

KANSAS FARMER

For the improvement



of the Farm and Home

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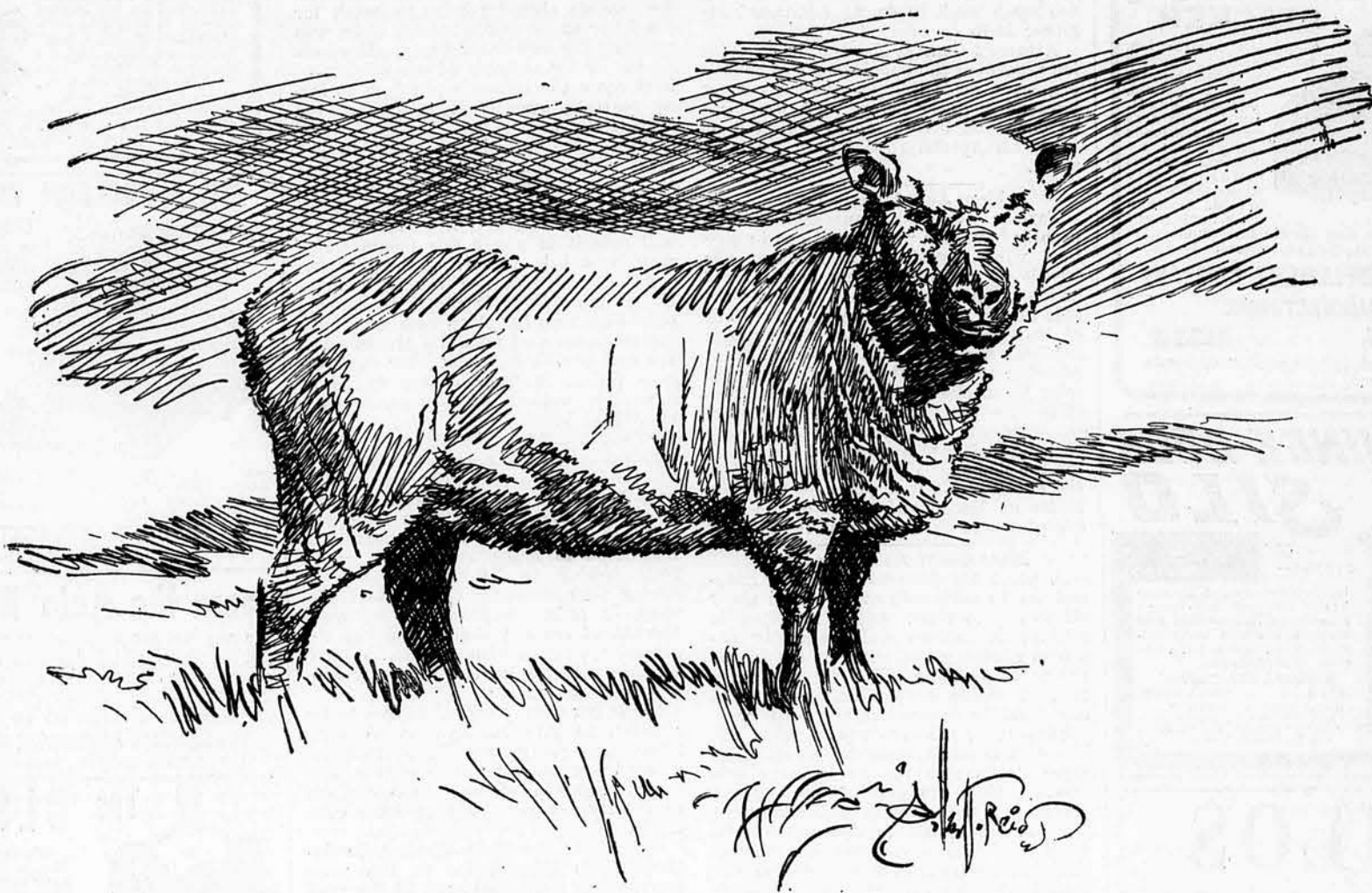
WITH no fossil remains on earth and no wild ancestry in America the sheep is the oldest domestic animal and the one first named in history.

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—I. D. G.



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GOOD ROADS

FOR THE IMPROVEMENT OF GOOD
ROADS BY VERY SIMPLE METHODS

The Auto on the Farm.
The auto on the farm arose
Before the dawn, at four;
It milked the cows and washed the clothes
And finished every chore.

Then forth it went into the field,
Just at the break of day;
It reaped and threshed the golden yield
And hauled it all away.

It plowed the field that afternoon,
And when the job was through,
It hummed a pleasant little tune—
And churned the butter, too;

And pumped the water for the stock,
And ground a crib of corn,
And hauled the baby 'round the block,
To still its cries forlorn.

Thus ran the busy hours away,
By many a labor blest.
And yet, when fell the twilight gray,
That auto had no rest—

For while the farmer, peaceful eyed,
Read by the Tungsten's glow,
The patient auto stood outside
And ran the dynamo.
—Peoria Herald-Transcript.

The citizens of Lawrence will furnish the people of Wakarusa township with two good drags with which to improve roads leading to the city. This is the beginning of a co-operative movement between Douglass county farmers and the people of Lawrence in a road betterment campaign.

Farmers' Auto Tour.

All along the route from Dallas to Galveston, Texas, interest is growing in the farmers' and ranchmen's tour, in which real Texas farmers and ranchmen will drive their cars in August, attending the Beach races at Galveston at the middle of the month and then returning home, after driving 1,200 miles. It will be an eminently practical demonstration in which daily performances and endurance will count. The entries have been coming along nicely and prospects are for the complete success and importance of the event.

Order Engineers Employed.

There are about thirty counties in the state which have voted money for good roads, varying in amounts from \$10,000 to \$60,000 for the year. To prevent the wasting of this money a county engineer must be appointed to supervise the work. If the county surveyor is not competent to handle the work or has too much work to do, an additional engineer is to be selected.

Attorney General Dawson, in an opinion regarding the appointment of county engineers, holds that every county must have an engineer before road work can be done and before money collected as taxes for special road building can be spent.

Keep Auto Wheels True.

Farmer owners of automobiles who usually have bad road conditions to contend with should be careful that the wheels of an automobile remain "true" and parallel to each other. Even if the axle of the machine is only slightly out of true, the wheels do not run without friction, and tires are subjected to a grinding action that has a tendency to wear them out quickly. "Lots of tires come into the factory for repair," says the Goodyear Tire Company, "that have been injured in this way, and the reason for the damage is usually a mystery to the autoist. He is disposed to place the blame on the manufacturer of the tire, except where he knows real conditions."

More About Auto Tire Care.

A point for farmers who own automobiles to take note of is to not allow oil to get to tires. Oil is injurious to rubber; it softens and eventually destroys efficiency and shortens the life of the tire. Gasoline will clean oil from a tire. Gasoline evaporates quickly and consequently does not injure the tire.

Supporting the car on jacks when not in use is another important thing. The object is to rest the tires, as in this position they are only supporting the pressure of the air with which they are inflated. It stands to reason that the weight of the car, several thousand pounds sometimes, is a real load, and it is real work for tires to carry it. Anything you can do to help your tires is repaid in miles, and consequently dollars. The life of the tire by adopting this method, it is estimated, will be materially increased.

Road-Building Bee Annually.

If you can't build a lot of road, build all the road you can. This is the policy of the farmers of Washington County, particularly between the towns of Pal-

mer and Linn. These farmers try to build some road every year and keep it in repair, but they have an annual road-building bee when everyone is supposed to turn out and work. One of these annual workfests took place a few days ago when A. R. Losh, assistant state highway engineer at the Kansas Agricultural College, accepted an invitation to build one mile of road in any way that suited him. A big drill was given, attended by 250 persons. One hundred and fifty men worked all day on this mile, with 60 teams, two traction engines, six graders and dozens of women and girls to encourage the outfit. Mr. Losh had the mile graded 30 feet wide, including cuts, laid the ditches straight, gave the banks the proper slope so that they would not cave in and cause blockades, reduced two very steep hills to a reasonable grade, and pulled all the brush and young trees that interfered with smooth working of the road. The leaders in this enterprise were W. E. Wilson of Washington; S. H. Hamilton of Clifton; H. W. Sterns and Henry Meierkord of Linn, and J. A. Clark and Henry Palmer of Palmer.

Good Roads, and How to Get Them.

At a recent meeting of Highland Park Grange, E. Leuenberger, a member of that Grange, read a most excellent paper on the good roads subject. The paper is too long for printing in full, so excerpts only are here given.

"For the last decade our political parties have been more interested in creating an unnecessary amount of new offices, such as highway engineers, county engineers, bridge inspectors, etc., with handsome salaries attached, and clerks and stenographers thrown in for good measure, who do not give the state value received for their salaries. We do not need more men to tell us how to build good roads. What we need is more men to take off their coats and actually go right in and build them, and the salaries of the useless officers, as above stated, used to pay the men who really do the work. I also believe that any man working on the construction of any state, county and township road or other improvements should receive as much for his labor as he would receive if he was working for any other party. It seems to one of the delights of our officials to hold down the laborer's pay just as low as possible, even if it is against the state labor law.

"Now, the question of how to get good roads, looms up before us, and it is left for you, as an organization, not only to get them, but also to maintain them. You will ask me how? I will submit to you a few points which may be a help in solving the problem.

"That the Shawnee county granges should unite in their efforts to support only such men for office, such as county commissioner and township trustee, who are well qualified to look after the business placed in their charge and that have the welfare of the whole community at heart.

"That all the materials used in the construction of bridges and culverts, such as stone, timber, etc., be procured at or near the place where needed, and the labor and money be kept in the state.

"That our county commissioners be instructed to make use of the county rock crusher to its full capacity in winter time whenever the weather permits, in order to provide a sufficient amount of crushed stone to supply the several townships with material to build concrete culverts, instead of the tin contraptions now in use.

"That our county commissioners be instructed to give employment to home labor, preferably men with families, while the crusher is in operation, and to pay them the full wage scale, and not as charity laborers, as they have done lately.

"That our township trustees be instructed to issue order to the road overseers to make more use of the road grader soon after a rain and to give the road drag a rest part of the time. The road grader will do more work in less time and with less expense than the road drag.

"In closing, I want to state that if all the salaries paid out in the state of Kansas for useless officers could be turned into a road improvement fund the question of good roads would be solved to a large degree."

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**KEEPS
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KANSAS FARMER

With which is combined FARMER'S ADVOCATE, established 1877.

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NEW YORK OFFICE—41 Park Row, Wallace C. Richardson, Inc., Manager.

Entered at the Topeka, Kansas, postoffice as second class matter.
GUARANTEED CIRCULATION OVER 60,000

OUR GUARANTEE

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



ENLARGING THE FARM.

It should be the object of every farmer to get the largest possible income from his land. This, we believe, is the desire of every man who tills the soil. To aid in this is the mission of KANSAS FARMER. This point is raised by our subscriber, H. E. L., Emporia, Kan., who asks how he can "enlarge his farm without increasing his acreage by the purchase of additional land."

Recent letters from several subscribers indicate that other farmers are thinking about the same thing. In a general way the question can be definitely and positively answered. The details by which the income of the farm can be increased are too many for discussion in one article, but in every issue of this paper this question is discussed. However, the farmer only can work out and make these details practical in his own operations.

We believe that the producing capacity of at least 80 per cent of Kansas farms, whether large or small, can be doubled. This can be accomplished by better general farming and improved methods of handling live stock. The desired increased production can be most easily and certainly obtained through the increased ability of the farm to support live stock in greater numbers. Better agricultural methods will come near doubling the crop yield, regardless of what that crop may be, but the doubling of the crop yield—if that crop be marketed—does not measure the capacity of the farm. Land having a value of \$75 to \$125 per acre must produce good crops which can be converted into high quality live stock products if farming that land is to be really profitable. To reach the maximum of income from any land that land must support a maximum of live stock, and in so doing it necessitates the growing of more feed than has been grown heretofore, and so more acres must be devoted to forage and feed crops.

On many farms this will require the planting of the entire farm to feed crops. It should be laid down as an everlasting and indisputable principle that the growing of crops as exemplified by wheat and corn for market, does not result in the great return or the most profitable use of the land. It will be many years, however, before in this country a maximum return from the land is obtained through the maintenance of a maximum of live stock. Live stock herds increase slowly and the transition from cropping to live stock farming is an evolution in farming methods. The change is not brought about in a night. There is much to be learned in the handling of a maximum of live stock. One must forget the pasture and learn soiling methods and the use of the summer and winter silo. Scrub live stock must be forgotten and the pure-bred must take its place. While all this is going on, the production of crops for market will continue along with the slow and natural increase of live stock, but as the live stock increases the acreage to crops for market will decrease until, eventually, the latter are eliminated.

In one respect we are not now doing the best we know, even in the feeding of such live stock as our present facilities and disposition for growing feed will permit. Most of us have overlooked the fact that every ton of cured feed we now harvest will make three tons of silage, and will feed practically three times as much live stock as we are now keeping. The introduction of the silo alone will increase the capacity of the farm under present farm conditions. The greater acreage of alfalfa will increase the producing power of every farm.

Speaking of live stock in this connection does not mean that the farm should be devoted exclusively to dairying, to beef cattle, horses or hogs or sheep, but contemplates that several kinds of live stock can and should be successfully maintained. For example, dairy cows and hogs are an admirable combination—in fact inseparable when

maximum of profits is considered. With these, good horses necessary to do the farm work, and the offspring for market, make a good live stock combination. We think this is especially true of the 80 or 160-acre farm. On the larger farm—ranging from 160 acres to a section of land—if the owner does not have a liking for the milking of 10 or 12 good cows, then well bred beef cattle with hogs, horses and mules will make a combination which will cause the income of the farm from the growing of wheat and corn for market to look insignificant. In a general way, the principles outlined above are those which will make every farm of average size in Kansas capable of producing from two to five times the income heretofore realized.

The many Kansas friends of Prof. W. J. Kennedy of Ames College, Iowa, will be pleased to know of his appointment as superintendent of the agricultural extension department of Iowa to succeed P. G. Holden, resigned. Professor Kennedy leaves his work with the animal husbandry department because of the larger opportunities offered in the extension field. He expects to develop every phase of agricultural work in Iowa. "Agriculture in Iowa," he says, "is as strong as its weakest part."

KANSAS' CREAM GRADING TEST.

From some quarters we note complaint of the Kansas cream grading test, which is being tried out in an experimental way at some 12 or 15 cream buying stations in Kansas. The claim has been made that the test is a scheme trumped up by the State Dairy Commissioner for the benefit of the creameries. No statement could be further from the truth. Every state in which dairying has become a factor has, for years, been endeavoring to work out a practical method whereby cream may be sold on its merit or on the basis of its value in butter making. It may be interesting to Kansans to know that so great a dairy state as Wisconsin has accepted the Kansas cream grading test as a fair and practical means of determining the quality and, consequently, the value of cream. The adoption of the Kansas test by Wisconsin should have the effect of inspiring the confidence of Kansans in that test.

EXHIBIT FOR YOUR FAIR.

The two agricultural exhibits arranged and supplied by Kansas Agricultural College for Kansas fairs this fall have only two open dates. If application were quickly made an exhibit could be contracted for the week beginning August 19 and one the week beginning August 26.

Two representatives from the college will be present with each exhibit to install the exhibit, to care for it, and to explain to the public the purpose of the various things which the exhibit contains, and to deliver lectures at the following hours: 11:15 A. M. and 1:30 P. M. each day of the fair. The exhibits contain photographs, seeds, grains, charts, apparatus in different kinds of equipment, and in every way possible represent the various phases of agriculture.

The interest shown in the exhibit last year at the fairs has been productive of an extra effort being now put forth to make the exhibit a more complete feature this year in every way than it was last year.

SMALL FARM BEEF.

Wisconsin farmers who are not dairymen are thoroughly aroused over the production of high quality beef on their farms. They figure that they can grow silage almost as cheaply as it can be grown anywhere, and alfalfa is a tremendous success in that state. With these two feeds they propose to fatten a prime steer at less cost, they think, than it can by other means be fattened. If this is the opinion of the small farmer of Wisconsin, where silage and alfalfa cannot be grown as cheaply as

in Kansas, and where the rigorous winters make stabling essential and where the pasture season is short, is there any reason why the Kansas farmer, with a mild climate, with cheaper silage and alfalfa and a longer pasture season, should hesitate to consider the production of high quality beef or mutton on the quarter or half section farm? It has for years been the contention of KANSAS FARMER that the meat of the future must be produced under such conditions. We cannot get away from this proposition. If the people of the United States are to eat meat—and they will almost regardless of the price—then the small farmer must produce it and it can be produced at a cost and sold at a price that will make him good profit.

DISTRIBUTE THE WORK.

The hired help problem will this year prove a bugaboo in the wheat belt, as it has every other year for the past two decades. The wheat of Kansas is, for the most part, grown on the 160- and 320-acre farm and the wheat fields call for more labor at harvesting time than at any other time, and the help is most difficult to secure. This brings up the point of the desirability of diversified farming which, in the wheat belt would mean fewer acres of wheat and less harvesting. In the eastern one-third of Kansas the growing of wheat has pretty well settled down to the point of growing the acres which the family can harvest, which, it seems to us, puts the wheat business on about the right basis, both from the standpoint of labor and from the standpoint of the profitability of wheat growing. With the wheat field reduced to this point earlier plowing and better seeding methods can be followed with the chances for an increased yield per acre and greater acre profit. The balance of the farm is devoted to those crops which enter into the growing, feeding and fattening of live stock and which method has the effect of distributing the work of the farm pretty evenly through the year and on most farms the labor involved is not greatly in excess of what the farmer and his family can take care of. It is the editor's idea that the measure of farm operations, if the ideal farm condition could be brought about, is determined by what the farmer and his own help can accomplish. However, with more work than he can accomplish and with the work distributed through the year, it is possible for him to keep a hired man the year around and it is possible to obtain men on such basis when it is wholly impossible to secure the help needed for just a few weeks of the twelve months.

KANSAS BUYS JERSEYS.

The dispersion sale of the famous Kinloch Jerseys reported in another column of KANSAS FARMER was the largest and most important sale of this breed of cattle ever held west of the Mississippi. The average price of nearly \$175 per head for animals of all ages tells its own story. This sale was significant as being an index of the present changing conditions in the corn belt by which the dairy cow is coming into her own, as well as in showing the valuation placed upon good blood by the buyers.

In a sale in which many states were represented it is also significant that Kansas, which has long been thought of as a beef state, should have taken one-eighth of the entire offering of 214 head.

The dairy-bred cow, the silo and the methods which of necessity accompany them will do more for Kansas in the future than anything has ever done in the past.

Of all forage fed on the farm, at least one-third of the cash value remains on the farm in the form of manure. Are we getting this out onto the land where it belongs? If not, it is plain to see that we are not realizing the full benefit from the feed grown and fed.

KANSAS COW TESTING.

It is certain that if dairymen in a number of selected localities in Kansas will co-operate on a plan now being formulated, by the first of November there will be 12 to 15 cow testing associations under way. The Dairy Division of the federal Department of Agriculture is co-operating with the Dairy Department of Kansas State Agricultural College to this end, and last week F. H. Scribner—the famous Jersey breeder who is now in the employ of the federal Dairy Division—was in this state visiting the most advanced dairy sections with Prof. O. E. Reed, dairyman of Kansas Agricultural College. These men will work together in the establishing of cow testing associations, and the outlook is promising for a number of strong organizations.

These associations will be organized and conducted for demonstrative purposes, with the idea of showing the advantage and the necessity of the cow testing association, and after these features are shown, the dairymen are left to continue the association under their own arrangement and at their own expense. It is the history of cow testing associations that a demonstration of the value of the association to the dairymen only is needed to induce the dairymen to continue the association on their own account, and the demonstration also has the effect of spreading to other communities and the establishment of other associations.

The associations which will be established for demonstrative purposes will be composed of as near 26 herds as possible, aiming to have herds of 12 to 15 cows. Such associations will furnish work to occupy the full time of one man in looking after the testing, enabling him to spend one day with each herd and on each farm. A sample of the night's and morning's milk will be taken from each herd for one day of each month. These samples will be tested. The day's results will be multiplied by the number of days in the month to ascertain the month's production of the herd. The twelve months' production will make the year's record.

The dairymen will pay \$1 per cow per year for having this work of testing done. This will pay not more than one-half of the salary of a competent man to do the testing. This man will also be competent to advise with reference to methods of feeding, the grading up of the dairy herd, the selection of the dairy herd by culling out poor cows and replacing the same with better cows, etc. The possibilities of advantage resulting from the testing association are by no means limited to obtaining knowledge relative to the amount of milk given by each cow in the herd or the relative value of the cows.

In localities where testing associations have been established the first year's work has resulted in an increase of 50 pounds of butter fat per cow for entire herds. The full effect of the testing association is not apparent the first year. Its effects are cumulative and a test for a period of four to five years will produce results which are away yonder out of proportion to the expenditure incurred.

It is hoped that such KANSAS FARMER readers as may be solicited to enter these testing associations will so do. The benefits to be received are important and the progress of dairying and the increased profit resulting therefrom are almost wholly dependent upon testing the individuals of the herd, whether the farmer himself does the testing on his own herd or whether it is done through associations as contemplated above.

The two-row cultivator helps keep ahead of the weeds and does as much work as an extra team and hand.

"The live country community is known by the sort of town it supports," says a Minnesota farm exchange.

GENERAL FARM NOTES



THIS DAIRY HERD IS PRODUCING ABUNDANT MILK AT A LOW COST, AND HAS MADE ITS OWNER PROSPEROUS—WITH A SUMMER AND WINTER SILO, THIS DAIRY FARMER IS INDEPENDENT OF PASTURE CONDITIONS.

Our subscriber, B. H. G., El Dorado, Kan., wants a recipe for destroying cut worms. The following remedy is recommended: Bran, 100 pounds; Paris green (dry), 1 pound; sugar, 2 to 3 pounds. Mix thoroughly and dampen slightly with water and spread over the section where the worms appear.

State After Cream Buyer.

A. A. Allee, cream buyer, Centralia, Kan., has been arrested to answer a charge of having tested cream inaccurately. The complaint was made by E. G. Maxwell, deputy state dairy commissioner. It was found the cream had been tested in such a manner that it lacked more than the permitted 1 per cent of coming within the law.

Easy Way to Catch Rats.

A subscriber writes KANSAS FARMER: "Scatter a handful of soaked corn on the floor or hard ground near rat holes. Then spread an old horse blanket or carpet over the holes and corn. The rats can move around in the dark and will come out of their holes and crawl around under the blanket after the corn. You can tell exactly where Mr. Rat is by the raised place in the blanket. Just step from one rat to another, and they will not even squeal."

Warts on Cow's Teats.

Subscriber J. G., Colony, Kan., wants a cure for warts on teats of a heavy milking cow. We would worry along with the inconvenience of the warts until the cow dries. The danger in attempting to remove the warts while the cow is milking is that the teats may become sore and milking difficult. The warts he describes are quite common to milch cows. These are long and soft. We have known them to disappear during the dry period. In the case of this kind of wart a white silk thread may be tied tightly around the wart and close as possible to the teat and the wart will drop off in a few days. This will make milking more easy, but does not cure the wart. When the cow is dry a drop of acetic acid applied daily for four or five consecutive days will remove the remaining part of the wart. If the wart is stubby and hard, apply the acid.

Hard Running Mower.

Our subscriber, L. A. R., Larned, Kan., says his mower runs heavily and wants to know the probable cause. The movement of the sickle may not correspond with the guards. This is not uncommon when an adjustable pitman is used. Look into this condition. See if the ledger plates hold the grass against the sickle. They may be so worn that the bars slip away from the knife and if so should be replaced. The guard caps may be so worn that they do not hold the knife down on ledger plates. Beat these caps down with a heavy hammer. The sections of the knife may not be in line and in cutting weeds the knife may have been bent. Straighten it. A knife with new sections runs easier than with old sections. This on account of the loss of the original bevel. Remember that the same general principles apply to the sickle and cutting bar as to a pair of scissors, and the same conditions in each are required for easy cutting.

