

KANSAS FARMER

For the improvement

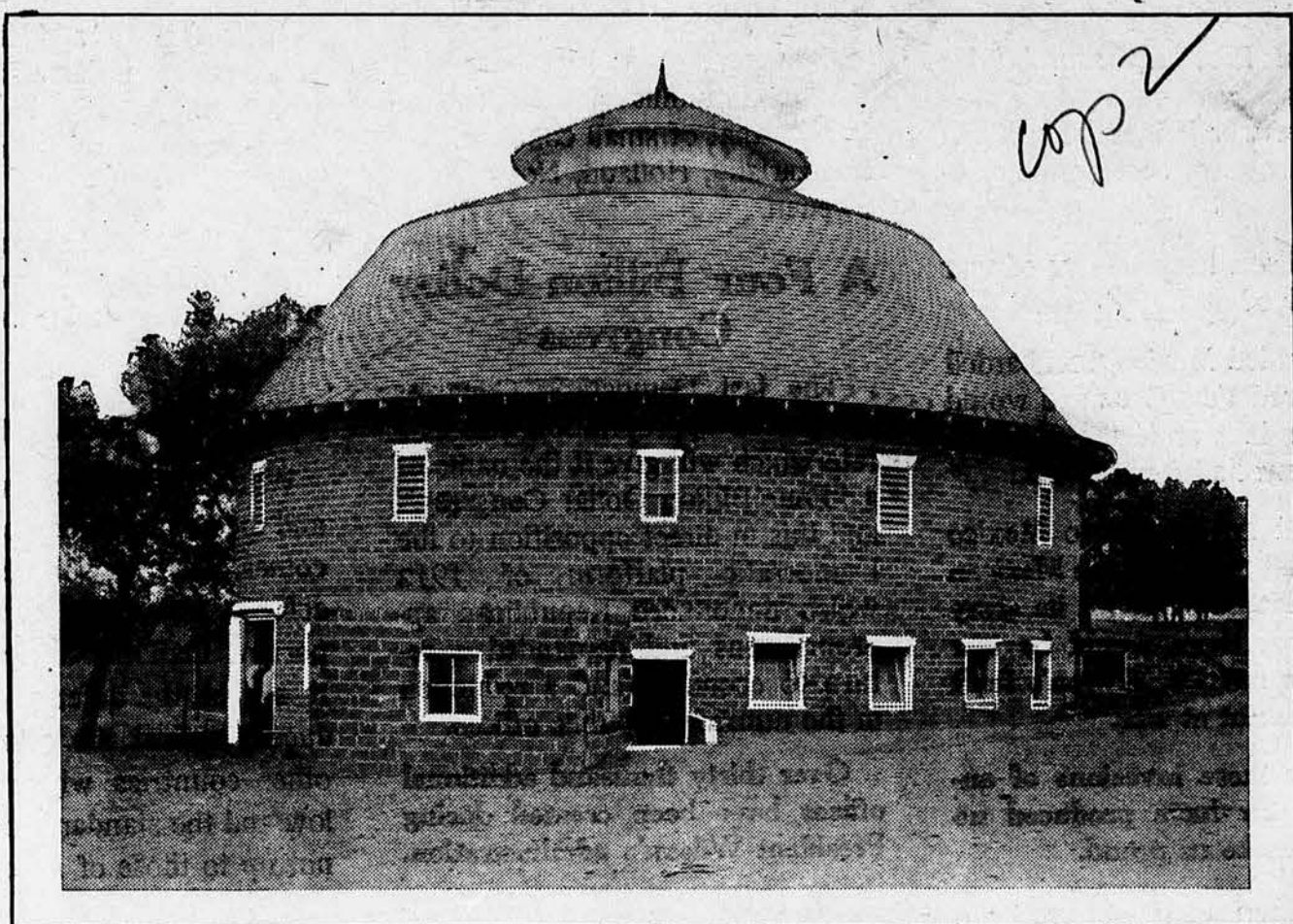


of the Farm and Home

Volume 54, Number 44.

TOPEKA, KANSAS, OCTOBER 28, 1916.

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THE labor of caring for dairy cows may be reduced one-half by housing them in a carefully planned barn.

An expensive or elaborate structure is not necessary. An expenditure of fifty dollars a cow is enough to provide a sanitary, comfortable, convenient and substantial barn. This investment in a well planned barn will return good interest on the money.

It is of primary importance that the dairy barn be easily cleaned and be well lighted and ventilated. In making stalls, floors, stanchions, and mangers, the comfort of the cows should be considered. The barn should also be planned to save steps in feeding and in caring for the milk.

It is easy to make serious mistakes in building a barn and for this reason much thought and study should be given to the planning before starting to build.

G. C. Wheeler

The "War" Catch-phrase and the Falsity of It —The Real Issue

The Democratic campaign has been framed on the catch phrase, "Wilson kept us out of war."

It is not true, and is absolutely at variance with facts.

Under our constitution, the only power that can declare war is Congress. The President cannot declare war.

But the President can, by his policy, place our country in a position where war is inevitable if the opposing country accepts the challenge.

Did Wilson keep us out of war with Mexico?

We invaded Mexico, bombarded and captured Vera Cruz and would have been in war if the Mexican Government had fought back.

We sent an army into Mexico and it is still there. **If the Mexican Government dared to pit its army against ours there would be war now. It is not Mr. Wilson's fault that we are not at war.**

And yet these invasions of another country have produced no results to make us proud.

More American lives have been lost—lives of private citizens, soldiers and marines—in this Mexican "peace" than were lost during the Spanish-American war. We have submitted to humiliating conditions and awful outrages without resenting them, and yet we have paid the price of a war.

We could have prevented every outrage and saved thousands of lives if we had had a firm Mexican policy.

Did Wilson keep us out of war with any European nation?

Not at all.

No European nation would fight us. The same condition kept us out of war that kept Holland out of war and Switzerland, and Spain, and Norway, and Denmark. None of them wanted to get into war and neither did the United States. No nation involved in the European struggle wished to add us to its list of enemies.

Our foreign policy has been weak and humiliating to us, in contrast to that of small countries like Switzerland, Holland, Norway and Sweden.

A Four Billion Dollar Congress

The last Democratic Congress has passed appropriation bills at a rate which will give it the name of a "Four Billion Dollar Congress," and this in direct opposition to the Democratic platform of 1912 which denounced Republican appropriations and demanded a return to economy and a reduction in the number of public offices.

Over thirty thousand additional offices have been created during President Wilson's administration.

Mr. Hughes stands for the constructive policy of a budget system against "Pork Barrel" methods; he is in favor of a reduction in expense, and economy in government.

Aside from the great issues that are temporary at this time, there is no greater question involved than that of making our government careful in appropriations and clean in expenditures.

The Farmer Pays the Adamson Bill

The Democratic party expects to gain votes through the Adamson

[POLITICAL ADVERTISEMENT]

Bill, which is merely a measure to postpone trouble, passed without consideration or investigation. It will place a burden of millions of dollars in future years upon the farmers of the country, who in the end must "pay the freight." The plea is made for Mr. Wilson that he raises wages.

It is fair to add that he also raises expenses, increases taxes and **places the burden on the people for a proposition which is purely political.**

The threatened strike could have been avoided by an arbitration law just as easily as by the Adamson Bill.

The Real Issue

When the European war is ended and the re-adjustment of conditions comes, America will need a line of defense which will be no less important than the army and navy. It will be the defense of our producers against the competition of other countries where prices are low and the standards of living are not up to those of America.

There is only one party that proposes to enact this preparedness into law, and that is the Republican party, which stands always for the protection of American farmers and American trade.

Many of the other issues of this campaign will be settled in a few months, but the consequence of no protection of our producers and our workmen would lead to disaster that would never be overcome.

On this question the Republican party deserves the support of every man who produces and who labors.



KANSAS FARMER

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ALBERT T. REID, President
C. C. YOUNG, Vice-President and Advertising Manager

T. A. BORMAN, Editor-in-Chief
G. C. WHEELER, Associate Editor

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DAIRY MEETING AT MULVANE

On November 10 the Kansas State Dairy Association will hold a meeting at Mulvane. The association has been holding annual meetings at Manhattan during Farm and Home Week for a number of years, but the attendance has not been as large as it should be. This idea of having several sessions during the year at different points in the state, was proposed at the last annual meeting, and the officers were instructed to arrange programs for these meetings. The suggestion was that they be held at points in the state where dairy interests were especially strong.

This idea of taking the program to the dairyman was given its first trial at Abilene last April. Dickinson County has made considerable progress in developing the dairy industry, and it was hoped that many of its dairymen would take part in the meeting. The officers who planned the meeting were not disappointed. The attendance was large, the program was unusually good and there was much enthusiasm.

In the territory around Mulvane there has been a rather remarkable development in dairying during the past five years. We well remember that only a few years ago the farmers in attendance at a farmers' institute meeting would not go across the street to look at a dairy cow. It was admitted that crop yields were falling off and farming conditions were not good, but at that time the effort to arouse interest in dairying as a means of overcoming this condition failed to meet with much response. With the starting of a condensery at Mulvane, however, dairying at once began to be the type of farming generally practiced. Dairy cows were in such demand that shipments received late in the day were sorted over in the cars and in railroad yards by the light of lanterns.

We have no details as to the program for this Mulvane meeting of the State Dairy Association, but judging by the past we feel sure it will be of such character as to make it well worth while for dairymen to make a special effort to be present. A visit to a community that has made such marked progress in its dairying in so short a time is certain to be of interest to dairymen in other sections. Begin at once to make your plans to be present at this Mulvane meeting, November 10.

FUTURE BEEF PRODUCTION

Cattle growers among our readers will be much interested in the article, "Future of Cattle Industry," on page four of this issue. It is a portion of the address given by F. T. Ransom to the cattlemen who visited the Kansas Experiment Station at the close of the winter feeding experiments, June 9. Mr. Ransom is president of the Stock Yards Bank of Wichita, and has made a close study of the cattle business as conducted in the territory tributary to that city.

This business is undergoing changes of vital importance. The experiments being conducted at the Kansas Experiment Station are pointing the way to a new era in the growing and feeding of cattle. We are practically through with exploiting the use of new land for the cheap production of beef. In fact, we are now in direct competition with beef production of other countries where new land is being exploited. Cattle production in this country has reached the point where it must be largely a farm business in which the cheaper feeds and cheaper lands will be used in beef production.

Cattle growers in this country may not realize the strides other countries are making in growing cattle. Argentine has been the great meat-exporting country of South America, but Brazil is now making rapid progress. Numerous packing houses have been established in that country during the past few years. During 1915 Brazil exported 8,500 tons of beef, but during the first six months of 1916 its meat exports amounted to over twelve thousand tons, and according to

conservative estimates its total exports for the year will be around forty to fifty thousand tons, having a value of from eight to ten million dollars.

To the breeder of pure-bred cattle this rapid development of the cattle business in South America opens a market for pure-bred animals needed to bring about improvement. This demand is now being strongly felt in this country. To the beef producer it suggests the thought of ever-increasing competition in meat production. It will be some time before production will catch up with consumption, but we can have no monopoly on this business of meat production.

Cattle are almost essential to market rough feed and it is up to the beef producers of the United States to meet this competition by more rapidly improving the quality of the stock grown and thus bring about greater economy in production. This is the way pointed out by the article referred to in this issue.

KILL INSECTS IN FALL

Fighting insects is an important part of raising crops. In a new country this is not so noticeable, but in a section where the land has been farmed a long time, one who would succeed must ever be on the alert to reduce to a minimum the damage done by insects of various kinds.

Injurious insects are especially prevalent in orchards and gardens. Fall and winter is the season when these insects can be most successfully destroyed. The bugs are in their winter quarters—the remnants of old plants and other trash and litter that has accumulated about the orchard and garden. Cut out dead trees and limbs and use them for firewood and burn up or plow under trash and rubbish.

According to T. J. Talbert of the Missouri Agricultural College, this cleaning up about the orchard and garden will destroy a dozen or more of our most destructive pests. The plum curculio is now wintering as a full grown beetle in the trash and litter along the fence rows or about the trees. The codling moth will be found in the worm stage within a silken cocoon tucked away under the shelly bark of dead trees and dead limbs. The fruit tree bark beetles or shot-hole borers are wintering mostly as adult beetles in dead or dying trees.

Under the old stalks and rubbish in the garden and about the borders will be found the adult asparagus beetle, bean leaf beetle, harlequin, cabbage bug, flea beetles, the striped cucumber beetle, and the chrysalis of the cabbage worm. If you want to kill these pests, pile and burn dead tomato and pea vines and other remains of vegetation in the garden and along the border.

Deep fall or early winter plowing will also destroy many insects. This is especially true of the cut worms, potato beetles, white grubs, and wire worms which are now hibernating in the soil. Late fall or early winter plowing will turn these insects up near the surface and expose them to an attack of birds, poultry, and other animals. At this season of the year the insects are in a dormant or semi-dormant condition and when brought up near the surface of the ground they are unable to go deeper in the soil or to construct new cases or cocoons and they are killed by being subjected to excessive weather conditions and to the alternate freezing and thawing.

COLD CHECKS HESSIAN FLY

The wintry weather that swept over Kansas last week effectually checked the spread of the Hessian fly infestation. The fall has been so warm that a second brood of the flies has been laying eggs. The first brood found volunteer wheat in many localities and due to the unusually warm weather the period of development was so shortened that mature flies were emerging and laying eggs in wheat fields that had not been sown until after the fly-free date. These fields would have been free from any fly in-

festation ordinarily, although liable to spring infestation if there happened to be early sown fields or volunteer wheat in the vicinity.

"This emerging of a fall brood is unusual," says George A. Dean of the Kansas Agricultural College. It is most fortunate that the cold spell came when it did. The eggs of the fly cannot stand cold at all, and the maggots seldom get through the winter alive. Unless they reach the flaxseed stage before cold weather they are almost sure to perish.

This fall infestation of the fields of those who took all the precaution possible, further emphasizes the importance of co-operation in checking the work of this insect.

