day for 365 days! That is the record of this Guernsey cow, May Rilma,—enough butter to supply 12 families two pounds a week for a whole year.

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Guernseys have made world's records before, but in these days when world's records come thick and fast no cow can long stand at the top.

Three Holstein champions pushed the record up a notch at a time until it seemed that the limit had been reached; but here comes May Rilma, and Banostine Belle DeKol with her butterfat record of 1058.34 pounds must yield her place to the new champion.

—G. C. W.



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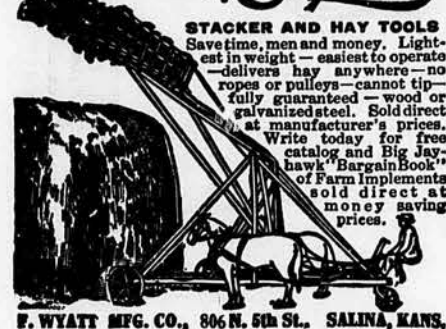
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Record Breaking Wheat Crop

Price Expectations Not so Encouraging as Yields—Fed Cattle Being Marketed Not Returning Profit

COLOSSAL is the word which best indicates the magnitude of the prospective wheat harvest in Kansas and other southwestern states this year. It is probable that Kansas, Nebraska, Missouri, Oklahoma and Texas will produce a combined wheat crop of 315,000,000 bushels, or nearly 100,000,000 bushels more than the generous crop of 1913. The probable Kansas yield is being estimated at 120,000,000 to 152,000,000 bushels. The general expectation of the Kansas City Grain Exchange is that Kansas will have 130,000,000 bushels, provided conditions are propitious in the next few weeks. It is even asserted in some quarters that there is already sufficient moisture in the ground in Eastern Kansas to insure a harvest. The 1913 crop was 72,500,000 bushels, so Kansas may produce more than double the output of last year and the greatest wheat crop ever raised by any state in the Union.

According to the May report of the Federal Department of Agriculture, the winter wheat crop this year promises to be 630,000,000 bushels, against a harvest of 523,561,000 in 1913, the preceding record winter wheat crop. This 1913 winter wheat prospect is greater than the average combined winter and spring yields of the United States the last twenty years. The area promised for harvest is 35,387,000 acres, 3.1 per cent only, or 1,119,000 acres of the area sown last fall which has been abandoned.

The price prospect is not so encouraging as the yield probabilities. KANSAS FARMER market correspondent believes there will be hurried, early movement of the new crop marketward, as many farmers are desirous of selling early because of their failure to obtain liberal revenues from 1913 crops. Unless a strong export demand develops, the first new crop of wheat may sell for quite a bit less than 80 cents per bushel. There is even some talk of a 70-cent market. Just what the price will be is a matter of great uncertainty, however, although there is a bearish feeling in the trade. Still, wheat is now about the cheapest commodity quoted in markets for farm products.

Those who are enthusiastic over the tremendous yield of wheat Kansas promises to have, should not overlook the fact that it will be partly at the expense of corn, oats and other grain, the state having a larger area of wheat than ever before. However, the per acre yields promise to be considerably heavier than heretofore. One favorable result of the big harvest outlook is the fact that it has stimulated grain elevator construction in many parts of Kansas. At Kansas City the St. Paul railroad is adding 1,000,000 bushels to its elevator storage capacity. Topeka, Newton, Manhattan, Lawrence, Alton and Hudson, in Kansas, each report one elevator of 100,000-bushels capacity under construction, and smaller houses are under construction elsewhere. Hutchinson reports a 200,000-bushel elevator going up. The more elevators in the state, the less likelihood there is of a price-demoralizing rush of grain marketward in years of normal crops, at least.

As an indication of the effect of storage facilities on the wheat trade, the following concerning Russia, is instructive: The Russian government has been building a large number of elevators in the interior during the past year, and some 80 new ones are said to be in course of erection on the black soil, or winter wheat region of Southern Russia. The slowness of shipment of wheat from Russia, which claims to have produced a record crop the past year, is said to be due to the enlarged storage facilities and to the action of the government in encouraging holders to wait for more favorable prices. Of course, the calculations of the Russian government may be upset by the tremendous outpouring of wheat from the farms of the United States, especially the winter wheat belt.

It is to be hoped that the new federal reserve bank system will be put into operation as soon as possible after the new crop starts to move. This system should increase the supply of available credit in the United States and thus help support wheat prices by making it possible for millers and grain men to put away heavy stocks.

FEW CATTLE FEEDERS MAKE PROFIT.
Buyers of stocker and feeder cattle, who are quite numerous in Kansas now as a result of the liquidation last year, should not overlook the fact that only a small percentage of the feeding operations of the past six months have re-

turned profits. KANSAS FARMER market correspondent asked one of the leading cattle salesmen on the Kansas City market, who feeds stock, as to what proportion of the fat beef animals being marketed are yielding profits. Here is his answer:

"Not more than one load out of ten received so far this year made feeders any money."

This estimate is quite accurate. It indicates that, despite the record prices fat beef cattle are bringing, there is not enough profit in them for the feeders to warrant enthusiasm over the market. The factors responsible for this situation are the exceptionally high cost of stockers and feeders and the high cost of feed. Thus, the breeder or ranchman who raises the cattle is getting the lion's share of the profits the beef cattle industry is yielding to producers.

In connection with the discussion in this department last week as to the probable shortage of cattle in the summer and fall of this year, it is well to note that Chicago, Kansas City, Omaha, St. Louis and St. Joseph, the five leading western markets, have received 2,130,000 cattle so far this year, compared with 2,278,000 head the corresponding time in 1913. For the year 1913, the Kansas City market received 2,131,015 cattle, compared with 1,943,390 in 1912 and the record of 2,384,294 in 1907. So far this year Kansas City's receipts of cattle aggregate 490,000 head, a decrease of 83,000 from the corresponding time in 1913. W. H. Weeks, assistant general manager of the Kansas City Stock Yards Co., who is an enthusiast over the Kansas City market, expects the year 1914 to close with a loss of 200,000 head in cattle receipts compared with the total of 1913 at Kansas City.

Prairie hay is now selling near the record levels of 1912, when prairie sold up to \$23.50 per ton. Dealers expect the market to continue high until the new crop is available. There is some nervousness over the probable yields, as some meadows appear to be seriously injured as a result of last year's drought. To what extent this will effect the prairie hay yield remains to be seen. It is significant to note, in this connection, that where cattle are pastured in the Kansas prairie sections, much more grass is being allowed per animal. Reserves of old prairie are the lowest in years.

Alfalfa hay prices have already declined because of the prospective new harvest. Cutting of the first 1914 crop of alfalfa is already in progress in Kansas and Oklahoma. The first cutting in Oklahoma is about two weeks late on account of the late freezes. As a result of the unfavorable weather, the first cutting will not yield so well in Oklahoma. Reports from parts of Kansas indicate a generous first cutting. Kansas City usually receives new crop alfalfa at the opening of June. When the new crop is moving in fair volume, dealers predict that prices will rule from \$1 to \$2 per ton under the present level.

ARGENTINA CORN CHECKS ADVANCES.
Argentina shipments of corn to this country are expected to act as an effective damper against advances in the corn market this summer. Until a month ago the prospect of a 300,000,000-bushel corn crop in the South American republic was a depressing influence on prices at Kansas City and other centers. The excessive rains began falling in Argentina, which suffered more often from droughts, and prices in this country strengthened somewhat. It is now estimated that Argentina will raise about 250,000,000 bushels. Harvest is on there now, but the first 1914 Argentina corn will reach this country later than expected.

In 1913 the Argentina corn crop was 200,000,000 bushels; in 1900, 40,000,000 bushels. This year's production will be the largest on record for Argentina, despite the excessive moisture.

Abundance of wheat will also play an important part in holding corn down this summer. In fact, present signs indicate that wheat and corn may sell mightily close together. Already the weakness in wheat is affecting corn adversely.

With the sort of weather prevailing, corn is not making very rapid growth. Hundreds of acres would be greatly benefitted by a light harrowing or cultivation with the weeder. Keeping the surface in fine tilth conserves moisture and warms and aerates the soil.

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80 cents per agate line—14 lines to the inch. No medical or questionably worded advertising accepted. Last forms are closed Monday noon. Changes in advertising copy and stop orders must be received by Thursday noon of the week preceding date of publication.



KANSAS FARMER

With which is combined FARMER'S ADVOCATE, established 1877.
Published weekly at 625 Jackson St., Topeka, Kansas, by THE KANSAS FARMER COMPANY.
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CHICAGO OFFICE—404 Advertising Building, Geo. W. Herbert, Inc., Manager.
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Entered at the Topeka, postoffice as second class matter.
GUARANTEED CIRCULATION OVER 60,000

OUR GUARANTEE
KANSAS FARMER aims to publish only the advertisements of reliable persons or firms, and we guarantee our subscribers against loss due to fraudulent misrepresentation in any advertisement appearing in this issue, provided that mention was made of KANSAS FARMER when ordering. We do not, however, undertake to settle minor claims or disputes between a subscriber and advertiser, or be responsible in case of bankruptcy of advertiser after advertisement appears. Claims must be made within thirty days.



GET READY FOR HARVEST.

We hope KANSAS FARMER folks will leave nothing undone which will delay wheat cutting so soon as the grain is ready. It is our guess that harvest will be on a week or ten days earlier than usual. We are sure the harvest will be early if the season should be a bit dry from this time on.

Do not lead yourself to believe that you are ready for harvest and later be fooled. You may think you can get new canvasses for the header or binder promptly by calling on the dealer for them. You may conclude, likewise, regarding some repair part only to find that they must be ordered from some distributing point or the factory. Then there is the twine, and you are not sure of it, unless it is safely stored in your own buildings. Do not depend on the ability of anybody to carry in stock the supplies you need. Look after these things at once if you have not already done so.

Be sure that the binder will work and that when the wheat is ready to cut, the binding mechanism will go off without a hitch. This can be determined only by giving it a trial. When you think the machine is in first class condition, give it a trial on one swath around the field, cutting the weeds and in fact opening up the field. On this swath you can tell whether the knoter works or whether the tension is so taut as to break the twine. This trial will tell whether the machine is in condition or not and will give ample opportunity to get it ready for the harvest.

You know that all this is necessary, because there are contingencies sure to arise and which are beyond your control and which may result in two or three days' delay. It may be too wet to begin cutting when the wheat is ready, it may be so hot that you can't harvest as many acres per day as you thought, or any one of a half hundred other things may arise to delay the game.

Look well to the horses which are to do the work. Have them in the pink of condition when they enter the field. Be sure that the collars fit and that they are not likely to produce sore shoulders or necks. Adjust the hame tugs so that the pull will not be downward and on the necks. Get the neck and collar pads fitted and used a few days before the heavy work begins. While thinking about sore necks don't forget a set of tongue trucks for the binder. This is the greatest little implement contributing to horse comfort yet invented.

These are commonplace suggestions, but if you overlook even one of them you may lose valuable time in saving the wheat crop. The editor of KANSAS FARMER has had to contend with everything here mentioned and we know that many of our readers will be confronted with one or more of these difficulties this very harvest time.

ABOUT HARVEST HELP.

Business has already begun in KANSAS FARMER'S clearing house for harvest hands. This service is rendered without charge to employer and employee. The service is yours to use in the way that will do you the most good.

Elsewhere in this issue is printed the coupons which you will use in making your request for help. It will be valuable to you to fill in all the blanks in the coupon because this will enable us to send you the kind of help you want.

If you want work, fill out the coupon carefully. We would dislike to send you to a farmer who did not want such service as you would likely render.

KANSAS FARMER rendered a good service in this respect for a lot of people last year and we hope to do so again. There is only one way to do even this sort of business, and that is in the right way. This looks like the right plan to us.

The people of Northwest Kansas will miss James N. Fike, who passed away at his home in Thomas County a few weeks ago. Mr. Fike was the staunch supporter of Northwest Kansas. He be-

lieved in that section with his whole heart and his time and energy were expended in developing it. He was a leader who inspired confidence and whose leadership was responsible for the hope held by thousands of farmers who ultimately expect prosperity and permanency under the adversities with which they have to contend. Mr. Fike was the "wheat king" of the Northwest and whose success at wheat growing was not such as met the expectation of either himself or his friends. It is to be regretted that the hand of Fate removed him at a time when his county and his fields promised the largest crop in their history.

DIETRICH DIES IN IDAHO.

C. F. Dietrich, who has long been well known as the senior member of the firm of Dietrich & Spaulding of Richmond, Kansas, died at his home in Boise, Idaho, May 10.

There was probably not a better known breeder of Poland China hogs in the state of Kansas than Mr. Dietrich. He always was a pusher for the improvement of the breed and never seemed quite so happy as when he was dressed in his blue overalls and out in the ring showing his hogs at the various big fairs.

For a number of years he has been a member of the Board of Directors of the American Poland China Record Association. Owing to failing health he went to Idaho a few years ago hoping the change of climate would be beneficial to him. His wife and youngest son, George, went to Idaho with him, and at the time of his death all of the family were present except Frank, who is running the home farm at Richmond.

The extension division of the Kansas Agricultural College is the department of the institution which lies close to the rural communities of the state. The activities of that division have increased so rapidly and to such extent as to be little short of marvelous. Within the last week Otis Hall of Montgomery County, Indiana, and one of the most successful county superintendents of schools in the United States, has been elected to take charge of the rural education work of the division. Hall's work will pertain not only to the promotion of vocational education and the re-vitalizing of rural villages and schools, but also the conducting of various clubs and contests which have become a prominent feature of the work of the division.

The cow-keeping farmers of Kansas seem convinced that dairy-bred cattle are those which will return the greatest profit for labor given and feed consumed. In every locality within the state are farmers who are introducing dairy blood in their herds. Such farmers are acting cautiously and along the lines of wisdom and there is every reason to believe that the larger proportion are building for a permanent future success. A company of farmers from Allen, Montgomery, Harvey and Pratt counties is this week in Wisconsin buying cattle, visiting prominent dairy farms and lead-

ing co-operative creameries. These gentlemen are accompanied by Mr. Neale, the expert dairyman of the extension division of the Kansas Agricultural College. Neale had been solicited by these farmers to assist them in buying dairy stock, but instead of making a trip for each man, he organized the party and thus will make one trip suffice and in all probability so enable them to buy at the best advantage. It is safe to say that these gentlemen on this trip will learn much regarding dairying and which could not have been obtained in any other way.

The community, which is a year of such wheat outlook as this, and which community gets a new threshing outfit or two, cannot realize the extent to which the wheat belt of the Southwest uses new threshing machinery. Last week 93 carloads—in two special trains—of Rumley engines and threshers, passed through Topeka billed to Kansas and Oklahoma points. These 100 or more threshing outfits created quite a stir along the lines over which they passed; but these outfits shipped together were a small part of the number of new threshers which will be bought in the wheat country. Shipments such as these have some advertising value, but it is the steady movement of two or three cars of outfits a day in every freight train from now until July 15 that swells the total and causes one to realize the tremendous cash outlay necessary to get the wheat crop in marketable condition.

A temperance lecturer we recently heard gave these figures: Of each \$100 spent in the United States for clothing, the farmer gets \$24.50; boots and shoes, \$30.50; cotton goods, \$47.60; woolen goods, \$46.35; leather, \$50; flour, \$61; meat, \$66; liquor, \$5.50. He said: "When the saloons are wiped out, the question will be with the farmer, not what will he do with his grain but how will it be possible for him to supply the demand that will be made upon him for the products of the farm."

KANSAS FARMER has taken the pains to look up the twine situation. There is reason to believe that there will be plenty of twine made to meet the demand, although one jobber said we need not be surprised to find a shortage. Our best advice is to buy twine right away. There is danger in delay. While there may be plenty of twine in the manufacturers' warehouses, it will require ten days to two weeks to get it into the territory after it is ordered.

The woman's board of the Panama-Pacific International Exposition is organizing a travelers aid, by which they hope to make the exposition city absolutely safe for all girls and women visiting in during 1915. The organization will extend its protection to boys as well as girls, and will list hotels, lodging houses and restaurants, and establish information stations upon the grounds and in railway stations.

NO DEMAND FOR GRADE BULLS.

It has always been the policy of KANSAS FARMER to discourage in every way possible the use of grade sires for breeding purposes. We have permitted some of our advertisers, who so desired, to advertise grade bulls in our classified columns but under no consideration have we permitted grade sires to be advertised under the regular live stock head where breeders of pure-bred stock advertise.

It is evident that the policy of KANSAS FARMER along this line is having its effect upon our readers. One of our advertisers who is carry a breeders' card in the regular live stock columns had some grade bulls which he thought he would try to dispose of and tried an ad under the classified columns. He just writes us, however, to discontinue the grade bull ad as it is not bringing results. This is really encouraging, since it has seemed at times as though many farmers were "penny wise and pound foolish" in persisting to use the grade sires and as a result failing to make any progress in live stock improvement. This same advertiser goes on to say, "You may continue my regular ad, however, as we are selling some cows and heifers and our registered bull calf trade has been splendid."

If this policy of using nothing but the best of registered sires for breeding purposes is persisted in, the live stock on the Kansas farms will soon show marked improvement. We are certainly glad to have evidence brought to our attention that the readers of KANSAS FARMER have adopted the policy of refusing to buy grade bulls for breeding purposes.

THE BINDER ENGINE.

We cannot help but feel that the most useful of recent inventions for expeditious harvesting is the binder or header engine. This is an engine which is attached to binders or headers and which furnishes the power for driving the machinery. It relieves the horses of the power required to cut the grain. It relieves the bull wheel of the header and the binder of the power required to drive the cutting machinery. It does not require very soft ground to mire the cutting machine when the power for it is supplied by the bull wheel. It frequently happens that extremely hot weather reduces the work of horses to as great extent as heavy fields.

A binder or header equipped with the gasoline engine enables the horse to accomplish two times as much work as they can accomplish without the engine. The bull wheel of the binder or header, when the engine is used, serves only as a part of the header or binder truck. The engines weigh two hundred to three hundred pounds. This added weight is nothing compared with the power required if the horses are to furnish the cutting power.

If we felt a bit shaky on the ability of the horses to stand the strain, or feared a few days of wet or exceedingly hot weather, we would seriously consider the purchase of an engine.

Strange as it may seem there are a few large shippers favorable to the increase in freight rates recently authorized by the Interstate Commerce Commission. John Willys, who makes the Overland automobile, and ships and receives annually about 1,600 carloads of freight, is one of these. He recently wrote the commission: "After considering from every angle the general increase in rates, I am constrained to express to you my belief in the advisability of such action. I am convinced that conditions warrant it and that carriers are entitled to a larger revenue for the service they perform." The railroads in the future as in the past, must continue important in the development of this country. To serve the country they must make some money. The Interstate Commerce Commission is supposed to know its business. It must safeguard the shipper as well as the railways. Its work is to study the situation of both. It should know the situation of either better than the politicians.

Buy Binding Twine Early

Do not put off buying binding twine. If you do there is a possibility that you cannot get it when needed. Your dealer will buy twine only as he has demand for it. He won't buy freely with the prospect of carrying it over. You can't blame him.

The twine factories are running overtime to increase their surplus. They probably will make twine enough but it requires a week or more for the railroad to get it to your town. Should the orders be heavy at the last minute, the shipping facilities will be further handicapped.

Everybody who makes harvesting machinery, twine, threshing machinery, etc., must take a chance on the probable demand for his product. The farmer who grows wheat takes a chance on the weather. When the crop is growing with splendid outlook he must take a chance on buying the twine he needs and having it when he needs it.

Kansas prison twine will bind the grain of only one wheat county. That twine is all contracted for. Don't fool your time away looking for prison twine, but buy at once where you can get it.

TRUTH ABOUT SOIL ANALYSIS

Analyses Furnish a Measure of Soil's Possible Fertility—Must Study Nature's Methods of Making a Highly Productive Soil—By G. C. Wheeler

CAN we not secure a chemical analysis of our soil and be told why it does not produce maximum crops? This question comes up continually where farmers are gathered together, and especially if there happens to be present a man who is supposed to have some scientific agricultural education. If he cannot answer this question he is considered by many to be a fraud in setting up any claims to technical training as an agricultural expert. The desire for accurate and reliable information along this line is perfectly legitimate, but it seldom can be answered in the manner the one making the inquiry seems to expect.

