

KANSAS FARMER

For the improvement

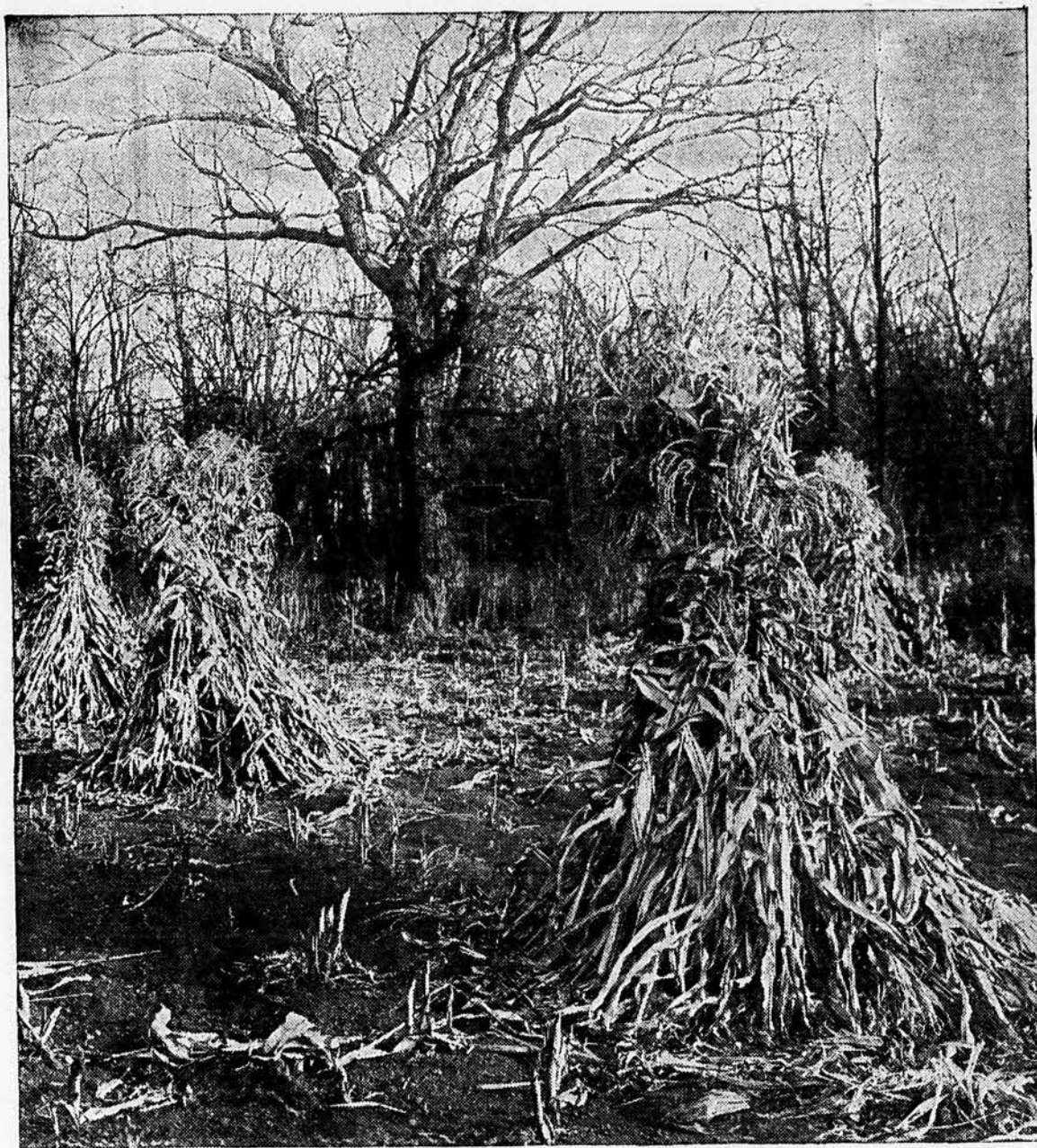


of the Farm and Home

Volume 54, Number 48.

TOPEKA, KANSAS, NOVEMBER 25, 1917.

Established 1863. \$1 a Year



Lord, 'tis Thy plenty-dropping hand
That soils my land,
And gives me for my bushels sown,
Twice ten for one;
Thou makest my teeming hen to lay
Her egg each day;
Besides, my faithful ewes to bear

Me twins each year;
The while the conduits of my kine
Run cream for wine—
All these, and better Thou dost send
Me—to this end,
That I should render, for my part,
A thankful heart.

—Robert Herrick.

The Farm Implements Puzzle Game

Fun for Everybody in a Fascinating Pastime

\$3500 - For Fifty Suggestions! - \$3500

Farm & Fireside and Kansas Farmer announce a pictorial pastime in which everybody is invited to take part. \$3,500 will be given 400 people who make best suggestions for titles to pictures drawn to represent things familiar to young and old around the farm. No sets are to be filed before January 20, and sets will be accepted if filed by midnight of February 20.

Read this announcement carefully, then send for the first twenty-five pictures and details. Watch for further announcements and additional pictures.

We can explain our new plan quickly and easily. It is to be known as the FARM IMPLEMENTS PUZZLE GAME and it will consist of fifty clearly drawn pictures, each representing some farm implement, implement part or mechanical term. These pictures will have no titles given them in advance. Readers will be invited to study the pictures and make title suggestions. When all fifty pictures have appeared, readers will file their sets of title suggestions and a committee of prominent and disinterested men will pass upon them and select titles which, in their judgment, are most fitting or applicable to the pictures.

Awards totaling \$3,500, as explained opposite, will then be given those whose title suggestions are deemed best by the judges. A sample picture and five regular pictures (Nos. 1 to 5, inclusive) appear on this page, so you can start playing the game at once. To make the game one which anyone can play intelligently and with benefit, and to meet the natural argument, "But I know little or nothing about farm implements or machinery," we have prepared an alphabetical list of about 3,000 implements, parts and mechanical terms, all of which will be found in the average farmer's equipment.

With such a list for guidance of all, the person who knows absolutely nothing about machinery has every bit as good an opportunity to play and win as an expert. From this list, ideas for the pictures were obtained, and in this list the answers surely will be found.

With pictures and the list before you, the game becomes both simple and easy. You study the pictures and then run through the alphabetical list to see if the ideas which occur to you can be used and also to get new ideas. The sample picture and accompanying matter explain this thoroughly. We call the list the Official Key Book because containing, as it does, titles which will be selected for the pictures, it is truly the key to correct solution of each picture and, in this way, the key to success. The rules of the game do not require that you refer to the list, but we cannot conceive of anyone playing the game with the idea of submitting a carefully prepared set to win an award, yet not taking advantage of the assistance the Official Key Book offers.

It is not a requirement that you subscribe nor purchase anything, but if you intend to follow announcements closely it will be advisable to subscribe for Farm & Fireside and Kansas Farmer, and if you do, you will be given a copy of the Official Key Book free. The Key Book will be placed on public file in any city when arrangements for this are made.

If you desire to get all fifty pictures at one time, you can do so by sending us in a second subscription, which will entitle you to a free copy of the Reprint and Reply Book. This contains reprints of all fifty pictures with spaces for as many as six suggestions opposite each picture.

It is not a requirement that you submit suggestions in the Reprint and Reply Book. You can clip the pictures from Kansas Farmer and submit one suggestion for each picture by pasting each picture on a separate sheet of paper and placing below it ONE title suggestion. In this case you will sign your name and address on each separate sheet. If, however, you desire to submit the maximum number of suggestions permitted in one set (six to any or all pictures) you can do so in the Reprint and Reply Book. This offers a convenient, compact and safe form in which to submit suggestions.



No. 4—What farm implement, machine part or mechanical term does this picture represent?



No. 5—What farm implement, machine part or mechanical term does this picture represent?

Here Is a Sample Picture

(See the First Five Numbered Pictures at Bottom of Page.)

The picture opposite is a sample picture to show you how pictures are drawn to represent farm implements, parts or items having to do with farm machinery and so show you just how you play the game.

Look at the sample picture. What does it immediately suggest to you? Let's take a few titles from the Official Key Book:

Alfalfa Cultivator	Leg Band
Asparagus Buncher	Poultry Band
Band	Perch
Barb Wire	Scalding Vat
Cattle Fence	Sweep Rake
Double Trees	



There is nothing in the picture which suggests "Alfalfa" or "Asparagus," is there? "Band"—that sounds promising. It is surely a Band, but is that the best possible suggestion? Let's look farther and carefully, "Barb Wire"—no, nor "Cattle Fence." What's this, "Leg Band?" No, that's not as good as Band, but Band is surely—here it is! "Poultry Band!" Certainly, what else could it be? And there comes the Poultry Band, every little chick-musician playing away for dear life with the proud rooster drum major in the lead! Easy, isn't it? Fun, too.

NOTICE

The first twenty-five pictures will be mailed free to readers of Kansas Farmer. Simply send your name and address. Send no money, not even postage. With the first twenty-five pictures in your hands you will have exactly half of the total number constituting the game. The balance of the pictures will appear in Kansas Farmer at frequent intervals. No sets of suggestions are to be filed before January 20, 1917, and you will have until midnight of February 20, 1917, to file sets of suggestions. You have ample time.

It may surprise you to learn we intend to divide the substantial sum of \$3,500 among four hundred readers who submit the best sets of title suggestions. And wouldn't it be fine if your set of answers were considered the best and you were so fortunate as to receive the biggest award?

We offer for the best set of title suggestions as defined by the rules \$1,000.00
For the next or second best set we will award 500.00
For the third best set 250.00
For the fourth best set 125.00

For the fifth best set, \$100.00; for the sixth best set, \$75.00; for the seventh best set, \$50.00; for the eighth best set, \$50.00; for the ninth best set, \$25.00; for the tenth best set, \$25.00; for the eleventh to fiftieth best sets, \$10.00; for the fifty-first to one hundred and fiftieth best sets, \$5.00; for the one hundred and fifty-first to three hundredth, \$2.00; for the three hundredth to four hundredth best sets, \$1.00; making a total of four hundred awards amounting to \$3,500.

No award will be divided. In case of ties, awards of equal value will be made to each tying participant.

The \$1,000, which is the first award—just think of it, \$1,000 for fitting titles to pictures, pictures of farm implements which you see about you every day—and three hundred and ninety-nine smaller amounts will go to someone. Why not you? I hear you say you have "never tried" your skill in this way. You are able to accomplish almost anything you really determine to do, why not decide to play the Farm Implements Game so well that you will be among the winners?

You will find this game a mighty fine mental recreation and relaxation. Play it! Get those around you to play it!

If you want information only, send postal—For Either or Both books send this coupon.

Here are the first five pictures. Each represents some farm implement part or mechanical term. What titles do they suggest to you?



No. 1—What farm implement, machine part or mechanical term does this picture represent?



No. 2—What farm implement, machine part or mechanical term does this picture represent?



No. 3—What farm implement, machine part or mechanical term does this picture represent?

KANSAS FARMER, GAME EDITOR, TOPEKA, KANSAS.

Enclosed herewith please find (\$1.00—\$2.00) to cover (one—two) subscriptions to Kansas Farmer and Farm & Fireside, each for one year. (If you enclose \$2.00, two subscriptions to both publications must be included. One can be your own.) This remittance entitles me to a copy of the (Official Key Book—Reprint and Reply Book) to be sent me free and postpaid, together with instructions and information.

NAME

P. O. Route State

NOTE.—If books and subscriptions are to be sent to different addresses, make this plain. *Remittance of \$1.00 entitles you to choice of one book. †Remittance of \$2.00 entitles you to both.

If you want information only, simply send your name and address

REMEMBER---We Will Send Pictures 1 to 25 Inclusive FREE! Simply Send Your Request



KANSAS FARMER

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COW TESTING ASSOCIATIONS

There are 346 cows testing associations in the United States. Wisconsin leads the list with the largest number, New York coming second, and all the leading dairy states have a good many such associations. Kansas has but one. On page four of this issue is the report of the work this association has done during the past three years. The Pioneer Cow Testing Association of Dickinson County, Kansas, has made dairy history for that county.

We have many times wondered why other dairy communities have been so slow to seize upon this most valuable co-operative method of finding out the facts about the cows being milked. The most skillful judge of dairy cattle cannot safely depend on his ability to pick profitable cows simply by looking at them. Without records he is working in the dark.

No money invested will bring back a larger income on the dairy farm than will the fees paid to conduct a cow testing association. It will cost the man with fifteen cows, \$22.50 a year, if \$1.50 is paid for each cow in the herd. This is less than \$2 a day for the work of the tester who spends one day each month with each member of the association. Common labor on the farm costs more than this during rush seasons. The tester will not only keep the records for each member, but will be a means of constantly taking from farm to farm the best dairy practices he finds the different members of the association following. The dairy methods of the whole association will be improved as a result of this passing around of the good things the different members have discovered in their experience.

If you are not satisfied with the results you are getting in your dairy work, the test association will help you. Dissatisfaction with existing conditions is always one of the necessary steps in making progress. The self-satisfied dairyman does not care to go into a cow testing association. He is content to let well enough alone. In the face of what happens wherever such an association is formed, it would seem that the man milking cows without adequate records could not remain in this self-satisfied class very long. No man wants to sell his feed to a cow for 65 cents on the dollar and throw in his labor. Perhaps the manure and the calf may return bare wages for the labor of milking the cow and cleaning the stable, but the calf from such cow is not likely to be better than its mother and the herd will not be improved by permitting so unprofitable an animal to perpetuate herself.

The cheapest way out of this condition of uncertainty in the dairy business is through the cow testing association. We hope our readers interested in dairying will study carefully the article on page four of this issue.

NOVEMBER CROP REPORT

The November reports from the Federal Bureau of Crop Estimates do not show any improvement over the conditions as reported for October. The great staple crop, corn, has fallen off 75 million bushels, it is estimated. The potato crop, known last month to be short, is turning out 12 million bushels less than was then expected. Even the grain sorghums—kafir, milo, and feterita—which have so often in dry years returned satisfactory grain crops when corn has failed, are yielding only about half as large a crop as last year.

The corn crop of the country is short 89 million bushels of the average for the past five years. The Northern States have more and better corn than last year, the crop in these states being seriously injured the previous year by severe early freezes. About 90 million bushels of old corn is reported still on hand, or about 6 million bushels less than last year. Stores of old corn are relatively high in Kansas, Missouri, Texas, and Oklahoma, this corn being held because of the very poor yields this year.

The acreage of grain, sorghums and their importance to the Plains States have increased rapidly during the past few years, but even these crops were unable to withstand the long, dry, hot spell of the past season. Their yield for this year is but 61 million bushels. The grain produced is nearly all from the early planted fields, many of which gave fairly good yields in spite of the dry season. These crops are almost invariably planted too late for best results. They are seldom given a fair chance as compared with corn. The poor returns this year should not result in cutting down the acreage of sorghum grains planted. Instead it should emphasize the importance of careful seed selection and the planting of the crop on a well prepared seed bed as early as is safe.

For Kansas and Oklahoma the government figures give the yields of grain sorghums as 12 and 11 bushels to the acre, respectively, compared with 26 bushels in each state last year.

TRAPPING PROFITABLE

Many people would be surprised to know the volume of business being done in handling furs. Furs of all kinds are in greater demand than ever before.

We ordinarily think of taking furs by trapping or otherwise, as a pioneer occupation. Many of the larger fur-bearing animals become scarce as civilization invades their homes. There are many of the smaller animals, however, such as the muskrat, skunk, civet-cat, opossum, mink and raccoon, of which this is not true, and it is largely from these smaller fur-bearing animals that our furs are now coming. Boys or young men can make quite a little spending money during the winter season by attending a few traps, even in a settled country. It requires skill and considerable close application to successfully take furs, but even the busy schoolboy can manage to put out a few traps and attend them regularly if he is willing to use his time to the best advantage.

Companies dealing in furs are glad to supply pamphlets that will tell of trapping methods, and we would advise the boy who wishes to try out his hand at trapping, to secure all the information possible in this way. Names of such companies will be found in our advertising columns.

LOSING MONEY ON POOR COWS

Many a good cow fails to return a profit because of poor care and lack of proper feed, but it is also true that heavy losses in dairy herds are frequently the result of keeping unprofitable cows. The only way to locate these unprofitable cows is to keep records.

The actual record of an Ohio dairy farmer which came to our attention recently, illustrates this point. This farm was being operated under normal conditions, one year after another. The size of the business was practically the same for the two years that are reported. The same amount of feed was used each year, and the proportions of feed grown and purchased were approximately the same. By weeding out the unprofitable cows, however, this farmer was able to raise the average receipts per cow from \$89 one year to \$180 the next, and the total live stock receipts for every \$100 worth of feed consumed, from \$76 to \$176. This increased the profit \$1,500 on this farm over and above 5 per cent interest on the investment and what the farm contributed to the living of the family. The year previous it had actually lost money. Such results are by no means uncommon.

The Bureau of Crop Estimates of the Federal Department of Agriculture reports that the composite condition of all crops of the United States on October 1 or at time of harvest was 5.5 per cent below their ten-year average condition on that date, as compared with a condition 5.4 per cent below average on September 1. Final yields per acre of

crops last year were about 8 per cent above average. Aggregate crop yields this year are about 12.5 per cent smaller than last year. This year the total acreage in cultivated crops is slightly less than last year. The total production of important products this year compared with last year is estimated as follows: Corn, 89 per cent; wheat, 60.1 per cent; oats, 79.8 per cent; barley, 77.4 per cent; rye, 85.1 per cent; buckwheat, 88.4 per cent; white potatoes, 83.7 per cent; sweet potatoes, 91.2 per cent; tobacco, 113.4 per cent; flaxseed, 111.3 per cent; rice, 114.6 per cent; hay (all tame), 101.1 per cent; clover, hay 110.8 per cent; cotton, 104 per cent; apples, 86.3 per cent; peaches, 58.2 per cent; pears, 90.9 per cent; sugar beets, 115.3 per cent.

WILSON COUNTY ORCHARD

"Let's get together and raise our own apples," says the agricultural agent of Wilson County in a recent news letter to the farm bureau members. The apples are needed and already several carloads have been shipped into this county, which could easily raise all the apples needed for home consumption and have a surplus to market.