SUDAN GRASS VALUABLE CROP

Again Sudan grass has shown its ability to withstand dry weather and make good growth. It is rapidly being recognized as a staple, dependable feed crop for Kansas. In a recent bulletin entitled "Sudan Grass in Kansas," G. E. Thompson, its author, reviews its introduction into the state and tells of the success with which it is being grown.

In so far as Kansas is concerned, points out Mr. Thompson in this bulletin, Sudan grass is adapted to practically all soils except those which are very wet and poorly drained or those which are extremely alkaline or sandy. Soil conditions generally favorable to Sudan grass are similar to those favorable to the other sorghums. It yields best in rich loam to sandy loam soil that is well drained. Thinner and poorer soils necessarily produce lighter yields, although Sudan grass, like the other sorghums, is an extensive feeder, and is one of the profitable crops on thin, poor upland soils. Being a native of a hot, dry climate, it is naturally adapted to the relatively dry conditions of Western Kansas, and it is in this part of the state that it will prove of most value.

Sudan grass can be used readily in any ordinary farm rotation. It is an annual, and can be substituted in the average rotation for corn or any other sorghum crop, or it can be grown in the longer rotations instead of the perennial hay or pasture grasses. It is not a legume, and will therefore not add nitrogen to the soil, although its extensive fibrous root system contributes to the supply of organic matter. Careful study of its moisture requirements under field conditions and examinations of the root system at all stages of growth show that Sudan grass can draw moisture from greater depths of soil than millet, but it does not draw its moisture supply from as great a depth as do the ordinary sorghums.

Sudan grass is a crop that matures quickly and can often be used as a catch crop. Because it makes a much better sod than the ordinary annual grasses, and because its growth of foliage is rank and rapid, it has been, and no doubt will be, used to a considerable extent for pasture purposes.

We heard a farmer in Eastern Kansas make the statement that this could never be a good dairy country because we could not depend on pasture for a long enough period of the year. If this man had by chance been farming in Wisconsin, we can imagine hearing him complain that the winters were too long and severe for dairying to be practiced successfully. It is largely a matter of the "man behind the cow" in making dairying a profitable business. Kansas, with her abundant supply of alfalfa, cheaply-grown silage, and mild winters, should appeal to the real dairyman as an ideal location. The lack of pasture is more imaginary than real. Hundreds of cows are milked every winter that graze on wheat pasture throughout the season.

Milk that has a bad flavor often acquires this after it is drawn from the cow. It is more often due to such influences than to the feed the cows have had.

WINTERING STOCKERS

Feeders of cattle are more and more following the practice of buying stockers in the fall instead of in the spring or following summer. One reason is that they can usually be bought at fifty cents to a dollar cheaper than in the following summer.

The farm feeder can easily afford to winter stockers for the difference in price, even though he may not be in a position to finish them for market. It affords a market at a fair profit for much of the coarse, unmarketable feed of the farm. Full-feeding where the profit to be made depends entirely on the increase in the value of the steer, is a speculative business. The safer method of handling cattle is to consider them primarily as a means of marketing cheap, farm-grown feeds. When so handled there is a chance for profit at a number of different points in the process. Under some conditions full-feeding or finishing would be out of the question, but cattle that have consumed cheap feeds only can nearly always be marketed at a profit.

For wintering stock cattle there is no more effective ration than silage and alfalfa, but even such cheap feed as wheat straw can be used profitably as a part of the ration if the alfalfa and silage is limited. Steers being wintered in open lots should have sheds to shelter them during rough weather. Shelter is cheaper than feed in the long run. Cattle that are being "roughed" through need better shelter than do cattle being full-fed. The fattening steer does not feel the cold, but the stocker without the layer of fat under his skin will suffer unless given suitable protection.

KANSAS CORN KEPT AT HOME

Many Kansas farmers and feeders will have to buy corn this year. It is the height of folly to ship corn back and forth over our railroads as is too common a practice. We have known of instances where feeders were buying corn from central markets, while corn was being shipped to market from nearby towns on the same line of railroad. Of course, this is highly profitable to the railroads and commission companies, but the feeder has to pay the freight.

It is desirable to supply the needs of Kansas farmers and feeders with Kansas grain to the fullest extent possible. The Kansas Grain Dealers' Association has started a movement that should by all means be encouraged. The plan is to get Kansas corn to Kansas farmers and feeders who are short by the most direct route. Practically the only counties in the state having a surplus of merchantable corn are those east of the Blue River and north of the Kaw. Dealers in this section are being asked to furnish their names to the association so that a list can be compiled and sent to dealers in other sections of the state, thus putting them in direct touch with the nearest source of corn supply. South-east Nebraska will probably supply some corn in this way and the Nebraska members of the Kansas Association of Grain Dealers are being asked to co-operate in making up this list.

It seems to be the opinion of grain men that Kansas demands of corn can be largely met in this way.

This movement is along the line of greater economy and efficiency in getting standard farm products to the consumer, and we trust it will be successful in bringing about the desired result.

The Kansas exhibit at the International Dry-Farming Congress recently held in El Paso, Texas, won the first prize in competition with exhibits from fifteen other states. This exhibit contained various farm products, but its most important feature was the excellence of the many grains and forages especially adapted to Kansas conditions. Kansas won first last year also at the exposition held in Denver. The prize consists of \$100 in cash and a loving cup valued at \$500.

FUTURE OF CATTLE INDUSTRY

Beef Production Must Become a Part of Farming to be Profitable

From Address to Cattlemen at Manhattan By F. T. Ransom

WE ARE all more or less familiar with the results of the raising and feeding of cattle during the past five years, and we all know that there is something radically wrong. It can be truthfully said that there are but few cattle men, especially of the old school, that have not lost money. The farmers and breeders to some extent have made money, but as a matter of fact, there has been but little money made that has not been made out of someone that handled the cattle and not out of the cattle themselves. On the face of it, this may appear an abnormal period in the history of the live stock industry, but a careful analysis of the situation will conclusively demonstrate that the trouble is not in the cattle, not in the industry, but in the ideas of the man handling the cattle.

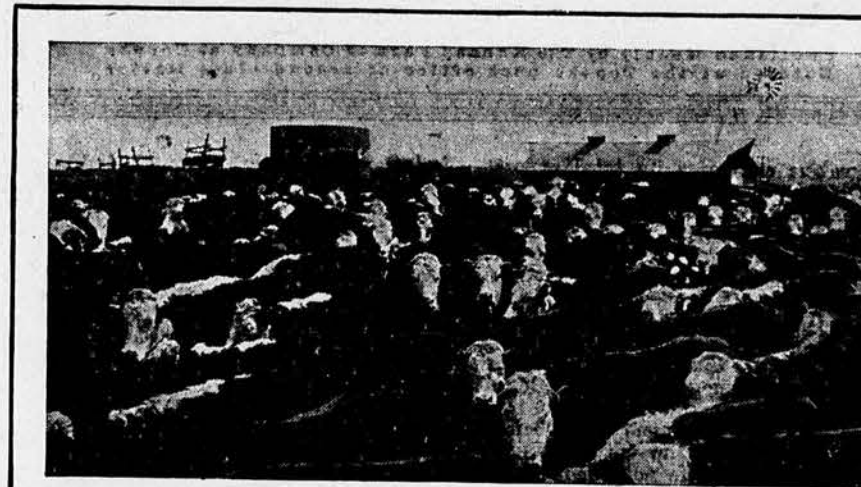
It has been clearly demonstrated that large parts of Kansas, Oklahoma, Colorado and Texas cannot be successfully farmed without cattle, for the reason that the crops best adapted to the soil and climatic conditions are most profitable when fed to cattle. The use of the silo, the pasturing on what was formerly waste on the farms, are completely changing the whole system of raising cattle. We have learned that the entire supply of stock cattle in the United States can be carried on what was formerly waste on the farms, which means at a very small cost.

Two years ago our bank made a radical departure from long established methods in the making of cattle loans and declined to even consider loans that were to be secured by aged steers that had been bought by the head. We were criticized in no uncertain terms by persons interested in maintaining those conditions, but we now have the facts and figures from the American Live Stock Association, showing conclusively that there is a loss in marketing aged steers raised in Texas. These figures show that the actual cost of producing and marketing a 1,300-pound steer is \$105.31, while the price received for the animal ranged from \$87.75 to \$97.50.

These figures have no doubt been carefully compiled by persons in a position to know and may therefore be accepted as reasonably correct as far as they apply to the aged Texas steer, but the evident mistake made by the American Association is in apparently assuming that this is the cheapest beef steer that can be produced. Neither do they seem to consider that the marketing of a beef steer is on a competitive basis and they apparently ignore the fact that there has been gradually developing a much better beef steer produced at a less cost. This may have something to do with the market conditions of which they complain and ought also to furnish an object lesson in the cost of production. While it may seem strange, yet it is possible, that the producing of the Texas beef steer has not kept pace with the evolution of the beef steer in other localities. In other words, it may be that through the operations of the natural laws of development, a new beef animal is being produced and that the three- and four-year-old Texas beef steer is no longer in the race.

It may be justly claimed that the Texas aged steer is not much worse off than the same class in Kansas. The trouble with the average three- and four-year-old Kansas steer is that it has accumulated an expense account, several items of which add nothing to its value but nevertheless increase its cost. When a steer starts to come to market as a calf and changes ownership every six months, there accumulates in freight charges, yardage charges, commissions, shrinkages, unnatural fills, and other expenses, a total ranging from \$15 to \$25 per head.

As long as the Texas steer, staying on its home place until shipped to be fed out as a beef animal, was in competition only with this form of Kansas beef animal, there was no cause to worry, but it is the development of this new beef animal, ranging in age from the yearling to the two-year-old, that is eliminating the aged steer. In the production of this new beef steer these unnecessary expenses must be and are largely avoided, as it should not change ownership until it comes to the market as a beef animal, or at least change own-



WAITING FOR THEIR DAILY ALLOWANCE OF SILAGE

ership but once when it goes into the feed lot where its home conditions are not favorable to full feeding.

While there have been several contributory, but minor, causes that have led to the marketing of the Kansas steer every six months during his life of three or four years, the two principal reasons are, first, the desire of the borrower to realize his profits, and second, the maturity of his loan. There has been a profit, however, in developing this animal from a calf to the beef steer, but one great trouble is that we have been trying to realize every six months all of the profit on the entire life of the animal, so that by the time it enters the feed lot all of the profits have been cashed and there is nothing left for the party full-feeding. This is the meaning of the statement that the large per cent of the profits made has come out of the pockets of someone else, and not out of the cattle. The new methods of producing beef steers will check this to a large extent, and by eliminating the unnecessary expenses before mentioned, and by cutting down the cost that is incurred by reason of the unwarranted length of time involved in maturing the animal, we will produce a better beef animal and at a profit.

As this new beef animal is a farm product, it must be figured on that basis, and a fair unit would be that of fifty cows and two bulls. One of the elements of success is the quality of the animal, and consequently high grade cows and bulls are necessary and we will use cows that cost \$65 per head and bulls at \$125 per head, or a total investment of \$3,500. The initial investment is therefore approximately 30 per cent greater than the Texas estimate. We will figure the interest at 7 per cent, the average rate in Kansas, rather than 6 per cent as given in the Texas figures. The cost of keeping this herd a year will be as follows:

Interest	\$ 245.00
Two months' wheat pasture	104.00
Winter feed bill	273.00
Summer pasture	364.00
Death loss	35.00
Taxes	35.00

Total \$1,056.00

This cost is figured from weaning time to weaning time. While wheat pasture is not essential and cannot be the cheapest when figured at \$1 per head per month, it is given here, owing to the fact that it is so largely used and is a credit to the farm account. The winter feed bill represents the actual cost in tests made by the agricultural college but, as here given, it does not include labor, for obvious reasons. Neither is there any interest on the farm included because the farm account is allowed \$104 for wheat pasture, \$4 per ton for kafir silage, \$2 per ton for kafir fodder, and \$1 per ton for wheat straw, so that you can readily see that the winter feed involves the utilization of a large amount of what was formerly waste on the farm.

Where the producer owns his own pasture, this allows a credit to pasture account of \$7 per head, or he can rent a pasture at that figure. The death loss and taxes are each figured at 1 per cent

in order to be safe in our estimate and not because they really amount to that. This grade of cows, handled as outlined, will produce on the average a calf crop of nearly 90 per cent, but taking the average covering every class of cows in the entire state as 80 per cent will give the cost of the calf as \$26.40 as compared with the Texas figures of \$24.93. There is just as great a difference in the value of the calves as there is in the cows, so that the difference of \$1.47 per head is not sufficient to cover the difference in actual value. To carry this calf through the winter and to bring it out a yearling weighing 550 pounds, would cost as follows: Cost of calf, \$26.40; two months' wheat pasture, \$1.50; winter feed, \$7.15; interest, 95 cents; death loss, 75 cents—total \$36.75.

The winter feed bill is based upon the tests made by the agricultural college and can therefore be easily demonstrated and the farm account is credited with the farm products used. To carry the yearling through its second summer would cost as follows: Pasture, \$7.00; interest, \$1.25; death loss, 35 cents—total \$8.60.

This would make the total cost \$45.35 and the animal ought to weigh at least 750 pounds. Two months of wheat pasture at the cost of \$2 would add 125 pounds to the weight, making the cost \$47.35, and the weight 875 pounds when it goes into the feed lot. To overcome the natural shrinkage when placed on dry feed, and to add 425 pounds to its weight by a feed of 180 days, would cost as follows: Fifty bushels of corn at 60 cents, \$30.00; 1,500 pounds alfalfa at \$9.00 per ton, \$6.75; 500 pounds cottonseed cake, \$9.00—total \$45.75.

