

KANSAS FARMER

For the improvement of the Farm and Home

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We Resolve

TO plant only the best seed of adapted crops and that the seed will be properly tested for germination before planting.

To carefully prepare the seed bed and plant in season in a workmanlike manner.

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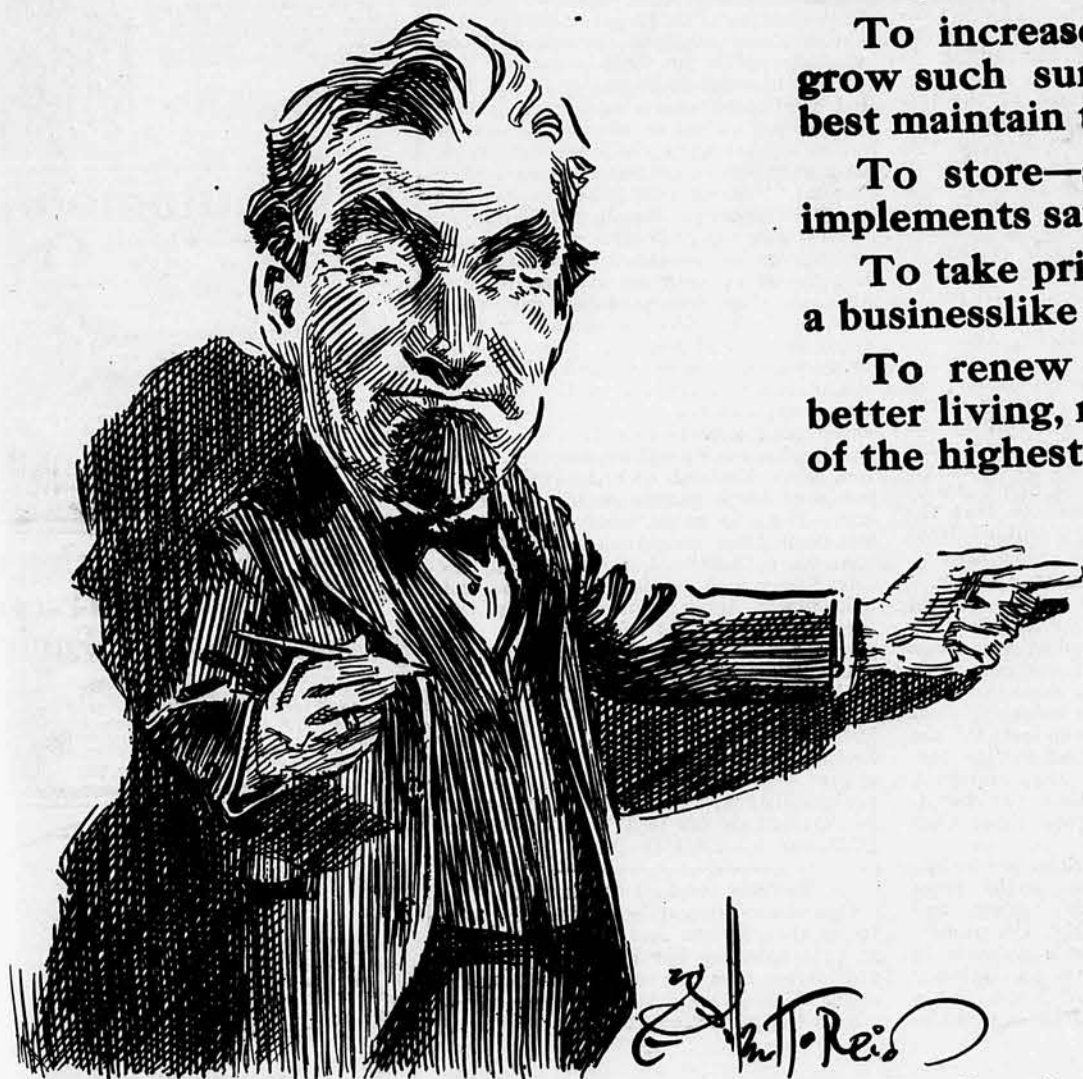
To plow each field thoroughly at least once in three years.

To increase the live stock of the farm and grow such sure grain and forage crops as will best maintain that stock.

To store—somehow, somewhere—all farm implements safe from damage by the elements.

To take pride in our farming and conduct it in a businesslike manner.

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THE YEAR IN LIVE STOCK

The Past and the Probable Market Future
—By Kansas Farmers Correspondent

A successful year in the live stock industry is going out and another which will be of great interest is almost here. It is therefore a time of retrospection among stockmen. Many are asking, What of the past and what of the future?

The Kansas Farmer market correspondent is not a prophet, but believes, as do others who have been connected with the live stock business for years, that one may gauge, to a degree, the future by the past. The transitions of 1913 will be potent in the developments in live stock in the next twelve months. But the outlook is not circumscribed by the boundaries of the United States at the threshold of 1914. With the tariff bars removed, stockmen looking at the future of cattle, sheep and hogs must make a survey of world conditions. This was not the case a year ago, when the action of the Wilson administration as regards import duties on agricultural products was still uncertain.

From almost limitless optimism to more or less uneasiness—this is the change which took place in the course of the outgoing year in the cattle industry. The early months of the year were periods of high remunerative prices. Even the dry weather with its resultant record-breaking movement of cattle from withered pastures and farms to the Kansas City market passed with a remarkably strong undertone in prices. In the very period when enormous runs of thin cattle were offered at Kansas City, during July, August, September and October, particularly, the extreme confidence of feeders in Illinois, Iowa, Ohio and other eastern states actually resulted in a scramble to buy, not in a demoralization to sell. Stockers and feeders sold largely at \$7.25 to \$8.25 at this time; today they are worth only \$6.25 to \$7.25, while fat cattle, excepting the choice stock, are only slightly higher than the feeder quotations of a short while ago. In the early months, when pasture men bought of range producers for summer grazing, unprecedented prices were paid for range animals, some transactions at \$50 to \$60 per steer on ranges representing a cost of 10 to 11 cents per pound to the buyers. But there was enthusiasm among cattlemen—1912 had been the most profitable year in the history of the American cattle industry.

TARIFF EFFECT ON PRICES.

In the almost country-wide enthusiasm over the market, however, feeders failed to take cognizance of the epochal revision of the tariff policy of the United States government, including the placing of meat and meat animals on the free list and the reductions in other duties. These factors, combined with the recent development of almost world-wide depression in the industry, and the abnormally mild weather of this winter to date, have told on the cattle market.

When the official figures of the foreign commerce of the United States for 1913 are compiled, they will show record imports of live cattle and dressed meats at our ports of entry. And these imports, while not so enormous in the aggregate, have played no unimportant role in weakening the cattle market in the closing months of this year. Whether prices are now on an international parity is a question. If not, it seems as if they will go there, for the big American packers are actively engaged in slaughtering live stock in South America, the world's greatest meat exporting continent, and appear to have definitely decided to ship the foreign beef here. One packing house official who has just returned from a long tour of South America told the writer he believes that the South American offerings will at least check further advances in prices here.

ACTIVE DEMAND FOR BREEDING STOCK.

Present prices in this country would be sufficiently remunerative to induce increasing breeding and feeding operations were the feed situation normal. This should not be overlooked. That the purebred branch of the cattle industry is not unmindful of this is manifest by the buoyant tone in the market for the registered beef breeds. The Hereford, Shorthorn, Angus and Galloway breeders are enjoying more good times than in years.

So far as future American production is concerned, the excellent outlet purebred cattle growers are having, and other breeders, notably the diminished proportion of female animals in the marketings, point to an increase. This is as applicable to farms as to ranges, for the farmers who buy stock-

ers and feeders are beginning to realize that the "cow" animals are commanding a very great share of the final selling price of fat cattle. Rangeland men are endeavoring to grow more and more cattle, for they could hardly ask for a better market than that which they have been having the last few years.

THE YEAR 1913 IN CATTLE AND HOGS.

The year's top on fat cattle on the Kansas City market probably will be \$10.60, which was paid for yearlings a short while ago. The top in 1912 was \$11.10; in 1911, \$10; in 1910, \$8.60; in 1909, \$10.50. These figures, of course, do not include the American Royal fat stock sales, which were up to \$12.85 this year, \$12.40 in 1912, and \$12.55 in 1911.

The year's cattle receipts at Kansas City promise to aggregate about 2,120,000 head, calves, 189,000. This compares with 1,943,390 cattle and 203,634 calves in 1912; 2,124,772 cattle and 245,618 calves in 1911; 2,229,570 cattle and 277,572 calves in 1910; 2,350,946 cattle and 308,982 calves in 1909; 2,154,328 cattle and 303,789 calves in 1908. At the five leading western markets, Chicago, Kansas City, Omaha, St. Louis and St. Joseph, the receipts of cattle for the year promise to be 7,140,000, against 7,262,640 in 1912; 7,769,367 in 1911; 8,223,869 in 1910; 8,158,364 in 1909, and 7,904,917 in 1908.

For hog producers this year was much like that in cattle. The Kansas City market soared to a top of \$9.25 in April, the high point of this year, compared with a top of \$9.05 in 1912, \$8.10 in 1911, and \$10.95 in 1910. The early summer trade was also highly profitable. Then came the drouth, the sharp advance in the cost of feeds, and the liquidation of thin, immature porkers. The year is not closing with hogs cheap, but the market is not in line with the value of corn. There is, as already noted in these columns, an undercurrent of bullishness as regards the market the first half of 1914, anyway. As America is the pre-eminent producer of hogs, it has no fear of an invasion of foreign pork products. Still, hogs fluctuate with other meats, to a degree. This year's hog receipts will total about 2,557,000 head, against 2,523,331 in 1912; 3,167,816 in 1911; 2,085,566 in 1910; 3,092,835 in 1909, and 3,715,109 in 1908. At the five leading western markets, receipts for 1913 will be about 17,000,000 head, compared with 17,079,874 in 1912; 17,683,635 in 1911; 12,973,464 in 1910; 16,014,602 in 1909, and 19,180,779 in 1908, the banner year in hog supplies.

THE OUTLOOK FOR SHEEP.

Although more fearful of possible trade developments than any other stockmen, sheep men have prospered in no small measure this year. Out on the Rocky Mountain ranges and in the native sheep districts there was alarm over the effect of tariff revision. The placing of wool and mutton on the free list frightened many, leading to heavy liquidation of native flocks and considerable marketing by the West, but prices, with very few exceptions, have been very remunerative all year. Lambs sold up to \$9.05; sheep, \$8; in 1912, lambs, \$10.10, sheep \$8. Feeders of cattle and of hogs are complaining of present prices, but the sheep men are making profits, although they, too, paid high prices for feeding stock. Wool sold from 3 to 5 cents per pound less this year than in 1912, partly because of the removal of the duties, but there is a hopeful feeling as regards the future market. And sheep men now incline to the opinion that perhaps the great producers of mutton, New Zealand and Australia, will not send large quantities to this country. There is no certainty about this, however; time alone can tell. Rangeland men are optimistic, however, having received very high prices for their fat and thin stock, despite the drouth in the feeding states. At Kansas City the year's receipts of sheep will aggregate about 2,096,000 head, which compares with 2,133,976 in 1912; 2,175,493 in 1911; 1,841,173 in 1910; 1,645,325 in 1909, and 1,640,542 in 1908. At the five leading western markets this year's receipts will be about 12,856,000 head, against 12,869,992 in 1912; 12,590,708 in 1911; 11,350,629 in 1910; 9,649,900 in 1909, and 9,368,911 in 1908.

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400,000 Settlers a Year

Immigration figures show that the population of Canada increased during 1913, by the addition of 400,000 new settlers from the United States and Europe. Most of these have gone on farms in Manitoba, Saskatchewan and Alberta.

Lord William Percy, an English Nobleman says:

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ORCHARDISTS SIDE STEP.

It was apparent at the meeting of the State Horticultural Society in Topeka, last week, that there were numerous orchardists dissatisfied with the work the entomological commission has done in the southern half of the state through State Entomologist Hunter. This is particularly true of orchardists in the fruit-growing sections about Hutchinson and Wichita. Mr. Hoover, former president of the State Horticultural Society, and a Sedgwick County commercial orchardist, made an effort to express this dissatisfaction, but he did not succeed. This, because conservative members of the horticultural society sat upon the lid. Last year Hoover succeeded in voicing his feelings, but what he said was not printed in the daily press and it did not find its way into the report of the society's proceedings. Thus the state at large has not heard the complaint of the Wichita orchardist, but that complaint will be heard through KANSAS FARMER, because he has been invited to reduce his views to writing that we may print them.

However, Mr. Hoover was able in the short time he was permitted to talk at the recent meeting of the society, to make inquiry as to why the entomological commission had expended its money in fighting chinch bugs and grasshoppers instead of San Jose scale. He requested that the society hear from State Entomologists Dean and Hunter in explanation. Professor Dean stated that he, as entomologist for the northern half of Kansas, had not spent one cent of the commission's appropriation for anything but San Jose scale work, and that the money he had used for fighting chinch bugs and grasshoppers was Federal money, meaning money appropriated for use through the Kansas Experiment Station. Professor Hunter replied by quoting the law regarding the duties of the entomological commission, as follows: "Its purpose is to suppress and eradicate San Jose scale and other dangerous insect pests and plant diseases throughout the State of Kansas." Professor Hunter stated that the commission had acted within the law.

The inference warranted from Professor Hunter's statement is that the commission has permitted him to use a part of its appropriation for fighting chinch bugs and grasshoppers, in spite of the fact that in the commission's 1907-1908 report to the governor were these words: "We respectfully recommend that an appropriation be made sufficient for the purpose of effectually combating this insect as provided for in the law creating the commission." The insect to which reference is made is San Jose scale and the plea quoted above is for an appropriation sufficient to combat the scale. The commission's report for 1909-1910 says: "The commission thus far has been able to combat only the San Jose scale with the appropriations made." The commission's 1911-1912 report says: "The appropriations so far have been only sufficient to deal principally with the San Jose scale." Since the appropriation for the 1913-1914 biennium is one-half the amount appropriated for each biennium heretofore, it would not seem that the commission was warranted in seeking new worlds to conquer. The fact, however, is that the commission has given Professor Hunter, state entomologist for the southern half of Kansas, permission to use some of its funds in fighting chinch bugs and grasshoppers. The commission gave Professor Dean, entomologist for the north half of the state, no permission to so use any part of the funds of the commission available for his section of the state.

