

KANSAS FARMER

For the improvement

The Farm and Home

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COST OF PRODUCING BEEF

Successful Cattleman Must be Good Farmer and Practice Business Methods

W. A. COCHEL, Before American National Live Stock Association

ONE of the most unsatisfactory situations revealed by an analysis of the cattle industry is the lack of accurate and reliable figures relating to the cost of producing meat animals. There are men engaged in this business whose incomes indicate that they are far above the average as business men, yet few are able to state the exact cost of maintaining animals of various ages through a period of twelve months. When pressed for a statement as to costs the question is usually evaded or answered in a general way which indicates an entire absence of accurate information.

The reason for this state of affairs is plainly evident. No two years are exactly alike, the yield per acre as well as the nutritive value of the feeds produced from year to year is variable. The amount of feed required to carry an animal through a winter that is normal may be inadequate during one that is severe, or more than ample during one that is open. Because of general industrial conditions the breeding herd, which can be considered as capital stock, may be greatly reduced or greatly enhanced in value. The percentage of calves weaned from the cows bred annually may vary from fifty to one hundred due to causes over which the cattleman has little if any control. Three years must elapse before any income whatever may be derived from a group of calves purchased for the purpose of developing a breeding herd. During this time the owner must await with an abiding faith, the condition of the market upon which his surplus is to be offered.

The Kansas Experiment Station, during the fall of 1913, purchased 100 head of high grade Hereford heifer calves to be developed as a herd of breeding cows. Accurate data has been assembled as to the kind and amount of feed consumed, losses incurred, and labor involved in their production.

The figures secured during the first winter indicate that a range-bred heifer calf weighing 325 pounds at weaning time, wintered on one pound of cottonseed meal together with all the silage and straw she will eat, will consume slightly more than twenty-five pounds of silage per day for six months, together with one-half pound of wheat straw. During the winter of 1913-14, which was one of high prices for all kinds of feeds, this cost 6.7 cents per day, or a total of \$12.17 per calf. Allowing \$4 for pasture, \$2 for labor and equipment charges, estimating interest at 7 per cent, \$2.10 per calf, and taxes at prevailing rates, or 30 cents per calf, and allowing for a 2 per cent loss during the twelve months, the total outlay or cost would be about \$51.60 one year from weaning, or when the heifer was eighteen months old.

Table II gives in detail the amounts of feed and other items included in the preceding table with the addition of the service fee, all of which make the total cost of maintenance from the fall after breeding until the calf is weaned amount to \$22.14, the cost of carrying a breeding female one year. This amount not only includes interest, labor, taxes, and other charges, but also represents quite a ma-

terial profit in the production of the crops which were fed to the cows and an excellent market for the by-products of grain farming usually practiced in the Great Plains area.

This cost of \$22.14 is based on a 100 per cent calf crop. With a 90 per cent calf crop it will be \$24.60; 80 per cent, \$27.67; 70 per cent, \$31.63; and if the calf crop is but 60 per cent, the cost will be \$36.90. These figures indicate the actual cost of producing calves under conditions usually found in the cattle growing sections of the country. No depreciation is charged against the breeding herd except for actual losses because the individuals which proved to be undesirable for any reason, were worth more on the market than their cost of production.

TABLE I—DEVELOPING BEEF COW	
Cost of heifer—fall 1914.....	\$51.60
Weight when 18 months old, 642 pounds.	
Cost of wintering—5 months.....	7.53
Cost of feed per day, \$.0502.	
Average daily ration:	
Silage.....	10.00 pounds
Stover.....	10.10 pounds
Straw.....	3.00 pounds
Meal.....	1.00 pound
Weight in spring, 723 pounds.	
Pasture rent—7 months.....	5.00
Labor and equipment charges.....	2.00
Taxes.....	.52
Interest, 7 per cent.....	3.61
	\$70.26

Cost of heifer assuming 1 per cent loss.....\$70.97

Weight, 30 months old, 928 pounds. During the second year the cost of wintering was reduced, as rougher feeds, such as stover, were used, the consumption of straw was increased, and the length of the winter feeding period was reduced from six to five months. The cost of wintering was materially reduced

due to a greater abundance of feed which affected the prices of feed as well as to the change in the ration. The heifers were bred during the summer of 1915 so as to calve in April and May, 1916.

TABLE II—MAINTAINING BEEF COW	
Cost of heifer, fall 1915.....	\$70.97
Weight 30 months old, 928 lbs.	
Cost of wintering—5 months.....	6.75
Cost of feed per day.....	\$.0449
Average daily ration:	
Alfalfa hay.....	11.1 pounds
Stover.....	14.8 pounds
Straw.....	.6 pound
Weight in spring, 931 pounds.	
Pasture rent, 7 months.....	6.00
Labor and equipment charges.....	2.00
Taxes.....	.71
Interest, 7 per cent.....	4.97
Loss, 1 per cent.....	.71
Service fee for calf at side.....	1.00
	\$22.14

It may be noticed that these cattle were kept growing all of the time and that the total amount of feed consumed during the three years, other than that actually produced on the farm, was \$5.09 at prices prevailing when fed or \$5.75 at present prices. The pasture charge is a little higher than is usually allowed in Western Kansas but probably not more than enough to include maintenance of fences, salt, and other expenses usually incurred in grazing.

The cost is materially influenced by the percentage of calves weaned. This is one item which should be carefully considered by those whose calf crops fall below 80 per cent, as it may mean the difference between profits and losses for a series of years.

These results have been secured under the most practical conditions, although material reductions might have followed from the extensive use of wheat pasture, limiting the feeding to stormy

weather, and other economies which the assembling of accurate data prohibited. The farmer or ranchman could have taken advantage of these conditions which the purpose of the experiment made inadvisable.

When cattle have paid for the feed, labor, interest on the investment, and taxes involved in their production, the return to their owner has been adequate. Any further profit must be due to the business ability of the man. In the past when the cost of production was disregarded, the cattle industry was one in which speculation had a large part. In the future, the investment will be considered to the exclusion, for the most part, of huge profits and similar losses.

Agricultural colleges, agricultural journals, and other sources of information have been teaching that live stock should have a large place in the farming sections of the United States because feeding live stock makes farming more productive. That live stock feeding is essential to the maintenance of soil fertility, or that crop production is dependent upon the return to the soil of the plant food which is removed in the growing of crops has become almost a platitude. It is time that the cattlemen begin to look at the other side of the story and to realize that good farming is the basis upon which profitable live stock breeding and feeding industries will be based in the future. We can no longer afford to depend entirely upon the grass which Nature has so abundantly provided, but must of necessity supplement our ranges and pastures with feeds cheaply produced which will prevent loss during the winter or in the summer when climatic conditions are unfavorable.

The most successful cattleman of the future will be he who studies and works out means and methods of increasing the carrying capacity of his grass lands, grows crops which will yield the largest amount of food nutrients per acre, harvests and stores his feed in such manner as to preserve its feeding value, and supplements it with such concentrates as will increase its efficiency. In addition to this ability as a farmer and feeder he will possess a sufficient amount of knowledge of live stock to select the type of cattle which will most economically turn the products of the soil into meat and at the same time be desirable either to the feeder because of their ability to finish into desirable market animals, or to the packer because of their ability to yield attractive carcasses. Another factor which will contribute to success is a study of market conditions so that his product may be cashed at a time when most in demand.

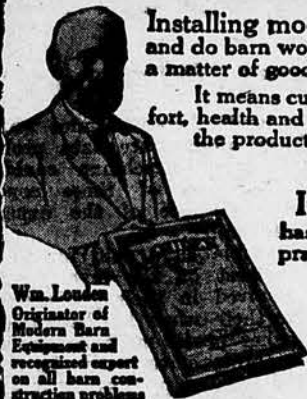
The cattleman who thoroughly masters all phases of the business and changes his methods and ideas as new conditions confront him, will be able to compete successfully with his fellowman who clings to the old ways, and has a most promising future before him. His business is one which demands a large investment of brains as well as capital upon which he will be able to realize if he has both available. The cost of producing beef, although never constant, may be reduced materially by the application of business methods to the problem.



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HIGHWAY LEGISLATION

No legislation that is being considered at the present session of the Kansas legislature is of greater importance than that having to do with the administration of road and bridge work. Now that the federal government has taken a hand in road building and is allotting funds to the different states to be used in building and maintaining public highways, the need for some modern road legislation becomes almost imperative.

A most comprehensive road bill has been presented and is now in the hands of the committees in the House and Senate. This is legislation affecting every person in the state, and we would urge that readers of KANSAS FARMER thoroughly inform themselves as to the details of this bill, before forming their opinions as to its merit. No one needs good roads more than do farmers who must haul everything they produce from the farm to the nearest railway station and many of their supplies from the station to the farm.

The proposed bill, which is known as the Administration Bill, is worked out in the main along the plan of the Iowa highway law. It provides for a state highway commission to consist of the governor, the secretary of the State Board of Agriculture, and the dean of engineering at the State Agricultural College. This commission is to employ a competent state highway engineer and such other help as may be necessary. Advantage will be taken of the engineering laboratory already equipped at the college, for doing such testing of materials as may be necessary. The commission will also have the use of the drafting rooms. The county organization consists of the county commissioners and a county engineer, this engineer to be employed by the commissioners but approved by the state highway engineer. In the townships the trustees employ a road overseer who directs the road work of the township, receiving from the county engineer standardized plans and specifications for the work. Uniform systems of records and accounts are to be provided by the state commission through its engineer.

While the state, county and township organizations are linked together in this manner the state has no authority over county or township funds. The people who pay the bills make their own levies and expend them. The bill also provides for the complete separation of road levies and bridge levies. In the use of the federal money it is required by the national government that it be expended under the direction of the state highway commission.

A separate bridge bill has been presented. The purpose of this bill is to make it certain that people in different sections of the state get what they pay for in the bridges they build. The bridge question has been the cause of a great many complications. In the neighborhood of six million dollars will be spent in this state on bridges during the coming year. A committee of the New York legislature which has been investigating the bridge question, makes the report that Kansas stands second among the states in the amount of money it will expend on bridge work this year.

This is most important legislation and should be worked out solely from the standpoint of the interest of those who pay the bills and use the roads. In the neighborhood of 35 million dollars, all told, will be spent in Kansas on roads and bridges this year, and we certainly should demand that it be used in the most economical manner possible.

The proposed bills may be reported out of the committees by the time this issue of KANSAS FARMER reaches our readers. We would again urge that these bills be studied with open minds as to their effect on the administration of the road and bridge work of the state.

SEEDS FOR SPRING PLANTING

In a very few weeks it will be time to begin spring work in the fields. The first step in crop production is to plant good, clean seed of adapted varieties. Securing this seed is one of the jobs that can be done now. The forehanded farmer will do this and not wait until the rush of spring work is on.

Some seeds should be tested for germination before being planted. Others must be inspected for purity and freedom from seeds of noxious weeds. Such weeds are often introduced as a result of planting seeds from other localities without making sure they are free from seeds of this kind. By having samples in advance of the purchase it is possible to know the purity of the seed. Some kinds of weed seeds can be fanned or screened out, while others are of such character as to make it almost impossible to separate them from the seed of the crop.

Seed dealers will welcome this opportunity to furnish samples and thus be able to do much of their seed business in advance of the planting season. They have their catalogs prepared and are ready to send them out to those needing seed for spring planting.

Some kinds of staple seeds are likely to be very scarce the coming season. Conditions were very unfavorable last year for maturing seed of kafir, milo, and others of the sorghums. Corn, likewise, was not a good crop over much of Kansas, and home-grown seed corn will be none too plentiful. This shortage of staple seeds makes it of more than usual importance to begin the search for seed early in the season. All kinds of grains are high in price and for this reason, if for no other, it will pay to give more than the usual amount of attention to securing seed suitable for planting, as long as possible in advance of the planting season.