There is no part of the farm that concerns the farmers more than the soil of which it is composed. It is the storehouse from which all things must come. In the early development of agricultural research a great deal of attention was devoted to the analysis of the soil and of plants. These earlier students of agriculture had great faith in such analyses as a means of solving many of the problems of crop production. The chemists themselves were perhaps the first to realize the decided limitations of this method of determining the crop producing powers of a given soil. They found the widest variance between the results of the laboratory analyses and the actual crop returns in the field trials. Soils which the chemical analyses showed contained all the essential elements of plant food in sufficient quantities to produce crops for hundreds of years, in the actual trial gave meager returns; on the other hand, soils which contained far smaller quantities of the essential constituents of plant food, produced maximum results in crop production.

The farmer is naturally most desirous of knowing the truth regarding the available plant food in his soil; this is especially the case if he is meeting with a falling off in the crop yields. While the chemist now thoroughly realizes the limitations of his analytical methods, the farmers, as a rule, have an entirely mistaken idea as to the value of soil analysis. The difficulty lies in the fact that practically every soil contains enormous quantities of potential plant food but relatively small quantities of usable or available plant food. Professor Hopkins in his text book, "Soil Fertility

THE SOIL

THE soil is the basis of all life but the lowest. Silent, unresisting, a prey to wind and water, it covers portions of the earth as a mantle of wealth. The strength of empires has for ages been drawn from it, and ever will be. A fertile soil is indispensable to the propitious founding, the continued development, and the perpetuity of a great people. Itself a product of disintegration and decay, it is the theater of organization and growth, the blending boundary between the mineral kingdom and the realm of life.

The earth has existed in substantially its present condition for unknown millions of years. It has reached this state by the ceaseless action of natural forces; forces that are acting today. The conditions that formed and placed soils in the past are operating now in a manner vital to their preservation and use. Hence, there can be no intelligent and continuously effective treatment of soil that will use its fertility and at the same time conserve its possibilities, unless there is an understanding of the means by which soils have come to the condition in which man finds them.—DR. J. T. WILLARD, Dean of Science, Kansas State Agricultural College.

and Permanent Agriculture," states that we can assume for the purpose of a rough estimate that the equivalent of two per cent of the nitrogen, one per cent of the phosphorus and one-fourth of one per cent of the total potassium contained in the surface of the soil can be made available during one season by practical methods of farming. This wise provision of providence makes it absolutely impossible for the farmer to totally exhaust the fertility of his soil.

When the available plant food in the soil is reduced to a point where unprofitable crop yields result, the first thought of the average farmer is almost invariably to have the soil studied chemically so that he may add to it the available plant food which may be necessary to again make it produce maximum or paying crop yields. This might be likened to the man, who, through violating every rule of hygiene and right living, finds his health failing and seeks some patent nostrum which he may take to restore him to his original condition.

The farmer should, as far as possible, adopt a system of farming that will make the vast store of plant food in his soil available. If through analyses he finds that some element is actually so deficient as to make profitable yields impossible this element should be added

in some cheap form and in sufficiently large quantities to make it possible to produce the large crop.

The chemist has no means whatever for separating the available plant food from the unavailable. He can determine, however, for instance, that the surface is 2,000,000 pounds of a given soil of an acre which includes six and two-thirds inches in depth, contains but 900 pounds of phosphorus. It requires 11½ pounds of phosphorus to produce a 50-bushel yield of corn per acre and if through the practice of the most practical methods but one per cent of the total phosphorus in the soil can be made available it would be impossible to produce the 50-bushel yield of corn on a soil in which the surface, six and two-thirds inches, contained but 900 pounds of phosphorus to the acre.

In commenting on this matter of soil analysis, Professor Alfred Vivian, soil expert of the Ohio University, says: "Soil analysis gives practically no hint as to the immediate needs of the soil. It gives the total plant food in the soil but does not give any clue to its availability. The most important thing that the chemist can do is to determine whether the soil is properly supplied with lime by testing for acidity." Rather than make a chemical analysis

of a soil, Professor Vivian has another method of determining its needs in the way of fertilizers. He tests for acidity, notes the physical properties of the soil and then asks the owner a number of questions including such as, the location of the farm, kind of crops grown, whether or not clover can be successfully grown, and the character of the underlying stone. From the answers to these questions he can tell what kind of fertilizer is needed with more intelligence than when simply making a chemical analysis.

Doctor Kedzie of the Michigan Agricultural College, has the following to say regarding the chemical study of soils:

"Chemical analysis of the soil is of value in determining whether the soil is capable of fertility or the contrary; also in determining the measure of its possible fertility. There are certain ash elements which are absolutely necessary for plant growth, in the absence of any of which vegetable growth is impossible; if the supply is relatively limited, plant growth will be limited correspondingly. Hence, chemical analysis of a soil is of importance in determining possible fertility and of the relative fertility which may be secured under favorable conditions. Chemical analysis will not always distinguish between a fruitful and an unfruitful soil. A soil may be unproductive for physical reasons, though it may still contain all the chemical elements of fertility."

It is apparent from the facts above stated that the application of chemical analysis to the soil cannot be looked to by the farmer, who is facing steadily decreasing yields, as the one solution of his difficulties; in other words, it is just as impossible to write a prescription and apply a nostrum to the soil to cure its ills as it is to satisfactorily prescribe to a man who has broken himself in health physically by the persistent violation of the laws of nature. There is no doubt but that soil analyses may be of some help, especially in some cases. In order to convert the soil into its former condition of fertility it is necessary, not only to have a definite knowledge of its chemical composition, but to study most carefully nature's methods of producing and maintaining a soil in a high state of productiveness.

Reliable Breeders Furnish Pedigrees

KANSAS FARMER recently received a letter from one of its readers in Osborne County in which he tells of his experience in attempting to get a start in pure-bred hogs. He purchased last fall three gilts and a boar from a man whom he supposed was a reputable breeder of pure-bred Duroc Jersey hogs. It was his understanding that they were to be registered and that the papers would be sent to him at once. One of the sows failed to produce pigs, and our correspondent was then informed that this one was not eligible to record. According to our correspondent the pedigrees which were finally sent for the other hogs, are apparently incomplete.

Our correspondent did not secure this stock from any of the reliable breeders advertising in KANSAS FARMER, but he wishes us to inform him whether there are any rules of law in connection with record associations which will compel breeders to do a square business. He goes on to say in his letter, "If there is no law or rule to make breeders straighten out their mistakes I will not join the record association."

The beginner with pure-bred live stock should be absolutely sure before purchasing stock that the breeder of whom he buys his foundation stock, is thoroughly reliable. This fact can usually be established through consulting the advertising columns of standard farm papers known to accept advertisements from reliable breeders only. A dishonest man may do business for a time but will be found out sooner or later.

The work of recording associations depends absolutely upon the honesty and reliability of the breeders of pure-bred

stock. The most drastic punishment is meted out by these associations to men who are caught in any act which is not absolutely square and above board in connection with the registration of pure-bred stock. If a breeder attempts to practice any fraud in connection with the registration of pure-bred stock the record association should be furnished the most complete information concerning the transaction. Charges should not be made, however, which cannot be sustained by absolutely reliable evidence.

A man buying pure-bred hogs should never buy breeding stock without demanding that the pedigrees or proper papers for the registration of the animals be furnished at the time the ani-

mals are shipped. Even thoroughly reliable breeders are sometimes negligent in this matter of properly turning over the necessary papers for the registration of the animals sold. The prompt delivery of papers is good business practice on the part of the breeder, since it is bound to create a favorable impression upon his customers. The necessity of writing and asking several times for the papers is of frequent occurrence and such necessity is certain to prejudice the buyer against the breeder.

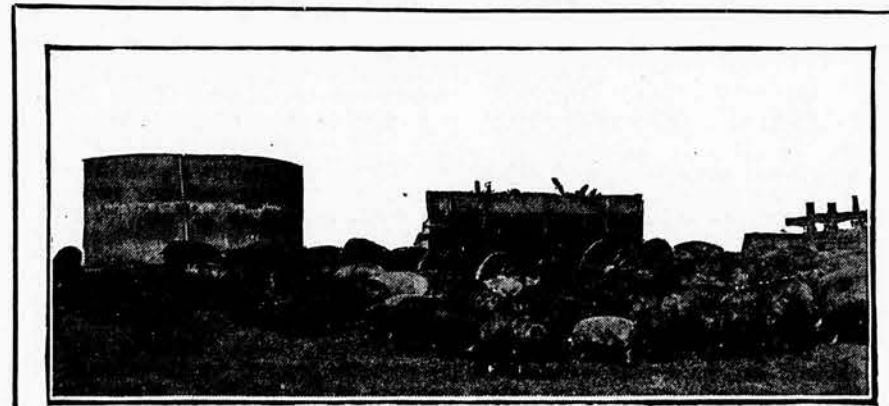
The purchaser of pure-bred hogs has a right to demand that he receive the papers at once and is justified in looking upon the breeder with suspicion who puts him off in this matter. He is also

justified in viewing with suspicion the hog breeder who gives no evidence of having a thoroughly reliable system of marking and keeping track of his own private herd records. The hog breeder who does not have a positive means of identifying at once every pure-bred pig on the place is not a safe man to do business with. We have continually urged the importance of this matter in columns of KANSAS FARMER, and this spring prepared cards suitable for efficiently caring for the private herd records. No breeder of pure-bred hogs should be without such record cards and the proper place for filing them, or a private herd book in which he can keep recorded, with their proper markings, the various litters of pigs produced.

We trust this new beginner in pure-bred live stock will not be discouraged in his efforts to secure pure-bred breeding stock. He should not expect to purchase first class, pure-bred animals for pork prices. It costs money and effort to produce first class pure-bred stock of any kind. The man needing such stock should expect to pay the breeder for his special ability and effort in producing the high class pedigreed animal.

No 1914 License Yet.

Answering A. M. S., Clay County: The 1914 auto licenses will not be issued until July 1. Nothing will be gained by remitting your county treasurer at an earlier date. A license good from this date to July 1, will cost \$2.50. The law requires that your auto be licensed and it may save trouble to buy a license for the unexpired term of the present year and not wait until July 1 when next year's licenses are issued.



THESE HOGS HAVE JUST BEEN MARKETED.—IN SPITE OF HIGH PRICED CORN THEY RETURNED A PROFIT.—WELL BRED HOGS HAVE ALWAYS BEEN THE MOST CONSISTENT MONEY MAKING ANIMALS KEPT ON THE KANSAS FARM.

GENERAL FARM INQUIRIES

Something For Every Farm—Overflow Items From Other Departments

ONE of the readers of KANSAS FARMER in Pottawatomie County, has just written us regarding the advisability of selling some pure-bred hogs from a herd which has recently passed through a siege of cholera. This breeder lost all his brood sows and litters but one; this one, a very fine sow passed through the disease and consequently is immune. She has a splendid litter of six pigs which our reader has assumed are immune, as they were exposed to the disease and apparently were sick for about a week. The question is as to whether the pigs from this litter can be advertised and sold and under what regulations.

Under the present rules and regulations of the Live Stock Sanitary Commission stock hogs cannot be shipped into Kansas or from one point to another within the state unless vaccinated 21 days prior to shipping, unless shipped under strict quarantine or the party receiving the hogs may signify his willingness to have the hogs vaccinated against cholera at destination and his premises quarantined 21 days after vaccination.

Our correspondent could advertise and sell his hogs which escaped the cholera, under these regulations. The Sanitary Commission recommends that all stock hogs shipped from one point to another should, if possible, be dipped in a regulation dip commonly used for dipping hogs. Under the circumstances it would be advisable for this breeder to communicate with the Live Stock Sanitary Commission setting forth all the particulars before advertising or attempting to sell or ship any of these pigs for breeding purposes.

The regulations in effect regarding the shipment of stock hogs in Kansas have for their purpose the prevention of the spread of hog cholera. The rules in their present form are objected to quite seriously by breeders of pure-bred hogs. Missouri breeders have practically ceased advertising and selling pure-bred hogs in Kansas on account of the present regulations. The Kansas Improved Stock Breeders' Association passed resolutions at the recent meeting recommending that present rules regarding the shipment of pure-bred hogs in Kansas be modified.

Beans For Western Farms.

J. C. N., Thomas County, asks if white beans are adapted to his locality.

There are few beans grown in Kansas but the fact is that it will pay many farmers to grow a few acres. There is a demand far in excess of the proportion grown in the United States, and prices range around \$2.50 per bushel. White beans grow well on thin land, use soil moisture economically and are dry weather resistant. In other words, they are a good dry-land crop. This is demonstrated by the Eastern Colorado farmers, many of whom are growers of beans of considerable acreage. Last summer we visited with a Colorado plainsman who grows two kinds of beans as his principal spring planted crops. He grew beans and milo and milked cows and had made money. This man grew 500 to 1,000 pounds or 13 to 16 bushels per acre.

The pods and vines make good roughage for cattle and sheep. Beans also work well into a crop rotation. The Western Kansas farmer can well afford to look into bean growing. The eastern farmer who has a piece of thin land can grow them on it to advantage. A few acres of beans are likely to surprise you in profit.

Smut Treatment For Sorghum.

C. E. L., Dickinson County, asks that we reprint the formula for treating cane seed for smut.

There are two kinds of smut which effect and reduce the yields of all sorghums except the milo. These are head smut and kernel smut. The first is recognized because it makes the whole head a smutty mass and resembles smut in corn and there is no treatment for this kind. Select seed from fields in which it was not present. Kernel smut attacks the kernel of the head and the seed glume is filled with smut instead of grain. This variety is most destructive but can be prevented by a solution of formalin.

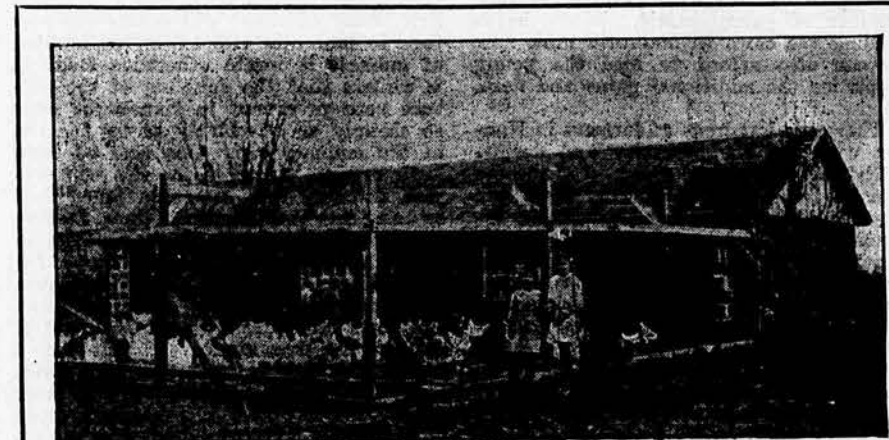
A solution composed of one pound of formalin to 30 gallons of water is placed in a barrel or tub. Formalin can be secured in pound bottles from the drug store at 50 to 75 cents per pound and

should be a guaranteed 40 per cent solution. The seed is placed in gunny sacks and suspended in this solution for about one hour. The sack is moved up and down so that every seed becomes thoroughly wet. After one hour the seed is removed and spread out on a clean floor or canvas to dry. When thoroughly dry it may be kept for weeks or months in clean sacks and then sown. Care must be taken that sacks in which it is placed after treatment are absolutely free from smut, for if they have contained smutted seed many of the smut spores will have remained in the sacks and will get on the seed. This can be prevented either by using new sacks, or soaking sacks in the formalin solution for one hour and drying them before the seed is placed in them.

Destroying Rose Insects.

Mrs. J. T. J., Douglas County, asks how roses may be protected from the ravages of the rose aphid, an insect which works on blooming plants.

A convenient and efficient spray is: One teaspoonful of 40 per cent nicotine solution to 2 gallons of water and one-half ounce of whaleoil soap. The soap should be shaved fine and dissolved in hot water. The mixture should be applied as a fine, penetrating spray. Care should be taken to use the solution at strengths no greater than that mentioned, since injury to the foliage may result through the use of too much soap,



A GOOD HOUSE IS NECESSARY FOR BEST RESULTS WITH POULTRY. THE HOUSE SHOWN IN OUT IS MADE FROM HUMBOLDT, KANSAS, HOLLOW TILE AND IS ON THE FARM OF J. W. HAMM.

or mildew be favored by too strong a nicotine solution. Application of insecticides should be made on the first appearance of the pest which varies from the time that the leaves are put forth until the buds begin to form. Applications should be repeated as found necessary.

Carbolic Acid For Milo and Feterita.

F. M. B., Harper County, asks if the carbolic acid treatment for kafir can be safely applied to milo and feterita to protect the planted seed from the ant.

The dipping of these seeds in commercial carbolic acid will repel the ant as effectively as in the case of kafir, but on account of the seeds being softer and absorbing the acid more readily, the dipping should be done quickly and the surplus acid at once drained off. The seed should be dipped only as used—that is dip and drain a planter box full and plant it. Then repeat. To dip a day's seed at a time is dangerous. The acid treatment is effective for kafir, milo and feterita but carelessness may result in totally destroying germination.

Stallion in Pasture.

An inquiry comes to us from one of our subscribers in Lincoln County, regarding the legality of a stallion running at large in a pasture, thus endangering the mares of a neighbor on the opposite side of a three-barbed wire fence. KANSAS FARMER cannot give positive advice on legal questions. As we understand the statutes there is nothing to prevent a man from running a stallion in his own pasture if he so wishes. If the animal should break over the fence and damage should result, the man damaged would undoubtedly have a case against the owner for the damages resulting. Such action, of course, would call for the services of a competent lawyer to prosecute the case. Collecting such damages through legal

action usually is a most unsatisfactory proceeding.

The stallion involved in this case certainly cannot be much of an animal or his owner would not care to risk him in a pasture fenced with barbed wire with other horses running in adjoining pastures.

Alfalfa and Rye For Silage.

Answering W. H. M., Shawnee County: The Manhattan Kansas, Agricultural Experiment Station will, in a practical way this summer, carefully test the siloing of alfalfa and rye. In these tests the silage will be put up in quantities sufficiently large to feed a considerable number of animals and so the test will in every way be practical.

From laboratory tests at the same station during the past winter these deductions seem warranted: Alfalfa when mixed with rye or green corn can be kept successfully. The mixtures of alfalfa and rye, either finely ground or coarse, kept well. Alfalfa and rye with water did not keep so well. Alfalfa and green corn, both fine and coarse, kept well. Alfalfa, ground finely and packed firmly, kept well. Coarsely ground alfalfa both with and without water, did not keep well; and some was true of rye.

Owing to the large amount of protein in its composition, alfalfa putrefies when placed in a silo. By adding green corn, rye, or some other green stuff rich in

feeding of alfalfa to growing pigs, it was estimated that the alfalfa produced on an average acre produced 1,670 pounds of pork; this statement, however, does not mean that if a bunch of pigs should be turned on to an acre of alfalfa and given no supplemental feed this acre of green alfalfa will produce 1,670 pounds of pork. What was accomplished was to increase the production of pork over what it would have been through the feeding of grain alone to the extent of 1,670 pounds by the addition of green alfalfa produced on one acre.

The running of pigs on alfalfa pasture without grain is almost never advisable from the profit standpoint. Mature hogs—a bunch of brood sows for instance—may often be maintained on alfalfa alone with profit, but the growing pig cannot consume enough of the forage to secure the necessary nutrient material to make rapid growth. A limited amount of grain should always be fed and in some cases it is a question whether it would not pay to supply a fairly liberal ration in addition to the pasture.

When grain is extremely high priced during the pasturing season and there is a prospect for much lower grain prices in the fall, the limiting of the grain ration would be more advisable from the profit standpoint. With the prospect of grain being as high in the fall as during the pasturing season, pigs certainly should have their grain allowance even on alfalfa pasture.

Cowpeas as Catch Crop.