Will the commission please advise the farmers of the north half of Kansas why this discrimination against the north half, and will the commission please explain to the orchardists of Southern Kansas why a part of the commission's money should be expended in fighting grasshoppers and chinch bugs when the San Jose scale is ruining their orchards?

At the recent meeting of the horticultural society when the official reports of the state entomologists were called for,

Professor Hunter gave as his report the results accomplished through spraying and pruning on an orchard which he had leased as a personal enterprise and with which he has not been more successful than have other individual orchardists. Why did he not make a report as state entomologist? However, he carried a voluminous manuscript and it is possible that his report was contained therein, but if so, he did not permit its contents to be known for the benefit of the members there assembled so that a free and open discussion might follow. If he had been able to fight San Jose scale successfully in the south half of the state, why did he not so say? If he has eradicated San Jose scale in that section of the state over which he has supervision in this work, why did he not so state and thereby justify himself and the commission for having extended his field, namely, to the conquering of chinch bugs and grasshoppers? If his work along these latter lines has been successful, why did he not have something to say about such success? It is a weakness of humankind that a man be proud of his accomplishments, particularly so if successful.

CLOSING THE YEAR'S WORK.

KANSAS FARMER, with this issue, passes another mile-post in a long and useful history. A year ago now we were printing our anniversary issue, celebrating fifty years of usefulness of KANSAS FARMER. We are now fifty-one years old, or as we feel, fifty-one years young, because never before in its history has KANSAS FARMER been so active and so important a factor in the agriculture of Kansas as it now is. Because of this increasing activity it may truly be said that we are young still.

When the reader scans the index in this issue for the 52 numbers of 1913, he cannot help but feel surprised at the wide range of subjects written about during the past year and the large amount of space devoted to each of the several subjects. It is doubtful if it is possible to purchase at any price a set of books or even a library which would contain so much of value to the farmers of Kansas as is contained in fifty-two numbers of KANSAS FARMER. We are absolutely certain that it would be impossible to obtain through any other source as much material written for the farmer of Kansas and from his viewpoint, as is to be found in a year's issues of this paper.

KANSAS FARMER should be filed in every home it reaches. The fifty-two issues fastened together in some way or other will, with the aid of the index, enable the reader to locate those articles on any topic in which he may at any time become interested. KANSAS FARMER would be a hundred times more valuable to its readers if this were done.

Week after week we are called upon to answer questions which have time and again been answered in previous issues. This necessitates our re-printing much material and using space therefor which could be devoted to other subjects or to other phases of the same subject. However, the inquiries must be answered in justice to our readers because we know that a comparatively few have retained preceding issues. At any rate each issue of KANSAS FARMER contains a large fund of information which is reliable and prepared especially for the Kansas reader. We know that an equal amount of valuable material cannot be had through any other source. There is satisfaction in this—not only for ourselves, but for our readers as well, and this is so whether the paper is kept on file in the farm home or not.

We feel that during the past year we have lived closer to our readers and so have been of more benefit to them than ever before. Whether we realize it or not, great changes are taking place year after year in the agriculture of Kansas. We are satisfied that the outlook for a permanent prosperity in this state is brighter than ever before. To be sure, we will in the future have the "off" year as we have had it in the past, but with each succeeding "off" year we

are manifestly better prepared to withstand its disappointments. This is a condition which cannot be disputed. There are methods of agricultural activity working slowly but surely which will place the farmer of Kansas on as permanent and as prosperous a basis as the farmers of any other state. The time has come when we as farmers cannot turn a deaf ear to those movements which are designed for the uplift of our general agriculture. More and more are we disposed to take hold of these. We are each day becoming better farmers as a result. KANSAS FARMER rightfully claims a part in the progress and advancement. Its readers and its friends have enabled it to do so and to them we are appreciative and thankful.

FARM DEMONSTRATION.

The so-called Lever Bill, providing for large federal appropriations for carrying on demonstration work all over the United States, very likely will be passed by this session of Congress. A part of the appropriations called for in the bill will be available for Kansas. This is a good time to learn to study the work of the various farm demonstration agents which have for a year or more been employed in Kansas. A conference on demonstration agent work in Kansas will be a feature of the State Farmers' Institute held at the Kansas Agricultural College, December 29 to January 2, and a part of the program is: "The County Demonstration Agent From the Farmers' Standpoint," by H. M. Hill, Montgomery County; J. M. Oilman, Leavenworth County. "The Demonstration Agent From a Farm Paper Editor's Standpoint," by T. A. Borman, KANSAS FARMER. "The Demonstration Agent From the Bankers' Standpoint," by Chas. M. Sawyer, Bank Commissioner of Kansas. "County Agent Work in Allen County," by W. E. Watkins, County Agent, Allen County. "The Place of the Demonstration Agent in Agricultural Education," by H. J. Waters.

An interesting and valuable bulletin is that on "Mill and Stored Grain Insects," by Professor Dean and recently issued from the Kansas Agricultural College. While this bulletin runs largely to the destruction of insects in mills, nevertheless that section referring to the destruction of insects infesting farmers' stored grain, is of importance to Kansas farmers generally. The bulletin should be had while it is obtainable, and while the insects in stored grain may not be troubling our farmers much just now, there is a time not far ahead when the granaries will be filled and when the insects can and will do damage. The bulletin states that the insects in grain products stored in tight bins may best be killed by careful fumigation with carbon bisulphide. If the building is reasonably tight and the temperature above 70 degrees, four pounds of carbon bisulphide is sufficient for each thousand cubic feet of space, or one pound for every 35 bushels of grain. The bulletin will be sent free to anyone applying to the director of the experiment station.

That Kansas is wasting four million dollars a year in road and bridge work, was a recent statement of Governor Hodges. Much of the money is lost through the hiring of inefficient road overseers and we wish that the trustees, clerks and treasurers who hire the overseers should know enough of road construction to enable them to choose competent workers. They can have this information through the correspondence courses of the Kansas Agricultural College. One of the courses is a general study of road building, which treats of the construction of all sorts of roads, of road drainage, culverts, bridges, grading, and other essentials. More detailed study is made in the other correspondence courses of concrete work, pavements, bridge building, surveying, and necessary work in drawing and mathematics. Information in regard to the courses may be obtained from J. C. Werner, director of all correspondence courses at the agricultural college.

LAST INSTITUTE CALL.

This is the last call KANSAS FARMER can make for the State Farmers' Institute to be held at Manhattan, December 29 to January 2. While we understand that the prospects are for an unusually large attendance upon the institute, nevertheless, we are certain that there will be several thousand Kansas farmers, their wives, sons or daughters who can attend the institute just as well as not but who will fail to enroll.

There are several reasons why it will prove profitable to attend the institute. The first and most important is that each attendant will learn from the various meetings something that will be of inestimable value to him or her in pursuing the work of the farm. It is certain that the trained farmer can and does succeed in a greater measure than does the untrained man. Every good farmer you see here and there—and there are thousands of them throughout the state—has through some means or other been better trained—uses better judgment—than his neighbor located on the same kind of land, who has had the same chance and who has not succeeded. It is a fact, and indeed it is fortunate, that it is not necessary to attend an agricultural college or any other school to come into possession of that information which makes for a good and successful farmer. Nevertheless, the fact remains that the man who has attended those institutions which make for higher ideals in farming, are those who achieve the most satisfactory results. The broader vision of farming and of farm life which will be obtained during this week of institutes will be worth more than it costs.

Even though the attendant does not confine himself to the class work as planned for the institute, but spends his time exploring the agricultural college and experiment station farm, he will be benefited to a great measure. We are a firm believer in the farmer—as well as the man engaged in every other line of business—getting away from his own little institution whether it be farm, store or shop, and looking into the methods employed by other people in the same line of business. We know that the farmer who may feel discouraged, either with or without good reason, feels much better when he meets other farmers and learns what and how they are doing. He will get pointers from his neighbors which will be well worth while, but even though he does not, it is comforting to find that you are succeeding as well as those generally engaged in farming.

If the boy has opportunity to attend the institute or visit the college, he is sure to return home with something of importance impressed upon him, and with an enthusiasm which will keep him going for months to come. Give the lad a chance to see what the possibilities are in farming. Give him a chance to broaden his outlook by stimulating his thought, and he is likely to be not only a better worker but to keep at it longer.

A volume might be written as to why the annual farmers' institute at Manhattan is a good thing. However, the proof that it is such is shown by the annually increasing attendance and the greater respect in which the agricultural college and agricultural teaching is each year held.

What is said to be the largest hatchery in the world is now being built at Holliston, Mass. It will have a capacity of incubating 100,000 eggs at one time, and they expect to incubate 1,000,000 eggs in 1914, and hatch out 600,000 chicks. The Pittsfield Poultry Farm sold over 100,000 baby chicks last year and this new place is an extension. There are 150 acres on the farm. They have two incubator cellars 34x127 feet. For their laying and breeding stock they now use a house 240 feet long by 24 feet wide, divided into four 60-foot sections. At present they have about 500 White Plymouth Rock hens and pullets in each section.

GENERAL FARM INQUIRIES

Something For Every Farm—Overflow Items From Other Departments

SUBSCRIBER W. J. O., Rooks County, writes: "I have for years been a close reader of KANSAS FARMER. I very much appreciate the paper. I think the readers of it should endeavor to follow its teachings in caring for stock and in general farming."

"In your issue of December 6 you give a sensible little talk on the care of the stallion. I do not think our horses in this country are cared for as they should be. It is certain that they are not so broken and trained as to add to their value. A well broken and trained horse is more valuable than one not yet broken. A horse is intelligent and can easily be trained. At the same time the horse can easily be spoiled by poor handling. I am a close student of the handling of horses and will be glad to enter into correspondence with any KANSAS FARMER reader interested."

Preparing Hides For Market.

Subscriber L. W., Dickinson County, asks for a tanning recipe but we are inclined to the belief that she wants information as to how raw furs can be put in condition for market. Tanning hides is a trade or profession and while there are numerous recipes for successful tanning we do not have such available. A topeka hide concern gives this instruction for preparing hides for market:

You cannot expect to get a good price for furs if they are not properly cared for. In the first place, visit traps every day. You then get the hides before they spoil, or before animal gets out of trap, or the dog tears it up. Then skin and cure. Stretch on a board made in proper shape and tapered evenly so hide will slip off without having to rip open. Hang skins up where dogs cannot get at them, and let dry in the shade. Always remove bone from tail of skins having fur tails. Do not stretch skins to make them larger; it makes the fur thin and the skins are not as valuable. Never use salt on fur skins; they will cure by hanging up skin side out. See that all surplus fat and meat is removed from the skins.

Grading Seed Corn.

T. B. U., one of our readers in Barton County, writes to inquire regarding the use of a machine or grader for selecting seed corn from shelled corn. The use of some sort of a grader is a very important consideration if a uniform type of kernel is to be used for seed corn purposes. No corn planter or lister will plant corn uniformly if the kernels are of different sizes and shapes.

The object in using a grader is to eliminate all the irregular odd-sized kernels. Of course in the selection of seed corn the ideal way is to make the selections in the ear first. If this is carefully done there is less need for using the grader than where such careful selection is not made in the ear. The use of a grader in selecting seed corn from such shelled corn as might be purchased on the open market cannot be advised as a regular practice. Such corn may be adapted to the conditions locally, but the probabilities are it is not.

As an emergency measure following such a season as we have just had, it may be necessary to select seed corn from shelled corn by the use of a grader.

There are several machines on the market having attachments for the grading of seed corn. Our correspondent has been referred to parties advertising such machines for sale in KANSAS FARMER.

Type of Concrete Silo.

Our subscriber, H. B. W., of Atchison County, is interested in placing a silo upon his farm, and writes to KANSAS FARMER to know if it is true that silage will not keep as well in cement silos as in silos of other types. His preference is decidedly for the cement silo because of its permanent character.

Where poor results have followed the use of cement or concrete for silo construction, they can be almost invariably traced to improper methods of construction. A porous concrete where a sufficient amount of cement has not been used will undoubtedly absorb enough moisture from the silage to cause some of it to mold next to the walls. This is not true of a carefully constructed cement silo.

Of the different types of cement silos, the silo known as the metal-lath-plastered silo would probably be the better one for our correspondent to build. In silos of small size, under 150 tons capac-

ity, the monolithic concrete type built by the use of forms is usually more expensive than in the larger sizes. This might not be true on farms where gravel and other building materials are close at hand and where the farmer is his own contractor. The plastered silo uses sand only in its construction, a much thinner wall can be used, which means a lesser amount of material to purchase and haul. A great many silos of this type have been satisfactorily constructed over our state.

Means of Establishing Alfalfa.

Recently we had an inquiry from a Chicago seedsmen asking what advertising agency the seedsmen of Kansas had used in so successfully distributing alfalfa seed throughout Kansas as to make this state the leader in alfalfa acreage. It is strange what notions some men entertain. The introduction of alfalfa into Kansas is not, we think, due to the advertising of any seedsmen. However, seedsmen handling alfalfa seed, to be sure, successfully advertised that seed and have discharged their obligation in placing Kansas on the map through alfalfa. The demand, however, for alfalfa was not created through advertising. The demand came through the advantages of the plant as demonstrated by fields here and there and through the recommendation of those agencies which are at all times laboring for the improvement of Kansas' agriculture. We find that alfalfa was first written of in KANSAS FARMER about 1872. The first contribution on the subject was by J. B. Billard, a present resident of Topeka and recently our mayor. He had

subscriber asks for a full description of the plans of the Ohio, Wisconsin, Gurler, and such other makes of silos as are known to us, aside from the wood stave, the concrete, and steel silos. He says the last named are too expensive for the common farmer and that a cheaper silo must be found.