It is now up to the Supreme Court of Kansas to decide whether the constitution prohibits the state from taking any part in road-building or not. A bill was passed as an emergency measure during the first week of the present session, which provided for the state doing such work in co-operation with the counties. Shawnee County had just completed a piece of road work and made application to the state auditor for funds to pay part of the expense. Of course the claim was not allowed and proceedings were at once started which will bring it to the Supreme Court before the present session closes. If the court rules that the commonly accepted interpretation of the constitution is correct, a constitutional amendment will be the only means of permitting the state to take advantage of the federal road funds allotted to this state. This will postpone taking advantage of these funds for at least two years.

FARM LOAN BANK TO WICHITA

The Farm Loan Bank for the district including Kansas goes to Wichita. This announcement has just been made by the Federal Farm Loan Board. The other states included in this district are Oklahoma, Colorado, and New Mexico.

Each bank will start with a capital of \$750,000, and it is expected that these banks will be ready to make loans under the conditions of the new act in the near future.

Through its State Master, B. Needham, and a committee, the grange organization of Kansas is keeping a watchful eye on proposed legislation as it affects the interests of the farmer. An office headquarters has been established for this work in the State Horticultural Society rooms. Mr. Needham is also looking after routine state grange matters while attending to the work of watching legislation. He has just signed eighteen charters for new local granges.

SHALL WE TAX COLORED OLEO?

The oleomargarine interests are again attempting to have the ten-cent tax on colored oleomargarine removed or lowered to one cent a pound. The argument advanced is that it will help to reduce the high cost of living. The falsity of this argument becomes apparent when it is recalled that several years ago a leading oleo manufacturer testified before the Agricultural Committee in Congress that uncolored oleo was of better quality than the colored, admitting that lower grade oils could be used when the product was colored. The same testimony was brought out in Pennsylvania a few years ago, when the president of the State Federation of Labor stated to the committee of the legislature which was investigating the matter, that the uncolored oleo sold cheaper and was a better grade than the colored.

The real purpose of this demand for a reduction of the federal tax on colored oleo, is to enable the manufacturers of the product to add millions to their profits instead of to reduce the cost of living.

Dairy interests in Kansas are drafting a bill to present to the legislature, its purpose being to prevent oleo from masquerading as butter on the tables of hotels, restaurants, and boarding houses.

Dairymen should be vitally interested in oleo legislation both in Congress and in our own state. Any legislative enactment which makes it easy for the counterfeit product to pass as butter, is touching the pocketbook of the producer of the genuine article and will not have the slightest effect in lowering the cost of living of those who must use oleo because it is cheaper than butter.

Producers of dairy products should watch this legislation closely and write to their legislators in the state and to their members of Congress, urging them to so legislate as to require oleo to sell strictly on its merit and not in competition with butter.

MACHINERY AND TRACTOR SHOW

The use of machinery is becoming more and more important in farming. Exhibitions of farm machinery are increasing in popularity because they furnish an opportunity for studying the many pieces of equipment being offered for sale. Such an exhibition will be held in Wichita, February 22, 23, and 24. For years this has been held as the threshermen's convention. It has been widened in its scope and is now making an exhibit of power farm machinery a feature of the convention. All the big machinery distributing houses of Wichita join in conducting this show. The Wichita Thresher and Tractor Club, under whose management the show is held, will give an entertainment program to all visitors on two nights of the convention.

A large number of firms have already made entries and the indications are that this display of farm machinery will be one of the biggest ever made in the Southwest.

A fruit-growers' meeting is to be held in connection with the Farm and Home Week at Manhattan this year. Fruit-growers who attend are to be the guests of the horticultural department of the college at a noonday luncheon, Thursday, February 8, at the fruit packing house. A very practical and instructive program has been prepared. The first day, February 6, will be devoted to the nursery crop and the young orchard, second day to fruit pruning and spraying. The third day there will be a demonstration of grading, packing and storage. Gardening and potato-growing will also be taken up the third day of the program. The growing of fruit and garden produce receives too little attention on many farms in Kansas. This meeting will furnish an excellent opportunity to become familiar with orchard and garden practices.

EUROPEAN FARMING METHODS

In his address at the recent annual meeting of the State Board of Agriculture, W. R. Mellor, of Nebraska, gave an interesting account of his observations of European farming methods. He said:

"The so-called 'European farms' are very small tracts of land, many of them being 50 feet by 300 or 400 feet, which a farmer in this western country would call only a truck garden. The minuteness of the area to be cultivated by the person practically prohibits the use of machinery for the planting or gathering of the crops raised. This has a tendency to make the entire country a veritable garden. This accounts for the rapture of the tourist over the beauty of the country, as not a weed is to be seen. The work is done in nearly every instance by women.

"The tracts for farming being so small cause the people to live in little villages some three or four miles apart, and those who attend to the farm duties walk out from the town to the tract of land farmed, over beautifully macadamized roads, used very little for vehicle travel. Also, the limited size of the so-called farm does away with the necessity for farm animals as well as machinery.

"In view of these facts, the average condition of the farmers of Europe is restricted as to prosperity in comparison with those of the great agricultural districts of the United States. These European farmers are compelled to be exponents of 'intensified' farming—a sweet idea to many of our speakers—but I am glad that I live in a country where broad prairies are sufficient for the expanse of freedom so necessary for larger development which permits the pursuit of agriculture in its broader sense with greater possibilities for securing returns on industry. Our present situation permits the escape from the conditions of the European restricted peasantry and offers a better opportunity for honor and competency for old age. These deductions lead me to believe that what we want in this section of the country is not 'intensive' but 'better' farming."

The man yield is very low where the type of intensive farming observed by Mr. Mellor is practiced. The American farmer is the best farmer in the world if we consider man yields. The better farming suggested means keeping up the man yields and thus maintaining the high standard of living of the American farm family.

FARM ENGINEERING PROGRAM

The farm engineering program that will be given at the agricultural college by the division of engineering, Farm and Home Week, February 5 to 10, is of special interest to those who are thinking about building new houses, installing lighting systems, sewage disposal plants, or are the owners of tractors and automobiles.

On Tuesday, February 6, the subject of concrete on the farm, the materials and methods used in concrete construction, and demonstrations with concrete machinery, block machines and post molds will be given. On Wednesday, the water supply for the farm house, and sewage disposal for country-homes, will be handled, and afternoon demonstrations given on the manufacture and use of iron and steel, including the welding, hardening and tempering of tool steel.

The stationary gas engine, the care and home repair of automobiles and carburetors and ignition apparatus will be fully explained on Thursday and Friday. While the program, which is under the direction of Dean A. A. Potter, will be given largely by members of the division of engineering, representatives of some of the larger manufacturing companies will assist in the demonstrations.

SOIL STUDIES IMPORTANT

Cloud County Farm Bureau Conducts Demonstrations in Soil Fertility

By EDW. C. JOHNSON, K. S. A. C.

ONE of the first three things done by the county agricultural agent in Cloud County, Kansas, was to make a study of the different soil formations. Last April a general soil outline or survey was made of the four principal formations of the county. At the time this study was being made of the soil formations, samples were taken from the principal soil types of the prairie sod and of the land adjoining that had been continuously cropped for



SAMPLES OF CULTIVATED AND SOD SOILS OF FOUR SOIL TYPES OF COUNTY

thirty-five years. Meetings were held in the school houses in the evenings at the end of each day's work. The aggregate samples of soil were exhibited at each meeting. The general sentiment of the farmers at these meetings was that

Loss of Organic Matter and Nitrogen

Soil Type	ORGANIC MATTER			NITROGEN		
	Sod	Cropped	Loss	Sod	Cropped	Loss
Limestone-Silt loam	106,000	77,600	26.8%	4,100	3,440	16.1%*
Limestone-Clay loam	102,400	70,400	31.3	3,880	2,900	25.3
Wind drift-Silt loam	95,200	68,800	27.8	3,580	2,540	20.6
Sandstone-Sandy loam	89,200	57,600	35.5	3,300	2,200	33.3

*Alfalfa six years five years ago.

The results are given in pounds in one acre seven inches deep. One acre of soil seven inches deep weighs 2,000,000 pounds. The figures are from analyses of Cloud County soils made under the direction of the farm bureau.

the soils of Cloud County were not losing fertility but the unfavorable growing seasons were the whole cause for the decrease in crop yields.

To demonstrate the facts in the case composite samples were taken of the top seven inches of the prairie sod and of the cropped soil of the four principal soil types. These samples were sent to the Chemistry Department of the Agricultural College for analysis of the percentage of organic matter and nitrogen. The analyses of the samples showed the prairie sod of the least productive soil to contain 31 per cent more organic matter than the same kind of soil that had been continuously cropped for thirty-five years. The prairie sod of the most productive soil contained 35 per cent more organic matter than the continuously cropped soil.

Cloud County is one of the prosperous Kansas counties that has had a large natural store of soil fertility. The depth to which the decayed roots in the prairie sod extended shows that Nature formed deep soils in this section of Kansas. However, thirty to fifty years of continuous tillage has lessened the depth of these soils and they are now only one-half to two-thirds as deep as in the prairie sod. Then, in addition to this loss, the analyses show that the same quantity of prairie sod contains 21 to 35 per cent more organic matter than the continuously cropped land.

The soil that had only lost 21 per cent

of the organic matter had grown alfalfa six years followed by corn the past five years. The other soils had been cropped continuously to corn and wheat for thirty-five years.

The continued high production of the crops in that county in favorable seasons has led many to think that the fertility of the soil was not being lowered. In order to get the facts clearly before the farmers of the county, Karl Knaus, the agricultural agent, arranged another series of farm and school house meetings October 30 to November 3. M. J. Bower, soil specialist of the Extension Division of the Agricultural College, who assisted Mr. Knaus in the April meetings, also assisted with this series of meetings. The soil samples that were collected in the spring, with the analysis of each sample attached, were exhibited at each meeting. The local soil problems were discussed, practical methods of solving them were suggested. The suggestions were followed by field demonstrations to show the points brought out in the discussion.

Those who attended this last series of meetings offered no argument when confronted with the loss of organic matter and nitrogen, but instead asked many questions about the different methods of increasing the organic matter in the soil. There were also a large number of suggestions and experiences given by the several farmers present at each meeting, each session being an open

family meeting where everyone expressed his own ideas.

A soil exhibit for Cloud County was prepared during the odd moments between meetings, and placed in the office of the farm bureau. The exhibit consists of four columns of soil placed in wooden cases three feet long, showing the structure and general character of the four principal soil types of the county in their natural state. The soil columns are exhibits of the same soil types of which the analyses were made. The county map showing the areas of the different soil formations hangs above the soil columns with a string attached to each column and to the center of the area to which it belongs. Above the soil map is the chart showing in a graphic manner the total amount of organic matter and nitrogen in the first seven inches of each acre of the prairie sod and of the cropped soil of each soil type. The loss is given in percentages at the top of the chart, and is shown graphically by comparison of the total amounts in the prairie sod and cropped soils. On the floor by the soil columns are boxes containing small samples of the soils which were analyzed. A string connects each pair to the column of the same soil type, thence to the place on the map whence derived, thence to the analysis of that type upon the charts. The cuts on this page show this arrangement of charts and exhibits in the farm bureau office.

The lighter color and the less friable and granular condition of the samples of cultivated soils also plainly show the loss of organic matter. Every man that calls at the office has the soil problems of the county brought to his attention by means of this arrangement of charts and samples.

