KANSAS FARMER

FOR THE IMPROVEMENT OF THE FARM AND HOME

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Reading Room

Sweet Sorghum—Its Worth and Culture

By J. C. MOHLER, Asst. Sec.

Kansas State Board of Agriculture

In adaptability sorghum covers about as wide a range of conditions of soils and climate as corn, which is our most cosmopolitan crop, and sorghum succeeds in some semi-arid sections where corn often fails. On account of sorghum's notable dry-weather-resisting qualities its acreage is greatest in the states of the plains, but it is also esteemed for forage in the more humid regions, because of big yields of valuable feed, producing as a hay, when properly grown from five to fifteen tons to the acre, depending on the soil and season, or more than can be produced by any other known crop. In Kansas it is considered the most valuable annual forage crop.

There has been considerable said, here and there about sorghum "being hard on land." As a matter of fact, it takes no more fertility from the soil than does a like crop of any other forage or grain. But it does take more moisture from it than most other crops—and by so doing is capable of resisting dry weather the better—so that the physical condition of the soil may be impaired and the following crop suffer if timely rains in the meantime do not saturate the soil. Of course, in regions where rains are abundant this difficulty would not come up for consideration, and in the drier portions fall plowing after sorghum, will do much toward putting the sion in better physical condition, and the subsequent crop should not be appreciably diminished simply because it followed sorghum.

Two systems are common in growing the sweet sorghums. One is practised when a hay crop is the object, and the other when seed and forage are desired.

For hay, after the ground is plowed and thoroughly prepared, sow broadcast or in close drills, using about a bushel of seed per acre. In broadcasting, the harrow should follow, to cover the seed. Most Kansas growers think it best to sow from the 5th to the 20th of May, or following corn planting. They prefer varieties that mature slowly and require a full-length season, rather than early varieties, and regulate the time of sowing with a view to having the seed ripen, say, in September. Further north the Early Amber and like varieties would be suitable, for the shorter seasons, but in Kansas the Collier, a late variety, is a general favorite. Folger's and Colman are regarded as best for early and medium sorghums, respectively. Sorghum sown early and cut early is more often spoiled by rains and hot weather. May or early June sowing is probably best in all the Northern states, though sorghum has been successfully sown as late as July 4, for hay, in Kansas, maturing ready to cut before killing frost.

In harvesting sorghum hay, the ordinary mower and rake are used, and the sorghum put in large cocks of 1,000 to 2,000 pounds, well topped out, and left there until fed, usually. It should be cut when the kernels are well in the "dough," and put in the cock as soon as consistent after cutting. Perhaps a good rule to go by is as with clover, putting it up as soon as it is wilted sufficiently, the idea being to avoid as much as possible the deteriorating effects of the hot sun, dews and rains while lying in the swath. As a hay it is excellent and well worth a trial by those who are unfamiliar with it. In round numbers sorghum hay, containing 36 per cent of moisture, has about eight-elevenths of the feeding value of prairie hay, containing 12 per cent of moisture. A good yield of prairie hay is one to one and one-half tons per acre, to sorghum's five to fifteen. Hence, an acre may produce four or five times as much feed when planted to sorghum as it will in prairie grass. Compared with corn stover and other annual forages, sorghum is the heavier producer and can be more cheaply grown.

For forage and seed the same careful preparation of the seed bed should be given as when hay is the chief consideration. If one wishes to list, it is best to double list, or plow and then list, using perhaps 10 pounds of seed per acre. If preferred, seed can be put in with a corn planter, as it is not so easily washed out as the listed seed. Cultivate thoroughly throughout the season, as with corn. For forage and seed sorghum should be put in as a general thing right after corn planting. Where there is plenty of rain, select the poorer, rather than the richer, soils for this crop, for on the better soils it will grow too rank and be too cumbersome in harvesting. Of course, in the drier regions this does not hold, and the better soils may be profitably employed.

The seed, having a bitter taste, is not relished by stock, but there is a ready market at from 70 cents to a dollar per bushel for it, and the yield runs from 15 to 20 bushels per acre. Most of the Kansas grown seed, for instance, is shipped to Texas, where sorghum is much grown in the districts where corn is not reliable. The forage remaining after the seed is off is valuable, comparing favorably with corn fodder, and cattle are "roughed" through the winter with little or no other feed. It is preferable, though, to use it with clover or other hay, one feed of each per day. Sorghum forage is rich in sugar or carbohydrates, but contains little protein, so a balanced ration with sorghum would require concentrates rich in protein, or protein as applied in alfalfa or clover. It is usually advisable to feed the sorghum early or before, say, the middle of January, for later unfavorable weather conditions may greatly depreciate its value, although if the weather stays dry there is no danger of that. Grown for seed, it is especially valuable where corn does not reach its best development, giving as it does this excellent supply of forage, besides a money crop in the seed.

The common method of harvesting for forage and seed is with a corn binder, letting the sheaves or bundles lie until partly cured, which requires, say, two days of ordinary fall weather, then putting up in good sized shocks. The crop shoud be cut when the seed is ripe. Two men are required for cutting the heads. One of the best methods for this that has come to the attention of the writer is to take a rope and tie up the heads of the shock tightly and cut them off with a hay knife, store properly and thresh at convenience. This harvesting of the heads may be done any time after the process of curing has been thoroughly completed.

Where the producing of the seed is the chief end, and the forage is not so important, it is better to plant a smaller quantity, about three pounds to the acre, but in other ways the crop is handled as described in the foregoing. Some use a header in harvesting the seed. This is profitable and economical, and after the seed is taken off, the stock may be turned into the field to dispose of the stalks left standing. The corn harvester, however, is preferred, for the bound forage is vastly easier to handle, and by this method a great deal of waste is saved. The corn harvester gathers up the sorghum cleanly even when badly blown down. The make of machine should be one that throws the bundles in such a way that they will not interfere with the horses in following rounds. The difference in machines in this respect is well worthy of attention.

There is no danger whatever in feeding any kind of stock sorghum forage and hay that has been properly cured, but there is danger in the second growth sorghum, and cattlemen generally avoid it. When sorghum is fed green, care must be exercised, for it has a tendency to produce bloat, but this is no more pronounced in sorghum than in many other common crops. As a matter of fact, cattle have been successfully pastured on both the first and second growths of sorghum without apparent harm; but as many have died very suddenly on such feeding, in other instances, suggests that it is wisdom to take no chances. Where animals are hungry and allowed for the first time to eat the lants greedily there is great danger. When they have gradually become accustomed to such pasturage, and have their stomachs pretty well filled with other forage before being turned onto the tender sorghum plants, sorghum may be successfully grazed, though the practice cannot be recommended as a general one.

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KANSAS FARMER

Volume 48. Number 21. TOPEKA, KANSAS, MAY 14, 1910 Established 1863. $1 a Year

KANSAS AS POTATO PRODUCER

By SEC. F. D. COBURN

Kansas State Board Agriculture

Kansas, agriculturally, has excelled in many directions, being first in wheat without a close competitor, premier in corn and cattle, and ranking high in the quality of other live stock. As a producer of potatoes her capabilities are not so widely nor well known, except to the comparatively few who are more or less intimately identified with the business, either as growers, handlers, shippers or dealers.

According to the year-books of the United States Department of Agriculture, Kansas is no inconsiderable factor in the potato world. These year books rank the state on an average about twelfth in production, although by the same authority in 1899 she was tenth, and in 1902 eleventh. For these years she ranked in area twelfth and thirteenth, respectively, and in aggregate value sixth and ninth, indicating superiority in yields per acre and in quality of crop. In fact, the average for the whole state in 1902 is given as 138 bushels per acre, outranking such notable potato regions as New York, Pennsylvania, Ohio, Michigan, Illinois, Indiana, Wisconsin, Minnesota, Maine, Colorado, Missouri and Nebraska, and, in the same respect, likewise outclassed the majority of these states in 1899.

The state's largest yield, according to the Kansas records, was 11,432,482 bushels, from 109,447 acres, in 1889, and the following table, compiled from the reports of the Board of Agriculture giving the acres, product and value of Irish potatoes in Kansas for each one of the ten years, ending with 1903, suggests somewhat of this crop's importance:

Year.	Acres.	Bushels.	Value.
1900	99,096	7,141,806	$ 2,685,297.95
1901	86,011	2,313,772	2,313,772.00
1902	60,618	8,193,632	3,136,856.71
1903	80,178	5,023,042	3,755,304.93
1904	74,172	6,078,391	3,034,120.25
1905	90,756	6,865,326	3,587,688.82
1906	75,712	5,685,164	3,584,496.71
1907	84,374	5,336,979	4,138,403.06
1908	81,646	5,937,925	4,431,864.17
1909	90,330	7,026,896	5,008,738.87
Total	822,908	59,602,933	$35,676,543.47

It should be noted that the crop of 1903 in the commercial potato-growing districts was greatly curtailed by floods.

The potato is probably more generally grown and utilized than any other vegetable, and every county in the state, with the possible exception of six or eight in the southern and western portions, devotes greater or less acreage to its production. As many conditons within the state's 82,144 square miles of area are widely variant, yields likewise differ; thus the potato grows prosperously luxuriant in the rich, sandy loams of the formerly timbered river "bottoms" and the upland prairie limestone soils, while flourishing in a more modest degree where altitude, longitude, soil and climate present conditions quite dissimilar yet no less suited to various other crops. However, regardless of adaptability, potatoes, as in the past, will doubtless continue to be grown on practically every farm and in every considerable garden; consequently yields per acre for the state may seem to average low, comparatively; but in the real potato districts in the more favoring seasons returns of over 400 bushels per acre are realized, and an output of 300 bushels or more is not at all uncommon.

The portion of the state proven most admirably adapted to potatoes as a commercial crop is known as the Kaw valley potato district, in Eastern Kansas, where large quantities are grown and shipped each year. In the main, this consists of sandy loam "bottom" land, two to six miles wide, adjacent to the Kaw or Kansas river, in the counties of Wyandotte, Johnson, Leavenworth, Douglas, Jefferson, Shawnee, Pottawatomie and Wabaunsee, and exteding westward 100 miles from its joining with the Missouri at Kansas City. Of the total Kansas area planted to Irish potatoes in recent years more than one-fourth is in these eight counties, Wyandotte ordinarily leading in acres and production. Nearly a third of the state's crop, or practically all potatoes raised in Kansas for export, are frequently the product of the counties named.

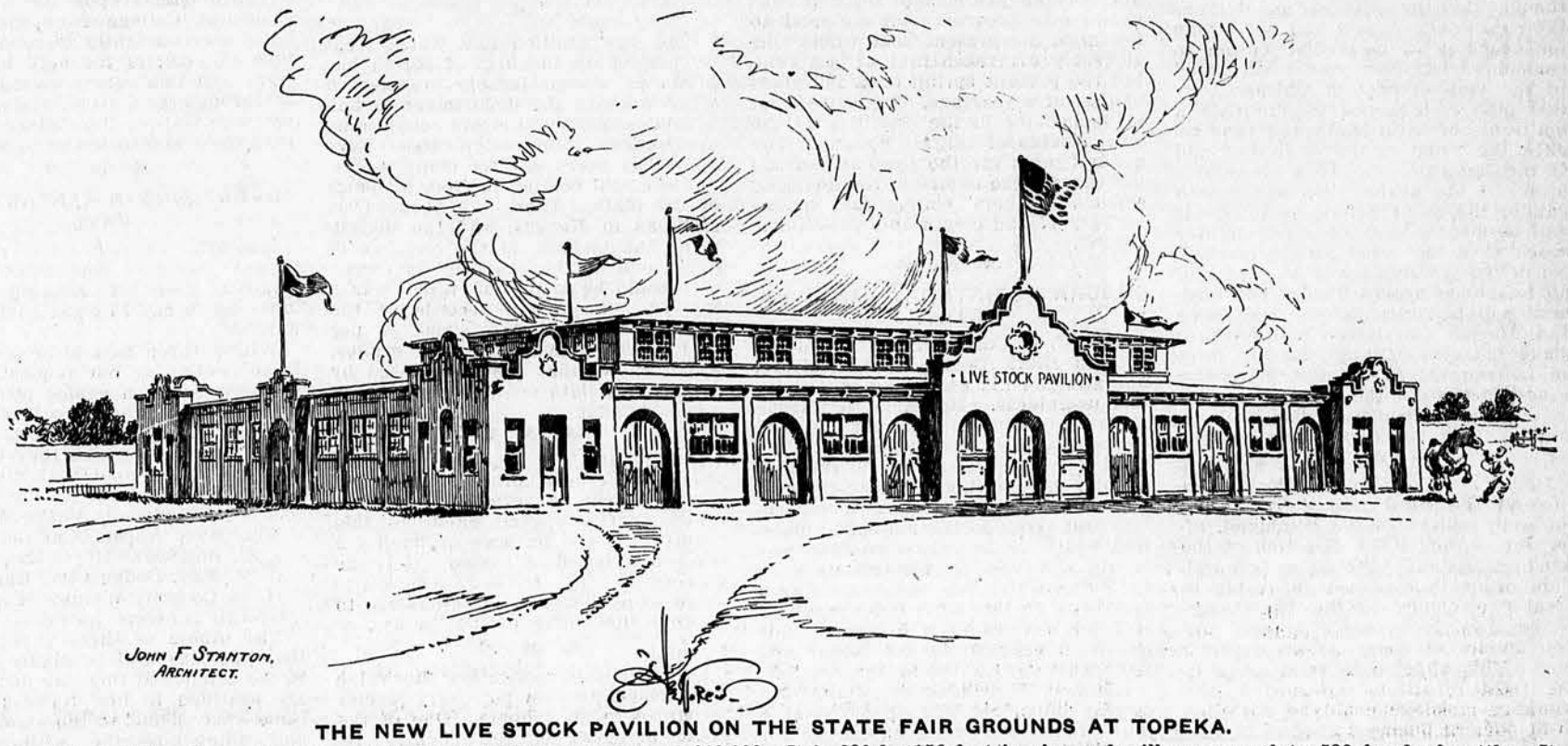
Early varieties for summer marketing are planted mostly, and of these the Early Ohio is by all odds the fovarite followed to a small extent by the Early Rose and Triumph, as named. The small proportion of late sorts planted are the Burbank and Peachblow. Even for winter use the early varieties are grown, and left undisturbed in the ground until fall. While some home-grown stock is planted, Northern-grown seed is found best and each year thousands of bushels are shipped in by planters and dealers, who buy from Minnesota and Eastern Dakota, in the Red river valley.

Kaw valley potatoes find their market in all parts of the country; early in the season Chicago and Northern points claim many, and some go in the direction of New York and Pittsburg but probably the bulk are sent south and southwest, especially to Texas, and preferably sold at digging time.

The concensus of opinions of Kaw valley growers reporting suggests that they consider in the neighborhood of 37 cents a bushel a fair price for potatoes on board the cars, and the range in the past ten years has been from about 14 cents to $1.15 per bushel.

Two striking features of Kansas' potato-growing as compared with that in other states surpassing her in aggregate yields are absence of need for ex

(Continued on page 5.)



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KANSAS FARMER EDITORIAL

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KANSAS FARMER COMPANY, Topeka, Kansas.

POWER FOR DOMESTIC USE.

Today the labor problem is the most serious one that confronts the farmer. Such help as he can secure is often the poorest kind and most evanescent quality. These men lack the necessary skill to do profitable work and the necessary knowledge to be safely entrusted with the high priced horses and farm machinery now common on the farm where help is needed. As their employment on the farm is generally of the most temporary character they do not seek to improve either in knowledge or skill and the farmer finds their services expensive and simply "puts up" with them because he is compelled to do so. If the farmer has serious troubles of this kind which are constantly growing rather than decreasing what can be said about those of the farmer's wife? He can have the slim satisfaction of knowing that his troubles with the help problem are acute during only a portion of the year but her own go on forever. Relief is being sought by both members of the firm and naturally, both turn towards the point of least resistance and buy improved machinery. With this much can and will be done towards the solution of this problem yet it remains a problem.

A young farmer in Brown county, Kansas, has gone at this matter in the right way, though his way has something of novelty in it. Recognizing his wife as his partner in business and that, as such, she was entitled to what help machinery could give, he has so arranged matters that all of her heavy work is done by gasoline engine power. To do this he built a house of two rooms with cement floor and plastered walls. In one of these he installed the engine and connected it with line shafting which extends into the other room. Here is placed the washing machine, the churn, the cream separator, the wringer, the hot water tank and the laundry tubs. When wash day comes the preparations are made and the engine started. No further care is needed until the washing is done. The time is greatly reduced and the back breaking job of rubbing the clothes is eliminated. The machine is always ready and always willing. It needs no attention except to start and stop it. The room in which this work is all done is clean and neat as a pin. Its cement floor permits of its being flushed out with the hose daily.

As an afterthought the farmer built on a "lean-to" in which he grinds his feed, turns his grindstone, etc., and so gets help in his own work. But that is not the point. He considered his wife first and in doing so, made her work easier, her own time more abundant and both their lives happier.

THE BUTCHER QUESTION.

The meat question is ever with us and is the subject of much serious thought by the retailer as well as the consumer. A new and novel plan for economy in meat distribution to consumers has just been inaugurated in the loop district of Chicago. By this plan it is hoped to eliminate a multitude of little leaks and thus reduce the price to the consumer and at the same time insure a reasonable profit to the dealer. No patron can handle the meat before he buys. It will be displayed in glass refrigerator cases with the price plainly marked. No delivery wagons will be used and no telephone orders filled. The business will be on a strictly cash basis and, though the buyer will have to make his own delivery, he will have an inducement in the low price and a satisfaction in the knowledge that he does not help pay for bad book accounts.

Under orders from the Postmaster General the rural free delivery and the star routes will be combined, after July 1, under the direction of the fourth assistant postmaster general. This order is expected to result in greater efficiency in the postal service and in the saving of several million dollars of departmental expenditure. This appears to be a move in the right direction and now if the franking privilege could be curtailed to fit modern business conditions, and the free seed joke abolished we might not hear about such big deficits in this department.

SAVE YOUR RAINFALL CHARTS.

The Weather Bureau office at Topeka, which is in charge of T. B. Jennings, makes a practice of clipping out the rainfall charts which are published each week in the KANSAS FARMER, and pasting those for each month on a sheet of paper. By doing this they have a complete record for each month on each sheet and a record for the year on 12 sheets. This idea might be adopted with profit in the farm home.

THE GROWTH OF THE AGRICULTURAL COLLEGE.

The forthcoming catalogue of the Kansas State Agricultural College will probably contain the names of 2,300 students who were present during the school year of 1909-10. The total number enrolled to date is 2,281, but there are students entering at present every day—teachers of country schools who have completed five or six months of teaching and intend to study here during the remainder of the spring term. The attendance now numbers 2,351, but of this number 70 students are counted twice. Most of these 70 came here to attend short courses aand later returned to take the full four-year course. Last year the total attendance was 2,308 and year before last 2,192. Five years ago it was 1,462, ten years ago, 1,094, and twelve years ago 803. It was confidently expected that the total attendance the present year would considerably overreach that of last year, but the present spring term fell short of that of a year ago. The cause must be looked for in the condition of the wheat fields of central Kansas. The given figures for the present year do not contain the names of the domestic science teachers' course that begins on May 17 and closes July 22.—Industrialist.

COBURN'S BIRTHDAY ANNIVERSARY.

Hon. F. D. Coburn, Secretary of the Kansas State Board of Agriculture, has attained his 64th year of activity and usefulness. He came to Kansas as an unknown immigrant just 43 years ago after having served in the Civil War. He began life in the new country by farming, in a small way, advancing as his means increased. His first claim to the national reputation which he has since attained was in his production of his famous work on Swine which has stood alone as a text book on this most important subject for a third of a century. This has been eclipsed by his larger and later work on "Swine in America."

His first little book on Alfalfa was equally important and appeared at a time when men were hungering for information about this "wonderful weed." Greater knowledge and experience demanded a more elaborate work and Coburn's "The Book of Alfalfa" was the result.

Other writings have filled their niche in the agricultural history of Kansas and the west, but his more important work is to be found in his reports of the Department of which he has so long been the active head.

Mr. Coburn's usefulness has been shown in every department of agricultural activity but his chief value to the state and the nation lies in his wonderful ability to present the real Kansas to the world through his departmental reports.

Without Coburn Kansas might still be writhing under the unsavory reputation that had been given her in the early days by the hordes of dissatisfied and disgruntled fortune seekers who did not come here to live and work and build a state but only to get rich quick. With Coburn the world knows the truth and gives its mead of praise to Kansas, its greatest commonwealth.

Under provisions of the Act of Congress of February 20, 1905, it is possible to register cattle brands under the exclusive jurisdiction of the Federal courts by recording them as trade marks in the U. S. Patent office. This is a valuable feature which applies especially in interstate traffic and which is frequently adopted by cattle men, though it is not widely known.

The new stallion law which went into effect on the first of March has produced a considerable increase of office work in the department of animal husbandry. Letters containing applications for certificates have poured in every day for many weeks, and are still coming in from all parts of the state. There are about 4,000 stallions in Kansas, and the department had to look up the pedigree of every one of them before its certificate could be made out, which was a big job. From the records of the college it seems that about 55 per cent of the animals are only grades, which shows that the law passed by the last legislature was badly needed. —Industrialist.

Recognizing the fact that America produces the best horses in the world the Japanese government has recently sent a special agent to this country for the purpose of buying a number of breeding horses. It is the purpose of the Mikado's officers to breed army horses and ultimately to improve the horses of the Empire.

Every farmer recognizes the value of a good horse but not every farmer recognizes a good horse. One of the great breeders of the country recently stated that he believed the farmer, as a rule, knew less about a horse than about any other one thing with which he came in daily contact. One of the reasons why farmers are lacking in the knowledge of a good horse, and this applies to cattle and hogs only in a less degree, is because he does not get opportunities to learn. He sees his own animals and those of his neighbors and judges them and does it accurately, but it is only at rare intervals that he has a chance to see a really high class animal, a world beater. His annual visits to the county or state fair may give him pointers but the science of stock judging in which the younger generation of farmers is trained at the Agricultural College is beyond his reach in many cases and the bulk of his knowledge of horses is gained at home. This fact is abundantly shown by the fact that nearly one-half of all the stallions in public service in Kansas today are grades. If farmers generally had the thorough knowledge of horses which the Agricultural College boys may obtain would they stand for this humiliating and expensive fact?

Experts tell us that there now exists a world-wide shortage of beef producing animals and this would seem to apply, in some degree, to draft horses. Dealers in the big markets are on the alert for good horses of the draft type and when they are secured, they appear to have no complaint to make about the prices for which they sell. One feature in the draft horse trade is the strong Canadian demand for horses of this type.

Professor Henrietta Calvin, who is at the head of the Domestic Science department of Purdue University and who is a Wabaunsee county girl and a graduate of the Kansas Agricultural College, has the honor of inaugurating the first short course of study in Domestic Science ever held in Indiana. Her work contemplates extension courses similar to those now in progress at the Kansas College.

Concrete is a good building material or it is not and this will depend upon the materials used and the way they are handled. When properly made concrete is the best known building material but care is needed in the making. Cement blocks are manufactured and offered for sale in very many communities which are not only practically worthless for permanent construction but some of them are positively dangerous. The chief reason for this lies in the fact that they are mixed too dry in order to take the molds or they are too poor in cement or both. Such blocks absorb moisture readily and rapidly and soon begin to crumble. Use plenty of good cement and mix very wet and the blocks will be waterproof and lasting as the ages.

The demands upon the Kansas Agricultural College for expert assistance are constantly increasing. Just now the call is for help in building silos, and this comes by mail as well as through the personal visits of farmers who inspect the college silos and gain their knowledge at first hand.

ADVERTISING IN KANSAS FARMER PAYS.

Recently we asked, in these columns, for six copies of KANSAS FARMER, issue of January 9, 1909, agreeing to pay 25 cents each for that number.

Within three days after mailing the issue containing our request, we had received a dozen copies of the issue wanted, and more are still coming in at this writing. We sent 25 cents to each of these persons, they being the first six to respond with the papers wanted:

J. W. Thompson, McPherson, Kan.
Mrs. Mary Nelson, Canton, Kan.
J. C. Bostwick, Hoyt, Kan.
C. M. Key, Dodge City, Kan.
H. C. Coester, Walnut, Kan.
George Janssen, Lorraine, Kan.

The others of these papers (more than the six) will be gladly returned to the senders if they are desired. We are gratified to find KANSAS FARMER issues "saved up" to the extent noted, and appreciate the willingness of these valued subscribers, to furnish the necessary back numbers to complete our permanent files.

Care and Protection of Farm Implements

By M. D. R. Owings

Since the arrival of dollar wheat, seventy-five cent corn and fifty cent oats, editors, college professors and economists have taken a great deal of pleasure in speaking of the present day farmer as a "business man." They do not always define the term and on close scrutiny it looks as if the so-called "business" farmer was sometimes such largely because high prices of his products had made him prosperous, rather than because of his adoption of more business like methods.

It has been well demonstrated that a real business man is successful as a manufacturer in so far as he is able to make mechanical labor take the place of less productive hand labor, and that a real business man as a farmer is similarly successful in so far as he can do the same thing.

But here, very often, is where the resemblance ceases.

The manufacturer invests so much money in labor-saving machinery, he allows so much for depreciation and then proceeds to see that his machine is well housed, well cared for and kept going. He figures that it must pay so much interest on the original investment, plus a profit sufficiently large to equal, ultimately, the original investment. The longer the machine can fulfill the duties for which it was intended, the greater the money returns on the first outlay.

When a farmer figures on the same basis in caring for his equipment, the economic term of "business man" fits him and generally you can call him an automobile owner as well. But when he invests his capital in expensive machines—and many of them—such as a modern farm nowadays necessitates, and then leaves his plow in the fence corner and his binder in the field and his new wagon under the eaves of his cow shed, he falls short of exercising the right kind of business methods.

Perhaps he makes enough to be able to do all this without noticing the drain upon his gross income. Some farmers figure that way but it is not good commercial doctrine.

The money which a farmer puts into a binder, mower or manure spreader, is just as much capital invested as the money another man puts into a machine for making shoes or spinning cotton. It deserves an annual interest and an ultimate profit equally as much, and it is entitled to as thorough care and protection. Furthermore, the laws governing continuity of service apply exactly the same to a cream harvester and a wagon as to a planer or grinder. Of course, owing to the seasonal use of farm machines, there are lapses of time when certain machines must remain idle. It is at this period when they should be best protected. Scientists say that the muscles of an arm wither quicker from inactivity than from over-activity. The same thing is true of equipment, whether on the farm or in the factory. More plows have been worn away by the weather than were ever worn away by service.

True as this is, very little attention has been paid to the science of machine care. Experiment stations will work for years to show how to grow forty bushels of wheat where only thirty bushels grew before. No one questions the usefulness of this work, but it takes the difference of a good many acres to pile up enough dollars to buy a new binder. And yet, very little time is spent in showing how to increase the life of a binder from six to fifteen years. Perhaps they leave it to the common sense of the farmer. If they do, all right, for common sense is really the thing that is needed.

College instruction, ancestral advice, and original research in the care of farm machines can all be simmered down to these three elementary necessities, good roofs, good paint and good lubricants. These three determine whether the days of a machine shall be long in the land or whether it shall soon return to the dust whence it came and another order go to the firm who made it.

Let every farmer attend to this trio. How and when are questions which each must answer for himself, not very profound questions, but very important.

Few people realize how simple and yet how essential such care is and for those who have overlooked this phase of agricultural life, we give the experience of one successful Kentucky farmer which may contain helpful suggestions.

This man ran a big farm in that state and in spite of inefficient help and long used soil, made money. He was a firm believer in the above mentioned triumvirate, and he practiced what he believed. Back of his barn he had erected a long low shed, not particularly showy nor expensive, but dry, and under this shed he kept everything in the equipment line—from grindstone to wagons. In one end he built a home made improvised paint shop. Although his reputation as a family man in that country was good, it is said of him that he would just as soon leave a member of his family outside all winter as his mower or his drill.

When he finished his plowing, he saw to it that his men brought the plow back to the shed. He then went over it thoroughly with a coat of white lead and it was left that way all winter. In the spring a little kerosene or turpentine was applied which loosened the paint so that with the first contact of the ground the share came out smooth and shiny like a mirror.

"That plow," said the Kentuckian, "cost me $35. The paint cost about 35 cents, and it made the plow last ten years longer. That is just an illustration," he continued, "of my procedure with every machine I own. Every two years I made it a point to go over all the binders, mowers and all the other machines I had on the place, with a good metal base paint. I even painted the knives of the cutting machines the same as I did my plow, and I found that with a little application of turpentine or kerosene they became bright and shiny before the first circuit of the field was completed.

"Perhaps also the question of pride helped a little, because I always liked to have everything about the farm clean and bright. I generally use red because I like that color and because red lead is better than white lead for outside work. I kept even the tongues and whiffletrees of my wagons as good as new. They were mostly made of locust in that country and when properly painted would last a century.

"This painting was not just a hobby; I found that it paid, as at one time I sold a binder which I had used steadily for six years or over two-thirds of what it cost me, and I didn't cheat the fellow either. It was practically as good as new.

"I was a paint advocate all right, and it seemed to me that hired men might come and hired men might go, but my wagons, mowers and drills went on forever.

"I was equally as 'cranky' on lubricants. When I first started farming as a young man, it did not take me long to find out that a hot box generally meant a ten-mile trip to town for a new part. I har just about three experiences of this kind and after that the most important bit of barn furniture, next to the paint can, was the oil can. Many a time since then, when I have seen my neighbors tied up in the middle of a workday with an overheated part, I have praised 'John, from whom oil blessings flow,' as the University of Chicago boys say. I used to make it a rule, after each long trip, to grease my wagons with the result that they were always ready and always shipshape. I invented patent dust protectors of my own when none came with a machine, and where this was not possible I kept the exposed parts well cleaned.

"Now all of this might seem rather unimportant to some farmers, or they might think it a great deal of trouble for nothing, but, in the long run, I never noticed the trouble and I found that it was a good form of economy. I farmed for many years at a time when prices were much lower than they are now and I made my farm pay. I do not claim that it was all due to my caring for my equipment, but the fact that I made every cent of capital invested in the machines return the 100 cents on the dollar, and then some, had a great deal to do with my prosperity."

Commercial fertilizers have not long been necessary in Kansas nor in many parts of it and yet their use is growing and the growth will probably gain strength rapidly. Too many men realize that they have wasted their substance in burning corn stalks or stubblea, in continuous grain growing or in dumping the barnyard manure into the creek. When this realization comes they do like they have always done and follow the line of least resistance. This line seems always to lead them to move to a new country or to buy commercial fertilizers and try to win back what they have wasted. Commercial fertilizers are good things and of great help on almost any farm but they are like a hot poker and must be handled by the right end. Often they are stimulants rather than fertilizers and their use simply increases the trouble for which they were applied as a cure. Generally they are manufactured and used for the effect they have upon the immediate crop. When this happens they aggravate the difficulty by helping the plant growth to use up more of the soil humus and thus ultimately deplete the soil more rapidly. Used in connection with barnyard manure, the growth of legumes or green manuring they are valuable but without these they may prove the hot end of the poker.

Crop Conditions in Ellis County.

The season was unusually early in western Kansas, with almost the entire month of March favorable for soil work. Late fall and winter moisture carried winter wheat splendidly, a very small proportion growing in the county having suffered complete loss. Fall plowed land was in excellent physical condition, so that disking it in March made good preparation for seeding.

From the demand for seed corn at the Fort Hays Experiment Station, a demand that began in December and exhausted the Station's supply by middle of April, the acreage planted to corn in Ellis county is doubtless double to what was grown in 1909. A notable increase in spring small grains, oats, barley, and spring wheat, has also been made.

State officials and others, well acquainted with crop conditions over Kansas, either from personal observation or reliable reports, express unqualified opinion that wheat in Ellis county is as good as the best Kansas can show at this date. Even with small spring rainfall, the spring growth was rapid; due to abundant soil moisture deposits from fall and winter moisture. Excellent wheat pasture was available from first of March.

May 1 showed the same general good condition of the wheat. Certain areas gave evidence of very slight damage from frosts, other localities show inferior wheat because of poor plowing or late seeding; but all the wheat where soil was early and well prepared, and seeding accomplished in season, could be rated 96 per cent perfect. The period of dry weather, just broken by showers since May 1, was just commencing to affect some of the foliage, making it appear to be drying. The recent showers have revived the crop exceedingly; the damp, cool weather being favorable to continued prosperity of wheat.

Alfalfa is well advanced and promises a much earlier harvest than former seasons have given. The low temperatures prevailing the latter part of April caused no serious damage to the new crop, and a few frosted tips are the only noticeable ill effects therefrom. First cutting will come about May 15, provided no disastrous weather conditions prevent or possibly cause less.

The State Experiment Station at Hays has 600 acres of growing wheat, and over 300 acres planted to corn. The bulk of this acreage is grown for seed, and the improved varieties thus produced will be available for distribution as far as quantity will permit. —Geo. K. Helder.

Cattle raisers in the West are specializing, because they have discovered that the development of pure breds of a single breed pays much better than the indiscriminate herds which they have heretofore used.

(Continued from page 3.)

pensive fertilizers and freedom from insects and fungous diseases. Of the Kansans reporting, none mention using commercial fertilizers, although the majority apply more or less manure, or sow some crop such as cow-peas or turnips for plowing under when green thereby enriching the land and increasing its subsequent yields.