It is almost entirely a matter of taking proper care of the trees that are set. At the present time there is a disposition in this county to learn more of orchard methods. Arrangements have been made with J. W. Hyde, Altoona; W. L. Hatch, Buffalo; C. C. Cox, Altoona; and M. H. Whinnery, Fredonia, to carry on definite demonstration work for the production of good apples next year. Mr. Hatch's orchard has been sprayed more or less for the past few years, but apple blotch is much in evidence. Mr. Whinnery has a large orchard and raised a full crop of York Imperials, but most of the fruit was badly affected with blotch. An effort will be made to control the blotch and the insect pests and make these orchards profitable. Work will be started in February, and George O. Greene, of Manhattan, will come to the county and instruct those interested in the correct method of pruning. A spray schedule will be strictly followed out and meetings will be held at each farm, so that all who can attend will gain the benefit of these demonstrations.

SANITARY ASSOCIATION MEETS

Live stock sanitation problems are each year becoming more numerous and more difficult to solve. The United States Live Stock Sanitary Association, which is wrestling with these many problems, will hold its twentieth annual meeting at the Hotel La Salle, Chicago, December 5, 6 and 7. This association includes leading federal and state live stock officials, farmers, stockmen, and many persons interested in various lines of live stock work in this country.

The program covers a variety of topics related to the live stock industry. The program in detail can be secured by addressing the secretary, John J. Ferguson, Union Stock Yards, Chicago.

Seed specialists of the Federal Department of Agriculture have developed a method whereby seed of Sudan grass may accurately be distinguished from the seed of Johnson grass which, while valuable in some sections, is considered so troublesome a weed in others that state laws prohibit its admission. Careful study of the seeds of the two grasses has disclosed differences in size, form, color and physical characteristics which are easily detected under a good glass. Seed inspectors and others interested in determining the purity of Sudan grass seed may obtain a technical description of this method in Department Bulletin 406, "Distinguishing Characters of the Seeds of Sudan Grass and Johnson Grass," which will be furnished on application as long as the Department's supply lasts.

GRANGE POTENT FORCE

No farmers' organization has stood the test of time as has the grange. It is ever to the front in movements that have to do with the welfare and progress of the people of the open country.

Alfred Docking, one of the grange leaders of Kansas, states that the grange has made splendid progress in our state the past year. Its growth in the matter of subordinate granges has exceeded by nearly 100 per cent that of any other state. He calls attention to the fact that the gain has not been alone in numbers, but also in activity and solidarity.

"The 'ties that bind' are held dearer, the 'good of all' is more prominent, community building is gripping the membership—they are leading out in many neighborhoods in seeking the things 'worth while' for all the people, and they are developing in literally hundreds of communities leaders among their own members who are grasping the big things the grange stands for and trying to discover and follow methods to reach them.

"There is no greater structure going up today than the western communities that are being built upon a thousand country hillside. In this hewing, and squaring, and fitting, and cementing in one common mass, harmonious and complete, the varied materials of country life, the grange is making itself felt. There is a recognition of the usefulness of those who differ, and the respect for varying ability, that is encouraging. Each individual, every family, and every class of interest and service—social, educational, economic, neighborhood betterment, and wider general concerns, has its place.

"Time was when the farmer's life was isolated and unaffected by many great world events. Now it makes a difference to the Kansas plowman turning over his forty acres for wheat, whether the Cross or the Crescent is flying over that 'cross-roads' of the nations and races, the Dardanelles. It touches him practically if the Mexican port of Progreso is closed by war, and the bulk of the world's supply of sisal bottled up.

"It is truly a man's job to grapple with the problems of soil, stock, markets, and home opportunities, that confront the farmer and his wife today, and how thinking people can tackle them unorganized is cause for wonder. It might have been wise to organize twenty years ago—it is absolutely and vitally necessary now.

"There is no department of the varied interests of the farm that the grange does not touch. Its present growth indicates that the brotherly love that is a bond of unity, is pervading its membership as never before. It is not enough to cultivate the business phase alone—there must be links that bind to each other and to deeper and broader principles. All-round progress, in terms of manhood and womanhood, is what we want."

LIVE STOCK MARKETING

The American National Live Stock Association has sent out a call to its members endorsing the work of the Conference on Marketing and Farm Credits and urging them to take part in this meeting which will be held in Chicago, December 4 to 9. The live stock hearings will begin the morning of December 6.

Unsatisfactory conditions at leading live stock markets and the extravagant system of distribution now practiced, were the reasons assigned by Edward L. Burke of the committee on live stock marketing, in sending out this call.

The conditions seem to warrant a thoroughgoing investigation by the Federal Trade Commission. Such investigation will furnish a basis for much constructive work in which the government, the packers, feeders, growers, and public can consistently co-operate. An investigation seems almost necessary before confidence can be restored in the future development of the live stock industry.

COW TESTING BRINGS RESULTS

Test Association Has Put Dairying in Dickinson County on Business Basis

By O. E. Reed, Professor Dairy Husbandry K. S. A. C.

THE cow testing association has proven a success in Kansas. The first cow testing association in this state was organized in Dickinson County in November, 1913, and is called the Dickinson County Pioneer Cow Testing Association. This association was organized by the Dairy Department of the Kansas Agricultural College, a representative of the United States Department of Agriculture, and local men of Abilene, Kansas. A few of the first members were very enthusiastic about the association but others were not especially interested. The association started out with only eighteen members whereas it was possible to accommodate twenty-six members. These men held the association together, others joined later and now they are about to complete their fourth year in this work. Some members have dropped out of the work on account of selling their cattle and for various other reasons, but the great majority have kept up the work and all declare that it has been of great value to them. At the present time it is not possible to accommodate all who would like to become members of this association.

ADVANTAGES OF TEST ASSOCIATION

The greatest advantage of the association in this community has been that the members and others have really found out something concerning the value of a good dairy cow. Good cows bring higher prices in Dickinson County than most anywhere in the state, simply because they have known records of production and it is possible to know what to expect of a cow. The best herd in the association the first year—a grade herd—was sold at public auction in order that the owner might invest in pure-bred cows. One cow sold for \$287.50 and no one doubts that she was worth that figure, for she produced 13,698 pounds of milk and 546 pounds of butter fat during eleven months and returned \$3.59 for every dollar's worth of feed that was given her. A six-months-old heifer calf from this cow brought \$125. Other cows in the herd sold for similar prices.

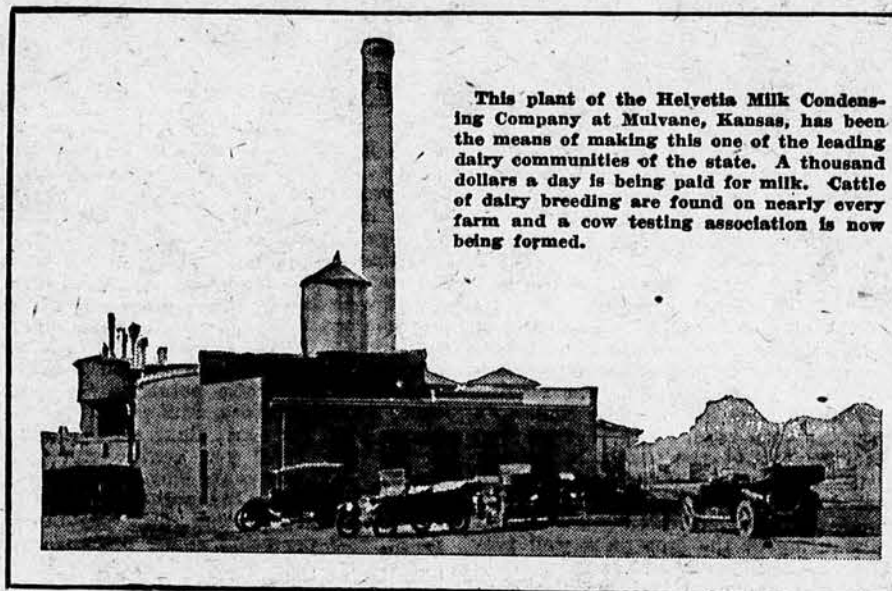
The cow testing association has placed the cow business on a business basis in Dickinson County. The boarder cows were spotted as well as the good cows and by discarding the poor ones the herds produced larger net returns than ever before. There were some very poor cows being milked in this county before the association started. One cow was fed and milked for twelve months and produced only 1,418 pounds of milk and 59 pounds of butter fat. For every one dollar's worth of feed given this cow she returned only 65 cents. The ten poorest cows produced an average of 2,942 pounds of milk and 119 pounds of butter fat during the year.

The members have also learned to appreciate the fact that it pays to milk cows of dairy breeding rather than scrub cows. Most of the highest producing cows were pure-breds or grades of dairy breeds. Only a few of the members were using pure-bred dairy sires when the association started. Now every member has a pure-bred sire of recognized merit at the head of his herd. They also know what it means to own a dairy sire with the right kind of breeding back of him and when they purchase a bull they demand one from a cow with a good record of production.

Another advantage of an association is that the cows may be fed more intelligently. The average herd of milk cows is not fed properly simply because all cows are fed the same amounts of feed. The proper way to feed cows is to feed each cow in proportion to the amount of milk she produces or her capacity for production. Where the production of each cow is known it is possible to do this and where this practice is adopted it usually means that one can get a larger production from the same amount of feed. The poor cows are fed less and the best ones more.

The table on this page gives the most important results of the records made during the three years by the Dickinson County Cow Testing Association. In these calculations butter fat was valued at 28 cents a pound and skim milk at 40 cents a hundred. The calf and manure are a liberal offset to the labor and risk.

Judging from the records one might



This plant of the Helvetia Milk Condensing Company at Mulvane, Kansas, has been the means of making this one of the leading dairy communities of the state. A thousand dollars a day is being paid for milk. Cattle of dairy breeding are found on nearly every farm and a cow testing association is now being formed.

assume that the members are making very little progress in building up their herds, but this might be explained by the fact that new members have joined the association at all times and their average has lowered the general average of those who have made improvement. As stated before, the best herd was dispersed after the first year, and this influenced the average results.

This association is the only one in Kansas at the present time, but it has borne fruit. There is an effort being made at the present time to organize an association at Mulvane, and it is expected that there will be several others organized this year.

HOW TO ORGANIZE ASSOCIATION

A cow testing association is simply an organization of not more than twenty-six farmers who want to have a record kept of the cows they are milking. This organization hires a man to make these records for them. This man goes from farm to farm, weighs the milk night and morning for one day, tests a sample of each cow's milk with the Babcock tester, weighs or estimates the feed eaten by each cow and makes a record of this in a herd book prepared for this purpose. This book remains at the farmer's home and is his own property. There being twenty-six working days in a month, it is possible for twenty-six farmers to be members of the organization. The man who does the testing visits each farm one day each month. The records made for each cow for one day are taken as the average for the month and the monthly records are estimated on this basis.

COST OF TEST ASSOCIATION

It requires about \$600 a year to run an association. This money is raised by an assessment on each cow. There should be at least 400 cows in an association and each member should pay \$1.50 a year for each cow. It is a good plan to re-

quire a minimum limit of fifteen cows. If a smaller number is used for a minimum it will be a difficult matter to get the required number of 400 cows, hence it is advisable to charge each member for fifteen cows at least. Some farmers who own only a few cows may want to join the association and in this case they may have to pay for more cows than they have entered. In the Dickinson County Cow Testing Association several men pay for more cows than they have entered in order to get their cows tested. The assessments are usually paid each quarter in advance. This money is paid to the secretary-treasurer and he looks after all expenses, such as tester's salary and incidentals. The members board the man while testing their herd and take him to the next farm. In the Dickinson County Association, and many others, the association or some of the members furnish the tester a horse and buggy. This system simplifies the matter of hauling the tester and his outfit from one place to another.

The Dairy Department of the Agricultural College at Manhattan will gladly furnish any one further information in regard to a cow testing association and give all the help possible in organizing other associations.

Cow Testing in Wisconsin

Cow testing associations should command the interest of every dairyman, for they help to make more money for the man who milks.

Progress and then success spring from dissatisfaction with present conditions. The fifty-three active cow testing associations in Wisconsin are made up of dissatisfied men.

A year ago a certain Waupaca County dairyman was dissatisfied. He was milking eleven cows and getting a monthly cream check of \$35. He joined

the Waupaca and Butter Nut Ridge Association. By weeding out the robber cows and replacing them with good producers and by giving the herd better feed and care, he increased his monthly cream check from ten cows to \$110 a month. He has one cow less to milk and a cream check three times as large. Very many members of Wisconsin cow testing associations could tell somewhat similar experiences.

OUST "ROBBER" COWS

A cow testing association is simply a group of twenty-five or thirty dairymen who jointly hire a man to weigh and test the milk of each cow in their herds, to keep their production and feed records and to do whatever else he can to promote their interests. The movement is neither old nor new, yet it is old enough to have proved its worth in making dairying more interesting and profitable, but so new that your community is not getting the benefits of one.

During the past fifteen years the price of feed has increased about 50 per cent, while the price of dairy products has increased only about 30 per cent. Labor and land values have also risen, making it necessary to lower the cost of production in order to make a profit in the business. The low-producing or "robber" cow is undoubtedly the greatest factor in increasing the cost of production. To detect these "robber" cows is the first duty of the cow testing association.

"The poor ye have with ye always" is true of cows as it is of people, unless we detect and dispose of them. If we do not dispose of these poor cows, we become poor like they, and the more we have the poorer we get. The Stanley Association sold 101 poor cows or one-fourth of the cows in the association before the year closed. Welcome Association sold twenty-eight unprofitable cows the first year and ninety-two the second year. Antigo Association sold fifty-four "boarder" cows before the end of the year. The Sheboygan Association in one of the best dairy sections of the state found eighty-nine out of 480 cows to be unprofitable and sold them during the year.

USES STANDARD TESTS

Last year records of 19,000 cows were kept and about 4,000 or more than one-fifth the number under test were sold as unprofitable. The time is past in Wisconsin when a man claims that he can tell, by looking at or even by milking, how much milk or fat a cow will give in a year. The Babcock test, the milk scale, and the yearly record are the only reliable judges of cow ability to convert feed into fat, and the cow testing association seems the best way to use these means, for it insures the work being done accurately, promptly, impartially, and economically.

While the cow testing association is locating the unprofitable cow, it is also locating the profitable cow—the cow that will return \$1.50 to \$3 worth of dairy products for every dollar's worth of feed. To know what each cow produces during the month, and the cost of the production, stimulates interest in the cows as individuals and causes the whole family, and the hired man too, to take new interest in the dairy business. —NOEL NEGELEY, Fieldman, Wisconsin Cow Testing Association.

Nearly half of the nitrogen and potassium from farm animals occurs in the liquid excrement. It is therefore important that this be saved through use of sufficient straw to absorb it. Manure stored in the open barnyard loses a considerable proportion of its nitrogen through fermentation, and its potassium and other mineral elements through leaching. This loss may be avoided by hauling the manure to the field as fast as it accumulates. If this is impracticable, it may be stored in a covered shed where animals run over it and so keep it well packed. The greatest loss of fertility occurs when the manure is stored in loose piles.

Fall plowing and cultivation will enable you to have vegetables a week or ten days earlier next spring, because you will be able to plant earlier on fall plowed ground. Early, thrifty, healthy plants are also less liable to injury from insects.

Three Years' Record Dickinson County Cow Testing Assn.

Year	Number of Cows with 12 Months Feed Records	Average Milk Record, Pounds	Fat Record, Pounds	Cost of Feed	Value of Product	Profit per Cow
1913	134	6,019	246	\$35.59	\$90.48	\$54.89
1914	151	6,414	247.5	41.01	87.95	46.94
1915	164	6,821	245.2	40.55	93.56	53.01
RECORDS OF COWS						
Best Cow—		Pounds of Milk	Pounds of Fat	Profit		
1913		13,698	546	\$145.21		
1914		15,124	504	131.21		
1915		15,152	614	162.24		
Poorest Cow—						
1913		1,418	59	11.65 loss		
1914		1,980	85	.57 loss		
1915		2,475	112.5	13.62 profit		
Ten Best Cows—						
1913		8,427	400	96.43		
1914		10,511	408.5	98.20		
1915		8,842	370.2	96.16		
Ten Poorest Cows—						
1913		2,942	119	15.23		
1914		2,730	113.6	7.37		
1915		3,505	140.2	17.82		

GENERAL FARM INQUIRIES

Something For Every Farm—Overflow Items From Other Departments

A SHAWNEE COUNTY reader asks if millet has any value as a silage crop.

Millet contains about the same nutrients as does corn and can be used for silage, but in Kansas much greater quantities of feed can be produced by growing corn or some of the sorghums and there would be little object in considering millet as a silage crop. Its chief advantage is that it will mature in a short period of time. For this reason it can be used as a catch crop, but present indications are that it will be superseded by Sudan grass even for this purpose.

Blue Ointment

A. A. R., Johnson County, writes that he has heard that blue ointment is a good remedy for lice on chickens, and asks how it can be made or where it can be purchased.

Blue ointment is a standard product, the formula of which is given in the U. S. Pharmacopoeia. Some of the ingredients are so high-priced at the present time that it is not a very economical remedy to use.

There is another standard ointment used in a similar manner which is somewhat more economical. This is ammoniated mercurial ointment.

A good substitute for either of these is common axle grease. It requires a larger quantity.

To make any of these remedies effective they should be applied on the hen's body in three places—just under the vent and under each wing. They should be rubbed on quite thoroughly, so no lumps will be left that the hens might pick off.

Care of Herd Bull

C. R. L., Sumner County, writes that he has purchased a bull calf to grow out as a herd sire. He has never handled a bull before and asks for suggestions on how to feed and care for this bull so as to secure the best results. The following from a Missouri Experiment Station circular is a good answer to our correspondent's inquiry:

"From birth, the bull should be given the best of care and feed in order that he may make the maximum growth and development. He should receive plenty of skim milk and grain and be treated as well as if not better than the heifer calves.