Anyone at all familiar with the feeding of cattle in Kansas will readily admit that this is ample. In addition to this, it will not cost to exceed \$5 to pay the freight, yardage, commission, and other expenses in marketing the animal. Figuring the cost of the animal when it entered the feed lot at \$47.35, a feed bill of \$45.75 and a marketing expense of \$5, would bring the cost of the animal to \$98.10. There is no question but that a responsible and experienced feeder would be able to decrease this total considerably. However, assuming the cost as \$98.10, as compared to the cost of the Texas steer of \$105.31, shows a difference of \$7.21. This is not the only difference, however, between the two animals, as the Kansas steer is worth, at the very least, 50 cents per hundred more than the aged steer, which makes a net difference of \$13.71 per head. This means that figuring the selling price of the Texas steer at from \$87.75 to \$97.50, the selling price of the two-year-old home-grown beef steer would be \$101.46 to \$111.21.

In figuring the cost of production we have charged everything chargeable but have given no credit for by-products. The profits from hogs and chickens are to a considerable extent creditable to the cost account of the steer. Then we have not considered the amount that is chargeable to farm account and a credit to production account due to the fertilizing value of the manure. We have

also furnished a market at a good price and on the farm, for its products.

There is still another vital element that enters into this question of producing a beef steer, and that is, the amount and quality of the dressed beef. These are the important factors upon which the packer must base the market price, and the feeders will find it to their advantage and profit to feed with these in view. This 1,300-pound steer fattened as beef at about the age of 26 months, has been used simply to obtain a better basis for comparison. This is not, however, the ideal beef steer of the future, which will be a younger animal, weighing from 100 to 150 pounds less, produced at a great saving and sold at a higher price per pound because of greater demand for light cuts than for the heavier cuts.

The Kansas Experiment Station is now engaged in working out the details of a plan by which practical demonstrations will be started in a few counties, and ultimately in practically every county in the state.

The plan does not contemplate trying out some theory, but it means that the crops produced on a particular farm will be those that practical experience has demonstrated to be best adapted to the soil and climatic conditions, as well as to the cattle. For this reason it involves considerable study and labor on the part of the different members of the faculty because different sections are problems in themselves. For example, what would apply to Greeley County would not apply to Sedgwick or Riley, and the natural laws governing the production of crops in the different sections must be determined and reckoned with.

We have passed the experimental stage of determining the crops best adapted to certain sections and have also demonstrated by these full-feeding experiments of the Kansas Experiment Station as well as by the winter feeding of stock cattle that there is a profit in the production and marketing of the beef steer. What is left to be done is to unite in one demonstration the various elements entering into this successful production. That this has been already worked out, in a limited way but in a practical manner, by a number of Kansas farmers, is shown by the fact that the new beef steer is coming on the market in increasing numbers each year. At least one demonstration in every county under the supervision of the agricultural college will simply assist in bringing about that which is slowly developing by the irresistible forces of its own logic and success. It is in the readjustment to new conditions that trouble and losses occur, so the sooner we pass through this transition period and establish the cattle industry on the sound basis of logical development, the better it will be for all concerned. We cannot expect the agricultural college to carry out this great work without assistance. What it will require is, of course, for the college to determine, but when these requirements are made known, then it is up to the farmers, bankers, and everyone interested in the success of the live stock industry to see that the requests are granted.

Fall Care of Vegetables

Vegetables cannot successfully be stored in an unpartitioned cellar containing a furnace.

If no cave or portion of the cellar is available, dig a trench as long as necessary and about a foot deep. Providing proper drainage is maintained, cabbage, potatoes, celery, carrots, beets—in fact all of the root crops—may be stored in it. For storing apples the hole should be deeper, and usually the apples are protected by being surrounded by straw before soil is placed on them. The outer leaves of the cabbages should not be removed, and they should be placed head downward. Beets, carrots and salsify may be buried as soon as the tops are frozen. Celery may be placed in the trench when mature to be bleached and later stored where it will not freeze. Parsnips may be left unburied, but if buried in a trench may be more easily handled. Many persons believe that the flavor of the parsnip is improved by being allowed to freeze before burying.

GENERAL FARM INQUIRIES

Something For Every Farm—Overflow Items From Other Departments

A READER in Franklin County asks how late in the fall and how late in the spring red clover can be safely sown.

We would not advise fall sowing at all. It is almost sure to winter-kill. In Eastern Kansas where wheat is grown in the rotation, it is a rather common practice to sow clover seed on the wheat early in the spring. On some kinds of soil the seed is sown while it is still freezing and thawing on the surface. This produces a honey-comb condition and the seed settles in the cracks and covers itself. Others sow later when a light harrowing is necessary to cover. The character of the soil must be considered. On some soils the honey-comb condition does not occur and on such soils the seed should not be sown until it can be covered with a harrow.

As a general rule we would advise sowing clover in the spring as early as possible. There is some danger of a late frost reducing the stand by killing the tender plants, but the advantages of the early start more than make up for this risk.

Feeding Flour

A reader asks for information concerning "dogwood" flour. He states that he found the term in a formula for a calf meal.

We presume what he has in mind is "red dog" flour. This is a dark feeding flour that generally contains the wheat germs. It differs little in composition and feeding value from the best grade of flour middlings, or white shorts, as it is called by millers in this section. Kansas mills do not as a rule market "red dog" flour. It is a product coming from the northern mills. Our Kansas mills sell the white shorts in competition with the "red dog" flour and in figuring feeding values, these two feeds can be taken as practically identical.

Concrete Water Tank

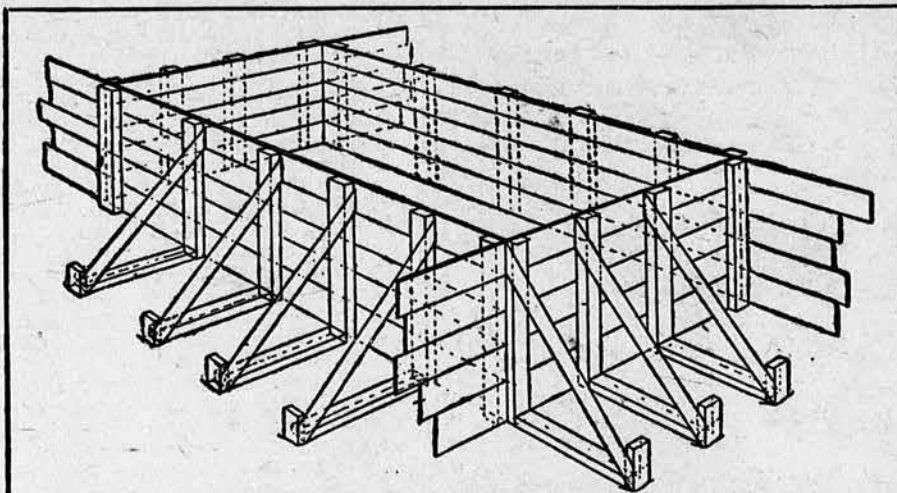
We have the following letter from A. B., Dickinson County:

"Can you give me any information as to the construction of a concrete water tank? I contemplate making such tank six by ten feet, outside measurements. I plan to make the base about eight inches thick, the sides seven inches thick at the bottom, five inches at the top, and two feet inside, making the slope on the inside. This slope is to prevent the tank bursting in case the water should freeze solid. I plan to use half-inch reinforcing rods, placing about three bands around in the sides and some hog netting in the bottom, this to extend up into the sides. What do you think of my plan? I do not want to make any mistakes. How would it be to put a couple of inch water pipes across in the base of the tank?"

Concrete water tanks give the best of satisfaction if properly made of good materials. Since such tank must be water-tight it is important that the concrete be placed all at one time and the mixture should be one part cement, two parts clean sand, and three parts crushed rock or gravel. Bank-run gravel may be used, but this varies so in its proportion of sand and gravel that it is always safest to screen with a sand screen and combine the sand and gravel in the proper proportions.

In the main, your plan is a good one. In building this tank, excavate for the foundation five or six inches deep and fill in with coarse gravel, crushed rock, or good hard cinders. Do not use ashes. If inflow and overflow pipes are to be put in, they should be placed in the start. The cut on this page shows how to make the outside forms. The inside form is simply a bottomless box of the right dimensions to give the proper thickness of walls. It must be carefully braced on the inside.

In order to have no delays in placing the concrete, the forms should be made and all the materials at hand before mixing any of the material. For reinforcing it is better to use quarter-inch twisted rods than the larger ones. In a tank 6 x 10 these rods should be placed nine inches apart with an extra one at the top. A good grade of woven hog wire makes safe reinforcing for the bottom. When everything is ready, put the outside form in place and spread six inches of well mixed concrete over the



OUTSIDE FORMS CONCRETE WATER TANK

bottom, tamping it thoroughly. Place the reinforcing, being careful to have it long enough to project up into the side wall, and put in two inches more of the concrete. The surface can be finished with a wood float. Immediately put in the inside form and fill the space between it and the outside form, placing the reinforcing rods the proper distance apart as the concrete is poured in. Have these rods within an inch of the outside of the wall. The concrete should be mixed quite thin and a paddle or spade should be used next the forms as the mixture is poured in. Unless this is done there will be rough places or pockets in the wall. As soon as the concrete has set enough so the inside form can be taken out, paint the surface of the concrete with a creamy mixture of cement and water. This gives it a finish and helps to make it hold water. The outside forms should be left in place a week or more. If it should be very dry and windy when the work is done, keep it moist by sprinkling with water and protect from the wind and sun.

If the woven reinforcing is carefully placed, there will be no need for putting in the large pipe at the bottom as you suggest. In fact, large pipes in such a piece of work are more apt to be a source of weakness than strength.

Growing Broom Corn

J. F., Osage County, asks about the culture and handling of broom corn.

Broom corn is very closely related to the sorghums and the methods of growing it are not much different from those followed in growing kafir or others of the sorghums. There are two types, the standard and the dwarf. The standard grows eight to ten feet high and pro-

duces a long flexible brush. It requires a fertile soil and plenty of moisture. The dwarf grows four to six feet high and produces a shorter, stiffer brush. The dwarf type is raised quite extensively in Southwest Kansas and Western Oklahoma. It makes the best brush on a rather light sandy soil. It is planted in rows about three and a half feet apart, with the plants three inches apart in the rows.

The dwarf brush is harvested by pulling the heads when they are in bloom. A special type of thresher is required to remove the seed from the brush. The brush should be cured under cover in order to hold its green color and prevent it from becoming brittle. After it is well cured it must be baled for market.

There is a great deal of hand work involved in growing and handling broom corn. It is estimated in Southwest Kansas that it costs at least \$40 a ton to grow it and get it ready for market. It takes four or five acres of dwarf broom corn to make a ton of brush. The price varies from \$50 to \$100 a ton and occasionally goes much higher.

It is a good dry weather crop but we would advise our correspondent and others interested in broom corn to learn all they can about handling it before attempting to grow it extensively. A bulletin giving full details can be obtained by writing to the Federal Department of Agriculture, Washington, D. C.

Partnership in Farming

P. M. C., Franklin County, sends in the following problem:

"A and B jointly own a farm and all its equipment, including live stock. A moves back to town while B remains and

runs the place. Both share the expense equally. Under these conditions what is a fair division of the crops and proceeds from the sale of farm produce, live stock included? Is A's share of the live stock which has been accumulated since he left the farm the same as it is in that which was here when he was here to help take care of it?"

As long as these two parents were putting in the same amount of labor in handling the farm and live stock jointly owned, they should have shared equally the profits, providing each owned a half interest in the investment. Now that A has moved to town, the amount he has in the business is reduced by the value of his labor. The simplest form of settlement would be to agree upon the value of this labor and deduct it from A's share of the profits. If the expense of operation includes any labor hired to take the place of that originally furnished by A, he should be given credit for the portion of this labor for which he is charged.

When two partners operate a business of any kind in which each has the same investment, each is obliged to stand half the expense of operation. If one partner works and the other does not, the only way to make them equal is for the non-working partner to pay for an equal amount of labor. In the above instance when this has been done they are on an equality and can divide the proceeds from the sale of crops or live stock equally.

If any of our readers have had any experience in working out partnership problems in connection with farming, we would be glad to hear from them. Such problems are constantly coming up and the experience of those who have worked out satisfactory plans will be valuable.

Leaf Hoppers on Wheat

C. B. S., Labette County, writes that there are "millions of little insects about a quarter-inch long on the leaves of the wheat. They jump and fly some little distance. They have hind legs somewhat like a cricket and greenish-brown wings slightly longer than the body." He asks if these are Hessian flies, and whatever they are, how to proceed in infested communities.

Prof. George A. Dean, entomologist of the Kansas Experiment Station, answers as follows:

"The little insects that you are finding on the leaves of your wheat plants are not Hessian flies. I am very sure from the description you have given of them that they are the little leaf-hoppers. These insects are usually common on wheat at this time of the year. They have bred in weeds and grasses that grow in the fields. As soon as frosts come, which usually kill the weeds and grasses, they move or migrate to green vegetation, such as wheat and alfalfa. I do not believe that they will do any serious injury, although they are probably sucking some sap from the plants. These insects have been common for a number of years and as yet I have not found them seriously injuring wheat."

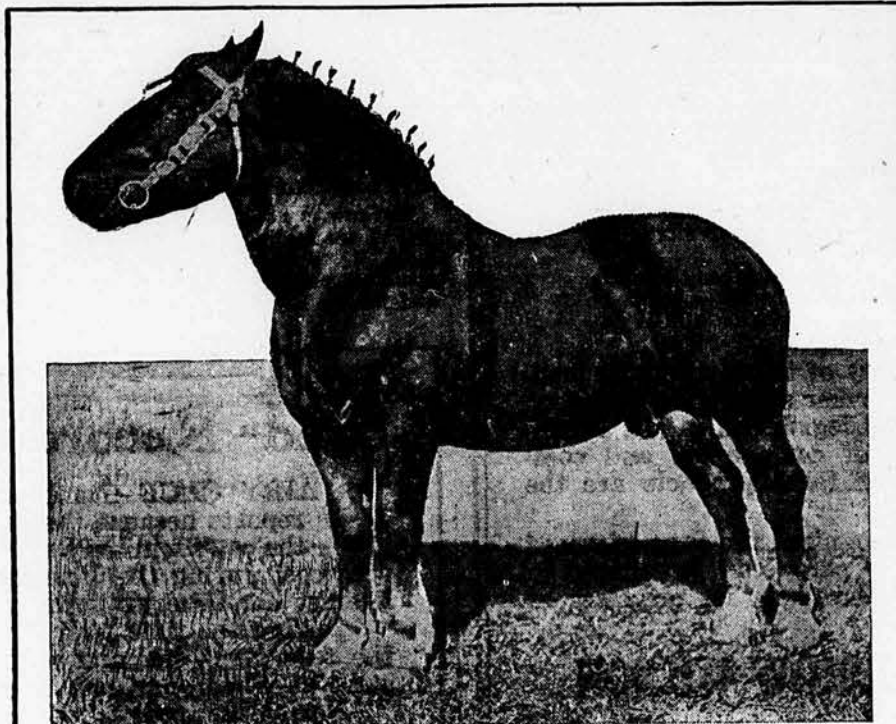
Oiling Wagon Wheels

B. H., a Texas reader, asks how hot linseed oil should be for dipping wagon wheels, also how long the wheels should remain in the oil and whether they should be dried thoroughly before being dipped.