Inquiries have been made regarding the advisability of using cowpeas as a catch crop after wheat, the purpose being to increase the fertility of the soil. Much of the soil of Kansas is deficient in organic material and for that reason is not as productive as it might be. Cowpeas have been grown very successfully after wheat, making a considerable amount of growth so that when plowed under in the fall a great deal of organic matter has been added to the soil. The Manhattan, Kansas, Experiment Station made trials along this line extending over five years. The cowpeas were drilled in after the wheat was harvested and the ground plowed and seeded to wheat again in the fall. Each year the plot where the catch crop of cowpeas was plowed under gave an increased yield over the check plot, the difference in yield gradually increasing each year. The first year the difference in favor of the cowpea plot was only about one bushel; the fifth year this plot produced nine bushels more wheat per acre, the average increased yield for the four years being four and one-third bushels per acre.

This is not a practical rotation to follow, however, on the average farm, since in average years it is very difficult to secure a proper seed bed for wheat after a crop of cowpeas has grown through the summer and has been plowed under in the fall. In favorable seasons in Eastern Kansas it might be accomplished very satisfactorily. A more practical way of utilizing the value of a cowpea crop grown in this way, is to plow it under late in the fall and to plant corn the following year. Handled in this way cowpeas can be allowed to grow as late in the fall as possible and by spring they will be thoroughly decomposed and the ground in splendid condition for the planting of corn. In a period of four years an average increase in the corn yield of nine bushels per acre has been made.

In using cowpeas in this way they should be seeded as soon as possible after the harvest. The ideal method would be to follow the binder with a disk drill so that the cowpea seed will be sown when the harvest is completed; quite often, however, the soil is not in a condition to seed the peas successfully in this manner, and what is usually a more serious hindrance to this method is the shortage of help at harvest time. Peas should be seeded, however, as soon as possible after harvest, thoroughly disking the ground and in some cases perhaps giving it a shallow plowing.

Some beef is still coming to New York from Argentina but the amount has dwindled to about 3,000 cattle weekly and will likely continue to decrease. Frozen beef cannot be successfully handled at this time of the year and as soon as grass cattle from this country begin to come in, the Argentina product will have keener competition.

carbonaceous substances Professor Swanson believes that this putrefaction can be prevented.

If the results from this experiment are found to be practical on a feeders' scale, they will be of value to the alfalfa grower. The first cutting, usually made during the rainy season of the year, can be placed in the silo. This will prevent the loss due to rain. The silage can be fed in the late summer or early fall, when the grass begins to fail and the fall forage crops are not yet ripe.

Rotation for Colorado Plains.

H. L. McC. asks for a crop rotation for El Paso County, Colorado.

The editor of KANSAS FARMER is not familiar with Colorado conditions except as he is able to observe in comparison with conditions in Western Kansas so we answer by giving this rotation which in Logan County, Colorado is regarded as successful:

First year, summer tillage; second year, fall wheat; third year, corn or other row crop; fourth year, spring grain.

Then begin over again with summer tillage. A rotation exactly like the above, but with cane the fifth year, has also been successful. Most successful upland rotations contain one year fallow or summer tillage in every three to five years, as a rule.

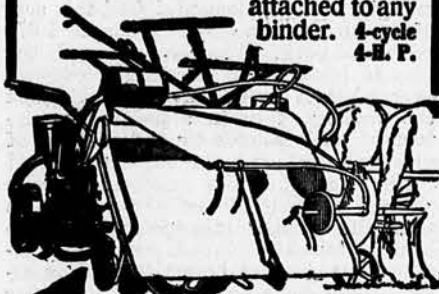
Grain to Hogs on Pasture.

The question as to how much grain to feed pigs on good pasture is often asked. A great many have maintained that pigs on alfalfa pasture will return more profit at the end of the year if fed no grain at all during the pasture period. While alfalfa makes a splendid pasture for hogs it will not give the best and most profitable results without being supplemented with some grain.

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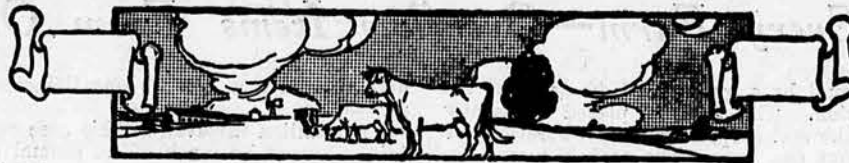
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DAIRY



The milk cows are all on pasture and the receipts of cream at the creameries indicate that every cow is doing her best to exceed all previous records. There are more cows being milked this spring than for several seasons past and the volume of cream now being sold is not a positive indication that pastures are better than usual. KANSAS FARMER correspondents from every county in the state report that "pastures were never better" at this season of the year. However, we have had reports from individual farmers, to the effect that their grass is poor and venturing the opinion that the hot, dry weather of last summer was damaging to pastures. This, however, is a phase of the subject which cannot now be discussed. So much are the pastures depended upon in Kansas for all classes of cattle, that summer feeding is scarcely given a thought. Yet it is well known that almost every year the late season finds short grass and a time when the milk cows go "dry" and stock cattle are barely able to maintain themselves without loss of weight. The matter of summer feeding a considerable herd of stock cattle is not a subject for discussion in the dairy columns of KANSAS FARMER, but the man who has 15 to 20 head of young stock along with milk cows, can apply with profit the principles of milk cow feeding to that number of young cattle. While he is feeding the cows to maintain milk flow he can also afford to feed the young stock for the additional gains and flesh.

There are hundreds of farmers in Kansas who feel the necessity and desirability of depending upon the income from a little herd of milking cows but who cannot make milking profitable because of the short and limited pasture season. With them there is a question as to whether or not cows can be profitably fed and milked during the pasture season. To the man who gives profitable cow feeding a thought, the question seems near absurd because all farmers, whether milking cows or not, are compelled to feed during the winter season when roughage is of poor quality and least efficient in milk production and when cows give the least milk. During the winter season butter fat sells at a higher price than in summer but not at a sufficiently high price to offset the extra cost of production when considered in connection with conditions which mitigate against free and economical production. If it will pay to produce milk from inferior feed in winter, why will it not pay to produce it in summer when the crops of the field are succulent and most efficient in producing milk. The reply, in most instances, to this question is that labor in winter is not so valuable as in summer that there is more time for feeding. The fact is that if a larger number of cows is to be milked in Kansas and if more live stock of all kinds is to be kept, the problem of summer feeding to supplement limited pasture acreage or to supplement short grass in the fall, must be worked out. Profit cannot come from milking cows or from growing other cattle stock unless these animals be well fed the year around. In Kansas, we have not yet found a pasture grass which is satisfactory and which is even near equal to the native wild grasses. It may be that such grass will be found in the years to come but no farmer can afford to await its coming. Even with such grass, if we had it, there are lands too valuable to be used as pasture and which condition necessitates careful inquiry into other summer feeding methods.

The cutting and feeding of green crops, called soiling, was one time the only summer feeding and that method involved an amount of labor during the busy season to which the general farmer would not submit. While soiling is practical for a short period in order to maintain the milk flow or animal growth pending the early return of better pasture, it is in this country not practical for any extended feeding period. It seems that the silo for summer feeding and to meet other conditions above described, is as well adapted as for winter feeding. It is no longer a question as to whether the farmer should have a silo for winter feeding. This question has long since been settled by the farm-

ers of Illinois, Indiana, Iowa, Wisconsin, Minnesota and every other state east of these. Kansas farmers are rapidly settling upon the silo as the most economical and convenient means of winter feeding. The summer silo will supply the need following limited pasture acreage, land which has become too valuable for pasture and will also supply the need for feed between good pasture and the time when the winter feeding season begins. Silage can be fed in summer as in winter, with a minimum of labor and a maximum of results. In summer, as in winter, the feeding of the silage is the smallest chore in connection with the care of stock. A half hour at the outside, is ample time to feed in bunks all the animals maintained on the average farm, if the lot is conveniently located with reference to the silo and a convenient arrangement is provided for the delivery of silage. On many farms the animals in summer can be supplied with a half ration of grass most of the summer and with a half feed of silage—15 to 20 pounds per day for a mature animal—and so be fully nourished. Such feeding will result in the cow maintaining her milk flow and in the young animal making a normal growth. By such methods of feeding the pasture acreage for each farm can, in effect, be doubled, or in other words, a half ration of silage will enable the pasture to maintain two times the number of animals it would otherwise feed. It is certain that the doubling of the pasture acreage cannot in Kansas be done so cheaply or effectively as by the use of the summer silo. One acre of corn, kafir or cane placed in the silo will provide three or four times as much feed as an acre of pasture, thus feeding three or four times as many animals as an acre of pasture. These crops fed through the silo assure the maximum live stock carry capacity of the land and the most economical use of the land if devoted to live stock. If you would better feed the animals you now have, if you would feed them at a greater profit, and if you would maintain more animals on your farm, think—and think seriously about the use of the summer silo.

While the summer silo idea may be new to many KANSAS FARMER folks who read these columns, it is in fact not a new idea in Kansas. There are scores of farm dairymen who are using the summer silo effectively and who are more than pleased with the results obtained. We chance to know personally only four or five dairymen who are feeding silage exclusively during the summer season. These dairymen have no pasture at all. They have, however, a lot in which there is shade and water and in which the cows are made comfortable and contented. The twice a day feeding of silage is, under these conditions, the only feeding care. But on the large proportion of farms on which silage is fed in the summer there is limited pasture and which in our mind greatly improves the feeding plan. Cows take naturally to grass. They crave it, and the conditions under which cows pasture are those which tend to comfort and contentment. So we think that the man who has even limited pasture and who is convinced of the efficiency of the summer silo, cannot afford to plow up the pasture and resort to silage exclusively. Not long since we visited a farm in Shawnee County on which there was abundant bluegrass pasture. In spite of the fact that the cows were on this pasture all day long and during the night, the cows were eating 12 to 15 pounds of silage per day. This was fed in equal quantities in the barn night and morning. The silage was being used as a means of coaxing the cows into the barn for milking and it was substituted for a light grain ration which had formerly been used for this purpose. The dairyman was convinced that the silage consumed was just that much in addition to what they would eat as grass and was satisfied that he was getting good pay for the silage so fed. This dairyman was thoroughly imbued with the idea that the more feed his cows could be induced to eat the more milk he would get.

While on a recent visit to the Man-



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Kalamazoo SILOS

"Best by Every Test" The "KALAMAZOO" is the silo for you! It answers every question—meets every demand that can be made in use. Your choice of Tile Block or seven kinds of wood. Thousands of satisfied users praise its perfect construction. Special improvements, found in no other silo, make the "KALAMAZOO" the one you need. Investigate now!

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KALAMAZOO TANK & SILO CO.
Kalamazoo, Michigan
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Settle the Silo Question Right

CEMENT SILO BUILDERS

Should write for information about my new forms and form lifter. Easy to operate, safe, and insures perfect work. I will figure with you on building your cement silo. Write

J. M. BAIER, Elmo, Kan.
(Shipping Point, Abilene, Kan.)

STANDARD PAPERS

For the farmer and breeder for sale at this office. Send for catalog.
KANSAS FARMER, TOPEKA, KAN.

hattan Experiment Station, accompanied by two friends, each an owner of a dairy herd, we inspected the station herd which was at the time on pasture. Our friends remarked to Professor Reed that a large number of cows was being pastured on the limited acreage and the two gentlemen could not well understand why the pasture was not eaten out more closely. Later the gentlemen were advised that silage was fed night and morning and that the station could not maintain a dairy herd of such proportions unless the available pasture could be supplemented with silage. The silage fed was that of kafir and which last season produced about seven tons of silage per acre on the upland of the station farm. It requires no diagram to show the man who desires to keep more stock or who needs more and better feed for the stock he already has, that the summer silo affords the best means yet known for supplying such feed.

Seven of every ten farmers realize that a farm is not a farm unless it has its cows and calves. Most farmers admit that the more cattle they can keep, the better. This, as viewed from the standpoint of assured income and profit and as a means of distributing the labor of the farm throughout the year and relieving the severe stress of crops saving which work is concentrated in six weeks to two months of the year. The silo is not an experiment. It is the tried and proven up to date method of saving feed at its highest value. In proportion to its cost it is the most efficient and profitable farm structure. The man who builds a silo of sufficient size to accommodate the stock he has on hand will save the price of that silo each year.

The Cow and the Man.

An article by A. A. Selden with the above heading, recently appeared in the Pacific Coast Review. The writer had been studying the annual report of the Dickinson Cow Testing Association which appeared in KANSAS FARMER of March 21. His conclusions are most aptly stated and are well worth the careful consideration of every man in Kansas who milks cows. The writer says: "This again goes to show that the contention that I have been making that there is more in the man and his ability to get food into the dairy cow that will show results at the milk pail than in the breeding of the cow. The dairy cow is a machine for the production of milk and her capacity as a milk producer depends on her capacity to hold feed.

Breeding may develop in certain lines capacity for feed, hence dairy cows with their ability at the pail. As we are after the best machine we can get, we choose those breeds that have been bred for that result. But if we do not make use of that ability to develop capacity we cannot expect any better results than from the scrub.

"The average cost of the feed for the ten best cows in this test was \$44.35 and the profits were \$96.43 for each cow. The average cost of the feed for the ten poorest cows in the test was only \$28.44 and the profits were only \$15.23. The question at once presents itself, why did not these poorest cows eat as much feed as the best and if they had, would they not have had as good a showing of profits?

"It is my claim that it was largely, if not wholly the fault of the men behind these cows that was the cause of their poor showing. If they had done their duty by these cows they would have done their duty by them. This circular shows the pictures of the best and the poorest cows in the test. The best ate \$55.91 worth of feed and produced 546 pounds of butter fat and she was a grade Holstein. The poorest was only a common cow, but she shows some signs of Jersey. She was dry seven months in the year. It shows the picture of another common cow that was well fed and was a persistent milker and made a splendid profit for her owner—\$80. The conclusion reached by the writer of the circular coincides with my opinion, for he states in reference to these cows' production that 'there are many Kansas cows that will do as well if given the opportunity.'

"It is only the owner of the dairy cow that can give her the opportunity, and the motto of the dairyman should be 'more attention to the individual cow.' Development of the feeding capacity of each individual in the herd is the important factor, and this can only be accomplished to its full extent by the use of different kinds of feed in different proportions suited to the needs of the individual cow. She always pays back in money the care she receives at the hands of the dairyman.

"For every dollar's worth of feed that the best cow ate she gave back over \$5 in profits. It is in this extra feed that the profits of the dairyman lies. He must, to make the best success, keep the dairy cow everlastingly at her business of feeding."

To remove stains from kitchen knives rub them with a piece of potato dipped in brick dust.

Do You Want Harvest Hands? Do You Want Work?

KANSAS FARMER will again act as a clearing house, for harvest hands. Last year the plan worked like a charm. Hundreds of farmers needing help were placed in touch with hands. Hundreds of hands were sent to farmers needing them. Men and hands within twenty miles of each other were brought together through filling out the harvest hand coupons which appeared in KANSAS FARMER.

At the date of this writing indications are that a record breaking wheat crop will be harvested. The need for help in saving this great crop will be most urgent.

KANSAS FARMER coupons are printed below. You are invited to avail yourself of our services to the fullest extent. They are absolutely free.

Farmers wanting harvest hands, fill out this coupon and mail at once to KANSAS FARMER, T. A. Borman, Editor, Topeka, Kansas.

When will your harvest begin?.....
Number of men needed: Shockers.....; pitchers.....;
stackers.....; extra teams.....
What have been the prevailing harvest wages per day?.....
Will you need men after harvest and at what kind of work?.....
Name.....
Address.....R. F. D.....State.....
Telegraph Office.....Telephone Address.....

If you want to work in the harvest fields, fill this out and mail to KANSAS FARMER, T. A. Borman, Editor, Topeka, Kansas.

Name.....Age.....
Occupation.....Have you ever worked
in the harvest fields or at outside day labor?.....
Can you go to any county?.....Do you want to work after
harvest, and what kind?.....

If you have a team, or harvesting outfit, and want to give additional information, write on separate sheet. We will endeavor to put every man who applies, into direct communication with the farmer nearest him, needing help.

KANSAS FARMER will make no charge whatsoever, to anyone, for the service rendered, unless you ask information by telegraph or telephone, in which case you will pay the charges.

Fill out one of these blanks and mail at once to KANSAS FARMER T. A. Borman, Editor, Topeka, Kansas.

Seeing the Difference BETWEEN THE DE LAVAL AND OTHER Cream Separators

IT DOESN'T TAKE AN EXPERT KNOWLEDGE OF mechanics or a long working test to tell the difference between the De Laval and other cream separators.

ON THE CONTRARY, WITH A 1914 DE LAVAL machine placed beside any other separator the difference is apparent at first sight to the man who never saw a separator before.



IF HE WILL THEN TAKE FIVE MINUTES to compare the separating bowl construction; the size, material and finish of the working parts, particularly those subject to wear and requiring to be occasionally taken apart and put together; the manner of oiling, and everything which enters into the design and construction of a separator as a simple durable machine, he will still further see the difference.

IF HE WILL GO A STEP farther and turn the cranks of the two machines side by side for half an hour, particularly running milk or water through the bowl, he will see still more difference.

AND IF HE WILL TAKE the two machines home, as every De Laval agent will be glad to have him do, and run them side by side in practical use, the De Laval one day and the other machine the

next, for a couple of weeks, he will see still greater difference in everything that enters into cream separator practicability and usefulness.

THE MAN WHO TAKES EVEN THE FIRST STEP INDICATED IN seeing for himself the difference between the De Laval and other cream separators doesn't put his money into any other machine one time in a thousand.

THE COMPARATIVELY FEW BUYERS OF OTHER SEPARATORS are those who merely read printed matter claims or listen to the argument of some dealer working for a commission, and who do not think it worth while to see the difference for themselves.

THE WISE BUYER OF A CREAM SEPARATOR TODAY DOES SEE this difference when buying his first separator, while the unwise or careless one usually finds it worth while to do so when he comes to buy a second separator a year or two later.

EVERY DE LAVAL AGENT CONSIDERS IT A PRIVILEGE TO show the difference between the De Laval and other separators, and to afford every prospective buyer the opportunity to try out and prove the difference to his own satisfaction, if on first examination he feels the slightest doubt about it.

THAT'S THE REASON WHY FOUR BUYERS OUT OF FIVE are buying De Laval Cream Separators in 1914 and why the use of De Laval machines will, before long, be nearly as universal on the farm as already is the creamery and milk plant use of power or factory separators.

The De Laval Separator Co.

165 BROADWAY, NEW YORK 29 E. MADISON ST., CHICAGO
50,000 Branches and Local Agencies the World Over

Kansas Farmer Sells Groenmiller's Stock.

George Groenmiller & Son of Pomona, Kan., write as follows, under date of May 3: Our Red Polls are coming through in fine shape. The demand for breeding stock has been greater than the supply. We have had inquiries from Pennsylvania to Utah, from Minnesota to Texas. Some of our recent sales have been a bull to C. A. Cupp, Pomona, Kan.; a bull to W. E. Price, Quenemo, Kan.; a bull to J. S. Carney, Pomona, Kan.; a bull to Stockwell & Lawrence, Paola, Kan.; a bull to George V. Sears, Ochelata, Okla.; a bull and five cows to I. N. Rutherford, Sulphur Rock, Ark.; six bulls and eleven heifers to H. C. Wade, Batesville, Ark.; a bull to A. A. Renard, Mound Valley, Kan., and 16 heifers to H. D. Mellen-

Bruch, Osage City, Kan. Most of these inquiries for stock have come through Kansas Farmer. We still have a dozen head of extra good young bulls six to ten months old, for sale. Could also spare a few cows and heifers. We also sold a 1,870-pound 2-year-old Percheron stallion to S. W. Spangler, Pomona, Kan., that is a show horse. We have a number of extra good ones left that weight 1,800 to 2,000 pounds at two-years old; all blacks, and raised out in the open with plenty of exercise. Enclosed find photo of our concrete silo 16 x 55 feet, that paid for itself the past winter in the saving of feed.