KANSAS FARMER cannot undertake to give a detailed description of the various makes of silos desired by our subscriber. We have at various times through KANSAS FARMER, in a general way, given these descriptions. However, not in sufficient detail, probably, to permit the farmer to build such silos. Our subscriber will find advertised in our columns, a silos book selling for ten cents, which is almost wholly along the line of his inquiry. We recommend that he send for it.

It is not amiss to say however, that these various makes of silos were evolved in localities which were early users of the silo and were developed also at a time when it was not possible to obtain ready made silos. The silos named are more or less experimental, the success depending upon the good judgment exercised by the builder. With them at that time failure was not the result of unsatisfactory material having been used but was due to the use of incorrect principles of construction. The lack of knowledge of such principles resulted in many failures and principally through the fact that the structures were not sufficiently strong to withstand the strain, and second, because they were not air tight. Furthermore, it is doubtful if there was greater economy in construction than would have prevailed

on the subject of English Bluegrass or Meadow Fesque, and wishes to know whether this would be a good crop on a field the soil of which consists of an outcrop of sandy shale. A very complete bulletin was published by the Kansas Experiment Station some years ago, but this bulletin is now out of print.

The Meadow Fesque or English Bluegrass is one of the much-prized tame grasses in Eastern Kansas. As a pasture grass it is more nutritious and palatable than timothy. It is especially adapted to good rich soil, and under such conditions makes a most excellent pasture grass. It would thrive, however, on poor soil. This grass should be used in practically every meadow mixture. It is much more valuable for pasture than as a hay grass. It associates well with other grasses and is a much more permanent grass in the pasture than timothy.

Grasses for pasture purposes should always be sown in mixtures, and a clover should always be used in the mixture. On this poor thin soil to which our correspondent refers, it might be well to use some orchard grass in the mixture. This is a very strong, hardy grass, and will grow in poor soils. It roots deeply and will stand drouth better than any of our tame grasses. It has the habit of growing in clumps and therefore does not fully occupy the ground. When sown in combination with Meadow Fesque or English Bluegrass the two grasses will go well together. Meadow Fesque seed weighs 22 pounds to the bushel, and when sown alone a bushel to the acre is about the right amount to sow. Where sown in mixtures a smaller amount of seed would be required per acre.

Curing Alfalfa Hay in Shed.

Subscriber E. C. G., Bourbon County, advises that he will build an alfalfa shed 20x50 feet with sides enclosed to within about 6 feet of the ground. He desires to allow alfalfa to wilt a few hours after cutting then take it up with a go-devil and with the hay fork distribute the alfalfa in the shed to a depth of three or four feet, for curing. Each successive crop would be handled in the same way and piled on top of the preceding crop, and he desires to know if this plan will be successful.

The whole question involved is that as to whether or not the alfalfa will cure when in a layer three or four feet deep. This will depend wholly upon the amount of curing given the alfalfa in the wind-row and also upon the conditions of weather after it has been placed in the shed. It is well known that the first cutting of alfalfa is extremely difficult to cure, particularly so in eastern Kansas. If the ground is wet—as it usually is—when the first crop is cut, even though the sun shines warm, curing is difficult and requires at least several days. Subsequent cuttings when the ground is dry and temperatures comparatively high, are comparatively easy to cure. The prevailing temperature will have its effect on the alfalfa when placed in the shed. We have seen fairly well cured alfalfa hay put in the barn mow at a depth not exceeding two feet, which molded and burned.

There are quite too many factors in influencing the curing of alfalfa to answer this inquirer specifically. The fact that the hay will be torn apart by the hay fork and so will not be packed as solid as in the case of stacking, would contribute to satisfactory curing. The alfalfa grower who is able to save his hay in the best condition must be able to know the effects of the weather upon the curing and this is a thing that can be learned only by practice. No specific rules can be made to apply with success in the proper curing and storing of alfalfa hay. It is certain that the curing must be almost completed in the field. If the weather is favorable after placing the alfalfa in the shed and continues so during the curing period, then the plan suggested is ideal from the standpoint of economy in handling.

We know of no better type of building for shedding alfalfa than that suggested. Such type of building is necessary for the most satisfactory use of the hay fork. The material used in construction may be to the liking of the builder. We believe that the greater majority of alfalfa sheds constructed in the Kaw Valley during the last few years have been of corrugated galvanized iron, this being used both in the roofing and for siding.

Wet Weather Has Not Destroyed Bugs and Flies

"THE rain has not killed the Hessian fly. The rains have enabled the wheat to make a vigorous growth and to recover to a certain extent from the injury. Any individual stalk in which there is Hessian fly will not make wheat; that is, it will shoot up no stem or stalk. However, since the rain these injured plants are stooling and the individual plants in these stools will make wheat. The rain has not killed the Hessian fly itself and thus the flaxseeds are left uninjured to give up flies next spring and lay eggs upon the wheat.

"The week of rainy, damp weather followed by these cold snappy mornings has been rather hard on the chinch bug. We are not able to say at this time just how high the mortality has been but probably not more than ten per cent. At any rate we are absolutely safe in saying that it has not been enough to make a big check."

The above is the reply of Prof. George A. Dean, head of the Department of Entomology of the Kansas Agricultural College. He makes this reply in response to KANSAS FARMER inquiry as to the truthfulness of certain newspaper reports to the effect that chinch bugs and Hessian flies in great numbers had been destroyed by the wet, cold weather. This will answer several KANSAS FARMER subscribers who also made inquiry regarding the truthfulness of the report.

a difficult time in getting alfalfa set on good bottom land just north of Topeka, but finally he was successful. It was from such isolated successful experiences as this that alfalfa became known. Farmers generally were looking for a superior hay crop. The need for such crop existed.

The propaganda for alfalfa was not premeditated. It was created by the need. Before a considerable acreage was sown, to be sure, much had been written and spoken in its favor. The situation with reference to alfalfa is much like that with reference to the silo. For twenty years there have been silos here and there throughout Kansas, and for twenty years KANSAS FARMER, the Kansas Agricultural College and other agencies have been advocating the economy of the silo. However, not until 1911 were any considerable number of silos built in the state. The short feed condition of that year made the silo necessary. Its worth was proven and silo building has been going on rapidly since. No man dare say that the time and energy expended in the fifteen or eighteen years preceding, was lost. It had the effect of advising the farmer what the silo was and what its advantages were, and when he came right up to the point of needing it, he bought it. This is the history of advancement in practically all agricultural affairs.

Get Sound Principle and Go Ahead.

We have a letter from our subscriber, D. R., Lyon County, appreciative of the detailed answers to questions asked by a northwest Kansas farmer and which were grouped in a recent issue of KANSAS FARMER under this heading: "Western Kansas Silo Questions." Our

through the purchase of ready made silos had they been available at that time.

The real essence of silo construction is that of ascertaining the fundamental principles of construction, than working those principles out in conformance to the ideas of the builder. If the principles of silo construction are thoroughly understood a silo can be successfully constructed after a half hundred different plans.

English Bluegrass for Pasture.

Our Missouri subscriber, J. S., is interested in sweet clover and wishes to know the market price for seed. Owing to the fact that there is as yet a rather limited supply of this seed being handled, it is being quoted at a rather high price on the market. It is being sold in small quantities locally at about 25 cents a pound. Owing to the fact that alfalfa seed this year is extremely low in price, it has been observed in some quarters that dealers have been accused of adulterating sweet clover seed with alfalfa seed. If there is any question as to the purity of seed, samples of it should be sent to the experiment station for examination as to purity. The Kansas station at Manhattan is doing a great deal of work along this line. Reports will be furnished by mail, giving the exact percentages of the various foreign seeds which are present and also information as to whether any of the weed seed which may be present is especially undesirable. The Missouri Experiment Station at Columbia doubtless is performing the same service to Missouri farmers.

Our correspondent also inquires as to the Kansas Experiment Station bulletin

UNDER FLOW FOR IRRIGATION

Western Kansas Can Become Great Well Irrigation District

IF Kansas were to irrigate the acres that could profitably be irrigated, this state would have as much land under irrigation as Colorado or Idaho, states famous for their water ditches. The most practicable method of irrigation for Kansas is by use of wells. The possibilities of storing water for irrigation have been investigated quite thoroughly, not only by state investigators, but by the United States Department of Agriculture and by the United States Reclamation Service. These experts have reached the conclusion that irrigation systems of this sort are not satisfactory for western Kansas.

"There is a wonderful opportunity for development by irrigation in the shallow water districts," said H. B. Walker, state irrigation and drainage engineer at the second annual meeting of the Kansas Irrigation Congress at Goodland last week. "In Kansas, there are three or four million acres where underground water may be struck at depths less than sixty feet. Practically all of this territory can be economically irrigated by means of pumps. Finney county has 6,000 acres under pumps at present. Water is found under every part of Kansas, but at some points the shale rises in ridges, making 'islands' in the underground sheet. At such places, it is not possible to obtain water."

Two general types of pumping plants are in use. In the bottom or valley lands the depth to water ranges from ten to twenty feet. Most of the shallow wells now bored are sixteen inches in diameter and range from thirty-five to fifty feet in depth. It has been found that from 250 to 400 gallons a minute generally can be obtained from one well. Where a larger flow is desired, a group of wells is sunk and a centrifugal pump is connected to the wells by means of suction pipe, graduated to decrease friction.

The deep-well plants are found on the uplands or plains and have been installed within the last two years. They are 300 to 400 feet in depth, depending upon the soil formation and water strata encountered. Cheap fuel makes it possible to pump for higher lifts than otherwise would be practicable.

The cost of the deep-well plants varies almost directly with the total lift. With an average lift of 125 feet, the cost for a complete plant, with a capacity of 1,000 gallons a minute, is about \$50 for every foot of lift, or \$6,250. On the basis of a plant of this capacity serving 160 acres of land, the cost per acre is \$39. The average cost of the plants pumping from the shallow wells in the bottom lands, having a capacity of 2,000 gallons a minute, is about \$3,200, or \$20 an acre on the basis of a plant serving 160 acres. Numerous smaller plants having a capacity of about 1,000 gallons a minute are in operation, also. With these plants a small earth reservoir usually is provided.

"Where the cost of installing a fuel pumping plant is deemed too expensive,

attention should be given to the windmill with the small reservoir, the importance of which can not be overestimated," said Mr. Walker. "Nearly every farm in western Kansas has a windmill used for stock and for domestic purposes. By building a small earth reservoir, sufficient water can be stored for irrigating the garden and family orchard or small tracts of a few acres. One case is recorded in Scott County of sixty acres irrigated by means of ten windmills and a reservoir."

The office of experiment stations of the Department of Agriculture, and the Kansas Agricultural College are co-operating in the maintenance of a substation at Garden City, where methods of irrigation, adapted to western Kansas conditions, are being studied. In addition to this, the office of experiment stations is maintaining an expert in western Kansas whose work includes a study of pumping methods, and of the use of water in that section. The results of this investigation are available to farmers who are planning the installation of pumping plants, and may be obtained by addressing H. E. Murdock, irrigation engineer, Garden City, Kan.

The Agricultural College will send an expert to advise with any individual who is thinking of installing a plant. In such a case, no charge, except for traveling expenses, is made.

"Kansas has more water beneath her western plains than she can ever expect to use for irrigation. On the other hand farmers must be cautious in making wells, since some of the water bearing sands are too fine to assure high yielding wells," said Erasmus Haworth, Geologist at the University of Kansas.

C. E. Daniels, immigration agent for

the Rock Island, gave a general outline for the preparation of land for irrigation. He urged proper leveling before water was turned on. In the discussion it was brought out that alfalfa should not be sown the first year, but the field should first be planted to less permanent crops until the water could be intelligently handled.

F. A. Hines of Scott City, discussed the recent irrigation law. While it was generally admitted that the law was imperfect in many respects, it was the opinion of the delegates that the law could be revised and amended to be of great benefit to the western third of the state.

Arnold Martin of DuBoise, Neb., the nation's greatest 20-acre farmer, was the other speaker for the evening session. Mr. Martin urged the western farmers to solve their own problems, if possible. He advocated smaller farms and more intensive cultivation. In summing up his talk, Mr. Martin said twenty acres is plenty; with forty acres you can get along; eighty acres is a burden; 160 acres a misfortune; and 640 acres a calamity.

IRRIGATION IN SHERMAN AND THOMAS.

One session of the congress was devoted to the experiences of local farmers. John Askard of Colby, told of his experiences in pumping for irrigation in Thomas County. He advocated the use of windmills and reservoirs where high pumping heads were necessary. H. C. Tagsmeir of Goodland, also told of his experiences with deep well pumping. Mr. Tagsmeir sold more than \$2,500 worth of melons and vegetables from ten acres of land this season. It cost Tagsmeir about \$20 per acre to irrigate from his deep well plant. However,

Tagsmeir admits that he used more water than was necessary.

E. R. Bennett, irrigation expert for the Rock Island, spoke of irrigation development. Mr. Bennett urged irrigation in a small way in the upland areas, and complete irrigation in the shallow water areas. "Kansas should produce all of her vegetables at home, instead of shipping them in from Colorado and California," said Mr. Bennett. "We have the soil and the sunshine and by pumping we can get the water."

The morning session of one day was given over to representatives of pumping plant machinery and general discussions from the delegates. In the early morning demonstrations were made with pumps, engines, and windmills. This session of the congress was one of the most interesting held. It developed in the discussions that the greatest hindrance to irrigation development was unreliable advertising frequently circulated by unscrupulous real estate agents. It was evident from the sentiment expressed by the delegates that irrigation in Kansas could not permanently develop unless the absolute facts were given to the prospective land owner.