Transplanting Trees.

Subscriber C. H. S., Idaho, writes: "In my experience, the main reason why people in transplanting shade trees fail to have them start, is because they neglect to pack the earth firmly about the roots. In connection with the work of transplanting evergreens, the Department of Forestry has been especially successful and we are inclined to attribute this success very largely to the strict attention we pay to packing the

earth firmly about the lower roots, as well as at the top of the ground. Many people throw the soil in around the roots loosely until the excavation is heaped up and then tramped wholly from the top. The better way is to place the roots, throwing in if possible, a little water, then a little good, moist, fertile soil; then pack this firmly, as what the roots desire is close contact with the moist soil; then if more earth is put in and packed from time to time until the hole is filled, the plant will be wind firm and at the same time in a position to respond at once to growing conditions. In examining a number of transplants failing to grow, I have found almost invariably that they are easily pulled up because the earth was not firm around the roots. Attention along this line will, I am sure, save very many trees which would otherwise die when transplanted."

Cowpeas and Corn for "Hogging Off."

Our subscriber, J. B. J., Ottawa, Kan., writes: "I have a 12-acre field fenced hog-tight, planted to checked corn, which is a poor stand. The corn has been planted ten days. Would you advise planting cowpeas with the corn and pasturing? I have 50 hogs which I could turn in. Would it be better to buy sheep and pasture? Could I plant the peas and cut them with the corn for winter forage? When would be the proper time to plant peas and what variety would you recommend?"

The subscriber can do either of the three things he proposes. We would recommend "hogging off" the crop. This feed will, we believe, make our subscriber more money in pork than in mutton or for winter forage. Would advise planting New Era or Whippoorwill cowpeas at once—the first named preferred.

This subscriber has been answered at length by personal letter giving our detailed reasons for the recommendation we submit. This is a part of the personal service we are rendering dozens of our subscribers each week.

Vegetable Canning.

Our subscriber, C. R. M., Haddam, Kan., asks for information regarding canning of vegetables. The successful canning of vegetables depends entirely upon the ability to completely sterilize the vegetables. It is necessary, therefore, to heat to the boiling point of water and keep at that temperature for about one hour. This should be done for two or three successive days, or else keep the vegetable at the temperature of boiling water for a long time—about five hours. The process of boiling upon successive days is the one that is usually employed, and is much to be preferred. The boiling on the first day kills all the molds and practically all the bacteria, but does not kill the spores or seeds. As soon as the jar cools these spores germinate a fresh crop of bacteria which begin to work upon the vegetables. The boiling on the second day kills this crop of bacteria before they have had time to develop any spores. The boiling on the third day is not always necessary, but is advisable in order to be sure that sterilization is complete. If the housewife will keep in mind these facts she will, with a little ingenuity, be able to successfully can meat or vegetables. The exclusion of the air is of course an important factor—not because the air itself does any damage, but because of the ever present bacteria in the air.

Smut in Wheat.

P. E. Crabtree, of Kansas Agricultural College extension department, who has been spending a great deal of time among the farmers of Kansas looking for farm leaks, writes: "I have observed a noticeable amount of smut in

the wheat fields. I don't recall having seen it so prevalent for many years. I suggest that care be taken in the harvesting, stacking, threshing and storage of grain so infected, that the spores be not unnecessarily scattered over the farms of the state in the grain that will be used for seed this fall.

"Sometimes the infected wheat is used for seed, which should not be. In some instances I find a field badly infected on the same farm where another field planted from different seed is apparently clean; such should be kept separate.

"Aside from the planting of self-infected seed, the most extensive distribution of smut spores is caused by carelessness in the use of the thresher and other machinery used, and the promiscuous stacking of the crop and storing of the grain.

"I suggest that the fields be now properly inspected—while it is possible to so easily detect smut—that it be carefully determined what wheat is entirely fit for seed, and that it be given the same intelligent care that is devoted to seed corn or to live stock for propagating purposes, that much additional result per effort may obtain."

Blue Sky Law for Seed Business.

Our subscriber, J. T. S., Marion, Kan., writes as follows: "I think we need a blue sky law in the seed business as badly as in any line of business in the state. A common highway robber is a gentleman compared with the average seed dealer; he not only robs you of your money, but your time, and often an entire crop."

We suppose there are disreputable dealers in seeds as in other commodities. KANSAS FARMER has every reason to believe that seedsmen using its columns are reliable—at least we have had no complaint of the quality of seeds furnished by KANSAS FARMER advertisers except in the case of one advertiser whose advertising does not now appear in KANSAS FARMER. In this instance some four or five complaints were received and KANSAS FARMER secured refunds of the money paid this seedsman by our subscribers.

In buying seeds it is a good plan to obtain a sample and examine the sample for its purity and also for the germination quality of the seed. If the seed is of such character as makes it impossible for the farmer to know whether or not it contains weed seed, such sample may be sent to the Kansas Experiment Station or to KANSAS FARMER for examination. If the seed bought is not up to the standard of the sample the purchaser has redress and will have no trouble in obtaining satisfaction from reliable seedsmen.

Silage Worth \$12 Per Ton.

Our subscriber, C. M. Garver, Abilene, Kan., writes: "I give you the results of my experience in feeding silage as a part of the ration in fattening steers. I fed two lots of 100 head each the past winter. The first 100 head I put in the feed lot on September 20; the first 10 days I fed shock fodder and alfalfa. I then commenced feeding silage, and by October 10, I had them eating a ration of 20 pounds ground corn and 20 pounds silage and about 5 pounds alfalfa hay. I kept them on this ration for 30 days, when we commenced feeding new corn, then fed 2 pounds cottonseed cake in addition to the corn and silage; I weighed them on October 10 and again 21 days later, during which time they made a gain of 85 pounds per head, or a daily gain of a little more than 4 pounds per day. I weighed them again on December 4, and they had made a gain of 200 pounds during the 55 days they were on full feed. They were

shipped to Kansas City on December 26. I did not get the weights when we shipped out, as my scales were frozen up, but the steers were fat and sold well.

"The second lot of 100 head were put on feed January 6, and fed 75 days, and made a gain of 24 pounds per day, which was very satisfactory, considering the bad weather and the condition of the feed lots. We fed in mangers in a barn with plenty of shed room, which we kept well bedded with straw. We put the silage in the mangers and the ground corn on top; then mixed with a fork so that both were eaten together. We feed twice a day and aim to give just what they will clean up between feeds.

"In comparison with a lot of steers I fed the winter of 1910-11, which ate 28 pounds of corn and 5 pounds alfalfa hay and made a daily gain of 3 pounds per head, we find that the 20 pounds silage took the place of 8 pounds of corn, which cost 9 cents, and made at least a half pound, or 3 cents, greater gain, which would make the silage worth \$12 per ton, and as my corn made over 8 tons per acre, I figure that I got \$100 per acre for the corn I put in my silos."

Destroying Web Worms.

Our subscriber, J. H. H., Arkansas City, Kan., writes that two plantings of corn in a small field of bottom land have been destroyed by web-worms and desires a remedy for the destruction of the pest. There are about 60 species of web-worms, but there are only four commonly found infesting corn. The work of the web-worm is similar to that of the cut-worm or army worm, and the ravages of one are often mistaken for the other. The web-worm is a four-winged moth when it has reached the adult stage. Previous to its being a moth it is a striped worm. The web-worm can be distinguished from the cut-worm by the fact that when the web-worm is disturbed it will endeavor to get away, while the cut-worm curls up and remains sluggish.

Web-worms infest all grass land to a more or less extent, and are most likely to be found in corn fields which have been in grass or which are adjoining or surrounded by grass fields. They live in the corn field from year to year, multiplying each year, and the most effective and permanent method of destroying these insects—as well as other insects—is a crop rotation. It is not wise to plant corn or other crops more than two successive years in a field. This is especially true of infested fields. It is true also of all crops, because each crop has its common insects. The most feasible plan for cleaning the field of these insects is, therefore, a crop rotation. The method of destroying these and similar pests is not practicable on a large scale, and the method given below is not practical for a corn field of average size in Kansas:

A bushel of bran and one pound of pure paris green or a half pound of pure powdered arsenic may be stirred together thoroughly while dry and enough sweetened water added to make the bran into a thick dough. This poisoned mixture may be scattered along in rows through and around the field to be protected. In the case of corn, if possible the bran should be placed in the row before the corn comes up. Cut-worms and web-worms will readily feed upon the poisoned bran and be killed. It is necessary, of course, that poultry and live stock are not allowed access to fields in which this poisoned mixture has been used.

Several Granges are planning to visit neighboring Granges in a body. This adds a lot of interest, which may be increased by having the visitors provide the program.

SCRUB STALLION IN KANSAS

The last census shows a total of 1,147,056 horses and colts of all ages in Kansas, and the Kansas Live Stock Registry Board reports 7,843 of these are stallions at public service. Of these licensed stallions only 3,250 are pure-bred, while 4,593 are grades or scrubs.

These figures show that there is only one certified stallion to each 146 of the total horse population of the state, and when we remember that all breeds, from Shetland ponies to the draft breeds, are included, the real scarcity of stallions in Kansas is apparent, and when we remember that only 3,250 of all the licensed stallions in Kansas are pure-bred and that these represent fourteen different breeds, the dearth of good stallions is shown.

Few states are so well adapted to horse raising as is Kansas. Her climate, her pastures and her abundant alfalfa and grain make it possible to grow and develop horses cheaper and better than less favored states, and the market for good horses is always present.

In putting his horses on the market the Kansas farmer is at a disadvantage, because they lack in uniformity of type. The more nearly a horse approaches the ideal type for his breed, the more money he will bring. The more nearly a team approaches this type, the more nearly they are alike and the greater price they will bring.

It is always a good business axiom to offer what your customers desire to buy rather than to try to sell them what they don't want. Good horses always find a ready market when inferior ones are a drag. The only way to have good horses is to use good breeding stock. The real money worth of a good stallion in the improvement of the horse stock of a community is beyond estimate, while the damage done by an inferior stallion is even greater.

Many farmers seem to think that if a stallion is a good looker he is all the better for being a grade, because he is more surely a foal getter. This is not true. If a pure-bred is less sure than a scrub or grade it is because he does not get the exercise, and the blame rests with the groom and not with the horse. Grade stallions and scrubs most generally get daily exercise which keeps up their physical vigor, while the pure-bred is too often pampered and fattened for

Causes Money Loss to Farmers and Destroys Work of Breeder



"HAMBLETONIAN" STALLION IN PUBLIC SERVICE IN WISCONSIN, AND "NOT FOR SALE AT ANY PRICE." COURTESY OF STATE UNIVERSITY.

show at the expense of his breeding qualities.

The idea that a grade stallion will reproduce his good qualities in his offspring is also erroneous. He may be a good looker and of a desirable type, but he has only a percentage of the blood of the breed to which he belongs and is even more likely to reproduce the qualities which lie in his percentage of "cold" blood.

The pure-bred horse which traces his ancestry back for a century does not always reproduce his type in his progeny, though he does so more frequently than not, and it could hardly be expected that a grade would do so. The good qualities of the pure-bred have been fixed by generations of careful selection and intelligent management and his prepotency, or power to transmit these

good qualities, is one of the results of this breeding. Another result, and a most important one, lies in the fact that he has these good qualities to transmit.

Many pure-bred horses are so prepotent that their get, even from only fairly good mares, are excellent individuals. These individuals cannot, however, be expected to transmit their good qualities in the second generation. The grade stallion is sure to transmit qualities from his diverse ancestry, and there is no way of telling which will appear in the foal. The best that can be said of his get is that it will be uncertain.

The Kansas stallion law is one of the most beneficial pieces of legislation that has been enacted in a long time. It does not bar any stallion from public service because of his breeding or lack of it,

but it does protect farmers against fraudulent pedigrees and against unsound stallions. The time may come when the law will go a step further and prohibit the public use of grade and scrub stallions, but it does not do so now. In England, France and Scotland, the three countries from which we import most of our pure-bred horses, the grade stallion is practically unknown, and the secretary of the Clydesdale Stud Book states that there has been but one non-registered stallion in public service in Scotland since 1900. In France all unsound stallions are barred from public service and the government pays the owners of selected stallions a bonus of from \$60 to \$100 on each animal to keep him at public service.

This will explain why we go to those countries to buy our breeding stock. They have the best horses in the world of their several kinds, and they have a world market for them. They did not get these horses nor their reputation for breeding them through the use of grade or scrub stallions. They got both horses and reputation by the careful selection and mating of their horses and seeing that each generation approached more nearly to the ideal type than had its predecessors.

The use of a grade stallion means more than a lack of ability to record a pedigree for his colts. It means an uncertain and, too often, an undesirable type of colt, and it frequently means unsoundness or weakness in the colt. It means the certain deterioration instead of the improvement of the horse stock of the country, and it means the tearing down of the results of the labor and skill which has been expended for centuries in building up the pure breeds. It means financial loss, as the get of a grade stallion never sells for as much as that of a pure-bred, and the difference is lost money. It means loss in economy in the working as well as in the selling of horseflesh, and the way things are now, good horses, good cattle, hogs and machinery are all necessary to make things go on the farm.

Everything should be of the best, but it is especially important that the horse, which is the principal farm motor, should be of high quality. This can only come through the driving out of scrub stallions from the state.

Your Part in Advertising

By E. B. TILSON, Concordia, Kansas

To our brother and sister breeders: Greeting.

We don't know how very much, but what little we do know has cost us much in money, and bitter experience sometimes. Looking backward at the past, we can see where many of our mistakes could have been avoided.

In writing a letter last night to our good friend, the genial and courteous live stock editor of KANSAS FARMER, we had occasion to discuss some up-to-date methods in dealing with our prospects. Now, I am going to say to you what I said to Mr. Graham, only more in detail, so hear me out.

It is a singular fact that many breeders look upon their methods of dealing with customers as secrets. Some of them, a very few, ought to keep their secrets until the judgment day. We mean by this the crooks in our business, for there are just a few "bad actors" in the breeding business as in any other line of industry.

While we recognize the axiom, "Tell the truth at all times," we are also aware of the fact that the truth is not always to be told. To illustrate: You get an inquiry describing the kind, size and color of hog the "prospect" wants. You have it almost exactly, but a heavy or soft eared one. Nothing is said about the ears, so you have a satisfied customer that will come again.

When we first started in the business of breeding pure-bred Durocs we remember how proud we were of our herd and that our first "ad" brought us 18 inquiries in the first three weeks. It was in the busiest season of the year, with a hundred acres of wheat to cut; 80 acres of corn to lay by; hay to put up; the threshers "at it," and all this at once.

We did not write a letter for three weeks, but on a sunny Sunday afternoon I wrote all of our inquirers, and I

remember bragging to my good little Dutch wife about how much money we would soon have. We were plowing for wheat in July and complacently waiting for the checks to come in. None came. I remarked to my wife that none of our prospects had answered me. She kept right on with her lunch and, without looking up, said: "I don't blame them a bit." Surprised at her answer, my first word was: "WHY?" She kept right on at the Plymouth Rock drumstick and flung this at me: "Because those letters laid around here a month before you answered any of them. Those fellows who wrote you are all farmers. They don't write many letters, but when they do write they mean it, and they all have sense enough to know how long it takes to get a letter from their homes to Concordia and the answer returned." For once in my life I had no answer ready.

In that plain spoken sentence I was taught more than I had ever learned. Do you see the point, brother or sister breeder? I did, and from that day to this I have always answered our farmer friends the same day their inquiries were received, no matter what the circumstances might be.

Do you advertise? Well, it pays. Select your medium—a good farm paper—and KANSAS FARMER is one of the best. Good results will be obtained from a six line "ad," while a 10 line or a 14 line "ad" is better. Write your paper what you have to advertise and give your bank reference. You will be surprised to learn how soon the live stock editor will give you a nice reply.

Don't advertise unless you are honest. It hurts the business of all of us who try to tell the truth. At any rate you won't advertise very long in KANSAS FARMER unless you are at least fair and

square with your customers, for KANSAS FARMER advertisers are all guaranteed to their subscribers.

Don't fool in replying to inquirers. Get your answer into Uncle Sam's post-office with the least delay. If you do delay in your answer, don't blame the paper and then take on a bad case of "grouch."

It is the business of your advertising medium to get replies to your advertisement and my experience has been that they sure do it. It is your business to answer your inquiries and if you don't answer by next mail it is a safe bet that you will soon go out of business.

Now, I want to submit the next sentence to the breeders. I think it is a shame and almost mean to keep a good, old, honest, plain farmer with one foot on the fence and the other touching the virgin soil alongside of his mail box; shading his keen eye with one hand in looking down the road waiting for the rural carrier and your letter that comes all too late.

Truly, a farmer is a peculiar animal. Treat him fairly and he is your best friend. He may be ugly of face with a week's growth of beard, but he is honest all the time, happy and smiling most of the time, shrewd but square in his dealings. You can beat him once, but not a second time. We tip our hat to the man in the overalls; the just "plain folks" American farmer. He is our brother, and we are proud of him.

Use a follow-up letter within a week after you have written the first time, and if you get no reply to the second letter mark that prospect as "cold." In addressing letters to ladies be especially careful and accurate. They are quick thinkers and the best of judges of human nature. They seem to be able to tell what kind of men we are from just one

etter. Some of our lady friends are "city raised," and if they use the terms, male and female, be sure to use the same terms in your letters to them. Other ladies may ask you to price a bull or boar and are probably farm raised. We use the same terms in our replies that are found in the inquiries.

Don't try to "gush" to a lady. She don't like it. Just write her a plain, careful, courteous business letter. Don't address her as madam. It sounds too much like the streets of Paris. Just say, Dear Mrs. Jones or Smith, and go on with your letter. Her husband don't care for the word, "dear," but when he and she talk it over they will decide you are O. K. and will send you an order or the reverse, and you will never hear from them again. Now, if you have followed me this far, stay and hear the end.

Maybe you will think it over when KANSAS FARMER sends you this. If you are a young breeder and care for advice or an older breeder, for that matter, would say that I have gone to some trouble to write out a dozen letter forms which we use, the style of letters, etc., how to keep your records, the way we mark our herd, etc., and we will send it to you for 10 cents (stamps preferred) if you mention KANSAS FARMER. If you tell me that you don't have a dime and can't get the stamps, just your name and address, plainly written, will do and we will send the forms just the same.

In conclusion, our advice is: Get a typewriting machine. Your customers are sure to think you are prosperous if your letter is typewritten. The one best machine we know anything about is the one we use, and it is also used by the wife and six kids.

Now, we shall be glad to meet all breeders at the Topeka State Fair, in the baby beef section, and we want to ask you to be friendly and write us.

CHINCH BUG DESTRUCTION



FIRST PICTURE TO THE LEFT SHOWS METHOD OF MAKING SINGLE FURROW BARRIER. SECOND, FLAMING SINGLE FURROW BARRIER. THIRD, FLAMING DOUBLE FURROW BARRIER; AND, FOURTH, MAKING A DOUBLE FURROW BARRIER.

By T. J. HEADLEE, State Entomologist

There are enough chinch bugs developing in fields of various parts of Kansas to do serious harm to adjacent fields of corn, cane and Kafir, unless there is a change from a dry to a wet season.

Before the bugs begin to move, adequate preparations for their destruction should be made. These preparations include the securing and making of materials and apparatus for constructing and operating both the dry weather—the dusty furrow—and the wet weather—the tar or oil line—barriers. Preparations for both barriers are necessary because no one can tell under what sort of weather conditions the fight will have to be made. Materials and apparatus must be at hand because when the bugs begin to move, there is no time to lose.

The dry weather barrier may be constructed in either of two effective ways.



TROUGH OR BOAT FOR SHAPING BACK FURROW.

In one case a strip 5 to 10 feet wide is plowed between the infested field and the one to be protected. The soil is finely pulverized by use of a harrow and the surface reduced to a dust by dragging a brush back and forth. Two troughs 3 to 4 feet long are made of heavy lumber held parallel and 12 inches apart by a couple of strong 2x4-inch pieces nailed firmly across the top. This double trough, loaded with stone and ridden by the driver, is dragged back and forth on the pulverized strip until two deep parallel furrows, the sides and bottoms of which are covered with a deep, fine dust, are formed. These furrows can be renewed at will by redragging them.

In the other case, a deep lister furrow is plowed between the infested fields and the ones to be protected. The sides and bottom of this furrow are reduced to fine deep dust by repeatedly dragging a log having about the diameter of the furrow, back and forth. This type of furrow, like the other, can be renewed by redragging. With this type of barrier, either post holes must be dug in its bottom at intervals of 20 feet or the bugs must be destroyed by flaming with a gasoline torch. The first type of dusty furrow barrier requires more time to make, but less attention after completion. The post hole trap in the bottom of the barrier is less satisfactory than the torch, because the post holes have to be renewed every time the furrow is redragged, which, in our experience, has been at least once each day.

There are also many methods of constructing the wet weather barrier, but

again only two will be discussed. In the first, a sharp back-furrow is plowed between the infested fields and the ones to be protected. Two 2-inch planks 6 or 8 feet long and 12 to 14 inches wide are nailed together hog trough fashion. That is, the 12-inch plank is laid flat on the saw horses or the ground, and the 14-inch is set on edge along one side. After careful adjusting so that the ends of the planks are even, the 14-inch plank is spiked to the 12-inch. The front end of the trough thus made is rounded off like a sled runner. In order that it may slip well, the inside of the trough is lined with galvanized iron. A straight, smooth pole, at least 2½ inches in diameter, is then nailed into the bottom in such a manner that it extends from the front end to a point 8 or 10 inches behind the rear end of the trough. A narrow rectangular platform, running the length of the trough and extending 6 to 10 inches beyond the rear end, is then constructed on the ridge of the now inverted trough. The platform is intended for the carriage of the driver and for the placing of stones when additional weight is needed. This platform consists of three 2x4-inch pieces a little shorter than the trough is wide and two other 2x4-inch pieces a little longer than the trough. One of the short 2x4-inch pieces is set in and spiked on crosswise near the front end, another near the middle and the third near the rear end. On one side one of the long pieces is nailed crosswise the short pieces and parallel to and 4 to 6 inches distant from the ridge of the trough, and the other in a corresponding position on the other side. By means of strong wire an attachment is made to the clevis and the inverted trough is ready to work. All grass and weeds where the furrow is made are cleaned away, because they interfere greatly with the making of a smooth, compact ridge and groove. This trough or sled is then placed over the back furrow and dragged back and forth until the sides of the furrow are well compacted and the top furnished with a shallow, well compacted ditch. Post holes at distances of 20 feet, must then be dug along the lower edge of the ridge on the infested field side. Slight imperfections can readily be repaired with a spade. In the second type a narrow strip between the fields is smoothed off by dragging a heavy plank back and forth. Post holes are dug along the line where the liquid is to be placed. The liquid used must be some preparation the chinch bugs particularly dislike. Coal tar has in the past been, all things considered, the most effective. The objection to coal tar is the difficulty of obtaining it and its high price. Recently, Prof. S. A. Forbes, of Illinois, has tested road oil No. 8, a product made and sold by the Standard Oil Company, and believes it a promising substitute for coal tar. The substance can be purchased from the Standard Oil Company refinery, at Whiting, Ind., and costs \$3.50 a barrel. The oil or tar can be applied by pouring it in a slender stream from an old teakettle or a sprinkling can. The latter should have the nozzle removed and the hole reduced by use of a plug with a hole of the desired size in it. A tar or oil line should have a diameter of about ¼ of an inch, and, of course, to be effective, must always be liquid. The back furrow barrier, while requiring more time to make, is better because the tar or oil line thus raised above the general level is

protected from objects falling across and bridging it.

The farmer must know his danger and have his barrier material ready before the small grain begins to ripen. He should keep the strip between the infested and non-infested fields where he plans to place his barriers, free from weeds, in order that it may, when the time comes, break up nicely and be easily pulverized. The moisture in it should, of course, be conserved by the dust mulch or the compacting necessary to the tar-line type will be difficult. The farmer must plan to use either type and must have all the apparatus necessary to the making of each.