You will find a lot of bargains on Kansas Farmer's Classified Advertising Page this week. Don't fail to carefully read that page.

DON'T RUN THE CHANCE

of losing payment on your labor for the year. Protect your income by insuring your growing crops. Can you afford to put off protection when hail is due at any time? You cannot afford to risk losing your crops nor to gamble their value against the very small cost of our hail insurance. Buy a policy now. Lay aside all worry over your income. We can sell you full protection at a low cost.

A POLICY IN THIS COMPANY

means that your losses, if any, will be paid in full. The record of this company has been built up on prompt payment of losses—honest and prompt adjustments. We are providing safe and reliable hail insurance to Kansas farmers. The same kind of hail insurance that has made hundreds of satisfied policy holders for this company. Let us protect you. Don't wait for the storm, but write us or see our agents at once.

THE CENTRAL NATIONAL HAIL INSURANCE COMPANY

TOPEKA, KANSAS

When Buying HAIL INSURANCE You Should Consider

The cost of your policy; the time your insurance takes effect; when and how will you get your money in case of loss.

THE HARVESTERS HAIL INSURANCE COMPANY is a reliable and responsible company. It is a Kansas company, operating under the direct supervision of the Kansas Insurance Department, and furnishes the State of Kansas bond in the sum of

\$50,000 Fifty Thousand Dollars \$50,000

This company furnishes a policy of insurance that insures, and costs no more than a policy with any other company. It pays regardless of what percentage of loss occurs.

The application takes effect, and your insurance is in force at the time the application is written.

This company has always promptly and honestly adjusted its losses and paid them in full in the field at the time of adjustment. No other company has nor can do more than that.

Ike S. Lewis, Superintendent of Insurance, in an unsolicited letter dated April 9, 1914, addressed to the Secretary of The Harvesters Hail Insurance Company, says: "I wish you success, and in this particular I desire to commend your company for the record it has made in the past in the way of settlement of its claims."

There has never been a complaint filed with the Insurance Department against this company by any of its policy holders who have sustained a loss.

Thousands of satisfied policy holders, and especially those to whom we have paid losses, and who continue to insure with this company, is our endorsement, and is the best endorsement any company can have.

INSIST UPON HAVING A HARVESTERS HAIL POLICY.
Write Us or See Our Agent.

The Harvesters Hail Insurance Company
Osage City, Kansas.

"THE OLD RELIABLE" KANSAS MUTUAL HAIL ASSOCIATION

will protect you and **PAY YOU** if you have a loss. The only Mutual Hail Insurance Company in Kansas organized prior to 1911 that has always paid losses in full on the cash plan. Your crop insured when you sign the application. Congested risks not accepted. Any Hail loss paid; we do not ask you to carry five per cent of your own risk. Losses settled on their merits. Rates based on careful experience. Policy Holder's liability protected by Kansas laws. Absolutely safe and full protection throughout the life of your Policy. Let us hear from you.

Send for the 1914 Hail Storm Dates

Latest complete hail schedule for this year, sent **FREE** on request to any Kansas farmer. Gives information that is decidedly important to every grain grower. Just send your name on a postal to Desk 1.

KANSAS MUTUAL HAIL ASSOCIATION, Sterling, Kansas

DON'T RISK ANOTHER DAY!

Insure your growing crops in a safe and conservative company whose officers are bonded to the State of Kansas for \$50,000, which guarantees you safe and full protection throughout the life of your policy.

THIS IS THE COMPANY

that first put the insurance in force from the moment the application was signed and the premium paid—always has adjusted all losses, no matter how small. We ask for your application on our past record. Write us for full particulars, or see our agent before you insure your grain.

THE GRAIN GROWERS HAIL INSURANCE COMPANY
TOPEKA, KANSAS

Conserve The Wheat Crop

*Don't Throw Away Your Years Labor—Expeditions
Harvesting—Hail Insurance—Safe Storage*

THE talk of town and country at this writing is wheat, wheat. The man who has a field of growing wheat is busy arranging for the harvest soon to begin. The man who has no growing wheat has the "fever" and will sow next fall. Be it understood that there are localities in Kansas which grow little wheat. The wheat crop of Kansas is near made—it is as certain as any crop which has not been actually harvested and safely stacked. The only harm which can befall the crop is hail—which damage is always local—and delay in harvesting through shortage of help or wet weather during harvest time. There will be no serious damage from insects, speaking generally, although there are localities in which the hessian fly infestation is serious and some wheat has been plowed up. But this is a local condition and a few thousand acres, more or less, are unnoticeable in general results. In the western third of the state some wheat has blown out, and while this condition seriously affects individual farmers, the damage from this source this year will not be noticeable in final results. The chinch bug is expected to do some damage in localities, but unless the weather should be extremely dry this damage will be small. So, the outlook is for an acre yield far above the average for the largest acreage of growing wheat Kansas has ever had. The "experts" are guessing at 130 to 160 million bushels. The railroads are preparing to handle a crop based on these estimates.

I am strongly in favor of covering the growing crop with hail insurance. It is good business to insure the barn or residence against fire or tornado or both, it is good business to insure the growing crop. The wheat about ready for harvest represents, on many farms, the only source of large income until a year from this time. On many farms it represents the entire labor of the farmer, his help and teams for a year. On scores of farms the wheat crop is each year the crop of main dependence, and this is true to a greater extent this year than for many years past, and it seems short-sighted, indeed, to fail to protect it. Hail insurance is not expensive in proportion to the interest involved. The premium is about 5 per cent of the insured value. That is, if you are figuring on \$500 worth of wheat, the cost of insurance will be about \$25. In other words, one load of wheat sold at 50 cents a bushel, will pay the premium. Can you afford to take the risk? In view of the amount at stake, I think not. It may be that some one has figured on liquidating a debt with this crop and which obligation cannot be renewed. Failure to secure renewal might result in forced sacrifice of other property, seriously crippling the farmer. Insurance might take care of this very situation. Not long since I heard of a western wheat grower who owed a general merchant \$300 on grocery and clothing bill. The merchant insured the growing crop as a protection to himself. This is the way a merchant looks at this insurance business. To be sure, the western section of the state is more subject to hail than farther east, but, as in the case of lightning, you can never tell when or where it will strike.

You might not see a hailstone all summer long and might feel that your money had been thrown away, but, remember that you had the protection.

Just as soon as the harvester has cleared a spot for the thrasher, the chug of the engine and the hum of the cylinder will be heard. The grain will be rushed to market. The local elevators, railroads and warehouses will be taxed to the limit in handling the new crop. The tremendous influx will soon fill the available storage space and thousands of carloads will be stored on side tracks. By the time this point is reached the outlet will be clogged and the prices depressed accordingly—not because there is no demand or market for wheat, but because no one can handle it just then. But, if the wheat can be bought cheap enough dealers will erect temporary storages. To do this, they must buy it cheap enough to warrant the expense of handling, storage cost, insurance, etc., and this will represent money which the grower should have had and could have had if his affairs had been so adjusted that he could have held the crop. Many farmers will be compelled to sell enough

wheat to realize some money, but few will be compelled to sell their entire crop. So, I say, fix up the granaries and prepare to hold a part of the crop. I have seen the time when my mother moved the furniture out of the front room to accommodate the wheat. I have known other families to do the same thing. That may not be necessary these days, but it is one way to prevent constructing more granary room. Do not forget the portable grain bin as a means of saving the crop. It can be placed conveniently in the field, reducing the hauling distance to the minimum. It reduces the fire risk to almost nothing, because the bin itself will not burn and because it is in the field far removed from other buildings. Plow a fire guard around the metal grain bin and the crop is as safe as it is possible to make it. The portable grain bin is a great thing. We know of growers who use it exclusively for storage—liking it much better than frame granaries.

Of course, all growers cannot thresh immediately after harvest. Hundreds will want to thresh out of the shock and will wait weeks—maybe months—on a machine. During this time the crop will be subject to damage by the elements. If the after-harvest season is wet the grain will bleach and grow and an actual dollar-and-cent damage occur. If threshing is not done immediately after harvesting, stack the grain. The grain can be stored in the stack with reasonable safety and it can be insured against fire. Stacking and later threshing will obviate the necessity, maybe, of additional granary room. Do the stacking well. If you are a stacker, do this work yourself. If you are not a stacker, hire a good one—it pays to stack well. Plow fire guards around the stack. If you let the grain set in the shock, plow a fire guard around the whole field and move enough shocks to plow guards across the field. Keep in mind that this may be your first big crop in many years and you can't afford to lose it. I do not want you to lose it and that is the justification for these lines.

But what about the harvest? Be ready for it. Have the header outfit organized and ready to go into the field the minute the grain will do to go into the stack. The binder can be started a few days sooner than the header. Some growers will start the binder and cut until they can use the header. That is a good plan. But, again there is the possibility of the field being too wet to permit cutting when the grain is ready. It does not require a great deal of rain some years to mire the bull wheel and you can't use horses enough to make the machine go. Fortunately, the gasoline engine comes to the rescue at this time. An engine of special construction is made for the header and binder. It furnishes the power to operate the machinery, taking the drive off the bull wheel and the horses. The horses push the machine over the ground—that's all they do. I have seen harvesting going on smoothly with the use of the engine when it was impossible otherwise. But, aside from wet weather, the engine is an important factor. An engine-driven binder or header will cut two times as many acres in a day as will the common method. In heavy fields or in hot weather the horses walk along at a lively gait, the engine doing most of the work. The engines are not expensive and are important in expediting the harvest. They can be used for other purposes and every farm needs an engine anyway.

All this points to the conservation of the wheat crop. My experience tells me that no man can afford to plow, sow and grow a crop and at the last minute lose it. Human ingenuity has ever been active in developing means and methods of conservation and much of the effort has rebounded to the interest of the farmer. Harvesting of today is vastly different from that of twenty-five or even fifteen years ago. The farmer today does not need to take the chances of those times. These suggestions show where he can to a great extent eliminate chance. Here is hoping that the wheat crop of KANSAS FARMER folks will be saved in perfect condition and that there will be no regret because you failed to do the best you know.

A. B. Brown

FARM ITEMS

Alfalfa Mills Sell Low.

Alfalfa mills selling to farmer stock companies at \$6,000 to \$8,000 each, were a few years ago required to keep the community up to date in the front rank of enterprise. Many were sold at these figures—now the same mills are selling at sheriff's sale at \$1,000 to \$1,500. It is the old story of the stock company creamery of which Kansas bought its share of experience 25 years ago. If some fellow thinks your community needs a mill or a creamery let him put his own money into it and operate it at his own risk.

Fish Ponds Need Vegetation.

Farmers who have planned fish ponds for this year should be sure to supply plenty of moss and other vegetation, according to State Fish and Game Warden Dyche.

"It is not that all the fish live on vegetation, though some, especially the goldfish, do," said Professor Dyche the other day. "But the mosses are the homes of literally millions of small crustaceans, mollusks, 'water fleas' and other minute forms of animal life. The fish live on these. A pond without vegetation will not be of much value as a fish pond. Kansans who want to raise fish would do well to write for copies of the fish pond bulletin now being printed at the state printing plant. You can't go into the business of raising fish and go it blindly with any hope of success any more than you can go into any other business."

Miami Secures Capable Agent.

Miami County, Kansas has taken up the organization of a county farm bureau or improved farming association, and has been fortunate in securing a man whose previous training and experience especially fits him for the work of a county agricultural agent.

O. C. Hagans, who has recently been appointed agent for this county, was born and raised on the farm, staying on his father's farm until twenty years old. The earlier part of that time was spent on a farm in Cass County, Missouri, and the latter part in Lane County, Kansas. He attended the rural public schools and the county high school at Dighton, Kansas. During the school year of 1905-06 he taught in the rural schools of Lane County. In the fall of 1907 he entered the Kansas Agricultural College, completing his course in 1911. During his summer vacations he worked on his father's farm in Lane County.

Silent Subsoiler.



ONE YEAR OLD SWEET CLOVER ROOT GROWN IN MAYES COUNTY, OKLAHOMA IN 1913.

Since leaving college Mr. Hagans has been instructor in Science and agriculture in the Atchison County High School at Effingham, Kansas. In addition to his school work he has done considerable demonstration work among the farmers of the county, has conducted demonstration plats in connection with the school, and has taught in the teachers' institute for the last two years. Mr. Hagans' farm experience, agricultural training, and practical work after leaving college, both in demonstration work and in extension work among the farmers, gives him unusual fitness for the position of county agent in Miami County.

About Permanent Road Work.

If you have any influence in the kind of road work done in your county, use your effort to have the work done permanently. Kansas spends much money each year replacing temporary culverts and bridges and in working over grades. It should be the practice to make any extensive improvements or alterations only after securing the advice of a competent highway engineer. The temporary employment of such an official is quite practicable; and the returns will be many hundred per cent on the outlay.

The loss of bridges and culverts in a relocated and graded road is generally heavy. Most constructions, even if found in fairly good condition, are totally destroyed by removal. A conspicuous exception is the corrugated iron pipe. When made from high purity iron, these culverts are but slightly affected by rust, and can thus be rightfully classed as permanent improvements, but they are also ideal for a temporary location, as they suffer no damage in being dug out and relaid. Brick, stone or concrete should only be employed where the location is fixed for all time, and where also an absolutely rigid foundation can be secured.

FIELD NOTES

James C. Hill of Holton, Kan., a member of the Jackson County Breeders' Association, has some choice Percherons. Anyone wanting Percheron horses will find it to their interest to investigate this offering. Look up his card in the Jackson County Breeders' Association section and write him for particulars.

Fred Chandler of Charlton, Iowa, always has high class Percherons for sale. His offering of two, three and four-year-old stallions, some of them sired by 2,400-pound imported stallions, are the kind that make valuable breeders. They are farm-raised and he is offering them at farmers' prices. Look up his card in Kansas Farmer and write him for prices.

M. M. Hendricks of Falls City, Neb., is offering some choice Duroc boars at bargain prices. Duroc breeders wanting boars of choice breeding should write Mr. Hendricks for pedigrees and descriptions of these boars. They are right in every way and priced to sell quick. Please mention Kansas Farmer.

John Coleman of Denison, Kan., owner of Capitol View herd of big type Polands, has a great lot of February, March and April pigs this year. They are the big, smooth, easy-feeding kind and Mr. Coleman will have an offering this year that should attract breeders wanting Poland China breeding stock with size and quality and carrying the best blood of the breed. He is also offering two August boars sired by Ross Hadley and out of Fann's Choice. These boars will weigh around 200 pounds and Mr. Coleman is offering them at \$20 per head for quick sale. Write for description, mentioning Kansas Farmer.

C. L. Branic's Polands.

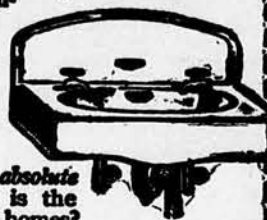
We are requested to claim the fall sale date, October 27, for C. L. Branic, owner of Parla Springs herd, Hiawatha, Kan., at which time Mr. Branic will offer a draft of his large type Polands to the public. Mr. Branic has owned and sold a number of very valuable hogs, one of which was O. K. Lad, now at the head of Roy Johnson's herd at South Mound, Kan. This hog is making good in Mr. Johnson's herd, and is only a sample of the good kind bred and grown by Mr. Branic. At the head of his herd is a very promising young boar, Melburn King by King Price by Long King's Equal; his dam was Blue Valley Hadley 135973, bred by John Blain. Mr. Branic now has 60 spring pigs coming along nicely and several sows to farrow in this month. Please make note of sale date and watch for further announcement later in Kansas Farmer about this sale and herd.

Attention is called to the card of Dr. George C. Mosher of Kansas City, owner of Hillicroft herd. The two-lines of foundation stock of thoroughbred Holstein cattle and Hampshire hogs which Doctor Mosher has been building up for several years, include some of the most noted families of both cattle and hogs. The Holsteins are from the celebrated champion, Sarcastic Lad breeding, and careful mating with Hengerveld and King Walker blood is producing some fine individuals which must make an impression on the herds of the Southwest, for which they are being developed. The Hampshire hogs include Messenger Boy, General Tipton and other well known champion strains. The herds are under the management of George J. Etem, a well known breeder of Hickman's Mills, Mo., who is associated with his son, George Jr., a young man trained by Professor Eckles of the Dairy Department of Missouri State University. Mr. Etem having an interest in the herds and giving his personal attention to the stock assures the success of the business. Dr. Mosher will still give his attention to the selling of the stock and anyone desiring a header for his herd will do well to look up his ad and write for prices and pedigree. Please mention Kansas Farmer.

It Cleans Without Scouring—

With its patent sifter top—its magic cleansing qualities—its purity and full strength—a can of Lewis' Lye is a necessity in every home.

Powdered, perfumed, easy, agreeable and convenient to use—doing its work better, with less labor and more economically than any so-called cleanser on the market—it is any wonder to you who know and appreciate the importance of absolute cleanliness, that Lewis' Lye is the standard cleanser in a million homes?



Lewis' Lye

The Standard for Half a Century

—Is lye, pure lye; nothing more or nothing less.

Made by manufacturing chemists who vouch for its 98% and full strength, Lewis' Lye is by far the safest and most economical household article obtainable; and every woman who has used it for any of the purposes named below, will endorse this statement as being absolutely true.

Get The Genuine—Made by Manufacturing Chemists—Guaranteed Absolutely Pure

If you value your skin—but don't think of starting to clean house or make hard or soft soap with anything but the genuine—which your grocer will vouch for in quality as best for—

- Cleaning
- Disinfecting
- Destroying Vermin
- Softening Water
- Making Soap
- Spraying Trees
- Conditioning Hogs
- And all general purposes

Our free booklet suggests half a hundred other uses for Lewis' Lye in the home or on the farm, that you'll be glad to know about. Send for a copy today. Simply address: PENNSYLVANIA SALT MANUFACTURING CO.

Manufacturing Chemists
PHILADELPHIA



SAVE YOUR ALFALFA

Use Equity Metal Stack Covers

They are guaranteed to last for years and will not rust—are made to fit any size stack and cover it down the sides as well as on top—you don't have to build the stack to fit the cover. They are easy to put on, keep on, or take off as desired. They have no corrugations to get mashed out of shape—no keys or bolts to give trouble.

Made of nothing but the best galvanized sheets, and put together with lock-joints so as not to leak. Save their cost the first season. For price list and full particulars, address the

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Low cost of operation means both economy and dependability.

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The EXCELSIOR AUTO CYCLE has been on the market for seven years, nearly 100,000 are now in use and every one has ALWAYS MADE GOOD.

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ADVERTISING PAGE FOR READY BARGAINS

LIVE STOCK



The scarcity of cattle in Argentina is evidenced by the fact that the killing establishments in that country are at the present time scouring a wider range of territory in order to secure material for their freezers. Special trains have been put on to bring in cattle from Paraguay. These Paraguay cattle are worth about \$26 in gold and \$11 per head in freight and other charges must be added.

Percheron Society Specials.

The Percheron Society of America again announces that it will offer thirteen special prizes to be competed for at the big Topeka Fair and at the Hutchinson State Fair. All animals competing for these special prizes must be recorded in the Percheron Stud Book of America; the owners must also be members of the Percheron Society of America. One hundred twenty dollars in cash is offered for these various prizes and numerous medals, trophies and ribbons.

Breeders planning to compete for the Percheron Society specials should thoroughly inform themselves regarding all the conditions under which these prizes are offered.

Hot Air Hog Story.

According to Mr. Seymour, who is in charge of the live stock department of "Country Life in America," a man named George C. Griffith back in Massachusetts, has originated a remarkable breed of pigs. The "Literary Digest" in its issue of April 4, under the head, "Blue Pigs," gave nearly a whole page to this article which had appeared in "Country Life in America." According to this article, Mr. Griffith is a remarkable man. He is quoted as saying that in time the breed will add millions to the pork producing industry because of the large amount of meat produced in a short time. In commenting on this article in the "National Stockman and Farmer," Thomas Shaw says: "This kind of dope may go with some of the readers of 'Country Life,' and it may be swallowed by some of the readers of 'Literary Digest,' but I am quite sure it will not be swallowed by the farmer readers of the 'National Stockman.'"