The report of the resolutions committee showed that the congress was in favor of a state board of irrigation, a revision of our irrigation laws and greater appropriations for advancing the work in western Kansas. The congress endorsed the work of the Kansas Agricultural College in its campaign for irrigation in Kansas.

A noticeable feature of the congress this year was that the attendance for the last session was practically the same as for the first. Had the roads been passable for automobiles, the hospitality of Goodland would have been taxed to the limit, for there likely would have been 400 to 500 visiting delegates. As it was, the attendance was much larger than last year at Garden City. Many of the speakers were unable to attend on account of snowbound trains in Colorado.

Dr. G. W. Smith, mayor of Goodland, opened the congress with an address of welcome to the visiting delegates. G. E. Feder, secretary of the Public Utilities Commission, was present to represent Governor Hodges. Mr. Feder's topic was "Kansas." Mr. Feder gave figures to prove that Kansas, even in the face of hardships, was growing into one of the richest states in the Union. Mr. Feder advocated state and federal aid for irrigation in Kansas.

The people of Goodland gave the delegates a banquet and otherwise royally entertained.

The next session of the congress will be held in Scott City, October 14 and 15, 1914. The following officers were unanimously elected: E. E. Coffin, Scott City, president; M. A. Alexander, Goodland, vice president; H. B. Walker, Manhattan, secretary; I. L. Diesem, Garden City, treasurer.



THIS GRADE SHORTHORN COW, IN MINNESOTA COW TESTING ASSOCIATION, PRODUCED 469.6 POUNDS BUTTER FAT IN YEAR AND MADE NET PROFIT OF \$81.28.—THERE ARE HUNDREDS OF SUCH COWS IN KANSAS.—BABCOCK TEST AND SCALES AND PROPER FEEDING AND CARE ARE REQUIRED, HOWEVER, TO DISCOVER THEM.

Kafir In Labette County

LATE in October the editor spent the greater part of a week assisting in a series of farmers' institutes in Labette County. On the occasion of our visit to the county we called on our former acquaintance, L. S. Edwards, now manager of the Deming Ranch at Oswego. On this ranch we observed many interesting things of which we will have more to say later.

We observed in the seed house a considerable quantity—possibly three or four double-box wagon loads—of kafir heads. These were well matured heads of a type much above the average of kafir grown in Kansas. At the time we failed to make inquiry whether these were heads of the 1913 crop or of the 1912 crop. To ascertain the fact we wrote Mr. Edwards, and he replies as follows:

"The kafir you saw in our seed house was this year's crop. We planted the field from which most of these heads were gathered, between May 10 and 15. The planting was done on early spring plowing following rye pasture. The ground on which the kafir was planted had been in alfalfa and the kafir crop was three years removed from the alfalfa sod. Chinch bugs gave us but little bother in this field, though the

old bugs were plentiful for a while in the spring. The damage by bugs on our farm and on surrounding farms was generally in wheat and corn but the bugs did not molest this kafir. We began gathering seed heads September 20. My recollection, however, is that we could have done the work as early as September 1. We went through the field and picked out the best heads.

"This is the first year we have grown kafir as a grain crop. We secured the seed from a grower in Oklahoma who had secured his seed the year previous from the Stillwater, Oklahoma, experiment station. We bought the seed in the head and the heads you saw were from our first selection from the lot. We expect to plant a large acreage to kafir this coming spring."

There are several points in connection with the above to which special attention should be called. The first is that of early maturity of the kafir and the relation which the type of head had to early maturity, but this subject is not worthy of extended discussion at this time because KANSAS FARMER has had much to say thereabout. This instance, however, is more evidence in favor of the inherent early maturity in the kafir which has been maintained true to type and which, therefore, is near pure kafir.

Another point is that of the preparation of the land for planting and the time of planting. A good stand of kafir can be had only when the seed is planted in warm ground. Early spring plowing and working will result in the ground becoming warm much earlier than ground not plowed. Kafir should be planted as early, we think, as the ground can be gotten into suitable physical condition. The earlier the planting, the better start it will get before dry weather, and if it does not get that start and is compelled to wait for late rains, the advantage is in favor of maturity before early frost.

Another point is that of the source of the seed, which is evidence that the experiment stations are more careful in the seed used by them than is the farmer generally. This, to be sure, is consistent, but this is one reason which accounts for the more satisfactory experiment station yields as compared with farm yields. It should be noted, too, that the Deming Ranch bought the seed in the head, thereby insuring, so far as possible, seed that had not been damaged by heating, and at the same time giving the ranch opportunity to throw out unsatisfactory heads or at any rate to select the most satisfactory heads for the seed field or the field

from which subsequent seed was to be obtained.

The field of kafir mentioned by Mr. Edwards, had been cut with a corn binder and the shocks were standing in the field at the time of our visit. The yield of dry forage was large and in all probability would have yielded 7 or 8 tons per acre for silage. A man who helped to do the shocking said there was hardly room in the field to set the shocks.

The letter also indicates that kafir will thrive on the best land, to the extent that good land can profitably be used in growing it. The land on which this kafir grew was as fertile as any farm land in Kansas. However, the season in Labette County was as dry as in any other county in the state. In fact, Labette County people say the past season was the driest in forty years.

Another point for observation is that on this large farm of 2,500 to 3,000 acres of as fine bottom land as there is in Kansas, will next year be planted a large acreage of kafir. This, we have no doubt, will be placed in the silos now erected and for several years used. The indications to us are that on this farm kafir will take the place of corn to a large extent—and if there is a corn farm in Kansas, the Deming Ranch is such.

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THE FARM



Thousands of the "young hopefuls" of Kansas are this fall making considerable extra money as a result of trapping gophers in the alfalfa fields. Unless there are sufficient boys on the farm to look after this trapping, it will well pay the "head of the ranch" to make some arrangement for the extermination of the gopher which during the last two or three years in Kansas has, it seems to us, done more damage to alfalfa fields than ever before during a similar period. The past season we have observed entire fields of alfalfa almost totally ruined by gophers. The feeding of poisoned grain or potatoes to gophers is an easy and effective way of controlling them. Inasmuch as the county commissioners of each county in Kansas are authorized to pay a bounty of five cents per scalp, there is some money in the gopher war aside from the beneficial results accruing through the destruction of the gopher. Two or three dozen steel traps staked about the field and given attention, will keep a live boy busy looking after them. It might seem that the cash income from killing gophers is of small account and so it is, compared with the real benefits, namely, those of getting them out of the field. The loss of a fine field of alfalfa as a result of gophers is a serious loss and is not warranted through the neglect to either poison or trap them.

There are widely varying opinions as to the amount of alfalfa seed to be sown per acre. It is, of course, well understood that the amount of seed necessary to obtain a satisfactory stand depends first upon how much of the seed will grow, and second, upon whether or not the seed bed is favorable to germination. However, with seed of good quality and with a well prepared seed bed, there are still wide differences of opinion as to the number of pounds best to sow per acre. In order to determine, if possible, the facts relative to seeding at different rates, at the Rocky Ford, Colo., experiment station ten different quantities were seeded. The lightest seeding was two pounds per acre, and subsequent seedings were made increasing two pounds per acre up to 20 pounds. The seed was sown under ideal conditions on land that was uniform in all respects regarding growing conditions. The fields were seeded in 1912 with common alfalfa and the first records were completed on four cuttings of hay during the 1913 season. The results show that there is very little difference in the amount of hay in tons, per acre, from the different rates of seeding. The thin seeding made coarser, more stemmy hay, while the thick seeding gave very fine leafy hay—almost too fine to get the maximum tonnage yield. The thin stands were more weedy the first season and also the second, while the thick seedings were practically free from weeds the second year. From indications it seems as if eight to ten pounds of seed per acre were the most satisfactory, all points considered. The general statement seems safe that if conditions are good for germination and if the seed is of good quality, that ten to twelve pounds will give satisfactory results. A good farm practice would warrant an increase in the amount of seed used to offset unfavorable conditions, even though 20 to 30 pounds per acre were needed. The Colorado station, however, will retain these test plots for several years and observe later results.

The northwest Kansas experiment station, which was a bone of contention in the legislature last winter, has been located adjoining the townsite of Colby and surrounding on two sides the Thomas County high school. It occurs to us that this is a fortunate location for this station. We presume that the Thomas County high school is attended by boys and girls throughout Thomas County, as other county high schools are attended by the young folks throughout their respective counties. The experiment station, therefore, easily accessible by these youngsters, should result in greater advantage in disseminating the results of investigation, than some other stations in this state. We do not know along what lines investigation at this station will be pursued, but it is our suggestion that to demonstrate

the possibilities of profitable and economical feed production, the possibilities of live stock farming, and the profitableness with which twelve to fifteen of the common cows of the country could be fed and milked, would be valuable. We will have no objection, either, to demonstrating the best methods applying to the preparation of the seed bed for wheat, but it is our sincere hope that the supervising authorities of this station will not permit the experiments to run wholly to wheat. We believe that wheat has a place in the agriculture of Thomas County and in fact all other counties in the western section of the state. However, it is our opinion that wheat should be grown in moderation—to such an extent as can be grown by early and thorough plowing, the early and thorough preparation of the seed bed and of such acreage as will permit the farmer generally to harvest with his own force. This condition of wheat growing, with a practical rotation which can also be demonstrated on this farm, is, briefly, the sum total of the practicability of wheat farming in the western section. Thomas County needs a revival of dairying. Twelve years ago, in proportion to its population, Thomas County was the largest dairy-producing county in Kansas. We think the county was then more prosperous than it has since been. In recent years the milk cow has been forgotten and her place has been taken by wheat—generally to the disaster of those who placed their sole dependence in the wheat crop. Director Jardine of the Manhattan, Kansas, experiment station, will be at the head of the investigational work of the Colby station. He will plan the lines along which the investigations and demonstrations will be made. We have great faith in his ability to pursue the right lines and to demonstrate those things which are most important to the western farmer. We hope that local sentiment will not be so strong or so prejudiced along certain lines as to influence Director Jardine from the course we think he would, without interference, pursue. We think we can see great possibilities for the farmers of the Northwest through the Colby station. The Colby station will not have the money it needs until another legislature convenes—maybe not then. We in Kansas are long on establishing experiment stations and allowing them to starve to death.

Speaking of the possibilities of the sorghums for Western Kansas in a growing season such as we have just passed, it is not amiss to call attention to the fact that W. A. Boys, demonstration agent in Western Kansas, has been able to find 6,000 bushels of upland alfalfa seed grown this year, 100 bushels of choice white cane seed, 270 bushels of select milo seed, 500 bushels of black cane seed, 300 bushels of kafir, and 850 bushels of seed corn. This is a small quantity of seed, outside of the alfalfa, compared with the need of these seeds in these counties for spring planting. However, the fact that choice seed of these crops could be obtained indicates that here and there are farmers who through some foresight in better planting and cultivation methods were able to mature these crops in this section this year. This fact should be encouraging to those who will plant spring crops next season. Some time since we called attention to the fact that in this district about 2,000 acres of land had been fall listed in preparation for spring crops. This practice of fall listing has established its value in the western section and the listing of 2,000 acres is a small acreage as compared with the total acreage to which such practice could have been applied. It is altogether probable that the scarcity of feed and consequent condition of farm work is responsible for the small listed acreage. Nevertheless, the farmer can better afford to exercise extreme measures to make fall listing possible. Conversation with western farmers on this point within the past few days is to the effect that on account of the ground being so thoroughly wet as a result of recent rains, fall listing is unnecessary. We believe it to be a fact that conditions relative to moisture are this fall probably such as result in less need for



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fall listing than ordinarily and it may be—no one knows—that next season will be so wet and favorable for spring crops that listing done this fall will not show to advantage as compared with a dry season. However, were the work ours, we would list this fall all the land we proposed to plant to spring crops next spring. The listed furrow will catch the snow, will catch rains, diminish the run-off, will follow the ground, prevent its blowing, and all of these advantages, even under present moisture conditions, are such as will justify it. Our correspondence indicates that the best crops this year in the western one-third of Kansas are those grown on land the preparation of which had begun the preceding fall. It is probable that practically all of the seed grown as above was grown on such land, and this, it occurs to us, is a sufficient hint to indicate that even in a season such as that just passed, grain sorghums will produce both grain and forage to meet the needs for feeding the farm live stock if proper care is exercised in preparing the field with a view to conserving the moisture, proper planting in rows and cultivation which will keep down the weeds and conserve the moisture in the ground at the time of planting.

Kansas' Sugar Output For 1913.

The Garden City sugar factory made only 31,000 tons of sugar from beets grown in Kansas this year. This was one-third of the usual annual crop. Dry weather cut down the beet tonnage. Farmers were paid \$150,000 for the beets grown. The beets were grown in Greenwood, Chase, Lyon, Pawnee, Hamilton, Finney and Kearney counties. The officers of the Garden City factory are skeptical regarding the future of the sugar making business with sugar going on the free list, but with the million dollar factory on their hands they will keep going as long as possible and will make contracts for beets in 1914 with the farmers.

Angora Goats.

An inquiry comes from J. S., one of our Missouri readers, as to the cost of Angora goats. He also wishes information as to the registration of Angora goats and where they may be purchased. This subscriber has been referred to advertisers of goats. The American Angora Goat Breeders' Registry Association is rather a young organization, having its membership mainly in the West. The headquarters of this association are in the Live Stock Exchange Building in Kansas City, Missouri. For full information concerning the Angora goat industry our subscriber should write to the association headquarters.

The prices paid for Angora goats have varied greatly. On some of the ranches in the West large numbers of Angora goats have been sold at \$2 or \$3 per head. For fancy pure-bred individuals extremely high prices have been paid. In one instance a buck sold in Kansas City in 1901 for \$1,150; the following year a buck brought \$1,400 and in 1903 the sweepstakes buck of the show sold for \$1,500.

Kansas Horse Breeders' Program.