The purpose of dipping wheels in oil is to keep the moisture from penetrating the wood and thus make it last longer. Oil has no true preservative action in that it can arrest decay. It is only as it keeps the water out that it preserves the wood.

An old carriage maker told us that careful tests had been made in their shop and these failed to show that dipping wheels in hot linseed oil was any more effective than applying good paint or oil with a brush. The important point seems to be to keep the wood coated with a layer of oil or paint mixed in oil so water cannot get into the wood.

Whatever method of applying the oil is used, the wood should be dry and clean. The exact temperature of the oil is not important except that it should not be hot enough to scorch or burn the fibers of the wood. Leaving the wheels in the oil a minute or two will thoroughly coat the wood.



MERONDE MERCHU, GRAND CHAMPION BELGIAN STALLION AT KANSAS STATE FAIR, HUTCHINSON.—OWNED BY DAVID COOPER & SONS, FREEPORT, KANSAS

MR. FARMER

Stand by the party which has stood by you. Laws for your relief and benefit have been enacted and put in operation by President Woodrow Wilson and the Democratic Congress. Such laws for instance, as:

**THE FEDERAL RESERVE BANKING
AND CURRENCY ACT
THE FEDERAL FARM LOAN ACT
THE GOOD ROADS BILL
VOCATIONAL EDUCATIONAL LAW
INCOME TAX LAW**

and many similar measures which make for the best interest of the rural community.

Remember Where Your Interests Lie

Don't forget, Mr. Farmer, that through your Farmers' National Congress, National Grange, National Farmers' Union, American Society of Equity, and similar organizations you have for years importuned Republican administrations for legislation you needed.

WHAT DID YOU GET?

Through all the years since 1864 the Republican Party was deaf and blind to the farmer's financial needs. This in the face of the fact that successful systems of Rural Credits were in operation throughout Europe for a century.

Was it because you were not Big Interests? You were, many of you, highly financed, and High Finance held the mortgage—and to that extent you belonged to High Finance. But you paid big interest to associate with Big Interests. A stack of wheat wasn't as good collateral as a sheaf of scraps of paper held by a stock gambler! When the Wilson Administration forced action and the Rural Credits Bill as a Democratic measure was put to vote in the Senate on May 4, 1916, only five Republicans dared vote against it! Three of them were on the sub-committee who wrote the Republican Platform of 1916.

THE PROMISES OF THE DEMOCRATIC PLATFORM OF 1912—written in courage and honesty and with sympathetic understanding of the needs of every honest American interest—HAVE BEEN KEPT!

The Republican party refused to do these things, which the prosperity of the American Farmer required.

The Republican presidential candidate, Charles E. Hughes, denounces the Democratic Party and President Wilson for having done these things.

WHERE DOES YOUR INTEREST LIE?

What the Democratic Party Promises the Farmer

PLATFORM OF 1916

"We favor the vigorous prosecution of investigations and plans to render agriculture more profitable and country life more healthful, comfortable and attractive, and we believe that this should be a dominant aim of the Nation as well as of the States. With all its recent improvement, farming still lags behind other occupations in development as a business, and the advantages of an advancing civilization have not accrued to rural communities in a fair proportion. Much has been accomplished in this field under the present administration, far more than under any previous administration. But it is also necessary that rural activities should be better directed through co-operation and organization, that unfair methods of competition should be eliminated and the conditions requisite for the just, orderly and economical marketing of farm products created.

"We favor continued liberal provision, not only for the benefit of production, but also for the study and solution of problems of farm marketing and finance and for the extension of existing agencies for improving country life."

For the first time in the history of the Nation, the business handicap under which the farmer suffers is recognized in the accomplished and proposed legislation of the Democratic Party. Unfair methods of competition and combinations for fixing the price of farm products are the creatures of Republican misrule.

The Democratic Party has recognized the farmer's need and done much to meet it. This party can be trusted to keep its promises of 1916, as it has kept its promises of 1912.

SO VOTE FOR WOODROW WILSON

Kansas State Democratic Central Committee

[POLITICAL ADVERTISEMENT]

Kansas Farmer Dairy Club

Oats For Milk Cows

SOME of our club members are using oats in feeding their cows. Oats contain 9.7 per cent digestible protein, 52.1 per cent carbohydrates, and 3.8 per cent fat. Therefore, 100 pounds of oats contains about three pounds more of digestible protein than does corn chop, about fourteen pounds less carbohydrates and about the same amount of fat as is found in the corn chop. Oats make an excellent feed for milk cows, but as a rule it is not economical to use them to any great extent. Ordinarily it is possible to purchase mill feeds that will give just as good results when combined with corn chop or kafir, and at less cost.

An experiment conducted at the Wisconsin Experiment Station shows the value of oats as a milk-producing feed. Two groups of four cows each were fed in this test. The cows in one group were given a daily feed of ten pounds ground oats and two pounds corn chop. The cows of the other group were given ten pounds wheat bran and two pounds of corn chop. After feeding these groups for twenty-one days, a change was made, the cows getting the oats being fed the bran ration, and the bran-fed cows given the oat ration. They were fed for another twenty-one-day period. The cows fed the oats and chop gave an average of 23.2 pounds of milk daily for the forty-two days, and the ones fed bran and chop, 20.8 pounds. The roughage was clover hay and corn fodder—all they would eat.

If you have oats and they are worth about the same price a pound as corn chop, you can afford to feed them as a part of your ration and can expect good results. They give variety and that is always an advantage. The standard grain ration at the agricultural college is four parts corn chop, two parts bran, and one part oil meal, all by weight, but the cows under test—those that they are trying to get to give the largest amount possible in a given period—are fed a grain ration consisting of three parts corn chop, one part oats, two parts bran, and one part oil meal, by weight. In this ration a pound of oats replaces a pound of corn chop.

Oats are nearly always worth enough on the market so they can be sold and the money used in buying more feed value for milk production in the form of bran, oil meal, or cottonseed meal. Unless the pound price of oats is about the same as that of corn, you cannot afford to feed them very heavily.

Feed Suggestions

My cow is doing nicely for the feed she is getting—buffalo grass and eight pounds of bran a day.—LESLIE LINVILLE, Logan County.

We believe you would get better results by using a mixed grain ration, made up in the proportion of four parts either corn or kafir chop, two parts bran, and one part of either linseed oil meal or cottonseed meal, all by weight. You should feed about one pound of this mixture to every four pounds of milk your cow is giving. If you have milo or feterita grain, this can be substituted for the corn or kafir chop.

This Ration Little Heavy

My cow is not giving as much as she did. I am feeding her 8 pounds of kafir meal, 1½ pounds of cottonseed meal, about 25 pounds of green fodder a day, and letting her run on pasture. I have

been reading the Dairy Club department in KANSAS FARMER, and I will have silage, alfalfa hay and rye pasture for her this winter.—BYRON ALLEN, Butler County.

We have suggested to Byron that he give his cow one to two pounds of bran a day, mixing this with the kafir meal and cottonseed meal. The feeds he is using are quite concentrated and the bran would lighten them. The better plan would be to mix kafir meal, bran, and the cottonseed meal in a bin or box in the quantities suggested in these columns and feed the cow the mixture.

Likes to Read Your Letters

I have been reading the letters in KANSAS FARMER from the members of the Dairy Club, and I think it one of the best means of keeping up interest in our work, as we may become acquainted through these letters and learn to watch with interest what each member is doing.

My cow is keeping up her flow of milk. She gives from 28 to 35 pounds a day. She is in good flesh. For the last month I have given her only 8 pounds of bran a day. She is on good bluegrass and white clover pasture. I will continue with the present feed as long as the pasture remains good and she keeps up her flow of milk. Then I will add to her feed what is best suited for her.—MAHALA SMITH, Leavenworth County.

As we have advised others of our Dairy Club members, a mixed grain ration will usually give better results than bran alone. Even though corn is high in price, we would recommend the use of a grain ration made up of four parts corn chop, two parts bran, and one part of either linseed oil meal or cottonseed meal, all by weight. After your cow has consumed all the roughage she will, she can be fed with profit about one pound of this grain mixture to every four pounds of milk she is capable of producing. As we have said before in these columns, it is important to know that the cow has capacity for using this much grain in the production of milk. The only way you can find out whether or not your cow is using her feed for milk, is to watch your milk record very closely and when you find she does not give increase in milk with the increase in grain, she is being fed grain at a loss.

Rye for Milk Cows

T. W., Morris County, asks if rye can be depended upon as an early spring pasture for milk cows.

Rye is being used more and more for this purpose. It is now rather late for seeding it, but if it is not pastured too much through the winter, it will be a good crop to plant for spring pasture, even at this late date. It tends to make more growth during the winter than wheat and is somewhat more hardy for pasture. Some stockmen, however, prefer wheat for pasture and plant it for this purpose. Of course, it is a very common practice to pasture wheat that has made a strong growth in the fall and winter. Early spring pasture is quite an important item in keeping up the flow of milk following a long winter feeding period, and especially for those who do not have silage. It is a good plan to sow some rye to be used as early spring pasture.

Send Record of Dry Cows

DAIRY CLUB members must not forget to send in reports because the cows are dry. A good many of the cows will have a dry period during the year. The feed cost during the time the cow is dry must be charged against her total production for the year.

During the time your cow is dry keep daily account of the feed given her and send in your feed record just the same as when your cow is giving milk.

Remember your feed and milk records for October should be sent to Kansas Farmer, Topeka, Kansas, by November 10.

FARM POWER

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

AUTOMOBILES have taken such an important place in our affairs in recent years that we sometimes wonder how we ever managed to get along without them. We can hardly realize that fifteen years ago it was not yet beyond the experimental stage, and few people could be induced to regard it as anything more than a toy for the entertainment of the idle rich. They feared our horses and the country roads were trails of disorder, profanity and spilled eggs every time one of the new-fangled machines passed along. The rural population in many parts of the country was greatly stirred over this menace to the peace and quietness of country calm, and there was much talk of legislation against their use on country roads.

There were those who soberly urged the farmers to arm themselves and turn the guns against the city joy riders when they failed to keep within reasonable bounds in matters of speed. Many of these same individuals are now converts and today use the machine for both business and pleasure.

Farmers everywhere own and operate machines. It has become an indispensable adjunct to farming operations. The horses, like the human, long ago adopted it, and today no self-respecting horse thinks of jumping at the sight of an auto; in fact, he is more than likely to be sharing the barn with it and has abundant reason to bless its coming on account of emancipation from sundry duties that once filled the Sabbath day as well as other days of the week.

Tractors in Kansas

The returns to the State Board of Agriculture show 3,932 tractors in the state March 1, 1916, as compared with 2,493 for the year preceding. The increase in the year amounts to 1,439, or only a little short of 60 per cent. This verifies the general belief that Kansans were rapidly adopting this new farm power. Under suitable conditions its use is an important factor in reducing cost of production and in bringing more extensive areas under cultivation. Tractors in Kansas are more numerous in the prominent wheat-growing counties, and on the broad prairies of the "wheat belt," with neither stone nor stump to impede, these machines should find a satisfactory field for demonstrating their efficiency in preparing land for crops.

This year's census reveals tractors in every county except Wichita. Pawnee County reports the largest number of tractors with 113, followed by Ford and Sedgwick with 108 each, Reno 107, and Barton 106.

The following table shows the number of tractors in Kansas, by counties, as returned by assessors March 1, 1916:

Counties.	No.	Counties.	No.
Allen	23	Linn	11
Anderson	18	Logan	16
Atchison	46	Lyon	39
Barber	33	Marion	29
Barton	106	Marshall	36
Bourbon	15	McPherson	90
Brown	40	Meade	49
Butler	46	Miami	11
Chase	11	Mitchell	35
Chautauqua	20	Montgomery	36
Cherokee	52	Morris	50
Cheyenne	64	Morton	14
Clark	26	Nemaha	22
Clay	38	Neosho	18
Cloud	53	Ness	28
Coffey	13	Norton	20
Comanche	9	Osage	94
Cowley	68	Osborne	59
Crawford	18	Ottawa	39
Decatur	16	Pawnee	113
Dickinson	85	Phillips	31
Doniphan	64	Pottawatomie	47
Douglas	29	Pratt	37
Edwards	36	Rawlins	25
Elk	61	Reno	107
Ellis	33	Republic	63
Ellsworth	32	Rice	33
Finney	25	Riley	23
Ford	108	Rooks	61
Franklin	22	Rush	60
Gary	22	Russell	28
Gove	42	Saline	59
Graham	7	Scott	2
Grant	1	Sedgwick	108
Gray	36	Seward	24
Greeley	1	Shawnee	20
Greenwood	25	Sheridan	24
Hamilton	2	Sherman	16
Harper	25	Smith	27
Harvey	83	Stafford	15
Haskell	30	Stanton	5
Hodgeman	21	Stevens	8
Jackson	35	Sumner	85
Jefferson	31	Thomas	49
Jewell	44	Trego	78
Johnson	62	Wabaunsee	50
Kearny	8	Wallace	13
Kingman	45	Washington	63
Kiowa	23	Wichita	6
Labette	79	Wilson	8
Lane	9	Woodson	23
Leavenworth	38	Wyandotte	30
Lincoln	35		

At a recent church gathering the fact was brought out that the automobile had been one of the church's most paying investments, especially in the rural districts. The minister or priest in charge of the small country church usually must accept other small churches in near-by territory. A single church in a small community could not support him financially while three or four churches could furnish him a most com-

fortable living. The advent of the automobile has made it possible to greatly increase the territory covered. There are many instances where the rural pastor has greatly increased his field of usefulness by having an automobile. Where three or more churches in neighboring villages or communities have the same pastor, each church pays its share of the automobile upkeep and the result is that the pastor has a suitable salary income, an automobile for pleasure as well as business, and his family is receiving a comfortable living.