A most interesting and suggestive fact is the possibility of profitably irrigating, in the more western counties, small areas for potatoes, and other vegetables as well, where underground waters are made available by wind or other power. Several correspondents have realized gratifying success by such means. By it the home demand in such territory may not only be supplied with certainty each year, but the markets of near-by cities and towns would offer for any surplus attractive inducements in prices, usually quite in excess of those realized by growers elsewhere.

The foregoing pertains to Irish potatoes exclusively, but sweet potatoes are likewise grown more or less in about four-fifths of the counties; most extensively and successfully, however, in the valleys of the Kansas and Arkansas rivers. The six counties of Pottawatomie, Riley, Wabaunsee, Shawnee, Wyandotte and Sedgwick yield annually about one-half or more of the state's output, which in the past twenty years has varied from 779,783 bushels in 1889 to 212,468 bushels in 1897.

A concensus of the detailed statements of forty representative growers, reporting from thirty-two different Kansas counties as to the cost to produce and market an acre crop of potatoes, averaging 122 bushels, shows, itemized, thus:

Average cost of plowing	$1.20
Harrowing	.54
Seed	7.25
Planting	1.35
Cultivating	1.66
Digging and marketing	8.25
Wear and tear of tools and rental of land or interest on its value	4.25
Total cost per acre, or 122 bushels	$25.27

Averages of other items, gathered from those furnishing the forty foregoing reports, are as follows:

Average number of years each of the forty reporters has raised potatoes in Kansas	18
Average number of acres raised by each annually	26
Average quantity of seed planted per acre (bushels)	9
Average yield per acre (bushels)	122
Average value of potato land per acre	$60

Statements of ten of the growers reporting who are most extensively producing potatoes for commercial purposes, in the Kaw valley, average as here shown:

Average cost of plowing	$ 1.45
Harrowing	.51
Seed	8.05
Planting	.65
Cultivating	1.46
Digging and marketing	11.00
Wear and tear of tools and rental of land or interest on its value	6.85
Total cost per acre, or 154 bushels	$29.97
Average number of years each of these ten reporters has raised potatoes in Kansas	18.
Average number of acres raised by each annually	80.
Average quantity of seed planted per acre (bushels)	10.4
Average yield per acre (bushels)	153.7
Average value of potato land per acre	$105.00

Incidentally, by these forty reports it is noted that the number of times the ground is harrowed ranges from one to four, and in one instance it is given as eight; in some cases the ground is disked also; and in the Kaw valley it is not uncommon for some of the more extensive growers to plow their potato ground twice.

Likewise, in the more western counties, in cases where the crop is mulched with a covering of straw or hay or where irrigated, the cost of cultivating, which includes these items, is proportionately higher, owing to extra labor in the first instance and more frequent cultivating in the second.

In the item of "planting," the cost to Kaw valley growers is lessened by the quite general use of machine planters.

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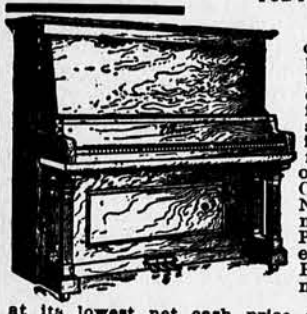

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HOME CIRCLE

In these days of general prosperity when the farmer is credited with the ability to buy and pay for what he wants; when labor saving machinery is to be found upon every farm; when the young folks secure the advantages of a college training and rural mail routes, telephones and automobiles serve to annihilate distance and bring the farmer into closer relations with his fellow man does the farmer's wife prosper, in her own proper sphere, as well? Is her condition improved? Are her labors lightened by modern conveniences and labor-saving machinery? Does she have her own pin money or hold property in her own name? Does she participate in the meetings of women's clubs or farmers' institutes and does she get time to become active in the affairs of the community? In order to get at the real facts concerning the home life and present conditions of the farmers' wives and families and learn whether the general prosperity has benefitted them as well as it has their sisters of the towns and cities or their husbands and brothers on the farm, The Kansas Farmer will offer a prize of one year's subscription for the best letter on the home life of the farmer's wife and family. These letters must be signed but the names of the writers will not be printed unless special permission is granted. Address your letters to Editor Home Department, Kansas Farmer.

A Suggestive Indian Story.

The Colony Courier contains much of interest concerning the Indians of the Cheyenne and Arapahoe country. In a recent issue was an article from Mr. John H. Seger, the veteran Indian worker, telling of visiting Indian homes. It was all interesting, but we have space for only a part:

"I saw a typewriter, a mandolin and a sewing-machine, articles not found in every farm home in this country. After supper we retired to the sitting-room which was well lighted and warm. The meal had been served so nicely and the house was so well kept that I soon found myself comparing this neat little home and comfortable house with the average Indian home as I had seen and known it thirty-seven years ago. I can plainly see that the training these young people got in the government boarding school will stay with them through life and will be handled down to posterity.

We spent the evening until bedtime in talking over the past and looking into the future. I had been talking to Mastamaha and had dwelt at some length on the need of the young Cheyenne and Arapaho Indians looking ahead and planning for the future when Mastamaha broke forth and said:

"Your talk reminds me of a story my father told me when he was alive, which was this way: There was a Cheyenne man who was very poor and had no horse. He did not sit down and feel sad about it, but instead he got together some sticks and by fastening them together he made a wooden horse. It was not a good horse, but it was the best he had, so he made it do. One day he was riding by where a white man lived. The white man was very poor and had no horse and he said, "My friend, (the white men always say "my friend" when they want something from an Indian) I wish I had that horse." The Cheyenne said ,"Get some wood and make yourself a horse." So the white man got some wood and made a wooden horse, and as the white men can make things out of wood the white man's wooden horse was much nicer than the Cheyenne's.

But when the white man got on his horse's back the horse would not move. Then the Cheyenne said, "Look forward, don't look backward!" So the white man looked ahead. Then the Cheyenne struck the white man's horse a lick with his whip and it went forward all right. The white man wondered if his friend, the Cheyenne, was coming, so he looked back to see, and when he looked back his wooden horse stopped. The Cheyenne then said, "Why did you look back? I told you to look ahead." So the white man looked ahead again and the Cheyenne hit the horse with his whip and he went ahead again all right. Finally they came in sight of three buffalo and the Cheyenne said, "Now, look ahead and don't look back and we'll catch up with the buffalo and kill them." So they started toward the buffalo. The Cheyenne kept saying, "Look ahead. Don't look back!" But just as they got up to the buffalo the white man looked back to see if the Cheyenne was coming with him, and when he looked back his wooden horse stopped. The Cheyenne dashed ahead and soon killed the three buffalo. The white man helped him to cut them up and put them on their wooden horses. Then the Cheyenne said, "Now, start toward your home and don't look back until you get there, but keep looking forward." So the white man mounted his wooden horse and looked forward, and the Cheyenne whipped the horse and it went all right. But just as the white man got in sight of his home and his hungry children were coming out to meet him, he wondered if the Cheyenne was still with him, and he looked back to see, and just as he looked the horse stopped, and then he discovered that the Cheyenne had gone off and left him. So he had to get off and carry all the buffalo meat to his house on his back. If he had looked ahead until he got home his horse would not have stopped until he got there."

This was not all of the story about looking forward, but perhaps is enough to impress us with the idea of looking forward and not backward. —Indian Leader.

Salt.

Salt is one of the simplest of all household remedies, and one that we always have on hand, yet many do not know how effective it can be made in many instances. It is an excellent remedy to allay neuralgic pains in the head. Make a small bag out of flannel and fill with salt and then heat thoroughly and apply to the afflicted parts as hot as can be borne. Hot salt in a big is fine to relieve all inflammation in different parts of the body, and also good in cases of sore throat. Flannel cloths wrung out of salt, vinegar and hot water is an excellent remedy to apply to chest, stomach or bowels in cases of inflamination or congestion. Renew the cloths as fast as they begin to get a little cool. Salt placed on the gums when teeth have been extracted will keep them from bleeding too profusely. A little salt and alum combined, put in cotton and inserted in an aching tooth will often remove the pain when nothing else will. Simple salt and water or salt and vinegar makes an excellent gargle for the throat. Vinegar, salt and water makes an excellent wash for the eyes. Salt in water that is tepid is a good emetic, and is also a good dentifrice, keeping the teeth white and the gums hardened. There are many kinds of poultices, some good and some not, but the old-fashioned flaxseed is one of the best to relieve congestions, and is good for tonsilitis. To make it have water boiling and stir in ground flaxseed meal until it is thick; add a teaspoonful of olive oil, and spread on a piece of muslin twice as large as needed, apply as hot as can be borne.—Exchange.

6117-6122—Boy's Outing Suit.

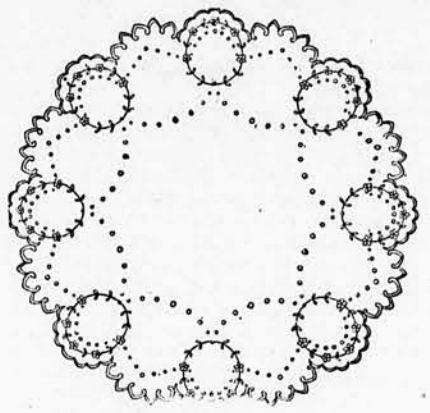
No other suit quite takes the place of this simple one made with outing shirt and knickerbockers. It is so loose and comfortable that the boy can enjoy active life to his heart's content. As here pictured the shirt is of soft washable flannel and the knickerbockers of serge, but the whole suit, trousers and shirt, may be made of light weight woolen materials. The medium size requires 2⅝

yards of 36-inch material for the shirt and 1⅛ yards for the knickerbockers.

Boy's Outing Shirt, No. 6117. Sizes for 8, 10, 12, 14, 16 years.

Boy's Knickerbockers, No. 6122. Sizes for 3, 4, 5, 6, 7, 8, 9, 10 years.

This pattern calls for two separate patterns, which will be mailed to any address on receipt of 10 cents for each in silver or stamps.



1523—Centerpiece.

Developed in the ever popular forget-me-not design, to be worked in either outline or French embroidery. Buttonhole stitch to be used for the edge. Stamped on linen, 35 cents. Perforated pattern, 25 cents. Transfer pattern, 10 cents.

1501—Pillow Top.

This is a very pretty and attractive design for a pillow top. Parts of this design may be used for coat corners, borders, etc. Stamped on art cloth, 25 cents. Perforated pattern, 25 cents. Transfer patterns 10 cents.

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HORTICULTURE

No wood will be more difficult to replace when the approaching shortage, in the supply of hard woods overtakes us than the hickory, one of the foresters in the employ of the government recently said. The truth of this statement is not realized by any one more than the practical men of the various trades whose future prosperity is measured by the available supply.

We have little idea in this country to what extent nuts are consumed in foreign countries says the Philadelphia Record. We try to teach other nations that Indian corn is an excellent article of diet, but most of the European peasantry still believe that maize was created for the live stock. These people will sit down to a dish of steamed chestnuts with much relish and are content if they have nothing more.

However, all of the apples sent to Glasgow are not consumed in Scotland. Ireland and the north of England receive large shipments from Glasgow. Fruit is offered in Glasgow in large bazar markets under municipal supervision. Belfast in Ireland consumes during the season about 3,000 barrels of apples per week; a third of these comes from the U. S. Principal varieties marketed in Glasgow include Baldwin, Spitzenberg, Spy, Russet and Greening.

Scotch Hungry for Apples.

The market destination of many of the apples raised in the U. S. is not fully understood by many people. In a recent report Consul J. N. McCunn showed that Glasgow received about 400,000 barrels of apples from foreign countries each year, and of this amount the U. S. furnishes 150,000, while the remainder comes from Canada. The quality and regularity of the varieties, and the sizes and nature of the packages, he claims, have a great deal to do with our securing this trade. Apples grown in England are almost always put up in packages of some value which are charged for by growers, necessitating either their return or payment for them.

Summer Spray for Peach Rot, Apple Scab and Injurious Insects.

Fruit growers are desirous of using one spray that will be effective against both plant diseases and injurious insects so that all can be dealt with at the same time. The department of entomology of the University of Kansas, therefore, recommends the following: Lime, 6 pounds, sulfur, 4 pounds, boiled together in a kettle of water for an hour. Strain this into a barrel of water and add two pounds of arsenate of lead.

It should be applied now to peaches to control the rot and to apple trees to prevent wormy apples and to secure smooth, symmetrical fruit instead of fruit disfigured by the scab. This is also an excellent spray against insects which affect the potato. For fruit trees, begin spraying as the blossoms fall, then once each month until fruit has begin to ripen. —University Press Bulletin.

To Regulate Fruit Packages.

A bill has been introduced into Congress by Senator Lodge of Massachusetts along the same lines as the Lafean apple and package bill. It prohibits the manufacture and use by dealers for interstate trade of baskets or other open containers of small fruit or berries, the character of which even full is not one dry quart or 67.2 cubic inches, pints, half pints or multiples of a quart| It provides that the name and address of the manufacturer and the capacity be stamped on each measure. Dealers may sell fruit and berries by weight or liter if they choose, and the bill does not prohibit the use of short measure in export trade.

At the hearing given the Lafean apple package bill before the house committee on agriculture at Washington very little opposition was made. Dissension expressed came from northwestern states, mainly Washington, Oregon and Idaho. Their plea was that the package was not the size they desired. Later it developed that another bill has been introduced into Congress by Representative McCredie of Washington at the request of shippers from the Northwest. It provides that the standard size of apple boxes shall be 18 inches long, 11½ wide and 10½ deep, inside measurement. The standard pear box 18 inches long, 11½ wide and 8 inches deep. The apple box contains 2,173 cubic inches against 2,342, as prescribed by the Lafean bill, or a difference of 169. This bill, it is understood, is intended as an amendment to the Lafean measure.

Forest Products Laboratory Ready for Work.

An event of importance to the wood-using industries of the country and to engineers is the completion of the Forest Products Laboratory at Madison, Wis. June 4 has been set as the date for the formal opening. The laboratory has been established to aid, through experiments and demonstrations, the lessening of waste in the manufacture and use of wood. It is a co-operative undertaking between the U. S. Department of Agriculture and the University of Wisconsin. The state has erected for the purpose a new building at the university and will furnish also the light, heat and power. The Department of Agriculture has supplied the equipment and apparatus and will maintain the force of thirty-five or forty persons required to carry on the work. Through this arrangement, the United States has secured perhaps the largest and best equipped wood testing laboratory in the world.

A number of vacancies in engineering positions in connection with the work will be filled in May and June. Among these are positions of engineer in wood preservation, engineer in timber testing and chemical engineering. These positions will be given to men with a basis of thorough engineering training, of two or three years' experience in practical work.

The laboratory will be prepared to make tests on the strength and other properties of wood, to investigate the processes of treating timber to prevent destruction by decay and other causes, to study the saving of wood refuse by distillation processes, to examine the fiber of various woods for paper and other purposes, and to determine the influence of the microscopic structure of wood on its characteristics and properties. Facilities are at hand, in fact, for almost any kind of test on wood that practical conditions may require.

Lumber manufacturing and wood-using industries are keenly interested in the work on account of its practical bearing on reducing waste of wood—to them a subject of vital concern. Already they have proposed many experiments and supplied much testing material, which is awaiting attention.

The Right Kind of an Onion Soil.

There is no reason why onions should not be grown as a money crop in many districts where they are not produced to any extent at the present time. It should be realized that if the conditions are right it does not require a very large tract to produce a large quantity of onions. The fact is that there are many small soil areas or fields, outside the limits of the present well developed onion districts upon which onions may be grown with profit and in time, when the conditions necessary are more fully realized, advantage will undoubtedly be taken of this fact, writes H. J. Wilder in Garden Magazine.

The character of the soil has so much to do with the quality of onion produced that the buyer can readily distinguish the differences, and unconsciously grades the price he is willing to pay accordingly. So the grower should have clearly in mind the type of onion he wishes to produce, or, in other words, the class of market to which he wishes to cater. Restricting our comparisons to the Danvers Yellow onion, the best quality of bulb is produced on a rich, fine, sandy loam; in fact, all soils must be rich or highly fertilized if the crop is to be profitable.

The real onion from the marketing point of view is medium in size and very firm and hard—so hard that extreme pressure between the thumb and fingers can produce no dent. If dropped on a floor the sound is the same as that produced by a ball of wood of the same size. This quality of onion is never secured unless the neck cures down thoroughly, the dried neck being extremely small and thin. Such an onion may be produced on ordinary, well drained, sandy soils, but with the danger that the bulb will be too small to be marketable. A finer soil holding a somewhat better moisture content, when well enriched will greatly reduce this danger, yet not bring a growth so strong as to injure materially the quality of the onion. It is this very balancing of conditions which makes the fine sandy loams so effective in producing not only good yields, but bulbs of the best possible quality for storage purposes.

Muck soils and mucky loams are easy to tend and the yield under favorable conditions is very high. The grade of onion grown, however, is always inferior to that from the fine sandy loams or fine sandy and silty loams, and in wet seasons the difference is even more marked. Onions grown on muck soils are not only coarse in texture but lack firmness and are often relatively soft, rendering them much less desirable for storage purposes as well as for table use.

BRAIDED TOPS.

In the East a somewhat different effect is seen on a mellow silty loam soil. While it produces a quality about midway between the muck soils and the most desirable fine sandy loams, it should also bring a satisfactory yield. And so it does, but the necks are too "fat" to cure down as well as they should. This tendency is more marked in wet seasons when there are liable to be many "braided" tops. The "braided" top is a stem that is thick for an inch above the bulb, caused by the outer layers of the latter extending upward and enveloping the lower part of the stem or top until late in the season. In mid-season this would be a normal condition, but at harvesting time all of the true stem part must have dried down thoroughly. And on the heavy fine sandy loams or light mellow loams this stage will have been reached. If this tendency toward the "braided' 'top, or fat stem, becomes more pronounced scallions (small bulbs upon which the tops are unduly large and do not die down) are produced, the waste from this source decreasing the yield.

The most money will be made in the long run by the man who gets the largest yield consistent with good quality. Fortunately this is a balance which may be attained without too great a sacrifice of yield. The general tendency has been in the past, to choose mucky or heavy soils from the viewpoint of yield only. Results show, however, that with especial care yields on soils producing highest quality may equal those from soils yielding a much poorer quality of onion.

As the crop requires very frequent weeding by hand, the soil must be mellow and free from coarse gritty particles and stones, or else the fingers and knees may become very sore. While there are many devices to assist hand weeding and quicken the process, the fact remains that the cheapest and most effective way to weed onions is for a boy or young man to straddle a row and manipulate his fingers so rapidly in the extraction of weeds and in loosening the soil around the tiny onion plants that he is in continuous movement crawling on his knees, and has no time to rest the weight of his body on the elbows. In this work skill must be developed, for not only is rapid work necessary, but the onion plants must be left behind the weeder in an upright position, with soil stirred yet firmed again, and with all weeds removed. Often considered a bugbear, this work is not so tedious as it would seem after one becomes accustomed to it, and the knees get toughened.

Big Combination Sale at Enid.

On May 31st to June 4th, F. S. Kirk of Enid, Oklahoma, will conduct a public, combination, commission sale of registered hogs, cattle and horses. All parties having registered stock for sale are solicited to make consignments. Enough hogs and cattle are now consigned to insure a good sale. Marshall Brothers of Burden, Kansas, have consigned twenty bred Duroc sows, the best individuals and the best bred consignment ever sent to a sale by this firm. They are bred to such famous boars as Missouri Wonder, King Wonder V and Vernon Lad. Samuel Drybread of Elk City, Kansas, has consigned ten Duroc sows bred to their herd boars, Hanley Lad, Kant-Beat Lad and Stub and Twist. Mr. J. M. Young of Fall River, Kansas, has consigned six Duroc sows by such noted sires as Ohio Kant Be Beat, Lightshade and General Lee. Also a few choice young boars by the same sires. Other consignors of Duroc hogs are G. H. Coleman of Elk City, Kansas; Alfred & Sons, Enid, Okla., and Edmund & Son of Clinton, Okla. The Poland-China consignment is a royal bred one. A. & P. Schmitz of Alma, Kansas, have consigned eleven of their best young sows. Six sows are by Meddler III, he by Meddler II, and all of them bred to the Grand Champion Voter. They have also consigned an aged sow, Lovely, by Keep-On-Perfection, son of Keep-On and her dam is Queen Wonder, a sow that Schmitz paid $1,000 for and considered one of the best sows living. As Voter is without doubt one of the best hogs in America, it is unnecessary to say more regarding this consignment. The Hereford sale will consist of twenty heifers and twenty bulls consigned by such breeders as Samuel Drybread of Elk City, Kan.; T. C. Cochran, Lockwood, Mo.; J. E. McPherson of Columbia, Mo. The Shorthorn consignors are I. L. Swinney, Burden, Kan., and A. P. Atherton of Waukomis, Okla. Several other breeders are considering the matter of making consignments and our next issue will give a more complete list. This sale will be held in the Enid Live Stock Pavilion, the largest stock sale building in America, and the sale takes place regardless of the weather.

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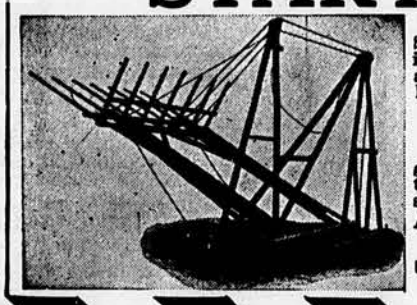

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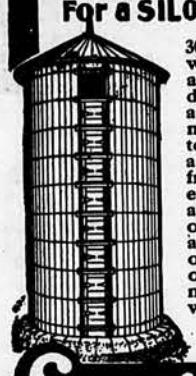

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THE FARM

The Farm Labor Problem.

One of the most serious problems facing the farmer of today is that of securing farm help. On probably half of the farms of Kansas it is necessary to employ one or more men throughout the year. Often it is very difficult to secure anyone, and the men who are secured are frequently unreliable, indolent, or otherwise undesirable. The inability to obtain good hired men means a serious financial loss to agricultural production. Working on a farm is usually regarded by those engaged in it, as merely a temporary occupation, and they therefore take little interest in their work. At the present time farm hands are usually the sons of farmers who do not have sufficient work on their own farms, wandering hoboes, or foreigners. There is no reason why the occupation of farm laborers should not have as honorable a status as any building or industrial trade. It requires considerable skill as well as strength and general efficiency. It is plain, that if a better class of laborers and a better supply is desired, it is necessary in these days of high prices and numerous opportunities, to hold out better inducements to desirable men.

1. The farmer should show more consideration for the feelings and comfort of the hired man.

Some farmers treat their men as inferiors. They invariably make them do the hardest work, and are gruff and overbearing in their manner. The free American citizen does not willingly submit to such treatment. There is a great difference between being an employe for a great firm or corporation, and being the personal servant of one man, with whom one works daily. The farmer should treat his employe with respect and as a social equal. Likewise, the comfort of the hired man when he is not at work should be considered. He should have a cheerful room in which he can spend his evenings and Sundays. It should be heated in winter, so that he can write his letters and read in comfort, as well as receive his friends in privacy. Young children often annoy a hired man, both intentionally and unintentionally, and for this reason a hired man often leaves an otherwise desirable place. Conditions should be such that the hired man feels that he is not merely existing, but actually living, and enjoying the amenities of life. If he is a proper person, he should be received into the social life of the community and treated in a human way. If he is a foreigner, he may be lonely and homesick, and personal kindness and sympathy will do much to make him a faithful and satisfied servant.

2. To secure good hired men, better pay and shorter hours must be offered.

In the last twelve years prices of all commodities have risen amazingly. The purchasing power of the dollar is much less than formerly. To the farmer, who is both a producer and a consumer, this has been an advantage. But to the wage-earner, who receives a fixed sum for his labor, and who is also a consumer, this change brings great hardship, unless his wages are correspondingly raised. In the last 12 years the prices of land and farm crops have practically doubled. Have the wages of the hired man doubled? If $25 a month and board (which may be reckoned at $15) was a fair compensation then, $40 or $50 and board would not be too much today. As my friend, Grant Chapin, of Green, Kan., in a recent issue of the KANSAS FARMER has said, is there not danger that the farmer will be unjust to the wage-earner, just as the trusts are unjust to the farmer? The farmer should share his prosperity with the man who helps him produce it.

Another feature of farm labor, which puts it in an unfavorable comparison with the trades is the keeping of long hours of labor on some farms. The progressive farmer of today realizes that it is no more necessary or desirable for a farmer to work 12 or 15 hours a day, than for a carpenter or mason to do so. When a 10-hour day is observed on the farm, and the hired man is given considerable liberty on Sundays and occasional evenings, one of the greatest obstacles in the way of securing first class men will be eliminated.

3. Opportunity should be given, when possible, for the employment of married men.

Married men are practically excluded from employment on farms today, although they would often make better and more reliable employes than restless boys. It is a good idea to build a cottage on the farm, about 40 rods from the main house, where a married hired man can make his home. Then give him the privilege of raising poultry, garden vegetables and potatoes, and it will be possible to secure a steady, contented employe, who may remain for years. Often a suitable house is already to be found on the farm. There are many advantages in this plan. The privacy of the family is not disturbed by the presence of an outsider. Sometimes the influence of the hired man upon the children is not for the best, where they are thrown into close contact with him. In practically every case he will remain at home more, and will not leave unexpectedly, as a single man often does. Farmers who need a hired man all the year round, and for an indefinite period of years to come, should very seriously consider this method of solving the problem.

4. The government should investigate the possibility of diverting desirable immigrants from the cities to the farms.

In the old days, a generation or two ago, most of the immigrants settled in the rural districts. The German and Scandinavian immigrants have done much to develop American agriculture. But today the character of our immigration is changed. The great majority of the new arrivals are from Russia, Italy and other Non-Teutonic lands. These people stay in the city, and help to form our slum districts, working as unskilled laborers at extremely low wages. Thus they are a menace to our civilization. Yet most of these people were farmers in Europe. Broughton Brandenburg, who personally investigated the life of the immigrant from Southern Italy, declares in his book, "Imported Americans," that most of them are decent, law abiding peasants before leaving Europe, and that the criminals and vicious are the exception. Can they become tillers of the soil in America, as they were in Europe? They differ so radically from the American farmer in race, religion and language, that such a plan seems hopeless. Yet, it might be possible for a state commission to take up the matter, and to induce recent immigrants of good moral character to come into the rural districts and to take employment there. Their experience as extensive farmers in Europe might make them useful on an American farm, and, if scattered among Americans, there is little doubt that the second generation would speak the English language and become Americanized. This scheme is as yet untried, yet the city and country problems alike, may yet compel the government to give it consideration.

As the price of land advances, and the demand for food supplies increases, it is inevitable that more intensive farming must be practiced. For this purpose a small farm brings the best results. The next few decades may see the development of small farms, operated by one man, where every acre will be made to yield its utmost. When such a condition becomes general, the farm labor problem will largely have solved itself.—Edgar G. Meinzer, of the Kansas State Agricultural College, Manhattan, Kan.

Less than 6,000 cattle have been fed along the Missouri, Kansas and Texas railroad during the present winter, as compared with 50,000 a year ago. This indicates the tremendous decrease in feeding operations.

Colonel W. A. Harris of Linwood as a Shorthorn Breeder.

Colonel Harris was most favorably known as a scholarly, most courteous and capable man, but only to the Shorthorn breeders, and especially to those well up in Shorthorn technique, was his best side discernible; and to those who were engaged in the battle of the breeds a quarter of a century ago, does he stand out conspicuously as one who helped save the red, white and roans from being put to rout by the white faces, assisted as they later were by the Angus and Galloways.

At the time of his advent into the breeding world, about, 1880, Bates Shorthorns were talked about by 99 to 100 of the breeders as the only kind that it was wise to buy, and were sold as gold bricks; not only were they sold to the unsuspecting, but to many knowing ones that at their opportunity would work the "gold brick racket" in disposing of their purchases or the progeny

In 1873 the craze for Bates cattle reached the climax. Parks' and Murray's sales of Bates cattle averaged $783 and $848 respectively.

M. H. Cochrane sold ten head at private sale for $50,000, and at the great New York Mills sale one hundred nine head sold for $381,990, an average of $3,504. They were the royal family, the aristocrats among Shorthorns of such lineage that it was out of the question to make out-crosses, so they had been bred, and inbred, then inbred some more, to four or five crosses of sire upon daughter and upon grand daughter, and then again upon great granddaughter, and still upon great great granddaughter, until the curse of incest, infertilty and deterioration were the inevitable penalties. Do you wonder that the animals sold at the New York mills sale were "gold bricks?"

As a result of incestuous breeding upon this once grand herd of Bates cattle were lost to the world. The eleven Duchess cows in this sale that sold at an average per head of $21,709 never one of them afterwards produced calves that were worth recording.

Owing to this infertility in the Bates herd, during the later lifetime of the owner, his herd produced only twenty-six cows worth recording in twenty-six years. "Gold bricks," indeed.

Here is where Colonel Harris, of Linwood, with Potts and a few other brave spirits, came into the game. In Shorthorn herds in America under the old regime it was all queens and no kings. All pedigrees must trace on the dam's side to the imported cow in the maternal line, while the sire's pedigree was nil, the family name coming from the imported cow. If she was back in the line ten generations she would impart 1-1024 part of her blood to the progeny.

Harris said, "Drop this fetish of tracing to Imported So and So, and form your judgment by the merit of the animals represented in the first three or four crosses. Above considerations of pedigree or family, select your breeding stock by what their produce will do on the block in producing a thick, luscious carcass of meat." And they did stop it when he was chosen to be managing director of the American Shorthorn Breeders' Association.

When the fight was on, between the progressives led by Harris of Linwood, and the reactionaries, or standpaters, about 1890, he made this broad and comprehensive assertion: "If the herd books could be closed for ten years and we would select our breeding stock by individual merit alone, confining ourselves, of course, to the pure-bred, it would result in the production of the grandest lot of beef cattle the world has ever known."

He was confirmed in this opinion, he told me, after he had visited the herds of England and Scotland, and had spent a day with Amos Cruickshank, the renowned old champion of improvement by individual selection. Honest, independent and aggressive, instinctively discerning the highest and best in men or animals, he was a power for good in any environment.

Alvin H. Sanders, in that universally accepted history, "Shorthorn Cattle," says of him: "The real leader of the Scotch forces in the United States was Col. W. A. Harris, of Linwood. Few men possessing like strength of character have given their personal attention to the breeding of Shorthorns in the United States. It was generally conceded that Linwood at its best was the outstanding herd of the United States and foreign visitors questioned if it had a superior in Great Britain.

"To have been in his home, even to have read the titles of the books in his library, to have sat and talked with him under the trees at Linwood, to have had him in your home to advise you about your breeding operations, and, above all, to have known that he was your friend, was indeed a liberal education."

J. F. TRUE.

Concrete Block Houses.

Some time ago, Prof. E. B. House, of the Colorado Agricultural College, planned a residence, and, as the bids for brick and stone were beyond the size of his pocketbook, he decided to buy a concrete block machine and make the blocks himself. Inexperience in this gave him some anxiety, but he is now prepared to say that care in mixing, proportioning and curing is all that is necessary, and any one who has spare time, and willing muscles, can make these blocks, and the houses made of them will be as strong and durable as stone.

Perhaps you don't like the dull gray color. It is cold and gloomy and many object to it. Here is one way to get around the color proposition. Get a machine which will mould the blocks face down, use a plain face plate. Sprinkle in a little dry sand over the plate, say about one-fourth of an inch thick; then sprinkle in a layer of broken boulders, crushed granite, or crushed bull quartz. On top of this place a layer of sand and cement one-half an inch thick, in the proportion of two parts of sand to one part of cement; then fill up the mold with the concrete (1 cement, 2½ sand, 5 fine gravel), ram it up and set the block in the yard. When 24 to 48 hours old, rick them up, and, with a hose, wash off the sand from the stones. You then have a beautiful rough face. The blocks will look mighty rough in the yard, but don't let your neighbors scare you out--they will look fine when in the wall. Mr. House used pink crushed granite in his, with good effect.

One sack of cement will make 17 blocks, if made as above. One ordinary load of sand and gravel mixed as directed will make 75 blocks, and two good men can turn out from 125 to 150 blocks a day.

One block will be equivalent to 16 bricks. Masons in Fort Collins lay them in the wall at 4 cents each, and make good wages at it. Mr. House saved a great deal on his residence in this way, with the result that his house is cool in the summer, warm in the winter, and as dry as can be from cellar to garret. Try it and you can do it; only remember that it requires careful work and plenty of muscle.

Value of the Muskrat.

On account of the increasing scarcity of fur-bearing animals considerable interest is being manifested in the muskrat. Both the fur and the meat are staple articles in some of the markets of the East and Middle West during the winter months. The furs are used largely by fur dressers and dyers and are made to closely imitate the more costly furs, thus creating a continuous demand for the pelts.

Owners of marsh lands have already made the trapping of muskrats profitable, converting otherwise useless lands into income producing investments. Many lease the trapping privilege to those who make a business of trapping.

Farmers' Bulletin No. 396, "The Muskrat," gives a description of its general habits, methods of trapping, and the value of its fur and flesh. It will be sent free by senators, members of congress, and the secretary of agriculture, Washington, D. C.

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never grows dull. It is made in such a way that you sharpen it by using it. Think what that means in saving of time, labor and expense!