As the wheat begins to ripen, he should watch the bugs closely, and on the first indication of movement, the dusty furrow should be constructed, if dry enough, and the back furrow should be thrown up and compacted. The back furrow should be between the dusty furrow and the field to be protected. The tar line should not be run unless, owing to wet weather, the dusty furrow will not hold the bugs.

The wheat should then be cut and the bugs compelled to pass without delay. While the bugs are passing, there must be one or more persons, depending on how much the barrier is to be looked after, in the field constantly burning those that have collected in the dusty furrow, if the weather be dry enough for its use, or destroying those that have collected in the post holes of the tar-line when it is in use. When the post hole traps are used, the bugs collecting in them may be destroyed by pouring a little kerosene over them. The persons operating the barriers must keep a sharp watch for any accidental breaks and repair them promptly.

Of course, the cost of operating the barrier will depend on the proportion of the day during which the bugs run and the number of days their passing continues.

In the course of careful studies of this phase of the question, Forbes found that the bugs never passed at night; that they passed more or less all day, if cloudy weather, and that they passed only for a part of the day when the sun shone. During the barrier work on the college farm in 1911, the weather was very dry and the days almost cloudless. The bugs usually began passing about 4 p. m., reached maximum between 5 and 5:30 p. m., and ceased entirely by 7 p. m. During the entire period of chinch bug migration it was necessary to attend to the barriers constantly for only three hours a day. In addition to this, the smoothing log was drawn through them once a day.

As the result of this study of the period of passing, Forbes says that the bugs run from 10 days during a dry season to 30 days in wet weather. The number of days during which the bugs pass depends upon the rapidity with which the food in the small grain fields is exhausted. On the college farm in 1911, the passage of the bugs from a given wheat field did not continue longer than six days, but when they passed first from barley, then from wheat, and finally from oats, the whole period covered about three weeks. It cost the department of agronomy of this station 14 cents a rod to maintain 219 rods of dusty furrow barriers for three weeks.

When, because of soil so tough that it cannot be pulverized or the presence of

too much moisture, the preparation and use of the dusty furrow becomes impossible, the back furrow should be examined and prepared. The tar or oil line should be poured and maintained. In the use of this barrier, as in the other, the operators should be on hand continuously while the bugs are passing, to repair breaks in the barrier and to destroy by kerosene or blast torch those bugs that collect in the traps. Forbes reports the cost of maintaining the tar-line barrier for four weeks as 7 cents a rod.

DESTRUCTION OF BUGS CROSSING BARRIERS.

Various experimenters have recommended that the few infested plants be thoroughly sprayed with kerosene emulsion, soapy sprays, or flamed with a gasoline torch. The kerosene emulsion has been the most highly recommended. Tests have shown that satisfactory kerosene emulsion was so difficult to make and that so much injury followed its use that in the hands of inexperienced men would be unsatisfactory.

Tests of the blast torch showed that not only were most of the bugs behind the leaf sheaths unhurt, but the corn was seriously scorched.

Tests show that 8 pounds of whale oil or laundry soap dissolved in 50 gallons of water would destroy every chinch bug thoroughly wetted by it, and would not injure the corn plant, even when used to drench it.

One part of "Black Leaf 40" to 500 parts of water, to which whale oil or laundry soap has been added at the rate of 4 pounds to 50 gallons, is as effective



BACK FURROW READY FOR TAR OR OIL. NO POST HOLES DUG.

for the bugs and as harmless to the plant as the soapy solution just described.

Recommendations regarding the means of applying these mixtures range from tin cups to the regular field sprayer. In our experiments the knapsack sprayer was found most satisfactory because, by placing the liquid under pressure and delivering it as a mist, a better distribution of the mixture was possible than by merely pouring, and because it was more easily handled than a field sprayer. The mixture was used freely to fill all the leaf pockets where the bugs collected. Economy of spray and time while attempting to kill the hardy bugs that have crossed the barrier, is foolish. The bugs must be destroyed without delay.

LIVE STOCK



For Selling Diseased Hogs.

A Sumner county jury in district court, after having been out nearly 36 hours, brought in a verdict for \$2,850 damages against J. A. Felt and his son, Allan, wealthy land owners, in a suit brought against them by H. B. Cheeseman, of Milan, for having sold him a bunch of hogs suffering with the cholera, thereby infecting his own herd so that a greater part of them died.

Mosquito Repellent.

Last year the people of Kansas were seriously inconvenienced by mosquitoes. The Alabama Experiment Station, located where people are really troubled by mosquitoes and where that insect is reputed to grow as large as the Missouri mule, gives the following repellent for all kinds and sizes of mosquitoes: Oil of citronella, 1 ounce; spirits of camphor, 1 ounce; oil of cedar, 1/2 ounce. This may be rubbed lightly on the hands and face, or a few drops on a towel hung near the head, will keep mosquitoes away for hours. Burning a little fresh, dry Pyrethrum powder in a closed room will drive the flies and mosquitoes to the windows and stupify them so that they may be easily killed.

Thumps In Shoats.

"I have a bunch of spring shoats that have the thumps, and some of them stagger around like they had the blind staggers. All the best pigs get the thumps. I would like to know what to do for the thumps."—G. A. EHOSAM, Bern, Kan.

Thumps are the results of digestive disturbances, usually constipation and too much grain.

This trouble may generally be relieved by cutting off the grain ration, at least in part, and turning the pigs onto pasture. If the pigs are very constipated a physic of raw linseed oil or Epsom salts may be given, to which may be added from a few drops of tincture of opium, say 2 to 6 drops. Feed alfalfa hay or pasture and milk or slop, but not much grain now.

Handling Pigs.

The profits of a successful hog man rest largely upon his success in raising pigs. No matter how well the sows may have been managed and how much care and attention may have been bestowed upon them, a little carelessness and lack of skill at farrowing time and during the early weeks of the pig's growth may result in the loss of a large percentage of the litters and the stunting of many more. Warmth and protection during the first few days, and sufficient amount of nutritious feeds and fresh air and plenty of sunshine later on, make for growthy pigs that bring profit to the breeder, according to Prof. E. J. Iddings, of the Idaho Station.

If from a well nourished dam and a healthy strain of animals the pigs rarely need attention at farrowing time. A quiet sow does not object to the presence of the herdsman, and weak pigs can be helped to suck without irritating the sow. Nervous sows are often best let alone. In very cold weather some artificial heat may be necessary in the farrowing pen. Moderate heat often helps, for a pig once thoroughly chilled, in a large percentage of cases, never survives for any length of time.

At three or four weeks of age the pig will begin to pay attention to his mother's feed. This is to be encouraged, and as soon as the pigs are eating well a creep to a pig feeding lot should be provided. Skim-milk is the standard pig feed, but some grain should be fed in addition. A palatable mixture for this purpose is four parts shorts, two parts corn and one part tankage. If corn is not available, ground wheat, sifted ground oats or field peas may replace corn. Both sows and pigs should have run of alfalfa, clover, rape, oats and peas, or other pasture. The object to be secured with the pigs is to train them to depend on prepared feeds to a large extent before meaning time.

Weaning time is from six to twelve weeks. If the sows are to be rebred at once, the pigs should be weaned at eight or nine weeks of age. If one litter per year only is planned, the pigs may be allowed to run with the sow until twelve or fourteen weeks of age.

After weaning, plenty of skim-milk, fresh pasture, and a grain ration in addition, are necessary for best results. In no case will it be found advisable to expect pigs to make profitable growth on pasture alone. At the age of weaning, the pig should be making very rapid and his most profitable growth. It takes 50 per cent more feed to put a pound of gain on a 150-pound pig than to put a pound on one weighing 40 pounds, and 83 per cent more feed for a 350-pound pig. Keep the pigs gaining while young on pasture and dairy by-products, if available, always supplemented with a grain ration.

A New Interest in Dairy Cattle.

While one of the objects sought by W. G. Merritt, of Great Bend, Kan., in dispersing his herd of high-grade Holsteins at his recent sale was to encourage the local community in the use of better and more profitable milk cattle, his other object was to set an example by demonstrating that the use of high-grades was so profitable that those who had once used them would want pure-breds, as he now does.

In the first of these objects he was disappointed as, instead of going to the local community which was familiar with them, or could have been, and which knew that these cattle were bringing to Mr. Merritt an income of \$600 per month, these cattle went to eager buyers from many sections of Kansas. Ellis, Ellsworth, McPherson, Clay Center, Scranton, St. John, Rozell and Burton were the towns best represented among the buyers, though many cattle remained in Barton county.

The result of this sale demonstrates the widespread hunger for dairy cattle which exists all over the state, and the need for more animals of the pure dairy breeds. Mr. Merritt made a daily demonstration to his neighbors of the results which came to him through the infusion of good blood into his milk cattle. He used high grades for milk producing purposes and, while his large income of \$600 per month would seem to most people as a satisfactory one, he had cut off one important source of income. He could not sell the increase of his herd except for beef.

By dispersing this good herd, each animal of which had a record of production for 20 months prior to the sale, and by replacing it with pure-bred animals, Mr. Merritt will probably more than double his income from his herd. He will have a greater milk flow for sale; he will be able to sell the increase of his herd for breeding animals; he will have the same amount of manure produced, and his cattle will cost him no more for feed and care.

This sale was a good move for his neighbors who bought his cattle, as it will give them better animals than they had and hasten their desire for pure-breds, and it was a good move for him, in that he was able to sell his cattle at fair prices and put the money into pure-breds. Prominent among the results of this sale is the establishment of a new dairy center for Kansas. It also shows, in a most emphatic way, the value of good blood and that this value increases in direct proportion to the amount of good blood which exists in the animals.

This sale averaged \$91.26, on 135 animals, from suckling calves to aged cows. The top price of \$250 was paid by J. P. Mast, Scranton, Kan.

A high grade, guaranteed durable live rich red barn paint is sold by the Sunflower Paint & Varnish Co. of Ft. Scott, Kansas, direct to the consumer at only 85c per gallon in 5 gal. cans, freight prepaid. This is a paint proposition worth considering by every farmer. This is a reliable company and now is paint season. Try this paint.

Does it increase your self-respect to have common seeds sent you at public expense when you can buy better ones, and those which are adapted to your locality, from your seedsman? What more reason is there for sending seeds to farmers than there is for sending nails to a carpenter or wax to a shoe-maker?

Over one gallon a minute

That's the capacity of the SMALLEST BEATRICE CREAM SEPARATOR—the simplest, most durable and most efficient skimming machine ever made.

With a BEATRICE, Mr. Farmer, you will find that you can skim more milk, in less time, and do the job better than you can with any other separator.

If you will go to a dealer who sells this separator, he will show you that these are "provable" points about the



If your dealer is not yet prepared to show you the BEATRICE, please let us know his name and we will gladly send you book-lets giving complete information about the labor-saving, money-saving BEATRICE. \$55.00 for the 550 to 600 lbs. capacity. Other sizes to fit all requirements. This is a money-saving price, as you know. You save from \$25 to \$40, depending on the size of BEATRICE you buy.

FREE DISC WASHING DEVICE.

FREE 1-PIECE STEEL PAIL

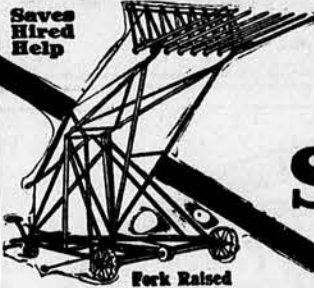
with each BEATRICE CREAM SEPARATOR. Don't take a substitute if you are unable to find the BEATRICE AT YOUR STORE. We'll tell you where to buy it if you don't know. You'll have the best milk and cream season you ever knew if you own a BEATRICE and that season ought to be this year.

Reminder: Send for the free book-lets and complete information today.

THE CONTINENTAL CREAMERY CO.,
Dept. C., Topeka, Kan.



Saves
Hired
Help



Fork Raised

The "Jayhawk" is

SOLD DIRECT

at Manufacturer's Prices

WHAT THE "JAYHAWK" IS

It is a hay stacker—the original portable stacker on the market. Nine years of success and thousands in use. Made of wood or galvanized steel.

WHAT IT DOES

It saves your hay in haying time by putting it up faster and with less help than other stackers. Build a stack of any size without extra work and put the hay any place on the stack. Think what it means in these days of scarce farm help to have a MACHINE that will do your haying quickly and easily.

WHAT IT MEANS TO YOU

You cannot afford to take a chance of losing your hay crop by putting it up by hand or depending on hired help. There is nothing on the market more up-to-date in haying machinery and we are selling them direct to you from our factory at wholesale prices. Saves you 20% to 25% on price. Every machine is fully warranted. You cannot afford to let our proposition go by you. Send today for our catalog, which tells you what our machine will do and how our customers like the "Jayhawk". Write today.

F. Wyatt Mfg. Co.

606 N. Fifth St., Salina, Kansas



Fork Lowered

Burns, Wyo., Dec. 14, 1911.
The F. Wyatt Mfg. Co.,
Salina, Kansas:
Dear Sirs: I have used the "Jayhawk" Hay Stacker for two years and it is the best machine that I have ever handled hay with. It is surely a labor saver. A boy can handle it. I would not think of putting up hay with any other kind of a stacker.
V. W. Smith,
Manager,
J. I. Corper Ranch.

Best feed
for your
baby
chicks



It is no trouble to hatch chickens, but it takes the proper Feed to raise them: use

Otto Weiss Chick Feed

a complete balanced Ration; it develops bone, flesh and feathers, saves your Chicks, and they make a rapid growth. Send for circular and prices on Poultry Supplies

Otto Weiss Alfalfa Stock Food Co.
Wichita, Kansas



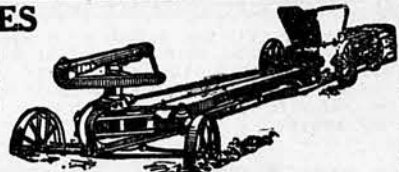
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Tested for over 25 years. Made in many styles, Horse Power, Belt Power and Self-feed Attachments. Simple and Durable with Greatest Capacity. They make a Profitable Investment. We can suit you. Write for Catalog and prices.

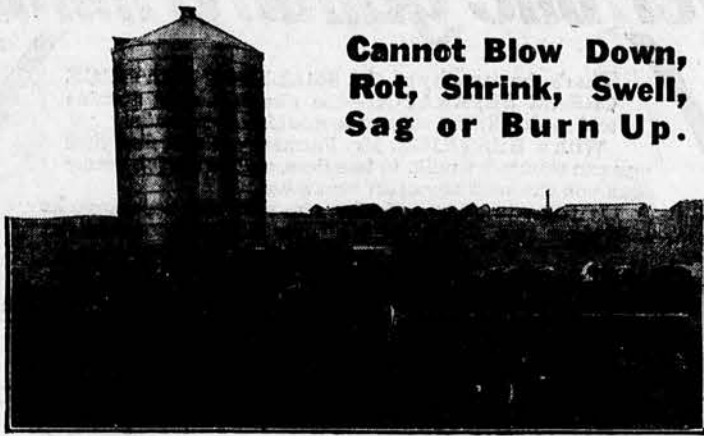
KANSAS CITY HAY PRESS CO.

129 Mill Street

KANSAS CITY, MO.



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Rot, Shrink, Swell,
Sag or Burn Up.

PERFECTION METAL SILO

MADE OF INTERCHANGEABLE SECTIONS.

A Silo ought to stand permanently. The PERFECTION Metal Silo does that. There is no risk. This Silo will last. We guarantee it.

It requires no expert help to erect. The sections are perfectly formed and interchangeable. Nothing to do but bolt them together, one piece at a time, round after round, until the required height is reached. Air-tight construction. Will withstand wind without guy wires or cables.

IF YOU BUILD A SILO 30 FEET HIGH THIS YEAR AND NEXT YEAR NEED ADDITIONAL CAPACITY, WE SELL SECTIONS TO MAKE HEIGHT, JUST WHAT YOU WANT. THIS SAVES ADDITIONAL FOUNDATION BUILDING AND EXPENSE OF SEPARATE NEW SILO. WE BUILD THE ONLY SILO EASILY ENLARGED, DOUBLING CAPACITY ON SAME FOUNDATION. THIS FEATURE ALONE SHOULD DETERMINE YOUR CHOICE OF SILO.

Can be taken down, moved and re-erected by anyone at any time. These Silos have been used for years, with entire satisfaction to the owners. A PERFECTION Metal Silo pays for itself every year. Our catalog tells you how. Write!

Let us prove that this is the most economical, convenient and durable silo. Drop us a postal card today for full information.

Perfection Metal Silo Co., Topeka, Kan.

FACTORY AT KANSAS CITY, MO.

26,791 Dairymen

Are Changing from Other Separators to the

United States Cream Separator

Read the experiences of two of them:

While using a _____ Separator, Mr. John Smith set up a No. 15 United States Interlocking Separator for trial. After using it I found it made smoother cream and made me more and better butter than the other machine. It is easier to turn and easier to clean. I can clean it in one minute and can say none too much in praise of it.

M. L. HUGGINS, Lew Beach, N. Y.

After using a _____ separator for 31-2 years I think your Interlocking U. S. bowl is surely all right. My wife and daughter are pleased with the washing and care of the U. S. The No. 15 U. S. turns but very little harder than the No. 12 _____ and separates almost twice as fast. Glad I bought the U. S.

C. E. MCCLURE, Melott, Ind.

A free trial will convince you. Ask our local agent.

Price \$25 and up. Old separators taken in exchange.

VERMONT FARM MACHINE CO.,

Bellevue Falls, Vt.

Distributing Warehouses everywhere.

HAY AND GRAIN BUNCHER

Saves the labor of one man and horse. Is fine for bunching clover or alfalfa for seed, also peas, flax or any short grain of a dry season.

Is the best method known to gather short, thin hay out west in the high altitude, where the hot sun cures the grass before it is cut.

Attaches to the seat post with a cord running to the tilting level. Operator can use either hand or foot-lift. Never gathers any old rotten grass, refuse or dirt.

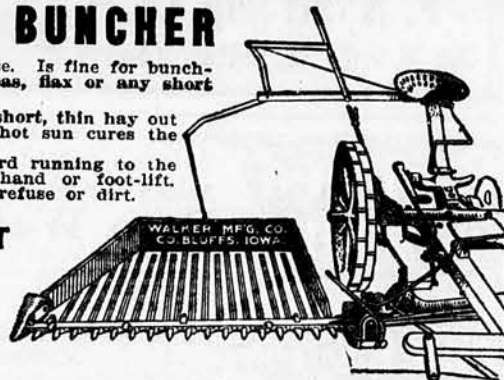
FOOT LIFT ATTACHMENT

Attaches to any mower.

Write today for full description.

WALKER MFG. CO.,

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COUNCIL BLUFFS, IOWA.



CAMPBELL COLLEGE,

HOLTON, KANSAS

WE HAVE just a few great forces in American Civilization that "lift us into life." The Christian College takes first place as such agency.

YOUNG MEN, YOUNG WOMEN, not only plan to go through college, but let the best things of a Christian College go through you.

Send for catalog, explaining courses of study, school year and cost of living in Holton.

T. D. CRITES, PRESIDENT.

THE FARM



As has been stated time and again in KANSAS FARMER, we do not believe in deep cultivation of the corn crop. We do believe in deep working of the field in the preparation for planting. If the field is clean and free from big weeds there is no occasion for deep cultivation after the corn has been planted. Shallow cultivation and more times over the field will give the best general results. We are confident that deep cultivation of the growing corn crop is not so common now as 10 years ago and the next decade will see, generally, a thorough preparation of the seed-bed before planting and what is called surface cultivation through the growing season.

It pays in comfort and in looks to have a few trees about the farm yard. A treeless farm is a desolate looking place. There are trees adapted to every climate and soil as there are crops adapted to the different climatic and soil conditions. A few thrifty trees, trim and neat in their appearance, will make farm life more pleasant. Nine out of ten farmers recognize the truth of the above statement and they plant the trees, but in probably 50 per cent of the instances the trees have failed through lack of care or the planting of the wrong kind. If you have no trees and have the time to care for them, arrange to do some planting next spring and during this summer and fall will be a good time to get the ground ready. Do not figure on planting acres of trees, but a few where you want them, with the determination that if they do not grow it will not be your fault.

We know there are thousands of young men who will not stay on the farm. If all of the young men were to remain on the farm we would soon be out of lawyers and doctors and men in other lines of business who now are large consumers of our farm products. This situation is not likely to be brought about soon, if ever, even though there should be an unexpected reversal of the present disposition to leave the farm. There is ample opportunity, and will be for many years, for the young man who is determined to leave the farm, even though he does not enter law, medicine, or some other similar profession. There is great opportunity for the so-called agricultural expert—for example, the man who can teach agriculture, who can accept positions as farm advisors or other similar positions which the agricultural colleges and the experiment stations are daily called upon to fill. It is in this line of work that there is today the best opportunity for the young fellow who feels that he cannot remain close to the soil.

It is time right now to be thinking about the seed corn for next year's planting. You may have been forced to take the best seed you could find for this year's planting and, possibly, you were not suited and the harvest will result in disappointment. Between this and corn gathering time observe your neighbors' fields and see if there is better corn grown in the neighborhood than that you are growing. Make up your mind where you will obtain seed if possible while the crop is growing. You can better judge seed corn by seeing it in the field and noting its habit of growth and its yield, than you can by seeing it in the crib or in the basket. The same general principle will apply to the securing of wheat, Kafir and cane for the next year's planting. We believe firmly in the use of good and acclimated seed and that which has done the best in the locality and under the conditions which it is expected to produce a crop.

At this time of the year one notices a tremendous difference in the condition of crops on one farm as compared with those of another. Under normal conditions it is possible at this season to pick out the best farmers as one drives through the country, the indicator being the condition of crops as existing on the different farms. Good methods of planting corn as compared with slip-shod methods have shown up by this time.

Likewise, in the case of wheat or oats. In a few miles drive recently we passed five fields of wheat. Three of these will yield easily two or three times as many bushels per acre as the other two. The farms on which these fields grow are in the same locality and all within a distance of two miles. If the man who has the poor crop adjoining the good crop will look into the causes responsible for the good crop he will find a reason for the difference in the two conditions. It will pay to watch the man who grows a good crop—whether wheat, corn, oats, or anything else. There is a reason. Find out what it is.

The more we see of the gasoline engine attached to the pump for power instead of the windmill, the more we like it. It is more certain in its operation than the windmill and wherever we find an engine doing the pumping we find that engine making easy from one to a half dozen other jobs on the farm which have heretofore been laborious. If the well is a good one—as most Kansas wells are—the engine will be found irrigating the garden and, aside from pumping water for the stock, the necessity of a garden supplying the family with vegetables during the growing season, is an important essential. One reason a farmer recently gave the editor for using an engine instead of a windmill was because in winter he could start his engine a few minutes before he was ready to turn his stock out to water and by this could supply the stock with warm water. He had found that his stock did much better drinking warm water than ice cold water. He said that the use of warm water in winter resulted in considerable saving of feed.

According to the news press, Kansas, in general, has been pretty well wet by liberal rains the past 10 days or two weeks. Some parts of the state have had far too much rain. Considerable of the uneasiness prevailing two weeks ago with reference to the wheat crop has been relieved, and in some sections in which it was thought the yield would be nothing, the wheat has shown wonderful recuperative power and will make a fair crop. It is our belief that Kansas will this year produce 60 to 70 million bushels of wheat. We would not be surprised if the yield would be 85 to 90 million bushels. It should be the aim to cut and stack this wheat in the best possible condition and start the plows as soon as possible after harvesting. If the plows cannot be started at once or the ground should not be in condition for plowing, it will pay to disk the ground which is to be plowed, just as soon as the crop is removed. If you do not believe this statement disk 10 or 15 acres, anyway, and handle the remaining part of the land as you have been accustomed and satisfy yourself as to whether or not there is any difference in results as between the two methods. We do not believe that you should take our word as final and conclusive, but we do believe that it is worth while to try out some of these generally accepted good recommendations. No man is in a position to better find out regarding the merits of the different suggestions than the farmer himself. He can experiment at little inconvenience and little cash or labor outlay. It is his business, we believe, to ascertain the truth regarding good farm practice, and after he has learned the truth he then is responsible if he does not accept it. While we are experimenting on the above proposition let us try also a little deeper plowing. If you do not believe in deep plowing for the whole field, try it on part of the field. Beyond any question, the deeper the plowing the deeper is the reservoir for water, the more water the soil will hold and the more moisture there will be available for the growing crop.