Tractor Doing Work of Horses

The engine man has visions of the time when much of the work now done by horses will be performed by mechanical power. W. H. Saunders, instructor in farm motors at the agricultural col-

lege, maintains that if the farmer demands it the designing engineer will construct engines to do every task which the horse does today.

Just as horse power in the past has supplanted the man with the hoe, so in the future the tractor will supplant the horse, is his prediction. It took man many ages to realize that by using horse-drawn machines, he could greatly increase his efficiency.

The advent of the tractor means there must be some changes in the methods of agriculture just as the working of horses has meant changes in methods since the work was done by man power alone. Next spring at least three traction companies will place upon the market engines designed especially for the cultivation of rowed crops. This is an indication of the trend of progress in the manufacture of tractors.

Same HUDSON SUPER-SIX Again Breaks Ocean to Ocean Record

On Return Trip Across America It Beats Best Previous Time and Establishes World's Endurance Record

The same Hudson Super-Six Touring Car which ran from San Francisco to New York in 5 days, 3 hours and 31 minutes, started back from New York on its arrival there and again made the transcontinental trip in shorter time than any other car ever made it.

Last spring the wonder record for the one-way trip made by a famous eight was 2½ days longer than the time required by the Super-Six.

No other automobile ever made the round-trip against time. Yet in both the going and return trips the Hudson Super-Six lowered the best previous one-way record.

In a little more than 10 days the Super-Six covered 6,952 miles.

Counting all stops, and slowing down to the speed restrictions of 350 cities, towns and villages each way, the average time from San Francisco to New York and back to San Francisco was almost 700 miles a day.

In the last leg of the return trip, between Elko, Nevada, and San Francisco, heavy mountain rains were encountered. In the going trip that distance was covered in 20½ hours. On account of the rain and mud, 35 hours were required on the return. Under similar road conditions as were met in the going trip the return would have been under 5 days.

Hudson Holds Every Worth-While Record

There are no important world's records which refer to a stock car that the Hudson Super-Six hasn't won. The best former records are too easy for the Super-Six. The events are too easily won. For instance, in the 24-hour record, 1819 miles, it exceeded the best former record by 52%.

And the Super-Six made the best time in the world's greatest hill-climb up Pike's Peak. The best time for 100 miles. The greatest distance covered in one hour and the fastest time for a stock chassis at the rate of 102½ miles an hour.

Such Endurance Is Convincing

Here we prove again that the Hudson Super-

Six has more endurance than we have ever claimed for it.

What can be more convincing than that round trip across the continent made with a Hudson Super-Six light weight 7-passenger phaeton? Previous records were made with roadsters and stripped cars, but the Hudson at all times carried three, and sometimes four, passengers, and with its baggage weighed in excess of 5,000 pounds.

No Engineer Hopes to Excel It

Remember that the Super-Six is a Hudson invention controlled by Hudson patents.

A hundred cars have motors of like cylinder capacity. Many cars have more cylinders. But in the Super-Six vibration has been reduced to almost nothing. That adds 80% to efficiency.

The Super-Six is not one of the passing sensations. Ours is not one of those claims to motor supremacy which yields in a year or two to another. Mark what these records mean. There is plenty of evidence now to convince you that it cannot be superseded.

Save \$175 Now

For many reasons, now is the time to get a Hudson Super-Six.

In the first place you can get delivery now. Last summer thousands had to wait, and thousands must wait next spring.

Then by buying now you can save \$175. The price will be advanced December 1. The models will not be changed. You get the same Super-Six motor, the same wonderful chassis, and the same beautiful body. Your car you get now will be identical with those we shall sell after December 1, except for some minor details.

Phaeton, 7-passenger	\$1475	Touring Sedan	\$2000
Roadster, 2-passenger	1475	Limousine	2750
Cabriolet, 3-passenger	1775		

(Prices f.o.b. Detroit)

Town Car	\$2750
Town Car Landaulet	2850
Limousine Landaulet	2850



HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

Insure your Hogs for Market



DON'T take chances that your hogs are going to slip through without being protected. Vaccination is hog insurance. It is the only protection known against hog cholera, when properly used—and used in time.

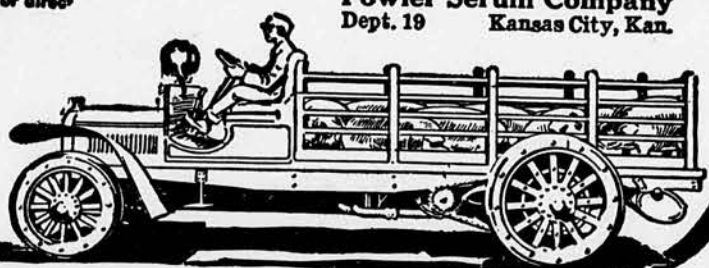
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IS MADE IN OUR OWN SPECIAL LABORATORIES, under U. S. Veterinary License No. 103. Experienced Veterinarians are in charge of the work. The Serum produced is Uniform in quality, Pure, Potent and Safe. We recommend its use as a preventive. The lighter the hogs, the less it will cost to protect them, and the easier it can be done. As a matter of business you cannot afford to run your own risk.

Your Veterinarian can obtain Fowler Serum through any Armour & Company Branch House, or direct

Further Information Sent on Request.

Fowler Serum Company
Dept. 19 Kansas City, Kan.



Your Live Stock Will Pay Big Profits

If you will do your part. When you move your stock from pasture to barn—change from juicy green feed to dry feed—you always expect trouble. Change of feed—lack of exercise and confinement—produce constipation and other disorders, which mean loss and worry to you.

Pratts Animal Regulator

will positively keep your stock in prime condition at little cost. It sharpens the appetite—improves digestion—expels intestinal worms—regulates the bowels—makes stock healthy and productive.

Pratts Dip and Disinfectant

exterminates lice and ticks—kills disease germs—keeps pens and stables sweet, clean and sanitary. Absolutely safe and pleasant.

Our dealer in your town has instructions to supply you with Pratts Preparations under our square-deal guarantee—

"Your money back if YOU are not satisfied"—the guarantee that has stood for nearly 50 years.

Write for 64 page Stock Book—FREE.

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WAGONS-BUGGIES-HARNESS

For every farm use since 1852

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Why take lower prices after you have been to all the trouble of catching furs? Send them here, where you share the benefit of the high prices we get through our close connection with the best manufacturers. We were the first to issue classified price lists, that tell you beforehand how much you will get. Trappers and hunters stay with us after trying others. Liberal grading and prompt returns. No commission or transportation to pay. All this means highest profits for your season's work. Write us today.

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READ KANSAS FARMER'S CLASSIFIED
ADVERTISING PAGE FOR READY BARGAINS

LIVE STOCK

ON THE live stock farm winter brings many problems. It is a time to plan carefully on how the different classes of animals can be most profitably fed. Grain is high in price and should be fed judiciously. The rough feed of the farm should be used to the fullest extent possible in wintering stock. For some classes of animals a small allowance of concentrates with these low grade feeds gives the best of results.

For convenience in planning winter feeding, farm animals may be divided into three classes, suggests a writer in the weekly news letter from the Federal Department of Agriculture:

Mature animals not producing an income during winter months, animals producing an income during the winter, and young and growing stock to be retained on the farm the following summer.

In the first class may be included all mature live stock held on the farm, either for breeding purposes, future work, or finishing for market the following summer.

In the second class may be included work horses, cows producing milk, and stock being fattened for market or conditioned for sale during the winter months.

The third class should include all young and growing stock on the farm.

The big saving in the winter feed bill can be made in feeding the animals included in the first group. This does not mean that animals of this class should be permitted to come through the winter in a run-down and weakened condition. Rather than consider such a practice, it would be far better to sell the stock in the fall. It is meant, however, that they can and should be maintained on the cheaper feeds. Roughages, supplemented by a small amount of concentrates—oil meal or grain—are in favor for them. Give the horses, cattle, and sheep access to cut-over grain fields and straw stacks, meadows, wooded lots, and pastures. Horses and sheep may have access to husked-out cornfields. In certain sections where losses of cattle have been experienced in the past from the so-called cornstalk disease, farmers should consider this fact before turning cattle into such cornfields. As the winter advances, open the bars to shelters, feed racks, and grain troughs.

Silage will be invaluable at this time, especially for cattle and sheep. Keep the feed racks filled with corn stover, hay, and straw, but do not be wasteful in the feeding.

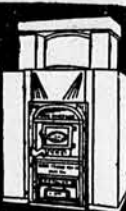
The amount of grain to put in the trough can not definitely be given. The same should vary in accordance with severity of winter and condition of stock. This is a point that can only be decided in the feed lot. To permit the stock to go entirely without concentrates at this time would be a grave mistake, and in all probability make impossible the task of bringing it to spring in a healthy and vigorous condition. Such a condition is imperative in the case of breeding animals and essential for feeders if best results are to be obtained.

The matter of feeding hogs, included in this first group, presents an entirely different problem from that of the other stock. It is true that they may profitably be run on grain fields, meadows, and pastures before snow arrives, but concentrates must constitute much of their ration after outside fields are closed for winter. Roots, chopped alfalfa hay, apples, and waste products of the dairy and household will do much toward keeping down the cost of their winter feed. In fact, any products that will substitute for the forage and grasses in the field, which feeds are so essential to the conditioning of brood sows, can well be used.

Concerning the feed for stock included in the second class, little need be said. It is a fact well known that horses at work require both care and feed. This they must receive if their work is done. To furnish the dairy cow with rations not intended to meet the demands made upon her system by the milk she gives would defeat the purpose for which she is kept. Equally certain would the stinting of the ration of fattening steers or hogs fail to make them ready for the Christmas market. As the food requirement for these different classes of live stock is a matter of common knowledge to stockmen, it remains only to see that it is provided in abundance.

It is in the wintering of the young and growing stock that the most costly mistakes in feeding are made. A full realization of the fact that cheapest and

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sometimes called "one register" or "vacuum system," have their uses. Made right and used in the right place, such a system can give very good results. But up to now no such device has been made with registers or air passages sufficiently large enough to permit the passage of the heat. The

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Following are the names of those who were awarded prizes in the contest advertised in this and other farm publications during the past few months.

Roy A. Miller, Farmington, Mo. - \$50
Mrs. E. E. Tietze, Cambridge, Neb. \$25
Thomas Johnston, Morrisville, Ill. \$10
and \$1 each to the following twenty-five:

William M. Heine, Fort Lauderdale, Florida; Dora J. Hughes, Carmi, Illinois; Jack Anderson, Hannover, Illinois; Ray E. Howe, Peoria, Illinois; Miss Grace Kinat, St. Charles, Ill.; Mrs. Francis Knecht, Hartford, Indiana; W. D. Loomis, Blencoe, Iowa; Mrs. J. W. Rignour, Gravity, Iowa; Mrs. Fred A. Smith, Troy, Kansas; Miss Nellie E. Brown, Leon, Kansas; Mrs. Ray Brownlee, Prett Prairie, Kansas; Mrs. Fred Britton, Raymond, Minnesota; Paul Winkelman, New Ulm, Minnesota; E. B. Sanders, Kansas City, Missouri; Wayne Taylor, Marionville, Missouri; Peter Jensen, St. Paul, Nebraska; Burleigh Thompson, Bloomington, Nebraska; Geo. Jank, Pleasant Dale, Nebraska; B. G. Kruthaup, Jr., Mulberry, Ohio; Clyde Lee, Lone Wolf, Oklahoma; Bertha Mattison, Arlington, South Dakota; Miss Nina Chandler, Lebanon, South Dakota; Mrs. Geo. Steinwand, Colby, Wisconsin; A. B. Caswell, Milwaukee, Wisconsin; Ruben Engstrom, South Range, Wisconsin.

The judges were George H. Cushing, editor of the Black Diamond, a leading Coal Trade paper, Dr. F. C. Honnold, secretary of the Franklin County Coal Operators Association, and William A. Stiles, a well known advertising expert of Chicago.

Hundreds of letters received were so good as to require considerable deliberation in making decisions. Another similar contest in 1917 is contemplated.

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most rapid gains in live stock are made with younger animals should do much toward obviating losses to farmers through insufficient and improper feeding of such animals. The failure to put gains on animals during the growing period intended for them by Nature cannot be corrected by liberal feeding at any later time. Their growth has been stunted, and rarely will they fully recover from the earlier setback. Even when they do it is a costly practice to put growth and flesh on a stunted animal, as compared to what could have been done when he was in a healthy and vigorous condition.

But it is not necessary that young stock be fed as are fattening animals. Watch their feed troughs and see that all of the daily rations are consumed. Do not feed them in excess, but make certain they are contented after each feeding. See that the exercise lot is used daily and that clean water is provided. The failure to feed young stock properly will open the way for future serious troubles, and no stockman can afford to encourage such a practice, even during the winter months.

Margin in Feeding Lambs

Many are questioning whether it will be profitable to feed lambs at the present high price for feeders. It is a speculative business and involves considerable risk. If one can get a margin of 50 cents on the selling price over the buying price, it may be a profitable transaction. At the Nebraska Experiment Station two years ago, when corn was 60 cents and alfalfa hay \$8, gains on lambs cost \$4.88 per hundred. Last year with feed at the same price, lambs fed heavily on corn made gains at \$5.53 per hundred, and those receiving a medium feed of corn made gains costing \$4.90 per hundred. As corn will probably bring 70 cents and alfalfa hay \$10 this winter, it is likely gains will cost upwards of 6 cents a pound. Consequently a 50-cent margin between buying and selling price should mean a chance for profit to the careful feeder who gets satisfactory gains.