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Largest Manufacturers of Farm and Garden Hand Tools in the World
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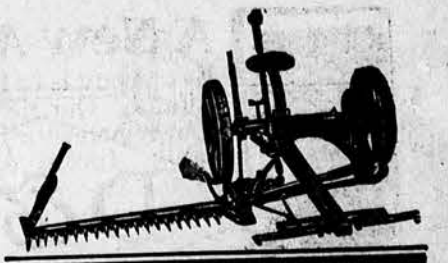

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The longer the lever, the heavier load you can lift. You can liken each spoke in a mower wheel to a lever. This is the principle to which the Dain, with its high, broad-gauged, wide rim wheels, long pitman and compensating gears, owes its remarkable light draft and its tremendous cutting power.

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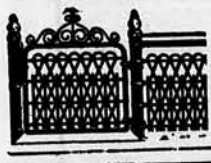

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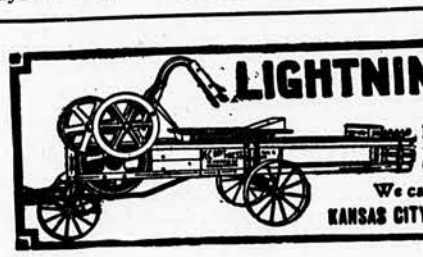

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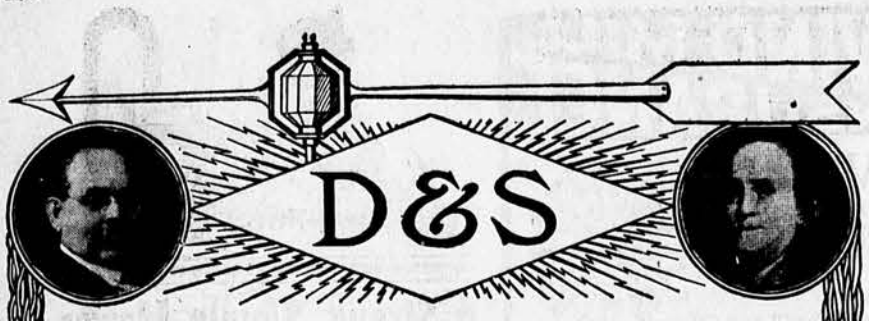

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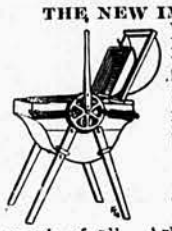
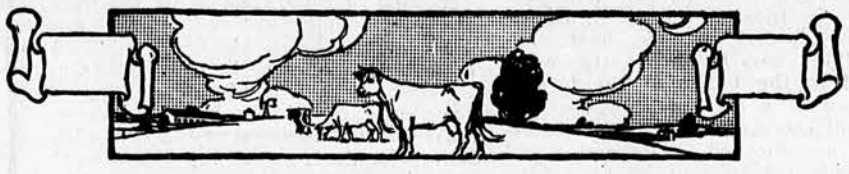


Emancipates the housewife from drudgery. **Satisfies the Daily Longing for an Equal Chance at Life.** Combining the good features of the **Washboard and Steam Laundry,** it charms our customers with its efficiency and makes possible our motto **"Not a Dissatisfied Customer."** Price within the reach of all. Ask your dealer or write **The Imperial Manufacturing Co., Main Office and Factory, Independence, Kansas.**

BOYS Make money trapping gophers; circular giving pointers on trapping them sent free. **A. F. Renken Trap Co., Box 32, Kramer, Neb.**

DAIRY



One of the arguments used by those who oppose the present oleomargarine law is that it militates against the poor man. To offset this it has been shown that in the same market uncolored oleomargarine sold for 20 cents a pound while the yellow product, not artificially colored but yellow because of selected ingredients, sold for 27 cents a pound. The manufacturers say it is impossible to select materials that will product the yellow color every time and hence the necessity for artificial color to render the product saleable.

Prof. C. C. Hayden of Illinois gives some very plain reasons for balancing the rations of dairy cows from the milk and butter-fat record of two lots. Lot 2 was fed a ration which was not balanced, and its production decreased much more rapidly than lot 1, which was fed a balanced ration. In the latter herd the milk decreased a total of only 55 pounds in the week's record from December 31 to May 6, while the lot without a balanced ration declined more than twiec as much. The lot having a balanced ration produced a total of 4,373 pounds of milk during the period, while lot 2 gave only 2,985 pounds.

In another comparison the actual milk records of two lots of nine cows each were given. The lot which was fed timothy hay, deficient in protein, stover and grain decreased in milk from 215.5 pounds to 194.6, but when alfalfa was substituted for the timothy the production increased steadily to 210.8 pounds. But the other lot, getting alfalfa (which balanced the ration), increased from 171.2 pounds of milk per week to 193.1 pounds. But when the ration was changed to timothy, the milk flow decreased from 184.4 to 171.9.

Conditions Affecting Richness of Cream.

1. Position of cream screw. If the cream screw is turned away from the center of bowl the cream will be thinner, if it is turned toward the center of bowl the cream will be richer.

2. Temperature of milk. If other conditions are similar the cream will be richer when the milk is skimmed cold. Skim the milk as it comes from the cow before it has lost the animal heat. By skimming while the milk is warm the separator will do better work.

3. Speed of separator. The faster the separtor is run the richer the cream will be. A separator should always be turned at the speed recommended by the separator factory.

4. The inflow of milk. The greater the inflow the more cream and the thinner the cream. If we want to produce cream of uniform thickness it is important that inflow valve is always opened the same, even then there may be a difference in the inflow of milk owing to the amount of milk in the tank; the higher the milk stands in the tank the greater is the pressure and the faster the milk will run through the separator.

5. Amount of skimmed milk or water used in flushing out separator bowl. For that purpose skimmed milk should always be used and not water. Milk will remove the cream more completely, and water is injurious to the flavor.

6. Richness of milk. Under similar conditions the separator will always give the same amount of cream and skimmed milk from the same amount of whole milk. It is evident that it makes considerable difference in the richness of cream whether the milk tests 4 or 3 per cent fat.—B. V. Bulletin.

Conditions Governing Richness of Milk.

1. Breed and individuality of animal. It is well known that there is variation in richness of milk from different breeds and between the product of individuals of the same breed. It has so far proved impossible to bring the average test of a Holstein herd up to that of a Jersey.

2. Period of lactation. Shortly after calving the milk is poorer in fat; the richness of the milk increases as the quantity decreases.

3. Health of animal. The milk of a sick cow or a cow in heat is generally testing higher, but the quantity is reduced. There are several exceptions to this rule.

4. Exposure to rain or bad weather, rough treatment or change of milkers all affect the quaility or quantity of milk for a shorter or longer period until the cow has returned to normal conditions. Generally the milk increases in fat and the quantity decreases.

5. Time of milking. The milk is generally richest after the shortest interval. Milking should be done the same hours morning and night.

6. Difference in fore milk and stripping. The fore milk is always poor in fat, the first streams are merely water, the stripping is very rich. This explains the importance of taking the last strippings.

7. Condition of the cow. Milk from starved or underfed cows is generally poor in butterfat, and the quantity is also decreased; very few experiments have proved the reverse.

8. Effect of feed on quality of milk If a cow is in good condition the different kinds of feed will have no material effect on the richness of the milk; one kind of feed may produce more milk than another, but the quality of the milk will be about the same. A starved or underfed cow may produce milk richer in fat after she has been properly fed, but when she has reached her normal condition the test is not apt to vary a great deal. At the same time the change is made from one feed to another there is always apt to be a change in the quality of the milk, but that must be accounted for in that the change of feeds brings about a feverish condition in the cow.—Bulletin.

A Woman and Sixty Cows.

Mrs. Durand, who owns a dairy farm just north of Chicago, near the lake, recently attended a farmers' institute in Kane county, Ill., and by her talk opened the eyes of a good many at the institute, showing how she makes $12,000 a year on her sixty cows. She is reported in a Chicago paper as follows:

The speaker was Mrs. Scott Durand, a society leader of Lake Forest and Chicago, who five years ago owned a Jersey cow and a high position in the social world and who is now a dairy woman and farmer with a reputation that places cream from her dairy on dining cars.

"Among other attractive features of my home life in Lake Forest I had a Jersey cow, and as we had more milk than we could use, I sold some of it to the neighbors. Then I became interested in the question of good milk for babies and the more I read the more fascinated I became. The outrages perpetrated upon the people by careless and money-grabbing milkmen made my blood boil and I made up my mind that I would show them how to run a dairy and make money and at the same time make the dairy barn as clean and wholesome as my own kitchen.

"It chanced that I went abroad that summer and when we reached Holland I started in with my dairy study. That was worth much to me. When I came home I started in. That was five years ago. Last summer I bought the old Blodgett farm on the lake shore, about two miles north of Lake Forest, and we moved out there. The buildings are not what I want, the house is not what I wish, but my heart and my cows are there and I am going to make it a beautiful and famous place."

Piling out of bed in the morning at 4 o'clock, sitting up late at night with a sick cow, getting out at 2 o'clock in the morning to see that a new calf is properly attended to, studying causes and results, this strenuous active labor has given the "Dairy Queen" her prominence in the dairy world.

"Mrs. Durand," said one of the questioners at the Institute, "to what do you attribute your success?"

"Because I am a woman," was the quick response, "that's all. Cleanliness is the important thing in the dairy business.

Feeding Calves for Veal.

About a year ago I wrote you a letter which appeared in the "Dairyman" on the subject of utilization of skim milk and the cheap vealing of calves by its use. At that time little expernmental knowledge was known on the subject outside of three or four expernment stations, notably that of Kansas under charge of Prof. D. H. Otis of the Kansas Experiment Station. At that time I had tried the practice on three or four calves, with marked success, writes C. L. Peck in Hoard's Dairyman.

The article to the Dairyman was largely copied in other agricultural papers. It aroused quite extensive experiments in many parts of the country, and I have been in receipt of many letters from persons who have tried the methods therein described. Nearly all were successful to a marked degree. The saving was from $10 to $12 and often more, each calf. This is a big saving in the dairy business. I encouraged the practice among the dairymen of my locality and watched results. I watched over 200 calves with which this method was used. I found but a very few failures, and in every case but one, was easily able to trace the cause of failure. In nearly every case it was overfeeding. In one large dairy "white scours" broke out, and of course the calves were not a success. The "dried blood food" remedy was not tried, or I presume they would have come out all right.

Where directions were carefully followed I did not learn of a single failure. Scours were almost unknown.

The method described was that of the Kansas Experiment Station, with a single change. It was as follows:

Calves were weaned at about 24 hours old. They were then fed about four quarts daily of the mother's milk. Most feeders fed but twice per day, as most farmers do not care to take the time to feed three times. So far as I could learn, those fed twice did as well as those fed oftener. This was continued for five to seven days. Then part of the new milk was removed and skim milk substituted, fresh as it comes from the separator. At the same time a sort of gruel or porridge is prepared from white wheat middlings and corn meal, by putting two parts middlings to one of meal (there are plenty of other compounds that do well), scalding or cooking so as to readily digest and a gill or so of this added to the milk. It must be thin enough to readily stir into the milk without lumps. About a week is used in changing gradually from new to skim milk. The gruel and milk may be slowly increased until at three or four weeks the calf is fed eight quarts of milk per day.

At from two to three weeks old the calf should be taught to eat shelled corn. Most calves will take to it readily at about the time they will begin to nibble a little hay or oats. It should be put in a box in reach of the calf and a supply kept where he can have all he will eat, at least until he eats more than a quart per day. In teaching it may be necessary to put a little in the mouth, holding up the mouth until he chews it. As soon as they get the taste they usually eat it readily and greedily. I have never known a case where feeding all the corn they would eat produced scours. Corn is preferable to meal for the reason the calf thoroughly masticates the corn before swallowing, while it will take the meal into the stomach without mastication and indigestion is liable to follow. Butter fat is a carbohydrate and little else. Corn is the same with protein added. A pound of corn worth 2 cents will go as far toward fattening the calf as a pound of butter fat worth 30 cents or more. It takes a little longer for results with the skim milk and corn than with the new milk for the reason that the digestive organs do not quite so soon master the corn, but being a much cheaper feed it pays to wait. I found instances where the calves put on over 20 pounds of flesh in seven days with the skim milk aand corn feed, between the age of four and five weeks. At the present price of veal it meant over 20 cents a day at a cost of not over 2 cents for corn. As a rule the calf will put on more flesh between six and eight weeks of age than in twice the time prior to five weeks. If the milk be fed half new and half skimmed for a week or so before marketing, it will be found a profitable thing to do. The added new milk at that age gives a finish and gloss to the calf that adds greatly to his margetability. Eight quarts of milk per day up to eight weeks is enough for a calf and too much for some.

There should be no set age for marketing calves. Sell them when fitted for market. Some calves are better fitted at six weeks than others under the same treatment will be at ten weeks. Keep them until ready to sell. This is in most markets before they reach 200 pounds, but as near to it as is safe, say from 175 to 190 pounds. Most markets object to calves over 200 pounds when offered for veals.

Two or three doses of ground blood meal prepared for use as cattle food, is almost an infallible cure for scours. The Kansas Experiment Station has tested in many scores of cases, with universal favorable results.

In the foregoing method of feeding calves for veal or otherwise, it will be found that at eight weeks they have consumed about 800 pounds of skim milk, and about 75 cents' worth of corn and about 75 cents' worth of good new milk. If fattened on new milk it will in the same time have eaten about $12 to $14 or more worth of butter fat, making a difference of over $10 expense in the feed cost of vealing a calf, if kept until nearly 200 pounds weight. In a large herd of veals this is a matter worth looking after.

Cold Storage the Farmer's Friend.

Cold storage is a necessity; that is, it is if we would preserve the perishable products of plenty against the time of scarcity.

The housewife has long recognized this law in the preservation of fruits by cooking them and then sealing them in air-tight vessels and for centuries the farmer has had practical cold storage when he has buried his apples, potatoes and other vegetables in the ground and covered them over with straw and loose earth to keep them from freezing.

The refrigerator of the home has long been a necessity to the housewife. Circumscribed and inadequate as it often is, nevertheless the residence refrigerator does on a small scale what cold storage houses do perfectly on a large scale, writes W. T. S. White in Kimball's Dairy Farmer.

Before cold storage facilities were available, during the time of plenty, prices were extremely low to the producer. Conversely, during the season of scarcity, prices rose rapidly and were extremely high to the consumer. Many classes of perishable products were not procurable even at extreme prices.

The cold storage warehouse acts as a balance. It insures that a fair supply of the products of plenty, produced in their seasons, shall be available throughout the year. It materially lessens the extremes between the former minimum and maximum selling prices, which is a decided advantage to both producer and consumer.

Perishable products for cold storage purposes are those produced and stored during the season when the finest quality is produced and available and these products are very carefully selected of the highest possible grade, packed and quickly handled into storage.

Great care must also be exercised in the handling of these products while they are in cold storage, although the system is very simple. Product in boxes or other containers must be properly stacked, to permit a free and even circulation of the air in the room, and the temperature must be kept at whatever degree of Fahrenheit is most suitable to that particular product.

Absolute cleanliness must prevail throughout a cold storage warehouse, and the rooms must be kept perfectly dry and sweet.

All the large cold storage warehouses welcome inquiries. Information regarding the system, the methods pursued or the purposes accomplished will be given

The time for marketing any stored product is governed by the requirements of the consumer. That is, produce, fruits, and certain vegetables are usually taken out of storage during the cold months, when nature is dormant, just as they are placed in cold storage during the summer and fall when nature is prolific. These seasons are as well defined as are the seasons in the dry goods business, whose mercants sell summer fabrics in spring and summer and winter fabrics in the fall and winter, although the time for manufacturing may be, and generally is, in opposite seasons.

Cold storage may be classed as public utility concerns and common carriers. As a rule, they do not own, therefore neither buy nor sell, the product handled. Cold storage places are warehouses whose facilities are at the command of all who have perishable products to preserve or store.

The rates of storage are uniform to all. No distinction whatever is made, and any one who wishes to do so has the privilege to buy and store during the season of plenty that he may sell or consume in the time of scarcity.

The principles of cold storage, as we understand it, expressed in this book, are about the same as a farmer erecting a silo, which he fills from his corn fields just at the time the corn commences to mature, giving him a supply of green, succulent feed for his stock during the winter months, when green feed for his stock otherwise is not obtainable; or about the same as a farmer erecting his corn crib into which he puts his surplus product to keep in the best possible condition until such time as he requires the contents.

It is the same principle that the fruit grower and shipper follows in pre-cooling his products before loading and shipping them in refrigerator cars under cold storage conditions to their destination, and it is the one principle that has made possible the rapid and satisfactory growth of the fruit business, and to the great benefit of the producer and consumer.

Questions of Law.

Questions of law addressed to this paper are referred to the University of Kansas. They are assigned to competent members of the Senior Practice Court of the School of Law, and the answers are given after each student has searched the authorities. In each instance the student is prepared to accompany his statement with the citations upon which his answer is based.

Question 1. If A raises a hedge fence on the line between his farm and a farm belonging to B, does the hedge all belong to A or can B claim one-half of said hedge?

Question 2. A and B have a hedge fence which was supposed to be on the line, but a resurvey established the line several inches or feet from the hedge. To whom does the hedge belong?

THE WORLD'S STANDARD"
That's What The
DE LAVAL
Cream Separators
Have Been from the Very Beginning of Separators 32 Years Ago.

Why bother with "copies," "imitations," "substitutes," "just-as-good" and other "near" separators, that merely utilize cheaply the expired DE LAVAL patents and cast-off DE LAVAL types of construction of from ten to twenty and thirty years ago?

There is no other cream separator made that comes WITHIN TEN YEARS of the IMPROVED DE LAVAL of TODAY.

SEE, COMPARE AND TRY
a 1910 DE LAVAL for yourself beside any other separator made and you cannot help so decide.

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1016 WESTERN AVE. SEATTLE

Answer 1. The hedge all belongs to A and he may by taking the proper steps compel B to pay him for one-half of the same.—Grey vs. Edrington, 29 Kan. 149. Gen. Stat. of Kansas of 1905, Sec. 3159.

Answer 2. In the absence of an agreement to the contrary the hedge fence, upon being planted, became a fixture and belongs to the owner of the soil on which it grows.—Rowand vs. Anderson, 33 Kan. 264. Ebersole vs. Trainor, 81 Ill. App. 645.

The fact that the hedge was planted over the line by mistake makes no difference.—Burlerson vs. Teeple, 2 G. Greene 542.

A cow to the acre is not an irridescent dream. It is well within the bounds of possibility and the work of Professor Kendall along this line will probably demonstrate the ease with which it can be accomplished before the season is over. Already one Kansas dairy farmer has succeeded in maintaining 75 head on 100 acres and he hopes to beat this record this year. Alfalfa, corn silage and good pasture will do it.

Politics will not fatten hogs, not the four legged kind.

The new State Fair grounds at Hutchinson as seen by a Kansas Farmer representative. Thirty-five teams at work grading the grounds for the race track and new building sites. In rushing the preparations for the greatest fair ever the management at Hutchinson is spending $1,000 per week. On this ground will be pulled off the great futurity races of the Kansas-Oklahoma circuit which is the biggest half-mile circuit in the United States.

READERS MARKET PLACE

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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. The "ads" are easy to find and easy to read. Your advertisement here reaches a quarter million readers for 3 cents per word, for one, two or three insertions. Four or more insertions, the rate is 2½ cents per word. No "ads" taken for less than 30 cents. All "ads" set in uniform style, no display. Initials and numbers count as words. Address counted. Terms always cash with order. Use these classified columns for paying results.

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WANTED—ECONOMICAL AND PARTICular people to take advantage of our prices and services. Western Printing Co., Ptg., Dept. of Kansas Farmer, Topeka, Kansas.

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WANTED—GOOD, RELIABLE MEN TO sell nursery stock. We have a splendid proposition to offer. Write today. James Truitt & Sons, Nurserymen, Chanute, Kan.

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BUY OR TRADE WITH US. SEND FOR list. Bersie-Meredith, Eldorado, Kan.

WE CAN TRADE YOUR PROPERTY—Book of 500 exchanges free. Graham Brothers, Eldorado, Kan.

NOTICE THE OTHER BARGAINS IN Real Estate offered under Bargains in Farms and Ranches of this paper.

FARM LOANS MADE IN ANY AMOUNT from $500 up at lowest rates and on most favorable terms. Betzer Realty & Loan Co., Columbian Bldg., Topeka, Kan.

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FOR INFORMATION ABOUT GRANT County, Okla., write us for Real Estate Bulletin No. Six. J. H. Ruth & Co., Medford, Okla.

FOR FREE INFORMATION ABOUT LAbette Co., Kansas farm lands and Parsons' real estate, one of the best towns in Kansas, write W. C. King, Parsons, Kan.

FLORIDA WANTS FARMERS—TRUCK, fruit, dairy and chicken farms cheap, any size, easy terms. Write for free book of facts. Florida Land Co. Chipley, Fla.

BARGAINS IN LYON COUNTY, FARMS for sale. Also have some fine exchange propositions. Write us for our new booklet. Hartford Realty & Loan Co., Hartford, Kan.

FOR BARGAINS IN CORN, WHEAT and alfalfa land in the Marie Des Cygres Valley, also good grass land near market, reasonable prices. Write Richard Griffith, Reading, Kan.

LEASE FOR FIVE YEARS—CHOICE stock and dairy farm in McPherson Co., to highest responsible bidder on June 8. For particulars address J. S. Hoover, Manhattan, Kan.

FOR SALE—120 ACRES, 6 MILES FORT Scott; fair improvements, smooth land, $5,000. 250 acres, 1 mile town; fair improvements, bottom land; no overflow. $60 per acre. Many others. Geo. N. Balnum, Fort Scott, Kansas.

CENTRAL MISSOURI FARMS—FOR corn, wheat, clover, blue grass farms that will prove profitable and satisfactory as homes and investments. Write for new list. Farms described and priced. Hamilton Realty Co., Box 1, Fulton, Missouri.

FOR SALE—BEST DAIRY FARM IN Okla., 2 miles from Enid, Okla. Land adjoining selling for $200 per acre. Has $10,000 dairy barn and built within the year, and planned by A. & M. College (dairy department) Stillwater, Okla. Write for terms. Address Box 72, Route 3, Mrs. Grace Atkins.

FOR SALE—160 ACRES, GOOD FARM land, six miles east of Plainview, and one mile southeast of Morrison, in Pierce County, Nebraska; 100 acres under plow and balance wild; can be farmed. Price $45 an acre, 1-3 cash and balance easy terms. For particulars, address owner, P. J. Luers, Wahoo, Neb., at once.

POULTRY.

WHITE WYANDOTTE EGGS, $4.00 PER 100 or 200 for $7.00. Mrs. H. G. Stewart, Route 1, Tampa, Kan.

ROSE COMB RHODE ISLAND RED eggs, pure bred; selected range stock, 15, $1.00; 100, $5.00. E. Conwell, Oneida, Kan.

ROSE COMB WHITE LEGHORN EGGS $1.00 per fifteen, $4.50 per hundred. Mrs. C. Dibben, Wakefield, Kan.

BABY CHICKS AND EGGS—CLOSING season's prices on Evans Specials S. C. B. Leghorns. Delivery May 23 and 26. Mrs. Evans, Edgerton, Kan.

S. C. BUFF ORPINGTONS—FIVE PENS; large, vigorous, tremendous layers. Eggs, 15, $1; 100, $5. R. C. Leonard, Oxford, Kansas.

ROSE COMB REDS EXCLUSIVELY. Eggs from high scoring birds, $1.50 per 15; $5 per 100. Mrs. Riley Ingraham, Manhattan, Kan.

BUFF ROCKS, EGGS 15, 75c; 50, $2.00; 100, $3.00. W. A. Hilands, Culver, Kan.

BUFF ORPINGTON EGGS 15, 75 CENTS; 100, $4.00. Ellen Shesboraw, Fredonia, Kan.

TWO BUFF ORPINGTON COCKERELS, $2.00 each. Harry Cure, Atchison, Kan.

S. C. BROWN LEGHORN EGGS—$1.00 per 15; per 100, $4.00. J. S. Evans, Manhattan, Kan., 713 Colo.

BLACK LANSHANS—EGGS $1.50 PER 15; $7 per 100. Baby chicks, 15c each. Mrs. Geo. W. King, Solomon, Kan.

ROSE COMB B. L. EGGS—$1.00 PER fifteen, $4.00 per hundred. Mrs. O. B. Smith, Cuba, Kan.

WHITE WYANDOTTES EXCLUSIVELY—$1.00 per 15; $3.50 per 100. Dora Y. Eustace, Wakefield, Kan.

BUFF LEGHORN EGGS—PENS $1.50 per 15; rage, $1 to $5 per 100; Mrs. John Wood, Solomon, Kansas.

SINGLE COMB WHITE LEGHORN eggs and stock for sale. Wyckoff strain. Mrs. Mabel Sullivan, R. 1, Abilene, Kan.

WHITE WYANDOTTES—BRED UP TO date. Eggs for hatching. S. W. Artz, Larned, Kan.

PURE BRED BUFF ROCKS—FARM raised; eggs, $1 for fifteen, or $4 per hundred. Mrs. W. Lovelace, Muscotah, Kan.

EGGS FROM A FINE LAYING STRAIN of Rose Comb Brown Leghorns. Mrs. J. E. Wright, Wilmore, Kan.

WHITE PLYMOUTH ROCKS, FARM raised. Eggs, $1.00 per 15. Safe arrival guaranteed. A. F. Huse, Manhattan, Kan.

BUFF COCHINS—EGGS, $1.50 FOR 15. W. T. Garner & Sons, Maple Lawn Stock Farm, Crossville, Ill.

INDIAN RUNNER DUCK EGGS IMported stock. Barred Rocks and Single Comb Reds. F. L. Reinhard & Son, Ottumwa, Iowa.

PURE S. COMB BROWN LEGHORNS—Eggs from prize-winning stock. Eggs safely packed 30 for $1.50; $4.00 per 100. A. G. Dorr, Osage City, Kan.

100 BARRED ROCK CLKS. AND FEmales, prize-winning strain, 85 premiums, 30 yrs. experience Eggs, $2 per 15; $5 per 50 Chris Bearman, Ottawa, Kan.

FINE BARRED ROCKS—GOOD LAYers, farm range, eggs, $1.00 for 15 or $1.75 for 30, or $5.00 per 100. Mrs. John Yowell, McPherson, Kan.

EGGS! CHICKS! SPECIAL SALE price this season. Single comb Brown Leghorns, Barred Rocks, Rosecomb Reds. M. A. Tomlinson, Eureka, Kan.

BARRED ROCKS—63 PREMIUMS. EGGS $1.00 for 15, $5.00 for 100. Exhibition matings, $3.00 for 15, $5.00 for 30. W. C. Opfer, Clay Center, Kan.

CORNISH INDIAN GAME, STOCK FROM imported birds last year. Eggs, $1.50 per setting of 15 or $6.00 per 100. Mrs. J. H. Drury, Fullerton, Neb.

SINGLE COMB RHODE ISLAND REDS, eggs, $2.00, $3.00 and $5.00 per 15; none better; my show record tells the story. Chas. E. Lentz, Atchison, Kan.

BARRED PLYMOUTH ROCKS (EXclusively)—Choice, healthy stock. Selected eggs, 100, $4.00; 50, $2.50. Safe delivery and satisfaction guaranteed. Adam A. Weir, Clay Center, Neb.

PRIZE WINNING WHITE ROCK EGGS, $1.00 per 15, $5.00 per 100. Pekin Duck eggs, $1.00 per 15. L. T. Spellman, Paola, Kan., Route 8.

NINE YEARS A BREEDER OF R. C. R. I. Reds, 15 range eggs, $1.00; 100, $5.00, choice pen eggs from high scoring stock, $2.00 per 15; $5.00 per 50. Mrs. B. F. Weigle, Winfield, Kan.

ROSE COMBED RHODE ISLAND REDS—Extra good stock, farm raised, free range, carefully packed eggs, $1.00 for 15; $5.00 for 100. Ella Kirkpatrick, Westphalia, Kan.

EGGS AND DAY OLD BABY CHICKS—From Johnson's Laying Strain, R. C. Brown Leghorns, 15 eggs, $1.25; 100 eggs, $5.00; chicks, 20c each. Send for circular. Mrs. H. M. Johnson, Formosa, Kan.

RHODE ISLAND REDS—BOTH COMBS. All stock sold we can spare this season. Ten mating to furnish eggs for hatching. Guarantee on eggs. Mating list with show record free. H. A. Sibley, Lawrence, Kan.

GALVA POULTRY YARDS—R. C. W. Leghorns and White Wyandottes. Some stock for sale and eggs by the setting or hundred. Prices reasonable. John Ditch, Prop., Galva, Kan.

EGGS! EGGS!!—FROM 18 VARIETIES thoroughbred poultry, geese, turkeys, Pekin, Rouen, Muscovy and Indian Runner ducks, pearl and white guineas, bantams, dogs, all kinds of fancy pigeons. Hen's eggs, 15 for $1.00. Write for free circular. D. L. Bruen, Platte Center, Neb.

SINGLE COMB WHITE LEGHORN eggs. R. W. Yoeman, Lawrence, Kan.

WHITE PLYMOUTH ROCKS—EXCLUsively—large birds, good layers, farm range. Eggs May 1st, $4.00 per 100; $2.50 per 50. Etta L. Willett, Lawrence, Kan., R. R. 5.

EGGS FROM CHOICE WHITE WYANdottes with splendid show record reduced. 15, $1.00; 30, $1.75; 100, $6.00. Beatrice Stock & Poultry Farm, Beatrice, Neb.

CATTLE.

FOR SALE—4 RED SHORTHORN bulls, from 13 to 23 months old, eligible for record. J. Thorne, Kinsley, Kan.

SEE US BEFORE PLACING YOUR stock catalog printing. Western Printing Co., Ptg., Dept., Kansas Farmer, Topeka, Kan.

FOR SALE—FIVE EXTRA GOOD Scotch and Scotch topped bulls, 10 months old. Roans and reds, sired by Victor Archer by Archer and Forest Knight by Gallant Knight. Priced right. Stewart & Downs, Hutchinson, Kansas.

HORSES AND MULES.

SHETLAND PONIES—WRITE FOR price list. Charles Clemmons, Waldo, Kan.

100 SHETLAND PONIES TO EXchange for good farm land, not heavily mortgaged. George Simpson, Wheaton, Ill.

OUR FORMULA FOR HORSE COLIC guaranteed to cure any case in 30 minutes is the most simple and reliable ever discovered. Price $1.00. A. Auchly, Montgomery City, Mo.

DOGS.

SIX COLLIE PUPS—$2.00 AND $3.00. Victor Hargrave, Richmond, Kan.

SEEDS AND PLANTS.

ALFALFA SEED, TEN DOLLARS. J. H. Glenn, Wallace, Kan.

PLANTS—CABBAGE, ALL VARIETIES, 25c per 100, $2.50 per thousand; tomato, Dwarf Champion, Kansas Standard, Free, Beauty, Stone, Matchless, Acme and Trophy, 30c per 100; $2.50 per thousand; Sweet Potato—Yellow Jersey and Yellow Nansemond 22½c per 100; $1.75 per 1,000. 6 other varieties, 25c per 100; $2.50 per 1,000. F. P. Rude & Son. Both phones, North Topeka, Kan.

MISCELLANEOUS.

ENDLESS DIME SCHEME, WILL MAKE you $25.00 weekly. (Legitimate). Postpaid 25c silver. W. H. Dutton, Little Rock, Ark.

GREAT SMITH TOURING CAR, FULLY equipped. Demonstrations on request. E. B. Kellam, 211 W. 6th, Topeka, Kan.

SEND STAMPS FOR SAMPLES OF AIRcured chewing and smoking tobacco. Jesse Miller, Adams, Tennessee, R. 1.

TELEPHONE SUPPLIES—LIGHTNING will stay out doors if your telephone line is equipped with a No. 700 Aerial Arrester. By mail 60c. Send for circular. Other things to your interest if you own a telephone. W. L. McMillen, Osborne, Kan.

PATENTS.

SEND FOR FREE BOOKLETS—ALL about patents and their cost. Shephard & Campbell, 6900 McGill Bldg., Washington, D. C.

PATENTS PROCURED AND POSItively sold if the idea has merit; all countries; best service; book free; send sketch. H. Sanders, 115 Dearborn St., Chicago, Ill.

FIELD NOTES.

Last Chance to Buy Bred Sows.

On May 17, Roy Johnston will sell extra well grown out Poland China gilts. This will be the last chance to buy at public sale this spring. If you need a good bred gilt or brood sow in your herd it might pay you to attend. See ad in this issue of Kansas Farmer.

H. E. Hoak Has Good Herd.

One of the young breeders that is building up a good herd of Poland Chinas is H. E. Hoak, of Attica, Kan. Mr. Hoak has at the head of his herd Kansas Hadley by Big Hadley out of Maid of Honor. Kansas Hadley is assisted by Spangler's Wonder by Spangler's Hadley and out of Lady Hutch, one of the largest sows on the Spangler farm. Mr. Hoak is pricing a few choice spring pigs of the large type Poland Chinas. Watch for further mention of this herd in Kansas Farmer.

The Stannard Oil.

Senator C. A. Stannard, of Emporia, Kan., won a very fine reputation and some sheckels with his processed oil for live stock dip. This dip has been uniformly successful wherever used, and is highly recommended by breeders, feeders and quarantine officers. Mr. Stannard also handles fine qualities of kerosene and gasoline, which are advertised in the Kansas Farmer. Please look up his advertisement and ask him for prices.

Bred Sows and Gilts.