In further commenting, Mr. Shaw goes on as follows:

"The narrative goes on to say that 'after eight years of breeding Mr. Griffith finally segregated his blue stock and admitted the identity of the sapphire hog, simply because he had to.' Think of it, this remarkable man succeeded in originating a new breed in eight years, a feat that has never been equaled since the world began. More than that, this phenomenal breeder is represented as saying, 'If all the blue pigs that I have were suddenly wiped out of existence, I could produce the breed again in six years.' This man is certainly a prodigy in the line of breeding.

"Notice what Mr. Griffith is represented as saying about his methods of breeding. 'I have not depended on standard breeds. Many times have I purchased an obvious mongrel because of one desirable point that it might possess. I tried to offset the undesirable traits by special care in the selection of the other animals used. I have gone around the world since I began, always with an eye for such animals as might help to give me what I sought.' Marvelous achievement, establishing a breed in eight years and in the meantime going around the world in search of material to make it. But here comes the most remarkable statement of all: 'I cannot definitely trace the steps I have taken.' This remarkable man has established a distinctive breed of swine in eight years and he does not know how he has accomplished it.

"Another remarkable feature of this work is that the achievement has been worked out mainly by feeding city garbage. The soil was too poor in that part of Massachusetts to raise the necessary food crops. The hogs are kept free from lice by means of mud wallows. The writer states 'There are now thirteen buildings on the ranch, including fattening pens, stables, commissary, cook house, bunk house, blacksmith shop and office. All have tight well-made floors, which are covered with shavings or sawdust every night and scraped clean in

the morning.' The writer does not make it clear as to why a commissary, a bunk house, a blacksmith shop or an office should call for a covering of sawdust every night and for a clean scraping away of the same in the morning. How long will it be before men cease to undertake to write on subjects of which they know little or nothing?"

Chicago's Team Requirements.

Chicago, which is the second city in the United States, is approximately twelve miles wide and twenty-seven miles long. Its level streets for the most part are well paved, so that the city is well adapted to teaming. The city licenses vehicles of all kinds, and just recently Wayne Dinsmore, secretary of the Percheron Society of America, secured from the city collector the exact data relative to the number and kind of vehicles used in the city for the years ending April 30, 1911, April 30, 1913 and April 30, 1914. These figures show a falling off of 1,804 in the one-horse vehicles, there being 40,109 of this class of vehicles in use during the year ending April 30, 1911. In the two-horse vehicles there was a falling off of 1,789 during this period. During the year ending April 30, 1914 there were only 256 three-horse vehicles and 17 four-horse vehicles. During this same year there were in use 2,448 auto delivery wagons of less than one-ton capacity, and 1,759 auto trucks of over one-ton capacity.

The decrease in the one-horse vehicles is without doubt properly credited to the rapidly increasing use of the small auto trucks which are particularly adapted to light delivery work. Men who have given the team requirements of Chicago the closest study, attribute the decrease in the two-horse vehicles to the elimination of the light pairs which have been used for delivery work by the large department stores, and also the reduction in light pairs owned by well to do people who used them for pleasure purposes. A large number of livery stables have also closed out during this time, disposing of a good many driving pairs.

This decrease of 1,789 two-horse vehicles in this period is not due to any reduction in the number of strictly draft horses in use. The best informed horsemen at the Union Stock Yards, after they had been asked to study the figures given above, stated that it was their belief that there had actually been an increase in the draft pairs in use. Those well acquainted with the use of auto trucks in Chicago have estimated that these vehicles have displaced a little more than 10,000 horses.

There are not nearly as many auto trucks of over one-ton capacity in use as many might have believed, the figures as already noted, showing but 1,759 in use in the whole city of Chicago. The firms using these large trucks have learned from experience that they are profitable only on rather long hauls of five miles or over, and on work at which they can be kept in continuous operation. On short hauls where frequent stops are necessary and where the vehicle is required to stand, at least for any length of time, use of these heavy auto trucks has not been found to be as economical as the use of draft horses. A great many firms which undertook to use the heavy trucks have abandoned them since learning these facts from experience. The use of the heavy trucks will undoubtedly increase, but their work will be confined to that line in which they are more efficient, namely, the long-haul delivery of heavy loads, where they may more properly be regarded as competitors of railroads than of horses.

From these figures and the close observations of men who are particularly well informed on the teaming conditions of Chicago, the indications are that there will be no material curtailment of the city demand for high class draft horses.

The farmer, who must necessarily be looked upon as the producer of the horses required for city purposes, is considerably interested in facts and observations of this kind. The better class of draft horses will undoubtedly hold up far better in price than the smaller, lighter type of horses which are generally far more common throughout the country.

POULTRY

This is fine weather for the growing chicks, but remember that they need something more than mere weather to keep them growing into strong, healthy fowls.

Don't diminish your watchfulness over your chicks even though they are getting to be of pretty good size. They need all your care and attention till they are fully grown, and then some.

It is well to get rid of the culls among the young stock, as soon as you are sure that they are not good enough to keep for breeders next year. Sell them as broilers as soon as they are large enough.

Feather pulling is largely due to idleness and is most likely to occur among active breeds that are confined too closely and have too little exercise. Give your fowls all the range you possibly can and keep them busy.

In raising poultry for market the profit lies in hatching early, pushing the chicks forward as rapidly as possible and marketing them early. The cost for feed is less for poultry, and the dividends in investment are more frequent and also large than in most other stock.

It is comparatively an easy thing to get out a brood of chicks in early spring, but to raise them to maturity in fine condition is quite another thing. The healthy appearance of the young birds while passing through the critical period of feathering and growth, is a sure sign that they are abundantly supplied with sound, nutritious food, and is a hopeful sign that they will grow to maturity.

Young chicks have very little storing capacity and they need, therefore, to eat very frequently, otherwise they will suffer from long fasting, and then from over-eating. It is not well, however, to keep feed before them all the time, especially soft feed, because the food gets stale and soon becomes unfit to eat when allowed to stand exposed to the air for any considerable time. A hopperful of bran kept before the chicks at all times will not hurt them.

A poultryman reports that he raised a flock of fowls last season without giving them any water at all, but all the skim milk they would drink. He never had better chickens. Pullets began to lay when five months sixteen days old, and cockerels weighed five and one-half pounds dressed at six months old. We knew that milk was good for chicks and always gave them what spare milk we had, but always provided water for them also. It is remarkable how rapidly little chicks will grow when fed on milk. It seems to matter little to them whether the milk be sweet or sour, cream or clabber; all they ask is to get all they want of it. Most farmers have a great deal of milk to go to waste, or that they cannot use to good advantage. There is no better plan than to let the chickens have all they want of it at all times, while at the same time we would not deprive them of water.

A subscriber reports he has been having lots of soft-shelled eggs lately, although he has given his hens all the oyster shells they need. While lack of shell-forming material is often the cause of hens laying soft-shelled eggs, it is not the only cause by any means. Over-feeding is a prolific cause of soft-shelled eggs. The poultry breeders forget that during the spring and summer months there is an abundance of insect food, such as worms, grasshoppers and other bugs, so that the birds do not require so much feeding as they did in the winter. When over-fed the fattened organs do not permit of the egg being shelled properly. It often happens, however, that hens cannot obtain sufficient lime salts from the food partaken of, and grit, shell and lime should be supplied. Grass contains lime, so does clover and alfalfa, and if the birds have the run of the fields they will soon benefit thereby. Wheat and oats both contain a goodly percentage of lime. Laying hens daily secrete their lime supply from various sources. Another cause of soft-shelled eggs, often

overlooked, is that hens of a prolific strain produce their eggs too rapidly for nature to keep pace with them, and the eggs do not remain long enough in the oviduct to receive their covering of shell. Again, this trouble is sometimes the result of allowing too many male birds to run with the hens, and when possible it is well to reduce the number of male birds and after the hatching season is over, take them away altogether. Our correspondent can study the above causes and which ever he thinks applies to his case, he can govern himself accordingly.

It is a good thing to count your chicks every week. By so doing you can tell whether there is a heavy mortality among them or not. If a much less number is noted one week later than another, there must be some cause for it. Find out this cause and remedy it. There is such a difference between the number of chickens that are hatched, and the number raised to maturity that the poultry breeders ought to pause and ponder over the reasons for this great difference. Is there some insidious disease getting away with your chicks? Or is it cats, your neighbors, or maybe your own that is diminishing the number of your chickens. Maybe it is rats. Are you sure that rats or skunks or weasels are not getting away with those chicks that gave you such trouble to hatch. Count your chicks quite often and if they are dwindling away without apparent cause, try and find out what the matter is, and see if you cannot have almost as many chickens at maturity as you had at hatching time.

Under an Emporia date line of May 13 we read: The egg-selling record for Lyon County is believed to be held by Mrs. Charles W. Heaston, who lives southwest of Emporia. Mrs. Heaston has sold 992 dozen eggs in the two months ending May 5, from a flock of 475 hens. Last Saturday, she brought 104 dozen eggs to town, and the Saturday before 145 dozen were sold. Most of the eggs have been sold at 17 cents, but 18 cents was received for a short time. Mrs. Heaston says her eggs have brought her \$157.58 in the past two months. This does not include the eggs the Heastons have kept for their own use, or used in setting. The total number probably would exceed a thousand dozen for March and April. Mrs. Heaston is engaged in a real business and handles it in a business-like manner. She keeps a strict account of every detail of the business. Most of her hens are Brown Leghorns, and wheat is used for their feed most of the time. The figures furnished by Mrs. Heaston date from March 5, at which time Mr. and Mrs. Heaston moved from their former location north of Emporia.

A Library of Advertising.

If you will but look through the advertising columns of KANSAS FARMER you will see a great variety of things advertised. It is quite as much a part of your education to carefully examine our advertising columns and send for the catalogs and literature that the various companies want to send you, as it is to attend fairs and demonstrations, because it is from these advertisements that you learn the latest and best methods and get up to date information on all farm commodities.

But another important thing is to keep the catalogs you send for, and thus build up a library of advertising. The catalogs contain a full description of the things that can only be briefly hinted at in the advertising columns of the paper. Keep a special place for these catalogs and booklets. These will be a great source of information to you.

Among the recent bulletins from the Federal Department of Agriculture, is the following: "Water supply, plumbing, and sewage disposal for country homes. Forty-six pages, 38 illustrations. (Department Bulletin 57.)" This pamphlet treats of farm home sanitation relating to water supplies, the safe-guarding of the same against contamination, and the safe disposal of sewage; it is of interest to farmers in all sections of the country.

Get Your Canadian Home from the Canadian Pacific



BUY an irrigated farm where you have insurance against drought and where you have just the moisture you need when you need it. You know the value of controlling the watering of your crops. In sunny Southern Alberta you are master of the moisture. The Canadian Pacific's great Irrigation Works insure your yield whenever rainfall is insufficient. Irrigation is not always a necessity—but it is yours at command. It means dependable crops, and wonderful crops every year. The Eastern section of the Canadian Pacific Irrigation Block East of Calgary is now open. Virgin soil of famous fertility—alfalfa, timothy and other fodders—raises all the grain and root crops, fine climate—great cattle country—good markets—unexcelled transportation.

We want the alert enterprising farmers who see this magnificent opportunity. So we make the most liberal terms. Take 20 years to pay. Call on us for long time loan of \$2000 for farm improvements if you want it. Investigate now. This block will soon be the most densely populated and intensely cultivated district in the west.

You Can Have 20 Years to Pay

We will sell you this rich, irrigated, Canadian land for \$35 to \$75 an acre. You need pay only one-twentieth down. Think of it—only one-twentieth down, and then the balance in 19 equal annual payments. Long before your final payment comes due, your farm will have paid for itself over and over again. Many good farmers in Western Canada have paid for their farms with one crop. Here are some of the starting features of the most remarkable land offer you have ever read:

We Lend You \$2,000 for Farm Improvements for farm development only, with no other security than the land itself, and shows our confidence in the fertility of the soil and in your ability to make it produce prosperity for you and traffic for our lines. This loan will help you in providing buildings, fencing, sinking well and breaking, and you are given twenty years in which to fully repay this loan. While enjoying the use of this money, you pay interest at only 6%.

Advance Live Stock on Loan Basis The Company, in case of the approved land purchaser who is in a position and has the ability to take care of his stock, will advance cattle, sheep and hogs up to the value of \$1,000 on the basis of the settler's note with interest at eight per cent, to enable him to develop more rapidly, on the right basis of mixed farming.

Farm Made Ready by Experts if Desired If you want a place already established, select one which our Department of Agricultural Experts has developed. On our improved farms, house and other buildings are up, well is dug, farm fenced, fields cultivated and in crop. All waiting for those who want an immediate start and quick results—all planned and completed by men who know—our own agricultural experts. Take twenty years to pay if you want to. We give free service—expert service—the valuable assistance of great demonstration farms, in charge of agricultural specialists employed by the Canadian Pacific for its own farms. This service is yours—free.

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The Canadian Pacific offers you the finest land on earth for grain growing, cattle, hog, sheep and horse raising, dairying, poultry, vegetables and general mixed farming—irrigated lands for intensive farming. Remember, these lands are located on or near established lines of railway, near established towns. You can start on an irrigated farm, improved or unimproved. Here is the Last Best West—where your opportunity lies. Don't delay. Mail the coupon here at once. The best land will be taken first—so time is precious to you. Write today.

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Solid, Light Running Machines With An Awful Appetite

—that's the way one owner describes the "Silberzahn." This same owner says: "If I had to buy a dozen ensilage cutters every one would be a Silberzahn." Hundreds of other owners say substantially the same thing. It's strong, powerful, safe, economical—that's why the

Light Running Silberzahn Ensilage Cutter

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Begins Thursday, June 11. First term (six weeks) ends July 22. Second term (three weeks) ends August 12. Credit may be earned in the Graduate School, College, School of Engineering, School of Law, School of Fine Arts, and School of Education.

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No spot in Kansas has better climatic conditions in summer than Mt. Oread, and no university in America has better opportunities for efficient summer work.

For Further Information Apply to

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"Better farming, better business, better living," is the formula for the re-making of rural life. This slogan expresses this important truth that the task before us must be shared in by every institution which has to do with community life.

The value of a man's farm will be dependent on its home value. The home value will depend on the moral and spiritual standards which rule in the community. A class of men who

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On the other hand home and cultural values are dependent on economic values. A poor farming district will be a poor living district. Ideals cannot be entirely independent of economic conditions.

This compels the rural community builder to be interested in every phase of human interest.—A. E. HOLT, Manhattan, Kan.

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SITUATIONS WANTED ads, up to 25 words, including address, will be inserted free of charge for two weeks, for bona fide seekers of employment on farms.

HELP WANTED.

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FOR SALE—240 ACRES. THIS IS A very nice level tract of land. Owner, R. L. Hampel, Otis, Kan.

240 ACRES GRASS LAND 4 MILES OF Lenora, \$3,600; no trades. B. K. McNall, Gaylord, Kan.

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LIST YOUR FARMS, RANCHES AND city property with me for sale or exchange. R. F. Glider, real estate specialist, 501 New England Bldg., Topeka, Kan.

EXCEPTIONAL BARGAIN IN LAND— 1,920 acres smooth, level West Texas land; every foot tillable; in water belt; four miles to station; all grass with exception small clearing which is ready for plow; small house; scattering brush; ideal location for stock ranch and farm; offer at \$6, one-third down, balance one, two, three and four years, low rate, or will exchange for good farm at its value.

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GERMAN MILLET SEED FOR SALE AT \$1 per bu. Track, Seneca. Aug. Kramer, Seneca, Kan.

5,000,000 SWEET POTATO PLANTS FOR sale. Any variety at 20 cents per 100; \$1.75 per 1,000. F. H. Buschmann, Popular Bluff, Mo.

PURE FETERITA SEED A SPECIALTY. test 98 to 99. Threshed, re-cleaned or in head, \$2.50 per bushel. Also kafir, Manhattan strain. Send for pamphlet. H. M. Hill, Lafontaine, Kansas.

FOR SALE—CHOICE FIRST CLASS RE- cleaned feterita seed at \$4 per cwt., sacked f. o. b. Hutchinson or Liberal, Kan. Germination excellent. Our supply is limited. Place your orders before it is exhausted. The Liberal Elevator Co., Hutchinson, Kan.

IMPROVED INDIAN SQUAW CORN; best for late planting; the only corn for dry weather; outcrops, outcrops, outcrops all other varieties; ripens in 85 days; have planted it in July and then gathered a good crop; have only limited supply. Price, \$2.50 per bu. f. o. b. Tulsa, Oklahoma. Address Miller Brothers, 101 Ranch.

PLANTS—CABBAGE: EARLY, SUCCE- sion, Late, 20c per 100, \$1.75 per 1,000. Tomatoes: Earliana, Early Tree, Dwarf, Champion, Beauty, Matchless, 30c per 100, \$2.50 per 1,000. Sweet potatoes: Yellow Jersey, 22c per 100, \$1.85 per 1,000. Red Jersey, Red Bermuda, Southern Queen, Early Golden, 30c per 100, \$2.50 per 1,000. Not prepaid. Parcel post 5c extra. Chas. P. Rude, North Topeka, Kan.

CATTLE.

CALVES—RAISE THEM WITHOUT milk. Booklet free. D. O. Coe, Topeka, Kan.

FOR SALE—REGISTERED HOLSTEIN bulls. Smith & Hughes, Topeka, Kan., Route 2.

GRADE HOLSTEIN CALVES, BOTH sexes, for sale. Arnold & Brady, Manhattan, Kan.

FOR SALE 3 REGISTERED HOLSTEIN- Friesian bulls; priced to sell; one or all. Write C. P. Meacham, Grand Island, Neb.

REGISTERED YEARLING HOLSTEIN bulls; ready for service. P. B. Johnson, Leavenworth, Kan.

FOR SALE—REGISTERED POLLED Jersey bull; nineteen months old. Frank Ridpath, Olathe, Kan.

HOLSTEIN CALVES; BEAUTIFULLY marked; 3 to 5 weeks old; 15 sixteenths pure; \$20; crated for shipment anywhere. Edgewood Farm, Whitewater, Wis.

FOR SALE—SEVEN YOUNG HEREFORD bulls. All registered; good quality; twelve to twenty months old. G. W. Calvert, Burlington, Kan.

HIGH-GRADE BULL CALVES FOR SALE from heavy producing dams and sired by registered bulls. Higginbotham Bros., Rossville, Kan.

HOLSTEIN BULL FOUR MONTHS OLD, \$100; two of his dams averaged 105 lbs. milk in one day and six averaged 100 lbs. two of his dams averaged 33.81 lbs. butter, five averaged 31.46 lbs., and seven averaged 30 lbs. butter in seven days, officially. R. M. Harriman, Appleton, Wis.

HOLSTEINS—OWING TO SHORTAGE of feed will sell my select herd of 250 Holsteins in the next 60 days, as follows: 50 fully developed rich producing cows; 150 heifers ranging in age from six months to three years, with lots of quality; 50 registered cows and heifers. For particulars write Neal Houslet, Oxford, Wisconsin.

FOR THE NEXT 90 DAYS WE ARE DIS- posing of all our Holstein calves, from heavy producing high grade Holstein cows and a very fine registered Holstein sire. The calves are from 4 to 6 weeks old, weaned, beautifully marked, strong and vigorous. Either sex, \$17, crated for shipment to any point. If you wish to get a start with good ones, send your order at once. Whitewater Stock Farm, Whitewater, Wis.

HORSES AND MULES

SHETLAND PONIES—WRITE CHARLES Clemmons, Coffeyville, Kan.

SHETLAND PONIES—REGISTERED; eligible and grade mares and stallions; write for description and kodak picture. J. R. Atchison, Minneola, Kan.

WANTED—TO BUY.

WANTED—TWO SHETLAND PONIES. Give age, description and price. Box 15, Topeka, Kan.

HOME CIRCLE



Funston!

Never any style about him, not impos-
ing on parade;
Couldn't make him look heroic with no
end of golden braid.
Figure sort o' stout and dumpy, hair and
whiskers kind o' red;
But he's always movin' forward when
there's trouble on ahead.
Five foot five o' nerve an' darin' eyes
pale blue blue an' steely bright,
Not afraid of men or devils—that is
Funston in a fight.