Time to Breed Ewes

If the next crop of lambs is to come when it can be handled with greatest profit, the ewes should be mated at once. In many small farm flocks the ewes have already been bred.

It is an advantage to have lambs come early in the spring so that they will be of sufficient size to make good use of the grass when first turned out to pasture with their mothers. Also by having them come early, they can be finished off and marketed before there is a run of range lambs, which always breaks the market. The gestation period in is five months.

Trapshooting

Back in the early eighties, when America's sportsmen began to demand a between-season outlet for their gunning enthusiasm, some bright Yankee genius conceived the idea of the glass ball as a fitting target to try the prowess of the marksmanship, when the object was projected at unknown angles from a mechanical contrivance known as a trap.

The name of Bogardus, in connection with glass ball shooting, is not only historical but still alive and dominant in the reminiscences of old timers, a goodly percentage of whom still follow the sport of trapshooting.

The trapshooting of today, however, differs materially from that sport of long ago; the traps are more scientifically constructed, the target, instead of being globular in form, is saucer-shaped and not only covers its fifty-yard flight with the speed of an arrow but rotates as well.

It has become customary for writers to refer to the clay pigeon as "the inanimate target"; so long as they remain packed in barrels or stacked in the trap house this is quite proper. On the other hand, were you to ask any one of the 500,000 active trapshooters in the country for his personal opinion, he would unhesitatingly say that immediately following the release of the trap it becomes just about as animated as a devilish ingenuity could conceive. — GEORGE PECK.

The more a cow relishes her feed the more she will eat, and that means the more she will produce at the pail. That's the idea of palatability in the ration, increasing the cow's desire for food, stimulating her appetite, and catering to her taste. Of course, all this presupposes a good, profitable cow.

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When Nature Turns Outlaw

*"Blow, winds, and crack your cheeks! rage! blow!—
You cataracts and hurricanoes, spout"*

Thus King Lear, in Shakespeare's tragedy, defies the elements. But man, even today, cannot challenge nature with impunity.

The unsinkable ship goes down like a rock from the impact of an iceberg. The fireproof building is burned. The monument, built for unborn generations, is riven by lightning or shaken down by an earthquake.

There are storms which make train service impossible, which delay the mails and which close the public highways to the usual traffic. Even in the cities there are times when the street cars do not run, and neither automobiles nor horse-drawn vehicles can be driven through floods or high-piled snowdrifts.

Such conditions increase the dependence on telephone wires, which themselves are not exempt from the same natural hazards. Fortunately, however, the Bell System has faced these dangers and well-nigh overcome them. Masses of wires are buried underground and lonely pole lines, even the most stoutly built, are practically paralleled by other lines to which their business can be transferred.

Each year the lines are stronger and the guardians of the wires are prepared to make repairs more quickly. So each year increasing millions of subscribers find their telephones more dependable and, within the limits of human power, they count upon their use in storm as well as in fair weather.



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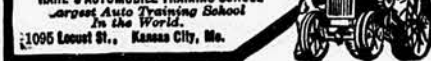
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OVERLAND RED

A Romance of The Moonstone Canon Trail

SYNOPSIS OF PRECEDING CHAPTERS

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

CHAPTER XIX.

"TO CUT MY TRAIL LIKE THAT!"

OVERLAND RED was concluding his last yarn, a most amazing account of "The night the Plancher boys shot up Abilene."

It was exactly two o'clock by Dr. Marshall's watch.

"Both my guns was choked up with burnt powder. I reached down and borrowed two guns off a gent what wasn't usin' his jest then. Next day I was elected sheriff unanimous. They was seven of us left standin'. That was back in '98." Overland yawned and stood up.

"The boys are all asleep now," said Walter Stone. "We have plenty of room here. You'll not object to taking one of the guest-rooms as you find it, I'm sure."

"For better or for worse, as the pote says," And Overland grinned. "But I got to put that little chaffer to roost somewhere."

"That's so."

"I'll go wake him up," And Overland strode to the racing-car. The "chaffer" had departed for parts unknown.

"I guess he was scared at that last grade," said Overland, returning to the house. "He's gone. He must 'a' been scared, to beat it back down the road afoot."

"Perhaps he has gone to the stables," said Stone. "Well, we'll take care of you here. You can see Collie in the morning."

Overland, closing the door of the spacious, cool guest-room, glanced about curiously. What was it made the place seem so different from even the most expensive hotel suites? The furniture was very plain. The decorations were soft-toned and simple.

"It's—it's because the Rose Girl lives here, I guess," he soliloquized. "Now this kind of a roost would jest suit Billy, but it makes me feel like walkin' on eggs. This here grazin' is too good for me."

He undressed slowly, folding his unaccustomed garments with great care. He placed his automatic pistol on the chair by the bed. Then he crept beneath the sheets, forgetting to turn out the light. "Hugh! Gettin' absent-minded like the old professor what picked up a hairbrush instead of a lookin'-glass to see if he needed shavin'."

He was dum' near scared to death to see how his beard was growin'." And Overland chuckled as he turned out the lights.

He could not go to sleep at once. He missed the desert night—the spaces and the stars. "I left here in a hurry once," he muttered. "Bout three years ago. Then I was kiddin' Collie about wearin' silk pajamas. Now I got 'em—got 'em on, by thunder! Don't know as I feel any heftier in the intellection. And I can't show 'em to nobody. What's the good of havin' 'em if nobody knows it? But I can hang 'em on the bed-post in the mornin', careless like, jest like I was raised to it. Them pajamas cost four dollars a leg. Some class."

"And he drifted to sleep."

After breakfast Dr. Marshall, who had taken a fancy to Overland, strolled with him over to the bunk-house. Most of the men were on the range. Collie was assembling bits and bridle, saddles, cinchas, and spurs, to complete an equipment for the proposed camping trip in the hills. He was astounded at Overland's appearance. However, he had absorbed Western ideals rapidly. He was sincerely glad, overjoyed, to see his old friend, but he showed little of it in voice and manner. He shook hands with a brief, "How, Red!" and went on with his work.

Dr. Marshall, after expressing interest in the equipment, excused himself and wandered over to the corral, where he admired the horses.

"Where did you get 'em?" queried Collie, adjusting the length of stirrup-leathers.

"These?" And Overland spread his coat-tails and ruffled. "Why, out of the old Mojave. Dug 'em up with a little pick and shovel."

"You said in your letter you found the claim."

"Uhuh. Almost fell over it before I did, though. We never found the other things, by the track. New ties. No mark. Say, that Billy Winthrop I writ about is the brother of them folks stayin' here! What do you think?"

"Wish I was out there with you fellows," said Collie.

"You're doin' pretty good right here, kiddo. The boss don't think you're the worst that ever came across, and I expect the ladies can put up with havin' you on the same ranch by the way they talk. Got a hoss of your own yet?"

"Nope. I got my eye on one, though. Say, Red, this is the best place to work. The boss is fine. I'm getting forty a month now, and savin' it. The boys are all right, too. Brand Williams the foreman—"

"Brand who?"

"Williams. He came from Wyoming."

"Well, this here's gettin' like a story and not like real livin'." Why, I knowed old Brand in Mex. in the old days when a hoss and a gun was about all a guy needed to set up housekeepin'. We was pals. So he's foreman here, eh? Well, you follow his trail close about cattle or hosses and you'll win out."

"I been doing that," said Collie. "The other day he told me to keep my eye on one of the boys. Silent Saunders, he's called. Kind of funny. I don't know anything about Saunders."

"Well, you bank on it. Stack 'em up chin-high on it, Collie, if Brand says that. He knows somethin' or he would never talk. Brand is a particular friend of yours?"

"You bet!"

"Well, tie to him. What he says is better than fine gold as the pote says. I reckon coarse gold suits me better, outside of pot'ry. How does the Saunders insew wear his clothes?"

"He's kind of lame in one arm and—here he comes now. You can see for yourself. The one on that pinto."

As Saunders rode past the two men, he turned in his saddle. Despite Overland's finery he recognized him at once.

Overland's gaze never left the other's hands. "Mornin'," said Overland, nodding. "Ain't you grazin' pretty far this side of Gophertown?"

"Who the hell are you talkin' to?" Saunders asked venomously, and his eyes narrowed.

Overland grinned, and carelessly shifted the lapel of his coat from beneath which peeped the butt of his automatic pistol. Collie felt his scalp tightening. There was something tense and suggestive in the air.

"I'm talkin' to a fella that ought to know better than to get sassy to me," said Overland, "or to cut my trail like that."

Saunders rode on.

"Seen him before?" asked Collie.

"Yep. Twice—over the end of a gun. He come visitin' me and Billy at a water-hole out in the dry spot. We got to exchange opinions. Two of mine he ain't forgot, I guess."

"Saunders is branded above the elbows on both arms," said Collie. "He's been shot up pretty bad."

"You don't tell! Wonder how that happened. Mebbe he was practicin' the double roll and got careless. Now, I wonder!"

"He's one of the 'bunch'," said Collie, suddenly awake to the situation. "Come on over to the bunk-house where we can talk. Red, I'll introduce you regular to Silent."

"All right. Here, you walk on the other side. I'm left-handed when I shake with him."

But Saunders was not at the bunk-house. Instead he had ridden on down to the gate and out upon the Moonstone Trail. He had become acquainted with Deputy Tenlow. He would make things interesting for the man who had "winged" him out in the desert.

"I smell somethin' burnin'," said Overland significantly. "The Saunders man has got somethin' up his sleeve. He did n't turn his pony into the corral, did he?"

"No."

"All right. Now, about them papers and your part of this here claim."

For an hour they talked about the claim. Winthrop, Collie's prospects, and their favorite topic, the Rose Girl. They were speaking of her when she appeared at the bunk-house door.

"Good morning, Mr. Summers. Mrs. Marshall wished to know if you would tell her more about her brother—when you have visited with Collie. She was afraid you might leave without her seeing you again."

"I was thinkin' about that myself," replied Overland. "Yes, Miss, I'll be right over direct."

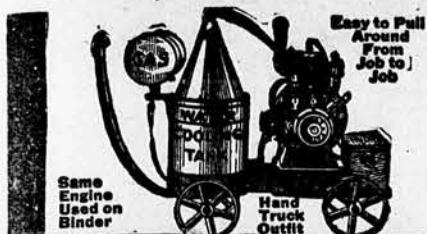
Louise nodded, smiled, and was gone.

"Say, Red, you better go quick. In the machine," said Collie, fearful that Saunders was up to mischief.

"Grand idea, that," said Overland, calmly brushing his hat. "But Tenlow and Saunders—that you're thinkin' 'bout—ain't neither of 'em goin' to ride up too close to me again. They are goin' to lay for me down the canon. They'll string a plate across the road and hold up the car, most likely. They know I can't get out of here any other road."

"Then what will you do?"

"Me? Why me and the Guzzuh'll go down the trail jest as slow and easy as a baby-buggy pushed by a girl that's waitin' in the park for her beau."



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The 4 H. P. Cushman Handy Truck is the most useful outfit ever built for farm work. Engine weighs only 190 lbs., and entire outfit only 375 lbs.

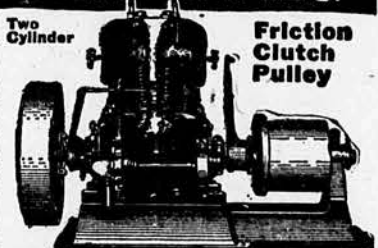
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"But, Red, you don't think—?"

"Not when it hurt me dome," interrupted Overland. "I got a hunch I'll see you again before long. So long, Chico. I got to shine some of the rust off my talk and entertain the ladies. You might get into my class, too, some day, if you knowed anything except hoss-wrastlin' and cow-punchin'," he added affectionately.

And Overland departed, sublimely content and not in the least disturbed by future possibilities. "He's the great kid!" he kept repeating to himself. "He's the same kid—solid clean through. Good morning, ladies. Now about Billy—or—Mr. Winthrop; why, as I was sayin' last night. . . . No, thanks, I'll set facin' the road. Sun? Why, lady, I'm sun-cured, myself."

CHAPTER XX.

THE LED HORSE.

Anne Marshall had stepped from the porch to the living-room. Overland Red was alone with Louise.

Facing her quickly, his easy banter gone, his blue eyes intense, untroubled, magnetic, he drew a deep breath. "They're waiting for me down the canon, about now," he said, and his tone explained his speech.

Louise frowned slightly, studying his face. "That is unfortunate, just now," she said slowly.

"Or most any time—for the other fella," responded Overland cheerfully.

The girl gazed at the toe of her slipper. "I know you didn't speak because you were afraid. What do you intend?"

"If I ain't oversteppin' the rules in invitin' you—why, I was goin' to say, 'Miss Lacharme, wouldn't you like to take a little buggy-ride in the Guzzuh, nice and slow. She's awful easy ridin' if you don't rein her too strong.'"

"I don't know," said Louise pensively. "Your car can only hold two?"

"Yes, ma'am."

"I couldn't run away and leave Mrs. Marshall. Of course, you would go on—after—after we were in the valley. How could I get back?"

"That's so!" exclaimed Overland, with some subtlety, pretending he had not thought of that contingency. "Course Collie could ride down ahead with a spare hoss. You see the sheriff gent and Saunders—"

"Saunders? Our man Saunders?"

"Uhuh. Me and him ain't friends exactly. I figure he's rode down to tell the Tenlow man that I'm up here."

"You are sure?"

"Yes, Miss. I don't make no mistakes about him."

"Then one of our men has gone to get the deputy to arrest you, and you are our guest."

"Thanks, Miss, for sayin' that. It's worth gettin' pinched to be your guest."

"I did intend to ride down for the mail. Boyar needs exercisin'."

"So does the Guzzuh, Miss. . . . s queer how she acts when she ain't been worked every day."

"I don't believe Anne would care to come, in the machine. I'll ask her."

And Louise stepped to the living-room.