"At the age of five or six months he must be separated from the other calves. From this time on he must receive regular exercise and must be gently handled. When he is ten to twelve months of age he may be given light service—possibly one cow every three or four weeks. From the age of twelve to sixteen months this service may be increased to one cow per week.

"A satisfactory feed for a mature bull is alfalfa or clover hay and a grain mixture of corn, with oats or bran. A bull must have plenty of exercise. He does not need to be housed in a warm barn, but is kept in the best condition when given a dry but open shed with a pad-dock attached so that he can go in or out at will.

"Every mature bull should have a ring in his nose. There is some difference of opinion in regard to dehorning, but it is always safer to handle a bull without horns.

"Following are a few 'Don'ts' which can be followed to advantage in handling a bull:

"Don't underfeed him when young or keep him over-fat when mature.

"Don't use him too heavily before he is mature.

"Don't abuse him. You can get better results by gentle but firm handling.

"Don't tease him or allow children to play with him.

"Don't let him get the upper hand at any time.

"Don't let him realize his enormous strength.

"Don't keep him confined. Give him plenty of exercise.

"Don't trust ANY bull at ANY time. It is the 'gentle' bull that does the damage."

Variations in Cream Test

P. L. R., Rice County, asks why there should be such wide variations in the test of the cream he is selling.

The first thought when cream tests

vary is that the cream buyer is not giving an honest test. This may be the case, but it is more frequently the fault of the producer and it is an injustice to the cream buyer to suspect him of giving a fraudulent test without complete evidence. Variation in the speed at which the separator is run is probably responsible for a large portion of the variation that occurs. If the separator is run above the speed recommended by the maker, it will give a richer cream. If run slower, the test will be lower. Fat will be lost in the skim milk, also, if the separator is turned at too slow a speed. Lack of steadiness in turning the crank will cause the cream test to vary, as will also failure to wash the separator carefully. It is always a good plan to have the same person run the

separator each day, if possible, for the reason that this one person will learn how to operate it to the best advantage. The temperature of the milk also affects the operation of the separator. The best results will be obtained by separating the milk as soon as it is drawn. When it becomes cold the cream is more difficult to separate and the test will be raised.

Many causes may operate to produce variations in the cream test and the cream buyer should not be accused of giving incorrect tests until an effort has been made to find out the cause of the variation.

High Cattle Market

B. R. N., Phillips County, asks if the heavy marketing of cattle should be taken as an indication that next year's supply of beef will be materially lowered.

The increased movement of cattle to market was most noticeable in October. At the six markets of Chicago, Kansas City, Omaha, St. Louis, St. Joseph and Sioux City, the increase over the October receipts last year was a million head. Not very many of these cattle were good beef animals. Finished cattle

have sold at a high premium over the vast number of cattle that have been sold in poor killing condition. This indiscriminate marketing of cattle in unfinished condition can have but one effect later on, namely, a material reduction in the beef supply.

The extremely high price of feed is of course largely responsible for this marketing of cattle in an unfinished condition. Feed and labor have never been higher, but on the other hand cattle are on a higher level than ever before. It would seem that every effort possible should be made to avoid sacrificing stock cattle that are not ready for market. We have not been fully utilizing the rough feed grown, and in many instances greater economy along this line might make it possible to carry some of

tion has likewise found that silage can be fed with safety providing the feeder is careful to sort out any mouldy silage that may be found.

Frank McRoberts, one of the most successful lamb feeders in Missouri, in speaking of his feeding operations, at the sheep feeders' meeting in that state, said that he had fed silage in connection with corn, cottonseed meal and some hay, for four years, and had found it most profitable. He learned that lambs do not begin to eat silage unless rather hungry. It seems to be necessary for them to acquire a taste for it. He has found it much easier to start them in by giving a small amount when they first arrive at the feed lot, gradually increasing it until they are getting about all they will clean up in an hour and a half after turning them to the feed troughs. He called attention to the fact that when a spot of mould was found in the silage he always took special pains to sort this out. This feeder has had excellent results from the following daily ration: Corn 1½ pounds, silage 2 pounds, cottonseed meal ½ pound, and all the hay the lambs would eat, this usually amounting to a quarter to a half pound daily per lamb.

Value of Manure

A reader writes that he has been following the practice of allowing the manure to accumulate around the barns and yards in the winter, making a general cleaning up time in the spring. He is contemplating the purchase of a manure spreader with the idea of trying to keep the manure hauled out as it accumulates. He asks our opinion of this investment.

We believe a good manure spreader is one of the best investments a live stock farmer can make. The soil needs the fertility and organic matter of the manure, and on few farms is it possible to keep the manure that accumulates stored under shelter until it can be hauled out. Manure piled around barns and yards loses a large part of its fertilizing value. The Federal Department of Agriculture has estimated that two billion dollars' worth of manure is produced in the United States annually, and that fully half of this value is lost because the manure is not protected or hauled out to the fields as made.

The most practical and economical means of getting full value from barnyard manure is to haul it out to the fields and scatter it as it accumulates. This can be done most conveniently with a spreader. By having it near the barn the manure can be dumped into it as the barn is cleaned. A good spreader will scatter a load of manure in three or four minutes and do it better than it can be done with a fork in twenty or thirty minutes. It is spread evenly and becomes available for the crop at once. Top dressing of crops is coming more and more into favor, and this cannot be well done without a spreader.

Our correspondent need not take our word alone as to the value of the manure spreader. We have heard scores of farmers make the statement that a good spreader was one of their most profitable investments in farm machinery.

Value of Straw in Soil

J. E. Payne, agricultural demonstrator for the Frisco Railroad, has found that some "tight land" is short in organic matter, even before the sod is broken. He has been watching some land near Manitou, Oklahoma, which has grown wheat several years in succession. The wheat has been headed so that the straw has been returned to the soil. This land is more mellow now than before the wheat was grown upon it.

When we do not head wheat, the straw can be returned to the land by using a straw spreader—using it as top dressing.

The application of straw to wheat, as a top dressing, helps the soil to hold moisture, and it has often improved both the yield and quality.

Feeding straw furnishes a coarse manure which can be used as a top dressing. Very little value is saved when straw is burned.

Why not consider values when deciding whether to burn, feed, or spread?



ARGONIA, KANSAS, is the center of a community that has caught the spirit of co-operation in solving its many problems. In order to have a suitable meeting place for the various social and educational events of the community, a township community hall has been constructed at a cost of \$5,000. The cut shows this building which was completed October 1. The expense has been met by a bond issue, there being a special act authorizing townships to vote bonds up to five thousand dollars for building township halls.

We asked if there were not people in the community who objected to this taxing of their property for the building. The answer was that there was opposition, but those who were opposed were a very small minority.

The building has an auditorium seating 700. The stage is equipped with footlights and has several dressing-rooms. Directly in front of the stage is a strip of cement floor sixteen feet wide. At each side is a grade entrance so that live stock can be led into the hall for demonstrations in stock judging. The annual farmers' institute was the first meeting held in this new hall, and the judging of stock was one of the features of this meeting.

Argonia is to have its second two-weeks extension school later in the season, and this hall is admirably fitted for this work and will be so used. The township officers have a room at the front and on the opposite side is a room that is to be devoted to the public library. There is a basement under the front that can be used as a banquet hall or dining room.

This community has one of the few township high schools of the state. The hall and the high school are managed by the township board, so it will be an easy matter to use the hall for various high school events. This town also has a consolidated school, the children being hauled to the schoolhouse in automobiles. The board for the consolidated school district has co-operated with the township board and they have jointly hired a principal who has jurisdiction over the high school and the consolidated school.

The people of Argonia and vicinity may well be proud of the manner in which they have been able to solve some of the problems of the rural community.

these cattle through and be ready to finish them later. We believe some are making mistakes in letting cattle go that might be carried over with profit.

Silage for Lambs

R. N. T., Washington County, asks if he can safely feed corn silage to some lambs he is finishing for market. He has heard that it is dangerous to feed silage to sheep.

The common impression has been that silage cannot be safely fed to sheep and it is true that sheep have been injured by silage. In nearly every instance, however, it has been found to be due to the carelessness of the feeder in permitting the sheep to have access to partially spoiled silage. Sheep are very susceptible to mouldy or spoiled feed of any kind, and in feeding silage to them only that of good quality should be used.

Silage has been found to be a most profitable feed for sheep by some of the largest sheep feeders in Kansas. A. L. Stockwell, of Pawnee County, has several large silos and for some years has been feeding silage to sheep. He ships in lambs by the thousand and finishes them by using silage and alfalfa as the roughage ration. The experiment sta-



Doing "the Impossible"

The Gordian knot is the ages-old symbol of the seemingly impossible. Alexander the Great gave it a place in legendary history when, unable to untie it, he cut it in twain with his sword.

This famous incident of antiquity has its modern counterpart in the real work of the men whose vision and unrestricted initiative brought forth the great Bell System.

In the development of the telephone, one Gordian knot after another has been met with. Yet each new obstacle yielded to the enterprise of the telephone pioneers. Every difficulty was handled with a will and a courage which knew not failure.

Man's words have been given wings and carried wherever his will directs. Electrical handicaps have been overcome one by one.

The feeble current of telephone speech has had a way hewn for its passage through all physical impediments, until the entire country, from the Atlantic to the Pacific, is within hearing of a child's faint cry.

This record of the Bell System for past achievements is an earnest of future accomplishment. New problems are being met with the same indomitable spirit, which guarantees a more comprehensive as well as a more perfect service.



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FARM AND HERD.

At the meeting of the board of directors of the Holstein-Friesian Association, held at Worcester, Mass., October 16, the following resolution was adopted: "Resolved, that the committee on prizes be instructed to advise the officers of all fairs where the Holstein-Friesian Association appropriates money for prizes, that this association will pay no money for prizes except for animals shown wherein the certificate of registry establishing the identity and transfers showing the ownership have been presented and proven at the time of showing the animals."

H. C. McKelvie, Lincoln, Neb., will manage a combination sale of Polled Durham cattle in South Omaha, Neb., March 29, 1917. Request for entries to this sale is being made early because none but sound animals in good fitting will be sold. Polled Durham breeders who can foresee at this time a few surplus young females or bulls that will be of serviceable and good selling ages by March 29, should make application for entry to this sale. This will insure the right class of cattle and will give ample time to get the entries in high-class sale condition. There are a few bulls and females of show character already listed for this sale. The entries will be closed at the earliest possible date. The sale will be widely advertised in corn belt and western agricultural papers. Good prices will obtain on good cattle. Full information concerning consignments will be furnished by Mr. McKelvie.

On March 30, at the sale pavilion, South Omaha, Neb., H. C. McKelvie, Lincoln, Neb., will manage the annual South Omaha Spring Combination Shorthorn Sale. This event last spring resulted in the best combination sale of Shorthorns that had been held at this point. The offering, consisting mostly of Scotch-topped Shorthorns and a few Polled Durhams, averaged \$180. Scotch-topped females sold as high as \$440, with a general average of \$200 on the females. The ten top bulls averaged \$279, but none of these was over fifteen months of age and but few were of Scotch pedigree. Mr. McKelvie will close the entries to this sale at the earliest possible date. Scotch cattle are preferred, and in any event the cattle must be sound and in sale condition. Late in March is the season of the year when the western demand for good bulls is at its height. It is also an opportune time to sell to breeders who raise early spring calves and the wide publicity that this sale will receive insures a large attendance. Anyone having young bulls that will be of serviceable age by March 30, the announcement of this sale at this early date gives ample time to get them into sale shape. The same is true of females, and the entries to this sale will close at the earliest possible date to insure that these cattle will be given time to take on sale bloom. This sale follows in the McDermott, Uppermill Farm and Maasdam & Wheeler spring sale circuit. Full information concerning consignments will be furnished by Mr. McKelvie.

When Writing to Advertisers,
Please Mention Kansas Farmer

Kansas Farmer Dairy Club

Effect Of Feed On Test

WE frequently find people of mature years who think the richness of a cow's milk is influenced by the feed she gets—that when a cow is fed a lot of corn, bran, and oil meal, she will produce milk testing higher in butter fat than when fed nothing but fodder and hay. The facts are that the test of a cow's milk is an individual characteristic, like the color of her hair or the turn of her horns. You cannot make a cow give richer milk by giving her richer feed. If you give her plenty of the right kind of feed you will get more milk and hence more butter fat, but the test or the per cent of butter fat will not be raised.

Some of the Dairy Club members have cows that test rather low. The thing for them to do is to feed their cows so as to make them give all the milk possible. The more milk they can get, the more butter fat will be produced.

The effect of feed on the test has been studied carefully at a good many experiment stations, both in this country and in Europe. In some instances when feeds very rich in fat were fed, the test rose a little at first, but as soon as the cows became accustomed to the new feed it went back to normal. The experimenters have all come to the conclusion that it is impossible to influence a cow's test by the character of the feed.

As you continue milking your cow you will find the test will gradually get a little higher each month, although this will not be uniform. Occasionally the test will drop a little from that of the previous month, due to some influence that was present the day the sample was taken. Just before your cow goes dry she may possibly test as high as 7 or 8 per cent, but she will be giving only a small amount of milk. As soon as she freshens, the test will be about the same that it was when she was fresh before.

We are calling your attention to this point so you will not waste thought or effort in trying to make your cow give richer milk. The test is a matter of inheritance, and by weighing and testing the milk of all the cows in a herd you can pick out the ones the heifer calves of which are likely to be high testers. Never forget, however, that the test is only one factor in profitable production. You might have a cow averaging 6 per cent for a whole lactation period and find her unprofitable because of the small quantity of milk given by her. If you are buying a cow, the quantity of milk she gives in a whole lactation period is of greater importance than is her test. Some people of considerable experience in dairying give the test entirely too much prominence in selecting profitable milk cows. It is easy to take a sample of milk to the creamery and have it tested, and they jump at the conclusion that because the test is high they have a profitable cow.

Warm Water for Cows

Do you ever have to break the ice in the trough so your cow can get a drink? Whenever you have this to do, the water will be so cold that the cow will not

drink as much as she needs. A cow giving milk will drink about four times as much water as when she is dry. The milk cow ought to drink about 100 pounds or 12½ gallons of water daily. Professor Eckles of the Missouri Agricultural College tells of a cow giving about 100 pounds of milk daily that drank from 216 to 307 pounds of water a day.

There is no special advantage in warming water above ordinary well temperature, but the cows will not drink enough when it is ice-cold. Just as sure as your cow fails to drink the usual amount of water, she will drop in milk flow. Watch this point and when it is very cold take special care to see that your cow gets water at such temperature that she will drink all she needs. Water directly from the well as about right. Sometimes when it is cold and stormy you may be able to keep your milk record from dropping by watering your cow in the stable.

Planning Better Barn

I am going to tell you how my cow is. She is doing better now. I feed her four parts corn chop, two parts bran, and one part cottonseed meal, by weight, for grain.

We are going to make a better barn and then I will have a better place to put my cow.

I am getting my calf fat. We are going to butcher him. I feed him the same feed I feed my cow. He will not eat shelled corn.

I had a picture taken but it was not good. Maybe I will get a better one.—CARY BURTON, Butler County.

Best Possible His Aim

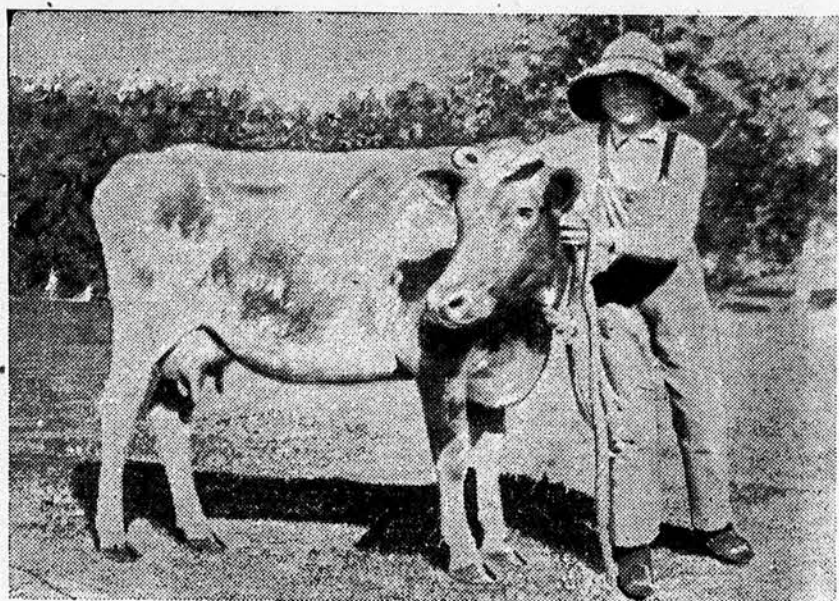
My cow is not doing as good as some of the rest I am reading about, but I am trying to get the best out of her. She does not seem to eat much grass while she is in the pasture. She eats quite a bit of alfalfa though.

I wish that you would please send me a pair of scales as soon as possible. I will pay for them when you send the bill.

This is a picture of my cow and me.—HAROLD BENTZ, Marion County.

Sometimes the cow that is not as heavy a milk producer as others, gives a steady flow of milk for a much longer period and may catch up with heavier producers or even pass them. You can help her do her best by watching her closely and seeing to it that she gets all of the right kind of feed she will use for making milk.

Cows require salt in order to do their best. More salt is necessary when feeding heavy rations of rich grain than when the feed is poor in quality. If salt is kept before cows all the time they will get away with about an ounce daily. Some dairymen mix the salt with the feed, but cows differ in their appetites for salt and the better practice is to keep some in a box where they can get it every day.



HAROLD P. BENTZ, MARION COUNTY, AND HIS GRADE JERSEY COW



Feeding For Development

A SPEAKER at the dairy meeting at Mulvane remarked that the average dairyman would be astonished to see what quantities of skim milk were being fed to calves and young stock by some of the leading breeders of dairy cattle. These men have learned that it takes feed to grow animals to large size, and undersized dairy cattle are seldom as good producers as large, well developed cows. If you are raising dairy heifers, do not overlook this important point. Well bred heifer calves will return good money for the skim milk they consume.