Fighter since he learned to toddle, sol-
dier since he got his growth;
Knows the Spaniard and the savage—
for he's fought and licked 'em both.
Not much figure in the ballroom, not
much hand at breakin' hearts,
Rotten ringer for Apollo, but right there
when something starts.
Just a bunch of brain and muscle, but
you always feel, somehow,
That he'll get what he goes after when
he mixes in a row.

Weyler found out all about him, set a
price upon his head;
Aguinaldo's crafty warriors filled him
nearly full o' lead.
Yellow men and yellow fever tried to
cut off his career,
But since first he hit the war-trail it
has never slipped a gear.
And the heart of all the nation gives a
patriotic throb
At the news that Kansas Funston has
again gone on his job.
—JAMES J. MONTAGUE in New
York American.

If your matting has become worn
and you wonder if you can make it do
for another season, why don't you give
it a coat of clear varnish.

The next time you make dumplings,
instead of making dough and rolling
them out, make a stiff batter and drop
them in your kettle.

It is said an excellent way to re-
move spots from silk and woolen fabrics,
is to add a quarter of a cup of salt to
a scant quart of gasoline. Besides re-
moving the spots it does not leave a
ring which is so frequently the case
when cleaning is attempted at home.

The leaves of a rubber plant should
be washed once a month with warm soap
suds and when dry, rub each leaf with
a cloth wet with olive oil. This treat-
ment feeds the plant and promotes its
growth.

The flat taste which is always found
in water which has been boiled, may be
overcome by putting the water in a
large fruit jar, screwing down the top
and shaking it vigorously until there are
bubbles in the water. This aerates the
water causing it to lose its flat taste
which is so objectionable.

Nearly all the new dresses have a
sash or girdle of some description. The
bows are located either in the front or
back, and may be of the flat Japanese
variety or they may have long ends. The
colors are brilliant and striking and fre-
quently in direct contrast to the gown.
The ribbons are wonderfully attractive
for these accessories this season.

A simple and accurate way to mark
the places for the buttons on a garment,
is as follows: Lap the edges correctly
and pin them in place, then with a
needleful of thread begin at one end
and take a single stitch in every button-
hole, carrying the thread to the opposite
end. Cut the thread halfway between
the buttonholes, take the sides apart
and there will be a bit of thread exact-
ly where every button should be sewed.

How many housewives have been an-
noyed by having a wrinkle appear in
the ironing sheet when in the midst of
ironing a heavy piece? To prevent this
the next time you are preparing your
ironing board, stretch the outer cover
tightly on the bias instead of the
straight way of the cloth. If this is
done it will always remain straight and
smooth.

Are your window shades very much
soiled at the bottom? If they are, after

removing the rollers from their sockets
unroll the shades and dust them care-
fully. Then take them from the rollers,
being careful to save all the little tacks,
to use in putting them on again. Hem
the end that was the top, using a
coarse stitch on the machine for this.
Then tack the old soiled and worn end
to the rollers. The unsightly part is
now at the top and hidden around the
rollers and the exposed part looks almost
like new.

Is your back porch screened in? If
it isn't it will be well worth your while
to have it screened. It is not so very
expensive and the pleasure you will get
from it will more than repay you. If
this is done you have a place to sit out-
doors and prepare all your vegetables
and fruit and not be bothered by the
flies. If you have a small oil stove
which you can carry out there, it makes
an ideal place to do the ironing on a hot
summer morning. There are so many
things that you can use it for that you
will wonder how you ever got along be-
fore without having it screened.

To prevent syrup from sticking to the
sides of a pitcher treat the pitcher as
follows: Rinse out the pitcher with hot
water. Melt a teaspoonful of butter,
pour it into the warm pitcher, shaking
and turning it until it has covered all
parts. Pour out what remains through
the lip or spout. Put the pitcher where
it will become cold; the butter will ad-
here to the bottom and sides. It is
then ready for the syrup which will not
stick as formerly. This may seem like
a good deal of red tape, but it is easier
than scraping and soaking a pitcher to
get it clean.

Teach Your Children Self-Control.

One of the greatest things a mother
can cultivate in her child is self-control.
If this all-important lesson is not
learned in early life, it is probable that
it never will be, and the man or woman
will go through life ruining his chances
for success by displays that convince
others of his weakness and inability.

It is not an uncommon thing to see
a wee child, whose wishes have not been
granted, throw himself upon the floor
kicking and screaming in a violent out-
burst of temper. While he is screaming
at the top of his voice, his mother looks
on wondering what to do. Finally an
idea strikes her and she puts it into
execution by offering him a cookie or
by giving him what he wanted. If, in-
stead, she had administered a little
punishment, the child would quickly
learn that such performances were fol-
lowed by a tingling sensation that was
not wholly pleasant, and the repetition
of the incident quite undesirable from
his point of view.

Few women realize what the lack of
self-control has meant in the lives of
many. Statistics have shown that fits
of anger frequently indulged in, lead
almost inevitably to some form of in-
sanity.

A mother who aims to develop self-
control in her children must have firm-
ness and determination as well as a con-
viction that such training is necessary.
It does no good to punish a child one
time and allow the offense to go un-
noticed the next time. A child must
have it clearly demonstrated to him that
such performances hinder instead of ad-
vance his cause.

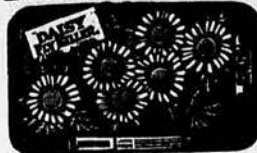
Frequently you find a child who is
incapable of controlling himself and then
a physician should be consulted. The
anger exhibited by such a child is quite
different from the temper of a child that
is well. It is a blind, unreasoning pas-
sion that comes apparently without
cause. He inflicts bodily pain on him-
self without feeling it, apparently, and
after the spasm is spent is totally un-
conscious of it and is indignant when
accused of it and if he is persuaded to
admit his actions, is sulky and not the
least bit sorry. Whereas, the normal
child is ashamed and sorry after such
an exhibition.

Such slight things will produce this
condition that it is hard to realize it
sometimes. Sometimes the trouble is
with the teeth, the liver, the eyes, or
the nose, as well as a number of other
things which could produce this extreme
nervous disease.

One of the greatest dangers is the

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LEGAL.

Meeting of Kansas Grain Grading Commission. Notice is hereby given that under the provisions of Chapter 222 the Board of Grain Grading Commission will meet at the office of the Governor, in Topeka, on the fifteenth day of June, 1914, and establish the grades of grain to be known as Kansas grades; to be in effect on and after the first day of August, 1914.

A. T. ROGERS,
 J. B. NICHOLSON,
 A. C. BAILEY, Secretary,
 Grain Grading Commission.

MISCELLANEOUS.

CLEANING, PRESSING, DYEING, WORK guaranteed. Manhattan Cleaners, 609 Jackson, Topeka.

NEW CYCO BICYCLES. COMPLETE with coaster brake. \$21.50. J. C. Harding Co., Topeka, Kan.

WE TRUST YOU, LADIES. ORDER 20 dust cloths from us on credit. Sell them at 25 cents each, forward the money to us and we will send you three beautiful lace curtains for your trouble. National Supply Co. Iola, Kan.

DOGS.

COLLIES, AIREDALES, TERRIERS—Send for list. W. R. Watson, Oakland, Iowa.

SCOTCH COLLIES. WESTERN HOME Kennels, St. John, Kan.

THOROUGHbred SCOTCH COLLIE puppies; finest markings and O. K. in every way. D. R. Wakefield, Brookville, Kan.

FOR SALE—HOUNDS, GOOD TRAILERS for coon, wolf and fox; send 2 cent stamp for prices. Rash Bros., Centerville, Kan.

SCOTCH COLLIE PUPS FOR SALE. ALL eligible for registry; three pedigrees, contains some of the finest blood lines obtainable; are marked exceptionally fine. Price, \$5. Only dog worth keeping on farm; a companion for your boy. L. P. Coblenz, La Harpe, Kan.

HOGS.

HAMPSHIRE PIGS, \$5. WILL WOODruff, Kinsley, Kan.

O. I. C. BOARS, FOUR LEFT, THREE months old; growthy, pedigreed; \$10. Grant Ackerman, Stilwell, Kan.

YOUNG HAMPSHIRE BOARS AND boar pigs for sale; champion bred stock; best families; best individuals; write for particulars; surplus females all sold. Geo. C. Mosher, 3612 Locust St., Kansas City, Mo.

BEE SUPPLIES.

FOR SALE—BEE SUPPLIES. ROOT'S goods. Send for catalog. O. A. Keene, 1600 Seward Ave., Topeka, Kan.

PATENTS.

PATENTS PROCURED OR FEE REFUND. Official drawings free. Send sketch for free search. Patent Exchange, Jordans Bldg., Washington, D. C.

THE STRAY LIST

W. E. NEAL, COUNTY CLERK, NEOSHO County. Taken up by W. T. Heath of Centerville Township, on April 21, 1914, one gray mare 10 or 15 years old, weight about 1,050 pounds, valued by takerup at \$100; and one black mare blind in left eye, brand O.V. on left cheek bone, 10 or 12 years old, weight about 1,050 pounds. Valued at \$75 by takerup. Address of W. T. Heath, Erie, Kansas, Route 4.

RICHARD ROHRER, COUNTY CLERK, Geary County, Kansas. Taken up, on 1st day of April, 1914, by Herman Nelson on his premises in Jackson Township in Geary County, Kansas, sixteen head of hogs; twelve of them are black in color, weighing about 80 pounds; four of them cross-bred, red and black in color and weighing about 80 pounds. Some of the hogs are marked with splits in their ears. Dated April 22, 1914.

SITUATION WANTED.

WANTED—A JOB IN HARVEST BY young man with good team; will run header or box; state wages paid. Write Thomas Russell, Sedgwick, Kan., Route 1.

FARMERS—YOUNG MAN WANTS JOB on farm where auto or gas engines are used. Has had experience in farming and autos. Write J. J. Coleman, Y. M. C. A., Topeka, Kan.

WANT TO OPERATE GASOLINE OR oil engine; handle tractor, electric or pumping machinery; S. A. C. graduate; experienced; do own repairing; state wages. O. W. House, Rush Springs, Okla.

STANDARD BOOKS
FOR THE FARMER AND BREEDER
 Address, Kansas Farmer, Topeka, Kan.

The American Poultry Association recognizes fifty-six breeds of fowls in this country.

tendency to "let him outgrow" the trouble. If he is neglected during these first years, no telling what nervous or mental disease may result from such a condition.

When a slight operation or treatment has been known to make an easily controlled, affectionate little girl out of one who had been willful and high tempered, or a boy of high ideals and kindly instincts out of one who had delighted in torturing animals and destroying other people's property, certainly a child's fits of temper are worth noticing.

The habit of obedience makes training in self-control an easy matter. The boy who screams at the top of his voice unconsciously, takes hold of himself if he is quietly told not to make so much noise, and quickly forgets the hurts if he is told to stop crying and go back to his play.

When a child is alone he is unconsciously governed by the words he is accustomed to hearing, and controls his feelings as he has been told to do many times before.

Just as in any other line of work, one victory over self leads to another. But until the child has become a man it is the mother's determination and firmness which will guide him over the hard places. Through her he learns to check the angry words which come to his lips; he leaves untouched the things that would bring suffering or misery to himself and others.

As the years go by he gains that self-control which is the greatest asset in our social and commercial world. It gives him power not only over himself, but over others, and makes him a master of men and circumstances, for he has learned the great lesson: to put down self and exalt the things that lead to the noblest and best.

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 DRESSMAKER, for only 2 cents; send 12 cents for pattern and book. Price of book if ordered without pattern, 8 cents. Address all orders for patterns or books to KANSAS FARMER, Topeka, Kansas.



6351—Ladies' Overblouse: Any of the figured silks can be used to make this overblouse. The blouse closes at the front and can be made with either the regulation or the deep armholes. The gimp can be made with either the high or low neck. The pattern, 6351, is cut in sizes 34 to 42 bust measure. Medium size requires 2 yards of 36-inch material for the overblouse and sleeves, 1 yard of 36-inch goods for the body of gimp and 1/4 yard of 18 inch silk for the yoke facing. 6576—Ladies' Dress: The blouse of this dress is very loose and the shoulder seam is placed almost at the elbow. There is a small vest with tabs at the ends of the front opening over it. The two-piece skirt is joined to a short panel, which forms the center of the front. The dress pattern, No. 6576, is cut in sizes 34 to 44 inches bust measure. Medium size requires 3 1/2 yards of 54-inch material, with 1 yard of 27-inch silk for revers, collars and girdle. 6248—Ladies' Waist: Any of the figured materials can be used to make this waist, with the collar of contrasting material. The waist closes at the front and is made with the body and sleeve sections in one. The pattern, No. 6248, is cut in sizes 34 to 42 inches bust measure. Medium size requires 2 1/2 yards of 36-inch material, 3/4 yard of 27-inch contrasting goods for the collar and 2 yards of ribbon for the sash. 6526—Ladies' Flounce Skirt: This model gives us the minaret style. It may be made with either two flounces or three. These are attached to a three-gore foundation and may be of one material or may contrast. Naturally, a light weight fabric must be selected in order to avoid weight. Lawn or silk makes a good foundation according, as the outer skirt is of cotton or woolen material. The skirt pattern, No. 6526, is cut in sizes 22 to 30 inches waist measures. Medium size requires 2 1/2 yards of 36-inch material for the foundation and 1 1/2 yards of 54-inch outer material. 6583—Child's Dress: This frock gives us the simplest of all the forms worn by a child. It has a round yoke, which can be made high in the neck and rounded as much or as little as desired. The sleeves are in the regulation bishop style, full top and bottom, long or short. The skirt is gathered around the yoke edge and hangs full with or without a ruffle at the edge. The dress pattern, No. 6583, is cut in sizes 1/2, 1, 3 and 5 years. Medium size requires 1 1/2 yards of 36-inch material; or, 2 1/2 yards of 25-inch flouncing and 1/4 yard of 18-inch tucking for the yoke. 6549—Girls' Dress: Any of the wash materials can be used to make this dress with the collar, cuffs and belt of contrasting material. The dress closes at the front and can be made with either the long or short sleeves. The pattern provides for a pair of bloomers which are attached to an underwaist. The pattern, No. 6549, is cut in sizes 2, 4, 6 and 8 years. Age 8 years requires 4 yards of 36-inch material with 1/4 yard of 27-inch contrasting goods for the dress and bloomers and 1/4 yard of 36-inch material for the underwaist. 6638—Ladies' Four-Gored Skirt: The novelty of this dress is in the arrangement of the side gores over the straight front and back panels. The top is fitted by darts, but gathers may be used instead and there is an ornamental girdle. Raised or regulation waistline may be used in making. The skirt pattern, No. 6638, is cut in sizes 22 to 32 inches waist measure. Medium size requires 2 1/2 yards of 36, 44 or 54-inch material.

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COLORADO STOCK, GRAIN AND ALFALFA ranch; 640 acres; improved; irrigated; abundance of water; close to railroad. Must raise money. Will sacrifice. Time on half. J. W. PHARES, Wakeeney, Kansas.

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THOMAS OWEN,

Station B. Topeka, Kansas.

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BRAGONIER'S BIG BARRED ROCKS—Best breeding, true type, deep barring. Ckl. bred heavy layers. Eggs, \$2 for 15; \$5 for 45. Satisfaction guaranteed. Write me. R. J. Bragonier, Buckingham, Iowa.

BARRED ROCKS; 68 PREMIUMS, TOPEKA, Manhattan, Clay Center, Denver. Eggs—15 for \$1; 60, \$3.25; 100, \$5. Chicks and breeders for sale. Mattie A. Gillispie, Clay Center, Kan.

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WHITE INDIAN RUNNER, FAWN AND White Runners, Buff Orpington duck eggs. Mrs. T. N. Beckey, Linwood, Kan.

INDIAN RUNNER DUCKS, FAWNS.—Eggs, \$1 per setting, \$5 per 100. Ducks and drakes, \$2.50 each; large stock. J. L. Holbrook, Clayton, Mo.

PURE WHITE RUNNER DUCKS, BUFF Black Orpington chickens, fancy breeding. Free mating list. J. F. Cox, Route 8, Topeka, Kan.

WHITE GUINEAS, WHITE INDIAN Runners, Bronze turkeys; stock and eggs; pen Pekin ducks \$8; Brown Leghorn hens 75 cents. Emma Ahlstedt, Roxbury, Kan.

PRIZE WINNING WHITE INDIAN RUNNER duck eggs, 15, \$1.50; 45, \$3.75; 100, \$7.50. Buff Orpington Ducks, 15, \$2; 45, \$5; 100, \$10. Fawn and White, 15, \$1; 45, \$2.50; 100, \$5. Light Brahmas, 15, \$1; 45, \$2.50; 100, \$5. Poultry book free. Frank Healy, Bedford, Iowa.

WHITE EGG RUNNERS, ENGLISH Penciled Ducks, from imported stock. Prize winners. Eggs, \$2. Race type and carriage. "Tom Barron" and Young strain S. C. White Leghorns, \$2.00, fifteen; strain that won at Mountain Grove, Mo., egg contest. Paul Galbreath, West Plains, Mo.

ORPINGTONS.

IRWINDALE FARM THOROUGHbred Crystal White Orpingtons produce heavy winter layers, also blue ribbon winners for our customers. Sale stock exhausted. Free catalog. Route 7, Topeka, Kan.

SINGLE COMB BUFF ORPINGTONS—Pure-bred. Fine flock on bluegrass range. Eggs, 80c per 15, three settings for \$2.00, by parcels post, prepaid; \$3.50 per 100 by express, not prepaid. L. H. Cobb, Dunavant, Kan.

HAMBURGS.

SILVER SPANGLED HAMBURG EGGS from prize winners. Edith Gresham, Bucklin, Kan.

PIGEONS.

FULL BLOODED WHITE PLYMOUTH Rocks, Homer Pigeons, White Angora Rabbits. 219 Huntoon St., Topeka, Kan.

MINORCAS.

SINGLE COMB BLACK MINORCAS—Eggs, \$2 per 15; \$3.50 per 30. Heavy winners St. Louis Coliseum show. Dan Oberneilman, Holstein, Mo.

RHODE ISLAND REDS

Meyers & Stover Poultry Farms Fredonia, Kan.

Rose Comb Rhode Island Reds. Fifty-two premiums at recent shows. Eggs \$2 to \$5 per 15. Farm range, \$4.50 per 100.

Indian Runner Ducks

Pure White. Thirty-two first premiums, including Missouri State and all five at Kansas State Show. Eggs, \$1.50 per 12; \$10 per 100. Fawn White. Show winners for years. Eggs, \$1 per 15; \$6 per 100.

Bourbon Red Turkeys

Often shown, never defeated. Eggs \$3 per 11. Free Catalog.

ROSE COMB REDS—PRIZE WINNERS. Laying strain, \$1.50 per setting. E. G. Cole, Garden City, Kan.

SINGLE COMB REDS, RICKSECKER strain. Fifty eggs, \$2.50; 16, \$1. Gertrude Haynes, Meriden, Kan.

BRED TO LAY, THOROUGHbred S. C. Reds, \$1 setting, \$4 per hundred. Satisfaction guaranteed. Finest birds I ever raised. Belmont Farm, Box 69, Topeka, Kan.

R. C. RED EGGS FOR HATCHING FROM five mated pens, from large prize-winning stock. Prices right. Mating list on application. Write at once. E. H. Hartenberger, R. F. D. 4, Box 1, Newton, Kan.

ROSE COMB RED EGGS AT SACRIFICE prices after May 15, from 5 grand pens mated to roosters costing from \$10 to \$35. 15 eggs \$1.25; 30 eggs \$2; 50 eggs \$3. Good range flock \$3 per 100. Send for catalog. W. R. Huston, Americus, Kan.

LEGHORNS

EGGS—S. C. W. LEGHORNS, \$3 PER 100. Lucy Johnson, Bosworth, Mo.

ROSE COMB BROWN LEGHORN EGGS, Kulip strain, farm range. Satisfaction guaranteed. M. E. Hoskins, Fowler, Kan.