The Kansas Horse Breeders' Association is one of the strong live stock organizations of the state. No other single live stock interest claims the attention of so many of our farmers. Good horses are essential to good farming and every farmer must have them. As is their custom this organization of Kansas horse breeders will hold its annual meeting in connection with the State Farmers' Institute in Manhattan. Dr. C. W. McCampbell, secretary, has prepared an especially good program for this year's meeting, which appears below:

THURSDAY, JANUARY 1.

Morning session—Old Chapel: President's address, George B. Ross, Sterling, Kan.; Community Co-operation in Live Stock Improvement, H. W. Avery, Wakefield, Kan.; address, C. W. Thompson, Washington, D. C. Afternoon session—Veterinary Amphitheater: Examining a Horse for Soundness, Dr. J. H. Burt, Manhattan, Kan.; Anatomy and Functions of the Organs of Reproduction (lecture and demonstration), Dr. B. R. Rogers, Manhattan, Kan.; Diseases of the Organs of Reproduction, Dr. L. W. Goss, Manhattan, Kan.

Evening session—Old Chapel: The New Stallion Law and the Service Lien Law, Dr. C. W. McCampbell, Manhattan, Kan. Business session.

FRIDAY, JANUARY 2.

Morning session—Old Chapel: The Colt Show, G. C. Wheeler, associate editor Kansas Farmer, Topeka, Kan.; What About the Mule? Prof. W. A. Cochel, Manhattan, Kan.; The American Saddle Horse, Prof. E. A. Trowbridge, Columbia, Mo.; A Comparison of European and American Methods in Draft Horse Production, Charles R. Kirk, St. Joseph, Mo.

Afternoon session—Old Chapel: Some Mistakes Often Made in Selecting a Draft Stallion, J. C. Patton, Towanda, Kan.; Present and Probable Future Demands of the Horse Market, A. D. Cottingham, Kansas City, Mo.; Horse judging demonstration.

Evening session—College Auditorium: Size in Draft Horse, Its Importance and How Obtained, J. H. S. Johnstone, Chicago, Ill.; Problems in Farm Management, W. A. Lloyd, U. S. Department of Agriculture, Washington, D. C.

The GRANGE

DIRECTORY OF THE KANSAS STATE GRANGE

OFFICERS.

Master.....A. P. Reardon, McLouth
Overseer.....J. L. Heberling, Wakarusa
Lecturer.....L. S. Fry, Manhattan
Secretary.....A. E. Wedd, Lenexa
Treasurer.....W. J. Rhoades, Olathe
Chairman of Executive Committee.....
.....W. T. Dickson, Carbondale
Chairman of Legislative Committee.....
.....O. F. Whitney, North Topeka
Chairman of Committee on Education.....
.....E. B. Cowgill, Lawrence
Chairman of Insurance Committee.....
.....I. D. Hibner, Olathe
Chairman of Women's Work Committee.....
.....Adeline B. Hester, Lone Elm

NATIONAL GRANGE OFFICERS.

Master.....Oliver Wilson, Peoria, Ill.
Lecturer.....N. P. Hull, Diamonddale, Mich.
Sec'y.....C. M. Freeman, Tippecanoe City, O.

Annual Meeting Patrons' Fire and Tornado Association.

The annual meeting of the policy holders of the Patrons' Fire and Tornado Association will be held in the Grange Hall in Olathe, Kan., January 7, 1914, at 10 o'clock A. M., at which time the annual election of officers will take place and the transaction of any business that may properly come before such meeting. It is hoped that there will be a large attendance of the policy holders, as there will probably be business of importance to transact.—GEORGE BLACK, Secretary.

Large Seventh Degree Class.

The number of candidates that took the seventh degree at Manchester probably exceeds all previous records. Very close to 6,000 persons availed themselves of the opportunity, largely from Massachusetts, Maine and New Hampshire, the latter sending in over 3,000. The candidates were taken in classes of eight or nine hundred each. There was also a class of over 500 sixth degree candidates taken in. All in all the admission fees went a long way toward the cost of the session.

National Grange Officers.

Master, Oliver H. Wilson, Peoria, Ill.
Lecturer, George W. F. Gaunt, Mullica Hill, N. J.
Overseer, W. T. Vary, Watertown, N. Y.
Steward, F. C. Bancroft, Wyoming, Del.
Assistant Steward, J. A. Sherwood, Long Hill, Conn.
Chaplain, A. P. Reardon, McLouth, Kan.
Treasurer, Mrs. E. S. McDowell, Wellesley, Mass.
Secretary, C. M. Freeman, Tippecanoe City, Ohio.
Gatekeeper, C. L. Rice, Austin, Minn.
Ceres, Mrs. Esther Pattee, Laconia, N. H.
Pomona, Mrs. J. C. Ketchum, Hastings, Mich.
Flora, Mrs. J. A. Peckham.
Lady Assistant, Mrs. H. Harland, Weiser, Ida.

The Essential Feature.

The strength and future of any organization depends more on its ability to hold the interest and loyal support of its old members, rather than its ability to get new converts. While an organization that cannot get new life and blood is of necessity a dying organization, yet if it is not founded on principles worth while, if it is not sufficiently alive and active in carrying out these principles and in improving its members, the new converts will not be long in losing the faith. This is especially true in Grange work. We all know that our order is founded on sound and enduring principles, and as a rule tries to so interpret them, that all will have faith that the Grange is of permanent value to rural life. However, the best evidence that we have that this is true can be found in those Granges which week after week, month after month, and year after year, meet, open, go through the Grange order of business, and close, and are not only holding their own, but are gaining in interest and numbers. The Grange ritualism is beautiful, but that alone would not hold the members together; the unwritten work is inspiring, but it could not keep up the interest. The legislative features are very valuable, but many do not appreciate this fact; the business and co-operative opportunities are unlimited, but many do not use them; the fraternal tie is strong, but it alone is not sufficient. We look more closely and find it is the lecture hour, the educational and social side of the Grange that furnishes the "mystic tie which binds." It furnishes the side of Grange work when all can get something of value, something to enjoy.—L. J. TABER.

To work and not to genius I owe my success.—Daniel Webster.

Your Grandfather Read It
Your Father Read It
Are YOU Reading It?



Which Bull's-Eye Are You Aiming At?

Field Crops?

10,000 Bushels From 100 Acres tells you how one man has made a fortune from a run-down farm. Starting from less than you have, very likely, he has made his farm a wonder in the production of corn. Think what his methods—we'll tell you what they are—might do for you!

Doctoring Sick Soils is a lesson that will give you a physician's degree to diagnose the ailments of your land and prescribe for its cure. You can't expect soil that is sick to work for you successfully any more than a horse that is off his feed or a hired man who has a fever. You must give it the proper medicine and nurse it—we'll tell you how.

Better Breeds of Corn mean better yields of corn and better yields mean more money. The champion corn breeder of the country will tell you how he does it, and you have only to follow his example.

Beef Cattle?

Replanning the Stock Farm is one answer to your question. As it stands today your farm may not be planned for success with livestock. Why not make it over? Other men have made old farms new—we have the experience of a man who replanned a place that didn't pay \$450 a year so that it now returns him more than \$2500 a year. You can do it, too.

Cheaper Money—Cheaper Beef is another story you want to read. Interest charges amount to 42 per cent of the total cost of carrying a four-year-old steer to market in the Southwest. If money could be had at 4 per cent the producer would make more profit and meat would cost less to the consumer. One of the biggest beef raisers in the country tells you why.

Chickens?

The Little Farm Hen is the series of articles you must read. No farm is complete without its chickens, but many a farm would be better off without the mongrels that it keeps. Here's a complete course in poultry raising for profit—read it and make the little farm hen fill the family purse.

Orcharding?

Apples Without Plowing, by the sod-mulch system, is a way of growing big apples that you might adopt. You may be too busy to pay much attention to the orchard, but trees on rough land will help to take care of themselves if you follow this method.

Farm Management?

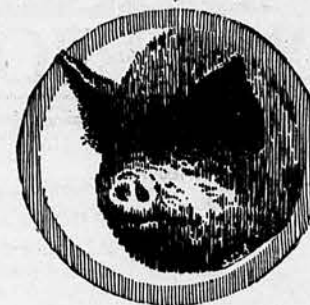
The Best Farm I Know is a series of articles from the West, the Northwest, the South, the Corn Belt, the Fruit Regions, written by experts who point out why certain farms are better than the general run. It will tell you how to manage your own place so it can get into the "best" class.

Better Marketing?

Advertising Farm Products is only one of the solutions of the problem of marketing that we shall give you. The manufacturer and the merchant advertise; why shouldn't the farmer? This valuable series of articles means better prices for your products.

Better Home Comforts?

The Woman's Department is a weekly magazine in itself for the wife and mother. If you want new recipes we have them. If you want new ideas in fancy work we have them. If you want the latest styles in dress we have them. If you are interested in short cuts in housework we'll explain them to you.



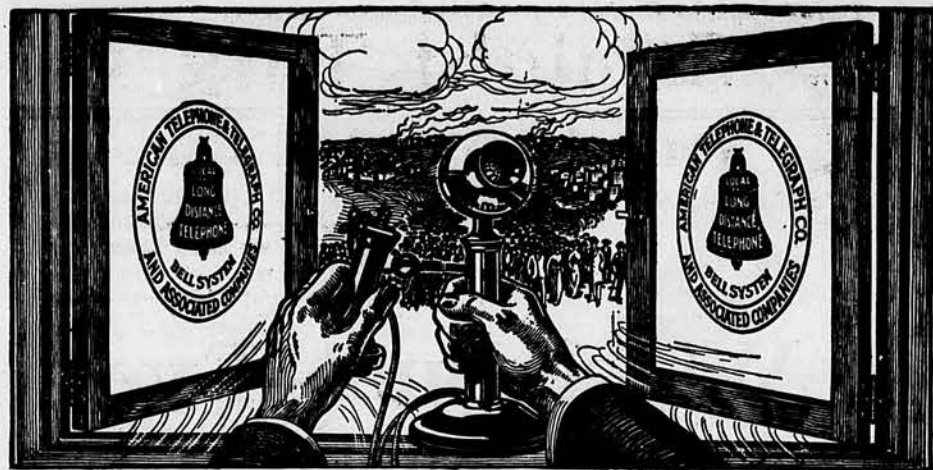
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MENTION KANSAS FARMER WHEN YOU WRITE.

DAIRY



We would urge upon farm dairymen that they attend the meeting of the Kansas State Dairy Association at Manhattan the first week in January. We think something can be learned at the meeting, but we are confident that much of benefit can be obtained through looking over the dairy herd, the dairy barns and the methods of feeding employed on the college farm.

The Michigan Agricultural College has developed the champion Brown Swiss cow. She was bred by that institution and in a recently completed rearing test produced 19,460 pounds of milk and 798.25 pounds of butter fat, or equivalent to 997.7 pounds of butter. The previous high record for a Brown Swiss cow was 16,609 pounds of milk and 815.5 pounds of butter. The Brown Swiss is a dairy breed of which more will be heard in the future. The animals of this breed are at present comparatively scarce and difficult to obtain.

Professor Smith, who has charge of the animal husbandry department of the Minnesota Agricultural College, believes that in the breeding associations, which are numerous in that state, it would be profitable that two sires be maintained—one a superior dairy sire, and the other a superior beef sire. It is his idea that the best milkers be bred to the dairy sire and the poorer to the beef sire. Evidently it is his opinion that the calves from the poor milking cows will be worth more as beef than as milkers, and that the offspring from the superior cows only will be such as should be kept for milking purposes. It is our opinion that Smith's idea will not work well, especially not on those farms on which only 10 to 15 cows can be kept. There is some difference between the handling of cows and young stock kept for beef and those kept for milk production. As Hoard's Dairyman wisely expresses the situation, "The dual-purpose dairy farmers who can successfully manage dual-purpose breeding are much scarcer" than Professor Smith imagines.

A few years ago it was decided that the ill health among the midshipmen of the U. S. Naval Academy at Annapolis was due to bad milk. Finally it was decided that the academy would produce its own milk, and thereupon established a dairy. J. A. Conover, a former Kansan, was placed in charge of the dairy farm. It is intended that the dairy not only provide good milk, but that it provide such milk at a less cost than that formerly purchased. The dairy is composed of 200 cows, with adequate buildings and equipment. It pleases us to know that Conover is in charge. If Kansas ever produced a thorough dairyman, Conover is that lad. Since the day he graduated from the dairy department of the Kansas Agricultural College he has held important positions connected with the industry. We do not know what Conover's salary is, but the point we desire to make is that the boy who is determined to get away from the common kind of farming can make more money for himself by specializing and making himself a competent servant along some line of agricultural activity, than he can in studying law, medicine, or some of the other learned professions. There is a demand for more thorough dairymen, farm demonstrators, etc.; there is no insistent demand for more doctors or lawyers. However, the young man who can make \$2,500 or more for himself running somebody else's business ought to be able to make more money than this running his own institution, if he can get the start.

It has been wisely said that the cow is a promoter of prosperity. This is so, absolutely, whether the cow be a dairy cow or a beef cow. In every section in this country, or in the world so far as we are able to know, agricultural prosperity has followed only when the cow—either of beef or dairy breeding—has been largely patronized. It is well understood that those feed crops which will maintain the beef breeding cow or which will produce a good flow of milk are of more certain growth than market grain crops. This is a fundamental principle very well understood and which

will be recognized by every farmer who gives it a moment of consideration. We have several times said that farming is a poor business if a single year of short rainfall be permitted to upset the success of several years past or possibly of a lifetime. The "off" year will not upset the farmer and cause him to dispose of his little live stock accumulation, if he has maintained well balanced farm operations. If he has been sufficiently thoughtful of the future to have a year's supply of feed ahead, and if he has diligently and intelligently endeavored to grow a crop of those feeds adapted to the conditions applying in his locality and which are recognized to be the most certain producers during a dry season, he will be able to maintain his herd. It is a serious mistake to at any time be placed in a position whereby the herd must be sold. Dozens of farmers in Kansas have this year been placed in that position. We are not criticizing these men; however, we are imploring them to look out for the next "off" year and if possible avoid a repetition of this year's experiences.