More Autos There Now.

The county assessor reports an increase in the number of automobiles in McPherson county this year over last. He reports 356 this year, while last year he found 276. The average price of the autos this year is \$418, while a year ago the average price was \$501.

DAIRY



Very rarely is the dairy herd of higher quality than its master.

One improvement in the dairy leads to another. The good dairy cow will provide the means for any improvement essential to the dairy.

When silage can be used in conjunction with alfalfa no other combination of feeds will excel these for economical production of butter fat or beef.

It is not too late to buy the silo for taking care of this year's corn, cane or Kafir crop. It is worth while to consider seriously the building of a silo. The silo is not new and untried. Silage is not an experimental feed.

You know that like produces like. This is the foundation principle of all breeding. The dairy herd will never be anything but a scrub herd if it is perpetuated by scrub males—scrub in so far as dairy breeding is concerned. The dairy herd is not being graded up by the use of males bred for beef, and such males, so far as dairy improvement is concerned, are only scrubs.

You never see a beef feeder skimp in the use of feed. If he has a bunch of steers in the feed lot he supplies just all the feed these steers will eat regardless of the cost of that feed. The same liberal methods applied to a bunch of good milch cows will make more money for the feed consumed than in the beef steer ever made for his owner. Beef cannot be produced without feed. Neither can butter fat.

Common scours in calves is indigestion, and can usually be traced to careless methods in feeding. The principal causes are overfeeding; feeding cold milk; feeding sour milk; irregular feeding; using dirty pails; and housing in dirty stables. Cold milk is not good for the young calf, neither is sour milk. After a month or six weeks, however, either cold or sour milk may be safely fed, provided the milk is in about the same condition day after day.

The very best dairyman is the man who has dairying in his blood. Dairy blood can be acquired. It can be developed in individuals who have a liking for the care of live stock and the doing of chores. If you do not have in your system a liking for the care of live stock, it is our advice that you turn your attention to some other specialty and something which is in line with the thing you like or in line with the kind of blood you have in your system.

The heifer calf intended for use in the dairy should be taught to consume large quantities of roughage. After she is ten to twelve weeks old the amount of grain should be limited with a view to making the calf eat a larger amount of alfalfa, vrayrie hay, or whatever other bright and palatable roughage may be available. The idea is to develop the digestive organs so that they may accomplish in the grown cow as much work as possible. The use of more good roughage in the calf's ration will make a larger animal and will also overcome some of the ills to which the calf is heir.

The arithmetic of the farm is interesting. If the boy or girl is a little bit slow in the arithmetic of the school, we will gamble that if the arithmetic is applied to farm problems in which the youngster is interested he will soon take to arithmetic as a duck does to water. The use of a 50-cent spring balance and a \$3 Babcock tester will teach the arithmetic of the dairy, involving addition, subtraction, multiplication, division and decimals. The problems of the dairy will interest the youngster as he has never before been interested. Try it. While the boy or girl is learning this arithmetic something will be learned of the cows that will be beneficial in acquiring greater and more economical production of butter fat.

What is the present outlook for plenty of feed for the dairy cow this fall when pastures are short, and for next winter? If the outlook is none too good,

get busy and sow a few more acres of Kafir, sorghum, cowpeas or some other roughage that will mature between this time and frost. The growth of too much roughage will be far more profitable than not enough. With plenty of roughage in sight you will be able to feed green stuff in the late summer and early fall when the pastures get short. This will keep up the milk flow and the cows will go onto dry feed with a good flow of milk, which good feeding will maintain during the winter.

A. L. Haecker, formerly in charge of dairying at the Nebraska Experiment Station, and who the past year or two has been engaged in the silo business, writes that butter production in Nebraska is increasing year after year. He says that Nebraska farmers will produce more cream for sale this year than ever before in the history of the state. He says: "It is a wholesome sign when a country increases their products; it means steadier employment, economical production and altogether is a safe and sound industry. It is gratifying to note a decided increase in the acreage of alfalfa; this will do much to stimulate dairying and stock raising and will tend to better farm conditions in every respect."

There are thousands of men who are engaged in the operation of milk factories. These men are for the most part located near the cities, producing milk for domestic consumption. They sell the whole milk. They grow no calves, but replenish their herds by buying cows here and there. As the cities grow and as the milk consumption increases there are more of these milk factories and a larger demand for milk cows. Who is to supply these cows unless it be breeders of dairy stock who are growing each year more cows than they care to milk? Have you known of a time in recent years when a top-notch dairy cow could not be sold at a long price? Every week KANSAS FARMER receives inquiries asking if we know where a carload of good milk cows could be obtained. We are compelled to answer negatively. The man who breeds dairy cattle has a larger and more profitable field in which to operate today than ever before in the history of the United States.

O. E. Walker, a Shawnee County farmer, has established a herd of purebred Guernseys, notice of which has already been printed in KANSAS FARMER. Mr. Walker bought his Guernseys in Wisconsin. Upon his return, in conversation with this editor, he commended the community breeding idea such as was in operation in Wisconsin where he bought his cattle. In this particular section there are Guernsey breeders by the dozen. This section is noted far and wide for its Guernsey cattle. One breeder could not create for a locality the reputation this locality has acquired by virtue of its having a large number of breeders of the same breed of cattle. It is certain that in this neighborhood the buyer of Guernseys can find what he wants. If he does not find the animals he desires on one farm, he goes to another farm. Mr. Walker found among these breeders a healthy competition, but nevertheless the highest and most wholesome degree of friendliness. He commented especially upon the high type of men who were breeding these cattle. They were gentlemen, well educated, big-hearted, broad-minded and honest, and a few days spent with them could not help but result in enthusing the lukewarm as to the possibilities of dairying and the breeding of dairy cattle. The above condition reported by Mr. Walker bears out the theory of a long time, namely, that good dairymen are good men and a high type of men. The dairy cow makes good men. Kansas furnishes the opportunity in every respect for the successful and profitable development of breeding centers of dairy cattle of all breeds. This community idea should take hold. With a half dozen breeders of Guernseys or Jerseys or Holsteins in a neighborhood, every hoof of breeding stock would be worth more money than if there is only one breeder in the community.

DE LAVAL CREAM SEPARATORS

The Best and Most Profitable of All Summer Farm Investments

A DE LAVAL Cream Separator is the best and most profitable of all farm investments at any time—and even more so in summer than at any other time.

The waste of butter-fat without a cream separator is usually greatest during the summer months and the quality of cream or butter produced without a separator the most inferior.

Moreover, the bulk of milk in most dairies is greatest at this season, so that the loss in quantity and quality of product counts greatest. It must count more than ever this year with the extremely high prices prevailing for cream and butter of good quality.



A DE LAVAL cream separator not only enables the production of more and better cream and butter than is possible by any gravity setting process, but as well by any other separator.

Then there is the great saving of time and labor accomplished by the separator in the handling of the milk and cream, which counts far more in summer than at any other time and alone makes the separator a profitable investment.

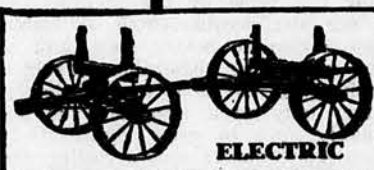
In this respect again the DE LAVAL excels all other separators by its greater capacity, easier running, greater simplicity, easier cleaning and greater sanitariness.

All of these considerations are points which every DE LAVAL agent will be GLAD to DEMONSTRATE and PROVE to the satisfaction of any prospective buyer of a cream separator.

Why not look up the nearest DE LAVAL agent at once, and if you don't know him write us directly, as below.

THE DE LAVAL SEPARATOR CO.
NEW YORK CHICAGO SAN FRANCISCO SEATTLE

Have You Written to the Electric Wheel Company Yet?



ELECTRIC

Do it now. Get one of the Electric Low Down Handy Wagons with broad tire Steel Wheels for your Summer and Fall work and save yourself and your horses. Wagons in stock, ready to ship. Also Electric Steel Wheels to fit old running gears and make old wagons new. We send free, on request, with full directions for using, rule and callipers for measuring old spindles, so that new steel wheels will fit perfectly.

ELECTRIC Steel Wheel Handy Wagons

Wagons
in
Stock
Ready
to
Ship

Act promptly. Your wagon is waiting for you. Don't think of beginning the long busy season's hauling with your old-style high-wheeled wagon. We save you thousands of high lifts. It is the useless high lift that kills. Think of the hay, grain, fence material, lumber, stone, manure and other hauling that is before you—this year and every other year. Cut out the high lifts. Stop rutting meadows and fields. The Electric Handy Wagon lasts a lifetime. Send for book giving all information. Use the coupon or write us a letter or postal today.

ELECTRIC WHEEL COMPANY
BOX 34, QUINCY, ILL.

Fill out, cut off and send this Coupon to

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I am interested in knowing how to get a set of Steel Wheels or Handy Wagon QUICK. If rule and callipers are wanted put X mark, here.

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It takes four big factories, equipped with special modern Silo machinery, to make the Saginaw—the most scientific Silo—and to turn out enough Silos to meet the demand. It takes this big equipment to make a Silo right. Scientific manufacture enables the makers of Saginaw Silos to offer you the only Silo with

BASE ANCHOR AND INNER ANCHORING HOOP

—greatest improvements yet made on a Silo. The Saginaw Base Anchor firmly roots Silo like giant oak. With Saginaw Inner Anchoring Hoop at top and Base Anchor at bottom, you need never fear that staves will ever loosen or fall in, or that Silo will ever collapse or blow down. Free Book of Pictures, for you, shows Saginaw factories inside and out. Ask for Circular A H

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Bees on the Farm "Cleanings in Bee Culture" will help you get more pleasure and more profit from Bee keeping. Six months trial subscription, 25c. Book on Bees and catalog of supplies sent free. The A. I. Root Company, Box 220, Medina, Ohio.

POULTRY

As the chicks grow larger, they will need more room. See that they are not crowded.

If your chicks are ailing these days, look out for lice. Nothing worries chickens, like lice during warm weather.

The yards should be spaded up quite frequently during the summer. It is a means of cleaning up the yard, as well as giving the chickens a good place to scratch in.

If you have more than one poultry yard it is a good idea, after spading, to sow with wheat or rye. Keep the hens out of one yard till the green food is up a few inches, then let them in and spade up the other yard and sow to some green crop. By thus alternating yards you will always have vegetable food for hens, which will keep them healthy and reduce the amount of your feed bill.

It is probable that during the warm weather many of the hens will lay double-yolk eggs. If so, it is a sure indication that you are over-feeding them. A healthy hen lays eggs of a normal size and whenever she varies the size, to produce some monstrosity, her system is over-heated and she is obstructed with fat. Feed less and give more exercise.

A person hates to admit that there are lice on his chickens or in his chicken house, and there may not be any on your premises or on your hens, but it will do no harm to use an insecticide on your hens and clean up your poultry house. The hens will be thankful for a nice, fresh bath, for dusting is their mode of bathing, and there might peradventure be one louse on them. Look and examine, anyhow.

The secret of fine poultry is severe culling. As soon as you can distinguish as between the good and the bad commence the culling process. The runts and the deformed, the off-colored and disqualified should be at once disposed of so that the room and feed may not be appropriated by them, to the detriment of the good ones. Look at their combs and be certain that they are correct; if the backs, legs or toes of any are crooked or deformed, throw them out for the table or the market. If there are any scrubs, small or feeble, we can advise no better plan than to end at once their miserable existence. In culling, our advice is to cull closely, retaining only such specimens as are reasonably sure to grow right. Only by such a system of severe culling can you ever hope to have fine specimens of fancy poultry.

Poultry on Farms.

The following figures are from the government census of 1910. Special attention is called to the fact that the present statement relates only to poultry on farms, as no enumeration was provided for by law for cities and towns.

The total number of farms reporting poultry in 1910 was 5,585,032, or 87.8 per cent of all farms in continental United States. Only 6,507 of the farms reporting poultry failed to report chickens. Turkeys were reported from 871,123 farms, or 13.7 per cent; ducks from 503,704, or 7.9 per cent; geese from 662,324, or 10.4 per cent; guinea fowls from 339,538, or 5.3 per cent; and pigeons from 109,407, or 1.7 per cent.

The number of fowls reported in 1910 was 295,880,000, and their total value was \$154,663,000, or an average value of 52 cents. Nearly 95 per cent of all the fowls were chickens; they numbered 280,345,000, and their value was \$140,206,000, the average value being 50 cents. Turkeys numbered 3,689,000 and were valued at \$6,606,000, the average value being \$1.79. The ducks reported numbered 2,907,000, and were valued at \$1,567,000, with an average value of 54 cents. Of geese the total number was 4,432,000 and the value \$3,195,000, or an average value of 72 cents. In 1910 there were also reported 1,765,000 guinea fowls, valued at \$613,000; 2,731,000 pig-

cons, valued at \$762,000; and 6,458 peafowls, valued at \$18,300. Ostriches to the number of 5,361 were reported, with a value of \$1,096,000, or over \$300 each. The ostriches were reported from five states: Arizona, Arkansas, California, Florida, and Texas.

The total number of fowls in the United States increased from 250,624,000 in 1900 to 295,880,000 in 1910, a gain of over 45,000,000, or 18.1 per cent. The figures for the two censuses are comparable, despite the change in date of enumeration, fowls under three months old being excluded in both cases. The number of turkeys, ducks and geese, however, decreased very materially in nearly every section of the country. The aggregate increase in fowls was, therefore, due to the increase in the number of chickens, which rose from 233,566,000 to 280,345,000, or 20 per cent. The percentage of decrease for turkeys was 44.1, for ducks 39.3, and for geese 21.9. Comparable figures for the minor classes of fowls—guinea fowls, peafowls, and pigeons—are not available for 1900. The number of ostriches reported in 1900 was only 684, or about one-eighth as many as in 1910.

The percentage of increase in value of poultry was over four times as great as that in number, amounting to 80.2 per cent. The average value per fowl thus rose from 34 cents in 1900 to 52 cents in 1910.

The poultry industry is distributed throughout the United States. In the several geographic divisions, however, the number of fowls per 100 acres of improved farm land varies considerably. The New England division shows the greatest relative number, which is about 98 fowls per 100 acres of improved farm land, while the lowest relative number (36) is in the Mountain division. The Middle Atlantic and East North Central divisions also show large relative numbers, amounting, respectively, to 89 and 81 fowls per 100 acres of improved land.

Of the total number of fowls in continental United States in 1910 considerably over one-half, or 54.3 per cent, were in the two North Central divisions; about one-fifth or 19.8 per cent in the two South Central divisions; somewhat over one-tenth, or 11.2 per cent, in the New England and Middle Atlantic divisions; somewhat less than one-tenth, or 9.4 per cent in the two western divisions—the Mountain and Pacific.

Every geographic division reports an increase during the decade in number of fowls on farms. The greatest actual additions appeared in the East North Central divisions, and West North Central divisions, and these two divisions also had a greater percentage of increase than any of the others except the rapidly growing Mountain and Pacific divisions. For the two North Central divisions combined the number of fowls increased 22.7 per cent; for the Mountain and Pacific divisions combined, 55.9 per cent; for the East and West South Central divisions combined, 4.3 per cent; for the New England division, 7.2 per cent; for the Middle Atlantic division, 15.7 per cent; and for the South Atlantic division, 13.8 per cent.

The number of chickens increased during the decade in every one of the geographic divisions, but the number of turkeys, ducks, and geese decreased in every division, except that there were increases of turkeys and geese in the Mountain division and a slight increase in ducks in the Middle Atlantic division.

Iowa has the largest total value of poultry, amounting to \$12,270,000, and Missouri ranks second, with \$11,871,000. The eight states next in order are Illinois, \$11,697,000; Ohio, \$9,533,000; New York, \$7,879,000; Indiana, \$7,762,000; Pennsylvania, \$7,674,000; Kansas, \$7,377,000; Michigan, \$5,611,000; and Texas \$4,807,000. In these ten states together the value of poultry is \$86,481,000, or 55.9 per cent of the total value of poultry in continental United States.

It will encourage the boy if you permit him to prepare an exhibit of grain or fit an animal for show at the fair this fall. You can never know to just what extent encouragement of this kind is valuable.

Crib Your Corn with a Meadows

PORTABLE WAGON DUMP AND GRAIN ELEVATOR

You'd never use a scoop shovel or basket again, if you knew how easily, quickly and cheaply the Meadows Portable Wagon Dump and Grain Elevator cribs corn and other grains. Will unload the biggest load in 5 minutes. The horses do all the work—wagon raises and lowers itself automatically—elevator sets at any angle, elevates any height, distributes grain where you want it.

The Steel Elevator

Not affected by weather. Steel throughout. No wood to swell, shrink or crack. Chains always same tension. Price really LOW. Write for catalog.

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WHITE PLYMOUTH ROCKS



Best All-Purpose Fowls in Existence.

White P. Rocks hold the record for egg laying over all other breeds. 289 eggs each in a year for eight pullets is the record, which has never been approached by any other variety. I have bred W. P. Rocks exclusively for 20 years and have some fine specimens of the breed. I sell eggs at "live and let live" prices, \$2 per 15, \$5 per 45, and I prepay expressage to any express office in the United States.

THOMAS OWEN, Sta. B, Topeka, Kan.

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PLYMOUTH ROCKS.

EGGS—FAVORITE PLYMOUTH ROCKS—Eggs from prize winning White, Buff, Partridge and Columbian Plymouth Rocks. Catalog free. Favorite Poultry Farm, Stafford, Kan.

SHELLEY BROTHERS' BARRED ROCKS won 70 premiums—34 firsts, specials and sweepstakes—at Kansas' largest shows. Eggs, \$3 per 15; \$5 per 30; guaranteed. Circular free. Box 7, Elm Dale, Kan.

BARRED ROCK BARGAINS—FOR TWO WEEKS: Eggs, 15, \$1; 60, \$3.25; 100, \$5. Babes, 12, \$2. Breeders, either sex, \$1 each and up. Mrs. D. M. Gillespie, Clay Center, Kan.

WYANDOTTES.

BUFF WYANDOTTES—EGGS AND baby chicks from the finest lot of breeding stock we have ever mated. Mating list furnished on application. Baby chicks, \$3 a dozen; eggs, \$2.50 per 15; two settings, \$4. Prices cut in half after April 20. Wheeler & Wylie, Manhattan, Kan.

ORPINGTONS.

S. C. BUFF ORPINGTON EGGS, \$4 PER 100, \$2.50 per 50; chicks, 10c. Mrs. J. A. Young, Wakefield, Kan.

CHANGING LOCATION—WILL SELL mostly all my S. C. White Orpington stock at bargain prices. Ed Schmidt, Ottawa, Kan.

SPECIAL SALE OF WHITE AND BUFF Orpingtons. Winners at the big shows. Trios, \$5; pens, \$8. Worth double, but I need the money. Hawkeye Poultry Farm, Osceola, Iowa.

RHODE ISLAND REDS.

SINGLE COMB RHODE ISLAND RED eggs, \$3.50 per 100, \$1.00 per 30. Mrs. Rosa Jansen, Route 3, Geneseo, Kan.

PURE-BRED ROSE COMB RED HENS, at 75 cents each; pen eggs, 15, \$1; range, 100, \$3. Mrs. B. F. Weigle, Winfield, Kan.

SOME OF OUR FINEST BREEDERS—Cocks and hens, must go to make room for young stock. Get summer prices, quick. Moore's Single Comb Reds are best. Moore & Moore, 1239 Larimer, Wichita, Kan.

EGGS.

When writing advertisers, please mention KANSAS FARMER.

TURKEY EGGS—NARRAGANSETT, Bourbon Red, \$2.50 per 11. White Holland, Mammoth Bronze, \$3 per 11. S. Durlig &

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Part of an immense seed farm for sale. An attractive proposition for a successful up-to-date farmer. Will sell in blocks of one quarter to three sections. Write for full particulars, stating amount wanted. Investigate this today.

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BEST FARMERS USE PRINTED STATIONERY. Rise to the dignity of sound business. 100 notecards, 100 envelopes, 100 cards, \$1, postpaid. Neatly printed, with name of farm and products. Be up-to-date; advertise your stock, poultry, dairy products, etc. National Printing Co., Shelbyville, Ind.

The GRANGE

"Back east" they are having great success with "neighbors' nights" in which the members invite their neighbors who are not members to attend. This has resulted in many additions.

The Roster.

We are going to talk for a roster for 1913 right now. If plans mature properly, before you get this there will be issued a roster to each of the 130 odd subordinate secretaries of Kansas.

This roster should have been out on the first of February, which would have saved this office much embarrassment, for we do not like to be the last one to complete a job, but the fact remains that states holding their annual meetings a month later have a roster out, and we have received several and have had to offer various excuses as to why the Kansas State Grange was not prepared.

On the first of December we sent to the address of every secretary a double postal card, with the request that as soon as the officers for 1912 had been chosen to fill out and mail the return card, with the names of the newly elected officers. This should have given us the name and address of the officers that was necessary for the completion of the roster. Many did not realize the importance of this request, and all have not yet been returned, but we hope for better results next year, and we right here want to say a word for the secretary. Elect a good one, and then make some provision to reimburse this officer who is working while you are enjoying the evening; who is putting in much time between sessions; who keeps you posted on your dues and on whom many arduous duties fall. Take care of the secretary, and that officer will help to get the roster out in better time next year.

The Big Problem.

In speaking of the supreme importance of judicious marketing, State Master Kegley, of Oregon, recently said: "What gain will it be to the farmer to make two blades of grass to grow where only one grew before if the profit of the extra blade is to go to someone else? What gains it to him to produce abundant crops and then find that he can receive for himself only 41 per cent of the price the consumer has to pay? Not until the farmer has discovered and stopped the leak in his profits in that other 59 per cent of consumer's cost, can the problems of production occupy the farmer's chief concern, and the first duty of those who are elected to lead in the grange organizations, or who assume to speak for the farmer, is to see that no mistake is made in this respect. "The mission of the grange is to make glad the heart of the rural people; to bring the farmer to a full realization of his sovereign citizenship; to make of him, indeed, a country gentleman, the farm home the ideal home, and the farm district the ideal social center.

"The farmer can never become the independent, prosperous, liberty-loving, educated, kindly country gentleman that he ought to be if he is continually robbed of the profits of the larger part of his produce, and unless he succeeds in stopping the leak he is doomed to remain poor; or if he becomes rich, as riches are counted among farmers, it is at the sacrifice of much that makes life worth living.

"Farm life will indeed become ideal when the farm families have all the profits of the farm for themselves. With means and the leisure for social intercourse, study and travel, refinement will come quickly, and the beautifying of the home and the achievement of all that the higher education stands for will follow as a matter of course."

Ants and Kafir.

A few weeks ago KANSAS FARMER reported investigation as a result of complaints of farmers to the effect that ants were eating Kafir seed. J. W. McCullough, special agent of the Department of Entomology, Kansas Agricultural College, made an investigation in the infested fields. He has found that if the Kafir seed is dipped in a solution of crude carbolic acid just before planting, the ants will not eat it. His experiments showed that dipping just long enough to cause a coating on every seed protected more than 90 per cent of the grains. It was found that the ants ceased working when the seed germinated, so that protective measures must save the seeds from the ants between planting and time of germination.

BARGAINS IN LAND

WRITE FOR LISTS—Sale or exchange. The Eastern Kans. Land Co., Quenemo, Kan.

WE MATCH TRADES FOR OWNERS—List your property with us and let us match it. OWNERS' EXCHANGE, Salina, Kan.

Farm Bargains, sales, trades. Want Texas land. Don't trifle. Buckeye Agency, Agri-cola, Kan.

BARGAINS in Ness County land, large and small tracts. Write now for lists and literature. C. H. Brassfield, Ness City, Kan.

40 ACRES, 4 mi. from Kosema, Okla., clear, all plow land, to exchange for restaurant stock, clear, well located. J. A. Kasperek, Belleville, Kan.