S. C. W. LEGHORN EGGS AND CHICKS. Look up our winnings. Circular free. W. F. Wallace, Box K. F., Diagonal, Iowa.

PURE SINGLE COMB WHITE LEGHORN eggs. 75 cents per 15; \$3.50 per 100. Mrs. Frank Odle, Wamego, Kan.

EGGS FOR HATCHING—S. C. BROWN and White Leghorns, R. C. Reds, White Rocks, \$1, 15; Pekin Ducks, \$1.50 per 11. Thomas Ohlsen, Whiting, Kan.

S. AND R. C. WHITE LEGHORNS—Heavy laying strain. State Show prize winners. Prices right. A. L. Buchanan, Lincoln, Kan.

SINGLE COMB BROWN LEGHORN eggs, 15 for 85 cents; 30 for \$1.70, postpaid, or 100 for \$2.90. Mrs. P. H. Streeter, Hamilton, Mo.

S. C. B. LEGHORN EGGS FROM STOCK scoring as high as 94. 50, \$2.50; 100, \$4. Express prepaid. Cornelius Phillips, Route 9, Emporia, Kan.

S. C. WHITE LEGHORNS, THE KIND that lay eggs. Eggs for hatching, \$1 for 17; \$5 per 100. Write J. L. Shaner, Route 1, Maple Hill, Kan.

BUSINESS SINGLE COMB WHITE LEGHORNS. We breed for egg production. Eggs and chicks very reasonable. Satisfaction or your money back. R. W. Gage, Mont Ida, Kansas.

SINGLE COMB WHITE LEGHORNS—National Western Poultry Show, Denver, 1914, won \$50 cup, also national western sweepstakes trophy. Big free catalog. Baby chicks, eggs. W. H. Sanders, Box E-275, Edgewater, Colo.

I DEFY ANY MAN ANYWHERE TO give you better quality in combined bred-to-lay and exhibition S. C. White Leghorn eggs. They cannot do it. Ninety per cent fertility guaranteed. \$1 per 15; \$6 per 100. Send for my illustrated mating list. Geo. E. Mallory, Box 476, Boulder, Colo.

TURKEYS

BOURBON RED TURKEYS, PRIZE WINNERS. Eleven eggs for \$3.00, with directions for raising. Palmer's Poultry Farm, Uniontown, Kan.

TURKEY EGGS—EGGS OF QUALITY. Mammoth Bronze, Narragansett, Bourbon Red, White Holland. \$3.50 per 12. Walter Bros., Powhattan Point, Ohio.

BOURBON RED TURKEYS, BUFF ORPINGTONS, S. C. W. Leghorns, Indian Runner Ducks. These are all from prize winning stock. Eleanor Poultry Ranch, Brighton, Colo.

LANGSHANS.

BLACK LANGSHAN EGGS, \$1.50, 15; 100, \$7.50. Baby chicks, 15c. Mrs. Geo. W. King, Solomon, Kan.

BLACK AND WHITE LANGSHAN, ALSO Houdan eggs, \$2.00 per 15. Circular free. E. D. Hartzell, Rossville, Kan.

FARM RANGE EXTRA BIG BONED greenish glossy Black Langshans, all scored, prize winners. Eggs, 25c each. Osterfoss Poultry Farm, Hedrick, Iowa.

BLACK LANGSHANS—EGGS FROM two pens and farm flock. First pen headed by cockerel scoring 96. All prize winning stock. Write for prices. Geo. M. Klumire, Holton, Kan.

Col. L. R. Brady of Manhattan, Kan., one of the successful pure-bred stock auctioneers, has some open dates for fall and winter sales. Colonel Brady has had years of experience in the pure-bred live stock business. He is not only a good judge of stock but is a good judge of values, which, in a great measure, accounts for the long list of successful sales he has conducted the past several years. Write him for open dates.

FARM ELECTRIC LIGHTS

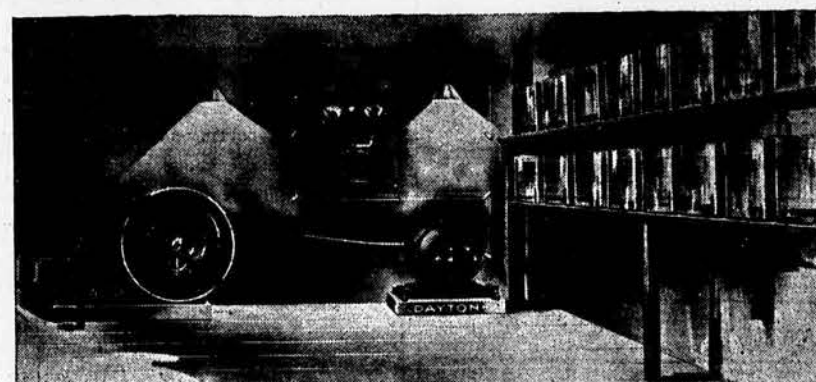
THERE is much interest in the lighting of farm residences, barns and other farm buildings by electricity. This interest has come through the invention of practical lighting outfits on a moderate scale and thoroughly practicable for farm usage. During the last few years at all the big fairs farm electric lighting plants have been shown. The plant shown in the picture is that of Ed Witte, the gasoline engine manufacturer, on his farm just out of Kansas City. The generator is of such size as to furnish fifty 16 candle power lights. The lights are distributed through a 10-room house, a large barn, a garage, pump house, granary and tool house.

To provide the current necessary to

hours each week to re-charge the batteries.

The operation of the plant is largely automatic. When the batteries are charged to their holding capacity the electric pressure automatically throws a switch so that no more current is added to the batteries. If the engine should for any reason stop while the charging is being done and there should be no one near, the same automatic devices would operate and prevent any current from escaping. As fast as the current gets into the batteries it is automatically canned until drawn out through the electric light wires.

The cost of this outfit was \$350 for the generator, switch, wiring and fix-



FARM ELECTRIC LIGHTING PLANT OPERATING 50 16-CANDLE POWER LIGHTS.

furnish such light, the engine is required to run only two or three hours a week. The current is run into storage batteries which appear in the picture like boxes on the wall. A gallon of gasoline and a pint of lubricating oil furnish the power necessary to charge these batteries. The engine shown pumps the water used on the farm and while pumping, the generator is operated, keeping the batteries charged. If this engine did not pump the water and at the same time run the generator, Mr. Witte says it would be necessary to run the engine only a few

tures; \$41.95 for the engine, and \$2.50 for the drive belt. However, the batteries would cost considerably less as only 13 volts are needed for ordinary lighting purposes while these batteries carry 30 volts because of their adaptability for furnishing current for small electric motors which operate washing machine, sewing machine, cream separator, and other household and yard machines usually found on many farms. The entire operation of the plant calls for vastly less work than caring for the kerosene lamps and lanterns necessary to light the farm premises.

Cooperative Improvement of Horses

It has just been reported to us through Edward C. Johnson, superintendent of farmers' institutes for Kansas, that through the efforts of the Cowley County Farm Bureau and of the county agent, O. P. Drake, a live stock breeders' association was organized in Cowley County last winter and this association is proposing to do aggressive and valuable work. Recently a committee of this association met to consider how to best improve the grade of horses in that county. This committee prepared some plans which a large number of the members of the association will follow this season. These plans are embodied in the following agreement which was prepared by the committee:

We, the undersigned members of the Cowley County Live Stock Breeders' Association, in order to improve the quality of our horses hereby signify our wish to co-operate in securing better stallions in our own locality; and in order to offer proper inducements to the stallion owners we hereby agree to pay a \$20 service fee (on the usual terms and conditions) and also that we will breed the number of mares set opposite our names and return said mares regularly throughout the breeding season.

It is understood that said stallion owners stand a really high class Percheron stallion in (or very near) the city of Winfield and that said stallion is not to make over two services each week day, also that the undersigned shall have preference rights to breed to said stallion, but shall notify the stallion owner as far in advance as possible of breeding date wanted. It is also understood that said stallion owner is not limited to the undersigned mare owners. In case his stallion is not engaged by the undersigned in advance, he reserves

the right to take in outside mares, but the object of this co-operation is to give the undersigned preference.

In order that the undersigned may be satisfied regarding the quality of said stallion they hereby reserve the right to appoint a committee of three of their number to represent them and act and advise with the stallion owner in the selection of said stallion, and unless the stallion is selected by and with the approval of the majority of this committee of three, the undersigned will not be held or bound to this agreement.

When sixty mares are subscribed hereto this list shall be considered complete, and a meeting of the undersigned shall be called by the president and secretary for the appointment of said committee and such other business as may come before them.

It is hereby understood that this agreement is for the season of 1915 only, and the undersigned agree to stand by the stallion selected by the committee for the above season (from April 1, to July 1) according to the above, unless released by the stallion owners.

In order to make this agree binding on both sides the stallion owner and the mare owners, the stallion owner shall also agree to above and sign same. The undersigned are not bound hereto unless said stallion is purchased prior to January 1, 1915.

It is difficult to see how these plans could have been improved upon and if several clubs of farmers in that county as well as in other counties, will draw up similar co-operative plans and stand by them, it will mean more for better horses in Kansas, perhaps, than any other step which could have been taken.

HARVEST HELP REQUESTS COME FAST

ALREADY several hundred Kansas farmers have made known their requirements for harvest help and the commissioners of one county have asked for 500 men. These are, for the most part, farmers who obtained satisfactory help through KANSAS FARMER last season—the first time a farm paper in this state undertook to serve its readers in this way. While urging the necessity of caring for the wheat we will help in a practical way. Let us know your needs.

Whitewater Falls Stock Farm



Nineteenth Sale of Imported and American Bred
Registered Percheron Stallions, Brood Mares and
Colts, with a consignment of Thirty Head of
Registered and High Grade Holstein Cattle

WEDNESDAY, JUNE 10, 1914

The Percheron Offering will Include

- 1 Stallion, 8 years old.
- 2 Stallions, 3 years old.
- 3 Stallions, 2 years old.
- 5 Brood Mares, colts at sides.

- 5 Mares, 3 to 5 years old.
- 10 Fillies, 2 years old.
- Mares all bred to Casino or sired by him.

Auctioneers; J. D. Snyder, Boyd
Newcom, W. M. Arnold, W. P. Ellet

For Catalog
Address

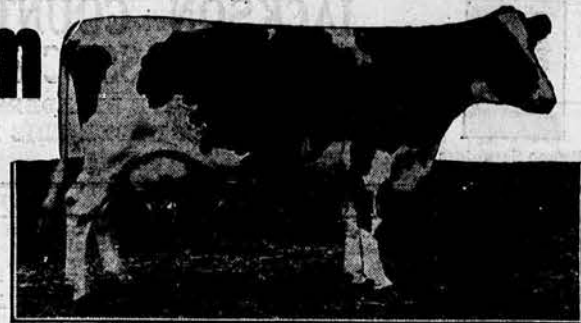
The Holstein Offering will Include

- 3 Registered Bulls.
- 5 Registered Cows and Heifers.

- 10 two and three year old Heifers to freshen soon.
- 10 Heifers recently bred.

The above cows and heifers are all sired by Good Registered Holstein Bulls and are all bred to Holstein Bulls.

J. C. Robison, Towanda, Kansas



SHORTHORN CATTLE

LOOKABAUGH'S SHORTHORNS.
At private sale. Six or nine months time-if desired. Young heifers and bulls, \$100 and up. Two heifers and bull, not related, \$225 for the three. Others higher. High-class herd bulls close to imported Scotch dams, sired by such sires as Lavender Lord by Avondale. Nicely bred young heifers from milking strains. Young bulls, the farmer's kind. Cows with calf at foot and rebred. Great variety of prize-winning blood. If you want breeding stock, do not miss this opportunity. My foundation Shorthorns carry the blood of the best families and most noted sires of breed. Over 200 head from which to select. If you cannot come, write.
H. C. LOOKABAUGH, Watonga, Blain County, Oklahoma.



Thirty-five Shorthorn Bulls

Sixteen months to two years old. Pure Scotch and Scotch topped. Sired by Star Goods and Victor Orange, two great bulls. These bulls are from my best cows. They are large and well developed and in good condition, fit to head good herds. Will sell one or a carload. Also a few cows and heifers—300 head in herd. Come and see them. Prices reasonable.
HENRY STUNKLE, Peck, Kansas.

Pearl Shorthorn Herd

Fifteen young bulls ranging in age from 8 to 13 months old. Red or roans of Scotch and Scotch-topped breeding. Herd located at Pearl, Dickinson County. Can ship over Missouri Pacific, U. P., Rock Island or Santa Fe. Address mail to Abilene, Kan.

C. W. TAYLOR
Abilene, Kansas

SHORTHORNS FOR SALE.

Several good coming yearling bulls and a number of heifers of various ages, from the Crestmead herd, which numbers 100 head, all Scotch of popular families.

W. A. BETTERIDGE,
Pilot Grove, Cooper County, Missouri.

CHOICE SHORTHORN BULLS

One red, 20 months old, well grown, straight and smooth, at \$125. One dark roan, 19 months old, very finely finished, well fleshed, large, attractive, at \$150.
G. A. LAUDE & SONS, Rose, Kansas.

Cedar Heights Shorthorns

For Sale—One roan Cruickshank Butterfly bull, 18 months old; extra good; come and see him.
H. T. FORBES, Route 8, Topeka, Kansas.

CHOICE SHORTHORN BULLS AND HEIFERS

Large beefy-type Shorthorns, extra in quality; reds and roans, richly bred, blood of imported Collingie, imported Mariner and Captain Archer.
H. M. HILL, Lafontaine, Kansas.

RIVERSIDE SHORTHORNS.

Clipper Model 386430 by Orange Model 317228, out of Crestmead Cicely 20, at head of herd. Herd cows representing the best Scotch families, Orange Blossoms, Butterflies and others.
H. H. HOLMES, Great Bend, Kansas.

BULLS FOR SALE

SIX SHORTHORN BULLS—Two 14 months old, red and roan; three coming 2-year-olds, reds; and one coming 3-year-old, red. These are good bulls. Price, \$80 to \$150 per head. In fine condition. These are bargains. Also have 50 registered Hereford bulls for sale.
SAM DRYBREAD, ELK CITY, KAN.

Short Horn Heifers

for sale. A few good ones bred. Price, \$125 each. Also large type Poland China September pigs, either sex, \$20 each.
JEWELL BROS., Humboldt, Kansas

TENNEHOLM SHORTHORNS

Three good yearling bulls and a few heifers. Some of show yard quality. Prices reasonable. Write for further information.
E. S. MYERS, Chanute, Kansas.

When writing advertisers, please mention Kansas Farmer.

SHORTHORN CATTLE

HOLSTEIN CATTLE.

CHOICE HOLSTEIN BULL CALF.
Grandson of King Walker, sire of world's record cow for butter and milk, 365 days; combines great milk and butter strains; four generations of 30-pound butter cows in pedigree; no females for sale. Established 1901 by George C. Mosher, Hilliercroft Farm, 3612 Locust St., Kansas City, Mo.

SUNFLOWER HERD HOLSTEINS

Oskaloosa, Kan. Watch this space for the best thing in Holsteins.
F. J. SEARLE, Prop., Oskaloosa, Kansas.

HOLSTEIN and GUERNSEY heifer calves; practically pure-bred; not registered but from selected cows; calves four weeks old; crated to ship anywhere; satisfaction guaranteed; \$20 each.
MEADOW GLEN YARDS, Whitewater, Wis.

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Travel over the country and make big money. No other profession can be learned so quickly that will pay as big wages. Write today for big free catalog of Home Study Course, as well as the Actual Practice School, which opens Monday, Aug. 3, 1914.
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Guarantees his work.

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Manhattan, Kansas.

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Hiawatha, - - - Kansas

COL. J. E. MARKLEY Fine Stock and General Auctioneer
Powhattan, Kansas.

JERSEY CATTLE.

Bank's Farm Jerseys

Quality with milk and butter records. One of the best sons of CHAMPION FLYING FOX, imported, at head of herd. Stock for sale.
W. N. BANKS, Independence, Kan.

GREEN HILL JERSEY FARM

For Sale—Several young bulls up to 15 months old, sired by Viola's Majesty. Dams American and imported cows of choice breeding and individuality.
D. LEE SHAWHAN, Lees Summit, Mo.

REGISTER OF MERIT JERSEYS.
Offer a fine young cow in milk and bred to Oakland's Sultan for \$150. Also a granddaughter of Golden Fern's Lad bred to same bull, \$200. Choice heifers, \$100 up. Bulls from high-testing dams, \$50 to \$150, including a son of Gamboe Knight.
R. J. LINSOTT, Holton, Kansas.

GREAT JERSEY BULL YEARLING
Out of 45-pound cow, Golden Fern's Lad, Flying Fox and Silverline Lads breeding. He cannot be duplicated for price asked. Write for price and description.
D. A. KRAMER, Washington, Kansas.

FIELD NOTES

Attention is called to the card of L. Reep of Abilene, Kan. Mr. Reep is advertising a high class registered Holstein bull and also a registered Holstein cow for sale. The yearling bull offered is of Korndyke breeding and has a long line of ancestors with records of 21 pounds of butter and over in a 7-day test. He is offering this bull at a bargain price in order to sell him quick. Look up his card and note his price. This is a snap for anyone wanting a high class Holstein bull.

Col. Burger Booking Fall Sales.
Col. Lafe Burger, Wellington, Kan., makes a specialty of pure-bred live stock and big farm sales. Colonel Burger has been selling for more than 15 years. He has a long list of successful sales to his credit and he knows how to get the full value for an offering. His business card appears regularly in Kansas Farmer and his address is Wellington, Kan. If you are planning to hold a sale in the near future it might pay you to write Colonel Burger for date, and mention Kansas Farmer.

H. T. Forbes of Topeka, Kan., is offering one pure Scotch Butterfly roan bull for sale. This young bull is a grandson of Choice Goods, and a splendid individual. Anyone wanting a first class herd bull should not look further. He is right in every way and priced reasonable. If you go, look him over and you will buy. Please read ad in this issue and write or go see him. Kindly mention Kansas Farmer.

Attention is called to the card of W. A. Hoyt, proprietor of Meadow Glen Yards, Whitewater, Wis. He is offering Holstein and Guernsey heifer calves that are practically pure-bred but not registered. They are out of selected cows and anyone wanting high class young dairy stock should investigate his offering. He will crate and ship calves anywhere and guarantees satisfaction. He is pricing four weeks old calves at \$20. Look up his card and write him. Please mention Kansas Farmer.

Working Concrete.
Farmers generally are awake to the economy and permanency of concrete construction. Much more concrete would be used on the farms of Kansas if the farmer fully understood mixing and the building of forms, etc. The Ash Grove Lime & Portland Cement Company has published a handsomely illustrated text book on concrete construction entitled "Permanent Farm Improvements." This is a 112-page book printed in clear, easy-to-read type—contains complete instructions for more than 75 farm structures—everything from a fence post to a barn. Complete instructions for building forms—the mixing of the concrete. All the different tables for the different mixings have been gone over by experts, and are authentic. By having this book any farmer can do his concrete work and will produce good results as to stability and strength, as well as appearance. This book cost The Ash Grove Cement Co. a big sum of money. It was published to sell at 25 cents a copy, which is less than cost. For a limited time these books will be sent free to all who write for one. Address The Ash Grove Lime & Portland Cement Co., 702 Grand Ave. Temple, Kansas City, Mo.

J. C. Robison's Percheron and Holstein Sale.
Attention is called to the sale advertisement of J. C. Robison of Towanda, Kan. On June 10 Mr. Robison will hold his nineteenth sale of imported and home-bred Percheron horses and mares. His offering of Percherons will consist of six stallions from two to eight years old, five brood mares with colts at side, five mares 3 to 5 years old and ten 2-year-old fillies. All of the

JERSEY CATTLE

JERSEY BULLS

We are long on bulls, so are offering young bulls from our very best cows; some ready for light service; way under value; sired by Vesta's Knight, a son of Gamboe Knight; Golden Love's Son, a son of Sultana's Jersey Lad; G. Melia Ann's King, grandsons of Noble of Oaklands and Eminent's Raleigh.