Collie, who had been watching anxiously from the corral, came across the yard to the veranda. He was dressed for riding, and he had a gun on his hip. Overland scowled. "You little idiot," he said, "when your Uncle Jack's brains get ossified, just give the sad news to the press. You're jest itchin' to get in a muss and get plugged. I ain't. I figure to ride down the Moonstone Trail, steerin' the Guzzuh with one hand and smellin' a bunch of roses in the other. Watch my smoke. Now, beat it!"

Louise, coming blithely from the living-room, nodded to Overland. Her pensiveness had departed. Her cheeks were flushed. "Oh, Collie! Saddle Boyar," she began, but Overland coughed disapprovingly. He did not wish Tenlow and Saunders to suspect that the led horse was for Louise.

"Or—no. Saddle Sarko," said Louise, at once aware of Overland's plan. "And have him at the foot of the hill for me as soon as you can."

"Yes, Miss Louise." And Collie departed for the corral wondering. Overland was too much for him.

They had luncheon and allowed Collie two hours to arrive at the valley level with the led pony. After luncheon Louise appeared in riding-skirt and boots. "Mr. Summers is going to take me for a ride in his new car," she said. "Don't worry, aunty. He is going to drive slowly. He finds that he has to leave unexpectedly."

"I'm sorry you are going without seeing Mr. Stone and Dr. Marshall again," said Aunt Eleanor. "You'll be careful, won't you?"

"So am I, ma'am.—Yes, I'll run slow."

"But how will you come back?" queried Anne.

"Collie has gone ahead with a spare pony. Good-bye, aunty."

"I can't thank you enough for all that you have done for Billy. I am so glad he's well and strong again. We never could manage him. Good-bye, and tell Billy he must come over and see us right away."

"You'll drive carefully?" queried Aunt Eleanor again.

"Jest like I was goin' to get pinched," said Overland, bowing.

As Collie rode down the last pitch, leading the restive Sarko, Dick Tenlow stepped from the brush. "Morning, Collie. Out for a little pascor?"

"Shouldn't wonder, Dick."

"Horses are lookin' good. Feed good on the hills yet?"

"Pretty good."

"I hear you got company up to the Moonstone."

"Yep. Eastern folks, doctor and his wife." And Collie looked the deputy hard in the eye.

"Oh, that was their machine I heard coughin' up the canon last night, eh?"

"I didn't ask them about that," replied Collie.

"You're improvin' since you first come into these hills," said Tenlow, with some sarcasm.

"I'm holdin' down a better job than I did then," said Collie good-naturedly.

"Well, I ain't. I'm holdin' the same job, which you will recollect. It ain't much of a job, but it's good to requisition that cayuse you're leadin'."

"What you kiddin' about?"

"Straight goods," said Tenlow, reaching for Sarko's reins. "Just hand over your end of that tie-rope."

[To be continued.]

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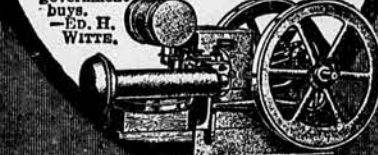
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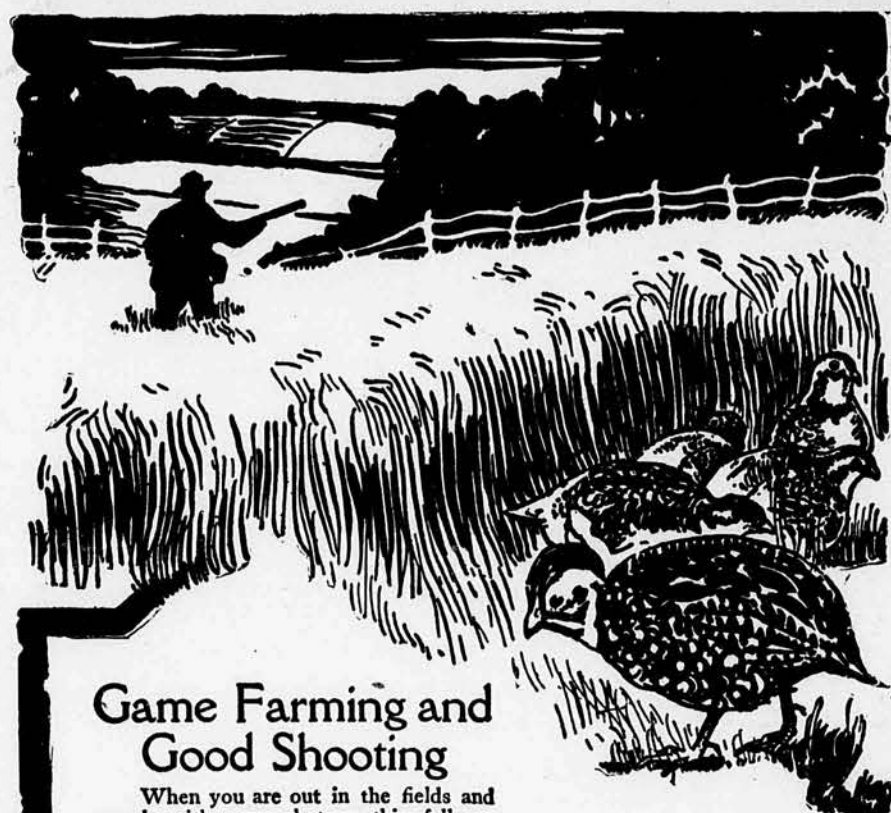
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"I shall pass through this world but once. Any good thing, therefore, that I can do, or any kindness I can show to any human being, let me do it now. Let me not defer it or neglect it, for I shall not pass this way again."

When you visited the school, did you discover ways in which you could make the room more comfortable or more attractive? Maybe the task which suggested itself to you is too great to undertake alone. Doubtless other mothers and fathers in the district would be glad to help bring about the improvement if you would make the suggestion or ask them to go to the school and see for themselves, the need.

Care of Teeth Important

Neglect of teeth in childhood is usually paid for dearly in after years—either with enormous dentistry bills or with great suffering.

The teeth should be brushed regularly at least twice daily, and should be examined occasionally in order that any decay may be checked.

Defects of the teeth and jaw can be corrected much more satisfactorily early in life. This matter should not be neglected. These defects mar the beauty of the face and affect the life of the individual in many ways. The relation between the teeth and one's general health is very close and neglect of the teeth may undermine the human system and rob it of its resistance to disease.

Carelessness

I am more powerful than the combined armies of the world.

I have destroyed more men than all the wars in the world.

I am more deadly than bullets and I have wrecked more homes than the mightiest of siege guns.

I steal, in the United States alone, over \$300,000,000 each year.

I spare no one, and I find my victims among the rich and poor alike; the young and the old, the strong and the weak, widows and orphans know me.

I loom up to such proportions that I cast my shadow over every field of labor, from the turning of the grindstone to the moving of every railroad train.

I massacre thousands upon thousands of wage earners in a year.

I lurk in unseen places and do most of my work silently. You are warned against me, but you heed not.

I am relentless. I am everywhere; in the home, on the streets, in the factory, at railroad crossings, and on the sea.

I bring sickness and degradation, and yet few seek to avoid me.

I destroy, crush and maim; I give nothing, but take all.

I am your worst enemy.

I am Carelessness!—Exchange.

This Teacher Earns Salary

Recently we were talking with a rural district teacher who is keenly alive to the possibilities in his work and who is deeply interested in everything that will help in making it more fruitful. Evidently this teacher has full support from his school board even though at times there may be doubt in the minds of the members as to the outcome of some projects. They are at least glad to see him try out such undertakings.

Perhaps this young man has an advantage over some teachers because he lives in the district and spends his summer months farming. In this way the needs of the district are his needs, and its advantages are shared by him. But he is earnestly endeavoring through his teaching and his living, to hold up to the young people in his district the advantages of farm life and the importance of education in making life on the farm satisfying and remunerative.

If figures are worth anything in measuring success in work of this kind, we would count him most successful. Last year out of an average attendance of twenty-eight, ten were graduated, and

this year every one of the ten is in high school. Surely only one thing could be more gratifying, and that would be to watch the lives of these ten—all of whom say they are going to return to the farm—as they grow and develop and become strong influences in their home communities after they have equipped themselves for their life's work. This is the kind of success which increases with time, as the constructive work done bears fruit year after year.

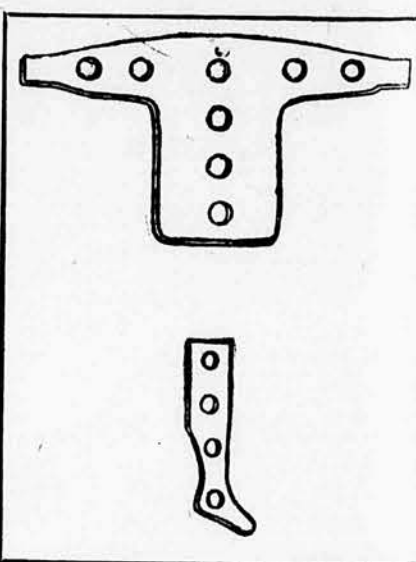
Another of the achievements of this teacher is an organized choir of forty children and twenty-five young men and women. The members of this choir come from five different districts and meet once a week to sing, and a number of special programs are given throughout the year.

These are only a few notes from the record of one rural teacher whose business office is a one-room Kansas school, but whose work is not forgotten when the office is closed.

There are interested teachers, and in different ones. However, the members of the school board and the school patrons should many times assume the whole responsibility for the teacher's attitude. Teachers are only human, and it is possible to kill the ardor of even the most enthusiastic, by a lack of interest and co-operation in the district. The teacher is hired by the board and can do only what the board sanctions, but backed by the board and school patrons, the possibilities are almost limitless so long as they keep within the law.

Wooden Drying Forms

Home-made forms of wood similar to those shown in the picture on this page, will be found very useful in drying



woolen baby shirts and stockings without stretching them out of shape. The forms should be patterned after the garments when new. They will be helpful in preventing shrinking. The holes in the forms permit the air to pass through.

Bulbs for Spring Flowers

It is time to set out the spring blooming bulbs. They should be planted from three to five inches in depth, depending upon the nature of the soil and the size of the bulbs. Deep planting is preferable in sandy or light soil, but in heavy loam two or three inches is enough. A liberal amount of well rotted manure should be worked into the soil before planting, and a light mulch should be applied for the protection of the bulbs during the winter months.

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SINGLE COMB BROWN LEGHORN cockerels from prize winners and winter layers, \$1 each and up. John W. Moore, Hendrickson, Mo.

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

SPLENDID "RINGLET" BARRED ROCK yearling cocks, \$3.00 each. "Goldbank" mammoth branze turkeys, big-boned lusty young toms, \$5.00 up. Harper Lake Poultry Farm, Jamestown, Kansas.

POULTRY WANTED.

WE PAY FOR POULTRY. PRICES PUB- lished in Daily Capital. Copy free. Coops loaned without cost. Address The Copes, Topeka.

CATTLE.

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

FOR SALE—REGISTERED GUERNSEYS. I have fifty head and only winter quarters for forty. Will sell yearling heifers and heifer calves, also bull calf and two young cows and yearling bull. R. C. Krueger, Burlington, Kansas.

FOR SALE—TWO REGISTERED JER- sey bulls, best strains. Will trade for others. L. E. Pendleton, Dodge City, Kansas.

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

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

FOR SALE—SHORTHORN BULLS: ONE extra good white yearling and a three-year-old roan, both Scotch. R. H. Hanson, Route No. 3, Jamestown, Kansas.

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

HORSES AND MULES.

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

REGISTERED PERCHERON STALLION, for sale or trade for one as good or trade for live stock, fillies in way. Roan, nine years old. Sound and all right, weight about 1,750 pounds. Levi Bailey, Route 1, Box 43, Thayer, Kansas.

FOR SALE—THE FINE GRAY PERCHE- ron stallion, Comet No. 79390, P. S. of A. Six years, 17 hands, heavy bone and should make a ton horse. Grandson of Casino dams of Brilliant breeding. Winner blue ribbons 1915 and 1916. Price \$750. Sid S. Tate, Lakin, Kansas.

HONEY.

HONEY—TWO 5-GALLON CANS COMB, \$12. Two cans extracted, fine flavored, \$10. A. S. Parson, Rocky Ford, Colo.

PURE HONEY—TWO 60-POUND CANS, \$9.50, f. o. b. Las Animas, Colorado. W. P. Morley.

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

DOGS.

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

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

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

PET STOCK.

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

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ROBERT H. HAZLETT

HAZFORD PLACE, EL DORADO, KANSAS

World's Largest Herd of Direct Descendants of Beau Brummel, Anxiety 4th and Don Carlos.

WILLIAM CONDELL, Herdsman.

LA CIMA FARM DISPERSAL SALE

OCTOBER 30, 1916

SEVENTY PURE-BRED REGISTERED JERSEY CATTLE

Including two show herds. Highest testing herd in the West. Take car at Forty-seventh and Troost, Kansas City, Mo., to Swope Park, or take Frisco train from Union Station, 9 a. m., to Holmes, Mo. Autos will meet cars and train.

F. J. BANNISTER, OWNER
811 R. A. Long Bldg., Kansas City, Mo.
Both Phones, Main 1084

WRITE FOR
CATALOG

TOM DEMPSEY
Sale Manager
Westerville - - Ohio

COL. D. L. PERRY, AUCTIONEER

Attend Longview Farm Horse Sale Near By, October 31

FOURTH ANNUAL HOLSTEIN SALE

150 HIGH GRADE HOLSTEINS AT AUCTION, WEDNESDAY, NOVEMBER 15

Entire Herd of Cattle Will Be Sold at Our Farm, Four Miles West of Lincoln, Nebraska, on O Street Road.
Free Lunch at Noon, Sale Follows.

Take cars Capitol Beach to B. & M. Railroad crossing. Autos will be running from this point to farm from 9:30 a. m. and will return after sale. This herd consists of sixty cows from three to six years old; a few springers, balance fresh since October; ninety head of heifers from calves to year-olds. All heifers of breeding age will be in calf. These cattle are all well marked, good sized and show every indication of making good. They will please the most discriminating buyer.