There is always the temptation to breed heifers young, this coming from the desire on the part of the beginner to get a herd as quickly as possible. Heifers that have not been pushed from the start cannot safely be bred as young as can the big lusty ones that were fed plenty of milk during their first six or eight months of life with liberal allowances of such growth-producing feeds as alfalfa, bran and oats, as they grow older.

Raising calves is one of the fine arts in successful dairying. The dairyman who neglects this important feature of his business is considerably handicapped in his efforts to build up a strong, vigorous herd of high producing cows. The father of one of the boys who is a member of the Kansas Farmer Dairy Club, told us recently that the boy had made the first real success in calf raising on their farm. He had studied the fine points of feeding young calves more closely than these had been studied before, and as a result had been more successful in developing his calf.

Sheep Save Waste

Sheep have been very profitably used to harvest a damaged wheat crop on the farm of W. C. Smyser, Rice County. The wheat was so badly damaged by the rain that he did not attempt to harvest it. In order to save the grain and use to good advantage the weeds and grass that sprang up, he turned in sheep. By the middle of October he had twenty thousand lambs running on this big wheat field. They thrived remarkably well and he expects that the field will return him as good a profit as if he had sold the wheat on the market. The lambs weighed an average of sixty pounds when they were turned in, costing \$8 a hundred.

The good results from pasturing growing wheat with sheep, is illustrated by a story from Tennessee. In driving a band of 200 ewes, they got into a wheat field along the road. The land owner undertook to hold the sheep for exorbitant damages. Their owner believing that the justice was prejudiced against sheep and realizing that the witnesses for the plaintiff were ready to testify that the damage done was greater than the crop produced the year before, put up \$300 and bought the crop. After grazing the ewes on the wheat, he sold them averaging 100 pounds apiece, at six and a quarter cents a pound, and the lambs weighing 65 pounds apiece, at eleven cents. Then the wheat crop, much to the chagrin of the land owner, made him an average of twenty-nine bushels an acre, the crop of the previous year being but fifteen bushels.

Better Stallions Needed

Inferior horses can be purchased cheaper than they can be raised. Unless you have good mares and can breed to a good, sound, pure-bred sire, you will save both time and money by not attempting to raise horses. Better stallions are being used, as is evidenced by the improvement in the colts shown at the colt shows, but there are still a good many inferior sires being used for breeding purposes.

Dr. C. W. McCampbell tells of a farmer who had been breeding his mares to grade and scrub stallions, paying from \$7 to \$10 in service fees, but finding that it was costing him more to raise the horses than he could get for them, he decided to try a pure-bred sire.

In the fall when the colts sired by the pure-bred stallion were weanlings,

the owner was compelled to sell live stock at public auction. The yearlings out of the grade mares sired by grade stallions sold for \$37, the two-year-olds for \$55, and the three-year-olds for \$76.

Two geldings were sold on the Kansas City market the same day. They were both sound, had received the same care, and were out of the same mare. One, a five-year-old, sired by a grade stallion, sold for \$112. The other, a four-year-old, and sired by a pure-bred stallion, sold for \$238. The future improvement of the horses of the state depends on the kind and quality of the horses used as sires.

Grade and scrub stallions are kept in Kansas because enough farmers patronize them to make it profitable for their owners to keep them for public service. Something must be done to impress upon



IMPROVER, THE FIRST PRIZE AGED PERCHERON STALLION, TOPEKA FAIR.—OWNED BY D. F. M'ALISTER

such breeders the fact that they are doing themselves and their community an injustice by patronizing such stallions.

Sow Has Piles

L. M. B. Woodson County asks for a remedy for piles or protrusion of rectum in a young sow. He says he has been greasing it but without result. Dr. R. R. Dykstra of the Kansas agricultural college furnishes the following information.

In animals, so-called piles almost always consist in a protrusion of the rectum. It may be treated in one of two ways.

"After thoroughly cleansing the parts with a mild disinfecting solution, a cross stitch is placed through the anus and the protruded tissues. The stitches are then cut through in the lumen of the rectum so that there will be four stitches in position. The ends of these are then tied after which the protruded rectum is excised or removed.

The other operation consists in making an opening in the animal's flank, introducing the fingers in the abdominal cavity, grasping the rectum and pulling it forward until it is no longer protruded after which it is kept in position by stitching the rectum to the inside of the abdominal wall.

"Both of these forms of treatment are of a highly technical character and should be attempted only by a competent graduate veterinarian."

For the cow giving twenty-four to twenty-eight pounds of milk daily, a good ration is all the clover or cowpea hay she will eat and about ten pounds of corn and oats or corn and bran equal parts. Alfalfa is the richest protein roughage that can be fed, and if the cow can have all the good third or fourth cutting alfalfa she will eat, a grain ration of eight to ten pounds of corn daily will be all right. The more milk she is capable of giving, however, the more protein feeds she must have, and this extra protein can be supplied only by feeding some of the purchased feeds rich in that material.

After testing his seventeen cows through a cow testing association, a Nebraska farmer sold seven and received more profit from the ten remaining animals than he had received formerly from the whole herd.



Is Your Gun Rusty?

THERE are many trusty old shotguns in this country that once were cleaned and oiled and used with great frequency. Today they lie idle, rusty, almost forgotten. Yours may be one of them. What is the reason for this? Does the lure of the fields and woods no longer hold attractions? Have we lost our love for good sport?

No—these things are not responsible for the rusty gun. The absence of game is the cause. And the cause must be done away with before the gun is used again as it once was.

The cure lies in game farming—in the breeding of game birds to replace those we have lost.

Already, in many places, good shooting has been restored by game farming. The same thing can be done where you live. You can take part in it if you will.

A game farm is easy to establish and maintain. Also there is money in it as well as pleasure. The prevailing scarcity of game has resulted in high prices being paid for game birds and their eggs. The demand from city markets is always greater than the supply.

We will gladly tell you how you can run a game farm and make it pay, or how you can induce others to raise game for you to shoot. Write today for our 64 page booklet, "Game Farming for Profit and Pleasure". It is sent free on request. You will find it interesting reading. Please use the coupon below.

When Your Gun is in Use Again

When you begin using your gun again remember to load it with powder that can be depended upon for accuracy at all times. Ask your dealer for shells loaded with Hercules Smokeless Shotgun Powder—either Infallible or "E. C.". Both can be obtained in all standard makes of shells. They are of high and uniform quality—give light recoil, high velocity, even patterns.

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HERCULES POWDER CO.
Wilmington, Delaware.

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Game Breeding Department, Room 95
Hercules Powder Company,
Wilmington, Delaware.

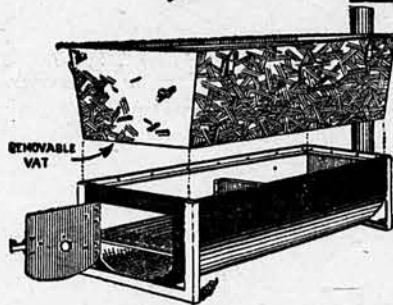
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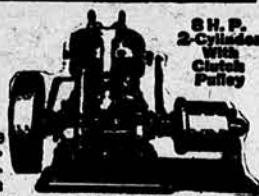
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\$13.50 Sweep Feed Grider, \$17.00 Salvaged Steel Wind Mill. We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list. **CURRIE WIND MILL CO.,** Seventh St., Topeka, Kansas.

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If on the market for pure-bred stock, read KANSAS FARMER live stock advertisements. You will find what you want.

Preparing Furs For Market

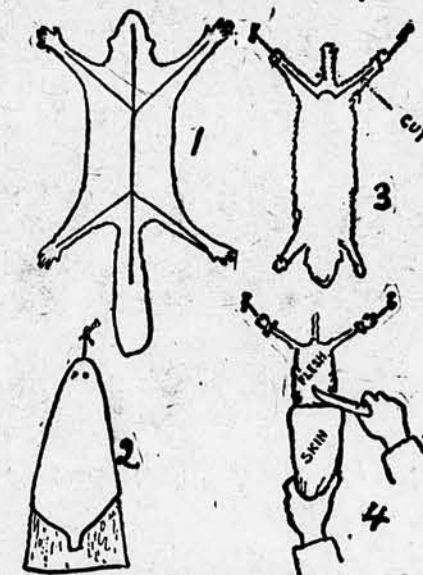
To become a successful trapper, it is necessary to learn many things besides the mere setting of the trap. For instance, you should be thoroughly familiar with the habits of the animals you hope to capture. It would be the height of folly to set a trap for muskrats in a dry upland pasture, and equally foolish to expect to catch raccoons in the middle of the winter. The former animal lives in dome-shaped lodges along the edge of lakes and ponds, along rivers and in some of the large marshes, but never wanders far from water during the trapping season. The coon like his larger relative the bear, retires to some snug retreat in a hollow tree or a sunny ledge at the first hint of real cold weather, and sleeps through most of the winter. Thus you see the necessity of knowing when and where to look for your game.

Great care must be used in removing and preparing your furs if you expect to receive the full value for your catch. Fur dealers are very particular, and utterly merciless in deducting for unprime and poorly prepared pelts. To tell whether a pelt is prime it is only necessary to look at the flesh side, as prime pelts are white, and unprime pelts are bluish or black. Do not forget that the latter do not pay for the work of getting them.

For the novice, "skinning out" a pelt will perhaps prove to be the most difficult detail of trapping. It is entirely a matter of care and practice. The prime essential is a good skinning knife. An expert can turn out a perfect job with almost any knife, but the task is made much easier by using the proper implement. The skinning knife should have a single blade about four inches long and slightly upturned at the point. The amateur will find that his success will depend largely on the sharpness of his blade—it can scarcely be too sharp. There are two methods of skinning, the "open" and the "cased." In the former method, figure 1, the pelt is cut straight down the belly side, and up the inside of each leg. The pelts of bears, raccoons, badgers, and beavers must be prepared by this method to bring the best prices. In the "cased" method the carcass is hung up by the hind legs, (fig. 3), and a cut is made down the inside of each hind leg, to the base of the tail. The tail is severed from the body but not from the pelt, and the pelt is peeled off over the head, (fig. 4). In this method the pelt should be left fur side in, and pulled on stretching boards to dry. Minks, muskrats, weasels, foxes, wolves, wildcats, otters, etc., should be prepared in this way. In removing a pelt particular care must be exercised in freeing the pelt from the skull. Be careful to

cut around the eyelids, the nose, and the lips and do not hurry the job. The ears must be cut close to the skull. After the pelt has been pulled upon the stretcher, it must be freed of all flesh and fat. A dull knife, or a home-made tin scraper is the best tool for the job. Keep at the task until the inside of the pelt is smooth and clean. Then split the tail on the under side, and carefully remove the bone. After this has been done, hang the pelt in a cool, shady place to dry. Never expose a pelt to the direct rays of the sun, or to the heat from a fire. Either method will seriously damage the pelt. Do not put any preparation on the pelt to "cure" it and allow it to dry until you are ready to ship it.

Stretcher boards should be made of basswood or other light material, and should be about thirty inches long for minks, weasels and muskrats. They should be four inches wide at the large end, and two inches at the other end, and about three-eighths of an inch thick. The small end should be carefully round.



METHODS OF "SKINNING OUT" PELTS

ded, and the large end square. The sides should be beveled. (fig 2). For foxes, raccoons and animals of similar size, the stretcher should be at least forty inches long and tapering from four to ten inches in width. Pelts which have been removed by the "open" method may be tacked on any flat surface until they have dried.

EDITOR'S NOTE.—The above is an extract from an article by Dan Beard in The American Boy for November and is here reproduced with the sketches by the author by special permission.

Fall Orchard Practice

If proper measures are taken during the autumn and early winter, much may be done to rid the orchard of diseases, insect enemies and other troubles. This will go far towards securing better crops the next season.

While this is not the season for general orchard pruning, it is the time when the grower should go through the orchard and remove all dead, diseased or broken limbs. Ragged wounds leave openings for various cankers and other diseases to get in. Broken branches should be pruned back with a smooth wound to a living side branch. Dead trees should be removed from the orchard. Branches which have died from canker or other diseases should be pruned out, back to healthy tissue.

All cull apples should be gotten out of the orchard. Those which are suitable may be used for cider, vinegar, or evaporating purposes. Those not suitable for such use may best be fed to hogs pastured in the orchard. Any worthless, decayed apples clinging to the trees should be taken off and refuse fruit not otherwise disposed of, removed. These refuse apples contain insects such as codling moth and usually the germs of disease such as bitter rot, scab, etc. Removing them from the orchard goes a long way toward preventing a spread of these diseases next year.

Young trees should have their trunks wrapped to protect from mice, rabbits, and to some degree, from borers. Perhaps the most economical wrapper is the veneer wooden wrapper which is a thin slice of wood like that from which berry

boxes are made. Wrappers fifteen inches long, eight inches wide, can be very cheaply secured. They should be fastened loosely around the trunk with a wire attached to the edge of the wrapper. If not thus attached, the wire ring may slip down and eventually girdle the tree. Approximately one inch of space should be allowed between the wrapper and trunk of the tree to permit air to circulate and prevent injury to the bark. Wooden wrappers are perhaps the most economical. A still better wrapper, but more expensive, is screen wire such as is used for window screens. It may be cut to accommodate the size of the tree. In small orchards even old newspapers, cardboard, corn stalks or other material available may be used. In addition to keeping out rodents, insects, etc., these wrappers shade the trunks of the trees, prevent absorption of heat, especially on the south side during sunny days, and therefore avoid what is called sun-scald.—J. C. WHITTEN, Missouri Experiment Station.

Wash water used in the churn should be approximately the same temperature as the buttermilk, or within 2 degrees of it.

In the home where there is a water-works system, the days will be shortened and life lengthened for the women folks. It is one of those things which should be considered a necessity the same as are the modern machines for doing the men's work.

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Send for our special price list before making shipment: to any one. Our prices will increase your fur income this season. You don't guess about your prices when getting ours, but get the highest always. When shipping to us you save the middleman's profit. We guarantee entire satisfaction and quick returns, pay express charges, and when so requested hold shipments separate for your approval of returns. Wanted at once, 50,000 Kansas Skunk Skins.

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Sudan Grass Becoming Popular

SUDAN GRASS, which is a member of the sorghum family, has been grown in Kansas for only a few years, but it bids fair to become one of our important forage and pasture crops. The Federal Department of Agriculture found this grass as the result of an extended search for a grass like Johnson grass which did not possess the objectionable character of spreading by underground root stalks.

J. C. Mohler, secretary of the Kansas Board of Agriculture, reports that there are more than 31,000 acres of Sudan grass in Kansas this year, according to the first acreage census of this crop taken by the board. It is grown principally for hay, although the seed crop has been profitable. Apparently the plant is looked on with favor, and farmers who have had experience with this new acquisition believe it is destined to take an important place in the state's agriculture. By some it is referred to as "the alfalfa of the uplands," they believe it so valuable. Its widespread planting suggests general adaptability, as every county reports more or less of an acreage devoted to it, except three—Atchison, Doniphan and Morris, all in the eastern belt of counties. It enjoys greatest popularity at present in the counties of the central third, which have about half of the state's total acreage in Sudan grass. The western third of the state has about 40 per cent of the acreage, while the eastern counties have only 10 per cent.

Four counties have more than 1,000 acres each of Sudan grass. Barber, the leader with 3,077 acres, has more than twice as much as any other county. Harper follows with 1,270 acres, Ford next with 1,085 acres, and Reno fourth with 1,023 acres.

Transferring Bees to Hives

J. F., Osage County, writes that there are several bee trees on his place and asks for advice on how to hive them. J. H. Merrill, assistant entomologist of the Kansas Experiment Station, says:

"Bees can be transferred from trees to hives, but it would be better to attend to this matter in the spring. It would be impossible to give them stores and the colony could not survive the winter.

"To transfer the bees, close all the entrances to the tree except one and over this place a bee-escape, which will allow the bees to get out but not return. Place a hive containing full sheets of foundation at the entrance as near as possible to the escape. In the hive should be placed one comb brood with eggs and hatching larvae present. Bees will issue from the tree and being unable to return will enter the new hive. As there will be no queen in the new hive, they will proceed to develop one from one of the young larvae in the comb brood which was placed in the hive. Within a short time all of the bees will be in the new hive. After all of the young have emerged, the bee escape may be removed and the bees allowed to rob the honey from the tree, after which they may be changed to a permanent location and the entrance to the tree closed to prevent the place being occupied by another swarm."

Cash Receipts on Farm

The cash receipts for the year are not always to be taken as the measure of the profits made. A farmer who has kept such accounts may be disappointed at the showing made. A careful inventory of capital on hand will often show him that he has done very well.

Records gathered from about 700 Johnson County, Missouri, farms show that about 25 per cent of the total receipts from these farms was from increase in young stock, feed, crops held for sale, and other items of farm capital.

R. M. Green of the Missouri Experiment Station tells of a young Missouri farmer who is keeping cost accounts in co-operation with the agricultural college, and whose accounts showed a total capital of \$5,577 on March 1, 1914. His inventory showed he owed \$4,000 of this. March 1, 1915, his inventory showed a total capital of \$5,526.96, but he owed for only \$2,410 of this. He was worth \$1,577 net March 1, 1914, and \$3,116.96

March 1, 1915, making a gain of \$1,539.96 for the year. This was not a bad showing for a young farmer who had just started farming.

Concrete Post Failures

Some who have tried to make concrete fence posts have failed to meet with success.

Most failures come from using dirty sand, dirty stone or lumpy cement.

Concrete posts must be reinforced to furnish strength necessary to avoid breakage by pull of fence or impact of animals or machinery. Three or four No. 3 wires will give the proper reinforcement.

Rusty reinforcement should never be used. Rusty material continues to rust after being imbedded in thin layers of concrete, although concrete will protect steel or iron in good condition.

Concrete maintained at a temperature of 60 to 70 degrees will have practically double the strength at the end of a week that the same material would have if kept at a temperature of 32 to 40 degrees.

Posts should not be used until they are three or four weeks old. Even a longer time is desirable.

A good size for a fence post is four inches square at the top, four by six inches at the butt, and seven feet long.

Before attempting to make posts, secure some of the literature furnished by the different cement companies and study carefully the details of post making.