160 ACRES, \$8,000, to exchange for merchandise or hardware. Other exchanges. Write what you have. N. F. HOEN, Morrowville, Kan.

1,200 ACRES Logan, Gove and Thomas County lands; 160 to 2,000-acre tracts; \$7 to \$20 per acre. Attwood Real Estate Co., Oakley, Kan.

KAY COUNTY—THE GARDEN SPOT OF OKLAHOMA.

Fine stock farm, worth \$10,000, for only \$7,500. Easy terms. Fine \$80, \$5,000. List free. E. E. WOOD, Newkirk, Okla.

395 ACRES, adjoining county seat of Jefferson County, Kansas; good soil; fair improvements; good barns and outbuildings; 290 acres cultivation, balance blue grass; young orchard. Price \$65; terms. FORD & WEISHAAR, Okaloosa, Kan.

SPECIAL BARGAIN. Coffey County 460-acre ranch with two sets of improvements. One set good. \$30 per acre. Also many other fine farms and ranches in Neosho River Valley at great bargains. Young & Sherwood, Burlington, Kan.

Buy This One and Get a Bargain.—160 acres, 12 mi. from Genoa, in good farming country. Has R. F. D. mail service. Small improvements and balance long time at 6 per cent. W. M. HOFFMAN, Genoa, Colo.

THIS IS IT—90 acres fine, level land, 29 acres platted, 1/2 of a block sold and occupied by elevator, general store, lbr. yard, etc. This is a good trading point and bound to make a nice little town. A bargain at \$32.50 per acre. Write for plat, or come and investigate. Marrs & Day, Meade, Kan.

C. W. CARSON, ASHLAND, KANSAS. (Established 1885.)

I have bargains in wheat and alfalfa lands, and stock ranches, that cannot be beat. It will pay you to write me before buying. Clark county is rapidly coming to the front as a grain producer.

HOME SEEKER—Was you ever in Southwest Arkansas? If not, and you are thinking of making a change, by all means come and see what we have, or write for map and list of improved farms. Greene & Millwee, Prescott, Ark.

19,000 ACRES smooth plains land in shallow water belt in Cochran County. Subdivided into small tracts. Splendid colonization proposition. Must be sold. Terms easy. Will give a bargain to a real purchaser. No trade. H. H. Simmons, Trustee, Hillsboro, Texas.

FREE TICKET to Chillicothe, Mo., to visit JACKSON UNIVERSITY OF BUSINESS. Finest quarters; free night school; positions guaranteed; dancing hall and dancing teacher. Board, \$2.50. Backed by World's Desire Bureau. For catalogue and free ticket, address WALTER JACKSON, PRES., Chillicothe, Mo.

IDAHO LAND On the famous south side of Twin Falls tract. Right prices and easy terms. The land where crop failures are unknown. Reliable water right and plenty of water. The coming fruit country. Mild climate. No severe storms. We need you and you need us. Come. F. C. GRAVES, Filer, Idaho.

EASTERN KANSAS FARMS AND FINE CITY PROPERTY.

We have some good bargains in farm lands and city property in the best country on earth to live in. Fine farms at prices more than worth the money. Fine city property in the best town in eastern Kansas. Free illustrated folder on application. EBY-CADY REALTY CO.

112 East First Street Fort Scott, Kan.

BEST TOWN TO LIVE IN.

If you would like to live in the most beautiful city in the West, with unsurpassed educational, business and religious advantages, in a city clean, progressive, where real estate values are low but steadily advancing, where living expenses are reasonable, a city with natural gas at lowest price, address the

SECRETARY of the COMMERCIAL CLUB, Topeka, Kansas.

160 ACRES FREE

Ten cents in silver to cover cost of mailing) will bring you maps and full information regarding choice free homesteads in progressive settlement near new railroad now building. Adjoining railroad lands selling from \$15 to \$18 per acre.

WALCH LAND CO., Winnipeg, Canada.

OKLAHOMA, ARKANSAS and LOUISIANA

We own 15,000 acres in Oklahoma, 10,000 acres in Arkansas near Hot Springs, 4,000 acres rich Red River bottom lands near Shreveport, La. All for sale in 40 acres and up, easy terms and small cash payments down. We are owners, not agents.

ALLEN & HART, 308 Commerce Bldg., Kansas City, Mo.

FINE ALL SMOOTH half section, improved, half cult. Price for quick turn, \$3,500; only \$750 down, balance \$250 year for three years, then crop contract for balance. Send for detailed description. Have some good trades listed.

BUXTON LAND CO., Utica, Kan.

FOR RENT OR SALE

200 choice farms in Oklahoma, Arkansas and Louisiana. Write ALLEN & HART, Owners, Shreveport, La.

HARDWARE AND IMPLEMENT stock for exchange—Stock consists of shelf goods, harness and implements. Invoice about \$2,000. Lot and as half with 33x80 building. Price, \$2,000. Total stock and building, \$4,000. Will exchange for clear land. W. R. KNIGHT, Traer, Kan.

AT A SCARIFICE.

640 acres, central Kansas, improved, 3 miles from good town, 6-room house, barn for 16 head of horses and 10 head of cattle, cattle sheds, chicken house, etc., abundance of water, 40 acres alfalfa, 135 acres under cultivation, 4 acres forest and fruit trees, balance blue stem and buffalo grass pasture with running water. Former price, \$18,000. Owner going south and offers it far \$12,800 for immediate sale. Talk quick. No trade.

JAS. H. LITTLE, La Crosse, Kan.

ARKANSAS FARM CHEAP.

160 acres 12 miles southeast of Waldron, 2 miles from good inland town; 12 acres in cultivation, 50 acres more can be tilled, small house and barn, 1 acre in orchard, fine spring on the place and in a very healthy locality; fine hunting and fishing. Price only \$600. Terms. I have other bargains. Write or call at once.

John D. Baker, Waldron, Scott Co., Ark.

COME TO THE PEERLESS PRINCESS city and country, where we have everything America affords, and buy yourself a home while property is yet cheap, but as good as the best anywhere. Fine, modern homes in the city and ideal country homes on the farm and farms from 40 acres up, and from \$40 up. Ranches from 320 acres up, from \$22.50 per acre up. Write us your wants and we will find it for us, is all we ask. Johnson & Thompson, 519 Barnes Bldg., Wichita, Kan.

A GOOD FARM BARGAIN.

No. 1. 240 acres, 60 acres creek bottom land, balance sloping and rolling upland, fenced and cross fenced with hedge and wire, about 10 acres fenced hog-tight, 25 acres set to alfalfa, 65 acres in cultivation, splendid well of water and cistern at the house, 140 acres pasture, water supply furnished by a spring, piped to a tank, which furnishes an abundance of good spring water; 8-room house with good porches, large frame barn, buildings are surrounded by a splendid grove of ornamental and fruit trees, and a great variety and abundance of all kinds of fruits. Price, \$55 per acre. No trades. Write for lists.

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BUY or TRADE with us—Exchange book free. Bersie Agency, El Dorado, Kan.

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1,000—FARMS—1,000

Everywhere for Exchange. Get our fair plan of making trades all over the United States. Graham Bros., Eldorado, Kan.

FARMS AND RANCHES for sale or trade. Corn, wheat, alfalfa and pasture land at from \$10 to \$40 per acre. You should buy now. Let us tell you why. Sperry & Olson, Hill City, Kansas.

THOUSANDS OF ACRES Of government lands still open for homesteaders, in the San Pedro Valley of Arizona. Abundance of artesian water for irrigation can be developed. Send for our large illustrated book free. MORLEY-KIMBALL REALTY CO., Benson, Ariz.

FOR SALE OR TRADE.

240 acres in Wilson County, Kansas, 7 miles from the county seat; 60 acres in cultivation, 60 acres prairie meadow, balance pasture. 320 acres, 2 miles from town; small house and barn; 140 acres in cultivation and balance pasture. Would trade either one or both for a good stock of merchandise. Long Bros., Fredonia, Kan.

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I have some good farms close to Scipio, Kan., for sale at the Owner's Price. Cash sales a specialty. Address W. L. MORRIS, Owner's Agency, Garnett, Kan.

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Have you heard the news? Western farmers going to Michigan by the hundred. My booklet, "Michigan Clover Farms," tells you why. Write for it. It will be a revelation. List of farms with it.

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Farms. We have the best bargains. We can sell or trade lands or merchandise, no matter where located. Send description and lowest cash price.

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A Good Creamery, located in a large town. Almost new. Also a good threshing outfit to trade for land. Also some fine irrigated land in the Laramie Valley, Wyoming, to trade for Kansas farms.

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For Sale or Trade.

160 acres in the flowing well district of the famous Pecos Valley of New Mexico. Ideal climate. Six miles from good town, with plenty of water from flowing well. All set to apples spring 1911. Best apple district in U. S. 80 acres in alfalfa between rows. Bearing orchards net \$400 to \$700 per acre and sell at \$800 to \$1,500 per acre. This will make buyer independent for life. Must be sold to settle partnership. Price, \$150 per acre. Good terms, or might trade for income, city property. Write for particulars.

D. F. THOMAS, Roswell, N. M.

SOME ONE has just what you want. SOME ONE wants just what you have. For quick action and satisfaction address I. A. Harper Co-Operative Realty Co., Holsing-ton, Kan.

Good Trade For western Kansas land, 2-story frame store building, 20x70 ft.; 5 living rooms upstairs; always rented; on Frisco railroad. Price, \$2,000. Address owner, D. D. Walker, Parsons, Kan.

Why Not Silo Without Doors?

Our subscriber, J. T. S., Marion, Kan., writes: "In KANSAS FARMER, June 8, S. R. H., Merriam, Kan., asks about the feasibility of a one-door silo. Why not do away with all doors? Make a simple, straight, air-tight tank of wood, cement or other material, with the usual outside chute. At the top of chute rig up a short track with carrier and dump basket to hoist silage, similar to unloading hay with fork or slings. This arrangement would require an additional hand to drive horse and hoist, but three or four pulls would load a ton on the wagon and in loading the basket it would only be necessary to lift the silage high enough to put it in the basket or carrier. When throwing silage out of a silo with several short doors, much of it must be pitched 4 to 6 feet high, depending on distance between doors. A plain, serviceable silo could be built at a much less expense if all doors were left out, and silo would last much longer and keep silage in better condition. I believe that in a wood silo at least one-third of the cost could be saved. The usual outside ladder to top of silo and down in the basket would be the handiest means of getting in and out of silo. I don't believe I would like to risk my neck mining out silage with a hundred tons or more above that might take a notion to slip down at any time. The silo door, I believe, has been and is still the weak point, as well as expensive one, in silo construction. As so many ways may be devised for elevating the silage at a mere trifle of expense, the silo door seems unnecessary."

More Work With Large Implements.

More two-row cultivators will be used in Kansas this year than ever before. It is KANSAS FARMER's idea that in order to increase the amount of cultivation, as is necessary in the preparation of the best seed bed and in the best care of the crop after it is planted, that much more work than heretofore be done. The question with nearly every farmer is, how to do this added work, particularly so when hired help is scarce? The only relief we see is in the use of farm implements which will do more work. These implements will require more horse power, but every farm can afford the horse power necessary to do better than the average farming. The gang sulky plow, the three- and four-section harrow, and the two-row corn cultivator are implements which will double the working capacity of one man. In other words, they will save the work of one man, and by so doing on most farms will permit, if necessary, twice as much work on the crop as it has heretofore been given. It is our idea that in the purchase of new farm implements it is advisable always to use such implements as will expedite the work to be done. There is also a difference in implements as to the quality of the work they will do. Often two operations with one implement are required to accomplish the same results as might be obtained by one operation of another implement. There are several matters which should be carefully considered in the purchase of farm machinery.

A large rainfall is not conducive to high yields of alfalfa seed. The unusually light rainfall during the summer of 1911 caused many farmers to harvest alfalfa for seed rather than for hay. This was because of the large seed crop produced and because of the small quantity of hay. East of the Missouri River little alfalfa seed is harvested. The principal business of the alfalfa plant is to produce hay. This peculiarity of the plant is conducive to the success of live stock on farms where alfalfa is grown. Do you have this combination?

MAIL ORDER SPECIALS**Summer Waist Materials**

—to make up after the pretty tailored waist pattern illustrated on this page. Order samples of these specials, or if you wish us to make the selections for you we will choose the best values and prettiest patterns.

15c Sheer, Printed Batiste—Light figures and stripes, 27 inches wide; yard..... **10c**

25c Madras—White ground, with colored stripes, 32 inches wide..... **12c.**

15c quality, same width, yard..... **9c.**

15c Percales—Best quality, yard wide, large line patterns, yard..... **12c.**

25c All Linen, natural color, plain, 36 inches wide. Quick seller. You must order at once; yard..... **19c.**

All White India Linon—Finest qualities, 30 inches wide; yard, 12c, 15 and..... **20c.**

All White Linen—For waists, sheer or heavy qualities, 36 inches wide, yard, 29c to..... **50c.**

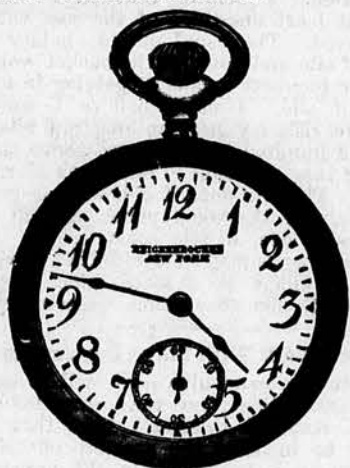
Nurses' Linon—All white, very fine firm, good wearing fabrics, launders beautifully, 36 inches wide; yard, 18c and..... **25c.**

Postage or Express Paid in Kansas.

THE MILLS DRY GOODS CO.,
Topeka, Kansas.

Boys, Look Here**Do You Want a Real Watch?**

If you do, send us your name at once and we will tell you how you can secure the beautiful, guaranteed watch illustrated herewith.



Listen, just a minute! We don't want you to answer this unless you are in dead earnest and really want a watch. We are not going to send you this watch free. This is an honest advertisement and we will tell you how you can get this watch by doing just a little work for us. You can do it. It has been done by hundreds of other boys.

Let us tell you how easy it is to secure a fine watch. Just send your name on a card saying that you want a watch. You can be wearing the watch inside of 10 days. Address,

Watch Dept., Kansas Farmer
Topeka, Kansas

**Be A Good Indian**

Every boy wants an Indian Suit. Let us tell you how to get one complete in less than an hour, without costing you a cent.

Address,

Indian Boy

—CARE—

Kansas Farmer

Topeka, Kans.

Ask your dealers for brands of goods advertised in **KANSAS FARMER.**

HOME CIRCLE**Make Your Brains Save Your Hands and Feet.**

MRS. THEO. HARTMAN.

What we housekeepers need is to use our brains a little more—study out a plan to reduce our daily tasks to a minimum number of steps and motions. This is accomplished largely by a convenient and systematic arrangement of kitchen furniture and utensils—giving prominence to those articles most frequently used; after having a place for things, keep things in their place; make our hands and feet co-operate with our heads. In short, HAVE A SYSTEM. How many housekeepers have their salt and pepper for seasoning in pantry or kitchen cabinet (several yards away from the stove) which might much more conveniently be kept in warming closet of range, or even on top?

How many dip water from a pail into the tea kettle with a small tin cup, when you might as well use a quart or one-half gallon dipper?

How many have no fit paring knives, and have their carving knives and scissors so dull that they would put to a test the patience of Job? I always keep conveniently at hand both a coarse and fine whetstone, and if necessary, use the grindstone. They serve the purpose far better than a crock or stovepipe. But do not understand me to say that when you have idle men about, you should deprive them of those honors. I always hunt up odd jobs of this kind on rainy days, or when the men hang around the kitchen.

How many keep a memorandum book conveniently at hand and jot down from day to day articles to be purchased the next time you go to town? A few years ago I saw a woman purchase a large bill of groceries for harvest. She had no list, but kept walking about in the store looking up at shelves and into barrels and boxes as she gave her orders. I hope she found nothing wanting the following week. At another time I happened in a country home during harvest. The lady of the house was paying 75 cents per peck for potatoes and \$1 per day for help in the kitchen—and had nothing but a short butcher knife with which to pare, cut or carve.

How many have spent ten minutes in trying to hash small potatoes or slaw with a knife, when you can so easily construct something like this—"a biscuit cutter"—which serves so many purposes? (A small tin can with perforations in the bottom for air to escape when used as cutter or chopper.)

How many have lifted a hot skillet, pan or roaster from the oven with a damp dish rag or the corners of your kitchen apron, and afterwards wished you had not? Why not keep on top of your warming closet two like this "holder"? This is made by cutting away the foot of a woman's hose, turn the remainder inside out, and fold in such a way as to form a square pad with the hemmed or upper end forming the final covering. After this is in proper shape, stitch on machine, starting at corner across one open end, then turn and stitch center to opposite corner, then across other open end, and finishing by crossing at right angles to other diagonal line. These can be made in less time than it takes to tell it, and may last for a year or two. They also possess several striking features. They are pliable, and being dark in color, do not show soil so soon. However, if John should persist in wiping the top of the stove with them, and they in turn black your hands, they can be washed. No, I did not use a pair of new hose; neither was I ever as "flush" as the \$5 clerk who told me she never wore darned hose. Moreover, when past darning I have doubled the life of hose by means of "slipper feet" and where there is a family of children, the worn portion of heel can be simply cut away at such an angle that when the seam is sewed up the former instep forms a shapely heel. Thus the worn places at toe and knee are also reversed, which prolongs the general wear. Of course, this stocking becomes smaller in the operation and must necessarily be handed down to a smaller child. And while sewing knit material see to it that the goods is stretched, otherwise a small

strain will break the thread and your work is undone.

Another convenience that I should not want to be without is soldering metal and soldering liquid. You can buy enough metal from a tinner for 10 cents to last for years. A good liquid is made by putting into a gill or two or wood alcohol or gasoline as much rosin as it will dissolve. You can buy a soldering iron for 25 cents, but I have found a stove poker convenient enough for my purpose. The superior virtue of a soldering iron lies in its copper coating, which will burn off in time or when it gets too hot. The secret of success lies in having surface perfectly clean and free from grease before applying liquid (merely a drop or two) and having iron not too hot for final operation. By this means the use of many a favorite kitchen utensil may be prolonged, which can be repaired with less work than would be required to take it to a tinker. My favorite time for soldering is while I have bread baking in the oven.

Now, I am going to mention what I consider one of the greatest household inconveniences. This is having no definite nor fixed time for meals. The lack of this is generally brought about by the neglect on the part of either husband or wife; often both. I say, have special times for meals. Let the women see to it that meals are ready on the dot, and the men, that they are there ready to eat them. The reasons for this are too obvious to be discussed. One thing I positively condemn is late suppers. Children carrying lunches or being obliged to eat dinner at noon on account of school regulations will naturally be intolerably hungry and resort to "piecing," which should be discouraged from every standpoint. Moreover, late suppers are naturally heavy suppers, and being eaten shortly before retiring, will be anything but conducive to good health. Besides, the housewife will have her dishes to wash thereafter, when she is already tired from her long day's work. Why deny her the pleasure of a little reading, or a part in the chat or amusements of the family circle when her day's work is done, instead of having supper from 8 to 9 p. m., drag herself to bed at 10 p. m. to get up in the morning only half rested, prepare breakfast in a half-hearted manner, which in turn will not be relished as it would be had there been an early supper to be digested before retiring. I cannot see that a lantern in the barn is a bit more inconvenient before breakfast or after supper (if need be) than before supper.



4841. Ladies Waist—This plain shirt waist is one which can be made of some of the pretty wash materials which are so neat and serviceable, or it may be made of a good quality of messaline, and will wear very well. The Gibson effect is obtained by the short tucks at the shoulders in front and the full length tucks in the back, while the finish of the neck, with a band allows the use of various styles of collar. The pattern, 4841, is cut in sizes 32 to 42 inches bust measure. Medium size requires 3 1/2 yards of 27-inch material. Price of pattern, 10 cents.

Important—In ordering patterns, be sure to give date of issue in which they appear, number and size wanted. No patterns excepted, Armstrong Mills, Ohio.

Save Money on Your Reading Matter Send Your Order to Us.

For the benefit of the readers of **KANSAS FARMER** we have made arrangements whereby we can supply practically any daily, weekly or monthly publication in the United States at greatly reduced rates. We want our readers to take advantage of our special club offers, and we give below a few of the most attractive combinations we have to offer. Send us a list of the papers and magazines you wish to subscribe for and we will make you a special confidential price on the club.

KANSAS FARMER, one year.....\$1.00
Topeka Daily State Journal, one year..... 3.50
Kimball's Dairy Farmer (semi-monthly), one year..... .50
Poultry Standard, one year..... .50
Total, regular price.....\$5.50
Our price for all..... 3.50

KANSAS FARMER, one year.....\$1.00
American Swineherd, one year..... .50
The Poultry Standard, one year..... .50
People's Popular Monthly, one year..... .25
Daily and Sunday Kansas City Star and Times (thirteen issues per week)..... 5.20
Total, regular price.....\$7.45
Our price for all..... 5.20

KANSAS FARMER, one year.....\$1.00
Chicago Inter Ocean (weekly), one year..... 1.00
Fruitman and Gardener, one year..... .50
Poultry Standard, one year..... .50
People's Popular Monthly, one year..... .25
Total, regular price.....\$3.25
Our price for all..... 1.75

KANSAS FARMER, one year.....\$1.00
Choice of Bryan's Weekly Commoner or LaFollette's Weekly Magazine, one year..... 1.00
Kimball's Dairy Farmer, one year..... .50
Poultry Standard, one year..... .50
Total, regular price.....\$3.00
Our price for all..... 1.50

KANSAS FARMER, one year.....\$1.00
Breeder's Gazette, one year..... 2.00
Kimball's Dairy Farmer, one year..... .50
American Swineherd, one year..... .50
People's Popular Monthly, one year..... .25
Total.....\$4.25
Our price for all..... 2.50

KANSAS FARMER, one year.....\$1.00
Hoard's Dairyman, one year..... 1.00
American Swineherd, one year..... .50
Poultry Standard, one year..... .50
People's Popular Monthly, one year..... .25
Total.....\$3.25
Our price for all..... 2.00

KANSAS FARMER, one year.....\$1.00
Poultry Standard, one year..... .50
People's Popular Monthly, one year..... .25
Woman's Home Companion, one year..... 1.50
Total.....\$3.25
Our price for all..... 2.00

Any of the following magazines may be substituted for **Woman's Home Companion**:

American Magazine.....\$1.50
Garden Magazine..... 1.50
Everybody's Magazine..... 1.50
McClure's Magazine..... 1.50
Pearson's Magazine..... 1.50
Good Housekeeping..... 1.50
Cosmopolitan..... 1.50
Delineator..... 1.50
Etude..... 1.50
Metropolitan Magazine..... 1.50

KANSAS FARMER, one year.....\$1.00
Poultry Standard, one year..... .50
People's Popular Monthly, one year..... .25
World's Work..... 3.00
Total.....\$4.75
Our price for all..... 3.00

Any of the following magazines may be substituted in above club for the **World's Work**:

The World Today.....\$3.00
Suburban Life..... 3.00
The Literary Digest..... 3.00
The Independent..... 3.00
The Review of Reviews..... 3.00

KANSAS FARMER, one year.....\$1.00
Poultry Standard, one year..... .50
People's Popular Monthly, one year..... .25
American Boy..... 1.00
Total.....\$2.75
Our price for all..... 1.75

Any Dollar Magazine published may be substituted for the **American Boy** in above club.

KANSAS FARMER, one year.....\$1.00
Fruitman and Gardener, one year..... .50
Poultry Standard, one year..... .50
People's Popular Monthly, one year..... .25
McCall's Magazine, one year..... .50
Total.....\$2.75
Our price for all..... 1.50

KANSAS FARMER, one year.....\$1.00
Kimball's Dairy Farmer, one year..... .50
Fruitman and Gardener, one year..... .50
Country Life in America, one year..... 4.00
Total.....\$6.00
Our price for all..... 4.25

KANSAS FARMER, one year.....\$1.00
People's Popular Monthly, one year..... .25
Poultry Standard, one year..... .50
Sunset Magazine, one year..... 1.50
Total.....\$3.25
Our price for all..... 1.75

Sunset is the one great magazine of the Pacific Coast. This fact makes it of special interest to a great many of our readers.