The soil problems of this county will now be given further consideration by establishing demonstrations on each soil type for the purpose of determining the most practical method of returning organic matter to the soil. These will continue for several years in the different communities.

It is realized by the farmers of this county that the first big problem of the farm bureau is to assist in the conservation of the natural store of wealth in Cloud County soils. By following the plan given, the bureau hopes to bring about some valuable results.

Essentials Of Good Hog House

THERE are some general considerations in hog house construction that should be kept in mind, whatever the type of shelter built.

A hog house must, first of all, be warm. Especially do the newly farrowed pigs require protection from the cold. Without good warm shelter, it would be impossible to make a success of early pigs. Even stock hogs thrive best when they are not compelled to shiver on account of cold and burn up what feed they eat to keep them warm. The wintering sow also makes good use of a warm bed. In fact, all classes of hogs will make good returns for reasonably warm shelter. Sudden changes of temperature should always be avoided.

Hogs will not thrive in damp, musty quarters. The dripping of condensed moisture from the roof or walls of hog houses is always objectionable. The floor should be so built as to keep dry and the roof and walls should be tight.

Sunlight is the universal germ destroyer. It promotes dryness and warmth in the hog house. Direct sunlight has an invigorating effect on young pigs. The sun should shine on every part of the inside of the house at some time during the day. During the farrowing months—February, March and April—it is especially desirable that the farrowing pens be well sunned, and whenever possible advantage should be taken of the forenoon sun. The night is likely to have a weakening and depressing effect on little pigs, and the morning sun will give them new life and vigor at a time when it is most needed.

Hogs need plenty of fresh, pure air,

but should not be subjected to cold drafts.

It is imperative that the hog house be cleaned and disinfected thoroughly. Cracks and crevices harbor filth and this encourages disease. The germs causing white scours, contagious sore mouth, cholera, as well as the parasitic troubles such as lice, worms, and mange, are all harbored by the filth which accumulates in a house that cannot be easily and thoroughly cleaned. Freedom from dust is absolutely necessary if hog houses are to be kept in a sanitary condition. Dust is indirectly responsible for many of the ills to which hogs are susceptible. It should always be borne in mind that hogs are more apt to become diseased from insanitary surroundings than any other domestic animal. They are so constructed that they eat, breathe and drink close to the ground where infection in some form is ever present. Regular removal of the litter and manure from the hog house is encouraged by having roof doors and gable windows in the small houses. The easier it is to clean the house the more likely it is to be kept clean.

The safety and comfort of the sow and litter are important points. High door sills over which the sows must climb, frequently cause abortion. Rough, uneven floors cause much discomfort to the heavy brood sow. Slippery floors frequently cause accidents. Narrow or low doorways through which the sows must squeeze or crawl, are objectionable. Properly placed fenders will save the lives of suckling pigs, and should always be used.

The matter of labor is always an item demanding consideration. No set rules can be laid down that will apply to all conditions, but the following points suggested by the authors of Bulletin 152 of the Iowa Experiment Station will be helpful in planning to reduce the labor of caring for the hog to the minimum:

Roof doors in small houses and alleys in large houses for quick and easy feeding, removal of litter or manures, and handling of herd.

Bins for storage of feeds.

Doors and windows which open or close easily and quickly.

Room for supplies and appliances, such as veterinary medicines and instruments, feed cooker, water heater, stove, sleeping cot, and so on.

Abundant water supply for drinking and flushing.

Ventilators, readily adjustable.

Litter carriers for removing manure.

Shade devices, handily managed.

Attached runners, for quick moving of small houses.

Dipping tank, in or near house.

Troughs arranged so as to be filled and cleaned with dispatch without interference from hogs.

Feeding floor, located in or near by the house.

Breeding crate and ringing chute under cover and near at hand, for winter service especially.

Tile drainage for flush water, which may be conserved by running into farm liquid manure tank.

Minor equipment, such as hurdles,

automatic waterers, self-feeders, barrel or other storage for slops, and other devices.

In locating the farrowing houses it is a saving of labor to have them near the supply of bedding and water. An open southern or southeastern slope is the most desirable location and it is a distinct advantage if the soil is somewhat sandy, as heavy clay or gumbo soils do not absorb the surface water and are apt to become muddy.

Diversified Farm Pays Best

A well diversified business pays best for the man operating a general farm. It will pay better during a long period to have several main sources of income rather than just one. In some farm surveys recently made in Ohio the average labor income on a number of farms where there was but one or no main source of income was but \$227. Where there were two main sources of income, the labor income was \$551; where there were three it was \$761; and where there were four or more it was \$1,029. The labor income is what the farm furnishes the operator for his labor and management after paying all farm expenses and after deducting 5 per cent on capital invested. In addition the family has what the farm contributes toward the living.

In buying prize corn at corn shows be sure that it is adapted to the community where it is to be planted. Otherwise it probably will not prove as good as seed corn selected on the home farm.

Why Breed Draft Horses

The danger of overproduction of horses is remote. It costs more to produce them than any other class of live stock. For that reason many farmers sit back and proclaim that it doesn't pay to raise horses; that there never was a time when the horse market was so dull as now; that the motor truck and tractor have killed the horse business and the horse is a thing of the past. Some people believe all of this, even though the truth of the matter is the opposite. Those who have allowed such thoughts to direct their operations for the past five to ten years will soon see the error of their ways. It takes time to make much headway in the horse business. Five years are needed to grow a horse. At best one should not expect more than two colts from three mares as an average per year. Moreover, not more than 16 per cent of our farmers are raising colts. Not long hence the American farmer will wake up only to learn that a great opportunity has passed. The next ten years is bound to see the greatest demand for horseflesh the world has ever known. It can't be met on short notice. The man who is breeding every mare old enough to the best stallion available and is taking proper care of the offspring, is the man who is sure to be rewarded. There are plenty of men who have bought and paid for farms within the past ten years by their pure-bred draft mares. In the same community there are farmers who are no better off financially than they were a decade ago because they failed to foresee the profits from using the right kind of horses in their farm work. The men who have made money and who are going to reap the fruits of their efforts in the future are those who early saw the undeniable need for heavy draft horses for farm work; who bred that kind and who will continue to do so without a halt.

Why is there a general tendency among farmers to buy their horses rather than to raise them? Farmers say, "I don't want to be bothered with a colt. When I get ready to plant corn or cut wheat, I want horses ready to work; I don't want to have to pay \$25 for a little scrub colt and then have all the bother to raise it, besides." Men with such ideas have to buy a horse or two nearly every spring at a cost of \$150 to \$250 a head. Instead of having a horse or two to buy, better have some to sell. There is no unusual training necessary. Any farmer can raise good horses if he will only use common sense. He can even succeed with pure-bred drafters if he will select good parent stock, take reasonably good care of them and develop the offspring rightly. Therein lies the secret of success.

A careful consideration of the situation cannot fail to convince one that there is no danger of an over-production of heavy draft horses for our farm and city uses. Almost a million horses and mules have been exported from this country in the last twenty-seven months for use in war. These figures show almost one horse or mule taken for every twenty-five left. As surely as this war continues another two years, good farm horses will be at a premium; and even after the war is over, exports will not cease, for thousands of horses will be needed to start European agriculture anew.

It follows, as a necessary consequence, that the demand for pure-bred draft horses for breeding purposes will continue to be good. Importations have been, to all practical purposes, cut off. We are producing only twelve or thirteen thousand pure-bred draft horses eligible to registry. This means, in substance, that we are producing only five or six thousand stallions fit for service per year, when we need at least seven or eight thousand. An excess of demand over supply makes good prices, and the present is no exception.

The farmer who uses heavy draft mares does better farm work, and raises bigger crops, than he who relies on small horses or tractors. Furthermore, he has horses to sell each spring, at a profit. If you don't believe it, go ask any country banker for the name of the most successful farmers in his neighborhood. You will find them to be live stock farmers, and men who keep and use heavy draft mares, either grade or pure-bred, in their farm work.—WAYNE DINS-MORE.

If it has not been done, now is a good time to burn the dead and diseased wood in the orchard, as well as waste fruit and other litter which may harbor diseases or insect pests.



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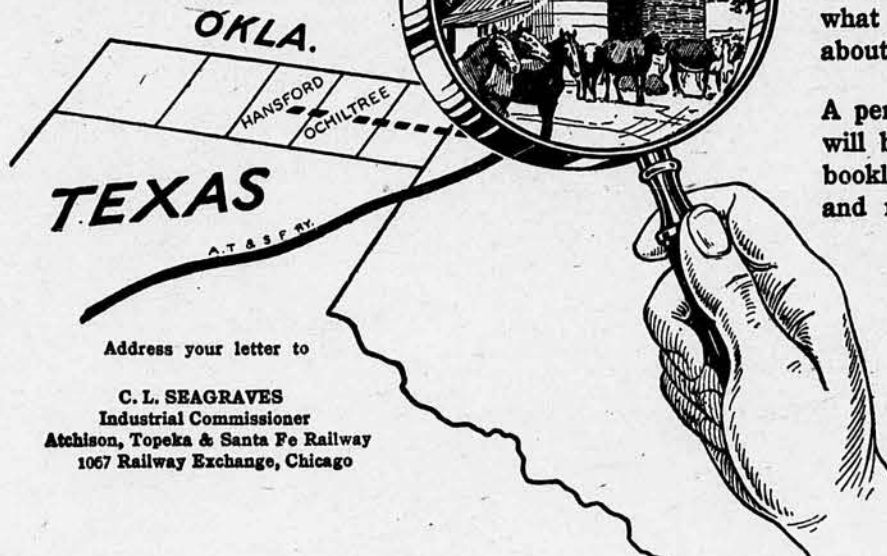
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Kansas Farmer Dairy Club

Fodder and Stover Not Same

SOME of our members do not fully
understand the classification of
feed as given in the uniform price
schedule. Kafir or cane that was
planted thick for forage should be listed
under the heading "Hay from Sorghums"
and given a value of \$4 a ton. Forage
of this kind has greater feed value than
the fodder part of corn or kafir grown
for grain. Fodder from which the ears
or the heads have been removed is in-
cluded under the classification "All
Stovers". This kind of roughage is
given a value of \$2 a ton. There is
always considerable waste in feeding
it. The stalks are large and have little
feed value in the dry form. The cows
will eat the leaves and fine parts only.

In entering the roughage on the feed
record distinguish between the kind of
fodder that is of this coarse, poor char-
acter, and the kind grown specially for
forage purposes. Corn or kafir stover
is poor milk cow feed at best and a good
cow should not be compelled to depend
upon it as the only roughage. The fod-
der grown as hay or planted so thickly
that the stems are fine, is much more
nutritious. Cane or kafir hay cut at
the right time and properly cured will
be eaten with very little waste. This
kind of feed is very low in protein but
can be used as roughage for milk cows
providing enough protein is supplied in
the grain ration by feeding some linseed
oil meal or cottonseed meal.

The use of the term "stover" is per-
haps not generally understood. There
is so much difference between the feed
left when the ears of corn or the heads
of kafir are taken from the stalks, that
the term "stover" has been adopted to
describe fodder of this kind. The term
"fodder" is used when speaking of the
whole plant, including the ears or the
heads. The term "corn fodder", in the
strict sense, thus means corn cut and
shocked and fed to stock without husk-
ing. When the corn is husked out the
stalks become "stover" and the same
term applies to shocked kafir after it
has been headed.

It is necessary to make a distinction
between stover and hay from sorghums
because of their different values. As
far as we know, none of the club mem-
bers are feeding corn fodder, using these
terms to mean the whole plant including
the grain. It would be impossible to
fix a uniform price for fodder and grain
together as this price would depend
entirely on the amount of grain con-
tained in the fodder.