In our advertising columns this week will be found the advertisement of H. B. Walter, Effingham, Kan., one of the best and most successful big smooth Poland China breeders to be found anywhere. Mr. Walter owns the great breeding boar Expansive, a boar that has already done service in three good herds. He is a very large boar and one of the best sow sires ever owned by a Kansas breeder. Mr. Walter offers for sale a daughter of the prize winner Grand Look, bred to Expansive for July farrow, also a few other good fall gilts bred to Expansive for fall litters. More about this herd later.

AMONG NEBRASKA BREEDERS.

The writer has spent the past two weeks among the breeders of southern Nebraska and has seen some of the best herds of pure blooded stock in the country. The Poland China breeders of this territory almost wholly breed the large useful type and that they have bred the right kind is proved by the fact that they are now supplying those who formerly bred the small type with new foundation stock. In the Durocs you will find those of the approved type, possessing plenty of size combined with good finish and prolific qualities. This has been one of the great red hog centers and, the competition being strong, only the best were kept for breeding purposes. The effect of this is easily seen. The breeding of good stock of the smaller varieties has paved the way for the breeding of better horses and cattle. As a consequence of this many good herds are found here. Those visited are mentioned below.

Albert Smith & Sons' Poland Chinas.

Our first visit was to the farm of Albert Smith & Sons, at Superior. Here we found over 100 spring pigs following a string of fine large sows. Many of these pigs already show promise of being great individuals at maturity. At the head of this herd is Smith's Big Hadley by Big Hadley. His dam is Zelma by King Do Do, he by Expansion. This hog is large, weighing in his everyday form over 700 pounds and, best of all, he is a good breeder. Jumbo Jr. 54256 is the other herd boar. This fellow was sired by Nebraska Jumbo and his dam by Bell Metal and out of Lady I Know. This young hog, just one year old, stands on 9½ inch bone. He will be one of the largest hogs the breed has ever known if fully developed. The pigs by these two hogs are a nice even lot and will surely please any one looking for large, useful Polands. Among the sows we found Big Grace by Chief of Pawnee; Big Jennie 2d by Chief of Pawnee; Hardy Girl 2d by Blue Valley Boy, Queen Victoria by Billie Young dam Zora Vick, a litter sister to Big Victor; L's Beauty by Chief of Pawnee. This sow is also the dam of T. J. Charles' present herd boar. Susie B. by Blain's Combination is the dam of Josh Morgan's herd boar. You see herd headers go out from this herd.

A. T. Cross' Durocs.

At the farm of A. T. Cross, at Guide Rock, Neb., we found a herd of exceptionally good Durocs, numbering over 100 head. This herd is headed by Prince Wonder 2nd, and Col. C. two well bred Col. boars. Prince Wonder 2d was sired by Prince Wonder and his dam by King of Cols. This is the best yearling Duroc the writer has seen and if Mr. Cross concludes to show him he is going to make warm company. Col. C. was sired by G C's Col. and his dam by Model Chief Again. These two boars were assisted last season by Crimson Boy by Pilot Chief. These hogs have all proved themselves good breeders both by the pigs seen here and at other herds where sows were bought at this winter's sale. Sows in this Red Wonder; 2 Valley Chief sows with litters by Col. C. and Prince Wonder 2nd. Kant Be Beat sows with litters by Mc's Improver and Chief's Wonder by Ohio Chief. 2 sows by Col. C. with litters by Prince Wonder 2nd and Crimson Boy. You will see by this that this herd is bred in the purple and Mr. Cross will show you some hogs this fall that are also good individuals. Remember this herd.

H. B. Miner's Durocs.

H. B. Miner of Guide Rock was also visited and while he has been one of the good breeders of Durocs for some time he is taking a vacation from his breeding business this year but has not quit the business nor the red hog. Mr. Miner has kept a nice bunch of gilts and will be out among the herds this winter to buy some bred sows with which he will be in business again.

T. F. Walker & Sons' Poland Chinas.

Our next visit was to the herd of T. F. Walker & Son, of Alexandria. We did not get a detailed list of Messrs. Walker's hogs but some fine specimens were seen here in spring pigs, fall pigs, yearlings, and mature animals headed by First Look and Blue Valley, two boars of the large type and their pigs on the farm showed they were good breeders.

O. P. Hendershot's Percherons.

At Hebron, the breeding barns of Mr. O. P. Hendershot were inspected. In these barns we found about ten head of Percheron and Coach stallions and one of the largest and best jacks you could find. Among the Percherons were some of the greatest prize winners at the largest fairs last season. These are the horses to which Mr. Hendershot is breeding his own mares. On the Hendershot farm near Hebron will be found a large number of mares, fillies and little colts. As well as several large jennets and foals. These jennets are being bred to the jacks mentioned above.

J. H. Hamilton & Sons' Poland Chinas

J. H. Hamilton & Son, also of Guide Rock, were visted and found with a large number of their usual quality on hands. It will be remembered that a large number of prize winners have been bred and fitted on this farm in the past and the present stock is surely up to or above their past average. Choice Metal by Belle Metal and Choice Goods by Bellville Chief he by Chief Tecumseh 3d are the present herd boars. They are bred right, are good individuals and in show shape would surely make good in the show ring. Their spring pigs are all by these two hogs and out of such sows as Queen Hadley by Hadley Jr. Faultless Queen by Bellville Chief, Lady Perfect by Big Medium, Guy's Queen by Guy Hadley, Allerton Maid by I Am Allerton, Miss Mogul by Mogul and others of equal breeding. Remember this herd when you want a young herd boar this fall.

FARM INQUIRIES

ANSWERED BY
Prof. A. M. TenEyck

Maintaining Supply of Soil Humus.

In last week's KANSAS FARMER was an article by G. E. Dull on "Maintaining Supply of Soil Humus." I may be wrong, but I have jumped at the conclusion that this man is a K. S. A. C. student and that this is his graduating thesis. If I am wrong I humbly apologize and absolve the college of all blame, but if he is one of the college students I think it is the duty of the professor of agronomy to give the young man a taking to with a wet elm club; for I notice that he says "follow finally with a smoothing harrow to form a dust mulch," etc. Now this "dust" mulch foolishness is the worst thing we have to contend with out here. It has been preached by the would-be agricultural experts till some of our people have the idea that the proper way to farm in this windy country is to follow a harrow all the time to keep their farms worn to a dust, in the best possible shape for the wind to blow it all away. The folly of this chronic, incessant, persistent and indiscriminating harrowing has been demonstrated so many times in this country that it makes me lose my temper every time I see the words "dust mulch" in print. Campbell, whom I presume these people think they are following, never says dust mulch, I am sure. He says "soil mulch," which is something altogether different. I am quite sure that I never read any recommendation for the "dust" mulch in TenEyck's writings. So, if this young man is on the campus, please go after him with the wet elm club; or ship him out here, and I'll have him smothered to death in dust mulch when the wind rises.—W. P. Harrington, Gove City, Kan.

MR. DULL'S REPLY.

Mr. Harrington's criticism is all right, although he took the words "dust mulch" too seriously and literally. I should have used the words he mentioned, "soil mulch," and had that condition in mind when I wrote, as I do not believe anyone thinks of the soil actually being so finely pulverized in a field as to be like dust. I think most people will understand the term "dust mulch" to mean simply a well pulverized condition of the surface soil as one would expect to find in a wheat field. Thanking you for calling my attention to the matter. —G. E. Dull.

Chinch Bugs in Wheat and Oats.

The chinch bugs, and other bugs, are taking oats and wheat in this part of the state. What can I plant in their place to make feed for stock? Will chinch bugs damage cow-peas?—George Walter, Gridley, Kan.

I mailed Press Bulletin No. 162 on "Late Crops." The chinch bugs will not damage cow-peas, but they will work on cane, Kafir and corn. If wet weather and favorable conditions prevail so that the chinch bugs are destroyed, you may plant cane and Kafir for forage rather late in the season, as late as the last of June or first of July. The usual time for planting the sorghums is about the last week in May or first week in June, when they are planted for seed production or early forage crop. Cow-peas should be planted at about the same time, but these crops may be planted much later and produce a crop of forage, as stated above.

I am mailing you a bulletin on "Cow-peas," and a circular letter on "Sorghums."

Grass for Low Land.

I have something like 400 acres of land located up the Missouri river that has overflowed every year since the big flood of 1903. I would like to know if there is any kind of grass, or any kind of crop, that I could put on this land that would not be destroyed by the water going over it. Could you suggest anything that could be done with it? It is very rich soil and its only fault is the frequent flooding.—Willard Merriam, Kansas City, Kan.

Redtop is the best grass for wet or poorly drained land, and this grass will stand flooding for some time without being destroyed. Alsike clover is the wet land clover. A combination of Redtop and Alsike clover will make good meadow or pasture, also you may include English blue-grass. If the land is covered with standing water for a considerable length of time the English blue-grass is likely to be destroyed, as is also the Alsike clover, but if the flood water drains off well the grasses and clover should not be injured except as the land may be covered with sand or silt. I would recommend to sow as follows: Ten pounds each of English blue-grass and Redtop, with six pounds of Alsike clover seed per acre.

As a safe crop on the land which you describe there is nothing superior to grasses and clover, and when the land has become well set with grass little damage to the land will result from flooding, even though the crop may be injured.

Canadian Field Peas.

If I should plant Canadian field peas between the rows of potatoes at last cultivation, would they be likely to produce seed? My object in so doing would be to secure seed for next year's planting. What variety would you recommend?—H. H. Adams, Pleasanton, Kan.

Canadian field peas should be planted early in the spring; the crop is not suitable for late planting. You may plant cow-peas between the rows of potatoes at the last cultivation, though the planting may be too late for the production of a seed crop. However, such varieties as the New Era, Gray Goose and Warren's Extra Early may mature seed when planted as late as the last part of June. The New Era and Whippoorwill are standard varieties for growing in this state, but the Whippoorwill is about two weeks later in maturing than the New Era, which variety matures in about 100 days from late planting. It may be difficult for you to secure seed peas of the New Era variety. We still have a limited supply of the Gray Goose variety, which we are selling at $3 per bushel, f. o. b., Manhattan. I am mailing you Bulletin No. 160, giving further information regarding cow-peas.

Buckwheat.

Is buckwheat a profitable crop in this section of the state? If so, when is the proper time to sow and what kind of seed is best?—R. W. Burdick, Chetopa, Kan.

Buckwheat succeeds better in the states further north and does not seem to be a very successful crop for growing in this state. Perhaps one of the reasons is that we sow the crop too early; even as far north as southern Wisconsin the ordinary time to sow buckwheat is the first week in July. In this warmer climate perhaps we should sow as late as the middle to the last of July or the first of August, but care should be taken to have the seed-bed prepared for several weeks or months previous to seeding, so that the soil will be in good condition to start and grow the crop. Our experience with growing buckwheat at this station has not been very satisfactory, but we have usually sown quite early, about the last of June or the first of July.

The Silverhull or the Common Brown buckwheat may be recommended as among the better varieties for growing in this state. Sow from a half bushel to a bushel of buckwheat seed per acre, planting at about the same depth as wheat or other small grain. We have produced 25 bushels of buckwheat per acre, but our average yield is less.

APIARY

One reason why a man so dreads the spring housecleaning is because it dirties things up so much.

Apiculture is becoming an important industry in the United States. Thousands of colonies are kept and tons of honey are marketed annually. We have men here who devote their entire time to the keeping of bees for the profits from this fascinating work.

Every farmer should keep enough bees to supply his family with honey, one of the most healthful and delicious foods that can be found. One or two hives would do this.

It is the proper attention paid to seemingly unimportant details that spells success for the beekeeper, and the failure to attend to these things at the proper time accounts for the poor success of so many in a vocation that is full of great possibilities.

The demand for honey is increasing every year, as people begin to realize its food value, and happy is the man who so looks after his little pets that he invariably has a handsome surplus of honey, which means money in the bank.

Comb honey will be much nicer finished, especially will the combs be attached to the bottom of the sections, if the bottom strands of foundation are used. Put in a strip of foundation about three-eights of an inch wide on the bottom of the section, and make the sheet of foundation which is fastened to the top just long enough to come down to within one-sixteenth of an inch of the bottom starter. The bees will soon fasten the two together.

If bloom is plentiful around the home of the bees they will not range very far, but if the bloom is scarce they will go as far as eight miles from home. About three miles is about as far as bees can go and make profitable returns.

The slump in prices on the hog market was not due to the discovery and marketing of a previously unknown supply of hogs, as some seem to think. There are no unknown supplies of hogs in this country. It was due to the decreased consumption caused by high prices; to the increase of the egg supply which took the place of pork and to the fact that the purchase for packing purposes at prevailing prices was not an attractive proposition to the packers, hence they quit buying.

Does anybody remember when the country roads in Kansas were in better condition at this time of year than they have been this spring? They can be kept in this condition throughout the year by a proper use of the drag. Did you ever consider what it would be worth to you and to the state to have good roads all the time? What would you not give for just one year of really good roads?

Some rainy day, when field work is not pressing, just take out the mowing machine guards and grind them on the cutting edge. This will make the machine work like new and you will wonder you never did it before.

AN EXCEPTIONAL SUBSCRIPTION OFFER.

SUBURBAN LIFE of New York is one of the largest and most beautiful outdoor magazines published. The regular subscription price is $3 per year and by special arrangement we are able to offer to readers of the KANSAS FARMER, three months' subscription to SUBURBAN LIFE, ABSOLUTELY FREE.

We will also add to this, one year's subscription to the PEOPLE'S POPULAR MONTHLY, a first class magazine for the home and one of the cleanest periodicals we know of.

SPECIAL FOR ONE DOLLAR.

Send us $1.00 for one year's subscription to KANSAS FARMER, new or renewal and you will receive, free, three months' subscription to SUBURBAN LIFE and a year's subscription to the PEOPLE'S POPULAR MONTHLY. Mention this offer in sending in your subscription.

KANSAS FARMER, Topeka, Kan.

Beekeeping

Its pleasures and profits, is the theme of that excellent and handsomely illustrated magazine, GLEANINGS IN BEE CULTURE. We send it for six months on trial for tenty-five cents, and also send free a 64-page book on bees and our bee supply catalog to all who name this paper.

THE A. I. ROOT CO.,
Medina, Box 62, Ohio.

SEED CORN.

Plant Young's Yellow Dent seed corn, the best on earth. Won Missouri's gold medal at National Corn Show, Omaha, 1908. Guaranteed 90 per cent germination under all conditions or will fill orders again free of charge. Price $2 per bushel. Sample ears 50 cents each. Sample free. Choice Poland China fall pigs $25 each. One Jersey bull calf for sale.

Robt. I. Young, R. F. D. 5, St. Joseph, Mo.

ABILENE NURSERIES.

Write for catalog and price list before placing your order. We have the stock that bears fruit, also all kinds of ornamental trees. Forest trees, shrubs, roses and vines. Special attention given mail orders. 10 per cent discount on $5.00 order; 15 per cent discount on $10.00 order. Cash with order. Mention paper.

W. T. Gough & Co. Abilene, Kan.

IMPROVED INDIAN SQUAW CORN

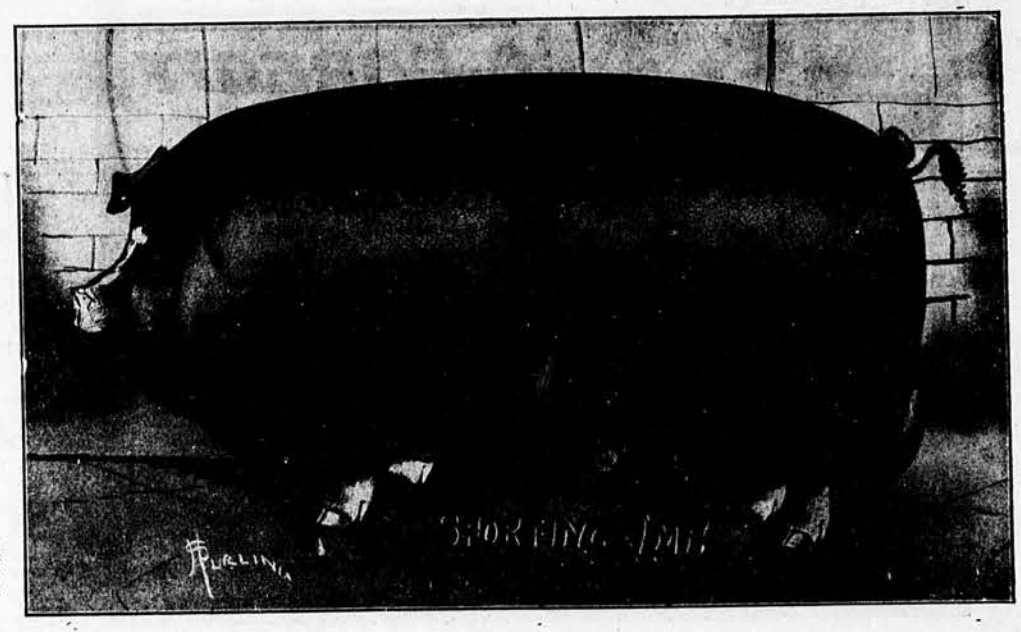
The wonderful corn for late planting. Matures in 75 days and makes large yields. Something new and wonderful. Price $2 per bushel. Sold only in 2½ bushel bags. Order today. Miller Bros., 101 Ranch, Bliss, Okla.

PURE BRED SEED.

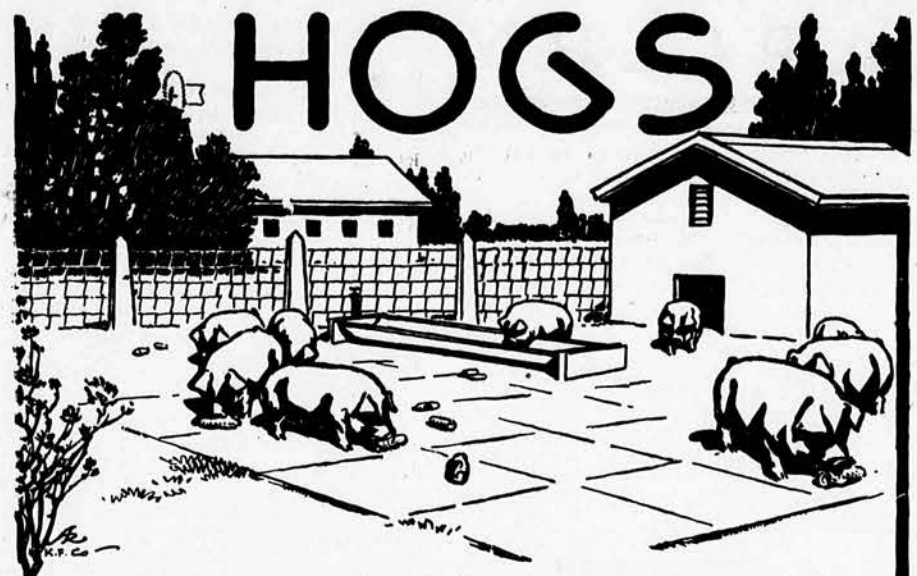
We have one thousand bushels of pure bred Black Dwarf Cane Seed for sale for $1.50 per bushel, f. o. b. cars at Syracuse, Kan. This seed was raised without irrigation and is pure. Samples upon request.

L. P. WORDEN & SON,
Syracuse, Kansas.

We herewith present the cut of Sporting Imp., one of the good Poland China boars now heading the herd of Mr. F. D. Fulkerson of Brimson, Mo. Sporting Imp is a son of Impudence and is a most excellent individual and sire. In this issue Mr. Fulkerson offers 30 summer and last spring's gilts, a big per cent of them by Sporting Imp. They are bred for April and May farrow to On The Dot 2nd. Among the dams of the gilts are sows of note including Eva the dam of Flying Fox, Stylish by Chief Perfection 2nd, Catharine Perfection by T. R's Perfection, Meddler Fancy by Old Meddler, Golden Lady by Perfection E. L., Juliet and Olivia daughters of Banker, Victoress by old Ideal Sunshine, two good ones by Storm Center, Spells Lady by Spell Binder, Sweet Clover by Corrector 2nd, one by S. P's Perfection and a lot of other fine ones. The gilts are good ones and will be priced low considering their worth. Mention Kansas Farmer when writing.



HOGS



Hogs are the pay streak on the farm; they are the "gold nuggets" in the "clean up" and are deserving of care and attention.

CONCRETE

furnishes the ideal building material for the protection of the hog. It is sanitary cool in summer and warm in winter; will not rust out, rot out or burn up It requires very little labor to keep things clean where concrete is used; a hose does the work.

Concrete work is not difficult. Concrete is a latin word meaning "to grow together." It is rock, sand and gravel "grown" or glued together with Portland Cement. Portland Cement is the glue. You obtain the rock, sand and gravel from the farm or near by and "grow" it better. The best concrete "glue" is

Grasshopper Brand Portland Cement

Ask for it at your local dealers. It gives you the best results with no trouble to work it. ¶Our book, "How to build it together with concrete" furnishes instructions for using on the farm.

Send Today for This Free Book

Get a few sacks from your dealer, follow instructions; be painstaking. Make a hog trough and you will be converted to concrete for evermore.

LOOK FOR THIS TRADE MARK

The Fredonia Portland Cement Co.
Fredonia, Kansas

THE FREDONIA PORTLAND CEMENT CO. TRADE MARK FREDONIA KANSAS

FREE 30 DAY TRIAL
BARREN MARE IMPREGNATOR

Eight out of ten barren mares impregnated first service. Price $5. Guaranteed. Breeding Outfits, Service Books, Vigor Tablets for slow Jacks, etc. Write for 16-page Stallion and Jack Journal—free.

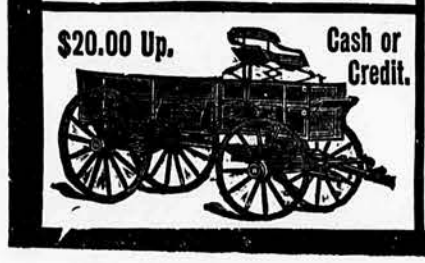
DR. CHAS. L. REA
Dept. I, Kansas City, Mo.

FIRE LIGHTNING TORNADO HAIL

$200,000 Cash Capital. **Central National Fire Insurance Co.** Of Chicago, Ill. $200,000 Cash Surplus.

Insures all kinds of farm property against Fire, Lightning and Tornado. Also insures growing crops against HAIL. Prompt and fair adjustment and cash payment of all losses in FULL. See our Agent and get a Hail policy. It will pay you. Country Agents wanted, where not represented, for both Fire and Hail departments.

C. L. SHARPE, State Agent,
Suite 407-8 Mulvane Bldg., TOPEKA, KANSAS



AGENTS WANTED

We want men who are not actively engaged in business to act as our agents. We pay liberal cash commissions. Write for our catalogue and full particulars.

ON CREDIT

Buggies
Only $10. Cash.
Balance $5 a month. Warranted for 3 years.

Surreys
Only $25. Cash.
Balance $7 a month. Warranted for 3 years.

Farm Wagons
Only $15. Cash.
Balance $5 a month. Warranted for 3 years.

We trust honest people located in all parts of the world. Cash or easy monthly payments. Write for our free catalogue.

CENTURY MFG. CO.,
Dept. 787 East St. Louis, Ills.

LIVE STOCK

A Cow Per Acre.

That one cow to the acre can be kept I know, but you will smile and say, how?

In the first place, the land must be good, and in a high state of fertility. Big crops of corn saved in the silo, alfalfa hay cutting three crops in a season, successfully cured, sugar beets or mangels, will produce an immense amount of cow feed per acre. Oats and peas sown together and cut for hay, followed by rape, also yield large amounts of feed. Pasturing is a wasteful method on high-priced land. The silo and soiling crops will support more cattle than pasturing. But why not take more land?

In the first place, we are getting short of land, our new lands are being all taken up. Our government is spending millions of dollars to irrigate the desert lands and bring them under cultivation, also to open ditches and drain our swamp lands to increase the agricultural area, when we already have good land near market and convenient in every respect but lying almost idle for want of knowledge. Our large farms are for the most part poorly tilled, robbed of their fertility because the owner will not keep the necessary amount of stock or needed help to work them properly.

The history of the nation shows that in the past our population has doubled in 27 years. That means that 27 years from now we will have practically twice as many to feed from the same land; that means that our acres must produce nearly twice the present product.

Again, our young men cannot buy 100 or 200 acres of land at $100 each and expect to pay for it in the old way of farming, but a few acres can be bought and by the same careful thought and study that the professional man or the business man or the politician puts in his work he can succeed. The professional man spends four years in college and three or four more in his special line of work and continues this by constantly keeping in touch through papers and magazines with all the discoveries in his special line, and even then, through the stress of competition, he may not attain unto wealth or distinction.

The advantages of the small farm are many. The hauling of manure and of crops is carried on much faster on account of the shorter distance. In using a manure spreader, a team and man will haul two loads 40 rods in the same time required to haul one load 200 rods. The same is true in nearly all the hauling. Shorter distances in getting from the buildings to the work is an important item. Less fencing is required, less seed has to be furnished, smaller amount of capital, smaller taxes and general expenses are proportionately less.

The hired help question is practically eliminated, as the man and his children can do the work themselves. The work can be done in season and the farmer can drive the work instead of the work driving him.

The home on the small farm can be kept more sacred; the housework made lighter. Instead of buying more land, put a heating plant in the house and a water system and sewerage. The home is a co-operative institution in the best sense of the word and the wife should have her full share of the best helps for her work. Neighbors are nearer on the small farms; social and school privileges more available. The farm home can be made the most beautiful spot on earth. Why not make it so?

We commenced with one cow on our little farm of 60 acres, but have been able to increase our herd to 50 head of cattle, besides horses and hogs. We have increased the fertility of the farm till it is able to produce practically all the feed for this number. We feel that we have just begun to realize the possibilities of the farm, and although we are not yet keeping quite one cow to the acre we can accomplish that at no distant day and at the same time receive a corresponding profit.

I love my wife, my children, my home and my cattle. My little farm has been there from creation and will be there till the end of time. It is mine only in trust, not mine to rob or destroy, but to cultivate and improve for those that shall come after. And because I love these things I care for them and they give back to me blessing a hunderfold.

There is a great field opening up in agriculture and the young man who will put the same thought and study and hard work into it that are put into these other lines of business can achieve the comforts and the luxuries, the pleasures of a more quiet, independent life and possibilities yet unknown. And when we get these educated, thinking farmers, we will keep one cow to the acre and we will feed the world.—H. D. Griswold, West Salem, Wis.

Loss of Manure Value.

With the careful study and observation that have been forced upon the farmer by high priced land, there has come a fuller appreciation of the importance of feeding the soil. It is not only necessary to have manure but it is more necessary than ever to save all the manure, both liquid and solid. Of course the big loss comes from the waste of the liquid portion and this can be prevented, in large part by the use of plenty of suitable bedding by which it is absorbed. The use of land plaster, ground phosphate rock and other chemical or mechanical agents will prevent loss by the absorption of moisture and the retention of gasses but these may not be available or even valuable in some localities. Fermentation may be prevented, in part at least, by mixing cow and horse manure together and seeing that the pile is well wetted down to compact it and keep out the air. Have the manure pile under cover to prevent leaching by rain.

Disease of Lymphatic Glands.

I have a young mare about four years old, weighing about 1,000 pounds which has been broken to ride and drive. She has a string of small bunches about the size of a small walnut on the inside of one hind leg. They have been noticable for a little over a year but do not seem to hurt her in the least. Some of them have a very tiny watery head. What can I do for her?—John Thomas, Clements, Kan.

This is a disease of the lymphatic glands and likely a chronic form of glanders. The only way to be certain would be to have the malein test for glanders given. Take iodide of potassium three ounces and Fowlers Solution 12 ounces and add water to make a pint. Mix and give a tablespoonful in the feed twice a day. Paint the little bunches with iodine twice a week and when one breaks swab it out thoroughly with iodine.

It Pays to Advertise.

The following letter received in KANSAS FARMER office explains itself. Mr. Boettcher is one of Kansas' most progressive and wide-awake farmers, and we are glad to note he will continue farming on the "old homestead."

"Holton, Kan., May 7, 1910.

"Gentlemen:—Please announce in your next issue of the KANSAS FARMER that my father, Mr. F. Boettcher has decided not to sell his farm, known as 'Orchard Hill Farm,' and that I have leased it from him again for another period of five years. I also wish to state that I have found the KANSAS FARMER, as an advertising paper, far superior to any I have ever advertised in, and you can always count on finding my 'ad' in the KANSAS FARMER whenever I have anything to sell. Yours very truly,

"JOHN F. BOETTCHER."

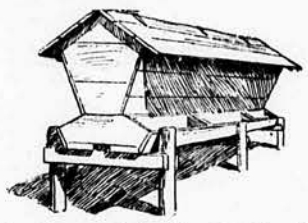
If your idea of advertising is to make a small appropriation cover as much ground as possible, study the flea.

he Metal Roof for Live Stock Buildings.

During a recent trip of some length ıong the farmers of northern Kan- ıs the writer was surprised to note e extent to which galvanized iron ad replaced shingles for roofing on ırm buildings. In some neighbor- oods practically every farmer who ad built or repaired any of his farm uildings had covered them with cor- ıgated iron roofing. When asked the eason they uniformly replied that ıe change from shingles was made cause of the present high price of ıe shingles. It was admitted that, hile the iron roofing was most satis- ıctory for turning water and had roved unobjectionable on hay barns, was not entirely satisfactory on orse or cattle barns on account of he noise in a wind storm or in a eavy hail or rainfall. This tends to ake the animals nervous and is es- ecially objectionable with high- trung horses and dairy cattle. Many f these farms were putting iron roof- ng on their hog houses and even on he farrowing house. Some of them ad compromised by putting iron on he north roof only and thus hoped to ave money and at the same time void, in part, the terrific heat. It is onceded by all that the use of iron oofs will increase the heat in the og houses, but it is thought that his may be offset by increased venti- ation. Where hog houses are shaded y trees there will be less objections o the heat, but the better way is to heet the roof with rough boards be- fore the iron is laid. KANSAS FARMER would like to hear of the experience of those who have used this roofing on swine houses and particularly on farrowing houses.

A Home-Made Self Feeder.

Herewith is shown the picture of one of the most successful self feed- ers the writer has seen. Many farm- ers object to the factory-made self eder because it is too narrow on e base and the galvanized iron with ich it is covered serves to heat e contents while the edges of the ron are almost sure to become loos- ened and wound the stock. This is



practically certain to occur in the ase of such feeders as are made for ogs. Again, the flat topped self feeder is objectionable for the reason that it will not exclude water unless covered with metal when it becomes open to the objection. noted above. The self feeder shown in the cut was made for cattle but was set low enough so that the calves could have access to it. By its use very little grain is wasted and what falls to the ground is picked up by the hogs. This particular self feeder was set in an open feed lot near a cattle shed in which a hay bag came close enough to replace the manger. It could be set in the shed, however, if thought desirable. In these days of the scarcity of farm help it is the brain work that is put into such little ac- cessories as this that count and help to solve the problems which confront the present day farmer.

The Hampshire Down Sheep.

With the increasing popularity of sheep in Kansas it would seem that the Hampshire is entitled to more consid- eration than it has had.

This breed is the outcome of crosses of improved Southdowns upon the old Wiltshire and the Berkshire Knot. The original Wiltshire was the largest of he fine wooled breeds in England, but ad a lank and ungainly body with hite or mottled faces and legs, and orns on both sexes. The Berkshires were very strong and active, with dark faces and feet, though one va- riety only had horns. They were very hardy, and like the Wilt- shires, were hard feeders and slow to mature. This combination with later improvements has given rise to the modern Hampshire, which is hardy, active, quick to mature and a heavy mutton producer. It is a hornless breed with dark faces and feet and second in size only to the Oxfords of the middle wool types. The average weight of the ram at maturity is 250 pounds, and of the ewe 200 pounds. Hampshires are especially adapted to systems of intensive farming and to locations near good markets for lambs. The lambs come larger and mature earlier than do those of any other breed. These sheep are excellent grazers and splendid feeders, as they stand forcing for the show ring or mar- ket. The lambs can be made to gain a pound per day from birth to mar- ket. They are fine breeders, as they retain much of the vigor of the original stock. They will shear from seven to ten pounds to the fleece on an aver- age and the wool is of medium length, though perhaps a trifle coarser than that from the Shropshires. Hampshires are much larger than Southdowns and are much more prolific, better milkers and have a heavier fleece. While South- downs seem to dress out a little better on the block, they are very nearly equalled by the Hampshires, who are fully their peers in every other respect.

Lessons of a Hard Winter.

"If corn belt feeders do not profit by the costly lesson taught by the past winter I am mistaken," said J. M. Wilson in Breeders Gazette, whose feeding operations both in Indiana and Kansas are on extensive scale. "For my own part I have concluded that if labor can be had to stack my corn fodder it will never lie out in the fields at the mercy of the elements again. What a brilliant opportunity there is for some one nimble with fig- ures to estimate how much wealth was wasted in the principal corn-pro- ducing states last winter by permit- ting fodder to be washed or blown away. I know conditions were abnor- mal and salvage or fodder in many sections well nigh impossible, as corn husking delayed until late in the win- ter demonstrated, but I intend to stack my fodder hereafter, not only in Indiana, but in Kansas, and believe it will pay.

"Another lesson I have learned is that even in Kansas feeders need equipment. Shelter may not be neces- sary every year, but as an insurance it will be worth initial cost and main- tenance. Out in western Kansas steers started on feed in December did not make 50 per cent of normal gain, owing to exposure to the ele- ments. In some sections it was neces- sary to run them through improvised chutes to relieve them of a load of mud. I saw cattle with 10 pounds of mud balls clinging to their tails.