We have given above a few clubs, but we will duplicate the price made by any subscription agency or publishing house in the country, and in many cases make a lower price on any club of magazines or newspapers you desire. Don't give your order until you have written us for our special price. Address all orders to Subscription Department, **KANSAS FARMER**, Topeka, Kan.

Readers Market Place

Advertising "bargain counter." Thousands of people have surplus items or stock for sale—limited in amount or numbers hardly enough to justify extensive display advertising. Thousands of other people want to buy these same things. These intending buyers read the classified "ads"—looking for bargains. Your advertisement here reaches over 300,000 readers for 4 cents a word for one week; 8 cents a word for two weeks; 12 cents a word for three weeks; 14 cents a word for four weeks. Additional weeks after four weeks, the rate is 3½ cents a word per week. No "ad" taken for less than 50 cents. All "ads" set in uniform style, no display. Initials and numbers count as words. Address counted. Terms, always cash with order.

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

HELP WANTED.

WANTED—POSTOFFICE CLERKS, CITY and rural carriers. Thousands needed. Examinations soon. Trial examination free. Write today. Ozment, 44R, St. Louis.

WANTED—MEN IN EVERY TOWN IN Mo., Kan., Ill., Neb., Okla., Ark. to take orders for nursery stock. Outfit free. Cash weekly. National Nurseries, Lawrence, Kan.

FREE ILLUSTRATED BOOK TELLS about over 360,000 protected positions in U. S. service. More than 40,000 vacancies every year. There is a big chance here for you, sure and generous pay, lifetime employment. Easy to get. Just ask for booklet A 809. No obligation. Earl Hopkins, Washington, D. C.

WANTED—MEN AND WOMEN, FOR government positions, \$80 month. Annual vacations. Short hours. No "layoffs." Common education sufficient. Over 12,000 appointments coming. Influence unnecessary. Farmers eligible. Send postal immediately for free list of positions open. Franklin Institute, Dept. C 88, Rochester, N. Y.

MEN WANTED FOR FIREMEN AND brakemen on railroad in Topeka vicinity; \$80 to \$100 monthly; promotion, engineering; experience unnecessary; no strike; age 18-35. Railroad employing headquarters; over 5,000 men sent to positions on 1,000 official calls. State age. Address, Railway Association, Dept. K, 227 Monroe St., Brooklyn, N. Y.

SITUATION WANTED.

WANTED—A SITUATION ON FARM BY the year. Am experienced. Either for wages or share of crop. I. S. Racus, Route 1, Broken Arrow, Okla.

CATTLE.

TWO EXTRA FINE JERSEY BULLS, just ready for service. One has a great dam. Write. Chester Thomas, Waterville, Kan.

FOR SALE—REGISTERED JERSEY bull, 3 years old; good disposition. A. G. Nelson, Route 5, Chanute, Kan.

HIGH-GRADE HOLSTEIN COWS AND heifers for sale, in carload lots or less. A. B. Caple, Toledo, O.

FOR SALE—TWO SHORTHORN BULLS, 21 months old; one Polled Durham bull, 18 months old. All registered. Kerohan Bros., Route 2, Nashville, Kan.

FOR SALE—THIRTY HEAD OF CHOICE fawn colored Jersey cows, 3 to 7 years old, fresh and fresh soon. O. N. Himelburger, 307 Polk St., Topeka, Kan.

DOGS.

COLLIES: 100 PUPPIES, BROOD bitches and broke male dogs. W. R. Watson, Oakland, Iowa.

REGISTERED SCOTCH COLLIE PUPS for sale. Good workers and farm raised. Also, M. B. Turkeys. I. P. Kohl, Furley, Kan.

SNOW WHITE ESQUIMO PUPPIES— \$2.50 and \$5. Pointer puppies, by Fisher's Frank. Heavyweight English bulls and one Collie brood bitch. Tested breeding stock of the above breeds reasonable. Brockway's Kennels, Baldwin, Kan.

REAL ESTATE.

BUYERS—IF INTERESTED IN FINE stock and grain farms, write to D. W. Adams, Prairie Grove, Ark.

TO TRADE—A LOT AND NEW 5-ROOM house (\$1,500), in Centralia, Ill., for a \$1,000 Jack. J. E. Karnes, 500-502 S. Com. Ave., Centralia, Ill.

SELL YOUR PROPERTY QUICKLY FOR cash, no matter where located. Particulars free. Real Estate Salesman Co., Dept. 77, Lincoln, Neb.

TRADE—200 A. IMPROVED McPHER- son Co. farm, price \$15,000, for farm in or near Fulton Co., Ill. Bremyer, McPherson, Kan.

GOOD STOCK FARM FOR SALE—ALL stocked, crops in. Price, \$9,000; stock, etc., extra. Owner, C. M. Stebbins, Devon, Kan.

DEAL WITH OWNER—40 ACRES N. E. Oklahoma, adjoining town and good graded school, \$75 per acre; half cash, balance easy. Address, Box No. 7, McIntosh, N. M.

QUARTER WHEAT AND ALFALFA land, 100 in wheat, 50 Kafir and barley, balance grass. Price, \$4,500; half cash; balance terms, 6 per cent. Davie Keller, Ford, Kan.

BARGAINS IN BLACK LAND IN THE black land belt of North Texas. If you are in the market for a farm this summer or fall, see this belt of country before you buy. Sam E. Bateman, Celina, Texas.

BARGAINS IN TWO KIOWA COUNTY, Okla., farms; 160 a. each; smooth, black land, mostly under cultivation; some improvements; good market. \$4,000 will take either one. E. D. Schmitt, Moundridge, Kan.

CORN AND ALFALFA FARM FOR SALE by owner—400 acres of choice land in milk belt surrounding Mulvane, Kan., where the condensing plant of the Helvetia Milk Condensing Company is paying out \$20,000 a month for milk. Either as a grain or dairy proposition this farm is hard to beat. If you are looking for a farm, do not delay writing. B. E. Beery, Owner, Lawrence, Kan.

HOGS.

PURE-BRED, REGISTERED BERK- shires, Durocs, and trotting stallions, cheap. Arthur Bennett, Topeka, Kan.

FOR SALE—FANCY O. I. C. BOARS, 4 to 6 months old, from prize-winning stock; \$15 each. F. J. Greiner, Billings, Mo.

GASOLINE ENGINES.

SIX, 11 AND 20-H. P. GASOLINE EN- gines for sale at second hand price. Correll Mfg. Co., Manhattan, Kan.

FOR SALE—1 HART-PARR 22x45 H. P. engine with plows. Cash or easy terms. Write or call. Geo. S. Dent, Danville, Kan.

MISCELLANEOUS.

FREE—NO HUNTING ALLOWED SIGNS. Address, F. C. Sturtevant Co., Hartford, Conn., Box 14.

JASPER T. KINCAID, COUNTY CLERK, Johnson County—Taken up, 1 bay horse, 800 pounds, color bay, wire cuts on both front feet. Appraised value, \$70. Taken up on the 17th day of June, 1912, by J. L. Thompson, Olathe.

YOUNG MAN, WOULD YOU ACCEPT and wear a fine tailor made suit just for showing it to your friends? Could you use \$5 a day for a little spare time? Perhaps we can offer you a steady job. Write at once and get beautiful samples, styles and this wonderful offer. Danner Tailoring Co., Depart. 636, Chicago.

SEEDS AND PLANTS.

ALFALFA SEED—OFFER EXTRA quality alfalfa seed, non-irrigated, \$9.00 bu., delivered any station in state Kansas. Sack free. Sample sent on request. L. A. Jordan, Winona, Kan.

HEDGE POSTS.

FOR SALE—25,000 hedge posts. H. W. Porth, Winfield, Kan.

POULTRY WANTED.

CASH FOR POULTRY—SPRING DUCKS, broilers, hens, squabs, pigeons, eggs. Coops loaned free. Cope's Sales System, Topeka, Kan.

FARM NEWS

In Wright county, Iowa, the boys and girls above the fourth grade in 34 grade schools were asked what they intended to do. One hundred and fifty-seven of the 164 boys replied that they would have nothing to do with farming. One hundred and sixty-three of the 174 girls likewise voted against the farm. Three years later, during which time instruction had been given in agriculture and home economics, the same question was asked of the pupils in the same schools. This time 162 of the 174 boys answered that they intended to become farmers, and 161 of the 178 girls were planning on remaining on the farm. This is the best solution that has been given for keeping the boys and girls on the farm, and it works.

Information for City Investors.

Owing to the extensive advertising propaganda, many people with little or no knowledge of agricultural matters are being led to invest money in projects which, by no reasonable chance, can ever be made to pay the profits claimed for them. Secretary Wilson is very much interested in this matter and has issued instructions that full data be gathered in order that the department, through its publications and correspondence, shall be in direct position to aid those who have been attracted by the promise of good investments, but who would like to obtain reliable facts before taking action. The department thinks this information will be helpful to the thousands of city people and others who are being encouraged to put their savings into various land selling, orchard growing, crop producing propositions.

Engine for Bushel of Wheat.

A prize of \$2,500 for the best bushel of wheat is a prize worth while. The M. Rumley Co., La Porte, Ind., offers a traction engine worth this amount to the farmer who, at the International Dry Farming Exposition, exhibits the best bushel of wheat. The competition is open to the world. The engine will be delivered free to the nearest railroad station of the winner.

Any wheat grower can compete for this tractor—there is no string attached—and the man who farms one acre will

THE KANSAS WESLEYAN BUSINESS COLLEGE

THE MOST MODERN EQUIPPED COLLEGE OF COMMERCE IN AMERICA. For TWENTY YEARS has furnished more Bankers, Civil Service help, Railroad Stenographers, and Telegraphers, than any other school. Railroad contracts for all our male operators and allow salary while learning. We guarantee positions for complete course or refund tuition. 20 instructors, 18 rooms, 1,000 students. Terms reasonable. Write for catalog and free tuition price offer.

Address, T. W. ROACH, President, Salina, Kansas.

have an equal chance at winning with the man who raises 10,000 acres of wheat, for it will be the best bushel of hard wheat grown where the annual precipitation is less than 20 inches that the judges will consider.

Sorghums as Drouth-Resistants.

The sorghums, including all varieties of Kafir, milo and cane, are drouth-resistants to the extent that they have large root systems which make it possible for them to take up as nearly as any plant can all the available moisture of the soil and, furthermore, have the characteristic of lying dormant during long dry spells and continuing their growth upon receiving rains. The sorghums readily adapt themselves to the peculiar conditions under which they are grown and for this reason have become the most reliable and profitable crops in regions of light rainfall.

Cultivation for Trees.

While small, the trees may be cultivated the same as corn, with an ordinary two-horse cultivator, an excellent tool for this purpose being the Acme harrow. It is a good weed destroyer and leaves the soil well pulverized and in good shape to retain the moisture. Until the trees begin to shade the ground they should be cultivated frequently, about once in 10 days or two weeks, and especially after every rain. In ordinary seasons the cultivation should continue until late in the fall, but in seasons of excessive rainfall the cultivation may stop late in the summer to give the wood a chance to ripen for winter. In dry seasons, cultivation is more imperative than in wet. As the trees become large enough to shade the ground, which they will do very quickly if well tended, less cultivation will be required, and after four or five years they will need but little. In most cases it can be done away with entirely and a good mulch of old straw will meet all requirements.

Nature's Reservoir.

The sub soil is nature's storage reservoir for the moisture which, when rains are far apart, shall maintain the vitality of vegetation. The larger the proportion of the rainfall which can be made to find its way to that reservoir, in all lands sufficiently dry for cultivation, the greater the security of the growing crop against drought. The rain does not readily penetrate a dry, caked surface soil, because the pores of such a soil are already filled with air; which condition makes it repel water like a dry sponge. This air is so slowly expelled that considerable rain may run off without materially benefiting the crop. Cultivation retards or entirely prevents the run off; very likely it may enable the rain to penetrate to the sub-soil, and thus it assist in the retention of moisture against an always possible day when "the heavens shall be as brass," and when, if nature's reservoir empty, the growing crop must perish.

The Pot-Bellied Calf.

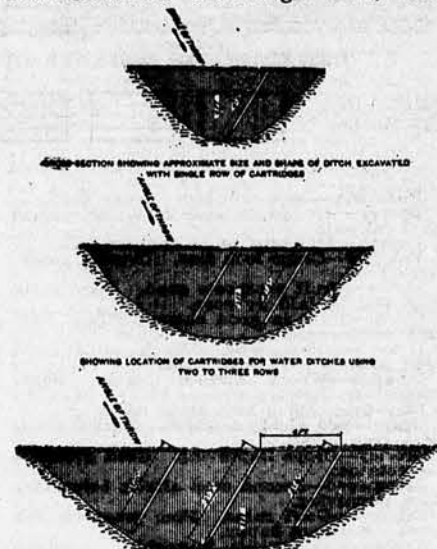
B. R. T., Lakin, Kan., asks what he can do to prevent his calves from becoming pot-bellied and cat-hammed. The two mentioned features of the individuals in our subscriber's calf herd are indicative and characteristic of calves which are not thrifty, and the lack of thriftiness, in all probability, is not due to lack of quality of feed, but to lack of feed of the right kind. The probabilities are that our subscriber is feeding his calves too much skim milk and by so doing is not furnishing the calves with the roughage and grain necessary to the complete and necessary development of the animal body. Calves under a month to 6 weeks old should not receive more than 10 to 12 pounds of milk per day. If they are being fed during the winter season they should by this time have learned to eat some good roughage, and for best results should have a small quantity of corn chop or Kafir or milo meal night and morning. Calves this age and drinking this quantity of milk are frequently turned on to pasture in the spring, with the expectation that the pasture with the milk will furnish the best results. A month to 6 weeks old calf drinking skim milk and on pasture will not do his best. He should have a small feed of grain night and morning.

The condition of calves as given by our subscriber shows unmistakably that

the calves are not properly fed, and to overcome this condition or to prevent this condition, better feeding methods must be employed. It is advisable to guard against the calf getting in this unthrifty condition. This can have no other effect than stunting and retarding the growth of the calf and in just the proportion that the calf is in this way handled does he become less profitable.

Ditching With Dynamite.

In the digging of ditches for any purpose whatsoever, the use of dynamite has become quite general in use. The illustration shows the size and shape of ditch excavated with single rows, two



rows and three rows of dynamite cartridges. Dynamite is not recommended for ditches having a greater depth than 5 feet, but is strongly recommended in digging of ditches 5 feet or less.

Says Deep Plowing Pays.

Our subscriber, Fred Bossen, Platte, S. D., writes, expressing his satisfaction as a long-time reader of KANSAS FARMER and to give his experience as a result of deep plowing. He says: "I formerly plowed 3 to 6 inches deep and am now plowing 10 to 16 inches deep, with an average of about 12 inches. I find that the growing crop can get along with less rainfall during the growing season when the land has been plowed deep as compared with shallow plowing. My experience leads me to believe that the growing crops can get along with 50 per cent less moisture during the growing season than when I plowed shallow. The deep plowing takes up the precipitation from rain and snow to a greater extent than does the shallow plowing, and the deep plowing forms a reservoir of moisture on which the growing crop can grow. I can prepare a much better seed-bed by deep plowing than by shallow plowing. Also, deep plowing is one-third more easy to work than shallow plowing. I can work the deep plowing sooner after heavy rains than I can the shallow plowing. The first year of the deep plowing my crops did not show such satisfactory results as they did the second year, and have each following year. I attribute this to the fact that in the first deep plowing I threw on to the surface too much new soil and this was not as thoroughly mixed with the old soil as it was later.

"As a result of deep plowing last year, my corn crop was double that of my neighbors who planted in shallow plowed land. In the case of potatoes and all kinds of garden truck, I had an abundant yield when neighbors had practically none.

"On the deep plowing at this writing all of my small grain and everything else I have sown or planted has made a larger growth and has a deeper green color than the crops of neighbors on ground plowed more shallow.

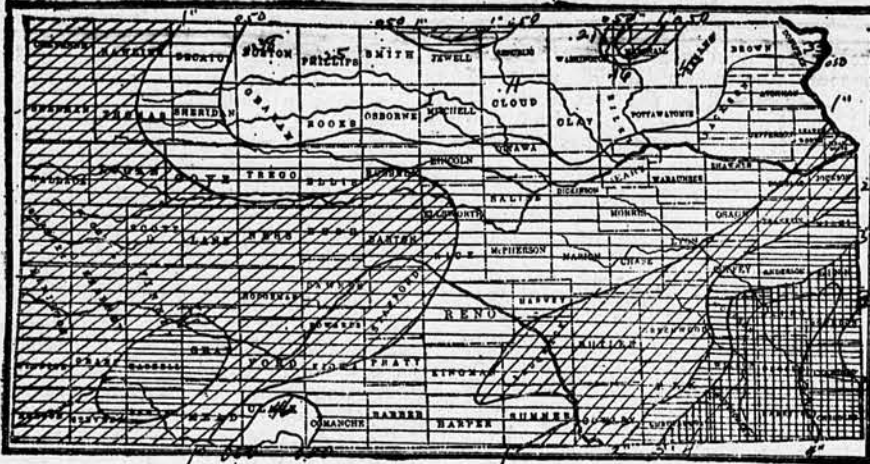
"I do my deep plowing with the Spalding deep tilling machine, and I find it a good mixed and a sub-soiler combined in one implement and that it handles both loose and hard soils quite satisfactorily. When plowing in extremely hard ground I use six horses.

"I can substantiate every claim and statement I have made, to any party who will visit my farm and compare the appearance of my crops and my yields with those of my neighbors who are skinning the top of the ground and calling it plowing."

KANSAS CROP REPORT

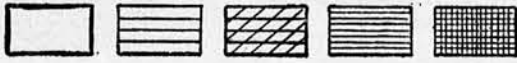
FOR WEEK ENDING JUNE 20

Rain chart prepared by T. B. Jennings from reports collected by the Weather Bureau.



UNITED STATES WEATHER OBSERVER'S REPORT BY COUNTIES.

SCALE IN INCHES:



Less than .50. .50 to 1. 1 to 2. 2 to 3. Over 3. T. trace.

Anderson—Corn growing. Grass good. Barber—Ground in fine condition. Good week on oats. Barton—All crops much improved. Bourbon—Crops look fine. General conditions good. Butler—Fruit prospects good. Some early corn will be laid by soon. Clark—Crops in good shape. Wheat harvest commenced. Decatur—Corn good. Much millet and cane sown within last week. Douglas—Wheat harvest begun. Some damage by Russian fly and chinch bugs. Elk—Crop doing fine since rains. Gray—Poor yield of wheat. Barley good. Oats crop small. Greeley—Crops improving. Good prospect for potatoes. Greenwood—Second crop alfalfa being cut. Corn improving. Johnson—Good rains. Fine prospects for crops. Farmers happy. Kearney—Conditions favorable. Weather cool. Logan—Wheat crop light. Leavenworth—Potatoes being harvested. Crops doing nicely.

Marion—Oats short but well headed. Harvest begins shortly. Marshall—Crops making rapid growth. Montgomery—Wheat ready to harvest. Good rains. Nemaha—Weather cool. Crops growing slowly. Some damage from chinch bugs and cut worms. Ottawa—Rains have improved oats 50 per cent. Wheat fairly good. Alfalfa ready to cut. Pawnee—Crop conditions good. Harvest begins about July 1. Saline—All growing crops doing nicely. Sedgewick—Rains have helped all vegetation. Wheat harvest to commence soon. Seward—Wheat in good condition. Broom corn and other crops late. Sheridan—All crops improving. Wheat good. Smith—Corn and alfalfa growing fine. Fruit crop will be heavy. Sumner—Corn growing nicely. Second crop alfalfa foot high. Wichita—Crops in fair shape. Kafir and milo in good shape. Greeley—Crop prospects much better. Cool and cloudy. Good rains.

In considering feed values do not forget that the one constituent of our rough feed which is worth more dollars than all that we save is the succulence. This is the one thing that makes feed appetizing. It is the thing in the grass and in the green stalk which causes the animal to lay on fat in June. It is the one thing in which all of our winter feed is lacking. The silo furnishes the only means of saving this succulence.

Field Notes.

Duroc Herd For Sale.

Grant Chapin, the well-known Duroc Jersey breeder of Green, Clay county, Kan., has sold out his implement business and home at his present location and will leave where he now is within a short time. On account of this, he offers at surprisingly low prices his entire herd of registered Durocs. The tried sows offered are among the best Mr. Chapin has ever owned, and would not be for sale under any ordinary circumstances. They are very large and mostly of Col. breeding, with strains of the most popular families, such as Golden Rule, W. L. A's Choice Goods, etc. The tried sows and fall gilts are bred for August and September farrow to the great young boar, Chapin's Wonder, by old Nebraska Wonder. The Chapin herd has long been noted as one of the leading herds of the west, and while Mr. Chapin hasn't been saying quite as much lately as he used to, the quality of the breeding and the great individuality of the stock has been maintained and there never was a time equal to this for the beginner or anyone else wanting something first class in this line to buy cheap. Mr. Chapin is pricing the stuff at 50 per cent on the dollar because it must be sold right away. Mention Kansas Farmer when writing.

Linscott's Jerseys Visited.

A few days ago the writer spent an afternoon very pleasantly and profitably at the fine dairy and Jersey cattle farm owned and operated by Mr. R. J. Linscott, of Holton, Kan. This farm has been noted for a quarter of a century because of its productions of high-class registered Jerseys. Mr. Linscott has carried out to the fullest extent the plans laid by his father, who founded the herd, and is today the best posted and most successful Jersey cattle breeder in the entire west. He knows every detail of the business and in connection is a thorough dairyman. His herd is a working herd and the cows last year, under official test, averaged better than 400 pounds of butter for the year, and several individuals made as high as 700 pounds. This is the only Register of Merit herd in Kansas, and the tests are made by a representative from the Kansas Agricultural College, who visits the herd twice a month and weighs and tests the milk from each cow. Mr. Linscott is milking in the neighborhood of 40 cows at this time. His dairy barns, silo and other equipments are as fine as can be found anywhere, and Mr. Linscott superintends and assists in all the work of taking care of the herd and saving feed for them. The present herd bull is Imported Oakland Sultan, a highly commended sire and a prize winner on the Island of Jersey. He has a wonderful line of ancestors back of him, and his daughters are now qualifying for the Register of Merit. This bull is assisted by a son of Golden Fern's Lad. The cows in the herd are of both American and Island breeding. The herd at this time numbers about 100 head. Mr. Linscott offers for immediate sale a couple of extra choice yearling bulls sired by Imported Oakland Sultan. Their dams have records and are

TOO LATE TO CLASSIFY

DUROC HERD FOR SALE

Am leaving, and must sell right away the following pure-bred Durocs: 12 tried sows, bred for September farrow, \$35 to \$50 each. 7 fall and summer gilts, bred for September farrow, \$25 each. 20 spring pigs, \$15 for one, two for \$25, five or more \$10 each. 3 fall boars, \$25 each. Herd boar, "Chapin's Wonder," by Neb. Wonder, \$50. King's Col., by King of Cols, 2nd, \$50. In bunches will make sweeping reductions from these prices.

GRANT CHAPIN
GREEN, KAN.

PHILLIPS COUNTY HERD.

Red Polled Cattle. Choice heifers and cows for sale, sired by Launfal and in calf to Cremona 21st. Also five choice bulls, in age from 8 to 18 months, some out of 60-pound 5 per cent cows. Also big kind Polands.

Chas Morrison & Son, Phillipsburg, Kan.

WESTERN JERSEY FARM—Headed by the famous Financial Countess Lad, sold for \$2,500 when only 3 months old and for \$5,000 as a 2-year-old. He is a wonderful show bull and the Finance family cannot be surpassed for production and constitution. Twelve granddaughters of Financial King in herd. Cows that milk as high as 45 pounds with second calves, and 55 pounds of milk daily when 5 years old. A few young bull calves for sale. Express prepaid in Oklahoma and Kansas. Safe delivery guaranteed.