With this explanation we hope you
will be able to enter these two classes
of rough feed correctly on your feed
records.

Remember, if you are feeding corn
fodder from which the ears have been
removed, you should write in a heading

"corn stover" and put down the amount
fed each day under it, and figure it at
the price of \$2 a ton. If you are feed-
ing cane or kafir hay or fine fodder from
either of these crops, you should state
in one of the blank spaces at the top
of the feed record, which you are feed-
ing and figure it at a price of \$4 a ton.

Her Cow Met With Accident

Am sorry for not writing sooner, but
I was almost too busy. I have started
to feed my cow linseed meal. I wanted
to feed it long ago but I could not get
it. I am feeding her now the way you
advised me—six pounds chop, three
pounds bran, and one and one-half
pounds linseed meal.

In this month's record you will find
that for a few days my cow gave only
from 26 to 30 pounds of milk a day.
The reason for this is that she got one
quarter of her udder hurt some way.
She is giving bloody milk in that quar-
ter now and we cannot use it. I think
it will be all right in a few days.

I wish you and the members of the
Dairy Club a Merry Christmas and a
Happy New Year.—ELISE REGIER, But-
ler County.

Has Sold His Pigs

I thought I had better write and tell
you that I failed to send my milk sam-
ple December 15. I was so busy that I
forgot all about it until the next day.
As the seventeenth was Sunday, I
couldn't send it until Monday, and Mon-
day I missed the mail carrier, so it
didn't get off until Tuesday.

I sold my three pigs which I wrote
you July 4 I was going to buy, and re-
ceived \$30.24 for them, and deposited it
on my cow. I have been keeping ac-
count of all my profit so I would know
how much she made in the year.

I am feeding my cow six pounds bran,
one pound linseed oil meal and about
twenty pounds of corn fodder, as we
haven't much hay.—PAUL STUDDARD,
Leavenworth County.

Effect of Straining on Test

Enclosed you will find my record for
November. And I am sending you some
pictures I have had taken. They are
not very good but maybe you can get a
print from one of them.

I am feeding my cow two parts corn
and one part oil meal and one part bran.
She is running on a timothy and clover
meadow and in the stalk fields. We
have about ninety acres of stalks. I
put my cow on this pasture the first of
November.

I saw my letter in KANSAS FARMER. I
received your letter about my cow's milk
test. In regard to the meeting in Leav-

AN IMPORTANT REMINDER

AS THE December feed and milk records have been received we have
written each one of our Dairy Club members. Some of these letters
did not require answers, but many of them should have been
answered promptly because they had an important bearing on your
December records.

If the letter we wrote you did not call for an answer, or if it did
and you have already answered it, this reminder is not intended for you.

If your letter did require an answer, you should look up the infor-
mation we asked for and write us at once. Remember that when we
write you for more information about your records or your work, our
only object is to help you do better work in the club and make a better
record. If you do not answer our questions they must go unanswered,
for no one can answer them but you. When we take the trouble to write
you about these matters, we expect to receive an answer from you, and
therefore we do not enter your record, but hold it out until we hear from
you, so that we can make the correction on the record when you make
the explanation to us.

It would be much easier and much more convenient for us to enter
all records as they are received, but this we do not do. The figures on
each record are verified and if mistakes are found they are corrected at
once if we can do this without writing you. When we do have to write
you, you should show your interest by giving us the information promptly
that will help us to make these corrections.

We are receiving many fine letters from many of you, and we know
the rest of you could write good ones and could give us the help we need
to enter your records correctly, if you would only do it as soon as you
receive our request for your help.

For some of our members we are now holding out records for two
or three months back because we cannot enter them until we get some
more information from these members. We have written three and four
times to some without being able to get a reply.

Won't you all please try to help us just all you can by being sure
that all the information needed is given on your records, and if you should
overlook anything and we write you, by supplying the needed information
as soon after our letter is received as you can get it ready to send to us?

enworth, I will meet you there and I thank you for your invitation.

My cow's milk tested a per cent better this month than it did last month. I did not strain the milk I sent in to be tested in November, but I strained the October milk several times. I read in a paper where it said that straining milk would lower the test, so it proved to me it was true.

I received one of the De Laval Dairy Handbooks not long ago and I found it to be a very valuable book. — ERNEST ASBURY, Leavenworth County.

Straining the milk will not affect the test. Ordinarily, however, the sample should be taken before the milk is strained. As soon as the cow is milked the milk should be thoroughly mixed by pouring it two or three times from one pail to another, and the sample should be dipped out immediately. If sticks and particles of hay or dirt should have fallen into the milk, they should be strained out as quickly as possible. You need not fear, however, that this straining will lower your test.

Uniform Price for Butter Fat

We wonder if some of you have not forgotten that your product is being figured at a uniform price. In order to give all an equal chance we are using the average Elgin price for butter fat each month, in figuring the total value of your cow's product for the month. Some of you are selling whole milk or butter, and actually get more for your butter fat, but to make it fair for those who do not have a special market the uniform price is being used in figuring the results for the club records.

You who have a chance to sell for the higher price will be able to pay off your notes more quickly and will be better off financially, but if you are not getting as much for your butter fat as is some other member in the club, you will have the same chance so far as the club records go.

Fat in Pound of Butter

One of our Labette County members asks how much butter a pound of butter fat will make.

This matter is controlled by the U. S. Government. A pound of butter represents 100 per cent, and the law states that every pound of butter must contain 80 per cent butter fat, not over 16 per cent moisture, the salt, casein and ash making up the other 4 per cent. That is, in every 100 pounds of butter there must be 80 pounds of butter fat, not more than 16 pounds of water or moisture, and not more than 4 pounds of salt, casein and ash. Those who sell butter not meeting these government requirements are liable to a heavy penalty.

Breed for Fall Calves

Cows calving in the fall not only produce more butter fat, but produce the larger part of it at a time when it is most valuable. Probably the most profitable months for cows to freshen are October and the early part of November. In order to do this, they should be bred during January or early in February.

Cows freshening in the winter can be turned out on pasture when the milk flow begins to slacken and needs the stimulation of succulent feed. The calf is carried through the winter on milk and by spring is able to make better use of pasture. On the other hand, a spring calf is carried through the pasture season on milk and has to be put on dry feed during the winter.

At the Ohio Experiment Station some calves born in the fall were raised for about \$5 less than others born in the spring. Under average farm conditions this difference would be even greater, as no grain would be fed to fall-born calves on pasture, while those at the station were given grain because of a shortage of pasture that season.

The fall calf must have good shelter and be given a little better care than the spring calf, but there is more time in winter to do the extra chores.

Terry Junkins, of Miami County, says he has always made more profit feeding hogs when feeds were high in price than when they were cheap. The first of December he was feeding 105 hogs a ration made up of 350 pounds of corn, 50 pounds of shorts, and 50 pounds of tankage, and they were making profitable gains. Later he fed all the corn they would eat and enough shorts and tankage to properly balance it.

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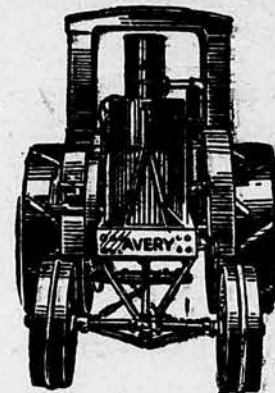
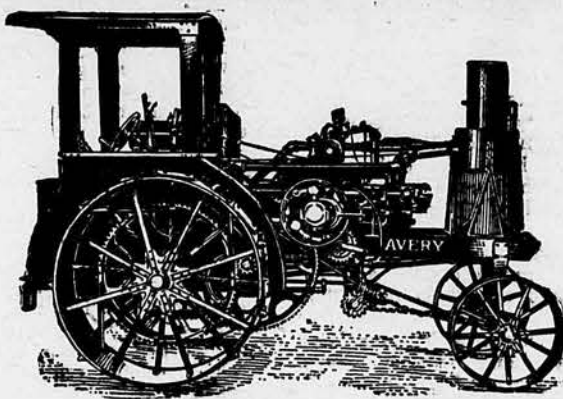
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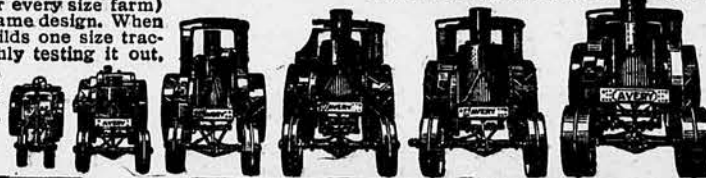
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This Liberal Offer**

Readers of KANSAS FARMER who have not taken advantage of the very liberal offer made by Mr. C. E. Warner of the Union Foundry & Machine Co., of Ottawa, Kansas, should do so at once.

Mr. Warner recently published an advertisement in this paper offering to send a brand-new, Perfection Straw Spreader on 60 days' trial to any responsible farmer—in order to prove to farmers in every community that the Perfection is the one implement every farmer who has spare straw stacks should own.

Your straw stacks are worth \$3.00 a ton as fertilizer if properly spread. You can make an additional profit of at least \$2.00 per ton for the spreading. Farmers who spread straw have found it increases their crop returns from \$5.00 to \$7.00 per acre.

Spreading straw is an easy proposition with a "Perfection" Straw Spreader. You can easily cover twenty acres a day. Do you know any easier way to make money—say you have enough straw to cover eighty acres—it is sure to make you at least \$5.00 an acre—more likely it will be \$7.00 or more an acre.



Farmers who have used the Perfection Spreader know beyond any doubt that it is a money-maker—Ed Morton, Ralph Rudd, Lee Miller are all Kansas farmers who say they have profited at least \$500 a year from the Perfection.

Ben McKay and Bob Bruner of Nebraska increased their wheat crops nearly five bushels an acre this year—a profit of nearly \$7.00, for they got \$1.50 for their wheat.

Lafe Baum of Idaho, C. O. McCain of Oregon, Art Newcastle of Oklahoma, Sid Leaman of Montana, Floyd Newcomb of Missouri all report big gains.

Why do without a straw spreader any longer? Mr. Warner has offered to send you one to use for sixty days to prove it is right.

If you want easy terms he will be glad to see that you get them. Any responsible farmer can get a Perfection Straw Spreader and make it earn him several times its cost before he pays one single cent.

The Perfection Spreader is easily attached to any header barge or hay frame. You don't have to tear up your rack or change your wagon. It can be removed in a few minutes. No farmer can afford to be without a Perfection Spreader—it is a real money-maker.

We most earnestly advise you to write the Union Foundry & Machine Co., 810 King Street, Ottawa, Kansas, today regarding their very liberal offer—ask them to send you Mr. C. E. Warner's new 32-page book, "Straw Spreading Pays." This book will tell you how scores of farmers have made a lot of money spreading straw. It will show you how to increase your profits. Write today, use the above address—they will send the book with other information absolutely free.—[Advertisement.]



Girl Wins Poultry Contest

THE first prize in the annual poultry contest for 1916, open to members of boys' and girls' clubs, was won by Mary E. Griffith, of Lyon County. Helen Spaulding and Harvey Russell, of Scott County, won second and third places respectively. Everett Reed and James P. Evans, of Rice County, won fourth and fifth places. Of the five state prizes awarded last year in the poultry contest, Scott County boys and girls captured four and Lyon County one. This year Scott County got two prizes, Rice County two, and Lyon County one.