The question of calf feeding will not have become exhausted so long as there are calves to feed, and we presume that at no time so long as cows are milked will feeders fail to ask those questions as to how the skim milk calf should be fed. We have answered the question a thousand times, we suspect, in KANSAS FARMER, but in our mail this week it has several times been asked. We consider it necessary to feed the calf whole milk at least two weeks and, if possible, three weeks. It will not pay to fail in giving the calf a good start. We can afford to feed it approximately a gallon of milk a day for three weeks, in order to give it a good start. The first week or ten days it does not need a gallon of milk a day. If it did, how would those calves be reared which suckle their dams and which dams do not produce one gallon a day? There are thousands of such calf-rearing mothers in Kansas and in the United States. It is not necessary to feed as much milk as we are inclined to believe. At the time the calf has reached three weeks of age it will be nibbling a little hay and eating a little corn chop, kafir or milo meal. To be sure, if none of these feeds is available for the feeding of the calf and the substitution for the fat in the whole milk, then the rearing of the calf is difficult, and if it be reared well then some feed must be bought or whole milk must be fed. At the end of three weeks begin substituting skim milk gradually, and by the time the calf is eating well the whole milk may be discontinued and skim milk substituted for it. The theory of feeding calves is simple. Give the calf a good start on whole milk. Substitute skim milk just so soon as he is able to eat and consume in some other way the fats which have been removed from the skim milk.

Big Price for Bull Calf.

Another of the many examples illustrating the advantages accruing to the dairy interest generally from men of means taking up with the breeding of dairy animals, is that of William Galloway, the implement manufacturer of Waterloo, Iowa. A few years ago he decided to engage in the breeding of pure-bred Holsteins and Ayrshires. As is common with men of his kind, he bought as foundation stock the best animals of the best breeding of these two breeds. From the four corners of the country he centered on his farm the best blood of these breeds and has recently held an auction sale of his surplus, at which sale King Segis Pontiac Combination No. 94710 sold for \$3,500. A good likeness of this calf is shown above. The calf was 22 months old at the time of his sale. He was purchased by C. A. Nelson, Waverly, Iowa, one of the leading Holstein breeders of that state and a man who began breeding and patronizing Holsteins in a very small way some 12 to 15 years ago. Nelson's show ring success has been remarkable. His milk business has also developed wonderfully and the fact that he was able to pay \$3,500 for a bull calf is evidence of the money he has been able to make from his dairy.

LIVE STOCK



New K. S. A. C. Live Stock Expert.
Charles H. Taylor, of Shubert, Neb., has been selected to take charge of the animal husbandry work in the extension division of the Agricultural College. He is to take the place left vacant by the resignation of George C. Wheeler, now associate editor of KANSAS FARMER. Since graduating from the University of Missouri Mr. Taylor has been farming near Shubert, devoting much of his time to the growing of live stock. He will, in his new work, lecture at farmers' institutes over the state and in various ways serve the live stock interests of the farmers of the state.

Good Colts in Western Kansas.

One of KANSAS FARMER readers in Cheyenne County writes to us as follows regarding some good draft colts which he is raising: "I have two Percheron colts, weanlings, and two five-top cross Percheron yearlings. I weighed them the other day, leading them five miles to the scales. One weanling was seven months and eight days old and weighed 980 pounds, measuring 15 hands high; around forearm, 21 inches; below knee, 9 1/2 inches; around hock, 19 inches; girth, 5 feet 11 inches. The other one was five months and fifteen days old, and weighed 840 pounds, and is 14 1/2 hands high, 18 inches around forearm, 9 1/2 inches below knee, 18 1/2 inches around hock, 10 inches below hock, and a girth of five feet ten inches.

"Of the grades, one was seventeen months old to the day, and weighed 1,210 pounds; the other was seventeen months and ten days old, and weighed 1,240 pounds. These two colts have not had any alfalfa, only wild hay and cane and two quarts of rye and oats twice a day. We have two imported mares three years old last May that weigh 3,640 pounds. They have been working all fall."

Such reports are very interesting, especially coming as this one does from the short-grass country of far Western Kansas. Let's have more of them.

Meeting of Kansas Dairymen.

The annual meeting of the Kansas State Dairy Association will be held in Dairy Hall at Manhattan, Friday, January 2, 1914. This date is just after the close of the State Farmers' Institute and is arranged at this time to accommodate those who want to attend both the State Institute and the Dairy Association meetings. This meeting will be given over to talks by well known men on practical subjects pertaining to dairying and to the inspection of the college dairy herd, and the milk and butter that will be on exhibit. Under the auspices of the Association and in connection with this meeting a dairy butter, milk, and creamery butter contest will be held in which suitable prizes will be awarded for the best five pounds of dairy farm butter, the best sample of milk and the best ten-pound tub of creamery butter. The program is:

President's address, J. G. Christ, Fort Scott; The Dickinson County Cow Testing Association, George Lenhart, Abilene; with discussion by S. Goldsmith, Abilene; Dairy Farm Management, A. S. Neale, K. S. A. C.; with discussion by Ben Schneider, Nortonville; P. W. Enns, Newton; J. B. Porter, Mayetta; Tuberculosis Regulation of Kansas Dairy Cattle, Dr. E. F. Kubin, McPherson; with discussion by Al Howard, Tonganoxie; D. T. Williams, Belleville; F. L. Huxtable, Wichita; Building Up Kansas Dairy Herds, Prof. O. E. Reed, Manhattan, with discussion by R. C. Krueger, Burlington; G. E. Merritt, Great Bend; Chester Thomas, Waterville; Dairying on the Kansas Farm, T. A. Borman, editor Kansas Farmer, with discussion by Dr. O. H. Simpson, Dodge City; R. C. Obrecht, Topeka; H. N. Holde-man, Meade; Relation of Creamerymen to Farmers, William Lutt, Concordia.

K. S. A. C. Stock Win \$600 at Chicago.
Nearly \$600 in prizes was won by the seventeen steers exhibited at the International Live Stock Exposition this month by the Kansas Agricultural College.

Of the pure-bred Shorthorn steers, Delighted, a junior yearling, stood first in his class. College Boy was first as senior calf, first in college specials, and reserve champion of all Shorthorns under one year. Among the junior calves, Golden Dale was first, and Kansas Dale fifth.

In the pure-bred Hereford classes, Greenwood was placed fourth in the two-year-old class. Beau Talent and Fancy Beau were second and third prize junior yearlings, and Beau Hazen, a junior calf, took second in his class.

Among the grade Herefords, Maple Boy was fifth as a two-year-old. College Mina 2d received second prize in the yearling class. Mischievous stood third in the group of calves.

Dr. Hendricks, the two-year-old pure-bred Aberdeen Angus, was awarded first in a class having twenty-two entries. Medalist, pure-bred junior yearling Gal-loway, received first in the yearling class and was reserve champion of the breed.

First and fifth prizes were won on grade Shropshire lambs, also, and third on a pen of five yearling wethers.

Leslie Ross, who is college herdsman, fitted and exhibited these cattle for the department of animal husbandry. Fred Kays, a student in animal husbandry, had charge of the sheep.

Dairy Cows for Hog Farm.

An Eastern Kansas reader of KANSAS FARMER who has been unusually successful in developing a high-class herd of breeding hogs, writes to us regarding the desirability of putting in a small herd of cows on his place. He feels the necessity of introducing into his farm management system some method whereby the low-grade material on the farm which can not be used by the hogs can be profitably marketed. The principal question seems to be whether it would be advisable to select strictly dairy-bred cows or to use dual-purpose animals, such as the Red Poll or the milking Shorthorn. With the standing our correspondent has in the pure-bred hog business, the production of breeding hogs will undoubtedly continue to be the specialty feature of his farming operations.

The handling of a few good dairy cows makes a splendid side line to go with the hog business. Since a large amount of skimmed milk is a very important item in handling hogs, the Jersey would not be as satisfactory a dairy animal as the Holstein, from the viewpoint of the writer, who is somewhat familiar with the farming operations of this correspondent. It would seem that it would be desirable to secure the largest amount of milk possible from a comparatively small number of animals. The use of dual-purpose cows for this purpose would mean that more cows would have to be milked to get the same amount of milk, and a third line of business would be introduced on the farm, namely, the handling and disposing of beef animals.

Pure-bred cows will, of course, cost two or three times as much as high-grade cows, and perhaps merely from the standpoint of milk production would not be much if any more profitable than carefully selected high-grade animals. When it comes to the disposition of the surplus, the registered animals will command higher prices than grades. This is especially true as regards the male calves. There is a strong demand for good dairy stock, even grade cows bringing comparatively high prices. There will be little difficulty in disposing of the surplus heifers from a well selected dairy herd, even though this herd be high-grade only. Of course a high-class registered sire must be owned or available, even if the cows of the herd are not registered.

If the labor of the farm can be so adjusted as to properly handle a few carefully selected dairy bred animals it would seem that the adding of this project to the well established hog business of the farm might be especially desirable from the standpoint of securing larger returns from the farming operations.

In starting a small herd of this kind, whether the first cows purchased be pure breeds or grades, the cows should undoubtedly be selected with a great deal of care, paying especial attention to the matter of the production records of the individuals themselves, and their immediate ancestors. In a small herd of this kind a few inferior cows could easily make the whole herd unprofitable.

"Kansas and Missouri need a great awakening to the need of improving and caring for orchards," remarked George A. Marshall of Arlington, Neb., recently. "Right now the apple men of the Missouri Valley have the growers of the Northwest scared, and the value of the orchards of Iowa, Nebraska and Kansas has more than doubled within the last three years."

Straight Talk on Plows—No. 3

In our previous talks on Plows, we have explained that the most vital feature of any plow is its share. Also, we have told you of the discovery of the wonderful ACME Steel which is used in making our famous ACME Steel Shares and Moldboards. Now let us consider this subject a little further:

Let us suppose you are in a store selecting a razor or a knife—you are undecided which one of the two to buy. They are practically the same price—each has an attractive handle and highly polished blade, but one has a fine steel blade that you can re-sharpen—it will retain its original hardness as long as you use it—while the other has a blade which will not hold an edge after you have sharpened it the first time and soon becomes dull.

Which one would you buy—the one that will stand re-sharpening, of course. All new plows are attractively painted—they all have their foot lift, etc.—the shares are all bright and sharp when new—in fact, to the naked eye there are several plows that look very much alike. So then in selecting a plow remember the SHARE is the blade of the plow and that is what you should consider, just as you do when you buy a razor or a knife.

You should demand a Plow with a Share that can be successfully re-tempered every time it is sharpened. You should demand a Share that you can keep as hard as new and with a sharp, keen cutting edge all the time.



Numerous heavy blows can't break ACME Shares.

Acme Steel Shares

are the only Shares that can be successfully re-tempered after re-sharpening. They are the only Shares that can be kept as sharp and hard as new during their entire life.

They have the quality of steel in them that no other plow share has or can have, because they are made by our own patented secret process, in our own factory and they are used only on Plows manufactured by the Moline Plow Co.

ACME Shares hold a hard, sharp, keen cutting edge. This means light draft—more acres per day and the best plowing you have ever done.



One light blow easily breaks other Shares.

More than 1,000,000 farmers will testify to this. A gilt-edge Guarantee goes with every ACME Steel Share. It guarantees that you or your blacksmith will not break it in the field or in the fire.

Our Free Booklet is full of valuable information on Plow Shares and Plows. Write for it. OUR 1914 ALMANAC FREE. WRITE TODAY.

Your Flying Dutchman Implement Dealer sells MOLINE PLOWS with ACME Steel Shares—see him.



Best Ever

Moline Plow Co.

Dept. 4
MOLINE, ILLINOIS



Good Enough

SHORTHORN CATTLE

SHORTHORN CATTLE

LOOKABAUGH'S SHORTHORNS.
At private sale, six or nine months' time if desired. Young heifers and bulls, \$100 and up. Two heifers and bull, not related, \$225 for the three. Others higher. High-class herd bulls close to imported Scotch dams, sired by such sires as Lavender Lord by Avondale. Nicely bred young heifers from milking strains. Young bulls, the farmer's kind. Cows with calf at foot and rebred. Great variety of prize-winning blood. If you want breeding stock, do not miss this opportunity. My foundation Shorthorns carry the blood of the best families and most noted sires of breed. Over 200 head from which to select. If you cannot come, write.
H. C. LOOKABAUGH, Watonga, Blaine County, Oklahoma.



Pearl Shorthorn Herd

Yearling bulls all sold. Have 20 bull calves, oldest a March calf. Reds, roans and red with white marks. Some of them from extra heavy milking dams. Some sired by the big roan Scotch bull, Valiant, and some by Highland Chief. Few coming two. Visitors always welcome.

C. W. TAYLOR
Abilene, Kansas

TOMSON BROS.' SHORTHORNS

200 HIGH-CLASS CATTLE, 20 leading Scotch families, other standard sorts also. We offer 20 heifers, yearlings and two-year-olds, choice breeding and quality; 10 select bulls of Augustus, Victoria and other Scotch families; breeding stock of all ages. Address either farm. Jas. G. Tomson, Carbon-dale, Kan., R. R. station Wakarusa, on main line Santa Fe, or Jno. R. Tomson, Dover, Kan., R. R. station Willard, on main line Rock Island.

Cedar Lawn SHORTHORNS

For Sale—Six choice young bulls ready for service, in age from ten to fourteen months. Good individuals and of the best known Shorthorn families. Also few big-type Poland China boars and gilts. Inspection invited.
S. B. AMCOATS, Clay Center, Kan.

MARCH BULL CALF.

Big and beefy, nice red, just right for few cows next summer. Few cows and heifers bred to our beefiest bulls. Write or come and we will show you.
JEWELL BROTHERS, Humboldt, Kansas.