J. E. JONES,
Nowata, Oklahoma.

500-pound cows. Mr. Linscott also offers 25 heifers and some tested cows. Mention Kansas Farmer when writing.

Norton County Polands.

A visit was recently made by a fieldman for this paper to the home of Mr. J. W. Loeper, Poland China breeder, of Norton, Kan. Mr. Loeper owns and operates a fine farm 7 miles from town. The farm is located in the famous Prairie Dog valley, where alfalfa thrives so well. Mr. Loeper, while living quite a ways west, has enjoyed a wonderful trade in his big Polands, and last year fitted up a nice bunch and exhibited them at Nebraska State Fair, winning a lot of good premiums, among them first on aged sow, Pecumseh Hadley. This sow is still in the herd and is without doubt one of the greatest sows of the breed now living. A sow of immense size and absolutely free from wrinkles or coarseness. Other sows in the herd not far behind her are several of her daughters sired by Blue Valley Exception and other big sows sired by Big Hadley, Gold Metal, Sampson, etc. Mr. Loeper's herd boar is the big fellow, Hadley Hutch, by Big Hadley, and out of Lady Hutch, the greatest sow John Blain ever owned. Mr. Loeper is planning to make the fair again this fall. Don't fail to see his exhibit. His other herd boar is a son of the show sow and sired by Blue Valley Exception. His brother was a winner at Lincoln. He is a boar with wonderful bone and good all over. Watch these columns for later announcement.

POLAND CHINAS

POLAND CHINAS

SAY! Mr. FARMER

Have you ever raised any of the Old ORIGINAL BIG BONED SPOTTED POLANDS? Faulkner has for years that have made good for him and hundreds of American farmers. Write to prices, etc. Pairs or trios, no kin.

H. L. FAULKNER, Box K, Jamesport, Missouri

MAMMOTH POLAND CHINAS

25 Bred Sows For Sale

Twenty-five mammoth sows bred for fall litters to the greatest breeding boar in the state of Iowa, the 1,000-pound Pawnee Nelson. A few bred to the mammoth two-year-old, Big Sampson. Spring pigs by the above named boars and out of mammoth sows. Size, big bone, ruggedness and quality characterize our herd. Write your wants. Prices reasonable. Address WILLIAMS BROS., Box 83, Villisca, Iowa.

Dean's Mastodon Polands. The big-boned type, will weigh when mature 800 MUNIZED BY DOUBLE TREATMENT AND ARE IMMUNE. Bred sows all sold. ALL IM-tion, New Market, and Postoffice, Weston, Mo. Address CLARENCE DEAN, WESTON, MO.

WALLACE'S MAMMOTH POLAND-CHINAS

A splendid offering of big-type young boars for sale, from the strongest collection of big-type brood sows, and by the GRAND CHAMPION BOAR EXPANSION WONDER and GRAND LEADER. Size with quality is my policy.

W. B. Wallace, Bunceton, Mo.

HANNA'S BIG TYPE POLANDS

We have a few outstanding good fall boars, also a few very high quality fall gilts. They are priced to sell quick, and are bargains.

J. T. AND C. A. HANNA, Bolckow, Mo.

BIG-BONED SPOTTED POLAND CHINAS

The old original kind, not related to Faulkner herd. One outstanding yearling; a number of high-class fall and spring boars for sale. They are the real spotted kind that grow big and have quality. For 20 years breeders of big ones.

J. D. GATES & SONS, Ravenwood, Mo.

FOR THIRTY DOLLARS

I will ship you choice Poland gilt sired by Colossus Pan and bred by August farrow to Boy Chief by Fulton's Chief.

HUBERT J. GRIFFITHS, Clay Center, Kan.

BREEDERS AND FARMERS

W's Made Good is making good. W's White Socks is another. Both them and their get open to your inspection.

L. C. WALBRIDGE,

Russell - - - Kansas.

POLAND CHINA BOARS.

Twenty fall boars ready for service. Twenty-five fall gilts, priced to sell. All large-type breeding, bred by Highball Look by Grand Look Jr. Write today. I mean business. **J. H. BAKER, Butler, Mo.**

VINECROFT POLAND CHINAS

Bred for quality and size. Address, **ALVIN LONG, Lyons, Kan.**

MAMMOTH HADLEY POLAND CHINAS.

60 choice spring pigs sired by Mammoth Hadley and Grand Model, two as good sires as can be found in the west; dams of pigs carry the blood of nearly all big sires.

GEO. W. SMITH,

Burchard, Neb.

MADISON CREEK POLANDS

Twenty-five Spring Boars, ready to ship at 2 months. Buy the best in big type breeding and save money on shipment. Inspection invited.

J. L. GRIFFITHS, Riley, Kan.

Poland Chinas With Quality

For Sale Ten Choice Fall Boars—15 Choice Gilts—a few bred for May litters, priced reasonable and guaranteed right.

P. L. WARE & SON, Paola, Kan.

EUREKA HERDS

of pure-bred Polands and Durocs. Will be in the market with some good ones this fall. Write early for what you want. The price will be right.

W. H. SALES, Simpson, Kan.

GOLD METAL HEADS

our herd, and leads in point of size and producing ability, assisted by Long King's Best, by Long King. Choice fall boars for sale, sired by the only EXPANSIVE.

H. B. WALTERS, Edinburg, Kan.

THE LARGE, SMOOTH POLANDS. Fifty head of fall boars and gilts that have size and quality; also, a few bred gilts. **L. E. KLEIN, Zeandale, Kan.**

BIG ONES, WITH QUALITY.

12 Poland China boars of November farrow. Extra good individuals. Sired by Giant Chief Price and out of J's Wonder dams; \$20 to \$25 each.

IEA C. KYLE & SON, Mankato, Kan.

POLANDS WITH SIZE AND QUALITY. Waechter's Referee No. 61045 at head of herd. Stock for sale at all times. **Josias Lambert, Smith Center, Kan.**

STRAUSS POLAND CHINAS. Big, smooth kind, headed by Model Bill 54634, and Model Wonder, descended from A Wonder. Sows of equal merit. Stock for sale.

O. R. STRAUSS, Milford, Kan.

Hildwein's Poland Chinas combines the blood of Expansion, Long King's Equal, Big Victor, Gold Metal, and other great sires. Sixty spring pigs to choose from.

WALTER HILDWEIN, Fairview, Kan.

SATISFACTION OR MONEY BACK. For sale, 12 young boars, will make herd headers; 30 choice gilts; 100 spring pigs. Prices reasonable.

W. A. BAKER & SON, Butler, Mo.

SOWS FOR SEPTEMBER FARROW. Daughters of M's Giant Wonder and bred to Pfander's King and Expansive's Metal. Others bred to M's Giant Wonder. Low prices for quick sale.

JOHN T. CURRY, Winchester, Kansas.

HOME OF CAPTAIN HUTCH.

200 Spring Pigs for immediate sale or orders booked. Pairs and trios not related. The blood of the biggest Polands; new blood for these parts. Write for private sale catalog and prices.

C. W. JONES, Solomon, Kan.

LARGE POLAND CHINAS

Choice boars, bred sows and gilts for sale. Sired by King Hadley, John Ex. and John Long 2d. Prices right.

W. Z. BAKER, Rich Hill, Mo.

HERD BOAR FOR SALE. Grand Look 2d, by Grand Look, Jr., he by Grand Look. An extra good individual and fully guaranteed.

FRANIS PROCKISH, Westmoreland, Kan.

FALL BOARS.

A few choice ones sired by First Quality 60266 and out of Expansion dams, at \$25 each. **JAS. ARKELL, Junction City, Kan.**

HARTMAN TYPE POLANDS.

Choice November and December boars, sired by Blue Valley, Jr., and Hartman's Hadley; \$20 for choice and quick sale. **J. J. HARTMAN, Elmo, Kan.**

POLAND CHINA BOARS FOR SALE.

Six extra good boars. Also, spring pigs sired by Kansas Hadley and Kansas X, Joe Bowers, Grand Leader, Expansion Wonder and Mount Vernon King. Prices to sell. Write today.

HULL & BEAN,

Garnett, Kansas.

LANGFORD'S Big Type Polands

Have 90 head spring pigs ready to ship. Out of big, motherly sows with stretch, and strictly big type boars. C. Wonder, Spotted King and other noted boars. My hogs have the stretch.

T. T. LANGFORD,

Box A, Jamesport, Mo.

NOLL'S MASTODON POLANDS. Headed by Pfander's King by Long King. Mated with sows of immense size that carry the blood of the famous Mastodon and Wonder families. I have topped the best sales having this blood for sale. Fall sale, October 22.

JOHN W. NOLL,

Winchester, Kansas.

GREEN LAWN STOCK FARM.

A choice lot of fall boars. Also two herd boars—Young Hadley by Big Hadley, and Big Spot by Pawnee Blain. Am booking orders for spring pigs for June shipment. I will trade a few Missouri farms for Kansas wheat land.

A. J. ERIHART & SONS, Adrian, Mo.

LONGVIEW POLANDS.

Spring boars for sale, sired by Mastiff, the first and grand champion boar at Topeka, 1910; Longview Orange by Big Orange, and Victor Chief by Big Victor. Victor Chief is the largest boar if fat in Missouri. All large type and priced reasonable. Write today.

D. M. GREGG, Harrisonville, Mo.

Twenty Duroc Jersey Fall Boars. Don't fail to look up the advertisement of F. G. McDowell, of North Topeka. He is offering 20 big, strong, Duroc fall boars for sale, priced at farmers' prices for quick sale. Please mention Kansas Farmer.

FIELD NOTES

FIELD MEN.

O. W. Devine.....Topeka, Kan.
Jesse R. Johnson.....Clay Center, Kan.
W. J. Cody.....Topeka, Kan.

PURE BRED STOCK SALES.

Jersey Cattle.

Sept. 5—George E. Norman, Newtown, Mo.

Poland Chinas.

Aug. 6—J. B. Lawson, Clarinda, Iowa.
Aug. 7—J. W. Pfander & Sons, Clarinda, Ia.
Aug. 8—L. R. McLarnon and J. O. James, Braddyville, Ia.
Aug. 23—W. B. Wallace, Bunceton, Mo.
Aug. 24—Bert Harriman, Pilot Grove, Mo.
Aug. 25—J. R. Sparks, Hunter, Okla.
Aug. 26—W. A. Burk, Trenton, Mo.
Sept. 2—John T. Curry, Winchester, Kan.
Sept. 1—John C. Halderman, Burchard, Neb.
Oct. 3—Williams Bros., Villisca, Ia.
Oct. 3—Thompson Bros., Marysville, Kan.
Oct. 8—J. D. Spangler, Sharon, Kan.
Oct. 9—Herman Groninger & Sons, Bendena, Kan.
Oct. 14—Verney Daniels, Gower, Mo.
Oct. 15—H. C. Gwener, Lancaster, Kan.
Oct. 16—H. B. Walter, Effingham, Kan.
Oct. 17—W. E. Long, Meriden, Kan.
Oct. 18—J. H. Baker, Butler, Mo. Sale at Appleton City, Mo.
Oct. 17—M. T. Williams, Valley Falls, Kan.
Oct. 17—Wayne Hudson, Hemple, Mo. Sale at Stewartville, Mo.
Oct. 19—W. H. Charters, Jr., Butler, Mo.
Oct. 22—Jacob Sparks, Pattonsburg, Mo.
Oct. 22—John W. Noll, Winchester, Kan.
Oct. 23—T. E. Durbin, King City, Mo.
Oct. 23—Harry W. Hoak, Attica, Kan.
Oct. 23—R. J. Peckham, Pawnee City, Neb.
Oct. 24—L. E. Klein, Zeandale, Kan.
Oct. 24—J. Hartman, Elmo, Kan.
Oct. 29—N. E. Copeland, Waterville, Kan.
Oct. 31—W. Z. Baker, Rich Hill, Mo.
Oct. 31—J. H. Harter, Westmoreland, Kan.
Nov. 1—Walter Hildwein, Fairview, Kan.
Nov. 2—E. J. Manderscheid, St. John, Kan.
Nov. 2—Hubert J. Griffiths, Clay Center, Kan.
Nov. 9—W. A. Baker & Son, Butler, Mo.
Nov. 9—Lomax & Starratt, Severance, Kan.
Nov. 13—Herman Groninger & Sons, Bendena, Kan.
Nov. 15—O. R. Strauss, Milford, Kan.
Nov. 16—J. B. Dillingham, Platte City, Mo.
Jan. 16—H. B. Walter, Effingham, Kan.
Jan. 24—Jas. G. Long, Harlan, Iowa.
Feb. 5—J. L. Griffiths, Riley, Kan.
Feb. 6—Thompson Bros., Marysville, Kan.
Feb. 8—W. H. Charters, Jr., Butler, Mo.
Feb. 12—Ira C. Kyle & Son, Mankato, Kan.

Duroc Jerseys.

July 26—E. W. Davis & Co., Glenwood, Mo.
Aug. 31—J. R. Blackshear, Elmdand, Kan.
Sept. 4—W. R. Huston, Americus, Kan.
Sept. 25—White Bros., Rose, Kan.
Oct. 5—S. W. Alfred & Sons, Enid, Okla.
Oct. 18—Jeff Constant & Son, Denver, Mo.
Oct. 26—E. C. Jonagan, Albany, Mo.
Oct. 29—W. W. Bales, Manhattan, Kan. Sale at College.
Oct. 30—Thompson Bros., Garrison, Kan.
Nov. 12—Lant Bros., Dennis, Kan.
Jan. 30—J. W. Wohlford, Waterville, Kan.
Feb. 4—Alvin Vilander, Manhattan, Kan.
Feb. 6—Thompson Bros., Garrison, Kan.

O. I. C.

Sept. 5—George E. Norman, Newtown, Mo.
Oct. 24—R. W. Gage, Garnett, Kan.
Oct. 25—Milton Pennock, Delphos, Kan.

Berkshires.

Aug. 22—Kinloch Farms Dispersion, Kirksville, Mo.

The Attwood Real Estate Company of Oakley, Kan., starts a card in the land section this week. They have for sale some choice ranch propositions. The head of this firm has lived in western Kansas for many years and is familiar with all its resources and advantages. He says "now is the time to buy."

W. H. Sales, owner of the Eureka herds of pure-bred Poland Chinas and Duroc Jerseys at Simpson, Kan., makes a change in his advertising card this week. He has abundant alfalfa pasture, and this, with some grain, is developing the spring pigs in fine shape. He will be on the market with some fine pigs of both breeds this fall. Keep in touch with him.

Read Hildwein's Card.

Walter Hildwein, Poland China breeder, of Fairview, Kan., starts his card in Kansas Farmer this week. Mr. Hildwein has about 60 choice pigs sired by a number of different boars and all of them out of sows of strictly big type breeding. Mention this paper when writing.

Groningers' Three Hundred Head.

This issue contains the announcement of Herman Groninger & Sons, the biggest Poland China breeders of the west. They have 300 in herd at this time and offer 50 fall and summer boars, also pairs and trios, not related. Write them early and often.

Read About Gold Metal.

H. B. Walter, the man who owns the noted Gold Metal, starts a card in Kansas Farmer this week. Mr. Walter also owns Long King's Best, and is famous as the owner of old Expansive, the best breeding Poland China boar ever owned in Kansas. Mr. Walter offers fall boars sired by Expansive.

Kinloch Berkshires.

Kinloch Farm, Kirksville, Mo., claims August 22 as the date of the dispersion sale of Berkshire hogs. The Kinloch Farm herd of Berkshires is one of the greatest herds in the country, and on the above date Messrs. Still and Laughlin will sell the entire herd, consisting of 100 or more high-class Berkshires. This will be a great offering, and Berkshire breeders should not neglect this opportunity to obtain the best of this famous herd.

The Good Kind.

W. R. Houston, the Duroc Jersey breeder at Americus, Kan., writes: "My hogs, both large and small, are doing nicely. I have the best lot of spring pigs I ever had. Seven litters were sired by Golden Model 3d 117887, a well bred Golden Model boar and a show prospect; two litters by Bell's Chief 2d 71777, one litter by Valley Chief's Special 116755. I have some good fall boars by Golden Goods 70513 and Bell's Chief 2d. Will have as good or better than I sold last spring. I think some of the spring pigs will develop into the best hogs I ever had. My offering of September 4 will be bred to Golden Model 3d, Bell's Chief 2d and Superba 2d, a boar sired by a \$1,600 boar now owned by Robert Ewing of Ohio."

George E. Norman's O. I. C.'s.
Mr. George E. Norman of Newtown, Mo., claims September 5 as the date of his annual fall sale. Mr. Norman is one of Missouri's enterprising breeders of O. I. C. hogs and owns one of the good O. I. C. herds. O. K. Tom, a splendid hard boar, heads this herd. He is a White Oak bred boar and is one of the big ones with remarkable quality. He has very heavy bone, fine quarters, good head and ear, good feet, good back, and is a fine breeder. Mr. Norman owns a fine herd of sows by Frost's Buster and other noted boars. An extra fine lot of early spring pigs is a feature of this herd. Also a lot of fine fall gilts. Mr. Norman will have an offering that will interest O. I. C. breeders. He also breeds Jersey cattle and expects to offer about 25 head of choice young females in his annual fall sale.

Henley Rancho Shropshires.

The Henley Rancho Shropshire flock at Greencastle, Mo., is one of the most famous flocks, as well as one of the largest in the country, and breeding stock from this flock is making good in almost every state in the Union. Kansas included, also Canada. A feature of the herd that will interest breeders this year is the large number of American bred and imported in dam yearling rams. They are a fine lot, and the American bred rams were sired by imported rams, the select tops of the best flocks in England. The imported in dam rams were sired by England's most noted Shropshire rams, and the largest flock of imported ewes in America is on the Henley Rancho. Registered Percherons, Jersey cattle and Poland China hogs are also bred extensively on this great ranch, which is one of the best equipped in the country. Watch for the announcement of their offering which will appear in Kansas Farmer later.

John W. Noll, breeder of Mastodon Poland Chinas at Winchester, Kan., will hold everything for his fall sale on October 22, when he expects to have an unusually fine offering of the big quality kind.

Sale Prospects Bright.

A short visit by Kansas Farmer representatives to the home of Col. L. F. Burger at Wellington, Kan., developed the fact that the Colonel is in fine fettle with working in his alfalfa fields and booking orders for fall and winter sales of pure-bred live stock. The Colonel is closely in touch with the situation, and predicts that the sales of pure-bred stock will be unusually numerous this fall and winter and that good prices will prevail. He says that the demand for breeding animals of all classes will be the strongest in years and that this demand will begin as soon as the corn is made. The scarcity of meat producing animals and their high prices will cause a big demand, while an increased knowledge of the value and economy of pure-bred animals will cause more farmers to buy of the better classes of live stock. With land prices as they are now, the farmer cannot afford poor live stock of any kind on his farm.

Santa Fe to Fair Grounds.

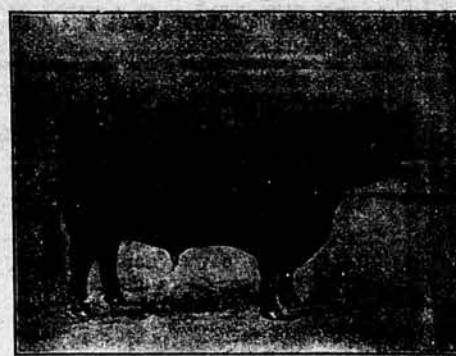
Breeders and exhibitors will be interested in knowing that the Santa Fe Railroad Company has given orders for the laying of a switch track from the main line to the new fair grounds at Hutchinson, Kan. The work of track laying will begin immediately and will be completed long before the big fair opens on September 14 next. Secretary Spangler expects the fair of 1912 to be the biggest ever.

Cleanliness is a most important consideration in the dairy, and dairy machinery that is easy to clean commends itself to the thoughtful farmer. Thousands of our readers who are turning Sharple's tubular separators twice every day appreciate the fact that the few parts these separators have to clean, and the ease with which they are washed, reduces the tiresome drudgery and saves the wife both time and labor. The tubular is easy to clean. Look into this matter before you buy a separator. Compare it with other makes, both as to skimming qualities and ease of operation, and be guided accordingly. You can do this without the cost of more than one cent. Send a post card today to the Sharple's Separator Co., West Chester, Pa., and ask for free catalog, or if there is a Sharple's agent in your neighborhood, ask him to take a machine to your farm, set it up for you and let you try it yourself. "The end of the pudding is in the eating." In sending for this information, we ask our subscribers to be kind enough to mention this paper.

Campbell College, Holton, Kan.

Our aim is to give the student the greatest returns, in first-class instruction and moderate cost of living, for the amount of money he is required to spend. The instruction is thorough and in classes of such size as to bring the best results. Students enrolled last year from eight states and 32 counties in Kansas. The school is organized as follows: College, Academy, Conservatory of Music, School of Commerce, School of Expression and School of Art. We have a Young Woman's Hall, thoroughly modern, where furnished rooms and board are furnished at from \$3.30 to \$3.45 per week, according to the room selected. Splendid homes near by the College, where students can secure board and room. In the dining hall of the young woman's building, table board is furnished to students of both sexes at less than 12 1/2 cents per meal. Student activities are under the management of the Student Council. Strong literary societies, athletic association, debating club, oratorical associations, etc., are managed by the students. The College buildings are beautifully located and the conditions surrounding the school clean and wholesome. The school is distinctively Christian with out being in any sense sectarian. The new year will open September 2, 1912. T. D. Vines, D. D., is President.

OFFICIAL Statement of the financial condition of the Bank of Richland, Private Bank, Albert Neese, Owner, at Richland, State of Kansas at the close of business on the 14th day of June, 1912. Resources: Loans and discounts, \$114,737.15; overdrafts, \$54.14; expense account, \$1,127.26; cash and slight exchange and legal reserve, \$17,632.32; tot l, \$133,550.76. Liabilities: Capital stock paid in, \$10,000.00; surplus fund, \$10,000.00; interest, \$2,885.86; exchange, \$62.10; individual deposits, \$49,770.52; certificates of deposit, \$60,732.28; total, \$133,550.76. State of Kansas, County of Shawnee, ss: I, Albert Neese, owner of said bank, do solemnly swear that the above statement is true; that said bank has no liabilities and is not endorser on any note or obligation other than shown in the above statement, to the best of my knowledge and belief. So help me God. Albert Neese, owner. Subscribed and sworn to before me this 20th day of June, 1912. Carl Thurber, Notary Public. Commission expires on the 24th day of April, 1913.



Kinloch Jersey Sale.