Each contestant is required to keep an accurate account of time spent in the enterprise and also of the expense and profit. These records are then considered by the judges in determining awards. The contest is in charge of Otis E. Hall, state leader of boys' and girls' club work, division of extension in the agricultural college.

Mary writes the following story of her work:

"On April 14 mother came into the house and said, 'Mary, there is a Barred Rock hen wanting to sit in the barn and you may set her if you want to.' So I went to one of our neighbors and bought fifteen fine White Wyandotte eggs, made a cozy little nest, and then put my hen and eggs into it. A little later the same day I found in the chicken house two more hens wanting to sit, and as mother didn't care to set them, I thought I would, and so I got two more settings of the same kind of eggs and set them. I paid 50 cents per setting, or \$1.50 for all my eggs.

"I never paid much attention to my sitting hens only to water and feed them. On the morning of May 4 imagine my surprise and delight at finding two pretty little chickens in one nest and one in each of the others. The next morning there were fourteen little chicks under the hen in the barn and fifteen under each of the others, or forty-four in all.

"When my chicks were only a few days old, mother received an order for thirty White Wyandotte chicks and she told me I could have the order if I wanted it, as she had none to spare, so I filled it and received \$7 for the thirty I sold.

"I left the remaining fourteen with a mother hen, but put them in a little chicken house that wasn't in use. The old mother hen coaxed three other motherless little chicks which were not mine to come to her. One of these chicks which my mother hen stole, died. I didn't count the money made from the other two, for I gave them back to mamma and they afterward were coaxed away by the neighbor's chickens and are now staying at the next door neighbor's house.

"I fed my baby chicks oatmeal the first week and chick feed the next three weeks and kafir after that. I also gave them plenty of fresh water. They were not bothered much with mites and lice.

"At the end of three months I sold my other fourteen on common market at 20 cents a pound and they weighed 2½ pounds apiece. My expenses were \$1.50 for eggs and \$2.20 for feed, which made a total expense of \$3.70. My receipts were \$14, which amount less the \$3.70 left me a profit of \$10.30.

"I think this ten dollars and thirty cents was the easiest money I ever earned and I expect to try my luck in the poultry club again next year."

Poultry at Community Fairs

I would like to offer a few suggestions in connection with the showing of poultry at such local fairs as that held by the Blue Valley Welfare Association of Riley County. This fair is held at the school house in District No. 1, which is a modern building and one of the standard schools of the state.

The first fair was held in September, 1915. We could not expect perfection in the start, and what I am saying is not in a fault-finding spirit, but rather to offer some advice that will be useful and helpful in the future. The poultry exhibition I wish to speak of specially. This did not begin to come up to what

it should have been. There were only about seven coops, including chickens, turkeys, ducks and geese. Any kind of an old box was used for a coop and the poultry presented a very poor appearance.

When the second fair was held last fall I found the same condition and thought I would offer a little unasked advice. I wish to commend this neighborhood for the fine work it is doing in building up the community, but when you hold the next fair, why not put up some benches and have suitable coops for the poultry department and make this one of the best features of the show? The poultry produced in the United States would pay off the national debt in a few years. A fine exhibition of poultry should be an outstanding feature of every local show, such as the one held at this school house. —F. E. MARSH.

State Show Successful

The Kansas State Poultry Association held a very successful show in Wichita the second week in January. Over a thousand birds were entered.

Poultry breeders are hoping that the legislature will provide a liberal appropriation for this industry which makes an annual return of almost 12½ million dollars to the state. It would please the poultry interests generally if the annual state show could be alternated between Wichita and Topeka.

A. J. Waddell of Wichita was elected president of the association for the coming year and Thomas Owen of Topeka, secretary and treasurer.

Corn and Meat Scrap for Hens

That a simple ration consisting of corn and a protein supplement is more economical under usual market conditions than a mixture of several different feeds for laying hens in winter is shown by feeding tests at the Ohio Experiment Station.

Corn and meat scrap have given practically as good returns as a ration of corn, wheat, oats, bran, middlings, oil meal and meat scrap. The hens fed the simple ration had access to self-feeding hoppers containing a dry mash made of eight parts of ground corn and five parts of meat scrap analyzing 50 per cent protein. They received twice as much corn, fed in equal portions in the litter twice daily, as they consumed of the mash, and also had grit and oyster shells.

The hens fed the variety ration laid more eggs, but not enough more to pay for the extra cost of their feed. Tankage and skim milk, as well as meat scrap, are recommended to be fed with corn for laying hens.

To lighten the grain ration for chickens and to keep them in good condition, a green food such as sprouted oats is satisfactory. Soak the oats over night in a pail of water to which has been added a teaspoonful of formalin, to prevent mold. Spread the oats out an inch thick on a tray which is provided with drainage. Sprinkle with warm water twice a day. Stir occasionally until the sprouts start. When three or four inches high, the sprouts will be ready for use. One square inch per hen per day of the mass is the amount usually fed.

Cull the flock rigidly for weak stock.

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The man or woman who gets the right start in the poultry business, will make money. This year will be a record breaker.

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Get the Cypers Book first, then follow with the Cypers Incubators, and help to success. This is good, practical advice. Act on it today. Get the book first.

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Why not save money by contracting for your silo now. It undoubtedly will cost you more next spring or summer. Let us send you our proposition—to contract now for your silo and deliver it later. We still have openings for a limited number of farmer agents.

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DAIRY

Difficult Churning

Failure to get butter "to come" by churning is not an uncommon experience during the winter season. The trouble most often occurs on those farms where only a few cows are milked. If the milk of one or two animals is responsible for the difficult churning, other milk when mixed with it will overcome the trouble. Usually when the trouble occurs it is due to one of two causes: an incorrect churning temperature, or the peculiar composition of some milk and cream.

During the cold months of the year cream should be churned at a higher temperature than during the summer months. For this reason a careful regulation of the temperature is necessary. If the temperature at which one churns is not high during the winter months, the cream must be churned a longer time to form butter. One may churn at so low a temperature that butter will not form with a reasonable amount of churning. It very often happens during the winter months that the cream becomes so cold that it will not churn.

Sometimes when cold cream is agitated in the churn it will whip and expand until the churn is nearly full. In this condition butter will not form because the cream cannot be sufficiently agitated. When a low temperature of the cream is the cause of difficult churning the trouble may be easily corrected by raising the temperature.

As the winter season approaches there is usually a larger number of stripper cows. When a cow is dry the butter fat globules in the milk become very small and collect with great difficulty in the churn. During the winter the feed is such that the fat globules become very much harder and this likewise interferes with ease in churning. The cream also becomes more viscous, or sticky, as the animals advance in their lactation period and this again makes churning more difficult.

Whenever butter granules fail to appear in about thirty to forty minutes' churning, the cream should be raised in temperature. It is well to raise the temperature only a few degrees at a time for if too warm the cream will give butter with a very soft salty texture. If on raising the temperature a few degrees the butter refuses to gather, a further raise of temperature is necessary. Whenever a raise of temperature does not give satisfactory results, add cold, pure water until the cream is diluted down to about the thickness of milk, re-separate the mixture and discard the skim milk. The cream should then churn easily, but upon failure to produce butter, the cream should again be diluted and re-separated.—L. G. RINKLE, Missouri College of Agriculture.

Success with Milking Machine

In his bulletin on the milking machine, Christian Larsen, of the South Dakota Experiment Station, states that dairy farmers who wish to use milking machines should study their herd from the standpoint of fitness for a milking machine. The reason why some men are successful with milking machines and others are not can be traced in part to the difference in cows. When the milking machine is installed, the owner will have better success if he will cull out the cows that do not readily and completely give down their milk, cows with uneven udders and irregular teats, and cows with very fleshy teats. Some herds may not contain any defective cows, some may contain one or two, and some herds may contain several.

Cows with such defective udders and teats should never be used as foundation cows. The heifer calves from the cows that milk easily by machine should be selected. It is especially important to select a herd bull from a cow having a well formed udder.

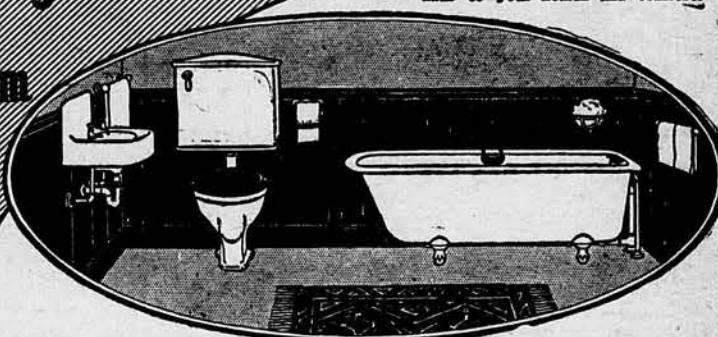
Six years of experimenting at the Indiana Experiment Station has shown the necessity of having meat scrap, skim milk or buttermilk in the laying ration for hens of either the Plymouth Rock or the Leghorn breed.

The Board of Governors of the International Dry Farming Congress have just announced that the twelfth annual session will be held in Peoria, Illinois, between the dates of September 15 and October 15, 1917. As usual, the International Soil Products Exposition will be held in conjunction with and under the auspices of the congress.

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

"One ship drives East, another West.
While the self-same breezes blow!
It's the set of the sails and not the gales,
That bids them where to go."

"Like the winds of the sea are the ways of the fates.
As we voyage along through life,
It's the set of the soul that decides the goal
And not the storms or the strife."

Do you know that by putting a thimble over the end of the rod, you can insert it into the starched hem of the sash curtain with ease and speed? Also that a safety pin makes a fine bodkin? You need never lose the tape in the casing if you stick the pin through the end of it before clasp the pin.

When we were children, sometimes our mother would make a big pile of "flapjacks" for supper, or perhaps for dessert at dinner. These we always hailed with delight. They are just as pleasing to children now. Try it some day and see if the members of your family do not pronounce it a treat. Bake large round griddle cakes—using your favorite recipe—spread liberally with butter and sugar, while hot, pile one on top of the other and cut like a pie when serving.

Dietitians tell us that skim milk is the most economical source of protein we can obtain—a fact that people who live on farms and produce their own milk will do well to remember. There are countless ways to use skim milk as will be discovered when one gives it thought. If you have not already done so, write to the Federal Department of Agriculture, Washington, D. C., for Bulletins 363 and 413, which pertain to the uses of milk. There are many other valuable bulletins, especially for the housewife, which may be had for the asking.

Our Eating Needs

Many of us have never had a course in dietetics and are a little bewildered by the scientific terms such as calories and vitamins, but we need not serve badly balanced meals in consequence, for there are a few simple rules which will help us.

We really need five food principles daily. We need protein as found in lean meats, fish, eggs, and milk; starch, in bread, cereals, potatoes, macaroni, etc.; fats, found in butter, fat meats, cream, and oil; minerals, in fresh fruits and vegetables; sweets, found in sugar, honey, jams, etc.

Old Stand-by—Oatmeal

During the summer we enjoy the many varieties of ready-to-eat cereals, but with the advent of cold weather many of us go back, with a relish, to the old stand-by, oatmeal.

We like our cereals cooked a long time, believing the old Indian saying—"Let the heat eat your starch"—and usually start the oatmeal in the double boiler while preparing dinner or supper, allowing it to cook as long as possible and then merely heat it at breakfast time the next morning.

Soms cooks add chopped dates, figs, or raisins to oatmeal, thereby giving a pleasant variation.

It is a great improvement to use at least half milk instead of all water when making oatmeal porridge, and the nutritive value is increased by so doing. Some add grated cheese to it shortly before serving, which of course makes it much more complete as a food and it then requires no cream or sugar.