SEAL'S MILKING SHORTHORNS.
Eight choice young red coming yearling bulls, sired by Seal's Gauntlet, grandson of Gifford's Red Gauntlet. Same number of choice young heifers. Attractive prices for a short time. Joseph Seal, Wakefield, Kan.

Springdale Shorthorn Herd

Headed by Athens' Scotchman, a son of the noted Athens Victor. Cows represent the very best milking families. Herd numbers about 70 for sale; 15 choice young red bulls, the blocky, beefy kind. Also 50 Silver Laced Wyandotte Cockerels. Inspection is invited.
Alvin Tennyson, Lamar, (Ottawa Co.) Kan.

Dual Shorthorns, Hornless. 5415 1/2 pounds butter sold 1911. No calf tasted skim milk. Infant male calves. J. H. Walker, Lathrop, Mo.

ANGUS CATTLE

CHOICE REGISTERED ANGUS CATTLE
Cows, heifers and young bulls. Nothing but the best. Wire, write or 'phone.
R. S. WILLIAMS, LIBERTY, MO.
Excelsior Springs car line route. Only 14 miles from Kansas City. Car every 45 minutes. Home 'phone 262.

REGISTERED ANGUS BULLS

For Sale—Choice young herd bulls, from best families; also registered Poland China boars and gilts of extra quality. Prices reasonable. Write at once.
K. H. BROWN, Bolivar, Polk Co., Missouri.

J. R. Jackson, proprietor of Clear Creek Duroc Jersey farm at Kanopolis, Kan., is changing his ad this week, making a special offer on two May boars from a Good Enough King sow. These two boars are being offered at a bargain. If interested, write Mr. Jackson, kindly mentioning Kansas Farmer.

REDUCE YOUR FEEDING COST ONE HALF!



BLISS-FED MOLASSES fits live stock for "top market" quicker, better and cheaper than any other feed. Contains the elements necessary for quick building of bone, muscle and fat. Makes young animals "grow like weeds." Increases milk yield. One gallon of BLISS-FED at 19c is equal to one bushel of corn. Stock eats wheat straw and other low-grade roughage greedily when mixed or sprayed with BLISS-FED. Stimulates the appetite and aids digestion. Mix your own ration to suit your needs.

FEED HALF A BARREL AT OUR RISK Send cash with order for one or more (56 gallon) barrels at \$10.64 a barrel, freight paid by us to points within 200 miles of Kansas City. Feed half a barrel and if not satisfied return what is left and we will refund your money. You don't risk a cent. Order today.

FEEDING DEPT.

BLISS SYRUP REFINING CO.

941 Hickory St., Kansas City, Mo.

HOLSTEIN CATTLE.



Pure-bred Registered HOLSTEIN CATTLE

The successful dairyman has judgment, business ability and courage. Cutting down expenses is not enough. He must know how to invest.

Apply business methods to your farm. Keep a record of the net profit from each cow and you'll soon convince yourself of the economy of putting your money into efficient milkers.

You'll find one good Holstein will do the work of two, perhaps three, ordinary cows. You save greatly on feed, and divide the expense of housing and labor by two or three.

Send for **FREE** Illustrated Descriptive Booklets.

Holstein-Friesian Assoc., F. L. Houghton, Sec'y, Box 114, Brattleboro, Vt.

Bonnie Brae Holsteins

80 Head of high-grade Holstein heifers and cows from 2 to 6 years of age. A number just fresh. All to freshen this fall and winter. Also a few young bulls, high grade and registered.

IRA ROMIG, Station B, Topeka, Kansas.

SUNFLOWER HERD—A Herd Sire, Hill-top Pontiac Abbecker, 116019, Born January 16, 1913. Dam, 21 pounds at 4 years. Twenty of his nearest tested dams average 25 pounds butter, 7 days. Mostly white, a choice individual, ready for service. Price, \$250. Other good ones, \$150 up. Bull calves, \$100 up. The best are the cheapest.

F. J. SEARLE, Oskaloosa, Kan.

M. E. MOORE & CO.

CAMERON, MISSOURI. Choice young Holstein cows and heifers for sale. Also few young bulls. Tuberculin tested.

PURE-BRED SELECTED HOLSTEINS.

We now have about 50 head cows, three to six years old, mostly springers, some to freshen soon; 12 head two year old first calf heifers; a few young bulls. Cows are high grade and bred to registered bulls. Edmunds & Young, Council Grove, Kansas.

We will have a car of **HIGH-CLASS HEAVY SPRINGING GRADE HOLSTEIN COWS**

for sale at Manhattan, Kan., during the week of the Farmers' Short Course at the Kansas State Agricultural College. **ARNOLD & BRADY, MANHATTAN, KAN.**

HOLSTEINS FOR SALE.

Large registered bulls, cows and heifers. Also five carloads of grade cows and heifers. Our herd is state inspected and tuberculin tested.

THE SPRINGDALE STOCK RANCH. Concordia, Kansas.

For Sale—Fine Holstein bull 15 months old, sired by Butter Boy; extra good calf. Also good milk cow.

DR. E. G. L. HARBOUR, Baldwin, Kan.

CHENANGO VALLEY GRADE HOLSTEINS Two hundred nicely marked well-bred young cows and heifers, due to freshen within the next three months. Also registered bulls ready for service.

F. J. HOWARD, Bouckville, N. Y.

HOLSTON'S HOLSTEINS.

Home of Madison Diamond DeKol 94475, one-day milk record 101 pounds 10 ounces. Six bulls for sale, calves to yearlings, grandsons Madison Diamond DeKol. One Pontiac bred bull. **CHAS. HOLSTON & SONS, R. 1, Topeka, Kan.**

COOKE'S HOLSTEINS.

Cows 3 years or older, \$225 to \$600. Nothing cheaper. No heifers or heifer calves for sale. Bulls 4 to 10 months, \$125 to \$175. Mostly sired by grandson of Pontiac Korn-dyke.

S. W. COOKE & SONS, Maysville, Mo.

HOLSTEIN BULL CALVES always on hand, and worth the price.

H. B. COWLES, Topeka, Kansas.

BUTTER BRED HOLSTEINS.

For Sale—Some choice bull calves. Prices very reasonable. Write me your wants today, as these bargains will not last long.

J. F. MAST, Scranton, Kan.

When writing advertisers, please mention KANSAS FARMER.

POULTRY

Poultry shows are now in full swing and ought to be patronized by every intelligent poultryman.

If you haven't any birds to show, attend the exhibitions anyhow and see how other people are raising good birds.

There will be three large poultry shows in Kansas next month, and all worthy of a big attendance. Independence and Hutchinson hold their shows the same week, January 5 to 10, while the state show holds forth at Wichita January 12 to 17.

Those who contemplate buying an incubator the coming season, should send to the manufacturers of the ones advertised in this paper and get their catalogs. There is no one best incubator, but all have good points. Study the catalogs carefully and buy the incubator that appeals most to your common sense ideas of incubators.

W. F. Holcomb, manager of the Nebraska Poultry Co., Clay Center, Neb., has planned a pure-air poultry house that will be a boon to all farmers. It is inexpensive, and means healthy poultry, more eggs and less work. He has the same kind of houses in practical use on his poultry farms. Mr. Holcomb will send plans and specifications free to anybody contemplating building a poultry house.

Charles M. Schwab, the steel magnate, is one of the latest recruits to the poultry business. Mr. Schwab is having an extensive poultry plant built on his farm at Loretto, Penn., and he will engage in poultry raising on a large scale. The buildings are to be of concrete and brick and will be steam heated and lighted with electricity. We wonder if he will adopt the same tactics in the poultry business that he did in the steel trade, that is, buy in other poultry plants and have the only exclusive plant in the United States.

A correspondent wishes to know whether the duty on imported eggs has been taken off. Yes, the new tariff bill admits eggs in the shell free. Frozen or preserved eggs, 2 cents per pound duty. Dried eggs, 10 cents per pound. The tariff has also been reduced on poultry, both alive and dressed. Alive is taxed 1 cent per pound and dressed 2 cents per pound. Notwithstanding the fear of farmers and egg dealers that the reduction of the duty on eggs would hurt their business, the price of fresh eggs in this country has never been higher than it is at the present time. There is no danger of "free" eggs ever reducing the price of eggs enough to hurt anybody.

Advanced Price of Eggs.

Fresh eggs have advanced in price at New York 66 per cent in the last seven years, according to figures made public by the United States Bureau of Labor. Strictly fresh, of the best standard quality, they were selling in that city at retail on November 15 last at 75 cents a dozen, as against 46 cents a dozen on November 15, 1907. The rise on those dates has been almost steady—53 cents in 1908, 50 cents in 1909, 53 cents in 1910, 60 cents in 1911 and 66 cents in 1912. Those are the average top prices at retail merchants.

New York has had to pay this winter the highest prices in the United States for fresh eggs. In Boston, which is further than the metropolis from the laying hens, the highest on November 15 was 67 cents a dozen; at New Haven it was 65, and at Providence, R. I., 65. The price at Chicago was 46; at Cincinnati, 48; at Denver, 50; at Philadelphia, 60; at St. Louis, 42; at San Francisco, 65; at Washington, D. C., 60. At Charleston, S. C., and Little Rock, Ark., on November 15 last fresh eggs sold at the lowest price in the country, 40 cents a dozen.

At Boston the rise in egg prices since 1907 has been about 33 per cent; at Chicago, 33 per cent; at Cincinnati, 72 per cent; at Philadelphia, 43 per cent; at St. Louis, 10 per cent; at San Francisco, 8 per cent.

Doctor Rommel of the Department of Agriculture today told a House committee that the government is experimenting to increase the egg laying capacity of the American hen. Children's Poultry clubs are being organized all over the country.

At Chicago today C. B. Morrison, Master in Chancery, reported to the

PURE BRED POULTRY

PLYMOUTH ROCKS.

BARRED ROCK COCKERELS, THOROUGHbred. Strong bony fellows, fine color, \$1.50 each. H. H. Unruh, Hillsboro, Kan.

BARRED ROCKS—66 PREMIUMS. Choice cockerels, \$3 each and up. Mrs. D. M. Gillespie, Clay Center, Kan.

BUFF ROCK COCKERELS, \$5 EACH, TO make room. Fine big fellows. Satisfaction guaranteed. C. R. Baker, Box 3, Abilene, Kan.

BARRED ROCKS.—I HAVE SEVERAL cockerels from my state show birds for sale. Write me. A. T. Edwards, Plains, Kan.

BARRED PLYMOUTH ROCKS FOR sale. Cockerels at \$2; pullets and last year's hens at \$1 each. Four male and four female Hampshire pigs for sale. E. S. Tallaferrro, Route 3, Russell, Kan.

BARRED ROCK COCKERELS—UTILITY birds for the farm flock, hatched from mated pens. Light color, \$2.00 each; medium and dark, \$3.00 to \$5.00. C. C. Lindamood, Walton, Kan.

WHITE ROCKS—BRED FROM OUR Missouri State, Kansas City, Little Rock, Jefferson City and Western Missouri winners. Four good hens and a cockerel, \$10.00. Edelstein Heights Farm, Harrisonville, Mo.

SEVERAL BREEDS

TURKEYS, CHICKENS, DUCKS, GEESE. Emma Ahlstedt, Roxbury, Kan.

WHITE ROCKS AND PEKIN DUCKS for sale. C. Herron, Hope, Ind.

PAYING 16 CENTS FOR STRAIGHT coops hen turkeys; young toms, 14c; old toms, 13c; springs, 12½c; stags, 10c; H. hens, 12c; ducks, 11c; geese, 10c. Coops loaned free. Daily remittances. The Cope's, Topeka, Kan.

SIXTY VARIETIES—BLUE RIBBON birds at all the big shows, such as the State Fair and Kansas State Shows. Some splendid birds for winter shows or breeding. Some in all varieties for sale. Western Home Poultry Yards, St. John, Kan.

DUCKS AND GEESE.

CHOICE INDIAN RUNNERS.—DUCKS, \$1.50; drakes, \$1.25. Mrs. E. M. Jones, Granger, Mo.

ENGLISH INDIAN RUNNER DUCKS— Brown breasted, rich in color. Eggs only. Booking orders. Louis McDonald, Topeka.

INDIAN RUNNER DUCKS, FAWN AND white ducks and drakes, \$1.00 each. Ducks are now laying. H. D. Williams, Brunswick, Mo.

ORPINGTONS.

CHOICE PURE-BRED S. O. BUFF Orpington cockerels one dollar each. Wm. Gutzmer, Le Roy, Kansas.

FOR SALE—BUFF ORPINGTONS, COCK- erels, \$3 to \$10; pullets, \$2 to \$5. J. C. Baughman, Topeka, Kan.

BUFF ORPINGTONS, S. C. BROWN LEG- horns. I have some extra nice birds for sale. G. F. Koch, Jr., Ellinwood, Kan.

SINGLE COMB WHITE ORPINGTONS— From St. Louis 1913 winners. Pens, \$20.00 and up, according to quality. W. G. Langehenig, Jackson, Mo.

S. C. WHITE ORPINGTON COCKERELS—Every bird from son of first cockerel, Madison Square, New York, 1911. Every bird shipped on approval. If not satisfactory, return at my expense. \$2.50 to \$5.00. Ed Granerhotz, Esbon, Kan.

LANGSHANS.

BIG-BONED DARK-EYED GREENISH glossy black Langshans, \$2.50 each. Guaranteed. H. Osterfoss, Hedrick, Iowa.

BLACK LANGSHANS—CLOSING OUT half price to make room. A few good Houdan cockerels. Write E. D. Hartzell, Rossville, Kan.

United States District court that the evidence he has taken shows that the Chicago Butter and Egg Board fixed artificial prices until it was abolished last February. Prices also have been fixed in the same way by the Elgin, Ill., Board of Trade, the Master states. The court will pass on his report later. The suit is a civil action, under the Sherman law. The decision will be a guide to Federal action against offending boards in other cities.