The dispersion sale of the famous Kinloch Jersey herd at Kirksville, Mo., June 19, was one of the great pure-bred stock sales of the season and attracted breeders from twelve different states. It was a great offering, and although no sensational prices were reached, the range of prices for the cows and heifers was fair. There appeared to be little demand for bulls, and prices ranged rather low for that offering. William George, representing Brookline Farm, Aurora, Ill., headed the list of heavy buyers with 45 head to his credit. J. R. Sterling of Abilene, Kan., was another heavy buyer, with 15 good ones to his credit, and other Kansas buyers for smaller lots made a good showing for Kansas at this great sale of high-class Jerseys. The great herd bull, Jolly Royal Sultan, went to Brookline Farm at \$2,400. Two hundred and fourteen head, including a large per cent of calves, were sold at an average of \$14.27 per head, and the sale totaled \$37,335. The following were among the Kansas buyers who secured one or more choice individuals in the sale: J. R. Sterling, Abilene; James S. Taylor, Iola; E. L. M. Benfer, Leona; A. J. Greenwalt, Hamlin; J. M. Lytle, Garnett; W. J. Grist, Ozarkia. The following is a list of buyers at \$150 and over:

J. R. Williams, Magnolia, Ill.	\$275
A. W. Triplett, Parry, Ill.	155
William George, Aurora, Ill.	240
W. J. Grist, Ozarkia, Kan.	225
P. L. Gaines, Carrollton, Ky.	130
H. Ordway, Marshall, Mo.	100
J. W. Love, Minneapolis, Minn.	250
R. M. Boucher, Cairo, Mo.	470
William George	240
Wayne McVeigh, Byrn Mawr, Pa.	260
William George	175
William George	260
William George	260
J. M. Axley, Kansas City, Mo.	230
R. M. Boucher, Cairo, Mo.	190
H. Morris, New Cambria, Mo.	190
J. C. Jones, Novata, Ill.	200
E. R. Shumaker, Waterloo, Iowa.	180
William George	270
William George	270
Wayne McVeigh	200
William George	225
William George	300
William George	300
Judge E. O. Kennedy, Youngstown, O.	215
William George	500
Thomas Dempsey, Lexington, Ky.	400
E. M. Dryden, Frankfort, Ky.	400
J. E. Jones	500
William George	200
William George	230
J. E. Jones, Nowata, Okla.	355
C. L. Hope, Memphis, Tenn.	245
E. R. Shumaker	200
T. E. Kinney, Frankfort, Ky.	395
E. L. Benfer, Lyons, Kan.	205
H. C. Young, Lincoln, Neb.	275
William George	175
R. M. Boucher	165
G. R. Williams, Magnolia, Ill.	350
William George	175
William George	300
William George	155
Dan McCarty, Hannibal, Mo.	230
William George	300
D. J. Walters, Farmer City, Ill.	225
Dr. H. J. Lomax, St. Joseph, Mo.	200
C. G. Wyatt, St. Joseph, Mo.	150
J. M. Axley, Kansas City, Mo.	150
William George	155
Wayne McVeigh	225
William George	155
E. R. Shumaker, Waterloo, Iowa.	205
E. R. Shumaker	155
William George	150
C. W. Clowser, St. Joseph, Mo.	160
C. L. Hope, Memphis, Tenn.	390
E. Jones	435
Guy McDaniel, Cairo, Mo.	300
William George	330
T. E. Kinney, Frankfort, Ky.	175
R. M. Boucher, Cairo, Mo.	175
Dr. J. H. Lomax	175
William George	155
William George	300
Ben W. Montgomery, Paoletti, N. C.	195
W. T. Deatherage, Brighton, Ill.	150
William George	225
William George	190
James Middleton, Shelbyville, Ky.	300
W. T. Deatherage	150
J. E. Jones	200
E. R. Shumaker, Frankfort, Ky.	250
E. R. Shumaker	180
William George	235
James T. Gills, Mt. Pleasant, Iowa.	205
William George	200
Elmdorf Farm, Lexington, Ky.	250
William George	225
J. F. Jones	310
J. F. Calderwood, Long Lake, Minn.	230
E. R. Shumaker	275
W. T. Deatherage	180
William George	195
William George	215
E. R. Shumaker	150
James Middleton	160
William George	260
D. J. Walters, Farmer City, Ill.	155
W. T. Deatherage	235
D. J. Walters	205
William George	185
R. M. Boucher	200

J. H. Brown, the Poland China breeder, located at Selden, Kan., was visited recently. Mr. Brown owns a fine farm just across the Sappy river, and has a small herd of mighty good Polands. His spring crop of pigs were sired by the herd boar, Look's Chief, a son of Look Grand, by Grand Look. The sow herd is composed of strictly big type sows sired by such sires as Pfander's Giant Pride. Crops look mighty well in Mr. Brown's part of the state and he is certain to enjoy a fine trade this fall.

Headley & Sigmund, the Short Horn breeders located at Selden, Kan., were visited recently. This firm have one of the good herds of Kansas. Their herd bull is snow white and crossed on red cows, produced a splendid roan. See announcement later about this good herd.

Morrison's Red Polls.

Charles Morrison & Sons, the oldest and most successful breeders of registered Red Polled cattle in the state, come back to our advertising columns this week. Mr. Charles Morrison, senior member of this firm, located on the farm where he now resides, 12 miles north of Phillipsburg, 31 years ago, and for more than 20 years has bred this, his favorite breed of cattle. The herd, responding to the good care and sound judgment of its proprietors, has grown larger and better every year. The bulls and surplus females have met with ready sale both in Kansas and other states, many having been shipped as far as Arkansas. The cow herd is composed of something like 50 head, large, strong specimens with great udders and many of them with records of 60 pounds of milk daily, with butter fat tests as high as 6 per cent. The cows are milked regularly, and the milk-giving propensity fostered in every way, and one has but to see this great herd to understand that the Red Poll is the double purpose breed. The cut that is herewith presented is of the great bull, Actor, in service in this herd for about 10 years. He weighed 2,400 pounds and sired some great milking cows. The present herd bulls are Launfal, a son of imported Cassenolette, the sire of a great line of producing cows. He is assisted by Cremona 21st, by Cremona, three times grand champion at Chicago International and winner of 17 firsts and sweepstakes. Cremona 21st himself was a winner of first in class at Nebraska state fair, winning second at Iowa state fair. Both of these bulls are large individuals and have lots of quality with their size. In the advertisement which appears elsewhere there is offered some choice heifers sired by Launfal and in calf to Cremona 21st. Also five extra choice bulls, in age from 8 to 16 months, a couple of outstanding good ones just past yearlings and out of the best cows should be sold right away and deserve place in the best herd. The calf herd numbers 22, even and uniform and just as fine as silk. To say that the writer enjoyed the visit to the Phillips County farm would be putting it mildly. Mr. Morrison has the best improved farm in his part of the state, including his big barn fully equipped with stanchions for the cows and room for the big touring car. Write Morrisons about the Red Polls and be assured that every representation will be absolutely correct.

In changing his sale date from October 19 to October 26, Mr. E. C. Jonagan, owner of Valley View Duroc Jerseys, at Albany, Mo., writes that the hogs are doing very well, indeed, and he expects to put a very fine bunch into his fall sale. Mr. Jonagan has a fine reputation as a breeder and Kansas farmers who want good Durocs should write him, mentioning Kansas Farmer.

Dean's Mastodon Polands.

Three or four years ago when the trend of popular sentiment from necessity was changing to the larger type Poland China, Clarence Dean of Weston, Mo., was one of the first breeders in this section far sighted enough to see what was coming. He went to the fountain head, at that time, of the new order of things, and secured from W. W. Wheeler some of the very best breeding material. The wisdom of this move has since proven sound, for the Mastodons, the Wonders, the Chief Prices came into their own and Mr. Dean was one of the very first breeders in this section in a position to supply the trade with new blood that has since proven so popular. In every phase of the breeding business Mr. Dean has shown this sort of keen judgment and far sightedness and it has been profitable to him and to his customers. The boars now at the head of Mr. Dean's Mastodon herd combine the best blood of the bigger Poland Chinas. Mastodon Price 144231 is by A Wonder and out of a dam by Chief Price; Columbia Wonder 178863 is by Columbia Chief 2d and out of a dam by Surprise Wonder 5th and Gritter's Longfellow 3d is by Gritter's Longfellow, by old Longfellow Jr. The sows in the herd represent the aristocracy of the big type, as a few of the following will show: Mollie G., by Chief Leader out of Mollie Fair, the dam of A Wonder; Miss Wonder 3d, by Surprise Wonder 5th out of a dam by Wonder 2d; Lady Mastodon 66th, by Mastodon dam Lady Wonder 5th, the great Gross sow and now owned by Fred Fulkerson of Brimson, Mo.; Fair Girl by Long Price 2d, out of a half sister to Mollie G., and Miss Mastodon, by Mastodon 2d, out of Lady Mastodon 66th. Mr. Dean has around 75 spring pigs, a good number farrowed early, out of these sows and sired by the three herd boars. The best of these are being offered at private treaty. Mr. Dean has always found an outlet for his stock through the medium of private sale and has never been able to hold enough for a sale. He is booking orders now for pigs of either sex and has yet on hand a few fall boars. The entire herd is immunized by the double treatment and is safe. Mr. Dean's stock always has given satisfaction and he numbers his customers in many states. Write him per his advertisement in this issue, and kindly mention Kansas Farmer when writing.

When writing advertisers, please mention KANSAS FARMER.

Gulbert and His Galloways.

A Kansas Farmer fieldman recently made a visit to the Smoky Hill ranch, located at Wallace, Kan. This ranch comprises 5,000 acres extending along the Smoky Hill river. A large number of acres are suitable for alfalfa, and in this way an abundance of feed is prepared each year for the big herd of registered Galloways that are kept on the ranch. Mr. E. J. Gulbert, owner of this ranch, lives on the ranch and supervises every bit of the work. He has just purchased machinery, pumps, etc., sufficient to irrigate 80 acres. The plant will be installed right away and the size of the plant will be increased from time to time until all the alfalfa land is under irrigation. Mr. Gulbert has lived in this part of Kansas for a good many years. He is one of the progressive men of the west and will, in all probability, be the next State Senator from his district. It has been found by actual experience that the Galloway is one of the best of all breeds for both grazing and feeding purposes, and so Mr. Gulbert has bred them extensively for about 10 years. At this time he has on hand about 150 head, headed by the show bull, Pat Ryan, of Red Cloud, assisted by the young Meadow Lawn bull, Sid's Best. In the advertisement, which appears elsewhere, 20 choice bulls are offered. They are in fine breeding form and range in age from 12 to 24 months. Mr. Gulbert also has a small herd of registered Percherons and a pack of Russian wolf hounds. They are direct to imported stock. The hounds are kept for use on the ranch, but the surplus stock are for sale. Write Mr. Gulbert, mentioning Kansas Farmer.

HORSES AND MULES



JACKS AND JENNETS

20 large Jacks from 2 to 7 years old. 25 head extra good Jennets priced right. Come and see me. PHIL WALKER, Moline, Elk Co., Kansas

SADDLE BRED STALLION

For exchange. He is 16% hands, black, weight 1360, coming 9 years old, without a blemish, works double or single, trots square in harness, takes saddle gait when made. A good breeder and sure. Sired by Woodford Squirrel, Jr., 1232, and out of standard-bred trotting mare, not registered. Want to exchange for a Belgian stallion not over 9 years old, or will buy one if priced right. Act quick. This advertisement will only appear twice.

G. S. LAWSON, Ravenwood, Nodaway Co., Mo.

REGISTERED PERCHERON STALLION

Black, weight 2,000. Wish to exchange or trade for land. Reg. number 25948. After July 1, correspondence solicited. GEO. S. WELLING & CO., Natoma, Kan.

HOLSTEIN CATTLE

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

YOUNG HOLSTEIN BULLS.

Have sold all my females that I can spare. Have a few young bulls sired by Prince Ermsby De Kol, now at head of Nebraska College herd. Prices reasonable. J. F. MAST, Scranton, Kan.

M. E. Moore & Co., Cameron, Mo., are offering Holstein bull and heifer calves. Also a few bred heifers and choice cows for a limited time. Sir Korndyke Imperial 53683 at head of herd. All tuberculin tested.

SUNFLOWER HERD HOLSTEIN-FRIESIANS.

Choice stock, both sexes, always on hand. The best sire in the middle west heads this herd. Visitors and inspection solicited. F. J. SEARLE, Oskaloosa, Kan.

When writing advertisers, please mention KANSAS FARMER.

YOUNG HOLSTEIN BULLS

Sired by Peterije Hengerveld Nannette and out of heavy producing dams, for sale. From young calves to yearlings. Won first at Topeka, Hutchinson and Oklahoma State fairs on young herd, 1911. Herd bull was junior champion. W. C. JONES & SONS, Topeka, Kan.



Purebred Registered HOLSTEIN CATTLE The Greatest Dairy Breed Send for FREE Illustrated Booklets. Holstein-Friesian Assn., Box 114, Brattleboro, Vt.

Ask your dealers for brands of goods advertised in KANSAS FARMER.

JERSEY CATTLE

REGISTER OF MERIT JERSEYS.

The only herd in Kansas that makes and keeps official records. FOR SALE—Two extra choice yearling bulls sired by Imp. Oakland Sultan. They are out of tested 500-pound cows. Also 25 choice heifers and a few tested cows. Inspection invited. R. J. LINSKOTT, Holton, Kansas.

GOLDEN RULE JERSEYS. For Sale—Few choice heifers, bred or open. Also herd bull bred at Kinloch Farm, Kirksville, Mo. Johnson & Nordstrom, Clay Center, Kan.

50 JERSEY FEMALES. I have just returned from Maryland with a carload of Jersey cows and heifers, mostly daughters of imported sires. Am short of pasture and must sell something quick. S. S. SMITH, Clay Center, Kan.

REGISTERED JERSEY BULL. BLUE BELL'S BOY No. 75800, half-brother to Noble of Oaklands; 5 years old; gentle. Price reasonable. J. S. TAYLOR, Iola, Kan.

POLLED DURHAM CATTLE

ROAN HERO, THE INTERNATIONAL CHAMPION, AND ARCACIA PRINCE X 8079-308159

The first prize winners, head my herd of Double Standard Polled Durhams. M. P. Ry, 17 miles S. E. of Topeka, Kan. Farms adjoins town. Inspection invited. D. C. VAN NICE, Richland, Kan.

GALLOWAY CATTLE

G. E. Clark, W. W. Dunham, CAPITAL VIEW GALLOWAYS 12 Miles West of Topeka.

A choice lot of bulls 10 to 20 months old, by imported and American bred sires. They will please you. Address CAPITAL VIEW RANCH, Silver Lake, Kan.

SMOKY HILL RANCH.

Registered Galloway cattle. One hundred and fifty head in herd headed by the show bull, "Pat Ryan of Red Cloud." Twenty-five choice bulls for sale, in age from 12 to 24 months. Also, breed Percheron horses. E. J. GILBERT, Wallace, Kan.

HEREFORD CATTLE

HEREFORDS FOR SALE

Ten choice, richly bred bulls, from 8 to 18 months of age. Also, few young cows and heifers. Plenty of size, extra good heads, with horns to match, and elegant coats.

WILLIAM ACKER

Vermillion, Marshall County, Kan.

SHORTHORN CATTLE

SHORTHORN COWS AND HEIFERS

25 cows and heifers, good individuals with lots of size and quality, and good pedigrees. Some of them bred, others with calves at foot. Heifers of different ages. Bulls all sold but one. 50 big-type Poland China pigs ready to ship. S. B. AMCOATS, Clay Center, Kan.



C.S. NEVIUS' HERDS

Shorthorns and large type Polands. The home of the great bull, Searchlight, and herd boars, Designer and Major Look. Young bulls and young boars for sale. Forty miles out of Kansas City.

C. S. NEVIUS, Miami Co., Chiles, Kan.

GLEN HALL SHORT HORN HERD. Headed by Choice Prince, by Prince of Tebe Lawn and out of Good Lassie by Choice Goods. 5 choice red bulls in age from 10 to 14 months. Herd header, Prospects. JOHN O'KANE, Blue Rapids, Kan.

TENNEHOLM SHORTHORNS—Pure Scotch and Scotch topped Bates families. Bulls in service, Royal Gloster and Col. Hampton. A few young bulls of extra quality on hand; also, some females. Prices low for early sale. E. S. MYERS, Chanute, Kan.

GUERNSEY CATTLE.

A FEW Guernsey bulls for sale; butterfat record 688 to 714 lbs. per year; prices reasonable. Frederick Houghton, Roxbury, McPherson Co., Kansas.

ANGUS CATTLE

SUTTON FARM

FIFTY ANGUS BULLS, sired by the best herd bulls. Priced single or carlots. Priced low to clean up. See them at LAWRENCE, KAN.

RED POLLED CATTLE



RED POLLED CATTLE A few choice bulls, ready for service, priced reasonable. L. W. POULTON, Medora, Kan.

RED POLLED HERD BULLS.

High-class herd headers, sired by 2300-pound bulls; also, a number of choice cows and heifers, priced to sell quick. E. B. YOUTSEY, Pattonsburg, Mo.

RED POLLED CATTLE.

The champion beef and milk producer of the age; bred and for sale by the undersigned. Write for prices or come and see the red beauties. J. B. RESER, BIGELOW, KAN.

RED POLL BULLS FOR SALE.

Ten choice young bulls, of serviceable age. The best breeding; registered; herd numbers fifty.

AULD BROTHERS, Frankfort, Kan.

FOSTER'S RED POLLS.

Choice bulls and heifers priced reasonable. C. E. FOSTER, R. R. 4, Eldorado, Kan.

Woods' Polled Durhams

A few extra good bulls and heifers by Champion Roan Hero, for sale. Prices reasonable for quick sale.

C. J. Woods, Chiles, Kan.

OHIO IMPROVED CHESTERS

MAPLE LEAF O. I. C.s.

Am booking orders now for spring pigs of the very best breeding. Also a few choice gilts for sale, bred or open. Prices reasonable. Write today. R. W. GAGE, Route 5, Garnett, Kan.

O. I. C. PIGS—Both sexes. \$10.00 each. Harry Haynes, Meriden, Kan.

You run no risk to patronize persons or firms whose advertisements appear in KANSAS FARMER.

DUAL PURPOSE SHORTHORN CATTLE

Evergreen Home Farms, Lathrop, Mo., J. H. Walker, Prop.—Breeder of dual purpose Shorthorn cattle, Oxford Down sheep, Berkshire hogs and Burbon Red turkeys. Breeding stock for sale at all times. Prompt attention to mail orders. Write us for milk and butter records of our Shorthorn herd. J. H. WALKER, Lathrop, Mo.

FULKERSON STOCK FARM HERD

Two outstanding young bulls, one red and one white; also 25 cows and heifers sired by or bred to Sultan's Fashion, the 2,300-pound son of the famous Whitehall Sultan. Have rented my farm and will price stock for quick sale. F. D. FULKERSON, BRIMSON, MISSOURI.

HIGH CLASS ANGUS BULLS.

We have sixteen outstanding good young bulls ready for service. If you are in the market for an Angus bull, come and see them. We will interest you in quality and prices. C. D. & E. F. CALDWELL, Burlington Junction, Mo.

Crystal Herd O. I. C. Swine

Herd headed by Frost's Buster. A number of extra good boars, ready for service, for sale. Also a number of choice gilts. This stock is priced to sell. DAN WILCOX, Cameron, Mo.

DUROC JERSEYS

DUROC JERSEYS

20 Duroc Fall Boars

Ready for use. Sired by G. C.'s 2nd King, he by G. C.'s Col. and Oom Paul 2d. Priced reasonable for quick sale. Write at once. F. G. McDOWELL, R. D. 4, N. Topeka, Kansas

DUROC JERSEY BOARS—We are all sold out on sows, but have three very choice yearling herd boar prospects. Two are line-bred Durocs, and one a son of Neb. Wonder. Also, some choice fall boars. Grant Chapin, Green, Clay County, Kan.

CHOICE DUROC JERSEY BOARS. Last fall farrow, sired by Good E Nuff Model by the Duroc wonder, Good E Nuff Again, and out of sows by Crimson Jack by Crimson Wonder. E. H. GIFFORD, Lewistown, Neb.

FALL DUROC BOARS. Choice ones to select from. Fed and handled properly for good results. Choice breeding. Only the best saved for breeding. Reasonable prices. HOWELL BROS., Herkimer, Kan.

GOLDEN RULE DUROC JERSEYS. Choice fall boars and gilts for sale, sired by Dreamland Col. and J. C.'s Defender, by the noted Defender. Also, R. L. Red chickens. LEON CARTER, Asherville, Kan.

FALL DUROC JERSEY BOARS. GOOD ONES: Sired by Carter's Golden Rule, grandson of Pearl's Golden Rule and out of sows sired by G. C.'s Kansas Col. Also, 50 pigs, yearlings. J. W. WOHLFORD, Waterville, Kan.

MULE FOOT HOGS.



THE ORIGINAL FAMILIES MULE FOOT HOGS SAFE—SOUND—CERTAIN Prices Reasonable, Write SULTAN STOCK FARM R. 7. BLOOMINGT N. IND.

MULE FOOT HOGS—Pigs in pairs and bred sows for sale. Pedigrees furnished. ZENE G. HADLEY, Wilmington, Ohio.

MISSOURI HERD—Mulefoot Hogs. A few fine yearling boars for sale. Also an extra good lot of spring boars and gilts. Stock priced to sell. ERNEST E. GRAFF, Rosendale, Mo.

BERKSHIRE HOGS.

Guaranteed choice breeding stock of very fashionable lines. Either sex. Pigs, \$15; of breeding age, \$25; very extra choice, best quality, \$35. Registered. Crated f. o. b. R. J. LINSKOTT, Holton, Kan.



BUY THE BEST IT PAYS

Sows bred for summer farrow. A splendid lot of young boars. Write SUTTON FARMS, Box 133 Lawrence, Kansas.

HAMPSHIRE HOGS.



HAMPSHIRE SWINE. Some fine spring boars and a fine lot of summer pigs, all registered stock. T. S. BURDICK, Route 3, Inman, Kansas.



HAMPSHIRE HOGS. Bred sows, spring pigs, in pairs or trios, not akin. Pat Malony, General Allen blood lines. Prices reasonable. F. C. WITTORFF, Medora, Kan.

THE STRAY LIST

W. A. BLAIR, COUNTY CLERK, Labette County. Taken Up—By J. W. Marvel, Valeda, 1 horse, male, 16 hands, bay blaze faced and stiff in shoulders, 15 years old. Appraised value, \$20, this on the 15th day of May, 1912. Taken Up—By Sheridan Green, Oswego, 1 calf heifer, weight 400 pounds, black, Jersey stock, appraised value \$15; also one calf heifer, weight 300 pounds, yellow, Jersey stock, appraised value \$15, this on the 25th day of April, 1912.

Francis Prockish, Poland China breeder, located at Westmoreland, Kan., writes that he has had fine luck with his spring pigs. They have made a splendid growth and some of them weigh 45 pounds at 2 months old. The litters have been large and the

STOCK CATTLE.

186 Long Yearling Steers.

Good grade. Will sell from 20 head up. Carload long yearling heifers, 100 head horses, including ponies and good draft mare. Good bunch of mules. Will sell worth the money. Alkin Station on farm, Maryville branch, U. P. AIKINS RANCH, F. T. GRIMES, Manager; P. O., Emmett, Kan.; Station, Aikins, Kan.

AUCTIONEERS

Missouri Auction School.

(Largest in the World.) The school that gives you practice in actual sales in their own auction rooms. Next term August 5, at Trenton, Mo. Address W. B. CARPENTER, 14th and Grand Ave., Kansas City, Mo.

R. L. HARRIMAN LIVE STOCK AUCTIONEER. Bunceton, Mo.

COL. OSCAR H. BOATMAN, Irving, Kansas.

Live stock auctioneer. Graduate American Auction School. Write, phone or wire for dates.

COL. RAY PAGE.

Live Stock Auctioneer. Satisfaction Guaranteed. FRIEND, NEBRASKA.

EMPLOY ZAUN

for the best results. He works for the best breeders in America. Best of reference furnished. Write for dates. J. E. BUMPAS, Windsor, Mo.

When writing advertisers, please mention KANSAS FARMER.

MONT ORR

Live stock and farm sales auctioneer; block and ring work solicited. Belleville, Kan.

James T. McCulloch Live Stock Auctioneer. Clay Center, Kansas. Write Early For Choice of Dates.

COL. MOSS B. PARSONS

LAWSON, MO. Pure-bred Stock Auctioneer and General Salesman. A number of years experience. Terms reasonable. Write me for dates for fall sales.

JOHN D. SNYDER,

Kansas Live Stock Auctioneer. Write or wire for date. Hutchinson, Kan.

W. B. CARPENTER

Live Stock and Real Estate Auctioneer 14th and Grand Ave., Kansas City, Mo.

J. R. Triggs LIVE STOCK AUCTIONEER. Valley Falls, Kansas.

Col. L. R. Brady Live stock auctioneer. Manhattan, Kansas. Ask about my work.

Col. L. H. Grote Morganville, Kan. Live Stock and General Auctioneer.

pigs are unusually strong and healthy. Write Mr. Prockish for price on a pair or trio, not related, mentioning Kansas Farmer.

J. J. Hartman, our Poland China advertiser from Elmo, Kan., reports good sales, having recently sold a pair of gilts and a boar for a good price to a man at Tampa. Mr. Hartman still has for sale a few very choice last fall boars. His pig crop numbers nearly 100, and the recent good rains assure good crops. Write Mr. Hartman and buy some breeding stock before it is all gone.