With all our splendid cereals, if the cook will use ingenuity in preparing them, we should not complain of a lack of variety in our breakfasts.

Most Boys Like Puddings

Mothers of those "bottomless pits"—growing boys—are often puzzled about what to fill them with, for they demand such quantities, and in cold weather they want something to furnish heat as well as growth and energy.

Boys usually are not fussy, demand-

ing quantity rather than dainty serving, though they appreciate quality keenly.

We know one mother of boys who seems to have endless varieties of puddings, none of them expensive and all of them palatable, nourishing and satisfying to the hungry boy. The base of some of them is a suet paste, made by rubbing a cup of shredded suet into three cups of flour and one cup of bread crumbs, to which has been added three teaspoonsful of baking powder, and salt. Wet with milk or water to make dough. Roll to half inch in thickness and spread with fruit, and here is where the variety may come. Rich jam or marmalade, plain canned fruit such as berries, cherries or plums, stewed dried fruit or raisins, or fresh apples may be used. After rolling the paste and sealing the edges, put into a mold and steam two or three hours. Serve with a sauce. This sauce can be made as elaborate as one likes, or can be cream sweetened and flavored.

Steaming the pudding in individual molds makes a pleasant change.

Home and the Children

If you are a mother or a father you must realize that these long winter evenings offer special opportunities for tightening the bonds of family and home. Don't hustle the children off to bed as soon as they have had their supper, because you are tired from doing that day's work which you are expected to do, and want to get rid of them. Fifteen, twenty, or perhaps even fifty years later, when the wind swirls the snow against the windows and whistles wildly as it plunges through the pines, the impressions of childhood, of home and father and mother will come back to them. For every day you and I as parents are making indelible impressions upon those minds that are young and growing. I know from experience—and so do you—what home means and what it meant to you.

I can see my father now, dropping, with what I thought and still think was great skill and dexterity, into the top of the stove a huge hickory chunk that had resisted the onslaughts of the axe. Then he would get his spectacles on, sit in the big armchair, and turn up the lamp-wick, and, with four children squatted around him, and my brother asleep in my little mother's arms, he would read aloud to us. My grandmother—what a wonderfully sweet woman she was!—would be over at one side of the table, just back of a bowl of pippins. She would be knitting, mittens or stockings, or crocheting an afghan or something.

One winter he read aloud "Our Boys in India," two volumes of those famous zigzag journeys, and that truly wonderful tale "Toby Tyler, or Ten Weeks with a Circus." We children did not always keep awake. And sometimes when awake we did not pay attention, taking turns peeking into the three-eyed dumper at the fire, and imagining we could see Shadrach, Meshach and Abednego in the fiery furnace. Then, too, when we had eaten too many doughnuts or had chilblains, our minds were not always on the story. But it was a splendid thing for us just the same. And now, though the principal characters in the picture have passed—even the big pippin tree is gone—it is not difficult to find the way back to these hallowed memories.

It isn't much, perhaps, and it may not mean much to you. Times have changed. You aren't burning hickory chunks and many things are different—except children. They come into the world now as pure and sweet as they ever did. They bud and blossom just as they ever did. And I can't help but feel that on these long winter evenings fathers and mothers can help them grow to love their home as they ever did.—Woman's World.

Attract Young People to Farm

We recently heard a public speaker jestingly offer a suggestion for keeping



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Practically every farmer in the West now knows this valuable crop. Withstands dry weather and produces a fine crop of hay that is superior to timothy and equal of timothy. Under ordinary conditions it yields from two to four tons of hay per acre and under irrigation reaches as high as eight to ten tons per acre.
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the boys on the farm. It was that a strain of dairy cows not requiring milking Sunday evening, be found, and that these growing boys be not called back when on their way to bed at night, to commence the morning chores. And this speaker stated he had a right to offer suggestions along this line as he had once been one of the boys eager to leave the farm for the city life of greater ease and more privileges. He admitted he had not been in the city long before he found it necessary to apply himself closely if he would "make good," but he could do this more cheerfully than he had on the farm for he knew there were some hours each day which he might call his own and which might be used as he chose.

We believe there are two sides to the question of unrest and dissatisfaction among young people in the country. A part of it is due to lack of appreciation of the things about them, which it is possible to make as interesting as the city amusements. But too often the conditions still fresh in this speaker's memory, prevail, and the young people slip away to the city before it is realized why they are not content to work on in the home and community which need them so much.

It is as unreasonable to expect that all farm-born children will want to farm, as it is to think that all children of ministers and doctors will follow their fathers in their professions. There is no question in our mind, however, that many more might be kept on the farm for life—and willingly—if greater effort were spent in making farm life more attractive. Those who stay on the farm should do so from choice—because they consider the farm offers the most satisfying life and the greatest opportunities. If they stay feeling this way, their lives cannot be failures.

There are many things which contribute toward creating an atmosphere of satisfaction and usefulness and part of these must necessarily be determined in each community. However, several of the most important are home comforts, school advantages, community social life, and good roads. It is quite improbable that any of these will be overdone and anything that we can do to promote these worthy causes will stand to our credit and to the credit of our community. The very young people whom we seek to interest and hold, will become active in their own cause, and once made to feel their responsibility in community work the tendency cityward will be greatly lessened.

Country Literary Developed

Many communities are doing quite effective work along the line of community activity, and in some instances only by chance do they become recognized. Such a neighborhood is located between Michigan Valley and Lyndon, Kansas. This district is really three communities, but the spirit of unity is so great that the three unite in their social life. In this way competition is overcome by the spirit of co-operation. For some time the three districts had a country literary. Out of this grew the organization now called the Country Club. This is a permanent organization and thus far they have handled the social life of the neighborhood.

Recently a trainer was engaged for one week to train twenty of the young people in the drama, "Josh Jones' Second Sight." This was the first drama that had been presented in the community for eighteen years. It is needless to say that those taking part in it were enthusiastic. The people of the country-side also responded well.

The people of this community have also made arrangements for the KANSAS FARMER lecture course. The Country Club members believe that the community is now ready to take up more definite lines of community building, and some plans are already under way for carrying out such a program.

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- 1 1/2 cups flour
- 1 tablespoonful bran, graham, or cornmeal
- 1/2 teaspoonful salt
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- 2 eggs
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CARLOAD HIGH GRADE WELL marked Holstein cows, 4 to 6 years old, plenty of size, bagging to calf. Hannon Bros., Olathe, Kansas, 20 miles southwest Kansas City.

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

FOR SALE—REGISTERED HOLSTEIN male, five months old. His dam produced under official test, 16½ pounds of butter in seven days. Largely black but splendid individual. Price, crated, \$100. Also full-blood male not registered, ten months old, nicely marked and from good producing dam. Large enough for light service. Price, crated, \$50. F. E. Proctor, Oswego, Kan.

FOR SALE—TO MAKE BARN ROOM for my recently purchased registered Holstein cows I will sell your choice of ten to fifteen head of my young high grade Holstein cows. Six close springers, three fresh, balance in spring. Also my two-year-old registered Holstein bull and three yearling heifers. Every milking cow a heavy producer with a seven-day record. Beautifully marked and splendid dairy type. Must sell within three weeks. Any reasonable offer accepted. Jas. W. Magee, Chanute, Kan.

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ONE REGISTERED PERCHERON STALLION, 4 years old, weight 1,950 pounds, black with small star, Reg. No. 89169. One road stallion, "Ben Weaver," track record 2:18. One mammoth black jack, 4 years old, heavy boned, 14 hands. All good breeders and colts to show. Emern H. Stedd, County Clerk, Lyons, Kansas.

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

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

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

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

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

FIFTY MAMMOTH BRONZE TURKEYS. Toms, \$7.50, \$10, \$15; pullets, \$5, \$10; hens, \$10, \$15. Eggs—Yard 1, \$1 each; second, 50 cents. Black Langshans, Barred Plymouth Rocks, show record. Order direct from ad. Order early. Jas. W. Anders, Unionville, Mo.

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

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

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

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WHITE WYANDOTTE COCKERELS. U. A. Gore, Seward, Kansas.

PARTRIDGE WYANDOTTE EGGS, \$3.00 per fifteen; \$5.50 per thirty. Mrs. O. E. Collins, Drexler, Mo.

ROSE COMB SILVER LACED WYANDOTTE cockerels, \$1.50 each. Mrs. H. R. Young, Stella, Neb.

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

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

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

BRAHMAS.

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

FOR SALE—PURE-BRED LIGHT Brahma cockerels now. Eggs in season. E. O. Strom, Shenandoah, Iowa.

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

DUCKS AND GEESE.

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

POULTRY WANTED.

PIGEONS—OLD, \$1 DOZEN DELIVERED before February 5. Guineas, \$5 dozen. No. 1 capons, 21c. Turkeys, 24c. Hens, 16c. Coops loaned free. The Copes, Topeka, Kan.

LANGSHANS.

BLACK LANGSHAN COCKERELS hatched from my San Francisco winning strain, at bargain prices if taken soon. H. M. Palmer, Florence, Kansas.

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College Sale Pavilion, Manhattan, Kansas

FRIDAY, FEBRUARY 9

**25 STALLIONS - - 20 MARES
PERSONALLY SELECTED**

Prize Winners :: Producers :: Promising Prospects
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The blood of the famous champions and sires, Casino, Scipion, Dandy, Minet, McDuff, Rabelais, Iena, and Paragon is predominant in the consignment. This sale offers an excellent opportunity to secure a high class Percheron stallion or mare. Write for a catalog today.

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THE MILLER HEREFORDS Are Ready for Their THIRD ANNUAL SALE

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THIRTY-FIVE PRIME YOUNG HERD BULLS

Two Carloads Coming Two-Year-Old Range Bulls

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

CARL MILLER, BELVUE, KANS.

FARM AND HERD.

We have just received the catalog of the Holstein offering to be sold in the consignment sale to be held by the Nebraska Holstein Breeders' Sales Company at South Omaha, February 21. Eighty head of Holsteins have been catalogued for this sale and the lot includes a lot of A. R. O. cows, and all of the cows in the sale are bred to 30 to 35-pound bulls.

The world's butter record has again been

broken by the Holstein cow, Segis Fayne Johanna, who in seven days produced 50.63 pounds of butter. This cow is a sister to the sire of twenty of the cows and heifers in the great Albechar Holstein Herd owned by Robinson & Shultz, of Independence, Kansas.

G. C. Roan, the well known breeder of high-class jacks and jennets, announces March 19, 1917, as the date of his annual jack and jennet sale. The sale will be held in Mr. Roan's modern sale pavilion in La Plata, Missouri.

POLAND CHINA BRED SOW SALE



The above are fair samples of the many attractive things to be sold in the J. S. Turner Sale to be held at

**FAIRFAX, MISSOURI, SATURDAY, FEB. 10
THIRTY-SIX HEAD**

Twelve Tried Sows and Twenty-four Head of Yearlings and Spring Gilts, including daughters of King Alexander, Orange Wonder, Trusty King, B. Wonder, Jumbo Prospect, Big Bob Wonder 2d, and Missouri King.

Aside from the ones mentioned above, breeders will find attractive buys in a spring gilt by Fesey's Timm out of a GIANT WONDER DAM, second dam by BIG JOE. This gilt sold in the Head sale for \$110 and is selling as an attraction in this auction. A fine yearling daughter of TRUSTY KING, one of the top sows in the W. B. WALLACE August sale, sells bred to KING ALEXANDER and is worthy of consideration.

OFFERING IS IMMUNE AND IS BRED AND SAFE TO

King Alexander

By King's Equal out of an Expansion-Tecumseh bred dam. Senior boar in this herd and a proven sire.

Model Big Bob Jr.