"In Indiana and Illinois feeders must figure on using silage if they expect maximum gains. Corn is not going to remain on the same elevated price plane as recently, but silage has a legitimate place in feedlot economy and within five years there will be 10 silos in Indiana where one is used now.

"My opinion is that the feed propo- sition is not of such serious concern to beef makers as a supply of thin cattle, wearing the '6666' brand, this spring at $35 per head and nothing ever realized more money on this con- tinent. One big crop of corn will do considerable atmosphere clarifying, but high priced stock cattle are with us for a long time to come and that there will be any cheap sheep or lambs for feeding purposes is a dream."

35-Jacks and Jennets-35

Few good Percherons and saddle stallions. Jacks 14½ to 16 hands and the very largest that can be found. 40 miles K. C. on U. P. and Santa Long distance phone.

AL. E. SMITH, Lawrence, Kansas.

Protection

The "Baker" trademark stands for all that is good in Stack Covers. It means that 40 years of honest work and experience are behind every "Baker" Stack Cover; that every cover is honestly stamped with the weight of duck used; that the dealer is giving you the best cover on the market. Insist upon getting only the genuine.

"BAKER" STACK COVERS

Guaranteed Full Weight

keep the rain out and last longer than other covers. "Baker" Stack Covers will protect your hay and the "Baker" trademark protects you.

If your dealer cannot, or will not, sell you a genuine "Baker" Stack Cover, write us and we will see that you are supplied.

BAKER & LOCKWOOD MFG. CO.
Established 1870
610 Wyandotte St. Kansas City, Mo.

Baker

To American Twine Users: Warning!

We make and sell all grades of binder twine — "Standard," "Sisal" and the higher grades. Our output of cordage far exceeds that of any other manufacturer in the world.

Yet — we advise American farmers against the use of "Standard" or "Sisal" twine during the 1910 season.

And we *warn* farmers that, if the present speculation in Sisal fibre continues, *all* kinds of binder twine must eventually be advanced. Remember, it is you, the consumer — and *not* the manufacturer who suffers most by the advance of any important raw material.

The thing to do is to refuse to use Standard or Sisal twine while speculators are trying to corner Sisal Fiber.

You will save money, too, by doing it. For the higher grade twine actually costs less per foot this season than "Standard" or "Sisal" twines! Take, for instance,

Plymouth "Extra" Twine

Plymouth "Extra" is a remarkably good twine — smooth and strong. Besides being stronger, evener, freer from knots, it runs 50 feet more to the pound than "Standard" or "Sisal." Moreover, you have no collapsing balls when you use Plymouth "Extra."

Buy Plymouth "Extra" and get good twine at a fair price, instead of "Standard" at a higher price. Remember, the *cheapest* twine always costs the least per *foot*. Note the Wheat Sheaf Trade Mark here shown. It appears on every Plymouth Tag.

We will be pleased to tell you how we make twine, and how Sisal and Manila fibres are grown. If you need good rope, Plymouth Manila rope is the kind to ask your dealer for. Write for free books.

PLYMOUTH CORDAGE CO., No. Plymouth, Mass.
Entirely Independent.

K. C. S. RY.

(Kansas City Southern Railway Co.)

For Health and Recuperation, visit

SULPHUR SPRINGS, ARKANSAS,

All Year Health Resort.

The Kihlberg Hotel and Bath House

Will Open May 1, 1910.

Illustrated folders sent free.

S. G. WARNER, Gen'l Pass. Agt. Kansas City, Mo.

STANNARD'S PROCESSED CRUDE OIL

Kills Lice and Cures Mange. There is No Remedy on the Market as Good or as Cheap.

It not only kills all lice on cattle and hogs, but all nits, and one application does the work. Does not injure the hair or skin. Can be used in vats or with brush. Also kills lice or mites on chickens. Put up in new 52-gallon barrels and sold for $5 per barrel. I have used nearly every dip on the market and I say to you, from experience, this oil is better and more effective than any of them. Why pay $50 per barrel when you can get a better article for $5. I also sell a heavy Pure Crude Oil as it comes from the well that is a good lubricating oil. 52 gallons for $3.50; an excellent grease to keep plowshares and cultivator shovels from rusting. When ordering state plainly whether you want the Process Oil or the Pure Crude. Send remittance with the order.

Read my advertisement of refined oils in next week's issue of this paper.

C. A. STANNARD, Emporia, Kansas.

HOLLAND STOCK FARM

Importers and Breeders of

Percheron and German Coach Stallions and Mares

Do You Want to Buy a Stallion for Cash; Go to the Holland Stock Farm.

CHAS. HOLLAND, Prop. SPRINGFIELD, MO

MAASDAM & WHEELER

BREEDERS AND IMPORTERS OF

PERCHERON HORSES

60 STALLIONS AND MARES to select from. Our stock has size, bone and quality. Stallions and mares from weanlings to 7 years old for sale. Imported and home bred.

FAIRFIELD, IOWA

Kansas Farmer ADS Bring Results

BROODER WITH THE ½ PRICE

60 DAYS FREE TRIAL

Bonded SURE HATCH

During this month we will send a brooder for actual **half price** to every person ordering a

Sure Hatch Bonded Incubator

This is the only incubator guaranteed and backed by a $1,000,000 surety bond of the Bankers Surety Co., Cleveland, Ohio. **We pay the freight.**

SURE HATCH INCUBATOR CO.

Box 42 FREMONT, NEBR.

OLD TRUSTY INCUBATOR

300,000 men, women and children, beginners and old timers, are now making big money with the Old Trusty

Let me tell you about my 30 or 60 day free trial and 10-year guarantee offer.

M. M. JOHNSON
Clay Center, Neb.

BOOK FREE

We ship quick from St. Paul, Buffalo, Kansas City or Racine

$7.55 Buys Best 140-Egg Incubator

Double case all over; best copper tank; nursery self-regulator. Best 140-chick brooder, $4.50. Both ordered together $11.50. Freight Prepaid. No machines at any price are better. Write for book today or send price and save waiting. *Satisfaction guaranteed.*

BELLE CITY INCUBATOR CO., Box 18 Racine, Wis

BIG PROFITS

result when chickens are free of mites and lice. *Use*

AVENARIUS CARBOLINEUM (REG.)

for cleaning poultry houses once a year. Write for circulars.

Carbolineum Wood-Preserving Co., Dep't 88 Milwaukee, Wis.

MAGIC NEEDLES RODS, Goldometers, Chronometers, etc., for treasure seekers. Millions of wealth under your feet. Guaranteed the best made. Interesting booklet for 2ct. stamp. FREE

P. & M. AGENCY, 149 Elk St., PALMYRA, PA.

Clean Up and Disinfect

everything about the barn, hog pen, cow stable, chicken yard, sinks, drains, cellar, cess-pools, etc., with a solution of

Dr. Hess Dip and Disinfectant

One gallon Dip makes 70 to 100 gallons of solution. The greatest preventive of disease known. Kills lice, mites, sheep ticks, fleas. Cures sheep scab, mnage, eczema and other parasitic skin diseases of horses, cattle, sheep, hogs, dogs and poultry. Also heals cuts, burns and infectious sores.

If your dealer cannot supply you, we will. Write for circular.

DR. HESS & CLARK
Ashland, Ohio.

"Red Label" "Knocks" Chicken Lice!

Nearly everybody now knows that it's sure death to any colony of chicken lice that gets up against Whittier's Red Label Lice Killer. It knocks them right and left. No chicken louse can stay in the same place as "Red Label" and **live.** Yet this marvelous Lice Killer neither harms nor bothers your fowls. One enthusiastic woman writes: "Your 'Red Label' is simply a godsend, that's what it is!"

Cheap, Too!

People who have not used "Red Label" seldom know its cheapness. A **gallon** of the solution, ready for use, costs but a nickel—five pennies. There is no excuse to let fowls suffer or for you to lose money by boarding, free, a million or so chicken lice when you can clean out the whole bunch easily, quickly and cheaply with a little "Red Label." Painted on roosts and dropping boards, the fumes kill all vermin. Your druggist or hardware dealer will supply you. If you want an interesting booklet on chicken pests and diseases, send us your name today.

Dr. H. J. Whittier, Pres., Moore Chemical & Mfg. Co., S. W. Blvd., Kansas City, Mo.

WHITE PLYMOUTH ROCKS

(EXCLUSIVELY.)

For 18 years I have bred White Rocks, the best of all purpose fowls, and have some fine specimens of the breed. I sell eggs at a reasonable price. $2.00 per 15, or $5.00 per 45, and I prepay expressage to any point in the United States.

THOMAS OWEN,
Station B, Topeka, Kansas.

PURE BRED POULTRY

S. C. B. Leghorn eggs $4.00 per hundred; $1.00 per setting of 15. H. N. Holdeman, Meade, Kans.

S. C. BROWN LEGHORN EGGS—$1.00 per 15; $4 per 100. J. S. Evans, 713 Colo., Manhattan, Kan.

TENNEHOLM LANGSHANS The big black kind. Eggs $1.50 per 15; $2.50 per 30. MRS. E. S. MYERS, Chanute, Kan.

WHITE WYANDOTTE EGGS for sale, $1.50 for 15, from high scoring pens. B. H. Carrithers, Severy, Kan.

BUFF COCHIN EGGS From high-scoring birds, 15, $1.50; 50, $4.00. Mrs. L. O. Housel, Smith Center, Kansas.

WHITE PLYMOTH ROCKS—10 cockerels and a few pullets for sale. Eggs $1.50 per 15; $2.50 per 30. J. C. Bostwick, Route 3, Hoyt, Kan.

EGGS for sale, S. C. Brown Leghorn and S. C. Rhode Island Reds, $1 for 15; $4.50 for 100. Special matings, both breeds. Mrs. T. I. Wooddall, Fall River, Kan.

WHITE WYANDOTTE EGGS For sale from six grand yards, scoring from 93 to 96 points. Send for catalog and prices. E. E. BOWERS, Bradshaw, Nebraska.

PURE BRED WHITE WYANDOTTE eggs, from prize winning strain, $1 per 15; $5 for 100. MRS. H. S. ADAMS, Route 8, Wichita, Kan.

BARRED ROCKS—High class show and utility stock. Pen eggs $3 per 15; $5 per 30; utility $4 per hundred. Send for circular. No stock for sale. C. C. Lindamood, Harvey County, Walton, Kan.

BUFF ROCKS. Vigorous, Farm Raised, Prize Winners. Eggs $2.50 and $3.00 per 15, range $1.00 per 15; $5.00 per 100. W. T. and Mrs. C. V. Ferris, Effingham, Kan.

BARRED PLYMOUTH ROCKS. Bred for beauty and profit. 33 regular premiums. Eggs: 15, $2.50 30, $4.50; 60 $8.00; 15, $1.00; 60, $3.25; 100, $5.00. Mrs. D. M. Gillespie, Clay Center, Kan.

SHELLEY BROS. BARRED ROCKS. Won 64 premiums at Kansas State Poultry Show, Central Kansas Show, and State Fair. Eggs from pens 15, $3; 30, $5. Satisfactory hatch guaranteed. Circular free. Lock Box 7, Elmdale, Kan.

S. C. BUFF LEGHORNS. No more stock for sale, but eggs from prize winners: Pen 1, $2 per 15; pen 2, $1.50 for 15; incubator lots, $6 per 100. CEDAR GROVE POULTRY FARM, M. KLEIN & WIFE, Props., Clay Center, Kansas.

BUFF ORPINGTONS. 50 fine cockerels from prize winning stock. My book tells why they are such wonderful breeders; why my hens are such great layers; sent for 10 cents. W. H. Maxwell, R. 95, Topeka, Kan.

LAY OR BUST. Send for our Poultry Almanac. Tells how to make your hens "Lay or Bust," also about our wonderful "Lullaby" brooders, costing only $1.50, delivered to you. This book is worth one dollar, and costs you nothing but a postal card. The Park & Pollard Co., 46K Canal St., Boston, Mass.

POULTRY

Don't let the hens suffer for water.

Water is cheap, but it is a necessity for sustaining life.

The laying hens especially need plenty of pure water for an egg is about 90 parts water.

Reports reach us of poor hatches from quite a number of poultrymen. Possibly the very dry weather we have been having has proven harmful to the eggs used for hatching purposes. A certain degree of humidity is required for successful hatches.

But what chicks that have hatched are doing splendidly. The fine, clear weather is just the right kind for growing chicks. Look after those you have very carefully, for the crop is not going to be over abundant.

An inquirer asks what to feed young turkeys. The same dry grains that are fed to young chicks will answer for turkeys. They should not be overfed, for they are very tender things for the first month or six weeks, especially are they susceptible to dampness. Keep them dry.

Receipts of eggs in New York in April were the largest in several years and the average prices were the highest on record. The larger dealers predicted on May 3, that the present flooding of the markets from the West and South would result in a drop of prices in a few days. The month's receipts were $1,800,000, or 680 million eggs. The total a year ago was a third less.

The setting hen should be provided with a dust bath, a place where she can dust herself each day when she comes off the nest. If provided with a proper place and right material she will generally keep herself free from lice, but if she does not do so, she ought to be dusted at least once a week with insect powder. After all the chicks are out of the shells, the hen should be dusted again for fear of lice upon the chicks. The dust left on the hen's feathers will cause the lice on the chicks to die or move away.

The month of May is one of the best months of the year to hatch young chicks, and if you have not yet sent after that setting of pure bred eggs you better send now. You never will have a better chance. Settled weather will now be on and you can raise the chicks without danger of them having a set-back by cold or stormy weather.

If fowls are yarded they should be provided with something in the way of green food. Plant some extra lettuce. It is a quick grower and you can give it to the hens. If you have a lawn save the clippings and give to your fowls. Another way to provide green food is to spade up the yard and sow oats or wheat several inches deep, the grain will soon sprout and the fowls will soon dig and scratch till they get every grain. Still another way is to put oats or barley in a flat box, sprinkle with warm water several times a day and the grain will soon sprout and make roots. The fowls will enjoy them and get food and green stuff at the same time.

Some root crops should be raised this season for the use of the fowls in the fall and winter. Turnips, rutabagas, mangels, sugar beets are all good for this purpose, and while they will prove to be very healthful for the fowls, they will also materially reduce the feed bill, for fowls that are fed such succulent roots will not need so much grain as they otherwise would. Anything that will reduce the feed bill will be a good thing.

Doctor Wiley of the Department of Agriculture, at a recent meeting of a congressional committee which is investigating the cost of food, explained and demonstrated practically an infallible method of telling when eggs are fresh. He had a big glass breaker about three-quarters filled with a 10 per cent solution of table salt. Into this he dropped eggs. All the absolutely fresh eggs immediately sank to the bottom, while the eggs that were not quite so fresh floated a quarter or a third out of the water. He indorsed this method and said it was possible thereby to prosecute and convict any dealer offering cold storage eggs as the strictly fresh country variety. Doctor Wiley stated that he now has only two inspectors supervising cold storage methods, but with 25 of them he believes it possible to keep a close watch over the industry all over the country and with the adoption of regulations prescribing the length of time allowed to foodstuffs to remain in storage, the public would benefit thereby.

Handling Storage Eggs.

Mr. Chas. H. Parsons, president of the Eastern States Cold Storage Company of Springfield, Mass., gives to the Republican of that city an average statement, covering the purchase, packing, transportation, storage, interest, insurance, handling, selling and retailing of storage eggs. The eggs are bought when eggs are plentiful and cheap and stored until they can be sold at wholesale for a better price and a profit, if possible.

	Per dozen.
Farmers' price	$0.16
Cost of packing, etc	.02
Shipper's profit	.00½
Transportation	.01½
Storage charge	.01½
Interest, insurance, etc	.01
Wholesalers, rehandling	.01½
Wholesaler's profit	.02
Retailer's profit	.14
	$0.40

It will be seen that eggs sold at 16 cents a dozen when eggs are plentiful and cheap, cost about 26 cents when they come out of storage, and after paying a fair wholesale price. The retailer gets what he can on his market, which Mr. Parsons figures to be 14 cents per dozen on 26-cent eggs. Mr. Parsons also stated that no one willingly carries cold storage goods any longer than they can help, because it means increased charges and deterioration in quality. Cold storage has its own benefits and limitations.

Country butchers have found it difficult to procure supplies of live animals at home and are buying in the big markets to such an extent that this trade was noted as quite a feature of last week's business in the Kansas City yards.

NEOSHO POULTRY YARDS. Rose Comb R. I. Reds. Eggs in incubator lots of 100, $4 per 100 balance of the season. J. W. SWARTZ, Americus, Kan.

D. W. YOUNG STRAIN of S. C. White Leghorns, prize winners at three state shows. Eggs $1.50 for 15; $6 per 100. Barred Rocks, "Ringlet" strain, $2 for 15 eggs. Eggs packed with care. C. H. McALLISTER, Carmen, Oklahoma.

THE EGG SEASON IS ON. We are shipping every day from all the leading varieties of poultry, large flocks on free range; orders filled promptly. My own special egg crate used. Price $6.00 per 100. M. B. turkey eggs $2.25 per 9. Write for circular. Address Walter Hogue, Fairfield, Neb.

S. C. BUFF ORPINGTON Eggs from Owen Farm strain, Mass., the best strain in America. Pen 1 and 2 headed by 10-lb. birds, 15 eggs, $2.00. Pen 3, $1.25 per 15 eggs.—C. B. Owen, Lawrence, Kan.

BARRED PLYMOUTH ROCK EGGS. Pen 1, $2 per 15; 3 settings, $5. Pens 2 and 3, $1.50 per 15. Range, $1 per 15 or $5 per 100. MRS. CHAS. OSBORN, Member A. P. A., Eureka, Kan.

THE SUPERIOR. If you will send us your address we will send you a book that will tell you all about a self regulating, self ventilating incubator and a brooder that will actually raise your chickens to satisfy yourself. Lice and mite proof. Indoor or outdoor. It hovers the chicks like the old hen exactly. This little book also contains valuable information about the poultry business. HOOPS & BOSTELMAN, Superior, Neb.

FROM OUR READERS

The Kansas Farmer invites letters from its readers upon subjects concerning the welfare and advancement of the farm and home. Practical letters from practical men are desired, and letters from the ladies and young folks are especially appreciated. Omit partisan politics and give your experience on the farm and in the home for the benefit of other farmers and their families. A prize will be awarded each week to the writer of the best letter, and in addition a series of three prizes will be awarded each month for the three best letters. Write on one side of the paper only, and make the letters short and to the point. Facts, ideas and experiences are wanted. We will do the editing.

I do not think the frost injured the wheat any, but it probably put alfalfa back two weeks and killed most of the fruit, with no injury to oats. Potatoes are just coming up. The usual acreage of corn is listed, which is about all done now, but none coming up yet, though some has been in over three weeks. Wild pasture is very slow in starting.—C. A. Shinn, Jewell, Kan.

Wheat is practically all killed—isolated patches left to "see" what it will do. Much of the ground put to oats, which came up thin and is not looking well owing to lack of rains, and much high winds with cold. Area of corn ground will be about double, because of wheat failure. Much corn has been planted, but is not up; is too dry. Alfalfa was injured to some extent by freezing out (not general), but is looking well at this time; is a foot high.—Ed. F. Haberlein, McPherson, Kan.

The winter wheat has nearly all been killed. Abut 10 per cent of the wheat sown last fall has survived the winter, but the dry weather has been very hard on it. About 50 or 60 per cent of the wheat plowed over will be put to oats. The remainder will be put to corn. The corn acreage will be the largest this year that we have had for many years. The drilled oats have stood the dry weather better than that sown broadcast. There will be some peaches and quite a few apples. We have had considerable frost this month, but as it was very dry, the frost did not do a very large amount of damage to the fruit. The fruit raisers generally differ as to the amount of damage that has been done. That the frost did some damage is an assured fact, but that it killed all of the fruit is not the fact.—August Jaedicke, Jr., Hanover, Kan.

Editor Kansas Farmer.—The article on the first page of the KANSAS FARMER on "How To Keep the Boy on the Farm" is a fine production but to my mind it will do more harm than good. It may look quite reasonable to a man on a big salary but I don't believe there is one farmer in Kansas who can afford such extravagance. I have a good 160 acre farm and I could not do all of that for my two boys. There is not much encouragement in it for the poor man. I have taken the KANSAS FARMER for 20 years.—W. R. Macklin, Marion Co., Kan.

Our correspondent evidently did not grasp the idea that the article to which he refers was written by a college student and not "by a man on a big salary." The author did not try to solve this problem for everybody but he did express his own view as to one way by which the much desired result can be accomplished. His ideas are good and may be suggestive even to those who cannot agree with them or who could not adopt them entirely. It might pay to give the article a second and more careful reading.

To the Editor—On ordinary corn belt soil thorough tiling requires about seven miles of tile on each 80 acres; few fields can be properly drained with less, while many should have more. The mains should be of sufficient capacity that water will never stand on any part of the field. The higher rolling land will produce 25 to 50 per cent larger crops for tiling, even though water may never stand on the surface. On low land the difference due to tiling is more variable, and may be greater, depending on the season.

The tendency on nearly all soils is for the subsoil gradually to become less and less pervious, under ordinary systems of tillage. New land drains better than old. The remedy for this impervious condition seems to lie in the growth of deeply rooting crops that permeate the subsoil and greatly increase the porocity. Clover is the most common and one of the best crops for this purpose. In an old clover field the roots thoroughly permeate the soil for several feet in depth. This alone is sufficient to make clover a necessary crop.

Drained land works easier, with less draft, and after a flood work can be commenced on it several days sooner. At a time when weeds are getting an advantage this may mean very much to the crop. Most of our worst weeds seem to require a rather wet soil for their best growth. Fighting weeds is much more successful on drained land. Drainage enlarges the root zone, conserves available plant food, permits the formation of a larger supply of available plant food, encourages nitrification, enables the soil to overcome drouth and tends to prevent loss by erosion. —Frank I. Mann, Iroquois county, Illinois.

Washing Milk Vessels.

When washing milk pails, pans, cans, churns, etc., first wash them out with cold or cool water. It is much better if you wash them twice with cold water. Next wash in water as hot as the hands can bear, in which there is soap or sal soda; scald in boiling hot water and wipe with clean towels. Milk vessels in which milk remains for any length of time should be set in the sunshine to air. All milk vessels containing seams can be more thoroughly washed with a brush.

The separator parts should be washed and scalded and sunned the same as the milk pails. A sunny kitchen window is the best place to sun and air them. When washing milk vessels all rust should be removed from tinware vessels, as rust affords the very best of hiding places for germs. The outside of milk pails and cream cans should be kept as clean as the inside. The exterior of the separator should also be washed off after each using; leave apart until the next milking time.

The churn should be washed and scalded; keep the outside clean. Wash the strainer with a brush; using cold water first, then hot water. If by neglect the meshes of the strainer become closed, you may readily clean it with dry salt and a stiff brush. If you use a strainer cloth, first rinse in two cold waters, then wash in hot water and soap; rinse in cold water and hang on the line to dry. If the straining is attended to late in the evening, for the sake of convenience the strainer cloth may be hung on bars or on a line in the house. Cloths and towels used for washing milk vessels should be white and sweet, never sour and soiled. When there are quite a number of milk vessels to be washed, the cloths and towels should not be used for any other purpose.—F. Lincoln Fields.

Kansas Farmers Building Silos.

The desire of the agricultural extension department of the College to see more silos in Kansas led the department to make the offer of the supervision of expert silo builders to the farmers of the state with no charge to them but the railroad fare and entertainment.

Since the offer the department has been swamped with requests for the services of these men and it seems as if they will be busy well into July. Mr. Hinman and Mr. Wheeler of the College are at Tonganoxie this week supervising the building of three silos one of them with a 120-ton capacity. Next week they will be at Edgerton in the same line of work. Mr. Loomis, a farmer at Tonganoxie, will build a silo with a 180-ton capacity. This will be of cement and will be the largest in the state. Mr. Hinman will furnish the plans and supervise the work.—L. M. Mickel.

The beef man objects to the tax on oleomargarine and wants it reduced from 10 cents to 2 cents per pound. The dairyman objects to oleomargarine itself and wants it taxed out of existence. So there you are.

Legality of Wills.

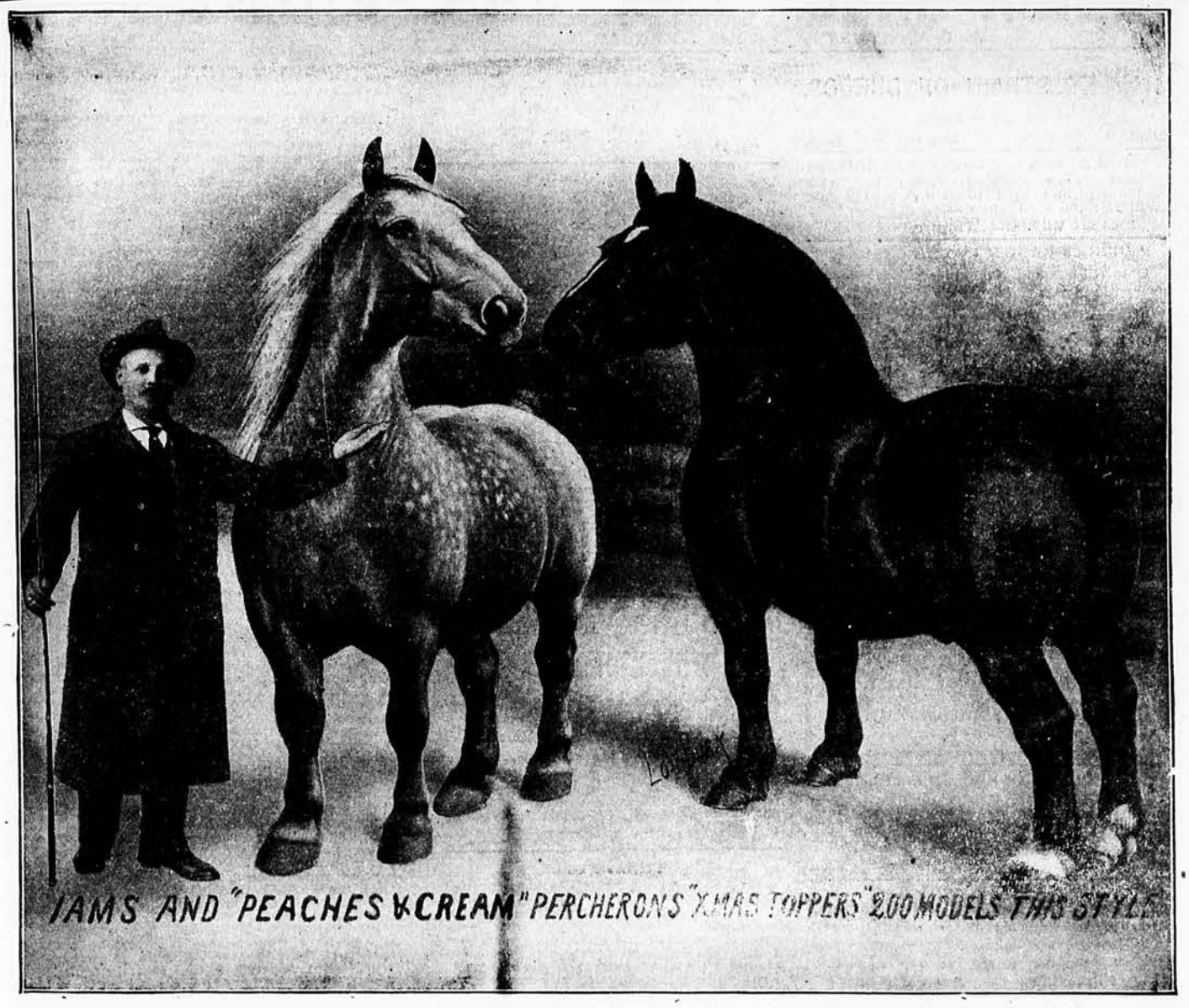
Every person is interested in the disposition of his property at his death and should know absolutely that it will be received by those whom he desires to have it, without trouble or expense. Nathan Q. Tanquary, Continental Bldg., Denver, Colo., for more than 20 years has made a specialty of the law concerning wills, estates and diversion of property. No will drawn by Mr. Tanquary has ever been broken. All inquiries by mail or in person are treated with the utmost confidence and given careful personal attention.

FRANK IAMS—THE IMPORTER

of "Peaches and Cream" Percheron and Belgian stallions cutting the "middle out" of prices on his **"60 Show and Business Stallions."** Iams has reduced prices on **all his Imported stallions** $200 to $500 each and a lady or a boy can buy as cheap as a man of Iams. His **"1909 Show Stallions"** and stallions bought for 1910 State Fairs and "Business" stallions **all go at prices never before equaled** for "Top-notchers." They are **"the cream"** of 200 horses. They must be sold to make room for 200 Imported horses in September, 1910.

Iams has all his Prize Winners and largest horses still on hand. His 1910 **"Imported Show Stallions"** have all competitors "skinned to a frazzle." They are **"fully acclimated"** and in the "pink of conditon." All imported September, 1909. They are **"Live wire business propositions"** that **"knock the persimmons"** on a **"wide-awake** horse buyer's Easter hat." Iams' **"Peaches and Cream"** Imported stallions are **"Eye-openers," "Big Diamonds"** (compared with others). His barns are full of **"Top-notchers"** and at **"big bargains,"** and all must **"positively be sold"** in the next 60 days. **IAMS' NEW BARN OF 40 PRIZE MEDAL WINNERS** at Paris and Brussels and leading European Horse Shows just opened up. **"All** his **"Show Stallions"** and largest stallions are yet in his barns and must be sold by June 1st. **"Ikey Boys,"** get into Iams' **Money-saving game."** Buy a stallion and save $300. Iams **"tickles" Buyers with "rippers"** at **"Let Live Prices."**. Owing to bad crops, panic, Iams' cash, his 28 years' successful business, he bought and sells horses cheaper than ever. **"Mamma,'** Iams is a **"Hot Advertiser,"** but **"he has the goods"** and sells horses at his barns only. Buyers get the **"Middle man's profits"** at Iams'. Iams has **60 PERCHERONS AND BELGIANS 60,** two to six years old, weighing 1700 to 2500 lbs; 90 per cent. blacks, 50 per cent. ton stallions, all registered and branded. He sells **Choice** of his prize winners cheaper than others sell culls, **"at $1,000 to $1,500 (Bar 4)"** so good they need not be **"peddled"** or put on the **"auction block"** to be sold. Iams' **"selling clothes"** fit all buyers. No man with money or bankable notes gets away from Iams. He buys, owns and sells more stallions than any man in the United States; saves thousands of dollars to stallion buyers. He is not in the stallion trust.

Write for .Million Dollar Horse Catalog, Greatest on Earth. References: First National Bank, Omaha National Bank, Omaha, Neb; First State Bank, St. Paul State Bank and Citizens' National Bank, St. Paul, Neb.



Two of the "Top-notchers that are being sold at reduced prices of $200 to $500 by Frank Iams, St. Paul, Neb. Buy "Show Horses" of Iams.

SHORTHORN CATTLE

Prospect Farm Shorthorns

The oldest Shorthorn breeder in Kansas. The largest herd of Cruickshanks in Kansas. Herd headed by Violet Prince 145647 and Orange Commander 220590. Young stock of both sexes and some cows for sale. Quality and prices right.

H. W. McAFEE,
Bell Phone 59-2, Topeka, Kan.

If you are looking for a young

Shorthorn Bull

to head your herd right in every way, write us for full particulars at once.

C. G. COCHRAN & SONS,
Plainville, Kansas.

HOLSTEIN CATTLE

Bulls - Cows - Heifers

35 bulls from 4 to 18 months old, at $40 to $100.

15 bull calves, 1 to 4 months, $30 to $50 each.

50 cows, 3 to 7 years, all milking, or soon fresh, a lot of them in calf to some of the best bred bulls in the East, and grand, good individuals, with producing qualities. Prices $150 to $200. 30 heifers and heifer calves from 4 months to 2 years. Prices $60 to $150.

Come to the Holstein headquarters of the west, and buy the best. Every animal tuberculin tested, and sold under a full guarantee. Must sell 30 cows in the next 30 days to make room.

ROCK BROOK FARMS,
Henry C. Glissman, Prop., Sta. B. Omaha, Nebraska.

SUNFLOWER HERD HOLSTEIN-FRIESIANS.

(Formerly East Side Dairy Holsteins).

I have now nearly 20 A. R. O. cows in this herd, all with nice records, including Inka Hijlaard Dekol No. 76076 with the fine record of 24.67 lbs. butter in 7 days from 617 lbs. milk. This herd is strictly Advanced Registry breeding throughout and with Sir Segis Cornucopia 399936 as herd header, there certainly cannot help but be great results coming, for his sire now has over 50 A. R. O. daughters, and one sister with over 31 lbs. His dam is a 21.92 lb. cow sired by Paul Beets Dekol (one of the greatest sires that ever lived), she has a number of A. R. O. daughters and 2 sons with A. R. O. daughters, including Sir Segis Cornucopia himself, and Segis Dekol Korndyke Prince, with 5 A. R. O. daughters (3 above 26 lbs., at 3 years old). A choice lot of bull calves to offer.

F. J. SEARLE,
Oskaloosa, Kansas.

DUROC JERSEYS

RED POLLED CATTLE

AULD RED POLLS.

Herd established 7 years. Choice breeding and individuality. Three young bulls for sale.

AULD BROS.,
Frankfort, Kansas.

ANGUS CATTLE

80-ANGUS BULLS-80

of serviceable age; herd headers and range bulls. Many of them by Champion Ito. 500 head in herd.