MY AIM IS TO SATISFY EVERY BUYER

And I will guarantee my cattle to be just as represented sale day. All cattle recently tuberculin tested and health certificate furnished with each animal over six months old. Plan to attend this sale and you will see a fine lot of cattle. A good place to buy the best. You Kansas men are invited to attend my sale. If you are not more than pleased with the class of cattle I am offering, I will gladly refund your railroad fare and hotel expenses. Terms, cash or ten months' time, 8 per cent interest.

Col. Z. S. Branson, Auctioneer



H. L. CORNELL, - - LINCOLN, NEBRASKA

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. A few choice boars and gilts for private sale that are splendid prospects. 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**

GRONNIGER & SONS POLAND CHINA SALE

BENDENA, KANSAS, NOVEMBER 9, 1916
Forty-five head choice big-type Poland, consisting of nine fall boars, eighteen choice spring boars, and eighteen choice spring gilts. Sired by Futurity Rexall, Big Bob 2d and Shamrock. Send for catalog at once.
HERMAN GRONNIGER & SONS - - - - - **BENDENA, KANSAS**



Faulkner's Famous Spotted Polands

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

Palmer's Immune Polands

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 6, MARION, KAN.

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.

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

DUROC JERSEYS.

W. R. CROW & SON'S DUROCS

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

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, Herlington, 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

PATTERSON'S DUROCS

FOR SALE—Fifteen head of good spring boars, Col. and Crimson Wonder breeding. Priced to sell and satisfaction guaranteed.
ARTHUR A. PATTERSON, Ellsworth, Kan.

TWENTY FIVE SPRING BOARS

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

Immune Duroc Jerseys

April boars for farmers and breeders at \$20 each. Plenty of quality and the best of breeding. Satisfaction guaranteed.
A. S. GRABLE, JR. - DEARBORN, MO.

DUROC JERSEY BOARS

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

QUARANTEED DUROO 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 heads, the tops from forty head. Thirty-five spring gilts. Priced to sell.
W. A. WOOD & SON, ELMDALE, KANSAS

CHOICE DUROCS.

A few extra fine Duroc Jersey spring boars by Big Wonder out of Tatarax sows, \$25.00, crated.
AXTELL & POTTER, NEWTON, KANSAS

REGISTERED DUROC BOARS

Spring farrow, big type, from choice stock. Write me before you buy.
BRICE NEWKIRK, Route 1, Strawn, Kan.

PURE-BRED DUROC BOARS
Best breeding, choice individuals, priced right. **W. J. Harrison, Silver Lake, Kansas.**

HERD BOARS

FOR SALE—W's Highfeller 65529 (s), Smooth Price Wonder 209579 (a). They are tops in every way and unexcelled as breeders.
L. C. WALBRIDGE, RUSSELL, KANSAS

AT REDUCED PRICES

On account of severe drouth and having to buy high priced feed, I have reduced prices on my Perfection Spotted Polands. 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, Holme, Mo. (Just South of St. Louis)

BIG TYPE POLANDS

Spring boars and gilts with size and quality. Priced to sell.
F. W. Schowalter, Route 2, Halstead, 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

Lambert's Big Polands

Big smooth Poland boar pigs, sired by Long Look and Black Orange. Out of big high-quality dams. All immune.
JOSIAS LAMBERT, SMITH CENTER, KAN.

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.

DEMING RANCH POLANDS

Will be at Topeka, Hutchinson, Oklahoma City and Muskogee fairs. Over two hundred April and May pigs that will suit breeders wanting big high quality Poland.
THE DEMING RANCH, OSWEGO, KANSAS
H. O. Shelden, Herdsman

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. OLIVIER & SONS, DANVILLE, KANSAS

FITZSIMMONS' POLANDS

Spring boars sired by Blue Hadley and Geo. Garnett, out of choice big-type dams.
O. H. FITZSIMMONS - WILSEY, KANSAS

BIG-TYPE POLANDS.

Spring boars and gilts, fifteen to twenty dollars. Edgar Hartman, Great Bend, Kan.

LANGFORD'S SPOTTED POLANDS.

Last call for early spring pigs. Extra good young boars. T. T. Langford & Sons, Jamesport, Mo.

RED POLLED CATTLE.

RED POLLED CATTLE

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

RED POLLED CATTLE

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

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

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HOLSTEIN CATTLE.

Clyde Girod, At the Farm.

F. W. Robison, Cashier Towanda State Bank

HOLSTEIN FRIESIAN FARM, Towanda, Kansas

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

BEFORE YOU BUY, TALK WITH US

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

GIROD & ROBISON -:- TOWANDA, KANSAS

TORREY'S HOLSTEINS

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

O. E. Torrey - Towanda, Kansas



IN MISSOURI

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

FOUR BULLS

Two of serviceable age. Priced very reasonable. Pictures and description on application. A Tredico bull will improve your herd.
TREDICO FARM, Route 2, Kingman, Kan.

HOLSTEIN CALVES

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

CLOVER VALLEY HOLSTEIN FARM
Whitewater - Wisconsin

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Fairview Farm Jerseys

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

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 pedigrees.
R. J. LINSOTT - HOLTON, KANSAS

Jersey Cows and Heifers

140 head to select from, pure-bred and grade. 20 heavy springers, bred on farm.
J. W. BERRY & SON, Jewell City, Kansas

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

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.

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



Purebred Registered HOLSTEIN CATTLE

The world's champion advanced registry milk producer is the pure-bred registered Holstein-Friesian cow, Lutacke Vale Cornucopia, owned in the state of Washington. In 365 days this wonderful cow produced 31,239.4 lbs. of milk or over 15,000 quarts, exceeding the best previous milk producing record of 30,451 lbs. made by the Holstein Tilly Alcarita. The big "Black and White" cattle, not only by individual performances, but by matchless qualities and achievements as a breed, are proving their superior worth all over the world.

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

BONNIE BRAE HOTSTEINS

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

23-HOLSTEIN-FRIESIAN BULLS-23

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

Breeders for Thirty Years.
McKAY BROS., Waterloo, Iowa

Butter Bred Holsteins

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

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**

GOLDEN BELT HOLSTEIN HERD

Herd headed by Sir Korndyke Bess Hello No. 16546, 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 caliber.
W. E. BENTLEY, MANHATTAN, KANSAS

THE CEDAR LANE HOLSTEIN HERD

Headed by a 29.4-pound grandson of Pontec 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

CORDALE FARM HERD

Herd sire, Jewel Paul Butter Boy No. 94245, who's eight nearest dams average A. R. O. 25.95. Eight bull calves for sale from 2 to 9 months old.

L. F. CORY & SON - Belleville, Kansas

HOLSTEINS BACKED BY RECORDS

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

GEORGE C. PRITCHARD
Route 2 - Topeka, Kansas

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

BRAEBURN HOLSTEINS

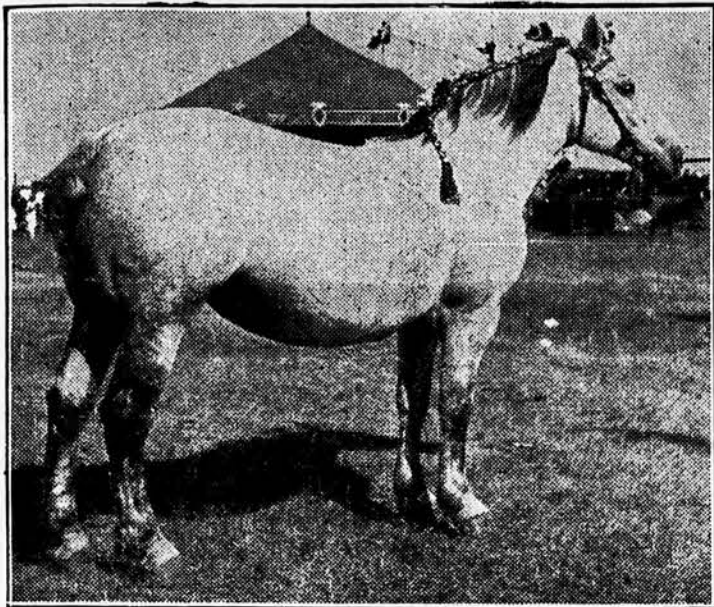
Four females to spare before stabilizing time. Always A. R. O. bull calves.
H. B. Cowles, 608 Kansas Ave., Topeka, Kan.

HOLSTEIN BULLS, "REGISTERED"

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

HOLSTEIN BULL, King Lyons Wayne. Exceptionally fine animal. Priced right.
DR. T. M. THOMSEN, Dannebrog, Nebraska

First Annual Registered Percheron Sale



At Great Bend, Barton County, Kansas
Wednesday, Nov. 15, 1916

40-Registered Percherons-40

Eight Coming Three-Year-Old Stallions—Extra Large—Weigh Almost a Ton.

Sixteen mares four years old and over, all safe in foal to our herd stallion, Algarve 54595, weighing more than a ton. Eighteen mares under three years old. Two 2-year-old stallions, both prize winners this year and one made grand champion at our Barton County Fair this year. Four yearling stallions and a few weanling stud colts. All that are under three years old are sired by Algarve 54595 and are real show-type Percherons. This is a clean lot and will be sold absolutely sound and all right in every day. Catalogs are ready to mail out. Send for one today. Kindly mention Kansas Farmer. Sale starts at 10:30 a. m. at the farmer feed barn.

Auctioneers: Col. Snyder, Col. Bales, Col. Keenan

HARRIS BROTHERS, - - - Great Bend, Kansas

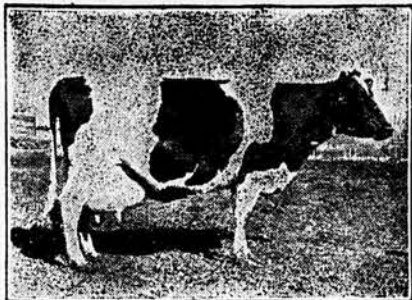
HOLSTEIN Dispersion Sale

85 - Head Pure Bred Holstein Cattle - 85

THE FAMOUS HAECKER & CORNELL HERD WILL BE SOLD AT AUCTION AT

Lincoln, Nebraska November 9

A dissolution sale of the entire breeding herd of Haecker & Cornell, carefully selected by Prof. A. L. Haecker for the founding of a herd that would be surpassed by none. Many individuals are from the well known S. E. Jones herd of Watertown, Wisconsin.



The champion cow of the Nebraska State Fair, Lady Oak Canary 229392, and many other prize winners will be among the offering.

The great herd bull, Crescent Beauty Butter Boy 10th 150438, whose dam has a record of 923 pounds of butter and 22,087 pounds of milk in one year, is also offered.

Two smaller herds are consigned to this sale: Mr. A. B. Hall of Creston, Iowa, and Mrs. Anna Witt of Scribner, Nebraska, consign ten head each. All animals are tuberculin tested.

Here is a splendid opportunity to found your herd with the best. Sale at Woods Bros.' barns across the street from the State Farm at Lincoln, Nebraska, on November 9. Street car service to the barns. Sale starts promptly at 11 a. m. For catalog and particulars address

A. L. HAECKER

719 P STREET - - - LINCOLN, NEBRASKA

Auctioneers—R. E. Haeger, Z. B. Branson, R. M. Adkins

POLLED DURHAM CATTLE.

Polled Durham Cattle

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

Ed. Stegell

STRAIGHT CREEK - KANSAS

Edgar Hartman of Great Bend, Kansas, has built up a good herd of pure-bred Poland Chinas. He has the big easy feeding type and a feature of his herd just now is the choice lot of spring heifers and gilts, including some choice herd material.

AYRSHIRE CATTLE.

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.

WHEN WRITING ADVERTISERS, MENTION KANSAS FARMER

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

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. PIGS Pure-bred, ready to wean, \$10.00 each.

JOE FOX - - - GREELEY, KANSAS

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

G. P. ANDREWS - DANVILLE, MICH.

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

KANSAS HERD

Chester Whites or O. I. C's. Big, growthy spring boars and gilts. Some by Izzy O. K. Wonder.

ARTHUR MOSSE, R. 5, Leavenworth, Kan.

CHOICE CHESTER WHITE BOARS Mature Stock at farmers' prices.

Joseph Morin - - Orleans, Nebraska

HORSES AND MULES.



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REGISTERED PERCHERONS. 39 heavy 3 and 4 yr. stallions, 68 rugged 2 yr. olds, 41 yearlings. Can spare 25 reg. mares. 24 reg. Belgian stallions. Sires and dams from France and Belgium.

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Breeders' Directory

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Geo. A. Deitrich, Carbondale, Kan.

D. J. White, Clements, Kan.

SHORTHORNS.

C. H. White, Burlington, Kan.

RED POLLED CATTLE.

Mahlon Groenmiller, Pomona, Kansas.

HOLSTEINS.

C. E. Bean, Garnett, Kansas.

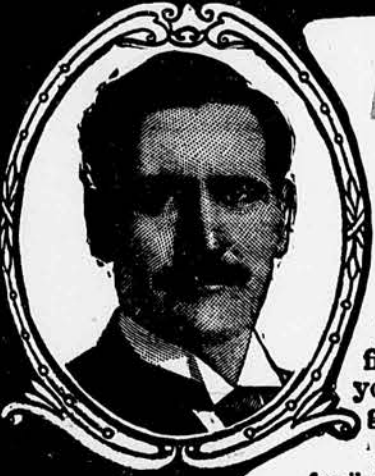
DORSET-HORN SHEEP.

E. C. LaTourrette, Route 2, Oberlin, Kan.

JERSEY CATTLE.

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

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These books are now ready to mail. I want you to get your

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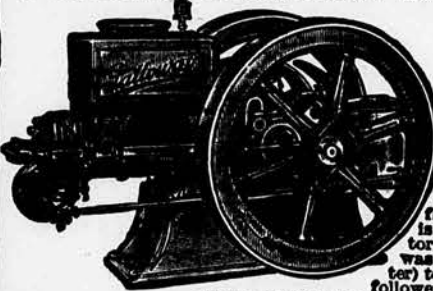


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