Prepare for Seed Plats Now

All of us want good seed. Few men are raising good seed. Those who will make an effort to produce good, pure seed for their neighbors will get good prices for it as soon as they prove they have what the country needs.

In each community some men should grow seed for their neighbors so that all could have seed suited to their conditions. Men who do this work have succeeded best by starting with small seed plats planted to the best seed. And, as they learned to handle the business, they have increased their acreage to meet the demands.

Seed plats should be prepared early so as to give the selected seed the best chance possible.

Many men should try this business on a small scale, and they can stop without loss if they find themselves unfit for the work; but they can increase their business if the profits show the way.—J. E. PAYNE, Oklahoma.

Farmers By the Grace of God

There are all sorts of farmers in this country. One man thus described himself: "I am not a full-blooded farmer, although to be that has been my ambition." Full-blooded farmer is very good. In any event this man is not a scrub, but a high-grade.

Then comes another friend who says: "I am a journalist by training and a farmer by the grace of God."

Are not all farmers journalists? They write the story of their lives upon the soil. They go to press with the seasons, and Nature provides the ink—green, white, gray and brown, with her changes of moods. Perhaps not all our friends can say with this one that they are farmers "by the grace of God," yet he who can realize that is the happy man—worthy to be envied by his fellows.

Protect Orchards from Mice

Field mice are likely to make nests around the trunks of apple trees. If the young orchard is plowed, the loose soil turned up against the base of the trees makes an excellent hiding place for mice. The ground should be scraped bare and smooth around the base of the trees so no loose soil, weeds, grass, or litter can collect and enable the mice to nest close to the trunks. Where they do this they will eat through the growing layer thus girdling the tree. This precaution should be taken whether wrappers are used or not, as mice frequently burrow in beneath the wrappers, if the soil is loose, and find shelter behind the wrapper.

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Look for the Red Ball Before You Buy

It's on every piece of "Ball-Band" Footwear. "Ball-Band" Rubber Footwear has the reputation of giving more days wear at a lower cost per days wear than any other. That wide reputation is the reason why nine million people wear "Ball-Band" Footwear. It is not an accidental reputation.

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If your dealer does not sell "Ball-Band" write us and we'll see that you are supplied.

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Raise High Priced Wheat on Fertile Canadian Soil

Canada extends to you a hearty invitation to settle on her **FREE Homestead lands of 160 acres each** or secure some of the low priced lands in Manitoba, Saskatchewan and Alberta. This year wheat is higher but Canadian land just as cheap, so the opportunity is more attractive than ever. Canada wants you to help feed the world by tilling some of her fertile soil—land similar to that which during many years has averaged 20 to 45 bushels of wheat to the acre. Think of the money you can make with wheat around \$2 a bushel and land so easy to get. Wonderful yields also of Oats, Barley and Flax. Mixed farming in Western Canada is as profitable an industry as grain growing.

The Government this year is asking farmers to put increased acreage into grain. Military service is not compulsory in Canada but there is a great demand for farm labor to replace the many young men who have volunteered for service. The climate is healthful and agreeable, railway facilities excellent, good schools and churches convenient. Write for literature as to reduced railway rates to Supt. of Immigration, Ottawa, Can., or to

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Costs less than other feeds—saves and makes money for dairymen at every turn in the road.

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Write in to us today for free literature telling about Fredo-Feeds. We will send this information to any dairyman. Also

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National Egg Laying Contest Closes

THE fifth national egg-laying contest at Mountain Grove, Missouri, closed October 31, 1913. It has been in many respects the greatest contest ever held at this place. All previous records were broken except individual.

The leading pen was Barred Plymouth Rocks owned by William Lloyd. This pen of five hens laid 1,185 eggs, or an average of 237 eggs each. The highest previous record was by S. C. White Leghorns with an average of 230 eggs per hen.

The individual record was made by a S. C. White Leghorn owned by Hollywood Farm, Washington, laying 275 eggs.

The ten highest pens each averaged more than 218 eggs per hen, while the five highest hens averaged 263 eggs each.

There were 106 hens, or over 20 per cent. of all in the contest, that laid 200 eggs or more during the year.

Following is a list of the ten highest pens for the year: Pen 69, B. P. Rocks, Missouri, 1,185 eggs; Pen 102, Oregon, Oregon, 1,159; Pen 25, S. C. W. Leghorns, Washington, 1,101; Pen 8, S. C. W. Leghorns, Pennsylvania, 1,100; Pen 59, R. C. Reds, Missouri, 1,099; Pen 27, S. C. W. Leghorns, Missouri, 1,071; Pen 17, S. C. W. Leghorns, Texas, 1,068; Pen 11, S. C. W. Leghorns, Kansas, 1,063; Pen 49; White Wyandottes, Michigan, 1,059; Pen 46, White Wyandottes, Texas, 1,021.

The five highest hens for the year are: Hen 3, pen 25, S. C. W. Leghorn, Washington, 275; hen 1, pen 69; Barred Rock, Missouri, 263; hen 2, pen 25, S. C. W. Leghorn, Washington, 262; hen 2, pen 102, Oregon, Oregon, 260; hen 3, pen 2, S. C. W. Leghorn, Missouri, 257.

Missouri Poultry Show

The Missouri State Poultry Show is recognized as one of the quality shows of the United States, and this year's congress of poultry under its auspices will no doubt draw the usual large numbers of top notch birds to contest for the honors which carry with them great advertising prestige.

The twenty-fourth annual Missouri State Poultry Show will be held at St. Joseph from the fifth to the ninth of December of this year.

One of the new features will be the placing of owner's name, with name of variety and breed, on every coop as soon as the birds are in the show room, so the large numbers of prospective customers can easily learn to distinguish the varieties and also know who owns any particular bird.

The Association officers anticipate that this will be a very desirable educational factor and also will be of considerable advertising value to the owners, who have to wait in most shows until the judging is finished before they can put up any cards or literature.

Northwest Missouri, of which St. Joseph is the trade headquarters, has long been noted for the number of its enthusiastic poultry breeders. It has both steam and electric interurban service, insuring large attendance from all of that territory, and the educational features which will be a part of the attraction, will draw large numbers of visitors every day.

The premium lists will be ready for distribution about the last of October, and may be obtained from Secretary Fred Crosby, Mountain Grove, Missouri. Competition is open to the world.

Members of the Missouri State Poultry Association whose memberships have expired, and others who expect to compete at the various county shows for the Association trophy, should send their name and address with fifty cents to Mr. Crosby at once, so they will not be barred from those prizes.

Culling the Flock

The exceptionally high prices of poultry products this year warrant a rigid culling of the flock. Only males of large, vigorous type, showing well-developed breast, strong bone, large comb and wattles, and bright eyes, should be held for breeding purposes. Crow heads, long beaks, and weak legs indicate a lack of

constitutional vigor and are usually found in poor producers. Hold the late-molting hen and sell the early-molting hen; the persistent or all-summer sitter, and the over-fat hen. Sell the immature pullets, or runts, and save only the best. Never breed from diseased stock.

Why Hens Don't Lay

Why don't hens lay at this time of the year?

They do, if their owner is onto his job. It is about as natural for a hen to lay in the fall and winter as it is for roses to bloom at the same season.

But the expert poultryman, nowadays with his modern methods of breeding, of feeding, of housing and of handling, has his hens to lay two hundred or more eggs per year and to lay a goodly number of these in the fall and winter.

Can an ordinary farmer or small poultry keeper get a good fall and winter yield of eggs?

He can if he will have a properly built house—not meaning an expensive one, but a house that poultry use and live in and can't be kept out of.

He can if he will feed the modern way or feed all grain in litter; feed beef-scrap, fish scraps or milk—animal protein—heavily; feed dry mash, and perhaps wet mash.

Feed plenty of grit and oyster shells. The digestive apparatus of a chicken demands grits. This month many of your pullets will begin laying, if they have the right kind of care. The feeding is the big element in governing the egg yield.

The Kansas hen has saved the day on many a farm following crop failures or other reverses. The farmer's wife usually has the poultry under her supervision and she has contributed a big share to the family finances. One woman in Western Kansas reports a net profit of \$200 on her poultry in the last eleven months.

The egg business in Kansas amounts to nearly thirty million dollars annually. It has been estimated that two million dollars more could be added to this if proper methods were used by all in handling eggs and poultry. This loss is due to improper nesting and housing, improper feeding, improper care and handling of eggs on the farm, carelessness in hauling and shipping, and carelessness on the part of the merchant in marketing. The loss to the producer due to these causes is principally in the quality of the product, for which he receives a lower price. The consumer meets loss also through receiving eggs of poor quality, for which he pays more than they are worth.

The best way to feed green food, according to a writer in the Pacific Poultryman, is to make a pocket of chicken wire against the side of the hen house inside. Nail your wire about twelve inches from the floor; bring it out at the sides so that you have a flare or pocket, nail the sides with staples and you have the pocket. When you put in the green food the hens can pick at it through the mesh in the wire, and when it drops down it will be held tight so that the hens will pick off a mouthful at each peck. This pocket is also good to hold turnips or mangels; split the turnips and mangels in two and turn the cut sides to the front. Feeding green food in this way will avoid waste.

Housing poultry is unnatural and for this reason it tends to entirely change the habits of the bird. The remark is often heard that hens roosting in the trees are free from roup and colds. This is undoubtedly due to fresh air. The housed birds are constantly breathing the poisoned air thrown off by other birds. The more room allowed each individual, the purer the air will be. It is necessary that some shelter be furnished in the winter months, as no house means no eggs. But too often the idea seems to be to make two hens exist where but one can thrive. Give each fowl at least eight inches roosting space and have the roosts fourteen inches apart for best results.

Get Eggs Now

Fall and winter eggs bring big money. Start your early-hatched pullets laying now—keep them at it all winter. Hurry along the late ones. Help the hens through the critical molting period when they are weak and liable to contract many diseases. Make every bird a producer by using

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Poultry Regulator

It makes hens lay by supplying the tonics they need at this season and quickly putting them in laying condition. It induces them to eat better—hastens digestion and assimilation—prevents disorders of liver and bowels—stimulates the egg-producing organs into activity. Used by successful poultrymen for nearly 50 years. The cost is small—one cent a hen per month—results are big.

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Cheaply built, small bore, high speed, light weight engines do not mean cheap power. Don't let anyone tell you it will pay you to buy a cheap priced engine with price its only recommendation. I know this engine game from A to Z—I've done all the experimenting here at Waterloo. I've found that large bore, low speeded, heavy engines will outlast others two to one; that the quality must be built in to get the service out.

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My 216 Free Engine Book—250 Pages will decide the engine question for you. It will tell you the INSIDE SECRETS OF THE ENGINE BUSINESS. It will show you how and why I built Galloway Masterpiece Engines in MY OWN FACTORIES OF THE BEST MATERIAL RIGHT FROM THE BLUES PRINCE OF THE MOOR. READ ENGINE ENGINES BY THE HIGHEST CLASS MACHINISTS AND WORKMEN AND sell them direct to you for less money than dealers and jobbers can buy engines of equal horse power, quality, workmanship and finish. This book on engines tells you why I can afford to back every Galloway Masterpiece engine from 1.5-4 h. p. to 16 h. p., stationary or portable, with a

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FARM AND HERD.

For the convenience of Shorthorn breeders, a special train of Pullman sleepers will leave Maryville, Mo., about 10:30 or 11 p. m. following Bellows Bros.' Shorthorn sale, November 21, for Tomson Bros.' sale, Wakarusa, Kan., November 22. This train will stop at Topeka for breakfast, leaving the Santa Fe station at 8:30 a. m. This will enable anyone reaching Topeka the morning of the 22d before that hour to connect with this train. The regular train for Wakarusa leaves Topeka at 10:15 a. m. and arrives at Wakarusa at 10:48. Special Pullman service has been provided over the Rock Island the evening following Tomson Bros.' sale for the H. C. Lookabaugh sale, Watonga, Okla., November 23.

When Writing to Advertisers,
Please Mention Kansas Farmer

OVERLAND RED

A Romance of The Moonstone Canon Trail

(Chapter XXII—"The Yuma Colt"—Continued.)

"They won't sell her. No, I was only romancing. Isn't she beautiful! She seems to be almost listening to us. What a head and what a quick, intelligent eye! Oh, you wonderful horse!" And laughing, Louise threw a kiss to the Yuma colt. "I must go. I came over to see the horses before the crowd arrived."

Collie stood hat in hand watching Louise as she strolled toward the ranch-house. He saw her stop and pat Boyar.

"I kind of wish I was a horse myself," he said whimsically. "Either the black or the outlaw. She treats them both fine."

Brand Williams, Bud Light, Parson Long, Billy Dime, and Miguel rode up, talking, joking, laughing.

"Fall to the kid!" said Miguel, indicating Collie. "I guess I'm scalded if he ain't nalled to the fence. He's just eating his head off thinking about the Yuma horse he dasset ride. No? Eh, Collie?"

"Hello, Miguel. Nope. I'm taking lessons in tendin' to my own business—like them." And Collie nodded toward the horses.

"Ain't he purty?" said Billy Dime. "All fussed up and walkin' round like a new rooster introducin' himself to a set of strange hens. Oh, pehaw!"

"And you're making a noise like one of the hens trying to get the notice of the new rooster, I guess."

"Well, seein' I got the notice, come on over and I'll show you where they keep the ice—with things on it," said Billy Dime.

The Moonstone riders dismounted, slapped the dust from their shirts and trousers, and ambled over toward the refreshments.

The little group, happy, talkative, pledged each other and the Moonstone Ranch generously.

Brand Williams, close to Collie, nudged him. "If you are thinkin' of takin' a fall out of the outlaw cayuse, don't hit this stuff much," he said. And Collie nodded.

The Moonstoners would one and all back Boyar for a place in the finals of the pony races, despite the Mexican "outfit" that already mingled with them making bets on their favorite pinto.

"Who's ridin' Boyar?" queried Bud Light. "In the races? Why, Miguel here," said Williams, slapping the Mexican on the shoulder. "He don't weigh much, but he's some glue-on-a-sliver when it comes to racin' tricks. The other Mexicans are after our pesos this time. Last year we skinned 'em so bad with Boyar takin' first that some of 'em had to wait till dark to go home."

Collie, listening, felt his heart pump faster. He turned away for an instant that his fellows might not see the disappointment in his face. He had hoped to ride Boyar to victory.

"Miss Louise could get more out of Boyar in a race than even Miguel here," said Billy Dime.

"I dunno," said Williams. "She give me orders that Miguel was to ride Boyar if they was any racin'."

So Louise herself had chosen Miguel to ride the pony. Collie grew unreasonably jealous. Once more and again he pledged the Moonstone Rancho in a brimming cup. Then he wandered over to the Mexican ponies, inspecting them casually.

A Mexican youth, handsome, dark, smiling, offered to bet with him on the result of the races. Collie declined, but gained his point. He learned the Mexican's choice for first place, a lean, wiry buckskin with a goat head and a wicked eye, but with wonderful flanks and withers. Collie meditated. As a result he placed something like fifty dollars in bets with various ranchers, naming the Mexican horse for first place. Word went round that the Moonstone Kid was betting against his own horse.

Later Brand Williams accosted him. "What you fell up against?" he asked sternly. "What made you jar yourself loose like that?"

"It's horses with me today—not home-sweet-home, Brand. Bet you a pair of specs—and you need 'em—to a bag of peanuts that the Chola cayuse runs first."

"Your brains is afloat, son. You better cut out the booze."

Unexpectedly Collie encountered Louise as he went to look after his own horses.

"I hear that you intend to ride the outlaw Yuma. Is it so?"

Collie nodded.

"I had rather you didn't," said Louise. "Why?" asked Collie, tactlessly.

Louise did not answer, and Collie strode off feeling angry with himself and more than ever determined to risk breaking his neck to win the outlaw.

Boyar, the Moonstone pony, ran second in the finals. The buckskin of the Mexicans won first place. Collie collected his winnings indifferently. He grew ashamed of himself, realizing that a foolish and unwarrantable jealousy had led him into a species of disloyalty. He was a Moonstone rider. He had bet against the Moonstone pony, and her pony. He was about to ask one of the other boys to see the horses when a tumult in the corrals drew his attention. He strolled over to the crowd, finding a place for himself on the corral bars.

Mat Gleason, superintendent of the Oro Ranch, loafed, his back against a post. Two men with ropes were following the roan pony round the corral. Presently a riata slipped out and fell. Inch by inch the outlaw was worked to the snubbing-post. One of the Oro riders seized the pony's ear in his teeth and, flinging his legs round her neck, hung, weighing her head down. There was a flash of teeth, a grunting tug at the cinchas, a cloud of dust, and Jasper Lane, foreman of the Oro outfit, was in the saddle. The cloud of dust, following the roan pony, grew denser. Above the dun cloud a sombrero swung and from fanning the outlaw's ears, Jasper Lane had essayed to ride the Yuma colt once before. His broken shoulder had set nicely, in fact, better than Bull O'Toole's leg which had been broken when the outlaw fell on him. Billy Squires, a young Montana puncher working for the Oro people, still carried his arm in a sling. All in all, the assembled company, as Brand Williams mildly put it, "were beginning to take notice of that copper-colored she-son

of a cyclone."

Jasper Lane piled spurs and quirt. The pony was broncho from the end of her long, switching tail to the tip of her pink muzzle.

Following a quick tattoo of hoofs on the baked earth came a flash like the trout's leap for the fly—a curving plunge—the sound as of a breaking willow branch, and then palpitating silence.

"Crazy with the heat," commented Billy Dime, jerking his thumb toward Collie.

Tall, slim, slow of movement, Collie slipped from the corral bars and secured the dangling reins. Across the utter silence came the whistle of a viewless hawk. The cowmen awakened from their momentary apathy. Two of them carried Jasper Lane toward the ranch-house. Some one laughed.

Gleason, the superintendent, gazed at the outlaw pony and fingered his belt. "That's the fourth!" he said slowly and distinctly. "She ain't worth it."

"The fourth Oro rider," said a voice. "You ain't countin' any Moonstone riders."

"Ain't seen any to count," retorted Gleason, and there was a general laugh.