\$50 AND UP

A few bred cows for sale; crated, registered and transferred.

GLENWELL'S FARM, Grandview, Mo.

FOR SALE—Five bulls, from two to eighteen months; solid light fawn, close up to Forfarshire and Blue Belle's Boy; half brother to Noble of Oaklands, the \$15,000 bull. Few young cows.
S. S. SMITH, Clay Center, Kansas.

BENFER JERSEY CATTLE.
Bull calves all sold except some very young ones. Offering three-year-old herd bull and yearling from imported cow; also few non-related cows.
E. L. M. BENFER, Leona, Kansas.

HEREFORD CATTLE

HEREFORD BULLS FOR SALE.
Choice young registered Hereford bulls, sired by Dan Shadcland 363260, out of Anxiety and Lord Wilton bred dams. C. F. Behrent, Oronoque, Norton Co., Kan.

DUROC JERSEYS

BARGAIN IN DUROC BOARS

Few choice boars left. Rich breeding and well grown out. Priced for quick sale. We need the room for our spring pigs. Write for prices and descriptions.
M. M. HENDRICKS, Falls City, Neb.

BERKSHIRE HOGS



Special Offering
Sutton Farm
Berkshires

200 HEAD

40 Boars, 20 Bred Sows, 40 Open Sows, 90 Fall Pigs, All at Attractive Prices.

SUTTON FARM LAWRENCE KANSAS

WALNUT CREEK STOCK FARM.

Large English Berkshires

Special Offering. Choice bred sows and gilts for August and September farrow. Choice pigs sired by prize winning boars, either sex, 10 to 16 weeks old, non-related. Price, registered, crated, f. o. b. here, one, \$20; two, \$35; three, \$50.
H. E. CONROY, Nortonville, Kansas.

mares were either sired by his great stallion, Casino, or are bred to him. This entire offering of Percherons are strictly high class in every way and anyone wanting Percherons should arrange to attend this sale. On the same date Mr. Robison will sell 30 head of registered and high grade cows and heifers and registered bulls. The cows and heifers were all sired by good registered Holstein bulls and are all bred to registered bulls. These Holsteins were all personally selected from the best herds in the east and all over six months old will be tuberculin tested before sale day. The sale will be held in sale pavilion on White Water Falls Stock Farm near Towanda, Kan. Parties attending sale will be furnished free conveyance to farm from Towanda. Send for catalog at once. Please mention Kansas Farmer when writing.

JACKSON COUNTY BREEDERS' ASSOCIATION

MOST PROGRESSIVE BREEDERS OF JACKSON COUNTY UNDER THIS HEAD

Bruce Saunders
President

Devere Mather
Secretary

SHORTHORNS.

Oak Grove Shorthorns headed by the great bull "White Starlight" by Searchlight. Dam by Choice Goods. Every cow in herd straight Scotch. **ROBT. SCHULZ**, Holton, Kansas.

ABERDEEN ANGUS.

"BLACK DUSTER" heads our herd, mated with as richly bred cows as can be found. Choice cows with calves at foot, and re-bred. Also young bulls. **Berkshires. George McAdam**, Holton, Kan.

POLLED DURHAMS.

"TRUE SULTAN" heads herd. Shown at 9 leading fairs last year, winning 9 firsts and 8 junior championships. We are mating him with cows of equal breeding and merit. **Ed. Steglin**, Straight Creek, Kan.

HOLSTEINS.

SHADY GROVE HERD. For immediate sale, four choice young bulls of excellent breeding and out of high record dams. Also three-year-old herd bull. Inspection invited. **G. E. MITCHELL**, Holton, Kan.

SEGIST & STEPHENSON. Breeders of registered working high testing Holsteins. Choice young bulls out of record cows for sale. Farm adjoins town. **Holton, Kan.**

BUFFALO AGUINALDO DOEDE heads Shadland farm herd. Dam, Buffalo Aggie Beets, the world's second greatest junior 3-year-old cow. Young bulls for sale. **David Coleman & Sons**, Denison, Kan.

HOLSTEINS. Best of breeding and individuality. Registered and unregistered O. I. C. swine of the best strains. Also White Wyandotte chickens. Stock for sale. **J. M. Chestnut & Sons**, Denison, Kansas.

JACKS AND JENNETS.

M. H. ROLLER & SON Circleville, Kan. Fourteen big jacks and 25 jennets for sale. One imported Percheron and one high-grade Belgian stallion.

PERCHERONS.

BANNER STOCK FARM—Home of "Incus," champion American Royal, 1911; Weight, 2,240. Two young stallions and one two-year-old big jack for sale. **BRUCE SAUNDERS**, Holton, Kansas.

PERCHERONS FOR SALE. A few nice farms for sale. Write **JAS. C. HILL**, Holton, Kansas.

P. E. McFADDEN, HOLTON, KANSAS. Live stock and general farm **AUCTIONEER**

HORSES AND MULES

Part from 2,400-pound imported sire and part from 2,200-pound imported sire and imported dams, my 2, 3 and 4-year old registered Percheron stallions would prove valuable breeders for you. With all their weight and bone they are dressy and straight sound. This is some of the most substantial and most attractive Percheron breeding material in the world. Farm-raised and offered at farmers prices. Fast direct trains from Kansas City and St. Joseph. **FRED CHANDLER, Route 7, Charlton, Iowa.**

IMPORTED and HOME-BRED Percheron and Belgian Stallions and Mares. Two-year-olds weighing from 1,850 to 1,950; older horses, 1,950 to 2,250. We have good herd headers at reasonable prices. Sold with certificates of soundness under Nebraska law. Guarantee and terms right. Come and see us. Seward is 26 miles west of Lincoln and 67 miles east of Grand Island. Farm adjoins city. **JOSEPH ROUSSELE & SON, Seward, Neb.**

JACKS AND JENNETS 20 Large Mammoth Black Jacks for sale, ages from 2 to 6 years; large, heavy-boned, broken to mares and prompt servers. A few good jennets for sale. Come and see me. **PHIL WALKER**, Moline, Elk Co., Kansas.

JACKS AND JENNETS. Six fine 3 and 4-year-old jacks and 17 mammoth black jennets for sale. Will sell worth the money. **JNO. A. EDWARDS**, Englewood, - - - Kansas.

GUERNSEY CATTLE

REGISTERED GUERNSEY BULL, 16 months old; five grade Guernsey cows; one 2-year-old heifer fresh in summer, and 6-weeks-old Guernsey bull calf. All must sell in next 30 days. Write for prices and description. Closing out. **DR. E. G. L. HARBOUR**, Baldwin, Kansas.

POLLED DURHAM CATTLE

ROAN HERO 3613 - 229963 THE INTERNATIONAL CHAMPION heads my herd of Double Standard Polled Durhams. Few choice young bulls for sale. Mo. Pac. Railway 17 miles southeast of Topeka, Kansas. Farm adjoins town. Inspection invited. **D. C. VAN NICE**, Richland, Kansas

POLLED DURHAMS FOR SALE TEN HERD BULLS sired by Roan Choice, the junior champion of 1911. Prices reasonable. Come and see my herd. **C. J. WOODS, CHILES, KAN.**

MULE FOOT HOGS

GRAFF'S MULEFOOT HOGS. Glits, breeding age. Choice boars, winter pigs, either sex. Herd boars. Prices low. **ERNEST E. GRAFF, Rosendale, Mo.**

HERFORDS.

HERFORD BULLS. Choice, richly bred individuals, ready for service. Also Duroc Jersey glits bred for spring farrow. Percherons for inspection. **M. E. GIDEON**, Emmett, Kansas.

JERSEY CATTLE.

Linscott Jerseys. The oldest and strongest herd in Kansas. One hundred head, consisting of cows in milk, heifers and young bulls. Reasonable prices. Island breeding. **R. J. LINSOTT**, Holton, Kansas.

FAIRVIEW JERSEYS.—For quick sale, a 4-weeks-old bull out of a fine young cow now giving 4 gallons of 5.6% milk daily. He is fine type and priced reasonably. **E. A. GILLILAND, Mayetta, Kan.**

SUNFLOWER JERSEYS, headed by Imp. "Castor's Splendid," mated with real working cows. Choice young bulls of serviceable age for sale. **H. F. EDDLEY**, Holton, Kansas.

Spring Hill Dairy Farm Bull Calves by sons of Gamboe Oxford Princess, 2 lbs. 6 1/2 oz. butter; Diploma's Fair Maid, 11,400 lbs. milk, 9 mos. Also females. **J. B. PORTER & SON, Mayetta, Kansas.**

"Fontain's Valentine" Heads our Jerseys. Unregistered. Cows bred to this bull for sale. Also bull calf. **W. R. LINTON**, Denison, Kansas.

POLAND CHINAS.

DODSON BIG SMOOTH KIND.—Ten big fall boars, ready for light service; sired by Sunny Colossus. Fourteen glits will be bred to Orange Chief. **WALTER DODSON**, Denison, Kan.

HIGHLAND STOCK FARM. Poland Chinas Shorthorns, 15 choice, big bone spring and summer boars for sale, sired by "Expansive Wonder." Also fall boars. **BROWN HEDGE**, Whiting, Kansas.

MAHANS BIG POLANDS have both size and quality. Headed by a son of the great Expansive. Sows of unusual size and smoothness. 25 fall pigs, either sex, for sale. **J. D. MAHAN**, Whiting, Kansas.

COLEMAN'S BIG SMOOTH POLANDS. 150 in herd. Herd boars, O. K. Lad, Hadley C. Expansion, Price We Know, Mastodon and Mogul sows. Herd has tops from many sales. 20 bred glits and 25 fall pigs for sale. Also Jersey cattle. **JOHN COLEMAN**, Denison, Kan.

TEN BRED GLITS and tried sows. Big kind bred to a splendid son of Blue Valley Gold Dust. Dams trace to John Blain's breeding. **IMMUNE.** **O. B. CLEMETSON**, Holton, Kansas.

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GRAFF'S MULEFOOT HOGS. Glits, breeding age. Choice boars, winter pigs, either sex. Herd boars. Prices low. **ERNEST E. GRAFF, Rosendale, Mo.**

HOLSTEIN CATTLE.



Pure-bred Registered
HOLSTEIN CATTLE

The Wisconsin Farmer notes that fewer and fewer of the Wisconsin farmers are content to milk and care for cows that are able to produce only about 150 pounds of butter. During two weeks last spring 145 Wisconsin dairy-men purchased registered pure-bred Holstein sires in order to improve their herds.

Everywhere the more progressive dairymen are alive to the necessity of using bred-for-production sires in order to bring up the butter-fat yield of their cows to a profitable figure. Send for **FREE Illustrated Descriptive Booklets.**

Holstein-Friesian Assoc., F. L. Houghton, Sec'y, Box 114, Brattleboro, Vt.

CORYDALE FARM HOLSTEINS Headed by Jewell Paul Butter Boy. Eleven choice registered bulls; ages, few weeks to 24 months. From large richly-bred cows with strong A. R. O. backing. Nicely marked. Splendid dairy type. Reasonable prices. **L. F. CORY**, Belleville, Kan.

CHENANGO VALLEY GRADE HOLSTEINS Two hundred nicely marked well-bred young cows and heifers, due to freshen within the next three months. Also registered bulls ready for service. **F. J. HOWARD**, Beuckville, N. Y.

FOR SALE—At reasonable prices, 25 high grade Holstein Dairy Cows, all young, good size and well marked. Not registered, but best to be had in the state at prices asked. A few young bulls coming one year old. Independent Creamery, Council Grove, Kan.

HIGH CLASS HOLSTEIN COWS

Both registered and high grade. Breeding stock for sale at all times. Write us your wants. **ARNOLD & BRADY**, Manhattan, Kan.

HOLSTEINS FOR SALE. High-grade cows and springing heifers, also registered bulls ready to use. Exceptionally good breeding. Write **Springdale Stock Ranch, Concordia, Kansas.**

Butter Bred Holsteins

For Sale—A herd bull, also choice bull calves. Prices very reasonable. Write today. These bargains will not last long. **J. P. MAST**, Scranton, Kan.

GOLDEN BELT HOLSTEIN HERD. Prince Hadria at head of herd. He has 26 A. R. O. sisters, 21 brothers and several daughters. Extra choice young bulls for sale out of 600-pound A. R. O. dams. Farm near town. **W. E. BENTLEY**, Manhattan, Kansas.

SIXTY HEAD of registered and high-grade Holstein cows and heifers, also a few registered bull calves. **HIGGINBOTHAM BROS.**, Rossville, Kansas.

HOLSTEIN BULL CALVES always on hand, and worth the price. **H. B. COWLES**, Topeka, Kansas.

HAMPSHIRE HOGS

ECLIPSE FARM HAMPSHIRE. Bred sows, spring and summer pigs for sale. **A. M. BEAR**, Medora, Kansas.

ATTRACTIVE PRICES. Some extra nice glits bred for August litters and a few choice 200-pound boars; also one tried sow bred for June. **F. C. WITTOFF**, Medora, - - - Kan.

Registered Hampshire Hogs

For sale, both sexes. Choice belting and type. Priced reasonable. **E. S. TALIFERO**, Route 3, Russell, Kan. Shipping point, Waldo, Kan.

BRED GLITS, serviceable boars, January and February pigs. Best breeding, well marked. Singly, pairs and trios. Satisfaction guaranteed. Prices reasonable. **S. E. SMITH**, Route 5, Box 18, Lyons, Kan.

HAMPSHIRE HOGS. We will offer for the next 30 days two yearling and eight fall boars; also a few sows and glits all of the very best breeding and markings. For further information address **WILLIAM INGE & CO., Independence, Kan.**

DUROC JERSEYS

GOLDEN RULE DUROC JERSEYS. Twenty spring boars, tops of entire crop. Sired by Dreamland Col. and River Bend Col., out of big mature sows. Priced to sell. **LEON CARTER**, Asherville, Kan.

Good Enough Again King 35203, the sensational grand champion of Kansas State Fair, 1913, heads our great herd. Forty sows and glits for sale. **W. W. OTEY & SONS, WINFIELD, KAN.** THE MEN WITH THE GUARANTEE.

Bonnie View Stock Farm

We have for sale some extra fall and spring pigs, nice enough to head any herd or show at any fair; out of prize winners. Write for prices on boar and three sows; last fall's farrow; for show. **SEARLE & COTTLE**, Berryton, Kan.

WEANLING PIGS—Duroc pigs from large, prolific, easy-feeding stock, \$15 each. Express paid on pairs and trios not related if ordered before June 1. Superba, Defender, B & C's Col. and Ohio Chief blood lines. Also choice summer and fall glits ready for breeding. Everything immune. **JOHN A. REED**, Lyons, Kansas.

DREAMLAND COL. HEADS OUR HERD. For Sale—Creek Creek Col., a splendid individual and sire; reasonable figure; fully guaranteed. **J. R. JACKSON**, Kanopolis, Kan.

DUROC JERSEYS

TATARRAX HERD DUROCS

Some choice fall boars ready for service by Tatarrax and G. M.'s Tat. Col. Price reasonable. **C. L. BUSKIRK**, Newton, Kansas.

BON-ACCORD DUROCS

Choice September boars, also one fancy April boar by Successor and out of the grand champion sow, Model Queen. **LOUIS KOENIG**, Solomon, Kansas.

DUROCS Summer and Fall Boars, sired by Joe's Pride 118467 and Monarch's Model 139777. Also a few bred glits by Joe's Pride and bred to Royal Climax. Will sell or trade Monarch's Model for good sow or glit. **Howell Bros., Herkimer, Kan.**

BELLAIRE DUROC JERSEY HERD. Fall boars and glits; immunized, double treatment; best of breeding; good individuality; spring pigs, both sex. Write for prices. **N. D. SIMPSON**, Bellaire, Kansas.

FANCY DUROC BOARS AND GLITS. Fall boars by Smith's Graduate by J. R.'s Col. by Graduate Col., out of best sows. Choice lot of glits by J. R.'s Col. bred for June litters to Gold Medal. Priced for quick sale. **J. E. SMITH**, Newton, Kansas.

Crystal Springs Duroc Jerseys. The Big Prolific Kind. Boars by Bull Moose Col. by King the Col. From big, well bred sows. Write for descriptions and prices. **Arthur A. Patterson**, Ellsworth, Kansas.

IMMUNE DUROCS—Fifty big-type sows and glits, fall boars and spring pigs. Choice breeding and guaranteed immune from cholera. Inspection invited. **P. I. NELSON**, Assaria, Saline Co., Kan.

POLAND CHINAS

GRANER'S IMMUNE FALL BOARS

Twenty extra choice big-type fall boars, tops from my entire crop, mostly sired by Moore's Halvor, my big Iowa bred boar. Others by Sampson Ex. and Melbourne Jumbo, out of big mature sows. \$25 each while they last. Send check with first letter. Fully guaranteed. Also one pure Scotch Shorthorn bull, solid red color, 12 mos. old. **H. C. GRANER & SON**, Lancaster, Kansas.

CEDAR LAWN POLAND CHINAS

Choice September boars and glits sired by the big boar, A's Big Orange, out of strictly big-type dams. All immune. Also Shorthorn bulls. **S. B. AMCOATS**, Clay Center, Kansas.

SPOTTED BOARS FOR SALE.

I have four splendid old original big boned spotted Poland boars ready for service. Price reasonable. One good glit bred for last of May farrow. Spring pigs, either sex. Jerseys—bred heifers and young bulls for sale. **THE ENNIS FARM**, Horine Station, Missouri. (30 miles south of St. Louis.)

BIG-TYPE BOARS AND GLITS.

Special offering. Choice bred sows and breed glits to suit purchaser. Boars ready for service. Will book orders for spring and July, August, September farrow. Can Price right. Write, **DIETRICH & SPAULDING**, Richmond, Kan.

Pioneer Herd Big-Type Poland Chinas. Choice lot of sows and glits for sale, bred for summer and fall litters to the three times grand champion boar, Smuggler S88913, A173869, and Logan Price. Booking orders for spring pigs in pairs or trios. Prices reasonable. **OLIVIER & SONS**, Danville, Kansas.

Merten's Big Smooth Poland Chinas Headed by King Hadley 3d and Kansas Wonder, mated with daughters of Old Expansion, What's Ex. and Grand Look Jr. Stock for sale. **E. E. MERTEN**, Clay Center, Kansas.

PAN LOOK HEADS HERD. Biggest possible big-type breeding. Fall boars and glits sired by him for sale. Be your own judge. Out of Expansion bred dams. **JAS. ARKELL**, Junction City, Kan.

Faulkner's Famous SPOTTED POLANDS. We are not the originator, but the preserver of the Old Original Big-Boned Spotted Poland. Write your wants. Address **H. L. FAULKNER**, Box K, Jamesport, Mo.

SMITH'S BIG-TYPE POLANDS. A choice lot of fall pigs, either sex. Strictly big-type breeding. High-class individuals, priced to sell. **AUSTIN SMITH**, Dwight, Kansas.

A ORANGE AGAIN Heads our Poland Chinas. Choice big fall boars for sale, also 50 spring pigs. **HUBERT J. GRIFFITHS**, Clay Center, Kan.

WONDER POLAND CHINA HERD Headed by Model Wonder, assisted by a son of Blue Valley. Mated to as big sows as can be found. We offer spring glits by first named boar and bred to the other one at reasonable prices. **O. R. STRAUSS**, Milford, Kan.

OHIO IMPROVED CHESTERS

Crystal Herd O. I. C's

Headed by Frost's Buster 29745 by Thea 30442. Some choice August boars by this great sire of prize winners. They are strictly high class and priced right. Also booking orders for February pigs by illustration and out of Frost's Buster dams. Get in early and get a prize winner. **DAN WILCOX**, Cameron, Missouri.

The Ennis Farm, Horine Station, Mo., is offering spotted Poland Chinas; also Jersey bulls and heifers. The entire offering, both of hogs and cattle, is first class. Write and describe what you want and get prices.

Anyone wanting big, high class jacks or jennets should remember that Phil Walker of Moline, Kan., always has that kind. His offering will always bear inspection and his prices for high class stock are always reasonable.