SUTTON FARMS
LAWRENCE, KANSAS
500 HEAD IN HERD.

JERSEY CATTLE

LINSCOTT JERSEYS

Offers a few choice cows in milk and some bred heifers. Milk and butter records accurately kept.

R. J. LINSCOTT,
Holton, Kansas.

HEREFORD CATTLE

YOUNG HEREFORD BULLS.

A choice lot ranging in age from 12 to 20 months, sired by Mystic Baron; all good ones, in fine shape. Among them are some choice herd headers. Prices right. Visitors welcome. Write your wants.

S. W. TILLEY,
Irving, Kan.

POLLED DURHAM CATTLE

BELVEDERE X2712-195058

Son of the $1,500 Grand Victor X1685 150364 heads my herd of Double Standard Polled Durhams. A few extra good, blocky, thick-fleshed young bulls for sale. Inspection invited. Farm adjoins town.

D. C. VAN NICE, Richland, Kan.

DUROC JERSEYS

QUICK SALE

Fall boars of best of breeding and quality at bargain prices for quick sale, also a few bred sows for June farrow of the best of breeding and bred to good boars. Write at once.

W. C. WHITNEY, AGRA, KANSAS

HANLEY STRAIN OF DUROCS.

Write for Prices.

Paul B. Johnson, Leavenworth, Kan.

BRED SOWS, AUGUST FARROW.

Duroc sows and gilts sired by Bell's Chief 4th and bred to richly bred boars. Will sell and ship when safe.

FRANK VRTISKA, Pawnee City, Neb.

" DUROCS GROWN IN THE OZARKS."

Ohio Chief and Col. blood. Litters by Munice Chief, Model Prince, King of Models, Inventor, The King I Am, Advance; several by Col. Carter, my leading bred boar. They are all grown right, are good and we answer all letters of inquiry.

C. L. CARTER, Albany, Mo.

20 - BRED GILTS - 20

Daughters of King of Cols. II and G. C.'s Col. These are very choice gilts priced to sell. Also a few choice boars of summer farrow.

FRANK ELDER,
Green, Kansas.

DUROC SOWS and GILTS

30 fall gilts by G. C.'s Kansas Col., and 15 yearling and matured sows, all by noted boars. Will sell and hold until safe for fall litter. Also 10 fall boars, tops of our fall crop.

CHAPIN & NORDSTROM,
Green, Clay Co., Kan.

CROW'S DUROC JERSEYS.

Herd headed by Climax Wonder, he by Missouri Wonder. 100 head to select from. Prices reasonable. The electric car runs within three blocks of my farm. Come and see my herd at any time.

W. R. Crow, Hutchinson, Kan.

25 - Duroc Jersey Gilts - 25

Spring yearlings bred for last of April and May farrow, large and smooth. The best of breeding priced at $40 and $50. Write today, these bargains won't last.

MARSHALL BROS.,
Burden (Cowley County), Kan.

I HAVE A GOOD bunch of spring pigs of both sexes; up-to-date breeding with plenty of quality. Write me your wants and I will treat you right.

E. M. MYER,
Burr Oak, Kansas.

HOWE'S DUROCS.

Special prices on boars and gilts sired by Rex K. champion at Wichita fair this year. Also a few by Perfect Improver, grand champion at Wichita, 1907 and 1908. Only a few left. Get busy and send in your order.

J. U. HOWE, Wichita, Kan.

BERKSHIRES

RIDGEVIEW BERKSHIRES.

2 herd boars for sale. 1 two-year-old by Forest King, other males of different ages. Sows and gilts open.

Manwaring Bros., Lawrence, Kan.

TAMWORTH HOGS—I still have a few extra good males and some gilts for sale. These are the ideal bacon and alfalfa hogs. They make a great cross on any of the lard breeds. Try one of my June boars before they are all gone. J. G. Troutman, Comiskey, Kan.

OHIO IMPROVED CHESTERS

MOSSE OF KANSAS

Breeder of O. I. C. swine.
ARTHUR MOSSE,
Leavenworth, R. F. D. 5. Kansas.

MAPLE LEAF O. I. C.'s.

Strictly up to date Imp. Chester Whites, of the best breeding and individuality. A few choice fall gilts and a fine lot of spring pigs to offer. Priced reasonable.

R. W. Gage, R. D. 5, Garnett, Kan.

FIELD NOTES.

Mr. H. W. Griffiths, the veteran Poland China breeder located at Clay Center, Kan., has almost a hundred choice pigs, practically all sired by his great young boar, Clay Jumbo by Nebraska Jumbo. This boar was among the best young boars purchased at Ben Bell's fall sale. He has made a marvelous growth and is at this time one of the outstanding young sires of central Kansas.

FIELD NOTES

FIELD MEN.

O. W. Devine.....Topeka, Kan.
Jesse R. Johnson.....Clay Center, Kan.
R G Sollenberger.....Woodston, Kan.

PURE BRED STOCK SALES.

May 18—H. M. Hill, Lafontaine, and S. C. Hanna, Howard, Kan.
June 10—C. S. Nevius, Chiles, Kan.
June 11—H. E. Hayes, Olathe, Kan.

Jersey Cattle.

June 30, 1910—Kinloch Farm, Kirksville, Mo.

Hereford Cattle.

Nov. 10—T. I. Woodall, Fall River, Kan.

Poland Chinas.

May 12—C. S. Nevius, Chiles, Kan.
May 17—Roy Johnston, South Mound, Kan.
Aug. 11—E. H. Davidson, St. John, Kan.
Sept. 20—J. D. Spangler, Sharon, Kan.
Oct. 19—A. B. Garrison, Summerfield, Kan.
Oct. 14—T. J. Dawe, Troy, Kan.
Oct. 18—Herman Gronninger & Sons, Bendena, Kan.
Oct. 20—Hubert J. Griffiths, Clay Center, Kan.
Oct. 21—J. M. Ross, Valley Falls, Kan. and W. E. Long, Ozwakie, Kan., sale at Valley Falls.
Oct. 22—H. C. Graner, Lancaster, Kan.
Oct. 25—W. C. Singer, Hiawatha, Kan.
Oct. 26—W. R. Webb, Bendena, Kan.
Oct. 26—G. M. Hull, Garnett, Kan.
Oct. 27—Walter Hildwein, Fairview, Kan.
Nov. 1—H. B. Walter, Effingham, Kan.
Nov. 1—H. F. Pelphrey, Humboldt, Kan.
Nov. 2—J. W. Pelphrey, Chanute, Kan.
Nov. 2—Albert Smith & Sons, Superior, Neb.
Nov. 2—R. J. Peckham, Pawnee City, Neb.
Nov. 3—George W. Smith, Burchard, Neb.
Nov. 3—D. W. Evans, Fairview, Kan.
Nov. 9—T. J. Meisner, Sabetha, Kan.
Nov. 10—H. B. Walter, Effingham, Kan.
Nov. 19—G. W. Roberts, Larned, Kan.
Feb. 7—J. M. Ross and W. E. Long, Valley Falls, Kan.
Feb. 9, 1911—Albert Smith & Sons, Superior, Neb.
Feb. 28—H. B. Walter, Effingham, Kan.

Duroc Jerseys.

Oct. 28—Thompson Bros., Garrison, Kan.
Nov. 15—J. E. Joines, Clyde, Kan.
Feb. 2—Thompson Bros., Garrison, Kan.

Horses.

Oct. 26—W. S. Corsa, Whitehall, Ill.

At Chester, Neb., is located the herd of good Duroc Jersey swine belonging to R. L. Wilson. Mr. Wilson is carrying along a fine bunch of spring and fall pigs with which to supply his fall and winter trade.

If in the market for the best bred Duroc Jerseys in bred gilts, fall gilts or boars write Frank Elder, of Green, Clay county, Kan. Mr. Elder owns King of Cols. 2d, one of the greatest living Col. boars.

Mr. Frank Barrett, of Cadamo, Neb., who has been a breeder of Poland China hogs for some time has on hands his usual number of spring pigs following a fine bunch of herd sows at the head of which is the good boar Bell Boy.

The Colony Investment Co., Greeley, Col., immigration agents for the Denver, Laramie and Northwestern, are advertising small irrigated farms along the D., L. and N. that will pay good interest on a valuation of $500.00 an acre. Write for their handsomely illustrated free literature.

Wyoming lands are now attracting much attention from the homeseeker and investor. The lands are much cheaper than in the older countries, and prices are bound to advance rapidly. The Western Irrigated Lands Co., Laramie, Wyo., will mail descriptive literature, and answer all questions about Wyoming. Write them.

The Safety Breeding Crate, which has been manufactured at Sioux City, Ia., for some time, and which is well known to our readers, has been improved so that its 1910 form is the simplest, strongest and easiest to operate of any breeding crate we have seen. It is advertised on another page, and an invitation is extended to the Kansas Farmer readers to send for full particulars.

A real estate deal was recently pulled off near Matfield Green, Chase county, by which Mrs. Elizabeth Long, of Circleville, Kan., sold 960 acres of pasture land for $21,120, or at the rate of $22.00 per acre. The buyers are John Clark and Willis Westbrook, of Peabody, Kan. Pending their occupation of the big pasture, the new owners have leased it for the season.

What is believed to be a record price for yearling cattle in Chase county, Kan., was paid the other day for a bunch of 32 calves that averaged 851 pounds. These calves were bought by J. W. Sayre, of Cedar Point, at 8 cents per pound, and netted the owner an average of $62.08 per head, or $2,178.56 for the bunch. The calves were sold to a local dealer who shipped them at once to the local markets.

The American Shropshire Registry Association plans the removal of its headquarters office to Chicago where it will be housed, with other pedigree record associations, in the Record Building at the Stock Yards. Secretary L. E. Troeger, who has lately taken office, will maintain his headquarters at Lafayette, Ind., until the change is made.

Farmers and others having wool for sale this spring, should communicate without fail with Weil Bros. & Co., at Ft. Wayne, Ind., whose advertisement appears in this issue, and get their prices before selling. Their financial responsibility in half a million dollars, and their location is such that they are in position to pay the highest market price for wool.

At Belleville, Kan., the writer visited the herd of Carl Jensen & Son who have been well and favorably known for several years as breeders of the best in Poland China hogs. The kind that make good both in the feed lot and show yard. Messrs. Jensen have won several good prizes at both state and county fairs and have on hand now some that would make warm company for some one this fall if shown.

H. B. Walter, the breeder of big type Poland Chinas at Effingham, Kan., writes as follows: "I have been looking for that big, fat, jolly Jesse Johnson to come around and see the pigs and make a new contract with me, but as both he and the Kansas Farmer have made good and I am perfectly satisfied, there won't be any kick coming when he does come. I have saved over 80 pigs sired by Expansive 34723, Logan W 51871, and Collossus, out of dams by Grand Look, Mogul's Masterpiece, Grand Chief, Captain Hutch, Mammoth Hadley, Blue Valley Quality, Big Ex, etc. They are the big kind with quality, and are coming along nicely. Everything will be ready for my coming sale on November 1."

Young Poland Chinas.

F. D. Young, Poland China breeder, located at Winchester, Kan., starts an advertisement in this issue. He offers for immediate sale 25 January boars and gilts and 17 yearling gilts bred for August and September farrow. The January pigs are the tops of a large lot farrowed in the month of January. They are good ones and very cheap at the prices asked. They were sired by Darkness Expanse by Sir Darkness he by Cant Perfection 2d. His dam was Lulu Expansion by Perfect Expansion. Why not buy one of these and save high express rate. The bred gilts are by D. A. Wolfersperger's great boar Impudence E. L. and have been bred to a son of Trouble Maker. Mention Kansas Farmer when writing.

POLAND CHINAS

HIGHVIEW BREEDING FARM

Devoted to the raising of

BIG BONED SPOTTED POLANDS

The Farmers Kind . . . The Prolific Kind.

I am now booking orders for spring pigs to be shipped when weaned. Pairs or trios; no kin.

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

MEISNER'S BIG POLAND CHINAS.

Headed by Metal Choice, sows are daughters of such sires as Nebraska Jumbo, Pawnee Chief, Big Hadley, etc. 50 fine spring pigs to date and more sows to farrow. Inspection invited.

T. J. MEISNER,
Sabetha, Kansas.

POLANDS!. POLANDS!. POLANDS!

Capt. Hutch, Moguls Monarch and Toulon Prince in service. Big type clear through. 4 young boars for quick sale. 2 July boars that are herd boar prospects.

J. H. HARTER,
Westmoreland, Kansas.

SUNSHINE HERD

20 spring and summer gilts for sale, bred for fall litters, price $35 and $40, sired by Parnell and other good boars, out of Dot's best Sparton Fancy Silver Tips, 10 spring boars, just right for service, priced reasonable. A. L. ALBRIGHT, Pomona, Kan.

BIG TYPE POLAND BOARS

7 Poland China boars September farrow. The tops of our fall crop. Extra good ones. Sired by Grandson of the prize winner Price We Know. Out of big dams of Big Hadley and Major Blain breeding. Will price reasonable.

R. J. PECKHAM,
Pawnee City, Neb.

STRYKER BROS.' HERD POLAND CHINAS.

The greatest show and breeding herd in the West. Write your wants and they will please you. Hogs any age at reasonable prices. Buy the best and make the most. They breed the kind that win; the kind you want. Address

Stryker Bros. Fredonia, Kan.

BIG STRONG SEPT. BOARS.

Sired by Guy's Monarch, the boar with frame for 1,000 lbs. and a 10½-inch bone. Out of dam by the noted boar First Quality. Low prices for quick sale, must make room for spring pigs.

H. C. GRANER,
Lancaster, Kansas.

ELMDALE POLAND CHINAS,

10 fall boars and 10 fall gilts. Choice individuals. Sired by Imperial Sunshine and out of Mischief Maker, Impudence I Know, and Voter dams. $25 each if sold quick.

C. S. MOYER,
Nortonville, Kansas.

30 BRED POLAND CHINA GILTS for sale. Spring and summer farrow, bred for April and May litters, choicest blood line, also five mature sows and boars ready for service, one by Meddler. Reasonable prices.

F. D. FULKERSON, Brimson, Mo.

MELBOURNE POLAND CHINA HERD

the home of the great boar Gold Metal. 90 good pigs will make prices after July 1. Sows are daughters of Prince Youtell, Chief Gold Dust, etc. Visitors welcome.

JOHN C. HALDERMAN,
Burchard, Nebraska.

20—BIG STRONG BOARS—20

The tops of 50 head ready for service. Want to make room for spring pigs and am making low prices. Strictly big type.

HERAM GRONNIGER & SONS,
Bendena, Kansas.

SHORTHORNS AND POLANDS.

Herd bull Acomb Duke 7th 291036. Polands headed by Big Bone Long. Females represent leading strain. Young stock for sale.

FREELAND & WILLIAMS,
Valley Falls, Kansas.

POLAND CHINAS FOR SALE.

10 January boars, $15 each.
15 January gilts, $15 each.
17 yearling gilts bred for August and September farrow, $30 each.
Good breeding and individuality.

F. D. YOUNG,
Winchester, Kansas.

WALTER'S BIG SMOOTH POLAND CHINA.

Expansive, the best living son of Expansion, heads herd. Daughter of Grand Look bred for July farrow to Expansive for sale. Also other choice gilts bred to same boar for fall litters.

H. B. WALTER,
Effingham, Kansas.

KANSAS LAND

IF YOU WANT

The right land, at the right price, in the right place, from the right man. Write right now to

H. D. HUGHES, McDONALD, KAN.

REAL ESTATE DEALERS, ATTENTION.

If you want to know how and where to buy advertising space in a big farm paper and a daily paper covering the richest agricultural sections of the United States for less than a half cent a line per thousand circulation write

Roy O. HOUSEL,
625½ Jackson Street, Topeka, Kan.

FINE IMPROVED 160, 5 miles out, $5,700. Terms. L. E. Thompson, Norwick, Kan.

Homeseekers

Send for a copy of the Southwestern Kansas Homeseeker, the best land journal published. It's free to those wanting homes or investments. We make a specialty of lands on small payments and easy terms. Address

THE ALLEN COUNTY INVESTMENT CO.,
Longton, Kansas.

SNAPS

35,000 acres in McMullen Co., Texas, all good, level land, black, sandy loam; price $10.00 per acre.

73,000 acres in southwestern Texas, $1.35 per acre.

200 acres near Marquette, McPherson Co., Kansas. Well improved. Price $10,000.

CHAS. PETERSON,
Hutchinson, Kansas.

Corn, Wheat, Alfalfa

Lands in Trego County, Kansas, where prices are advancing rapidly. Best opportunities in Kansas for homeseeker and investor. Write for our list, mailed free and postpaid. Live agents wanted.

D. W. KELLER LAND CO.,
Wakeeney, Kansas.

OTTAWA COUNTY BARGAINS

160 acres, 3 miles town, 110 cultivation, balance pasture, 4-room house, barn, 65 acres wheat, all goes with possession, $6,500. Easy terms. New list free.

J. S. Boyle, Bennington, Kan.

GOOD FARM.

344 acres adjoining town, highly improved, 6 acres alfalfa, 5 miles fence, mostly woven wire. Further particulars write

J. C. ELVIN,
Harper, Kansas.

LANE COUNTY, KANSAS

Offers bargains in wheat and alfalfa ranches at $10 to $20 per acre. Write for my price list and investigate at once.

WARREN V. YOUNG,
Dighton, Kansas.

KINGMAN CO. LANDS

Banner Wheat and Corn County of the State. Write for Selected List.

BROWN REAL ESTATE CO.
KINGMAN, KAN.

Land Bargains

ELLIS AND TREGO COUNTIES.

Where corn, wheat and alfalfa produce big crops. Prices are now only $15.00 to $40.00 per acre; about half what the lands are actually worth. Write for further information and bargains.

D. W. NICKLES,
Hays, Kansas.

A GOOD RANCH

in Chautauqua Co., Kan., 2040 acres, good improvements, good grass, plenty of living water, only two miles from railroad station. Will sell at a bargain or take some trade.

LONG BROTHERS,
Fredonia, Kansas.

Land Bargains

I HAVE 14 of the best quarter sections of land for sale within 4 miles from Minneola, some of them improved, and some all sown to wheat that I can sell for from $35 to $40 per acre, will give terms to suit. Will be pleased to hear from you at any time.

EUGENE WILLIAMS, Minneola, Kan.

GREATEST SNAP OF THE SEASON

An excellent 160 acre farm, about 7 miles northeast of Fredonia, good frame and stone house, 6 rooms, 2 cellars, frame barn, well fenced with hedge wire, 80 acres hog tight. Divided into 5 different fields; good orchard of 15 acres with all kinds of fruit; good cistern, 3 wells and 1 spring house. Land has been cultivated except 35 acres in pasture. 4 acres alfalfa, 12 acress clover. This is an excellent home, good land and nicely located. For sale for a short time at $30 per acre. Cash, no trade. Address,

C. B. CANTRALL
Fredonia, Kansas

FOR FREE INFORMATION about Allen county lands write F. W. Frevert, 51 years a Kansan, Gas City, Kan.

Ellis and Trego County lands, at the lowest prices on the best terms. Write for list, sent free.

C. F. SCHEPMANN,
Ellis, Kansas.

LOGAN, THOMAS AND GOVE CO. LAND.

In tracts to suit purchaser, at $10 to $30 per acre. If you want a good home and paying investment, write to or call on

F. E. CANAN,
Oakley, Kansas.

---

320 acres, 1 mile Wilson, 220 acres in cultivation, fairly well improved, would make a fine wheat and dairy farm. Price $21,000. Easy terms. Other farms. If above doesn't suit, write me.

N. COOVER, REAL ESTATE,
Wilson, Kansas.

IF YOU WANT

To buy Trego County corn, wheat and alfalfa land, at $15 to $40 per acre, write for free information about this section.

SWIGGETT,
The Land Man,
Wakeeney, Kansas.

TREGO COUNTY LAND.

Where prices are advancing rapidly, at low prices on liberal terms. Near markets, churches and schools. Write for prices and descriptions.

J. I. W. CLOUD,
Wakeeney, Kansas.

FREE

List of lands, ranging in price from $10 to $30 per acre, well located, near churches, schools and markets in Rawlins and Cheyenne counties, Kan., and Hitchcock Co., Neb. Send your name today. S. C. ALLEN, Herndon, Kan.

A DANDY HOME.

640 acres out one and half miles from Grainfield, $3,500 worth of improvements, 450 acres in wheat and spring crop, balance pasture, all can be farmed, a good investment at $30 per acre, crop included if taken soon. S. J. BAKER, Grainfield, Gove Co., Kan.

SHERIDAN COUNTY LANDS.

$15.00 to $25.00 per acre. Buy now and you will double your money soon. Write for prices, descriptions and full information. List free.

E. A. MONTEITH,
Hoxie, Kansas.

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200 ACRES, fine level sandy loam, 12 ft. depth, to water, all adapted to alfalfa, 140 a. in cultivation, 30 a. in growing alfalfa, good 4 room house, 2 barns, shed, windmill, blacksmith shop, reason for selling—in business in Englewood. Land around this holding at $60. Price $9,000. Terms $5,000 cash, balance to suit purchaser. WILSON & HAVER, Englewood, Kan.

SOLOMON VALLEY LAND.

80 a. improved, 3 mi. to market, 40 a. pasture, 40 a. tilled, $2,000. 640 a., 320 a. can be plowed creek through this section, 5 mi. to market, $12,800. 400 a. all grass, one-half tillable, 5 mi. to market; terms; $6,000. 160 a., 4½ mi. out, all good land, 80 a. broke, terms, $8,800. Other farms for sale and exchange. List free.

A. E. ROBINSON LAND CO.,
Minneapolis. Kansas.

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240 ACRES within one mile of Rexford, all smooth, tillable lands, good seven-room house, nearly new, good barn with hay loft, hen house, hog house, corn cribs, granary and stock shade. 130 acres in cultivation. Price $7,500. Many other bargains located in Sheridan and Thomas counties, Kansas. Also Colorado land from $8.00 per acre up.

A. T. LOOMIS,
Rexford, Kansas.

SHERMAN COUNTY LANDS, where prices are advancing rapidly, $12 to $30 per acre, good terms. Gulf and Northwestern Railroad now building at Goodland. Unexceelled opportunities for homeseeker on investor. Now is the time to buy, and you will double your money shortly. Write for free illustrated literature.

GLIDDEN REAL ESTATE CO.,
M. E. Glidden, Mgr.,
Goodland, Kansas.

OUT THEY GO, OUT THEY GO—To Sherman county, Kan., 320 acres, all smooth, black soil, 160 acres under cultivation, just across the road from the school house; highly improved farm on three sides; telephone; rural free delivery; Five miles from county seat, $18.50 per acre.

160 acres, 2 miles from Goodland; nicely improved and fair buildings, ½ mile to school, $32.00 per acre.

T. V. LOWE REALTY COMPANY,
Goodland, Kansas.

KANSAS FARM BARGAIN.

160 acres nice, smooth land, 2½ miles city limits of Parsons, Labette county, 5 room house, good barn, 6 acre family orchard, 8 fenced hog tight, 50 prairie meadow, 20 blue grass and blue stem pasture, balance in cultivation. R. F. D., and telephone line, $50 per acre. Good terms. Also 320 acre stock and grain farm, Linn Co., $25.00 per acre; easy terms. Other Missouri and Kansas farms.

THE STANDARD LAND CO.,
Room 4, Ricksecker Bldg., Kansas City, Mo.

IMPROVED FARMS in S. W. Kansas and N. W. Oklahoma, $10 to $25 per acre. Write Moore & Fails, Liberal, Kan.

FOR REPUBLIC COUNTY

corn, wheat and alfalfa lands, at reasonable prices on good terms. Write or see

Hall & Cartensen, Belleville, Kan

FREE LIST

Dickinson County corn, wheat and alfalfa farms. Write today.

Baumgarth & LaPort, Abilene, Kan

PHILLIPS COUNTY corn, wheat and alfalfa lands, $40.00 to $60.00 per acre. Prices rapidly advancing. Write or see L. E. COUNTRYMAN, Phillipsburg, Kan.

FOR SALE—Improved 160 acre farm, near Parsons, Kan., fine improvements, black loam soil, price $25 per acre. Write WALKER & CARDWELL, Parsons, Kan.

MONTGOMERY COUNTY LANDS.

Montgomery county is second in population and 5th in wealth in Kansas. Write for list of choice farm bargains and prices. W. J. BROWN & CO., Independence, Kan.

CHOICE KANSAS FARMS in Smoky Valley, Saline and McPherson counties, where you can raise alfalfa, corn and wheat with profit. Write for information and list.

David Bachman, Lindsborg, Kan.

MARION, MORRIS AND DICKINSON county, Kansas, lands. Bargains in improved farms at prices ranging from $45 to $60 per acre. Write for big list.

T. C. COOK, Lost Springs, Kan.

RENO COUNTY FARM—320 acres highly improved, fine new house with gas and water in, sandy loam soil, best kind corn and wheat land; price $4,000. Other bargains.

W. W. BARRETT,
Sterling, Kansas.

MIDDLE AND SOUTHWESTERN KANSAS LAND.

Corn, wheat, alfalfa and ranch lands, at low prices on liberal terms. Great opportunities for homeseeker and investor. Be sure to see me before you change your location.

E. B. FRITTS, Real Estate Broker,
Hays, Kansas.

BARGAINS IN LAND.

A well improved 10,000 a. ranch in Sherman Co., $10 per a., easy terms, also other smaller ranches and 100 scattering quarters and half sections from $9 to $12 per a.

M. ROBINSON, the Land Man.
Goodland, Kansas.

LIVE AGENT WANTED.

In your locality to assist in selling corn, wheat and alfalfa land. We own thousands of acres in Pawnee and adjoining counties. Write us for a proposition on our own ranches.

Frizell & Ely, Larned, Kan.

CORN, WHEAT AND ALFALFA LANDS

In Cloud, Washington and Republic counties, where all staples produce bountiful crops and prices are advancing rapidly. Best section in Kansas for a home or investment. Write for a free list.

Nelson Land Co., Clyde, Kan.

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560 ACRES, 6 miles Smith Center, county seat, 350 acres under cultivation, 140 wheat, 50 alfalfa and hay, 160 pasture, balance for corn; extra good house, barn, well, windmill, outbuildings, 1-3 all crops go, if sold soon. $40 an acre. Other farms.

RECORD REALTY CO.,
Athol, Kansas.

DICKINSON COUNTY FARMS.

Good water, good climate, corn, alfalfa and wheat produce mammoth crops. We sell these lands at prices that will produce big interest on the investment. Write us for full information.

Murphy & Fenton, Abilene, Kan.

SHARON COUNTY ALFALFA LANDS.

Choice corn and alfalfa farms for sale in Barber county, Kansas. Crop failure unknown. Write for particulars and list. Address

WILLIAM PALMER,
Medicine Lodge, Kansas.

HARPER COUNTY.

Home of corn, alfalfa and wheat. Lands $25 to $75 per acre that would be cheap at twice the money. Values advancing rapidly. Now is the time to buy. Descriptions and full information free.

HEACOCK REALTY CO.,
Anthony, Kansas.

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200 ACRES, 10 miles from Delphos, 40 a. pasture, 160 in cultivation, 175 can be cultivated, creek, plenty of fruit for family use. Good house, barn and out buildings. One of the best corn and alfalfa farms; can be bought for $75 per acre; ½ cash, bal. 6 per cent.

Box 114. Minneapolis, Kansas.

WESTERN KANSAS LANDS.

In Logan and adjoining counties, price $11 to $30 per acre, according to location and improvements. Good wheat, corn and alfalfa land, and good stock country. Write for free list.

T. E. HALE,
Solomon, Kansas.

---

180 ACRES ½ mile from "Baker University" townsite; good rich black limestone soil; 9-room house; two barns, hog sheds, large hay barn; splendid corn and timothy land. Well worth the money. Price $75 per acre.

WM. M. HOLLIDAY,
Baldwin, Kansas.

JUST LIKE STEALING.

To take this beautiful half section in Cowley Co., only 8 miles from a good R. R. town, in a fine community, school, church, and stores, only ½ mi.; free 'phone, rural route, 5-room house, cistern, good stable, well, finest water in the state, pond, two orchards, 100 acres cultivation, bal. splendid bluestem pasture, can all be tilled but 20 a. level, upland country farm, smooth and level; soil is a deep black limestone loam, average over 40 bu. of corn per a. last year; grows alfalfa perfectly; only $30 per a. for a short time; you'll have to hurry, this won't keep; $5,000 cash, balance back; talk fast; it's money for you.

SHARP REALTY CO.
Turner Bldg., Wichita, Kan.

JEWELL COUNTY.

Leads them all, according to Coburn, in corn, alfalfa, poultry, mules, cattle, hogs, honey. Write what you want to

GREEN REALTY CO.,
Mankato, (county seat,) Kan.

BARGAIN.

Improved ½ section level farm land, 1-4 mi. P. O. and school, 250 a. in cultivation, 100 a. wheat, 1-3 crop goes with place. Price $30 a.; make very reasonable and long time terms. W. B. Grimes, Owner, Ashland, Kan.

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240 ACRES VALLEY LAND.

Good improvements, near school, 4 miles town, several acres orchard, fine grove forest trees, water at 12 to 30 feet, $30 per acre. Good terms. Big list and booklet free. PARK M. THORNTON, Coldwater, Kansas.

COWLEY COUNTY BARGAIN.

284 acres. 2½ miles of Arkansas City, 160 acres is Arkansas river bottom land, 40 acres in alfalfa, 120 for corn; 9-room house, bank barn 36x40, small orchard and windmill. Price $57.50 per acre. Write

R. A. GILMAR, Arkansas City, Kan.

FOR HOMESEEKER OR INVESTOR.

Kiowa and Cavalry Creek Valleys, Comanche County, Kansas. Alfalfa land $20 to $35; rapidly advancing. Great opportunities for homeseeker or investor. Write for our large list of bargains, mailed free and postpaid.

PIONEER REALTY CO., Protection, Kan.

$15.00 PER ACRE QUICK SALE—Fine 800 a. farm and stock ranch, four and one-half mi. from Kanardo Co., big frame barn for horses and cattle, conveniently arranged. Hay mow, cattle shed and granary for 1,000 bu. of grain; good sod house and cave, fenced and cross fenced, all tillable, 175 a. undeer plow. Easy terms.

G. W. SAPP, Goodland, Kan.

THE BEST TOWN TO LIVE IN.

If you would like to live in the most beautiful city in the West, with unsurpassed education, 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 prices, address the Secretary of the Commercial Club, Topeka, Kan.

BEST FARM IN KANSAS.

560 acres bottom valley land, all smooth, fine, black sandy loam, no waste land, small orchard, 20 acres fine alfalfa land, new 10-room house, hot and cold water, lighted with acetylene gas, bath and toilet, 500-barrel cistern, sewer system, R. F. D., telephone, 5½ miles to two railroad towns. Price $65 per acre. For further particulars write

Neal A. Pickett, Arkansas City, Kan.

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240 ACRES OF LAND

3 miles north of Selden, on Prairie Dog creek, about 70 acres good alfalfa land, 100 acres broke, small house and other improvements, some timber. Price for the next 30 days, $4,000. Good terms. Other farms. Write for free literature.

GEO. P. LEWIS & CO.,
Selden, Sheridan Co., Kansas.

TREGO COUNTY LANDS.

If you are looking for a snap, here it is. 160 acres, all in cultivation, ¼ to go with it. All perfectly level. German Lutheran neighborhood 12 miles south of Wakeeney. Price, $3,500, $1,200 cash and balance in five equal annual payments. Write us for other bargains.

KANSAS AND COLORADO LAND CO.,
Wakeeney, Kansas.

BARGAINS IN WHEAT LANDS.

320 acres, 4 miles Brewster, good house, barn, granary, blacksmith shop, well, windmill, 200 acres in cultivation, 1-4 of crop goes, only $24 acre, good terms. 480 raw land, 5 miles Brewster, all level, $18 acre. 160, 6 miles Brewster, $16 acre. Other tracts at bargain prices.

LUND REAL ESTATE CO.,
Brewster, Thomas Co., Kansas.

I HAVE SOLD my half section near Colby and now offer a fine, smooth quarter 3 miles from Brewster, Kan., no improvements except 40 acres under cultivation, school house across road from it. This quarter is choice and is offered for the small sum of $2,200 cash.

Another smooth quarter, 14 miles from Brewster, 55 acres under plow, sod house, good well and new windmill and a bargain at $2,000 cash.

These are bargains and must be sold soon. Address

IKE W. CRUMLY, Brewster, Kan.

AN IDEAL FARM FOR SALE.

Kansas farm of 300 acres, adjoining a flourishing railroad town, forty miles west of St. Joseph, Mo. The soil naturally rich has been made more fertile by twenty years of judicious crop rotation and by the liberal application of manure; well watered, fine walnut timber, finest blue grass pastures, alfalfa, timothy and clover meadows; finest corn and wheat land; well fenced; hay, cattle and horse barn for a large amount of live stock; large silo, water tanks, granary, fine mill, etc. A model stock or grain farm, ready for use. An excellent opportunity. For complete information address K, 225, care Kansas Farmer, Topeka, Kan.

EAST KANSAS FARM BARGAINS.

90 acres Franklin Co., Kan., 65 a. in cultivation, 25 a. native grass, 2 a. orchard, new 7 room house, bbarn for 4 horses, other outbuildings, 8 mi. to Ottawa, R. F. D. Enc. $2,000. Price $60 per acre.