Strangely enough, the outlaw pony followed Collie quietly as he led her toward Gleason. "The boys say there's a bet up that nobody can stick on her two minutes. She's the bet. Is that right?" said Collie.

"What you goin' to do?" queried Gleason, and some of the Oro boys laughed.

"I don't know yet," said Collie. "Maybe I'll take her back to the Moonstone with me."

Miguel of the Moonstone removed his sombrero and gravely passed it. "Flowers for the Collie kid," he said solemnly.

Collie, grave, alert, a little white beneath is tan, called for Williams to hold the pony. Then the younger man, talking to her meanwhile, slipped off the bridle and adjusted a hackamore in its place. He tightened the cinchas. The men had ceased joking. Evidently the kid meant business. Next he removed his spurs and flung them, with his quirt, in a corner.

"Just defending yourself, eh, Yuma girl?" he said. "They cut all the sense out of you with a horse-killin' bit and rip you with the spurs, and expect you to behave."

"He'll be teachin' her to say her prayers next," observed Bud Light. "He's gettin' a spell on her now."

"He'll need all his for himself," said Pars Long.

The pony, still nervously resenting the memory of the mouth-crushing spade-bit, and the tearing rews, flinched and sidled away as Collie tried to mount. Her glossy ears were flattened and the rims of her eyes showed white.

"Jump!" whispered Williams. "And don't rough her. Mebby you'll win out."

And even as Collie's hand touched the saddle-horn, Williams sprang back and climbed the corral bars.

With a leap the Moonstone rider was in the saddle. The pony shook her head as he reined her round toward the corral gate. The men stared. Gleason swore. Billy Dime began to croon a range ditty about "Pickin' Little Posies on the Golden Shore."

The roan's sleek, panting sides quivered. "Here's where she goes to it," said Williams.

"Whoop! Let 'er buck!" shouted the crowd. Rebellion swelled in the pony's rippling muscles. She waited, fore feet braced, for the first sting of the quirt, the first rip of the spurs, to turn herself in a hellish thing of plunging destruction.

Collie, leaning forward, patted her neck. "Come on, sis. Come on, Yuma girl. You're just a little hummbird. You ain't a real horse."

With a leap the pony reared. Still there came no sting or spur or quirt. She dropped to her feet. Collie had cleverly consumed a minute of the allotted time.

"One minute!" called Williams, holding the watch.

"Why, that ain't ridin'," grumbled an Oro man.

"See you later," said Williams, and several of his companions looked at him strangely. The foreman's eyes were fixed on the watch.

Collie had also heard, and he dug his unsprung heels into the pony's sides. She leaped straight for the corral gate and freedom. With a patter of hoofs, stiff-legged, she jolted toward the plain. The men dropped from the bars and ran toward the gate, all except Williams, who turned, blinking in the sun, his watch in his hand.

A few short jumps, a fish-like swirl sideways, and still Collie held his seat. He eased the hackamore a little. He was breathing hard. The horse took up the slack with a vicious plunge, head downward. The boy's face grew white. He felt something warm trickling down his mouth and chin. He threw back his head and gripped with his knees.

"They're off!" halloed a puncher. "Only one of 'em—so far," said Williams. "One minute and thirty seconds."

Then, like a bolt of copper light, the pony shot forward at a run.

On the ranch-house veranda sat Walter Stone conversing with his host, where several girls, bright-faced and gowned in cool white, were talking and laughing.

The pony headed straight for the veranda. The laughing group jumped to their feet. Collie, using both hands, swung the hackamore across the outlaw's neck and tugged.

She stopped with a jolt that all but unseated him. Walter Stone rose. "It's one of my boys," he said. And he noticed that a little stream of red was trickling from Collie's mouth and nostrils.

His head was snapped backward and then forward at every plunge. Still he gripped the saddle with rigid knees. The outlaw bucked again, and flung herself viciously sideways, turning completely round. Collie pitched drunkenly as the horse came down again and again. Faintly he heard Brand Williams cry, "Two minutes! Moonstone wins!" Then came a cheer. His gripping knees relaxed. He reeled and all around him the air grew streaked with silvers of piercing fire. He pitched headforemost at the feet of the group on the veranda.

In a flash Louise Lacharme was beside him, kneeling and supporting his head. "Water!" she cried, wiping his face with



You Cannot Break Them

The picture shown above was taken during a test of the celebrated Anderson Doubletree, made by Mr. J. F. Ellis, of Osage City, Kansas. Read what he has to say:

Osage City, Kansas.

TO WHOM IT MAY CONCERN:

This is to certify that I own a team of horses weighing 2,640 pounds with harness on. They have been on heavy work for a number of years and are well used to pulling, and I will put them against anything their weight for a pull. I had the pleasure of testing a pair of doubletrees for the Anderson Manufacturing Company of Osage City, Kansas. The doubletrees in question weighed ten pounds, completely ironed. I hitched them to a traction engine, and the brake was set unknown to me. The horses made as hard a pull and repeated pulls on this doubletree as I ever saw them make. I made at least a dozen hard pulls and at a few times the team lunged, but could not break it.

(Signed) J. F. ELLIS.

We, the undersigned, employees of the Anderson Manufacturing Company, witnessed the above when Mr. Ellis of this city tested the doubletrees, and will say that every word in the above statement is true.

(Signed) OSCAR JOHNSON

(Signed) CARL GREENQUIST

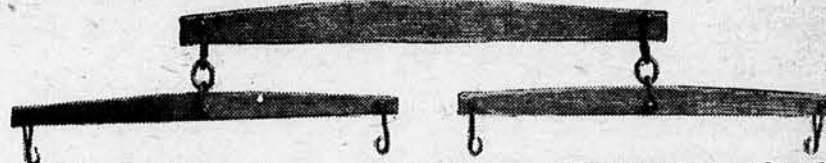
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Kansas Farmer
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her handkerchief.

Boot-heels gritted on the parched earth and spurs jingled as the men came running.

The pony, with hackamore dangling, raced across the plain toward the hills.

"This'll do just as well," said Williams, pouring a mouthful of whisky between Collie's lips. Then the taciturn foreman lifted Williams affectionately. "You ain't satis-

fied with his feet. Collie dragged along, stepping shakily. "Dam' little fool!" said

fied to get killed where you belong, but you got to go and splatter yourself all over the front yard in front of the ladies. You with your bloody nose and your face shot plumb full of gravel. If you knowed how you looked when she piled you—"

"I know how she looked," said Collie. "That's good enough for me. Did I make it?"

"The bronc' is yours," said Williams. "Bud and Miguel just rode out after her."

[To be continued.]

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BIG BONED BARRED ROCK COCKER- els, fancy breeding, \$2 each. Bred to lay strain. C. D. Swalm, Geuda Springs, Kan.

GOOD BLACK LANGSHAN COCKERELS, \$1.50 each. Mrs. Geo. W. King, Solomon, Kan.

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

UTILITY SINGLE COMB WHITE LEG- horn cockerels, Young's strain, \$2.00 each. Mrs. C. W. Churchill, Route 1, Leslie, Mo.

FOR SALE—ROSE COMB BLACK MIN- orca cockerels. Mrs. Susie Garner, Farnam, Neb.

FELTON'S MAMMOTH LIGHT BRAHMA cocks, cockerels and pullets for sale. Mrs. Mark Johnson, Bronson, Kansas.

CHOICE WHITE WYANDOTTE COCK- erels, \$1.25 and up. Mrs. Will Beightel, Holton, Kansas.

FOR SALE—SINGLE COMB WHITE LEG- horn cockerels, \$1.00 up. Mrs. H. A. Ketter, Seneca, Kansas.

OAK HILL FARM—PURE-BRED M. B. turkeys from high scoring stock. Pure-bred Duroc pigs. Lawson, Missouri, Route 3.

BIG-BONED BARRED ROCK COCKER- els, pure-bred, \$2 each. Would like to buy a few pure-bred pullets or exchange. J. P. Alpers, Hudson, Kan.

PURE BARRED ROCK COCKERELS from prize winning stock. Farm raised. \$1.50 each before January 1. Mrs. H. B. Buchanan, Abilene, Kansas.

WHITE MINORCAS AND PARTRIDGE Wyandotte cockerels and Buff Orpington ducks for sale at \$1.50 each. Mrs. Fred von Deylen, Avery, Okla.

SIXTY VARIETIES PRIZE WINNING geese, ducks, turkeys, chickens, peafowls, guineas, stock, eggs. Cheap. Write wants. F. J. Damann, Farmington, Minn.

CHOICE S. C. WHITE LEGHORN COCK- erels from prize winners and heavy laying strains, \$1.00 each. Pullets, \$8.00 per dozen. Mrs. H. Buchanan, Abilene, Kansas.

S. C. RED COCKERELS, BIG, DEEP red, exceptionally good birds. Price, \$2.50. Creighton Harper, Oak Leaf Poultry Farm, Roca, Neb.

WHITE ROCK COCKERELS, SIZE, quality and color. Fawn and White Runner ducks, all prize winners. Mrs. Ben Miller, Newton, Kansas.

COCKERELS FOR SALE—W. ROCKS, S. C. Buff Leghorns, R. C. R. I. Reds, Black Langshans; also Imperial Pekin drakes. Reasonable if taken before January 1, 1917. Mrs. A. Bollinger, Route 2, Lewis, Kansas.

SINGLE COMB REDS—FINE BREEDING cockerels at reasonable prices. This is the last chance this season. Order early and you will not be disappointed. Fine colored, large size birds, guaranteed to please. Write for prices. H. H. McLellan, Kearney, Neb.

POULTRY WANTED.

WE BUY 'EM ALL—CAPONS, GUINEAS, turkeys, geese, ducks, chickens, eggs. Cash prices on request. The Copes, Topeka.



We desire to make this department just as helpful as possible, and believing that an exchange of experiences will add to its value, we hereby extend an invitation to our readers to use it in passing on to others experiences or suggestions by which you have profited. Any questions submitted will receive our careful attention and if we are unable to make satisfactory answer, we will endeavor to direct inquirer to reliable source of help. Address Editor of Home Department, Kansas Farmer, Topeka, Kansas.

"I would be true, for there are those who trust me;
I would be pure, for there are those who care;
I would be strong, for there is much to suffer;
I would be brave, for there is much to dare.
I would be friend of all—the foe, the friendless;
I would be giving and forget the gift;
I would be humble, for I know my weakness;
I would look up, and laugh, and love, and lift."

The simpler the child's food, the better it is for him. The important thing to consider is that it contains food nutrients that will produce growth and strength.

The best way to trim a lamp wick is to pinch off the burnt portion with the fingers, then turn low in the burner and smooth toward the center with a match or toothpick.

Are you subject to backache? If so, before laying in a supply of some patent medicine guaranteed to cure, examine the height of your kitchen table and the bench or support for your wash tub. If these are the wrong height, you are doomed to chronic backache.

Cooked Breakfast Foods

Well cooked breakfast foods are rich in food value and are important in the diet. But they should be well cooked. The longer they are cooked, the better. Most of them require three hours cooking in the double boiler, or twelve hours in the fireless cooker—the best ways of cooking them—and any additional cooking will continue to add to their flavor.

There are several ways of accomplishing the three hours' cooking in the double boiler. One is to place on the stove while preparing the noon meal, again at supper time, and still again while breakfast is being made ready. If there is a flat surface on the top of the heating stove, this is an ideal place for cooking the cereal. Another way is to start in boiling water in the double boiler in the evening, allowing it to remain on fire while the evening meal is being cleared away, then close tightly. The cereal will steam in this way and by the time it has been on the stove in the morning while breakfast is being prepared, will be fully cooked.

Try adding chopped dates, raisins or figs to the cereal. This is delicious. Add the fruit about one hour before removing from the double boiler.

Have you ever tried cooking whole wheat grains for breakfast food? If well cooked, this is unsurpassed by any of the commercial products. After bringing the wheat from the bin, look it over, wash thoroughly, and cook as any of the other cereals.

Water content has much to do with the palatability of cereals. They should have plenty to cook them well, but not enough to make them soggy or heavy.

Are We Duly Grateful?

As Thanksgiving Day approaches, if we will but turn our minds back to that first Thanksgiving of our Pilgrim fathers and compare their blessings with our own, our gratitude will be profound and the day will have a far greater meaning for us than if we in a perfunctory manner offer our thanks.

Let us picture in our minds those early Pilgrims in their new home country, the hardships of which had depleted their numbers almost half, setting apart a day in which to offer thanks for what now seem to us scant blessings indeed. The crops from twenty acres of corn and six acres of barley and peas, and an abundance of wild game, shared equally by those half hundred pioneers were the material objects for special thanks, we are told.

The historian passes on to us a fine example of hospitality when he tells us that for guests on that memorable occasion, the early colonists invited Indian friends to the number of ninety to partake of their good things. He also tells us that four women, a few young girls

and one servant, prepared the food for three days for all these. It will not be hard for women of today who have tried to keep a threshing crew from going hungry, to realize the amount of work which fell to the lot of those good women.

Helen Philbrook Patten in writing of that first Thanksgiving, said: "What courage and good faith they had to celebrate in this way, for they had little cause to rejoice. This little company of stern men, armed, surrounded by savages who were gorgeous in holiday paint and feathers, and a few overworked, sad, homesick women, were trying to forget the weary months of hard work and disappointment, and were bent upon a common enjoyment of the gifts Nature had provided, for which they gave hearty thanks to God."

Can we ever at this season or any other, in offering our thanks to our Heavenly Father for our blessings, forget to be grateful for those early stalwart, determined characters who made it possible for us to here enjoy the "land of the free and the home of the brave"?

"Plea of Bob White"

Under the above heading, W. L. Nelson, Assistant Secretary of the Missouri State Board of Agriculture, tells of the usefulness of the quail to the farmer. Though in Kansas it is a statutory offense to kill quails before the year 1918, the fact that it was considered necessary to protect these birds from hunters for five years in this state, is legitimate basis for pleading for the lives of these bird friends.

This is the plea as worded by Mr. Nelson: "Please, farmer friend, may I speak before you shoot?"

"I am Bob White. It is my cheery whistle that comes to you through the ghost-gray mist of the morning, my covey call that echoes o'er hill and dale as dies the day.

"In early springtime when Nature writes in pink her proclamations of plenty I, in orchards, fields, and pastures, begin my battle against insect pests. Then when comes the wondrous white of winter, lulling into peace the plains and crowning with heavenly whiteness the hills, I still am here—still working to increase the next harvest. All winter long I labor, eating the seeds of noxious weeds.

"How many bugs and beetles and weed seeds do I eat? Well, I wonder! I cannot say, but here is what Science says:

"Eighty-five different weed seeds make up in part Bob White's bill of fare. Crops have been found packed with ragweed seeds and as many as 1,000 seeds of the crabgrass have been taken from one bird. A single specimen contained about 10,000 pigweed seeds. Crops and gizzards examined in government laboratories have yielded fifty-seven kinds of beetles, twenty-seven varieties of bugs, nine grasshoppers and locusts, and thirteen different sorts of caterpillars, besides ants, flies, wasps and spiders. A teaspoonful of chinch bugs has been taken from one quail, and an adult bird has been known to eat 5,000 plant lice in two hours. Bob White feeds upon the boll-weevil, cabbage worms, cucumber-beetles, squash bugs, grasshoppers, chinch bugs, the army worm, Hessian fly and many other insect pests."

"What pay do I demand for thus helping you in your fight against weeds and in reducing the annual insect bill of \$800,000,000? Why, I ask only that I be let live. Dead, I am only a small morsel of meat; alive, I make it easier for you and yours to live. Spare me and I will serve you.

"I speak not in opposition to true sportsmanship but against unrestrained slaughter. Today our numbers are few. Tomorrow we may be no more."

Helping Others a Tonic

The best cure for that feeling that the world is cruel and unjust, is seeking

out someone who is less fortunate than we and doing something to make that one happy or that will make his burdens a little lighter. There are so many who need a word of cheer or a kindly act, and this service on our part may change the course of a life. If it did no more than help us forget ourselves, it would be worth trying, for self-pity is anything but constructive.

Among our acquaintances is an example of the tonic effect of helpfulness to others. The friend is a widowed mother whose only child—a little girl of eleven years—died several years ago. The mother has a little business in a city and since the death of the child all her time has been given to her work, there seemingly being no pleasure left in life for her.

Recently this lonely woman has taken a boy of fifteen from an orphan's home, and she says that in doing for him she has found her first real joy since her little daughter-companion slipped away from her. This woman with only a moderate income, is finding real joy in sharing what she has with one who has no home but hers. The boy is not well and is unable to attend school, but when she offered him her home the doctor told her that with good care he would probably outgrow his weakness. He is receiving special lessons in one or two studies while he is under the doctor's care and until he can again enter high school.

The great joy these two are finding in each other, and the sacrifice this lonely mother is gladly making for one whose mother could not be spared to do for him, are fruits of an earnest endeavor to forget one's own discontent and sorrow by trying to be helpful to others. Her lonely mother heart has a new objective, and who can tell the result of her kindness to this appreciative boy?

Suet Plum Pudding

- 1 cupful suet, chopped fine
- 1 cupful cooking molasses
- 1 cupful milk
- 1 cupful raisins
- 3/4 cupfuls flour
- 1 egg
- 2 teaspoonful cloves
- 2 teaspoonfuls cinnamon
- 1 teaspoonful nutmeg
- 1 teaspoonful soda
- Pinch of salt

Boil 3 hours in pudding mold set in kettle of water. One-pound baking powder cans can be used as molds. Grease and flour the inside of the cans and put lid on tight for cooking. Fill each can half full. This recipe will make five one-pound cans full. Serve with common sweet sauce, as follows:

- 1 cupful water
- Butter size of walnut
- 1 scant cupful sugar
- 1 tablespoonful corn starch

Bring water to boiling point, then put in butter and sugar. Dissolve corn starch in cold water, and add. Flavor.