By Head and Leonard's Model Big Bob out of a dam by Long Jumbo 2d, a line of breeding second to none.

Robinette

By Robidoux and a litter brother to Robin Hood, a prize winner last year wherever shown, including the National Swine Show.

THOS. F. STRICKLER, CRAIG, MISSOURI, will consign ten head of top sows to this sale, equal in every way to the offering listed above.

The catalogs are ready and will be sent upon application by mentioning Kansas Farmer. Send today for catalog and arrange to come to my sale. Sale right in town, under cover.

J. S. TURNER,

FAIRFAX, MISSOURI

JACKS, JENNETS AND STALLIONS COURTLAND, KANSAS Thursday, Feb. 1, 1918



Mammoth Jacks and Jennets

The jacks include the herd jack, Solitario, and the outstanding two-year-old, 16½ hands, Kansas Wonder.

The herd jennets include the splendid show and breeder, Dandy, the dam of Kansas Wonder and others bred to Solitario.

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

J. W. SMITH, COURTLAND, KANSAS

Auctioneers, L. R. Brady and J. W. Shotwell.

I. W. Poulton, of Medora, Kansas, owner of one of the choice herds of Red Polled cattle now assembled, writes that the demand for Red Polled breeding stock is good. Among the recent sales reported by Mr. Poulton are to J. H. Ferguson, Gypsum, Kansas, four choice coming two-year-old heifers; B. C. Waters, Towanda, Kansas, six fine yearling heifers; Frank W. Terry, Haven, Kansas, a choice young bull. This stock was all purchased as foundation stock for pure-bred herds.

Walter B. Brown, of Perry, Kansas, owns one of the choice big-type Poland China herds in Kansas. Mr. Brown keeps his herd immune at all times and always has a healthy, growthy lot of hogs. The head of his herd is the great boar, Chief Miami, said to be the largest boned boar of the breed now in service. Mr. Brown's herd is noted for the fine lot of 600 to 700-pound sows. A feature of his herd at this time is the choice lot of young stock of July and August farrow.

Otto Plagmann, of Eureka, Missouri, owner of one of the good herds of big smooth Polands, reports his herd doing well. A feature of his herd at this time is the choice lot of gilts bred for early farrow and the good lot of summer and fall pigs.

E. E. Heacock & Son, of Hartford, Kansas, owners of Lowmont Herd of Shorthorns, report their herd doing well this winter.

They have succeeded in building up a Short-horn herd of the profitable type and a feature of their herd at this time is the choice lot of young bulls and the fine lot of young cows and heifers.

Grod & Robison, of the Holstein-Friesian Farm, Towanda, Kansas, report that the heavy demand for high-class Holsteins, both pure-bred and high grades, continues. This firm has placed a large number of Holsteins in Kansas and the Southwest during the past year.

The Bisonte Farm herd of Jerseys at Lawrence ranks high among the quality herds of the state. Although they have individuals strong in the blood of the show yard winners, Noble of Oaklands and Financial Countess Lad, their energies are directed toward breeding large, rugged, practical cows of high producing power. To this end they have at the head of the herd two grandsons of Financial Countess, test 935 pounds 10 ounces butter in one year. Both are out of Register of Merit dams. Their last two-year-old heifers to freshen milked 103 pounds 14 ounces milk in three days on ordinary farm care and dry feed.

F. W. Poos, of Potter, Kansas, reports his herd of jacks and jennets doing well. A feature of the herd at this time is the good lot of young jacks by a son of the famous Limestone Mammoth.

HORSES AND MULES.

HORSES AND MULES.

PIONEER STUD FARM

Established 1870

FIFTY REGISTERED STALLIONS AND MARES

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

C. W. LAMER & SON

SALINA, KANSAS

PRAIRIE VIEW STOCK FARM



Has 40 big, black Mammoth jacks and jennets. Every jack my own raising; two to six years old, 15 to 16 hands high, extra heavy bone, big bodies. I can sell you a better jack for \$500 to \$600 than most speculators can for a thousand. Come and see for yourself. They must sell.

ED BOEN, LAWSON, MO.

38 Mi. E. of K. C. on C. M. & St. P.

40 Mi. S. W. of St. Joe, on Santa Fe

MARES AND FILLIES

ABOUT ALL SOLD

A few good ones left. Fifty head of stallions and mares. Thirty head of stallions, including Percherons, Belgians and Coach stallions, 2 to 6 years old. All for sale at hard times prices. Come and see me.

J. M. NOLAN

PAOLA, KANSAS

40 Head Percheron Stallions - 40 Jacks and Jennets - 40

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

J. P. & M. H. MALONE

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

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

POLAND CHINAS

Poland China Boars and Gilts

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

WM. WATT & SON - GREEN CITY, MO.

OWA KING BRED SOW SALE FEB. 1

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

P. M. ANDERSON, LATHROP, MISSOURI

TOWNVIEW FARM

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

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BIG-BONED IMMUNE POLANDS

Both sexes, July and August farrow. Best big-type breeding. Choice individuals. Also bred gilts. All sired by that great boar, Chief Miami. Dams 600 to 700 pounds. Remember this is the home of largest boned boar of the breed.

WALTER B. BROWN, PERRY, KANSAS.

Size and Quality Polands

Five big-type gilts, weight 150 pounds each, bred for February, March and April farrow. \$35 each. Two good tried sows, priced to sell. Choice lot of summer sow pigs, weight 150 pounds and over, \$18 each or two for \$35. Fall pigs, \$15 each, two for \$25, sired by 1,000-pound boars, out of extra large sows.

OTTO PLAGAMANN, EUREKA, MISSOURI

DEMING RANCH POLANDS

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

H. O. Shelden, Herdsman Oswego, Kansas

ARKELL'S BIG POLANDS

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

JAS. ARKELL, JUNCTION CITY, KANSAS

OLD ORIGINAL SPOTTED POLANDS

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

A. S. Alexander, Prop. Burlington, Kansas

Lone Cedar Poland China Herd

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

A. A. MEYER - McLOUTH, KANSAS

LANGFORD'S SPOTTED POLANDS

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

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



FAULKNER'S FAMOUS SPOTTED POLANDS

THE WORLD'S GREATEST PORK HOG.

ANNUAL BROOD SOW SALE, WEDNESDAY, FEBRUARY 14, 1917

Sixty big spotted tried sows and yearlings bred for February, March and April farrow. You know the kind. Catalog tells all. Ask for it. Address

H. L. FAULKNER, BOX K, JAMESPORT, MISSOURI

HOLSTEIN CATTLE.

HOLSTEIN CATTLE.

MAURER'S HOLSTEIN FARM



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

T. R. MAURER,

EMPORIA, KANSAS

Farm Located Three-Fourths Mile West of Town on Sixth Avenue

CLYDE GIROD, At the Farm

F. W. ROBISON, Cashier Towanda State Bank

HOLSTEIN-FRIESIAN FARM, TOWANDA, KANSAS

Breeders of pure-bred Holsteins. Special attractions in choice young bulls ready for service, with fashionable breeding. Write for pedigrees and prices. We maintain a breeding herd of pure-bred females and offer a grand lot of young springing heifers and cows, a number with A. R. O. records at prices within reason.

IT WILL PAY YOU TO SEE OUR OFFERING

Of choice extra high grade young cows and heifers, all springers in calf to pure-bred sires; large developed females, good udders, well marked and the right dairy type at prices that will challenge comparison for Holsteins of their breeding and quality. A visit to our farm will convince you. Keep us in mind before purchasing. Wire, write or phone.

GIROD & ROBISON

HOLSTEINS and GUERNSEYS

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

EDGEWATER STOCK FARM

FORT ATKINSON, WISCONSIN

HOLSTEIN CATTLE

We offer for sale 200 choice, high grade Holstein cows, heifers and service bulls of various ages; well marked and in good condition. Also can furnish a few choice, beautifully marked, 15/16ths pure-bred heifer or male calves, 1 to 2 weeks old, out of heavy milk-producing dams, at \$15 each, crated f. o. b. cars. First draft takes them. Write

W. C. KENYON & SONS, ELGIN, ILLINOIS

REGISTERED HOLSTEINS

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

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

HOLSTEIN COWS

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

CORYDALE FARM HERD

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

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

Braeburn Holsteins A. R. O. BULL CALVES
H. B. Cowles, 608 Kansas Av., Topeka, Kan.

Real Estate For Sale

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

B. L. FOWLER, Executor, PERRY, KAN.

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

SOUTHERN REALTY CO., McAlester, Okla.

WANTED---TO RENT

A good farm for one year or longer. One that the owner wants his farm kept up. Must have good improvements, near good town, good schools, not river bottom, 80 to 160 acres. Am a breeder of registered Holstein cattle. Want possession March 1, 1917.

S. E. ROSS

Route 4 Mountain Grove, Missouri

190 ACRES, 6 miles Adrian, Mo. All smooth land, 25 acres in wheat, 40 acres in tame hay, remainder cultivation; 95 acres fenced hog-tight; fair improvements. Price right, easy terms for immediate sale.

MANSFIELD LAND CO., Ottawa, Kansas.

BROWN COUNTY FARM BARGAIN—Near Hiawatha, Kansas. Write for full description and price. Terms if desired.

MANSFIELD LAND CO., Ottawa, Kansas.

EIGHTY ACRES close to town, good improvements, fine property, a bargain at \$5,000. Possession on short notice. Easy terms. Come at once or write for full description of just what you want.

MANSFIELD LAND CO., Ottawa, Kansas.

If Sold by March First

A good home for sale cheap by owner; no agents. 320 acres in Anderson Co., six miles east of Garnett, four miles south of Greeley. Two improvements. Price \$7,000, half down, balance time from three to seven years, 6 per cent, payable any time desired, or will sell a part, 180 acres of it, for \$4,000; 65 acres in cultivation, 20 acres of mow land, 20 acres of timber, balance bluegrass pasture; everlasting water. The other 140 acres is mostly fine timber, about 25 acres cleared off. This will make a fine sheep ranch. Fenced and cross fenced, about 8 miles of fence. Good 6-room house, barn 40x60, implement shed, granary, hen house and other buildings.

JOE FOX - GREELEY, KANSAS

Butter Bred Holsteins

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

J. P. MAST - SCRANTON, KANSAS

The Cedar Lane Holstein Herd

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

T. M. EWING, INDEPENDENCE, KANSAS

Wichita Holstein Herd

High grade and registered cows, some heifers and heifer calves at reasonable prices. Bull calves at \$10 and up.

Wichita Holstein Herd, R. 4, Wichita, Kan.

BONNIE BRAE HOLSTEINS

Registered bulls from calves to 5 months old. Best breeding and good individuals.

IRA ROMIG - TOPEKA, KANSAS

LILAC DAIRY FARM

Route No. 2, Topeka, Kansas.

BREEDERS OF PURE-BRED HOLSTEINS
Bulls from A. R. O. cows, all ages, for sale.

GOLDEN BELT HOLSTEIN HERD

Herd headed by Sir Korndyke Bess Hello No. 155946, the long distance sire. His dam, grand dam and dam's two sisters average better than 1,200 pounds butter in one year. Young bulls of serviceable age for sale.

W. E. BENTLEY, MANHATTAN, KANSAS

REGIER'S HOLSTEINS

Holstein-Friesian A. R. O. bulls ready for service. World's record blood flows in their veins.

G. REGIER & SONS, WHITEWATER, KAN.

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

TREDICO FARM HOLSTEINS

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

George C. Tredick, Route 2, Kingman, Kan.

FARM AND HERD.