84 a. Franklin Co., Kan., 59 a. in cultivation, 25 a. native grass, 3 room house, stable for 4 horses, other outbuildings, 8 mi. to Ottawa, R. F. D., Enc. $2,200. Price $61.50. For full particulars write

Mansfield Land Co., Ottawa, Kan.

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184 ACRES, 2 miles from Cottonwood Falls and the same distance from Strong City, on the main line of the Santa Fe. 70 acres of alfalfa, 60 acres in corn and 4 acres in orchard and lots. A small house and fair barn and other outbuildings, 2 wells with windmills. Has telephone, daily mail and close to school; this is a fine bottom farm, every foot alfalfa, corn and wheat land, good locality. Price $80 per acre; can give liberal terms. Will sell on contract and give possession this fall. J. E. BOCOOK, Cottonwood Falls, Kan.

KANSAS LAND CONT'D

H. J. SETCHELL & SON Real Estate, Morland, Kansas. Send for free list of Graham and Sheridan County lands.

A RICE COUNTY HOME.

A fine quarter section 3½ miles from Lyons, splendid improvements, orchard, 30 acres fine alfalfa, 50 acres pasture, all tillable, 70 acres in corn, all goes with place, school 10 rods. Possession if sold at once. Price $13,000.

NODURFT & TORREY, Lyons, Kan.

WALLACE COUNTY LANDS.

At $10,000 to $25,000 per a. You will double your money if you buy now. If you want a good investment, write for further information. The Great Western Development Co.

H. FITZGERALD, Mgr.
Hays, Kansas.

BARGAINS IN GAS BELT.

120 a. in Wilson Co., Kan. Fine soil, well improved, lays well, good 7-room house, good barn, orchard, grove, paying $120 gas rental. Close to market. Will pay to investigate.

SHANNON & HARSHFIELD,
Fredonia, Kansas.

FARM BARGAIN BY OWNER.

240 acres located 2½ miles from Meade, Kan., 100 acres in cult., good well and windmill; price $4,000, $2,800 cash, balance 3 years at 7 per cent annual int. Write for list of other properties. L. F. SCHUHMACHER, Owner, Meade, Kan.

KIOWA COUNTY, BARGAIN.

160 acres improved, 4 miles to town, 60 acres pasture, 40 acres wheat to purchaser. Price $4,500. 640 acres hard land, well improved with share or wheat at $50 per acre. J. A. BECKETT, Greensburg, Kan.

Million acres Texas School Land for sale by the State; $1.50 to $5 per acre; only one-fortieth cash, 40 years on balance; 3 per cent. interest; good agricultural land; some don't require residence; send 50 cents for 1910 Book of instructions. New State Law and description of lands. J. J. Snyder, School Land Locator—Congress Ave., 568, Austin, Tex. Reference, Austin Nat'l Bank.

GOOD STOCK RANCH.

560 acres, 200 acres in cultivation, 300 more can be, 360 acres pasture, this is valley land. Improved 4-room house, barn 40x50 ft., granary, etc., family orchard, some timber, fenced, watered by well and never failing springs. Located 2 miles from railroad town, 8 miles from Winfield in Cowley, County, Kan. Price $30 per a. Call on or write THE NELSON REAL ESTATE & IMG. CO., 137 N. Main St., Wichita, Kan.

ROOKS COUNTY.

Corn, wheat and alfalfa make big crops every year We sell these lands at $20 to $75 per acre, on good terms. These prices are advancing rapidly. Now is the time to buy and get the advantage of the big increase in land values sure to come. Write for further information.

CASE & WILSON,
Plainville, Kansas.

WALLACE COUNTY, KANSAS.

Where land is now selling for $10.00 to $15.00 per acre. If you buy now you will double your money shortly. The best "buys" in Kansas are to be had here. If you are looking for a good home or money-making investment, write me.

G. G. IMMEL,
Land Agent, Sharon Springs, Kan.

SHERIDAN COUNTY

LANDS MY SPECIALTY, WRITE M. D. GALLOGLY, REAL ESTATE BROKER, HOXIE, KANS.

GOVE COUNTY LANDS

$8.00 an acre and up. If you want a good home, and an investment that will double soon, write me.

THOMAS P. McQUEEN,
Treasurer of Gove Co., Gove, Kan.

Rooks and Graham Co. Land

In any sized tract, at $17 to $40 an acre, depending upon improvements and distance from town, write for new list, mailed free and postpaid.

E. G. INLOW,
Palco, Kan.

MEADE COUNTY FARMS

400 farms, 160 to 640 acres, improved and unimproved, at $12.50 to $25.00 per a., easy terms. 320 a. 7 mi. Meade, in German settlement. 300 a. fine tillable land, 106 a. cult., price $6,400. Experienced salesman wanted. CHAS. N. PAYNE, Hutchinson and Meade, Kansas.

Rawlins County

Good lands for sale at $10 to $25 per acre, on good terms. These lands are well located, near schools, churches and markets. Write us for further information.

ROBERTSON & HORTON,
Atwood, Kansas.

Have You School Children?

We have just listed a well improved 80 acre farm only two miles from County High School, good seven room house, practically new barn, all tillable and no rock, $4800.00.

DONAHUE & WALLINGFORD,
Mound Valley, Kansas.

The Hoxie Realty Co.

Farms and ranches, any kind of land. Some of the best alfalfa, corn, wheat and hay land in the West. Also ranches with timber and running water. Good business propositions in Hoxie. For further particulars write us,

Hoxie Realty Co.,
G. H. Walbel and M. L. Bell,
Hoxie, Kansas.

For free information about Thomas and adjoining counties. Write to or call on

Trompeter & Son,
Colby, Kansas.

SHERIDAN COUNTY LANDS at $15.00 to $35.00 per acre. You will have to act quickly. Write for further information. W. S. Quisenberry, Hoxie, Kan.

A BIG BARGAIN.

2120 acres fine wheat, corn, alfalfa land, except 200 acres pasture, well located, watered and improved. Most of this worth twice the price. $13 per acre. A sure snap.

M. G. STEVENSON,
Ashland, Kansas.

FOR SALE

Sherman county lands, in any size tracts on most liberal terms. Write for prices, descriptions and illustrated literature mailed free and postpaid.

IRA K. FOTHERGILL,
Real Estate & Investments,
Goodland, Kansas.

MEADE COUNTY BARGAIN.

320 acres Meade Co., Kan., small house, good well and windmill, barn, all fenced. 175 acres in wheat, all of which goes to purchaser, 7 miles of Plains, Kan., close to school and church. Write for others.

CARLISLE & DETTINGER, Meade, Kan.

1000 ACRES WHEAT AND ALFALFA LAND AT $12.50 PER ACRE.

600 acres of this sub-irrigated, alfalfa, river bottom land under ditch. Stone house, fenced, 5½ miles to R. R. town. Price $6500 cash. Terms on balance to suit purchaser. Write H. M. DAVIS, Greensburg, Kan.

CLARK COUNTY BARGAIN.

2,500 acres, 12 miles of Bucklin, all fenced, good running water, 20 acres natural timber, good improvements, 500 acres good alfalfa land, easy terms. Price $18 per acre. Write

H. E. McCUE,
Bucklin, Kansas.

STAFFORD COUNTY BARGAINS.

160 acres, 4½ miles of Macksville, Kan., nice, level land, well improved, good house, near school and church, 50 acres in wheat, balance corn and pasture land, one-third crop goes with farm; possession in September, 1910. Price $9,000. Call or write CHAS. P. FIELDS, Macksville, Kan.

HAVE YOU ANYTHING TO TRADE?

If you have, list it with Howard, the Land Man, and he will get you something in short order that will suit you. I have farms to trade, automobiles, houses and lots, in fact, everything you can think of that you are likely to want. **Talk It Over With Howard, the Land Man, Room 15, Turner Bldg., Wichita, Kan.**

640 ACRES, smooth as a floor, 2½ miles station, well improved, 6 room house with double cemented cellar, porch nearly around house, large barn, 320 acres fenced with 3 wires and hedge posts a rod apart; 320 acres in cultivation, good well, windmill and tank. Price $25.00 an acre. Terms. Other farms at lower prices.

JOSEPH SAGER,
Colby, Kansas.

160 ACRES, 4½ miles Selden, good five room new house, half in cultivation, 70 acres in wheat, all necessary improvements, on rural route, fenced and cross fenced, school house on one corner of the place; everything in good shape; price $4,000; terms. Other farms.

Trimble & Trimble, Selden, Sheridan Co., Kansas.

GOVE COUNTY

If you want to buy wheat and alfalfa land, at the lowest prices, on the best terms, write to or call on

O. B. JONES,
Gove, Bonded Abstracter, Kan.

320-ACRE LABETTE CO. FARM.

Located 2 mi. from good railroad town, 240 a. in cultivation, 10 a. mow land, balance pasture, black limestone soil, good, tame grass, grain and stock farm. 2 sets of extra good improvements, plenty of water and fruit. $50 per a. This is only one of our many bargains. Write for free list.

THE BOWMAN REALTY CO.,
Coffeyville, Kansas.

ADMINISTRATOR'S SALE.

160 acres 1½ miles from Downs, Kansas, all good land, 1-3 of crop delivered to town. We will sell this at a reduced price to settle estate. This sure is a bargain and can not last, as we must sell. For terms and description write **B. D. Courter, Downs, Kansas.**

TO TRADE for eastern Kansas land of same value. A $4,500 clothing stock located on Mo. Pac. R. R. 50 miles west of Atchison. Only exclusive stock in town. Will consider any reasonble proposition in Kansas. Stock is good and consists of stock usually found in first class clothing stores. Cheap rent. Fixtures belong to building. Make proposition. Stock can be seen any day.—**C. E. Tinklin, Corning, Kan.**

The Ross Farm Percherons.

Hon. Geo. B. Ross, owner of the big Ross Farm at Alden, Kan., which is headquarters for Percherons, Shorthorns and Poland Chinas, in that section, has some very attractive offerings in Percheron fillies that are worth while. These number 16 head of splendid, registered fillies in matched teams. They are from 2 to 4 years old and are both imported and American bred. These fillies are being bred to a 2,200 pound imported Percheron stallion that was a winner at the International. Other attractions on this farm are the splendid Cruickshank Shorthorns that are now offered for sale. The bulls are all sold, but there are 30 head of splendid pure Scotch cows and heifers, all reds, and bred to a grandson of Choice Goods. These are first class animals of the richest Cruickshank families, and are offered at bargain prices because the owner has sold his pasture land and is obliged to dispose of the cattle. Notice a change in his advertising card this week.

Superior Incubators.

At Superior, Neb., will be found located the incubator and brooder factory of Messrs. Hoops & Bostelman, who manufacture the Superior incubators, brooders and hen nests. The machines turned out by this company are patterned after new ideas in incubator and brooder construction and these ideas are those of up-to-date poultry men. They are no experiment. They do the business. Their location could not be better for the quick shipment of goods to any point in Missouri, Kansas, Nebraska or Oklahoma. Send today for one of their catalogs. They fully guarantee their machines and leave the decision with you. They are reliable. Write them today.

Great Boar Changes Hands.

John C. Halderman, owner of the Melbourne Poland China herd, located at Burchard, Neb., has purchased from A. B. Garrison, of Summerfield, Kan., the great breeding boar Gold Metal. Gold Metal is one of the largest and smoothest of big type boars and is one of the best breeders the writer has ever known. Good judges believe that were Gold Metal to be fitted and shown this year he would be almost certain to win wherever the merit of big smooth Polands is recognized. He would without doubt weigh 1,100 in show form. Mr. Halderman is certainly to be congratulated upon this purchase.

If in need of a good summer or fall boar that has been fed properly to insure good service. Write Herman Gronniger, Bendena, Kan., breeder of big type Poland Chinas.

Schmidt Farm Engines.

If you have overlooked sending for the catalog of these engines, as advertised in April 23d Kansas Farmer, on page 22, you ought to send for it right now. These engines are especially adaptable and desirable for the hundred and one uses for which machine power can be utilized on the farm. They are easily adaptable and successful for attaching to self binders, thus saving time and horse in hot weather. While you may not need such an engine at this moment, it will pay you to get this free catalog and investigate the Schmidt. Write, mentioning Kansas Farmer, to Schmidt Bros. Co., Box 3984, Davenport, Iowa, and you receive the special introductory offer now being made by this company.

The Only Washing Machine.

About every woman who ever used an ordinary washing machine, will tell you **"she wished some one would invent a washing machine, that would wash all kinds of clothes clean, without tearing or wearing them out—and run without killing the woman."** Well, George Huenergardt of Lincoln, Neb., invented just such a machine several years ago. He has just begun to put them on the market. They are made entirely of steel and iron, have no gears, wheels, toggle-joints, or churn-dashers. But they do the work perfectly and so easily that a 14-year-old girl can do a big washing without being tired "near to death." These machines are sold on free trial, no satisfaction, no pay. Look up the advertisement in this issue and write Huenergardt Mfg. Co., Lincoln, Neb., for full information. Mention Kansas Farmer, and you will get the special offer they are making to our subscribers.

The Bundy Poland Chinas.

A field man for the Kansas Farmer called upon Mr. J. D. Bundy, owner of the Bundy Poland Chinas, at Goodrich, Kan., and met with the usual hearty welcome. Mr. Bundy has a fine herd of Poland Chinas at the head of which is the large show boar Nobleman by Meddler 2d, and out of Morning Glory by Mischief Maker. Nobleman was second in his class at the Iowa State Fair, first and reserve champion at the Hutchinson, Kan., State Fair, second in Illinois, and third in Missouri State Fairs. He secured 11 class and herd prizes last year, which is a record for any boar in twelve months. During the show season he traveled 1,500 miles, and came back in splendid condition. His pigs have that smooth, fine finish so much sought after in a Poland China, and he is a model sire. One-half interest in him is owned by W. B. Stafford, of Bronson, Kan. The sows include daughters by Truant Boy, Mischief Maker, Chief Perfection 2d, On and On, Perfection E. L., Corrector 2d, and other good ones. Mr. Bundy will price a few choice spring pigs if you will mention the Kansas Farmer and tell him whether you like this line of breeding.

The Louden Machinery Company Get Results.

The Louden Machinery Company, manufacturers of feed and litter carriers, hay tools, barn door hangers and other specialties at Fairfield, Ia., write the Kansas Farmer under date of May 2 as follows: "Reference to our records indicates that the Kansas Farmer advertising has been doing very nicely for us this season. We have no complaint to offer, and we are so busy manufacturing barn, stable and dairy fittings that we have no time to offer suggestions. We know that there is some nice business coming to us out of Kansas, and we are glad to give the Kansas Farmer credit."

Hubert Griffith's Polands.

Mr. Hubert J. Griffiths, Poland China breeder located at Clay Center, Kan., authorizes us to claim Oct. 29 as the date for his annual fall sale. Mr. Griffiths has an unusually fine lot of spring pigs nearly all sired by his good boar, Hugh Corwin, a son of Mogul's Monarch. A few litters are by H. W. Griffiths' boar, Clay Jumbo by Nebraska Jumbo. Among the dams of pigs are sows by Expansion, Bell Metal, Billy U. S., Hugh Corwin and Voter. Mr. Griffiths also has a number of choice fall gilts which are to be included in the fall sale.

Shorthorns and Poland Chinas.

This week we start the advertisement of Freeland & Williams, breeders of Shorthorn cattle and Poland China hogs. Messrs. Freeland and Williams are young men of energy and ability and are starting out to make a success of the pure bred business. That they will succeed no one can doubt who has visited their plant as has the writer. The herds are located about three miles north of Valley Falls, Kan. The farm is a good one for the business, having an abundance of blue grass and other pasture. Their principal herd boar is Big Bone Long sired by Flashy Metal he by Gold Metal. His dam was Ada Bell by Bell Metal. Among the most worthy of the sows we noticed was Lady Chief, by Big Chief 52211 and out of Minnie K. 125892; Belle M., by Judge Taft he by Moguls Masterpiece by Old Mogul; Ponsion Queen, by Peter Pan 135595; Mogul Lady by Mogul, Jr., dam Wonder Lady by Expansion; Minnie R. and Big R., daughters of Ross's Hadley he by Big Hadley. These are out of Price We Know and Big Price dams. Among the spring pigs are litters by Expansive and other good boars, a majority of them by Big Bone Long. We will have more to say about these breeders at different times.

SAY!

DID YOU KNOW THAT SOUTH DAKOTA

Ranks fourth in the yield of corn and that this is the last year to buy cheap corn land? Write me for a full description of this great corn country, also list of corn lands at $15 per acre. Opportunity is knocking at your door. Think! This land will sell for double the price by this time next year Write me. Do it NOW. This ad will not appear again.

A. E. SWIFT, Box 5, Coin, Iowa.

Breeders and Farmers Organize.

The progressive farmers and breeders of Clay county, Kan., have organized themselves into an association known as the "Clay County Improved Stock and Seed Association." The officers elected are as follows: President, J. H. Carnahan; vice president, S. B. Amcoats; secretary and treasurer, Jas. T. McCulloch; all of Clay Center. At their last meeting the following declaration of principles and rules were adopted:

The name of this association shall be the Clay County Improved Stock and Seed Association. The objects of this organization are:

First. To encourage the improvement of all classes of live stock, including poultry.

Second. The betterment of all kinds of seeds, grains and points.

Third. The closer association of all those who believe in the efficacy of better breeding both in plants and animals.

Fourth. Our general aim is to better our condition intellectually, socially and financially.

All are elligible who realize the necessity of improving both plants and animals, in fact, all those who believe in the advancement of our agricultural interests.

The membership fee shall be 25 cents. The officers shall be president, vice president, secretary, treasurer and such committees as may be deemed advisable for the furtherance of the interests of this association. The next meeting shall be the fourth day of June at 3 p. m. in directors' room of Farmers' State Bank.

Fine Dairy Cows at K. S. A. C.

Among the fine dairy cattle that are now owned by the State Agricultural College is a Guernsey bull that stood first in a class of 40 at the National Dairy Show at Milwaukee last fall. They also have a young Jersey bull which is, in the opinion of Prof. J. C. Kendall, as fine as anything that will be shown in the fair circuit this year. In addition to his individual qualifications, he has an excellent backing behind him. He is a son of Missouri's Ramaposa 155372, who has a record of 746 pounds of butter in one year. His sire, Daisy's Prince of St. Lambert 75437, was first prize bull at the Missouri State Fair, and the sire of some very promising calves owned by the University of Missouri. His extended pedigree is filled with records of creditable performers. The College Holstein bull, Sir Carlotta Pontiac Cronus 45502, is the son of Princess Salatine Carlotta 56190, with a year's record of 18,405.4 pounds of milk and 727.33 pounds of butter. His sire, Pontiac Cronus 28835, is a son of Hengerveld De Kol, who was one of the greatest sires of the breed, and who sold for $1,500 at 8 years of age. He was the sire of 4 proved sons, and more than 80 tested daughters.

The Rock Brook Holsteins.

Henry C. Glissman, owner of the Rock Brook herd of Holsteins at Station B, Omaha, Neb., states that the demand for stock from their herd has grown to such a volume that the natural increase from their 100 cows is not nearly enough to satisfy the demand. For this reason Mr. Glissman has just returned from the East with the largest shipment of registered Holstein-Friesian cattle that was ever brought into Nebraska by any one man or firm. The shipment consisted of five car loads numbering 120 head of all ages and both sexes. Sixty of these were cows and heifers of good age and individuality that were either bred or in milk. Thirty-five of the shipment are bulls from 4 to 18 months old. A number are now ready for service, and others soon will be. The balance are younger calves of both sexes, and a few heifers from 6 to 18 months old. Mr. Glissman says that these cattle are all of high class, and that he is now ready to fill orders for anything his customers may want. He says that he is sure that the quality and breeding represented has never been offered anywhere in the west at such prices as he is now quoting.

A Remarkable List of De Laval Separator Users.

In the De Laval advertisement in our last issue will be found a truly remarkable list of some of the more widely known of the nearly 1,200,000 users of De Laval cream separators, and it would probably be difficult to find any other article of which a list of patrons could be produced as representative in so many spheres of business and professional prominence and containing the names of so many men well known to the public at large. The De Laval Company clams, and not without justification, that such a list of users as this is of important significance to every prospective buyer of a cream separator because of the fact of the use of De Laval machines by most of these men perfects a thousand sources of authoritative information and experience not possessed by the ordinary purchaser, who not infrequently buys a separator simply because his local dealer happens to handle that particular kind or the claims made in some "ad" or catalogue may appeal to him. They make the point, too, that while it is true that many of these men are not dependent on profit from their separators, they want the best cream and the best butter and the most of it just the same, as well as the machine which will wear best and give the least trouble, and that they the kind of men who are able to ascertain and command the best and be content with nothing less, in cream separators as in everything else. There are doubtless prominent users of other makes of separators, but this De Laval list is probably the most unique and widely representative that has ever been published of separators or any other implement, and the De Laval Company ought to take considerable pride in it.

TEXAS LAND

A PARADISE RECLAIMED

15,000 Acres Actually Irrigated in the BEAUTIFUL PECOS RIVER VALLEY OF TEXAS.

Deep, rich soil. Abundance of water. Delightful climate. Right on Santa Fe Railroad, station in center of tract.

DAM, RESERVOIR, CANALS, ALL COMPLETE NOW.

Free water with every acre. Selling fast. Act quick if you want an actually irrigated farm cheap, or an investment that will pay you 50 per cent annually. Excursions and cheap rates first and third Tuesdays of each month.

Most desirable irrigated land and townsite proposition on the market today. Send for interesting booklet. Tells you about it. Good live agents wanted in every locality.

ARNO IRRIGATED LAND CO.,
Topeka, Kansas.

FREE TRIP TO TEXAS

If you want to take a free trip to the Sunny Pecos Valley of Texas where they cut six crops of alfalfa and raise all kinds of fruits and vegetables, write us for further information.

THE HEATH COMPANY, TOPEKA, KAN.

GOOD RANCH.

3,368 acre ranch, improved. $5.00 acre. Robertson Co., 7 miles county seat. Adjoining land couldn't be had for twice our price. Would sell part or all. All fine grass and much first class farm land. Detailed description and plat free.

C. A. BABCOCK,
Harper, Kansas.

Dalhart, Texas is where we are located and we have some land bargains for the buyer. Write for our free, handsomely illustrated book or come to Dalhart and let us show you a country without a fault.

J. N JOHNSON LAND COMPANY,
Dalhart, Texas.

Oklahoma Land

"WE SELL THE EARTH."

Farmers grow wealthy in a short time in Custer and adjoining counties in Oklahoma growing hogs, corn and alfalfa. Farms at from $30 to $50 per a. Write us for land list.

DULANY & RANDOL,
Clinton, Oklahoma.

IF YOU have money to loan on good farm and city security, write **John Hankins, Chickasha, Okla.**

FREE INFORMATION about Oklahoma. **Homer H. Wilson. Here since 1893. Enid, Okla.**

MAJOR COUNTY corn, wheat and alfalfa lands. Lowest prices. Best terms. Information free. **J. Nile Godfrey, Fairview, Okla.**

CADDO CO. FARMS.

Best in Oklahoma for homes or investment. Your address on postal card will bring descriptive list and literature.

BALDWIN & GIBBS CO.,
Anadarko, Okla.

CORN, OATS, WHEAT

and alfalfa and all staple crops grow to perfection here in the garden of Oklahoma. Prices reasonable. Write for list and descriptive literature.

C. E. POCHEL,
Newkirk, Okla.

EASTERN OKLAHOMA.

Improved farm, 160 acres, good, new house, half section of unimproved land, very fine. Several other good bargains. Write me if you want to know about Eastern Oklahoma. **T. C. BOWLING, Owner, Pryor Creek, Okla.**

WASHITA VALLEY LANDS.

From $10 to $60 per acre offer great opportunities for investment. They are well located near railroads, towns, churches and schools. Write for further information.

JOSEPH F. LOCKE LAND & LOAN CO.,
Wynnewood, Okla.

REAL ESTATE BROKERS.

Mangum, Okla. Lands that produce big crops of cotton, alfalfa, corn, wheat and all other staples at very reasonable prices. Write for free list of bargains.

McMILLAN & LANGFORD,
Mangum, Okla.

BECKHAM COUNTY, OKLA.

160 acres, 3 miles Doxey, railroad town, house, barn, 100 in cultivation, 700 peach and apple trees four years old, 140 tillable, $3,000. Terms. Other farms. Will sell at extremely reasonable prices.

SECURITY INV. CO.,
Mangum, Okla.

"Hough Sells The Earth"

in Caddo county, fertile, rich, cheap. Send 10 cents in stamps for handsome colored county map of Oklahoma, circulars and list. Letters answered in German or English.

W. R. Hough, Apache, Okla.

CADDO COUNTY, OKLAHOMA

corn, wheat, cotton and alfalfa lands, $20.00 to $75.00 per acre, according to improvements and distance from towns. Lands are advancing rapidly. Now is the time to buy. Write for full information.

J. ELZIA JOHNSON, Hinton, Okla.

IMPROVED FARMS.

180 acres, 140 in cultivation, good 9-room house, barn 45x65, tool shed and granary, 40x40, orchard, telephone, R. F. D., near school, 4 miles county seat. Price $9,000. Write

J. T. RAGAN,
Vinita, Oklahoma.

640 **ACRES OF DEEDED LAND;** 300 acres of this is first class farming land; 400 acres of Indian land, leased and under cultivation; 3,000 acres of first class grazing land (Indian) leased for term of years; excellent water and good grass; very cheap lease, good two-story house, cave, good grain elevators, scales, corrals and everything in first class shape, and the farm land is of the richest. Plenty of timber for wood and plenty of shelter for stock, and is an ideal farm and cattle ranch very desirably located; 2 miles to railroad. Steam plows, farming tools, horses and everything in connection with this ranch go. **First Loan & Mortgage Co., Watonga, Okla.**

CORRESPOND with us about Garfield Co. lands. **McCarty & Plumley, Enid, Okla.**

WASHITA VALLEY LANDS.

Good corn and alfalfa farm, four miles Pauls Valley, one mile State Industrial School. 170 acres, 150 under cultivation. 150 acres Washita Valley, 6 room house, above overflow. Electric line soon. Price $10,000.

O. W. JONES,
Pauls Valley, Okla.

NOTICE TO RENTERS.

Here is something you may never see advertised again: No. 240—160 acres, 3 miles from good town, 17 mi. from R. R., 152 a. tillable. 85 a. in cultivation, 140 fruit trees. 2 room house, $2,500. Terms. $1,000 cash, bal. terms. Write us when you can come.

The Grant Investment Co., Thomas, Okla.

A FINE HOME FARM.

320 acres 1½ miles south Wagoner. New 7-room house, nice outhouses, good barn, granary, wagon shed, windmill, concrete tanks. Nice bearing orchard. 225 acres cultivation, can most all be plowed. All good land, good set tenant improvements, 4 good wells, one of the best improved farms in the county. Price $45.00 per acre. Lots of others. Write for information.

W. H. LAWRENCE,
Wagoner, The Land Man, Okla.

EASTERN OKLAHOMA.

200 acres, 7 miles from Muskogee, 2 miles of railroad town, all good valley land, living creek water, 20 acres cultivated, balance meadow, all fenced. In white settlement, on main road, close to church and school. Price $30 per acre.

Many other farms, improved and unimproved at $25 to $35 per acre.

R. B. BEARD & CO.,
Muskogee, Okla.

SNAPS IN GRANT CO., OKLAHOMA.

½ section, 2 miles of Medford, county seat, ¼ deeded and ¼ school land, 185 a. in cultivation, 110 a. in wheat. 25 a. fine alfalfa, balance pasture, 6 room house, barn 56x60, granary for 3,000 bu., 2 good wells about 20 ft., also mill, 1 mile to school and good high school in town, creek bottom, deep black loam soil, ½ all crops in granary and possession next Aug. 1. Price until April 1, 1910, $11,500.

BATTEN REALTY CO.,
Medford, Oklahoma.

Oklahoma Land

Where corn, wheat, alfalfa and cotton are making the farmers rich. We specialize on Oklahoma, Cleveland, Logan and Washita counties. Fine alfalfa lands $30 and upward. Write for list and printed matter, mailed free. We also lead all in Oklahoma City property.

FARM & HOME INV. CO.,
Culbertson Bldg., Oklahoma City, Okla.

FIELD NOTES.

Do You Want a 320 Acre Homestead?

If you do, send 25 cents, stamps or silver, to the Western Land Company, K 4404, Cheyenne, Wyo., to cover mailing cost of the laws, maps and valuable information, showing you how to get 320 acres of fertile government land for nothing. Mention the Kansas Farmer.

The land around Loveland, Col., is famous for its big crops of sugar beets, wheat and alfalfa. Loveland is one of the good towns of Northern Colorado, and a good place to live. C. B. Henderson is one of the leading real estate dealers of Loveland, and will be pleased to furnish information to Kansas Farmer readers.

More Land Bargains.

Good homes and good investments abound in Custer County, Okla. Dulany & Randol, Clinton, Okla., specialize upon hog, corn and alfalfa lands at $30.00 to $50.00 per acre in this county. Write them for their free land list, mentioning Kansas Farmer.

The First Loan & Mortgage Co., Watonga, Okla., are regular advertisers in the Kansas Farmer. The land around Watonga is of the best, and sells for much less than its actual producing value. It will pay all of our readers who are looking for a good home or a good, solid, money-making land investment, to correspond with this firm. Mention the Kansas Farmer.

Custer County, Okla., offers some of the best land bargains to be found in Oklahoma. The leading firm of Custer City, Okla., are advertising 160 acres of improved Custer county land for $2,800.00. This place is a real bargain. Write them about it, mentioning the Kansas Farmer. Ask for their new list, at the same time. They will be glad to send it to you without charge.

Iowa Colony Lands.

Lands in the Iowa Colony, near Cheyenne, Wyo., for several years have produced crops equal to those produced on $100 land anywhere. The land at present sells for $15.00 an acre, but this price will undoubtedly be greatly advanced soon. Write to the Hartung Land Company for their free maps and illustrated literature, describing these lands. Don't forget to mention the Kansas Farmer.

Oklahoma.

Caddo County, is one of the most productive in Oklahoma and lands are still selling there for a tithe of their real value. One of the leading real estate firms of the county is the Baldwin & Gibbs Co., Anadarko, Okla. If you will send them your name and address on a postal card and tell them you are a Kansas Farmer reader, they will be glad to send you their new farm list and some handsomely illustrated literature.

A Genuine Land Snap.

One of the cheapest pieces of land, quality and the price of adjoining land considered, is the 640 acres east of Denver, advertised in this issue by the Longmont Realty Co., Longmont, Colo. They advertise the land at only $11.50 an acre, and it is absolutely the best land to be found in that locality. An adjoining piece of land sold only a few weeks ago for $22.50 per acre. The average price is $18.00 an acre. The Longmont Realty Co. is one of the large firms in Northern Colorado and is thoroughly reliable. They run a double column ad. in our Colorado Land Department, and it will pay you to watch it. Be sure to mention the Kansas Farmer.

Colorado and Wyoming.

In another column G. A. Hill of Berthoud, Colo., is advertising some of the land which he is selling in the famous wheat belt of Northern Colorado and Southern Wyoming. Since eastern farm lands have advanced to such fabulous prices, Western lands are beginning to attract greater attention on account of the rich profits which they are yielding as compared to older sections. The lands in Northern Colorado and Southern Wyoming show especially good yields of wheat and other grains, wheat in many instances yielding as high as sixty bushels or more per acre. The fame of Colorado wheat lands and the ideal climate of that state is sure to check the emigration of American farmers to the cold and uncertain regions of Canada when the homeseeker and investor become properly familiar with them. Write for his free lists and descriptive literature. Don't forget to mention the Kansas Farmer.

The professors of the University of Kansas who have the chinch bug investigation in hand are very desirous of obtaining the names and addresses of farmers on whose places outbreaks of the white-fungus disease of chinch bugs occur spontaneously. Farmers who have not infected their fields with the fungus-disease sent out by the University are requested to watch their fields, especially after a period of rainy or damp weather. If whitened bodies of chinch bugs are found, especially under sticks, clods, dead leaves, etc., a post card should be sent to the University at Lawrence, stating the name of the farmer and his post office. Those in charge of the investigation are anxious to visit farms on which the chinch bug disease arises spontaneously, in order to study the local conditons.—University Press Bulletin.

The Superior Incubator and Brooder.

The Superior Incubator and Brooder is manufactured by Hoops & Bostelman, Superior, Neb. After long experience and thorough tests they are able to claim the following advantages over all others: The incubator is ventilated and the heat regulated automatically. If the heat should get too high the eggs are not hurt, as it is immediately regulated. This automatic regulator does not interfere with the lamp in any way, which continues to burn at just the height of wick at which it is turned when lighted. The incubator saves at least one-third of the oil in running a hatch. In the brooder just one cubic foot of space is heated, while all other types are obliged to heat the whole brooder. The floors are made to pull out from the end, which affords the easiest method of cleaning out that has yet been devised. The new catalog tells all about these and also about their new beehive. It may be had for the asking.

The foremost method of cultivating alfalfa is with the disk harrow, one of the most excellent farm implements ever invented. Alfalfa sown in the fall is almost invariably helped by disking the following spring, with the disks set quite straight, so as not to cut the crowns but to split them. It is usually well to follow this disking with a tooth harrow, with its teeth set straight. Occasionally in a dry summer the disk may be used to great advantage after the second, and possibly the third, cutting also. Many disk their alfalfa fields every spring, and some after each cutting, others doing so only once in two or three years, owing to weather conditions and the conditions of the alfalfa. In some instances the common harrow is used instead of a disk. The disking has several beneficial effects. It splits and spreads the crowns, causing more and consequently finer stems to spring up, affording hay of the most delightful quality, easily cured; it loosens the soil about the crowns, conserves moisture and destroys the weeds. There need be no fear of killing the plants if the disks and the harrow-teeth are set straight and weighted or otherwise adjusted to give direct and steady forward movement. As an implement for the cultivation and invigoration of alfalfa the disk harrow has no equal, and its frequent use by those who know it best is deemed quite indispensable.—From Coburn's "The Book of Alfalfa."