FASHION DEPARTMENT — ALL PATTERNS TEN CENTS

This department is prepared especially in New York City, for Kansas Farmer. We can supply our readers with high-grade, perfect-fitting, seam-allowing patterns at 10 cents each, postage prepaid. Full directions for making, as well as the amount of material required, accompanies each pattern. When ordering, all you have to do is to write your name and address plainly, give the correct number and size of each pattern you want, and enclose 10 cents for each number. We agree to fill all orders promptly and guarantee safe delivery. Special offer: To anyone ordering a pattern we will send the latest issue of our fashion book, "Every Woman Her Own Dress-maker," for only 2 cents; send 12 cents for pattern and book. Price of book if ordered without pattern, 6 cents. Address all orders for patterns or books to Kansas Farmer, Topeka, Kansas.



No. 7972—Ladies' Shirtwaist: Cut in sizes 34 to 42 inches bust measure. In this design the collar is particularly inviting, cut in points at front and square at back where it descends almost to the waistline. It is inlaid with bands of insertion and outlined with edging. Interest also attaches to the simulated box plait down the center front, likewise trimmed with narrow edging. No. 7971—Boys' Suit: Cut in sizes 2, 4 and 6 years. This is an excellent design for kindergarten wear or play. Bands of contrasting goods cut bias to outline the square collar, finish the sleeve, and for the novel closing outline appropriately and attractively trim the blouse, which is belted at a lowered waistline. Straight or bloomer trousers may be used. No. 7934—Ladies' Shirtwaist: Cut in sizes 36 to 42 inches bust measure. This "vestee" shirtwaist, with collar and front band in dark material, with narrow ruffles of the material outlining them, has the "something different" air that is always prized. The fronts of the blouse are gathered at the shoulder seams. No. 7988—Ladies' Long Waisted Dress: Cut in sizes 36 to 40 inches bust measure. A very distinctive model is this one, buttoned at back and having the new straight line neck—collared at sides and back with contrasting goods—with a motif ornamenting at center. The skirt is cut in four gores. No. 7987—Ladies' Skirt: Cut in sizes 24 to 32 inches waist measure. This illustrates what the advanced fashion lines in separate skirts are. The four gores are mounted on a slightly raised waistline and an under box plait is introduced at each side seam to give necessary flare and fullness. A novel feature is the result of the side gores forming deep pockets. No. 7961—Misses' Dress: Cut in sizes 14 to 20 years. A model of charming simplicity, cut in one from the shoulder to the lower edge. The fronts may roll open at the neck if desired. A turn-over collar in contrasting goods and silk ribbon ties have all the trimming honors.

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The largest, best and most successful college in the West. Control your future by having a specialty. A successful school and successful methods. Character building and business training. A good position for every graduate. Moderate tuition—clean city—expert faculty. Free winter chalet, lectures, stereopticon. Stenotypy, the machine way of shorthand. Illustrated college paper free. Positions guaranteed when your work is completed.

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L. L. TUCKER, Pres., Kansas Wesleyan Business College
SALINA, KANSAS

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Please Mention Kansas Farmer When Writing to Advertisers.

Real Estate For Sale

DAIRY FARM
Forty Acres, one mile out; all alfalfa land, large buildings. A bargain if sold soon. Write for list of farms and ranches.
T. B. GODSEY - EMPORIA, KANSAS

216 ACRES of highly improved farm, 3 miles from Nevada, Mo. Will trade for rental property or merchandise.
W. C. BRYANT - ELK CITY, KANSAS

FLORIDA

A GRAND OLD PLACE AT A VERY LOW PRICE.

BALKUM PLANTATION
380 Acres, seven miles north of DeFuniak Springs, Florida. 140 acres in cultivation and all practically fenced with good wire. 240 Acres in pastures. Fine water. Three separate fields and pastures. Good clay subsoil. Well watered. Fifty-seven large pecan trees, bearing large delicious nuts. Some of the trees are 18 inches in diameter. One nice six-room dwelling. Good barn, 30x36; wagon shed, supply house, cow barn and sheds. Only three-fourths of a mile from good school and church. Nice neighbors and all white families. This property is very cheap at \$25 per acre, including improvements, but for quick sale will accept \$20 per acre. This property is considered the finest plantation in Walton County and can be cut up into nine good 40-acre farms. Present owner has no family and is too old to look after the property. Will accept \$3,000 cash, balance \$250 per year with interest at 6 per cent. Wire or write promptly. No trades.

THE R. E. L. McCASKILL COMPANY
DEFUNIACK SPRINGS - FLORIDA

160 ACRES, four miles railroad station; all rich, dark land; 20 acres bluegrass, remainder cultivation; good 5-room house, large barn, crib, etc.; well and cistern. Owner will consider some western land as part purchase price. Possession at once. Write for full description.
MANSFIELD LAND CO., OTTAWA, KAN.

40 ACRES, 8 miles from McAlester, city 15,000. All tillable. 30 a. in cultivation. Two small houses, barn, good well, all under good fence. Raised \$1,400 worth cotton this year. \$20 per acre. Terms.
SOUTHERN REALTY CO., McAlester, Okla.

FARM AND HERD.

The annual meeting of the American Tamworth Swine Record Association will be held at the Stock Yards Inn, Union Stock Yards, Chicago, Illinois, Thursday evening, December 7, at 7:30 o'clock.

Mrs. M. E. Gunderson & Sons of Alderley Stock Farm, Oconomowoc, Wis., owners of one of the good herds of Holstein cattle in that state, write that their herd is making a

MEN WANTED

LEARN TO DRIVE AND REPAIR AUTOMOBILES AND TRACTORS
Big demand for trained men. Earn from \$75 to \$125 per month. Learn in 6 weeks by the

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

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

OTTAWA
Business College
OTTAWA, KANS.

SITUATION WANTED.

MARRIED MAN WANTS WORK
will take charge of farm or ranch for coming year. Active Christian, reliable, good references. He is willing to prove his worth to you. H. O. Gresham, Parkersburg, Kansas, will put you in touch.

THE STRAY LIST.

STRAY NOTICE.—TAKEN UP BY MRS. Thayer of Geneva Township, Allen County, Kansas, in October, 1915, one steer calf, color gray, letter H on right hip. Appraised on October 12, 1916, at \$44.50. Geo. Seymour, County Clerk, Iola, Kansas.

WANTED—TO BUY.

WANTED—WHITE ESKIMO-SPITZ PUPPIES about six weeks old. James Brockway, Baldwin, Kansas.

WANTED, FOR SEED—SUDAN GRASS, cane, kafir, milo maize, feterita, millet and sweet corn. The Barteldes Seed Co., Lawrence, Kansas.

HONEY.

BULK COMB HONEY, \$11.50 FOR TWO 58-pound cans. Single cans, \$6. R. A. Topper, Rocky Ford, Colo.

FARMS WANTED.

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

banner record this year. This is one of the herds bred for production, with a record covering a number of years that shows consistent production which insures yearly profits.

George C. Tredick, of Kingman, Kansas, owner of Tredick Farm herd of registered Holsteins, reports that his herd is making a banner showing this year. This is one of the Kansas herds built up for producers from foundation stock from the heaviest producing Holstein herds and at this time it is one of the most profitable herds in the state.

L. F. Cory & Sons of Belleville, Kansas, owners of Corydale Farm Herd of Holsteins, one of the good herds in the Southwest, report their herd making a good record this year. This is one of the herds that has been bred for production and that returns a good profit every year. A fine lot of young stock by Jewel Paul Butter Boy 94245 is a feature of the herd at this time.

Volume 34 of the Holstein Friesian Herd Book has just been received. This volume contains the records of bulls from Number 155861 to 172519, the records of cows from Number 278176 to 307054, or all records approved and admitted for entry up to January 15, 1916.

SHORTHORN CATTLE.

Shorthorn Bulls

For Sale, Ten Shorthorns

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

H. W. Estes, Sitka, Kan.

PEARL SHORTHORN HERD

Pearl, Dickinson County, Kans.

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

C. W. TAYLOR - ABILENE, KANSAS

Sycamore Springs Shorthorns

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

H. M. HILL - LAFONTAINE, KANSAS

RIVERSIDE SHORTHORNS

Headed by Prince Valentine 4th 342179.

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

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

Grotheer's Shorthorns—Lavender Model by Choice Goods Model heads herd. Young bulls and heifers. Few cows for sale.

H. C. Grotheer, Route 7, Pittsburg, Kansas.

LOWMONT SHORTHORNS.

Brawth Heir 351808 heads herd. Inspection invited. E. E. Heacock & Son, Hartford, Kan.

RED POLLED CATTLE.



RED POLLED CATTLE

FOR SALE—Twelve cows and heifers.

I. W. POULTON, Medora, Kan.

Red Polled Cattle

A few 1916 bull calves for sale. Also a few cows and heifers.

AULD BROS. - FRANKFORT, KANSAS

RED POLLED BULLS

FORTY yearling bulls, big rugged fellows, sired by ten sires, all registered and priced reasonably. Will sell a few females.

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

SHEEP.



SHROPSHIRE RAMS.

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

C. W. Chandler, Kellerton, Iowa



REGISTERED SHROPSHIRE RAMS

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

HOWARD CHANDLER, Charlton, Iowa

RAMBOUILLETT SHEEP

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

CHESTER WHITE HOGS



CHESTER WHITE HOGS

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

COLEMAN & CRUM

Danville - - Kansas

CEDARDALE CHESTER WHITES

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

J. S. KENNEDY - BLOCKTON, IOWA

REGISTERED CHESTER WHITE AND DUDOC JERSEY BOARS, SOWS, PIGS

Half-ton kind. Also Silver Laced Wyandotte cockerels, hens, pullets.

L. M. FISH - BOLIVAR, MISSOURI

Breeder's Directory

ANGUS CATTLE.

Geo. A. Deltrich, Carbondale, Kan.

D. J. White, Clements, Kan.

C. H. White, Burlington, Kan.

RED POLLED CATTLE.

Mahlon Groenmiller, Pomona, Kansas.

HOLSTEINS.

C. E. Bean, Garnett, Kansas.

DORSET-HORN SHEEP.

H. C. LaTourette, Route 2, Oberlin, Kan.

JERSEY CATTLE.

J. B. Porter & Son, Mayetta, Kan.

We have just received Volume 26 of the American Aberdeen Angus herd book. This volume contains entries from February, 1916, to August, 1916, and from Number 208501 to 220500, and other information of interest to Aberdeen Angus breeders.

FARM AND HERD NEWS NOTES

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

Address All Communications to
Kansas Farmer, and Not to
Individuals

Personal mail may have to be held
for several days, or be delayed in
forwarding, and Kansas Farmer
cannot assume any responsibility
for mistakes occurring thereby

The thirty-third annual meeting of the American Aberdeen Angus Breeders' Association will be held at the Palmer House, Chicago, at 7:30 p. m., Wednesday, December 6, 1916.

Fifty-five head of cattle have been listed for the fifteenth annual sale of Aberdeen Angus cattle to be held in connection with the International Live Stock Exposition, Union Stock Yards, Chicago, December 6, under the auspices of the American Aberdeen Angus Breeders' Association. There will be seventeen bulls and thirty-eight cows and heifers, consisting of twenty Blackbirds, five of which belong to the aristocratic Blackcap family; seventeen Trojan-Ericas, seven Prides of Aberdeen, two of which are of the famous K Pride family; seven Queen Mothers, one Heather Bloom, one Lady Ida, one Mina, and one Miss Copland. Twenty-eight of the animals have won prizes at leading expositions, shows and fairs where the association has offered prizes; 138 special Association prizes have been won by these and the remainder of the offering at fairs in which the association did not offer specials.

The annual meeting of the National Duroc Record Association will be held in Peoria, Illinois, December 2, and on that date the \$60,000 office building of the Association will be officially dedicated. The building is the finest of any owned and occupied by a live stock record association. It is paid for and the association has a nice balance in the treasury, which is certainly a splendid showing.

J. W. Berry & Son of Jewell City, Kansas, report their Jerseys doing well. The Berry herd of pure-bred and high grade Jersey cattle is one of the largest in the state. The best blood lines of the Jersey breed are represented in their herd. A feature at this time is the large number of choice young cows and heifers. They have forty head of bred yearlings that are a choice lot. All of them are out of heavy producing dams.

R. I. Little, of Des Moines, Iowa, one of the leading draft horse men of that state, reports a good demand for draft stallions and mares of all breeds and expects the demand to increase as the season advances. Mr. Little handles all breeds of draft horses and is in close touch with the business. Horses from Mr. Little's herds have been consistent winners at the big fairs for several years.

One of the choice Jersey herds in Kansas is the Dornwood Farm herd at Topeka. This herd is noted for choice breeding and heavy production. A feature of the herd at this time is the choice lot of young stock, including outstanding young bulls from Register of Merit and Imported cows, descendants of Fontaine's Eminent, Pogs 80th of Hood Farm, and Golden Fern's Lad.

L. M. Fish, of Bolivar, is one of Missouri's live boosters for imported stock. Mr. Fish has very fine herds of both Durocs and Chester White hogs. This year he raised a large number of early spring pigs of both breeds. He also has a choice lot of summer and fall pigs. He has found pure-bred stock and poultry profitable and has one of the best flocks of R. C. Silver Laced Wyandotte chickens in that section of the state.

J. B. Branson, the well known Holstein breeder of Lincoln, Neb., has decided to breed pure-bred Holsteins exclusively and announces a sale to be held December 12. In this sale he will offer 100 head of select high grade Holsteins, a large per cent of them raised on his farm. There will be forty head of heavy milking cows milking from 40 to 80 pounds per day; thirty springing heifers two years old, bred to his great herd bull, Aggie King Gerben; also a lot of yearlings and calves, and some registered bulls.

Harris Bros., of Great Bend, Kansas, held a very successful Percheron sale November 15. Eight stallions, including the youngsters, averaged \$588 per head, and twenty-eight head or mares and fillies averaged \$368 per head. A two-year-old stallion by Algarve topped the sale at \$825. Many of the horses sold went to buyers in the wheat belt of Kansas.

A. J. Erhart & Son have claimed February 22 for their bred sow sale at Hutchinson, Kansas. At this time they will offer sixty head of high class sows and gilts, sired by and bred to the following herd boars: Big Hadley Jr., Big Robidoux, Big Bob Jumbo, King Price Wonder, Columbus Defender, and Big Hadley's Equal by Big Hadley Jr.

The Deming Ranch, Oswego, Kansas, is the home of one of the great Poland China herds in this state. H. O. Sheldon, herdsman, reports the herd doing well at this time and the young stock growing out fine. Although this was their first year out with a show herd, their winnings at the big state fairs in competition with the best herds in the country placed them in the ranks of the foremost herds of the corn belt. Their winnings included grand championships, reserve championships, first, second and third premiums in the various classes and they were contenders at every fair for high honors. They keep their herd immune and at the present time have a very fine lot of herd material and bred sows, the same breeding of their big winners. They are the big easy-feeding profitable type.

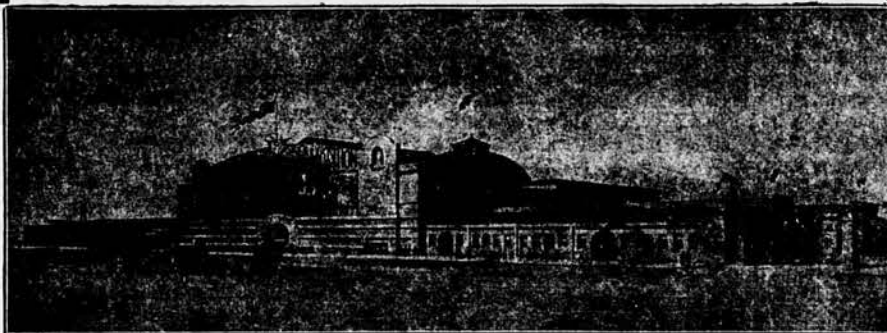
The twenty-ninth annual meeting of the American Association of Importers and Breeders of Belgian Draft Horses will be held at Assembly Hall in Live Stock Record building, Union Stock Yards, Chicago, at 8 o'clock p. m. Wednesday, December 6.

Now for the International

Greatest and Best LIVE STOCK SHOW of the Year

December 2 to 9

At Union Stock Yards, Chicago



DAILY SALES OF PURE-BRED LIVE STOCK

Clydesdale Sale

Tuesday, December 5, 1:00 p. m.

For particulars write J. A. H. Johnstone, Union Stock Yards, Chicago.

50 - Selected Shorthorns - 50

Thursday, December 7, 1:00 p. m.

For catalog write F. W. Harding, Union Stock Yards, Chicago.

Sheep and Swine Sales Tuesday, Wednesday and Thursday

Many new improvements, new features. Thirty National Conventions. Dairy sales of all breeds, etc., etc., etc.

A season of learning, entertainment, brilliant evening shows and A TRIP TO CHICAGO. Lowest rates on all railroads.

50 - High-Class Angus - 50

Wednesday, December 6, 1:00 p. m.

For catalog write Chas. Gray, Union Stock Yards, Chicago.

50 - Choice Herefords - 50

Friday, December 8, 1:00 p. m.

For catalog write R. J. Kinzer, 1012 Baltimore Ave., Kansas City, Mo.

Entire Grade Holstein Herd at Auction

TO BE HELD AT OUR DAIRY FARM, "RIVERSIDE PLACE," THREE MILES SOUTHWEST OF POST OFFICE

Lincoln, Nebraska, Tuesday, December 12, 1916

To make room for pure-breds I will sell the entire herd of carefully selected and bred-up grades—ABOUT 100 HEAD.

FORTY HEAVY MILKING COWS, 2 to 7 years old. Most of these have freshened since November 1 or are to freshen soon. Every mature cow has milked from 40 to 80 pounds in 24 hours. Most of them will weigh 1,300 to 1,400 pounds each.

THIRTY SPRINGING HEIFERS, coming twos. They are bred to Aggie King Gerben 156762 (my herd bull), a grandson of the noted KATY GERBEN, Nebraska's GREATEST COW.

BALANCE YEARLINGS AND CALVES, BOTH SEXES. Also two registered bulls. One 6-months-old registered bull calf, sire Sunflower Sir Hengerveld Walker 116779, dam Princess Katy Mahomet 275789.

Free conveyance from car line to farm sale day. Free lunch.