Charles Green, of Peabody, Kansas, is making a success in the live stock business. He owns one of the good herds of Poland Chinas. At the head of this herd is the great breeding boar, King Wonder Giant, by King of Wonders. This hog is a half brother in blood to the famous King Joe that now heads the herd of W. B. Wallace at Bunceton, Mo., and sold in the Cook & Potter sale for \$1,200. Mr. Green now has about 100 head in his herd. A feature of the herd at this time are the gilts sired by Miller's Sioux Chief and the fall and summer boars. The gilts are bred for late spring litters and all immune.

At the meeting of the Standard Poland China Record Association held at Maryville, Missouri, January 3, John B. Lawson, of Clarinda, Iowa, was elected president of the association, and L. V. Garrett, of Maryville, secretary. Walter W. Head, of St. Joseph; O. E. Wade, Rising Sun, Nebraska, and S. McKelvie, Fairfield, Nebraska, were elected as the three new directors for three years. The other members of the board are William Gex, Graham, Missouri; N. I. Staples, Burlington Junction, Missouri; L. R. McLarnon, Braddyville, Iowa; T. J. Dawe, Troy, Kansas; and T. J. Meisner, Sabetha, Kansas. The report of the secretary shows the affairs of the association to be in a flourishing condition.

The National Spotted Poland China Record Association held its annual meeting at the Hotel English, Indianapolis, Ind., January 2, 1917, with some 200 members present. The officers elected for 1917 were Charles E. Kurtz, president, North Salem, Ind.; J. W. Troy, vice-president, Rose Hill, Iowa; Fred L. Obenchain, secretary-treasurer, Bainbridge, Ind.; directors, J. H. Bock, Kempton, Ind.; A. S. Booco, Jeffersonville, Ohio; J. D. Gates, Ravenwood, Mo.; Roy Crum, Modesto, Ill.; George W. Reeve, Rushville, Ind.; and E. G. Perrigo, Donovan, Ill. The auditor's report showed a balance for the year of \$1,156.04 and that 115 new members had been added to the Association; 3,537 pedigrees recorded. Twenty-six hogs were assigned to the Association sale to be held at Crawfordsville, Ind., October 19, 1917.

BIG BOB WONDER BRED SOW SALE FEB. 6, 1917

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

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

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

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

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

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

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

HEREFORD CATTLE.

HEREFORD CATTLE.

WALNUT BREEDING FARM



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

LEON A. WAITE,

WINFIELD, KANSAS



HEREFORD CATTLE

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

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

T. I. WOODDALL,

HOWARD, KANSAS

STAR BREEDING FARM---HEREFORD PLACE



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

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

SAMUEL DRYBREAD,

ELK CITY, KANSAS

HEREFORD CATTLE

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

B. M. BROWN, FALL RIVER, KANSAS

JERSEY CATTLE.

JERSEY CATTLE.



SEVENTY HEAD REGISTERED JERSEYS

FORTY COWS AND THIRTY HEIFERS FOR SALE.

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

N. L. DUCHESNE

GREAT BEND, KANSAS

120 Jersey Cows and Heifers

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

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

THE STRAY LIST.

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

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

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

NOTICE IS HEREBY GIVEN THAT ON December 28, 1916, one red steer with horns, three years old, was taken up by W. E. Kimel in Ninnescah Township in Sedgewick County, Kansas. Said animal was appraised December 28, 1916, at \$50. H. M. Barrett, County Clerk, Wichita, Kansas.

FARM AND HERD.

J. S. Turner, of Fairfax, Mo., is claiming February 10 for his annual Poland China bred sow sale. Mr. Turner has the real big kind. They have been bred along the big-type blood lines and grown in a way that they have made big sows and gilts. There are a number of yearling gilts consigned to this sale that will weigh over 400 pounds at a year old. The offering is one of as clean lots as will be sold in North Missouri this spring. Thomas F. Strickler, of Craig, Mo., is consigning to this sale ten high-class brood sows.

REDHURST JERSEYS

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

REDMAN & SON - TIPTON, MISSOURI

Bargains in Jersey Cows

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

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

LINSCOTT JERSEYS

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

R. J. LINSKOTT - HOLTON, KANSAS

\$50 Noble Stockwell's Torono \$50

Sire, Noble Stockwell. Dam, granddaughter of Hood Farm Torono. She milked 32½ pounds milk daily, 2 years old.

BISONTE FARM - LAWRENCE, KANSAS

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

DORNWOOD FARM JERSEYS

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

DORNWOOD FARM, Route 1, Topeka, Kan.

PLEASE MENTION KANSAS FARMER WHEN WRITING TO ADVERTISERS

75 Registered Holstein-Friesians 75

At Auction

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

South Omaha, Nebr., Tuesday, February 6th

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

No better offering of Registered Holsteins will be sold this season.

For catalog, address

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

SHORTHORN CATTLE.

AUCTIONEERS.

Barber Shorthorns

Villager Junior and Curley Dals Head Herd.

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

F. C. Barber & Sons

SKIDMORE - - - - - MISSOURI

OUR HERD BULL

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

CHESTER A. CHAPMAN, Ellsworth, Kan.

CEDAR HEIGHTS SHORTHORNS

For Sale—Ten herd bulls from seven to eighteen months old. Scotch and Scotch topped. Priced reasonable. Come and see my herd. **HARRY T. FORBES, Bell Phone 59-N-1, Route 8, Topeka, Kansas.**

Sycamore Springs Shorthorns

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

H. M. HILL - LAFONTAINE, KANSAS

RIVERSIDE SHORTHORNS

Headed by Prince Valentine 4th 342179. Families represented, Orange Blossoms, Butterflies, Queen of Beauty and Violets.

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

Lowmont Shorthorns—Bulls, including white 2-yr.-old; 18 cows and heifers; priced right. **E. E. Heacock & Son, Hartford, Kansas.**

RED POLLED CATTLE.

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

AULD BROS. - FRANKFORT, KANSAS

RED POLLED BULLS

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

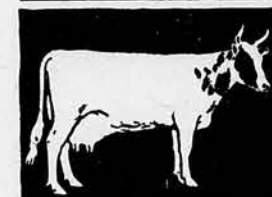
Live Stock and Farm Auctioneer

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

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

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

AYRSHIRE CATTLE.



BEEF

As a rule, dairy cows when through milking, do not make good beef.

AYRSHIRES

when through milking fatten quickly, thus making the beef tender and delicious. Cut up to good advantage; bones are small; meat is red and well flecked with tallow. Calves bring highest prices for veal. Write for information and list of breeders.

AYRSHIRE BREEDERS' ASS'N

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

Breeders' Directory

ANGUS CATTLE. Geo. M. McAdam, Holton, Kan. Geo. A. Detrich, Carbondale, Kan. D. J. White, Clements, Kan.

RED POLLED CATTLE. Mahlon Groenmiller, Pomona, Kansas.

HOLSTEINS. C. E. Bean, Garnett, Kansas.

DORSET-HORN SHEEP. H. C. LaTourette, Route 2, Oberlin, Kan.

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

OHIO IMPROVED CHESTERS

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

Feed Your Cattle 60 Days—At My Risk

AND GET ONE OF THESE \$5.00 WOOL
HORSE BLANKETS
FREE



I want every reader of this paper to try my Stock Tonic for two whole months at my risk, and to pay for making the trial I will give away to each one who sends in the coupon below one of these Magnificent Wool Blankets—Absolutely Free. I will send the Blanket at once and also a good trial feeding of

WILBUR'S STOCK TONIC the Greatest of All Live
Stock Conditioners

I will send you this Stock Tonic with the distinct understanding that it is to be used for two whole months at my risk—that if at the end of two months feeding the Stock Tonic has not been entirely satisfactory **no charge is to be made.** I simply want you to make a two months trial of my Stock Tonic with the understanding that **if it does not fatten up your live stock—kill the worms—that if it has not paid you to feed it—no charge is to be made.** Then as a special inducement and to pay you for the trouble in making the test I will give you—Absolutely Free—one of the \$5.00 Wool Horse Blankets shown above.

I Will Prove to You

that my Stock Tonic will positively rid your live stock of worms, fatten them up and keep them in the pink of condition. I will prove to you that you will actually get more milk from your cows, that you will fatten your hogs, steers, sheep and poultry for market in less time, that you will save grain, prevent disease and make more money from each animal you own. I have such absolute faith in Wilbur's Stock Tonic that I take all the risk in this trial feeding.

There is No Secret About This Tonic

It is composed of twelve separate ingredients—plainly printed

APPLICATION FOR FREE BLANKET

E. B. MARSHALL, President
Wilbur Stock Food Co., 172 Huron St., Milwaukee, Wis.
Please send me at once one of your beautiful \$5.00 Wool Horse Blankets. Also send me 100 pounds of Wilbur's Stock Tonic. I agree to feed the Tonic for two months, and if it does what you claim, I will send you only \$2.00 at the end of the two months' test and then \$4.00 a month for three months. If it fails and I so report in 60 days, you are to cancel the charge and I will owe you nothing. You are also to ship me—Free—enough Wilbur's Poultry Tonic—your guaranteed egg producer—to offset all freight charges on the shipment. It is understood that the \$5.00 Horse Blanket and this pail of Poultry Tonic are to be mine—Absolutely Free—whether I pay for the Stock Tonic or not.

Name.....

P. O. State.....

F. O. County..... State.....

I own.....cattle.....horses.....hogs.....sheep.....poultry.

I own.....acres of land. I rent.....acres of land. I am.....years of age.

NOTE—This liberal offer only open to responsible farmers and stock raisers over 21 years of age.

on every package. These ingredients are acknowledged by veterinarians everywhere to be the finest tonics, appetizers, digestive aids and worm expellers known to medical science. Each one has a special purpose. When all these herbs, roots, etc., are mixed with the regular feed they act directly on the digestive organs of the animal—they create an appetite, help the animal digest the food and then turn the food into good, rich flesh and blood. They **kill the worms, keep the blood clear and tone up the entire system.** This Tonic is not a patent medicine. It merely supplies to an animal what is lacking in ordinary feed. It is nature's own remedy for all troubles arising from indigestion, over-feeding, etc. That is why it is **absolutely sure to put all your animals in such perfect condition that you will be bound to make more money from every one of them.** I have made and sold this Tonic for over thirty years and over a million of the best stock raisers in America are feeding it every day. I have thousands upon thousands of the finest kind of letters from all parts of the country telling me of the wonderful results from feeding it. You would feed it, too—if you only knew that it would make money for you. **That's what I want to prove with this trial feeding.** And as a special inducement, just to get you to make this trial—at my risk—I am going to send you one of the handsome Wool Blankets.

The Blanket is Yours---Free

It never costs you a cent. It is yours—forever—to keep and use every day—whether you ever pay for the trial feeding of Tonic or not. It is a big, warm, soft, wool blanket—84 x 90 inches—never sold for less than \$5.00 to \$6.00 anywhere. It's a blanket you will be proud to own, and remember, it's free.

There are No Strings to This Offer

It's a sincere, straight forward effort to get you to use my Tonic. I am taking all the risk. I could not print this offer in this paper unless I made good every promise. In addition I refer you to any bank or Commercial Agency anywhere. I mean every word I say and you are taking no risk in accepting my offer and sending for this trial feeding with the Blanket Free.

Simply Fill Out the Coupon

SEND NO MONEY. Just find out by actual test on your own stock that my tonic will make money for you. I have a blanket all ready for you if you send that coupon right away. You can't possibly lose anything—you have everything to gain. Isn't it worth a postage stamp? Do it now—at my risk—fill out the coupon and mail it to me at once.

E. B. Marshall President.

WILBUR STOCK FOOD CO., 172 Huron St., Milwaukee, Wis.