MISSOURI LAND

NORTH MISSOURI farms for sale and exchange. Home of blue grass, corn and clover. Booklet and state map free.

Broyles Land Co., Chillicothe, Mo.

IMPROVED corn, clover and blue grass farms, 40 miles south Kansas City, $50 to $75 per acre.

Jot. M. Wilson & Son, Harrisonville, Mo.

CORN, clover and bluegrass farms in the best section of Missouri, very reasonable prices. Write for description.

W. A. HORN, Harrisonville, Mo.

DO YOU WANT TO SELL YOUR FARM?

Write us, we will give you good information. **Hoffman's Compiled List Report, 328 Sedgwick Block, Wichita, Kan.**

DID YOU GO TOO FAR?

Do you want to have a clover, bluegrass and timothy farm again? If so, write us. We sell well improved Johnson county farms for $40 up. Write for our list, mailed free and postpaid.

LEETON LAND CO.,
Leeton, Mo.

880 ACRES FINE TIMBER LAND.

Abundant living spring makes ideal ranch; if cleared would be good agricultural; farms adjoining all sides cannot be bought for $50 per acre; near county seat; price $75 per acre; no incumbrance; will take some trade. **J. H. McQuarry Realty Co., 120 Commerce Bldg., Kansas City, Mo.**

FOR SALE

60,000 acres of land in Stone and McDonald Counties, Mo. Especially adapted to the Fruit, Poultry and Dairy Business. Can be purchased on easy terms in 20 acre tracts or more. Write

JOSEPH C. WATKINS,
305 Miners Bank Bldg., Joplin, Mo.

NEBRASKA LAND

TWO SPLENDID FARM BARGAINS.

400 acre farm in Red Willow county, Neb., 2½ miles from McCook, good 8-room house, good barn and other good improvements, 160 acres choice valley alfalfa land, 55 acres now growing; 100 acres bottom and 40 acres upland, cultivated, balance pasture, well watered, some timber and abundance of choice fruit trees, bearing. Actual value of land over $20,000 but belongs to non-resident, who will take $16,000 if sold soon—only $40 per acre. Act quick; don't miss this.

560 acres 12 miles from McCook, 7 miles from Troyer, Kan., 400 acres choice, smooth farm land, balance good pasture, half cultivated, slight improvements. A splendid bargain at $16 per acre.

For other snaps in farm and ranch lands write or see

ACKERMAN & STEPHENS,
McCook, Nebraska.

IRRIGATED HOMESTEADS.

In the famous North Platte Valley, where Uncle Sam furnishes the water on ten years time without interest. Crops yield $25 to $100 per acre. Homesteads at from $700 to $3,500, according to improvements. Deeded land $75 to $100 per acre. Free rural mail delivery, telephone and all modern farm conveniences. These lands in splendid settlement of fine homes near town. For particulars write or see

CARPENTER, PLUMMER & MURPHY,
Morrill, Nebraska.

45 BUSHELS WHEAT LAND, $25 PER ACRE.

We own and control 20,000 acres of Cheyenne county, Nebraska's choicest farm land now on the market. The heaviest crop yielding county in Nebraska for ten years; alfalfa also a leading crop. Ask for folders and full particulars. Agents wanted everywhere. Write for our proposition at once. Railroad fares refunded if things not as represented.

FUNDINGSLAND & SEVERSON,
Sidney, Nebraska.

WESTERN NEBRASKA LANDS.

Good grazing lands, Chase, Perkins, Dundy and Hayes Counties, $5 to $10. Farm lands in same counties $15 to $30 per acre, absolutely no crop failure for more than 16 years. Great opportunities for the actual homeseeker. We are not looking for the speculator. We want to settle the country.

CHASE COUNTY ABSTRACT CO.,
Imperial, Neb.

Kimball Co. Neb.

has excellent farm lands. Produces alfalfa and all kinds of small grain. Prices $10 to $20 per acre. State amount of land wanted.

KIMBALL LAND CO.,
Kimball, Nebraska.

Land Bargains

NEBRASKA, Colorado and Kansas lands, well located in Dundy County, Neb., Yuma County, Colo., and Cheyenne County, Kan. $10.00 to $25.00 per acre, for good smooth land. Some 640 acre relinquishments yet.

HAIGLER R. E. & INV. CO.,
Haigler, Neb.

NEBRASKA

160 acres, only 4½ miles from Benkelman, $15.00 an acre, if sold at once. Has about 100 acres good corn land, and about 80 in cultivation. Telephone and rural delivery lines are right there; school 1 mile. one-half down, balance at 8 per cent. Other farms.

D. L. OUGH,
Benkleman, Neb.

FREE LIST

of Nebraska lands, in Chase, Dundy and Perkins Counties, ranging in price from $6.00 to $35.00 per acre. No crop failures since 1895. Your name and address on a postal card will do.

IMPERIAL LAND CO., Imperial, Neb.

Colorado Land

KIOWA COUNTY, COLORADO LANDS

12,000 acres of choice wheat land offered in quarters and half sections. On line of Mo. Pac. R. R., close to three good towns.
Prices range from $5.00 per acre upward.
Write for terms and descriptions.

ALBERT E. KING, McPHERSON, KAN.

1000,000 Acres of Land in Eastern Colorado

If interested in land in Eastern Colorado, where there has never been a hot wind or cyclone, where the water is shallow, fifteen to twenty-five feet deep, natural, sub-irrigated alfalfa land, where the soil is rich from the glaical drift from the mountains, where the air is pure, and the sun shines, and more showers than any other district. Write us for folder descriptive of the land and best map of Colorado published.

KIT CARSON COMPANY,
Kit Carson, Colorado.

LIST OF LANDS for sale at $5 per acre, and up free. 320 acre Homesteads located. Relinquishments for sale. R. A. SHOOK, Akron, Colo.

LIVE AGENTS wanted to sell Washington County land; big crops are being raised every year. Write for offer. The Clarey Land Co., Akron, Colo.

YUMA COUNTY, COLORADO
Lands $14 to $20 per acre, where all staples produce big crops. Write for free list.
B. M. WEAR, Jr., Yuma, Colo.

EASTERN COLORADO LANDS
Where all staples grow to perfection. Lands from $7.50 to $30 per acre, on liberal terms. Illustrated literature free.
UNDERWOOD & HEINY,
Flager, Colo.

SAN LUIS VALLEY, COLORADO.
Irrigated pea, alfalfa, hay and livestock farms, $45 to $90 per acre. Write for full information. HAIGLER REALTY CO., 113½ E. Pike's Peak Ave., Colorado Springs, Colorado.

EASTERN COLORADO Lands at lowest prices on best terms. If you want a good home or investment, you should see me. I have been here for 17 years. Inclose stamp for reply.
THE GENOA LAND COMPANY,
Genoa, Colo.

EASTERN COLORADO Lands $10 an acre and up. Live agents wanted. Write for our descriptive literature, and county map, mailed free.
HAYNES LAND CO.,
Vona, Colo.

960 ACRES AT $6.75 per acre of good farming land 10 miles out. For this and prices on other ands write us.
KENEDY LAND CO.,
St. Peter, Minn. Genoa, Colo.

YUMA COUNTY, COLO.
Lands that raise big crops of all staples, $10 to $15 per acre. Great opportunities for home seeker and investor. I own a few quarters, which I will sell cheap.
A. L. KISSINGER, U. S. Commissioner,
Yuma, Colorado.

WASHINGTON COUNTY, COLORADO.
Corn and wheat lands $7 to $30 per acre. Prices advancing rapidly—now is the time to buy. 320 acre homesteads and cheap relinquishments. Write for free list.
THE AKRON LAND CO., Inc.,
Akron, Colo.

LANDS that raise big crops of all staples, near towns, churches, schools and neighbors, $10 to $25. Will locate you on a 320 acre homestead relinquishment Act quickly. Write for full information. Empire Land & Cattle Co., Akron, Colo.

LANDS.
Adams, Arapahoe and Elbert County, Colo. Produce big crops, all staples; $8.50 to $17.50 per acre. For a good home, or investment that will increase rapidly, write for free list and descriptive literature.
PARKS BROS. & ORTON,
Longmont, Colo.

CHEYENNE COUNTY, COLORADO.
Where land often pays for itself in one crop. For $8 to $16 we can sell you choice land, well located, near schools, churches and markets. Write or see
WILD HORSE LAND CO.,
Wild Horse, Colorado.

EASTERN COLORADO.
Our lands raise big crops of wheat, oats, flax and corn, and are rapidly increasing in value. If you act at once, we can sell you a good farm for $12 to $25 per acre. We want a hustling agent in your locality. Illustrated descriptive literature free upon request.
CLARENCE M. SMITH,
Flager, Colo.

640 acres fenced and cross-fenced, twelve miles of Denver, three miles of Parker, Colo., well grassed, has living water sufficient to water 200 head of stock every day in the year, $12.00 per acre, half cash, balance in one and two years at 6 per cent. Several other bargains just as good. Write
A. J. SIMONSON,
Denver, 214 Cooper Bldg., Colo.

KIT CARSON COUNTY, COLORADO
Corn, wheat and alfalfa lands, at $10 to $25 per acre, according to location and improvements. Prices are rapidly advancing, and the time to buy is now. Write for our free illustrated booklet, stating what you want. A live agent wanted in your locality.
A. W. WINEGAR,
Burlington, Colo.

EASTERN COLORADO—The home of wheat, barley, millet, cane, broom corn, speltz, and all staples. Lands are now very cheap, from $9.00 to $11.00 per acre for raw land to about $20.00 an acre for improved farms, but are rapidly advancing in price. Write for free printed matter, stating what you want.
McCRACKEN LAND CO.,
Burlington, Colo.

FREE

Illustrated descriptive pamphlets and booklets telling all about Eastern Colorado; choice land at $10 to $20 per acre.
KENNEDY LAND CO.,
Limon, Colorado.

KIT CARSON COUNTY.
Lands now $10.00 to $20.00 per acre, and homestead relinquishments at prices according to improvements. Great opportunity for the homeseeker or investor. Descriptive literature free. Vona Land Co., Vona, Colo.

LOVELAND, COLO.
The land of irrigation and sunshine. Sugar beets, wheat and alfalfa produce big crops. If you want a good home, or increasing investment, write or see
ARTHUR H. GODDARD,
Loveland, Colo.

WANTED.
Agents to assist in selling eastern Colorado land. A good opening for alive men in your locality, one who can produce results. Write for our liberal offer, and full information.
ARRIBA LAND CO.,
Arriba, Colo.

NORTHERN COLORADO
Where wheat is wheat and yields 20 to 60 bushels per acre on either irrigated or dry land. Where alfalfa yields $25 per acre with only the labor of "making" it. Where farming is profitable every year and where life is real living. Send for free price lists and descriptive literature.
G. A. HILL,
Berthoud, Colo.

THE LIEBER LAND & REAL ESTATE Co., Hugo, Colo., dealers and absolute owners of Colorado lands. We bought right by buying early, and best by having first choice. Buy direct from owner and save agent's commissions. Choice farming lands in eastern Colorado, $5.00 and up. Live agents wanted. For handsomely illustrated pamphlet of 20 large pages, address John Lieber, Manager, Hugo, Colo.

LINCOLN COUNTY, COLORADO.
Corn, wheat, and alfalfa lands $12 to $25, on liberal terms; are well located, mostly smooth, dark chocolate loam soil; raises big crops, all staples. Prices are rapidly advancing; buy now and get in on the ground floor. Write for illustrated descriptive literature and sectional map of eastern Colorado, mailed free.
COLORADO LAND INV. CO., Arriba, Colo.

GOOD LAND, Kit Carson County, Colo., $8.50 to $25.00. Why stay last and pay big rent when you can come to Kit Carson county and buy a home for the rent you pay for the eastern fam one year. Land produces wheat, barley, oats, corn, cane, alfalfa, etc. Write for colored map of Colorado, sent free.
G. W. DINGMAN,
Stratton, Colorado.

MUNTZING PAYS THE FREIGHT.
Farms, Sheep and Also Cattle and Horse Ranches.
I own 40,000 acres of choice lands in Washington and Yuma counties, and am offering both improved and raw lands at prices far below all others and on terms to suit all purchasers. Monthly payments if desired. 160 and 320 acres relinquishments adjoining lands offered for sale. Best of wheat, oats, cane, corn, potatoes and alfalfa lands. I refund railroad fare and hotel bills to those who purchase from me. All lands are level, smooth and rich farm lands. NONE better. COME NOW and buy homes and get the free ride. Why pay big commission when you can buy direct from the owner? Write for maps, plats, price lists and explanations and proofs to
AUGUST MUNTZING, Akron, Colo.

DO YOU WANT A HOME?
Buy now in Washington county, Colo., where choice land, with best of soil, can be had, where good farmers raise from 20 to 45 bu. wheat per acre and oats, barley, corn, speltz, potatoes and alfalfa grow abundantly on upland, without irrigation; in a county rapidly settling and being improved by good thrifty farmers. We have hotel bills for those who purchase from me, many tracts of choice, smooth, fertile farm land, healthfull climate and abundance of good water, at prices ranging from $8 to $15 per acre. If you are looking for good investments write or see
Vanderhoof & McDonald, Otis, Colo.

$11.50 Per Acre

For 640 acres of the best land east of Denver in Colorado, worth $17.50 to $20.00 by Sept. 1st. Write for information and terms.
THE LONGMONT REALTY CO.,
Longmont, Colo.

GOVERNMENT LAND FREE IN ROUTT COUNTY COLORADO

To secure good farmers, we tell you how to locate 160 acres of fine government land in Routt County, on Moffat Road, (Denver Northwestern & Pacific Railway.) Big crops, pure water, good soil, fine climate and markets. Fine openings for investments and business. We have no land to sell, its absolutely free from the government. Law allows you to return home for 6 months after filing. Write for free book, map and full information that tells how to get this land free. Address W. F. JONES, Gen. Traffic Mgr., 708 Majestic Bldg., Denver, Colo.

STOP! LOOK! AND LISTEN! to what we have to say in regard to our business. We have a large list of the best lands in Morgan County. Should you desire a good irrigated farm, good dry land on a homestead, communicate with us or come and give us an opportunity to show you what we have.
B. W. JACKSON REALTY CO.,
Fort Morgan, Colorado.

COLORADO LANDS

Send for our descriptive map folder of Eastern Colorado, mailed free upon request. We have many bargains in wheat and alfalfa land, nice and smooth, at $8.50 to $20.00 per acre.
FLAGLER LOAN & INV. CO.,
Flagler, Kit Carson County, Colo.

IF YOU WANT TO BUY AN IRRIGATED FARM

that will produce big crops of all staples, at a reasonable price, write to or call on C. B. Henderson, Loveland, Colo.

I. L. DARBY THE PIONEER LAND MAN

Government and Deeded Lands and Town Property. 320 acre Homesteads. Snaps in Relinquishments. Write for new illustrated folder, mailed free.
Grover, Colo.

SUNNY COLORADO.
Beautiful irrigated homes, along the Denver, Laramie and Northwestern, 5, 10, 20, 40 and 80 acre tracts, suitable for all crops grown by irrigation, $200.00 an acre and up, on liberal terms. Write for beautifully illustrated literature, mailed free.
COLONY INVESTMENT CO., Inc.,
Immigration Agents D., L. & N.,
Greeley, Colo.

$1 MAKES ANOTHER — WHERE

In the South Platte Valley, Morgan county, Colo. Money invested in land here will double itself in 3 years. Write for full particulars to
E. E. SEAMAN,
Brush, Colorado.

DO YOU WANT TO BUY Eastern Colorado lands? Write for our free folder of 28 large illustated pages. Cheyenne County Land Co., Cheyenne Wells, Colo.

WYOMING LANDS

FREE—320-ACRE Homesteads—Millions of acres; fertile lands, valuable information, laws, maps showing how and where to locate sent for 25c, mailing cost. Western Land Company, K 404, Cheyenne, Wyo.

IOWA COLONY

$15 lands near Cheyenne, grows crops equal to $100 lands anywhere. Don't drown out or dry out—have rain enough. Finest climate and water. Maps free.
HARTUNG LAND COMPANY,
Cheyenne, Wyo.

FIELD NOTES.

The great sow, Do Do Bell, that topped Ben Bell's Poland China Jan. 7th sale and purchased by H. N. Farrar & Sons of Seneca for $111 has a litter of 8 very fine pigs sired by Collossus.

Many of our readers have money in the bank, drawing 3 or 4 per cent. interest. We advise all these to write to Arthur H. Goddard, Loveland, Colo., for prices and descriptions of some of the irrigated land about Loveland. It usually pays about 20 per cent. on the investment.

Caddo County, Oklahoma.
Apache is one of the livest little towns in this, or any other county, and is surrounded by rich farm land that still sells at low prices. W. R. Hough is the leading real estate man of Apache. Send him 10 cents for a handsome colored map of Oklahoma, or write for his free farm list and circulars.

Parks Bros. & Orton, Longmont, Colo., are advertising lands in Adams, Arapahoe and Elbert counties, Colo., at $8.50 to $17.00 per acre. Lands in these counties at these prices are good investments. Look up their ad. in our Colorado Land Department, and write for their free list and descriptive literature Mention the Kansas Farmer when you write.

320 Acre Homesteads.
One of the new advertisers in this issue is S. L. Darby, the pioneer landman of Grover, Colo. Land around Grover is still cheap, and is producing big crops every year. Things are in fine shape there this year. 320 acre homesteads can still be filed upon, if you act quickly. Write Mr. Darby for his new illustrated folder, and don't forget the Kansas Farmer.

WYOMING LANDS

Improved Irrigated Farms and Stock Ranches. Direct from the owners at low prices on liberal terms. Write for our free descriptve literature.
Laramie, THE WESTERN IRRIGATED LANDS CO., Wyoming.

AUCTIONEERS

L. E. FIFE,
LIVE STOCK AUCTIONEER.
Newton, Kansas.
Breeder of Percherons, Shorthorns and Duroc Jersey hogs; posted in pedigrees, terms reasonable. Write or wire for date.

LAFE BURGER
LIVE STOCK AUCTIONEER
Write or wire me for date.
WELLINGTON, KANSAS.

JOHN D. SNYDER
Auctioneer,
Winfield, Kansas.
I sell for many of the most successful breeders.

THOMAS DARCEY
Live Stock and Real Estate Auctioneer. Fifteen years' experience. Breeder of Poland China hogs. Well posted in pedigrees. Dealer in real estate. Terms reasonable. Wire or write for dates. Long distance phone 2651. OFFERLE, KAN.

W. C. Curphey
LIVE STOCK AUCTIONEER
Write, phone or wire me for dates.
Abilene, Kansas

Col. Essie Craven
LIVE STOCK AUCTIONEER.
Twenty Years Selling All Breeds.
NORTH BRANCH, KAN.

LIVE AND LET LIVE
is my motto. Reasonable charges and good service. Choice of dates if you write early.
JAS. T. McCULLOCH
CLAY CENTER, KANSAS

J. H. MOORMAN.
Live Stock and General Farm Sale Auctioneer. Satisfaction guaranteed. Long distance phone connection.
SOLOMON, KANSAS

SHORTHORN CATTLE

Tomson Shorthorns

Barmpton Knight sire of Benefactor champion Shorthorn steer at the International 1909 and Gallant Knight Heir, a winner of three grand championships, 7 firsts and three seconds in ten shows.
Our breeding cows are the best blood lines representing different Scotch families with 3 to 6 Scotch tops. Individually they are low down thick fleshed, breedy cows of the most approved type.
Ten Head of Choice Scotch and Scotch Topped Bulls for Sale.
A first class lot of cows and heifers.
Railroad station is Willard on Rock Island, 15 miles west of Topeka.
T. K. TOMSON & SONS, Dover, Kansas

SHORTHORNS.
If you need a young bull or some females write us; prices right.
SHAW BROS.,
Phillips Co., Glade, Kansas

SCOTCH SHORTHORNS.
7 young bulls from 10 to 15 months old, Scotch and Scotch topped; one pure Scotch bull by Blythe Conqueror. A few choice heifers for sale. C. H. WHITE, Burlington, Kan.

TENNEHOLM SHORTHORNS.
Have on hand a few young red bulls ready for service that are out of splendid milking dams and have good beef form. No better breeding could be wished. Can spare a few females. Prices moderate.
E. S. MYERS, Chanute, Kansas

A CARLOAD SHORTHORN COWS
All are bred or have calf at side. 4 good young bulls that I am sure will suit. Everything nicely bred and in good condition. Moderate prices. Come and see us.
D. H. FORBES & SONS, Topeka, Kan.
R. F. D. No. 8, Bell 'Phone

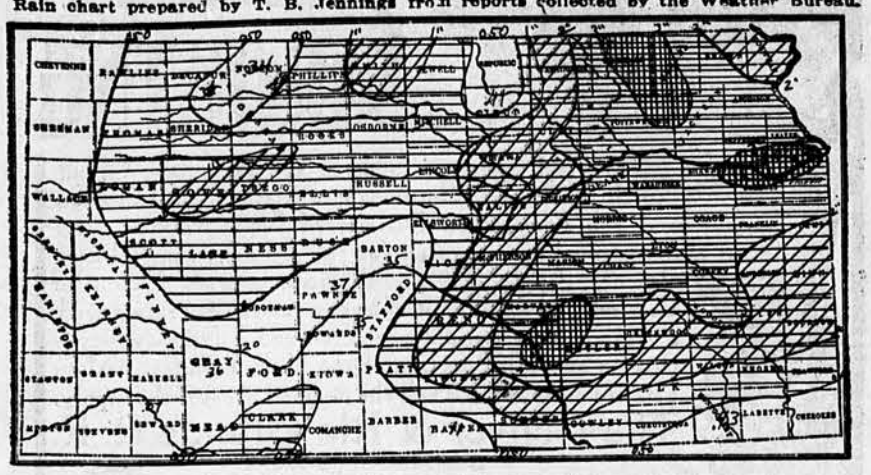
Center Grove Stock Farm
Scotch Shorthorn cattle and 20 bred sows and a few good spring boars of large type Poland China hogs. Write me what you want. No trouble to answer letters. Bell 'Phone.
J. W. Pelphrey & Son, R. 6, Chanute, Kan.

SCOTCH HERD BULL FOR SALE.
The Cruickshank Clipper bull, Scottish Archer 283319, sired by Victor Archer 22310 and out of Imp. Noamis Ruth 5th. An extra good individual and sire but can not be used in herd longer to advantage and will be priced reasonable.
S. B. AMCOATS,
Clay Center, Kansas

Humboldt National Stock Farm
Shorthorn cattle, large type Poland China hogs, 10 spring boars, priced right. Write me your wants. I meet parties at trains. We can do business. Come and see me.
H. F. Pelphrey & Son, Humboldt, Kan.

WEATHER MAP

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



SCALE IN INCHES: Less than .50. .50 to 1. 1 to 2. 2 to 3. Over 3. T, trace.

General Summary.

While the first part of the week was quite warm the latter part has been unusually cool with a damaging frost in some of the northwestern counties. Beginning with May 1 showers have been general over most of the state and heavy rains have fallen from Sedgwick county northeastward to Marshall, Jefferson and Wyandotte counties, the rainfall for the week amounting to over 3 inches at Wichita and Oketo and nearly 5 inches at Lawrence. Some destructive hail storms occurred in the central and central eastern counties.

Reports by Counties.

Eastern Division.

Allen.—An abundance of rain this week with warm weather fore part of week, quite cool at its close. Too wet for farm work. Pastures and meadows doing well but it is too cool for growth of corn and wheat.

Anderson—High wind and temperature early part of week; good rains with cooler weather latter part. Conditions have been more favorable for crop growth, though too cool for good corn growth last of week.

Bourbon.—Good rains on four days. Pastures good; wheat and oats doing fairly well, but last few too cool for corn.

Chase.—Plenty of rain this week, more than 2 inches; severe storm on 2d, some damage to crops by wind. Hail broke many windows, knocked much fruit off of trees, and cut down a large amount of garden stuff.

Chautauqua.—Exceedingly dry, vegetation growing very slowly; some rain Wednesday and later, with weather quite cool last of week.

Cherokee—Unfavorable week, too dry and cool, though first days were warm.

Coffey.—Too much rain, ground too wet. Severe storm Sunday night in north portion of county causing some damage to orchards and outbuildings. Too cool latter part of week for crop growth.

Douglas.—A great rain Sunday night, from 1.50 inches in south part of county to 3.41 inches in the north part, with more than an inch the last of the week. Some corn fields badly washed but wheat and oats look well. Some hail during first storm.

Elk.—Crops growing slowly on account of the cool weather. Corn a fair stand. Warm and dry first of week. Cool with light showers latter part

Greenwood.—Conditions quite favorable except temperature which has been too low since Monday.

Jefferson—Much wheat plowed up and ground put in other crops. Oats looked poor until after the rains began. Corn early and coming nicely. Considerable fruit left through many frosts.

Johnson.—Good rains. High wind night of the 1st and 2nd. Nights rather cool for corn and garden truck.

Linn—Thunder showers Sunday and Monday, good steady rain began Thursday but weather too cool.

Marshall.—Corn planting progressing. Pastures nothing and but little garden seed sprouted owing to the long dry spell—4 months. Rain set in 1 a. m. Thursday and by Friday morning 3 inches had fallen.

Montgomery.—Damp week, crops greatly improved; corn looking fine and being cultivated the first time wheat heading, and with sufficient rain will make a fair crop. Indications are for more rain.

Morris.—Corn mostly started and coming up. Good rains this week broke the long drouth.

Nemaha.—Corn planting stopped by rain, about two-thirds done. The rains have greatly benefited oats, barley and grass. Fruit is all right yet.

Riley.—The much needed rain came in such a way that all went into the ground. Late apples seem to have been hurt much worse than early ones by recent frosts.

Shawnee.—Conditions were favorable the first of the week, but the excessive rains and cool weather are not so favorable.

Woodson.—Too wet for farm work during most of the week. To cold for good growth of corn. Grass doing well.

Middle Division.

Barton.—First days of week warm, last days cool. Light showers on three days, and wheat, oats, grass and gardens benefitted by them. Corn planting progressing rapidly, some corn coming up. Four days cloudy, prospect for more rain.

Butler.—Heavy rain and hail Sunday night. Good rain began on the 5th and was absorbed by the ground. Fruits so far in fair conditon except cherries.

Clay.—Drouth broken by good rains on the 5th; warm, followed by cool weather.

Dickinson—Very warm first of week, nearly cold latter part, with abundance of moisture. Conditions more favorable.

Ellsworth.—Fair showers but weather cool.

Harper.—Week opened hot and dry but closed cool with fine rain. No damage from wind, hail or frost.

Jewell.—Hot and dry first of week, cool and moist latter part.

Kingman.—First two days clear and hot, last four days cloudy and cool with showers. Hail night of 1st-2nd damaged fruit and gardens. Wheat doing finely, corn about all planted. Rain fine on growing crops.

McPherson.—Ground scaked, will have good effect. Bad hail Sunday night stripped fruit.

Marion.—Warm weather followed by good rains and cooler weather, very beneficial.

Osborne.—Warm days and cool nights. Last few days cool. Rain began Tuesday.

Ottawa.—Light showers during week closing with heavy rain and cool weather.

Pawnee.—Crop conditions excellent. Rain sufficient to keep wheat and spring crops in good condition has fallen the past week. Outlook excellent.

Phillips.—Fore part of the week was warm, latter part cool. Had some rain and it was a great help to wheat. Have had strong winds most of the time. Corn planting progressing.

Reno.—Fair rains and cooler weather.

Russell.—Very warm early part of week and rain much needed, cool, damp and showery latter part.

Saline.—Cloudy, damp and cool, good showers.

Smith.—It rained continuously for 16 hours on the 5th. The ground is in fine condition. Some fruits stil promise part of a crop. Alfalfa very short, owing to the dry weather.

Stafford.—Light showers and cooler weather.

Western Division.

Clark.—The weather changed from warm to cool during the week. Good showers on Wednesday and Thursday.

Decatur.—The misty and rainy weather during the week was very beneficial to wheat which is showing marked improvement. Soil in fine condition and corn planting under way. Damaging frost on 3d; alfalfa and leaves black, garden truck damaged.

Gove.—Fine rain at last, some hail in places. Crops in good condition.

Gray.—Fair shower on the 2d and a good rain on the 5th.

Lane.—The fore part of the week was clear and windy, the last four days cloudy with light showers. A good rain is needed though crops have not suffered badly yet.

Norton.—Corn planting progressing nicely, oats looking well, wheat holding well.

Seward.—Wheat still looking well. Spring crops are in need of rain. Fruit is not damaged, corn is planted and up.

Thomas.—Good during the week, with a killing frost on the 9d.

Last Call for Hill and Hanna Sale.

On May 18 there will be one of the best bred lots of Shorthorns sold that we know of. Don't fail to attend this sale at Fredonia, Kan., on Wednesday, May 18, 1910.

A SCHOOL FOR CHAUFFEURS.

The Kansas Wesleyan Business College, Salina, Kansas, has taken on a new department. It has started in connection with the college a School for Chauffeurs. Mr. H. L. Center, a noted automobile man, has been employed as teacher. The purpose of the school is to acquaint men and women who own automobiles, or their sons or chauffeurs who run the automobile, with how to take care of the machine, and not only how to repair it and detect the troubles when the machine will not go and correct them, but train them how to run the machine as well, so as not to injure the machine or endanger the lives of the occupants and of the general public. This is certainly a commendable school. A very large majority of the people who run automobiles have not received any instruction, know nothing about the machine, except how to steer the machine, and will not learn caution or how to manage it until they have met with some serious accident or killed some one. It is hoped that the next legislature will pass a law requiring every one attempting to run an automobile to hold a certificate showing that he knows how to handle a machine.

Halderman's Poland Chinas.

John C. Halderman, a regular advertiser in Kansas Farmer, has about 90 of as fine pigs as one would wish to see. Mr. Halderman is located half mile north of Burchard and owns one of the finest country homes in southern Nebraska. He believes there is a right way for doing everything and employs a method in whatever he undertakes. His hog houses, barns and other buildings have been built after careful planning and are models of convenience. So well has Mr. Halderman looked after the comfort of his spring crop of pigs that he has succeeded in saving 90 out of the 100 head farrowed. This is a record seldom equaled. The pigs are by the boars Intole, Brave Metal, and John C. Hadley, three excellent boars and all of them richly bred. The dams of pigs represent quite a variety of breeding, among them daughters of O. K. Price, Chief Gold Dust, Prince Youtell, etc., among them the real choice sow, Oakland Price by Big Lad, he by Pawnee Lad. She has a fine litter by Prospect 46193, an Iowa boar of considerable note. One good sow by Broadgauge Chief, he by Grand Chief, and others by Gold Metal. Sows and gilts have saved on an average of over 8 per head. Besides Polands there are on the Halderman farm hundreds of pure bred poultry, Bronze turkeys and a fine little herd of registered Shorthorns. Always visit this place when you can.

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Premium List Ready June 1.

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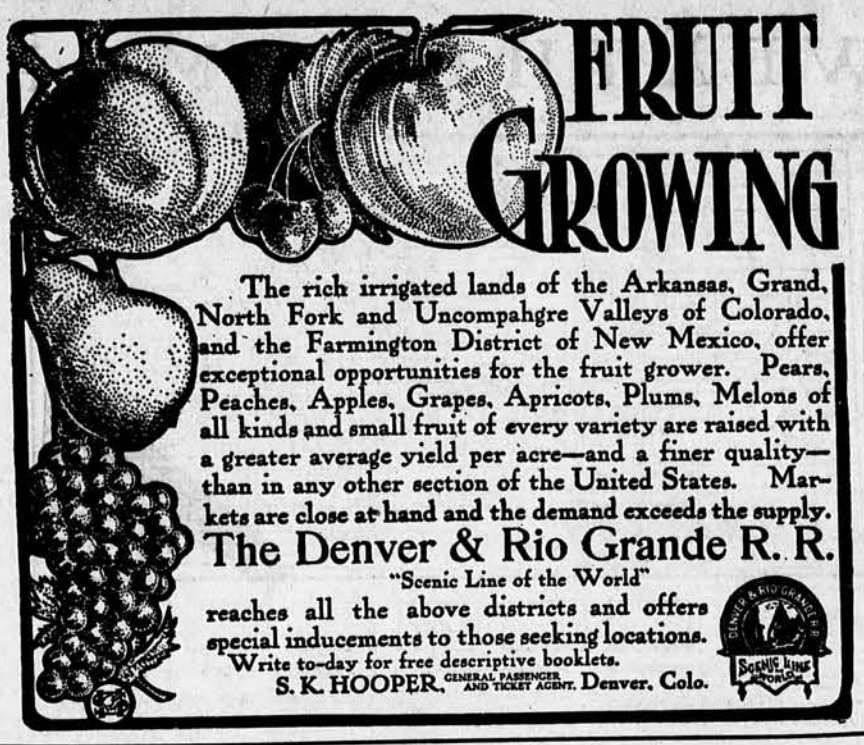

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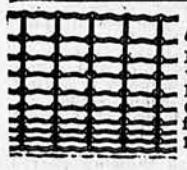

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