J. B. BRANSON, OWNER

Phone B-6337, R. F. D. 1

Lincoln, Nebraska

AUCTIONEERS—A. W. THOMPSON, Z. S. BRANSON

P. S.—It will pay Kansas farmers to attend this sale of good cattle. Bring your dairy expert and come.

HORSES AND MULES.

HORSES AND MULES.



DEIERLING STOCK FARMS

Have fifteen large, heavy boned, black, registered jacks, 15 to 16 hands high, good heads and ears, good style, good breeders. I have a number of jacks sired by the champion, Pride of Missouri, also several other good herd prospects. In my 1914 sale I sold the champion of Kansas State Fair, 1915, Eastern Lightning, also Demonstrator, first prize aged Jack Missouri State Fair. Reference, People's Bank. Written guarantee with each animal. Have a number of Percheron stallions for sale, also saddle stallions. Barn in town. Wabash Railroad. WM. DEIERLING, QUEEN CITY, MISSOURI.

PIONEER STUD FARM

Established 1870

FIFTY REGISTERED STALLIONS AND MARES

If you are in the market for a good Percheron stallion or mare, now is the time. We can show you more bone, size, action and conformation than you will see elsewhere. Write or come today.

C. W. LAMER & SON

SALINA, KANSAS

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



REGISTERED PERCHERONS, 30 heavy 3 and 4 yr. stallions, 68 rugged 2 yr. olds, 41 yearlings. Can spare 25 reg. mares. 24 reg. Belgian stallions. Sires and dams from France and Belgium.

FRED CHANDLER, R. 7, Charlton, Iowa Above Kansas City.

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

PERCHERONS FOR SALE

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

J. W. BARNHART, BUTLER, MISSOURI



JACKS AND JENNETS

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

PHIL WALKER, Moline, Elk County, Kansas

SIX BREEDS DRAFT STALLIONS Pedigree and guarantee with each, \$450 and up. Time given.

R. I. LITTLE, Good Block, Des Moines, Ia.

HAMPSHIRE HOGS

GEO. W. ELA'S HALCYON HERD Registered, Immured Hampshire boars for sale. Valley Falls, Kansas.



POLAND CHINAS

POLAND CHINAS.

ELKMORE FARM POLANDS

WORLD'S CHAMPION SENIOR YEARLING, CALDWELL'S BIG BOB

The sensation of the National Swine Show and grand champion Poland China boar at the Topeka Free Fair. Fifteen spring boars ready for service, priced to sell. Write at once. Mention Kansas Farmer.

FRED B. CALDWELL

HOWARD, KANSAS

DEAN'S MASTODON POLANDS

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

CLARENCE DEAN

WESTON, MISSOURI



Faulkner's Famous Spotted Poland

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

H. L. FAULKNER

Box K - Jamesport, Missouri

Herd Boars and Sows

Have a surplus of Poland China herd boars and sows. Wish to move them at prices you can afford. They are as good as grow. Let us tell you about them.

L. C. WALBRIDGE

RUSSELL - KANSAS

Poland China Boars and Gilts

Twenty-five early spring boars and twenty-five gilts. Sired by I Am King of Wonder and Watt's King.

WM. WATT & SON - GREEN CITY, MO.

SPOTTED POLAND CHINAS

Spring boars, one extra good yearling boar by Faulkner's Spotted Chief and one of my herd boars, Spotted Duke, an 800-pound hog. Summer pigs, either sex.

R. G. SARTAIN, ROUTE 6, FAYETTE, MO.

Sullivan Bros.' Poland

Outstanding February and March boars and gilts, good length, plenty of bone and high quality. Priced to sell.

SULLIVAN BROS. - MORAN, KANSAS

EUREKA POLANDS AND DUROCS

April boars, fancy individuals. Priced for quick sale. Sires, Lafollette's Last, Bader's Golden Model 2d, McWonder and Big Ex Wonder.

W. H. SALES - SIMPSON, KANSAS

Old Original SPOTTED POLANDS—Choice spring boars and 10-week-old fall pigs, priced to sell. Carl F. Smith, Cleburne, Kan.

DUROC JERSEYS.

Maplewood Durocs

We have a fine lot of pure-bred Duroc boars ready for service, and some choice spring gilts open, ready for December breeding. Price on boars, \$25; gilts, \$30. Send us your order.

Mott & Seaborn, Herington, Kansas

A HERD BOAR

We offer the splendid herd boar, Gold Medal 176231, also spring boars by him and the great boar, Country Gentleman 132541. All double immune. Prices reasonable.

W. R. HUSTON - AMERICUS, KANSAS

TWENTY FIVE SPRING BOARS

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

G. M. SHEPHERD - LYONS, KANSAS

DUROC JERSEY BOARS

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

K. HAGUE - NEWTON, KANSAS

UNEEDA HERD

Choice early and late spring boars. Weight 150 to 250 pounds. Not fat. Choice breeding. All rich red, good backs, bone and feet; quality kind; real herd improvers at right prices. Tell us your wants.

TYSON BROS. - McALLISTER, KANSAS

GUARANTEED DUROC BOARS

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

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

DUROC JERSEY HOGS

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

W. A. WOOD & SON, ELMDALE, KANSAS

PURE-BRED DUROC BOARS

Best breeding, choice individuals, priced right. W. J. Harrison, Silver Lake, Kansas.

WALNUT BREEDING FARM



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

LEON A. WAITE,

WINFIELD, KANSAS

Palmer's Immune Poland

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

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

OLD ORIGINAL SPOTTED POLANDS

150 choice spring pigs left, sired by seven of the very best boars of the East and West. Priced right. Write your wants to the CEDAR ROW STOCK FARM.

A. S. Alexander, Prop. Burlington, Kansas

AT REDUCED PRICES

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

THE ENNIS STOCK AND DAIRY FARM, Herington, Mo.

(Just South of St. Louis)

DEMING RANCH POLANDS

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

H. O. Shelden, Herdsman Oswego, Kansas

ARKELL'S POLANDS

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

JAMES ARKELL, JUNCTION CITY, KAN.

Poland China Boars and Gilts

For Sale—Two spring boars by Big Bob Wonder; 8 boars and 10 gilts by Mammoth Orange. Prices reasonable. Write at once.

JOHN D. HENRY, LECOMPTON, KANSAS

PIONEER HERD POLAND CHINAS

Twenty-five choice spring boars sired by the half ton A Wonderful King, the first prize aged boar at Topeka fair and first and grand champion at Kansas State Fair at Hutchinson, 1916. Write for prices.

F. OLIVER & SONS, DANVILLE, KANSAS

LANGFORD'S SPOTTED POLANDS

Boars—Serviceable age, guaranteed to please. Breeding stock, both sexes.

T. T. LANGFORD & SONS, Jamesport, Mo.

FITZSIMMONS' POLANDS

Spring boars—sired by Blue Hadley and Geo. Garnett, out of choice big-type dams.

O. H. FITZSIMMONS - WILSEY, KANSAS

HEREFORD CATTLE.

Herefords and Percherons

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

M. E. GIDEON - EMMETT, KANSAS

HEREFORD CATTLE

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

B. M. BROWN, FALL RIVER, KANSAS

The "Oaks" Farm Herefords

For Sale—Twenty-five bulls from 6 to 36 months old. Anxiety breeding, choice ones. Herd bulls, Beau D 376645; Albion 4th 458-303; Lewis Fairfax 522709.

J. C. DARR & SON, PLYMOUTH, KANSAS

OHIO IMPROVED CHESTERS

O. I. C. PIGS

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

DAN WILCOX, CAMERON, MO.

O. I. C. BOARS, all ages; big boned, long bodied, growthy fellows. Prices reasonable.

G. P. ANDREWS - DANVILLE, MICH.

AYRSHIRE BULLS

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

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

HOLSTEIN CATTLE.

HOLSTEIN CATTLE.

Clyde Girod, At the Farm.

F. W. Robison, Cashier Towanda State Bank

HOLSTEIN FRIESIAN FARM, Towanda, Kansas

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

BEFORE YOU BUY, TALK WITH US

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

GIROD & ROBISON

TOWANDA, KANSAS



THE HOLSTEIN-FRIESIAN ASSOCIATION OF KANSAS

as an organization offers nothing for sale but desires to supply valuable information free to prospective buyers. The object of this association is to protect the interests of the breed in Kansas. Are you a member?

Write W. H. MOTT, Sec'y, HERINGTON, KANSAS

HOLSTEIN COWS

For Sale—Holstein springers, fresh cows and two-year-old springers. All bred to registered bull. Also some registered females and bulls.

BOCK'S DAIRY, Route 9, Wichita, Kansas

REGISTERED HOLSTEINS

Priced for quick sale, 23-pound bull of serviceable age. Others 6-8 months of age from 20-23-pound dams. Young bull calves sired by a 32.52-pound bull; also a few bred heifers. For further particulars write

M. E. GUNDERSON & SONS

Route 25 Oconomowoc, Wisconsin

THE CEDAR LANE HOLSTEIN HERD

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

T. M. EWING, INDEPENDENCE, KANSAS

JERSEY CATTLE.

The All-Around Jersey

is the farmer's cow. She's his friend and pride—the beautiful, gentle, ever-paying milk machine that lifts the mortgage, builds up the fertility of the farm, and puts the whole business on a sound, paying, permanent basis. She adapts herself to all climates and all feeds and does not need fancy care. She matures early and lives long. And she's so sleek, clean cut and handsome, as to be the family pet and pride. She produces well and sells well. Learn about her in our fine, free book, "About Jersey Cattle." Write for it now.

THE AMERICAN JERSEY CATTLE CLUB
375 West 23d St., N. City

LINSOTT JERSEYS

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

R. J. LINSOTT - HOLTON, KANSAS

REDHURST JERSEYS

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

REDMAN & SON - TIPTON, MISSOURI

120 Jersey Cows and Heifers

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

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

DORNWOOD FARM JERSEYS

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

DORNWOOD FARM, Route 1, Topeka, Kan.

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

GALLOWAY CATTLE.

GALLOWAY BULLS

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

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

AUCTIONEERS.

Live Stock and Farm Auctioneer

Write or wire for date. I can please you. LAKE BURGER, WELLINGTON, KANSAS

FRANK J. ZAUN Live Stock Auctioneer.

Write or wire for date. Independence, Missouri

JOHN D. SNYDER

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



Purebred Registered HOLSTEIN CATTLE

Pure-bred registered Holstein cows hold all records, and the bright and shining high marks of production which enthrall Holstein owners and amaze the world are, forty-four and forty-two hundredths lbs. butter and 808.5 lbs. milk in 7 days; one hundred seventy-one and four hundred ninety-seven thousandths lbs. butter and 3,242.8 lbs. of milk in 30 days; and fifteen hundred and six and thirty-six hundredths lbs. of butter and 31,239.4 lbs. of milk in 365 days. The Holstein cow in her rapid forward march of progress is so profuse with remarkable achievements that even the above wonderful figures are 'subject to change without notice.'

Send for FREE Illustrated Descriptive Booklets.

The Holstein-Friesian Association of America

F. L. Houghton, Sec'y. Box 114, Brattleboro, Vt.

IN MISSOURI

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

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

Bonnie Brae Holsteins

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

IRA ROMIG, Station B, TOPEKA, KANSAS

23-HOLSTEIN-FRIESIAN BULLS-23

Best of sires. A. R. C. dams, fourteen over 20 pounds. Seven of the others from heifers with records of 14.89 to 19.2 pounds. The kind you want. We have only two cows in the herd with mature records less than 20 pounds.

Breeders for Thirty Years.

McKAY BROS., Waterloo, Iowa

REGISTERED HOLSTEINS

We want to cut down our herd. Will sell ten or twelve choice cows, most of them young, also a few heifers.

M. E. MOORE & CO. - CAMERON, MO.

CHOICE HOLSTEIN BULLS

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

BEN SCHNEIDER, NORTONVILLE, KAN.

HOLSTEIN COWS

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

CORYDALE FARM HERD

Offers for sale four bull calves two to four months, sired by Jewel Paul Butter Boy 94245. These calves are all nicely marked and from good milkers.

L. F. CORY & SON, BELLEVILLE, KAN.

Butter Bred Holsteins

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

J. P. MAST - SCRANTON, KANSAS

A TREDICO BULL

Is more than just a registered bull.

TREDICO FARM, Route 2, Kingman, Kan.

GOLDEN BELT HOLSTEIN HERD

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

W. E. BENTLEY, MANHATTAN, KANSAS

HOLSTEIN CALVES—Ten heifers and two bulls,

15-18ths pure, beautifully marked, 5 weeks old, from heavy milkers. \$20 each, crated for shipment anywhere. Write EDGEWOOD FARM, Whitewater, Wis.

BRAEBURN HOLSTEINS

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

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

"BY THE SKIN OF A SKUNK,"

or How Bud Won Sallie's Heart and Hand



1.—Bud longs for a little extra change. Father doesn't believe in giving him anything aside from his bed and living in return for hard work on the farm.



2.—Paul Willard and Sallie Meadows—a girl Bud had his eye on, out for a stroll. Paul is all dressed up—evidently has ready cash for fancy duds.



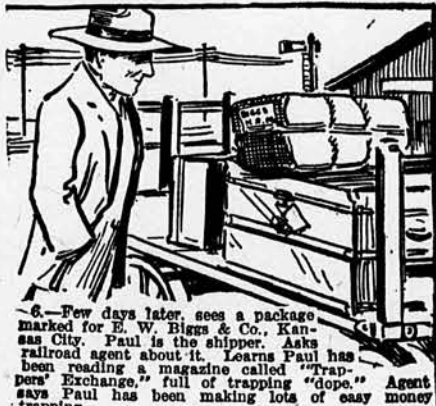
3.—Bud at home that night. "No chance for a fellow without a little money," says he. Wonders how Paul gets his dough. Will try and find out.



4.—Few days later. Shadows Paul. Sees him making for the woods, carrying something that looks like chains and a package.



5.—Bud sees Paul setting several traps—thats what! "Ha, ha—so Paul is trapping!" says Bud. The truth begins to dawn.



6.—Few days later, sees a package marked for E. W. Biggs & Co., Kansas City. Paul is the shipper. Asks railroad agent about it. Learns Paul has been reading a magazine called "Trappers' Exchange," full of trapping "dope." Agent says Paul has been making lots of easy money trapping.



7.—That night: Bud scans Dad's farm paper. Sees ad of E. W. Biggs & Co. offering to start fellows trapping skunk, coon, possum, etc. Offer free subscription to "THE TRAPPERS' EXCHANGE." Bud writes 'em quick.



8.—The second day later—Bud hears from Biggs at Kansas City. Finds "THE TRAPPERS' EXCHANGE" dandy reading—full of hints on trapping and stories from successful trappers. Orders some traps and baits.



9.—Bud sets his traps down by the creek. Uses Biggs' Guaranteed Baits. Biggs says if they fail to lure animals Bud can get his money back without argument.



10.—Twenty skunks, eight coons and a fox—that's Bud's haul since he got his outfit from Biggs. Prepares fur for shipment as per simple instructions in "THE TRAPPERS' EXCHANGE." Ships to Biggs and anxiously awaits the check he will get two days later.



11.—Next day: Biggs' force grading Bud's shipment. Highly pleased with the quality of fur. Fox proves to be a Blue Fox—top grade, worth \$150.00.



12.—Bud's check from E. W. Biggs & Co. "And it wasn't work at all—just good fun," says Bud. Thinks of all the good things he can have now— "What'll Sallie say?" Bud's heart beats fast.



13.—Bud in his new suit—Pete the tailor is some artist. Gets all dolled up, makes for Sallie's house that eve. Resolves to win back the love that was his. "A few silver dollars to jingle won't do any harm," Bud muses.



14.—Sallie and Bud a few years later. Married and happy. In background is their cozy bungalow. Trapping started Bud on the right track. Bud keeps it up in season. His ruddy complexion and powerful frame comes from the great out-of-doors.

MEN--

Young and not so young—are you losing the easy money that's waiting for your traps—back of the woods or down by the creek? Write "Biggs at Kansas City" for Free subscription to "The Trappers' Exchange"—right now—today.

Here's Easy Money

There's plenty of ready cash back in the woods or down by the creek waiting for you if you have a dozen or two traps and a few packages of Biggs' Guaranteed Baits that will lure Skunk, Coon, Possum, etc., right where you want them. Trapping is great fun and if you have never followed the game, you will be surprised at the good money you can make between now and the new year. If you have never trapped you are missing a lot of fun and you're losing easy money, too. Over half a million trappers deal with us and get highest prices for furs and hides because BIGGS PAYS TOP PRICES ALL THE TIME.

Write "Biggs at Kansas City" Today

Get our factory cost catalog of trappers' supplies—traps, baits, guns, ammunition, etc., then make up an order of what you think you will need and mail it quick so that you can start out trapping right now. Hundreds of fellows right in your own county are making dandy money trapping this season. You can do the same—we'll show you how. It's all simple and easy—just fun.

Get Our Raw Fur Price List Quick

See what we're paying for Muskrat, Skunk and Possum and other furs. Then you'll not wonder why hundreds of thousands of trappers and sportsmen throughout North America look to Biggs as fur headquarters where they get top prices and an honest and square deal all the time. FUR SHIPMENTS HELD SEPARATE on request and your furs returned quickly if our grading is not the most liberal, prices the highest and returns the quickest. Insert a notice in the package saying "Hold Separate" and we'll follow your instructions. You must be satisfied if you deal with us.

FREE

Use the Coupon or a Post Card and mail at once for a free subscription to "THE TRAPPERS' EXCHANGE," our monthly magazine for trappers, full of stories of hunting and trapping adventure, sent in by experienced trappers themselves, with pictures, diagrams, etc. Shows how others get big catches and make easy money. Sign and mail coupon today.

GET BUSY AT ONCE.—Let us start you and you'll soon be banking your trapping profits.

E. W. BIGGS & COMPANY
658 Biggs Building Kansas City, Mo.

SIGN THIS AND MAIL

E. W. BIGGS & COMPANY,
658 Biggs Building,
Kansas City, Mo.

Please put my name down for a free subscription to "Trappers' Exchange." Also send me your free price lists of Raw Furs, a catalog of trappers' supplies and prices on tanning and "making up" fur goods.

Name

Post Office

R. F. D. Box State