Doctor Mary E. Pennington, in charge of food research work of the Department of Agriculture, told the House Agriculture committee that frozen and dried eggs would solve the problem of high prices and cold storage corners.

"Frozen and dried eggs," said Doctor Pennington, "soon will be marketed in small packages so as to be available to every household instead of for bakers as at present. Hard frozen eggs will keep a year."

Eggs cannot be kept in cold storage and be fit for food longer than ten months, she asserted.

Baxter Writes.

Joseph Baxter, Poll Durham breeder at Clay Center, writes that he is selling stock right along through his advertising in Kansas Farmer. He sold two young bulls last week, one going to George F. Sullivan of Rice, Colo. This was an eight-months-old calf and sold for \$200. Mr. Sullivan writes as though this was the greatest animal ever brought to his part of the state. Mr. Baxter asks us to change his card so as to offer 12 registered Shorthorn cows in calf to the Poll Durham bull, Scottish Baron. This bull weighs 2,200 pounds. He and several young ones are for sale.

Big Money in Poultry Get the Facts!

are making money the Belle City way. They tell you how in my new Book of "Hatching Facts." Free to you. Illustrates in actual colors my 8-Times World's Champion Belle City. You get an exact duplicate of the prize winning World's Champion machine. Backed by my Money-Back Guaranty. Jim Mohan, Pres. Belle City Incubator Co., Box 18, Racine, Wis.

BOWSER SWEEP MILLS

Different from all others. Grind Corn with husks. Haver in the head and all kinds of small grain, 4 and 5 bushel mills. (Also make 10 sizes of belt mills) FREE—Send for "Facts and Figures" C. L. P. Bowser Co., South Bend, Ind.

PURE BRED POULTRY

LEGHORNS

FINE S. C. WHITE LEGHORNS. ALEX Spong, Chanute, Kan.

FOR SALE—FINE S. C. WHITE LEG- horns; cockerels, \$1 each. Mr. James Peterson, Box 454, Hays, Kan.

ROSE COMB BROWN LEGHORNS FROM prize winning stock. Cockerels and pullets, \$1 each and better also tris and pens. Mrs. J. E. Wright, Wilmore, Kan.

FINE SINGLE COMB WHITE LEGHORN cockerels, prize winning stock, \$1 to \$1.50. White Holland Turkeys, hens, \$2; toms, \$4. Mrs. Frank Odle, Wamego, Kan.

WALLACE'S S. C. W. LEGHORNS WON at Des Moines, December, 1913: 1st cock, 2d hen, 1st, 3d cockerel; 1st, 2d, 3d, 5th pullet; sweepstakes. Mediterranean male. W. F. Wallace, Diagonal, Iowa.

TURKEYS

BOURBON RED TURKEY TOMS FOR sale. Emma Avery, Woodston, Kan.

PURE-BRED WHITE HOLLAND TUR- keys. Winnie Litton, Peabody, Kansas.

BOURBON RED TURKEYS.—MRS. PAUL Bushkowsky, Whitewater, Kan.

BOURBON RED TURKEYS, BUFF ROCK chickens. C. S. Hart & Sons, Milan, Mo.

FINE BOURBON RED TURKEY TOMS, \$4.50 each. Victor Bull, Marietta, Kan.

LARGE MAMMOTH BRONZE TURKEYS not related to stock sold previous years. Sadie Litton, Peabody, Kan.

CHOICE MAMMOTH WHITE HOLLAND toms, \$5 each. Mrs. W. U. Stevens, Paradise, Kan.

BOURBON RED TURKEYS—FINE PURE- bred birds. Toms, \$4.50; hens, \$3.50. Chas. Crane, Conway Springs, Kan.

PURE-BRED BOURBON RED TURKEYS, Buff and White Orpington Partridge Rock chickens. A. M. Farmer, Pratt, Kan.

BOURBON RED TURKEYS—THOR- oughbred young toms and hens for sale. W. H. Oliver, Reger, Mo.

FOR SALE—MAMMOTH BRONZE TUR- keys, White Wyandotte cockerels. Alex Thomason, Havana, Kan.

WHITE HOLLAND TURKEY TOMS, \$3; hens, \$2. H. F. Fritzmeyer, Route 5, Box 15, Stafford, Kan.

MAMMOTH BRONZE TURKEYS.—20 toms, weight 20 lbs. extra choice, \$3.50 each; 12 hens, \$2.25 each. These prices for 30 days. C. F. Behrent, Oronoque, Norton Co., Kan.

WYANDOTTES

WHITE WYANDOTTES, 80 CENTS TO \$3.00. Mrs. E. S. Louk, Michigan Valley, Kan.

GOOD HEALTHY COCKERELS AND pullets in Silver Wyandottes. Prices reasonable. H. L. Brunner, Newton, Kan.

BUFF WYANDOTTES—CHOICE BREED- ing stock at all times. A few good cockerels on hand. Must be taken soon. Wheeler & Wylie, Manhattan, Kan.

WHITE WYANDOTTES, NONE BETTER in state. Have shape and color and great layers. Write your needs. Alford & Talbott, Yards 823 Fourth, Hutchinson, Kan.

PARTRIDGE WYANDOTTES—GREAT winnings at Kansas State Fair, Hutchinson. Stock for sale. Write me. Dr. E. P. Cressler, Peabody, Kan.

WHITE WYANDOTTES.—MY BIRDS also made a clean sweep at the American Royal Live Stock Show at Kansas City this fall. If in need of a good breeder of birds to win at your show this winter, write me. My birds are winning everything in sight wherever they go. N. Kornhaus, Peabody, Kan.

BUFF COCHINS.

FOR SALE—BUFF COCHINS; COCKS, cockerels, hens and pullets. Utility and show stock. J. C. Baughman, Topeka, Kan.

RHODE ISLAND REDS

S. C. REDS—FINE DARK RED COCK- erels, \$1.00 each until January 1. Harry Dickson, Blue Rapids, Kan.

PURE-BRED S. C. R. I. RED COCKER- els. Mammoth Bronze Turkeys. John W. Henry, Osborne, Kansas.

ROSE COMB RED COCKERELS, \$2, \$5. White Indian Runner Drakes, \$1. Satisfaction guaranteed. C. Thompson, Orlando, Okla.

WALKER'S STANDARD STRAIN OF S. C. Reds. Stock and eggs. Quality and prices made attractive. Address Walker Poultry Co., Chillicothe, Mo.

ANCONAS.

COCKERELS—ANCONAS, REDS, PEN- celled Drakes, Bourbon Red Turkeys. Mrs. Frank Wallace, Weldon, Iowa.

HOME CIRCLE

A piece of asbestos laid across the top of the stove will aid materially in making toast.

It is said that paste will never spoil if you use vinegar instead of water to thin it.

Light brown wrapping paper is said to be excellent to use for pressing trousers and skirts. It does away with water and damp cloths and makes better plaits and creases.

If you have been unfortunate enough to get too much salt in a dish, the trouble may be rectified by adding to the dish a teaspoonful of sugar dissolved in a teaspoonful of vinegar.

At the present time when eggs are so scarce the following suggestion may be worth while: Instead of using an egg in a pumpkin pie, use a heaping teaspoonful each of flour and corn meal. It is said to be difficult to detect the difference in taste or color.

As we are likely at some time to scorch a garment in pressing it, the following suggestion may be worth remembering. Immediately after scorching a white waist, according to the writer, she rubbed the spot with a cloth dipped in dilute peroxide, ran the iron over it, and the waist was as white as before.

If the ceiling has become soiled from a smoky lamp, the following treatment, it is said, will remove the discoloration: Mix a thick paste of starch and water and with a clean flannel cloth spread it over the entire mark. Allow it to stay on until thoroughly dry, then brush off with a soft brush.

Mose's employer gave him a dollar with which to purchase a chicken. It was the biggest piece of silver Mose had ever handled, and before parting with it he took it to show to his mammy, who, on learning what he was told to do with it, said: "Here, you Mose, you done gib dat dollar to yo' mammy. De idea of you payin' a dollah fo' a chicken! Who evah heerd tell ob such a thing! You jes' hike off and git dat chicken in de natcher way."

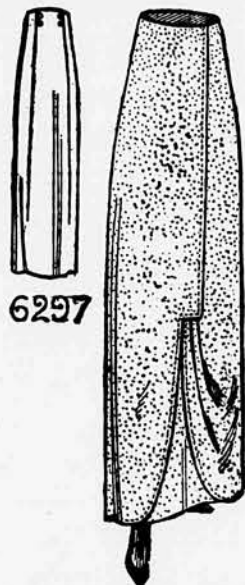
Uses for Old Velvet.

A bit of velvet is a fine cleaner for brass, and for polishing silverware it is better than chamois. It quickly removes the dust from woodwork, and if used to rub the stove after it has been blacked it will produce a high polish. There is nothing better to dust a felt hat, and silk gowns and other silk articles should always be dusted with it, for it cleans perfectly without cutting or otherwise injuring the silk.—Mrs. L. O'B., California.

Queer Ironing.

A writer says that the most curious sight he saw at Cairo was men ironing clothes with their feet. The men were employed in the native tailoring establishments.

Except for the long handle, the irons were shaped like the ordinary flatiron, only larger. A solid block of wood rested on the top of the iron, and on this the men placed one foot, guiding the iron in the desired direction by means of the handle. For the sake of



6297

No. 6297—Ladies' Three Gore Skirt. This model shows one of the newer styles for tailored skirts. It opens in front, where the material is slightly draped at about knee depth. A small V-shaped piece fills in the opening at the feet. Not only tailored goods but also soft silks and crepe materials will make up well in this style. The skirt pattern, No. 6297, is cut in sizes 22 to 30 inches waist measure. Medium size requires 2½ yards of 44-inch material. Price of pattern, 10 cents.

convenience, ironing boards were raised only a few inches from the ground, and, however strange the method may seem to us, the work was done very well and very expeditiously.

Dutch Proposal.

A curious old custom still exists in many provinces of Holland. If a young man is in love with a girl and wishes to ask her hand in marriage, he goes about it in the following manner:

He buys a small sweet cake, and wrapping it up in soft paper, proceeds to the house of his innamorata; upon his arrival he is ushered into the midst of the family circle; without a word he walks up to the young woman he wishes to make his wife, and he lays the cake on the table before her.

The rest of the family affect not to notice anything unusual, and continue their work or their reading. The young man turns aside and talks to the father or mother on some very ordinary subject, keeping his eyes eagerly fixed on the girl's face while he is conversing.

If she accepts his offer, she takes up the cake and eats it. Sometimes, though Dutch, she is coquettish, and tortures the young man by turning it over and playing with it before she decides to bite it, and then enraptures him by eating it to the last crumb.

If, on the other hand, she wishes to have nothing more to do with her admirer, she quickly wraps the cake in its covering and puts it back on the table. In this case the young man takes up the cake, satisfied with his refusal, and with a "Vaarvoal byzamen!" leaves the house. The matter is then kept a profound secret by all the members of both families and the outer world never hears of it.

If, on the other hand, the affair progresses favorably and the suitor is accepted, the father takes him on one side to ask about his business prospects and if he can afford to take his wife for a wedding journey up the Rhine, the ideal wedding journey of all Dutchmen. The girl, in a case of this sort, does not go into society for about six weeks. At the end of that time she reappears at balls and parties and is not thought any the less of or shunned by young men who wish to marry, as she would be either in France or Germany.—The American Woman.



At Last The Perfect Oil Heater!

Constant, unchanging heat through every hour of burning, whether the fount holds one gallon or one pint of oil.

With a clear, steady flame that gives clean, odorless heat—no waning and no smell as the oil in the fount gets low. No danger of smoking—a patented lock flame spreader keeps the wick at the proper height—you can't even turn it up to the smoking point.

And no trouble to re-wick. In this newest Perfection wick and carrier are combined. Fresh wicks and carrier come all ready for replacement—trimmed, smooth and ready to light. You have only to turn out the old and slip in the new.

PERFECTION SMOKELESS OIL HEATER

All these wonderful improvements, found in no other heater, are yours in addition to delightful comfort, convenience, and agreeable economy.

You can postpone your regular fires for a month with this handy little stove to take from room to room, wherever you need it, and never have an uncomfortable minute. Ready by striking a match—no fuel to carry or ashes to clean.

Useful all winter in out-of-the-way rooms that are difficult to heat. Drives out chill and dampness in early spring and summer.

Your dealer will have the different Perfection models—see them now before the first chilly days bring discomfort. Descriptive booklet gladly mailed free. Just send us your name on a postal.

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(AN INDIANA CORPORATION)
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**Look for the Triangle
for Warmth, Comfort
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**Burns 10 Hours on
One Gallon of Oil**

**Oil Fount Holds
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**To Trim, Wipe Wick
With a Cloth**

**For Best Results Use
PERFECTION OIL**

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BOURBON RED**

At prices you can afford to pay. We breed all paying varieties of poultry. Send for descriptive circular. Address

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MAMMOTH BRONZE**

At prices you can afford to pay. We breed all paying varieties of poultry. Send for descriptive circular. Address

NEBRASKA POULTRY CO., Clay Center, Neb.

**TURKEYS
WHITE HOLLAND**

At prices you can afford to pay. We breed all paying varieties of poultry. Send for descriptive circular. Address

NEBRASKA POULTRY CO., Clay Center, Neb.



Lots of Health
and Energy in this Big
Family Package of

Sunshine

L.W. SODA CRACKERS

These crisp, toasty-brown biscuits are lighter and more digestible than even well-made bread. The men folks and youngsters love them because they're so crisp and flavorful. Always ready to eat, no fussing nor fixing needed. Tuck some in your pocket when you start out for work. Solid nourishment without bread's large percentage of water.

Loose-Wiles Biscuit Company Bakers of Sunshine Biscuits

**Economical in
the extra-large
family package,
triple-sealed,**

25¢



SUNSHINE L.W. SODA CRACKERS
A THIS TRIPLE-SEALED CARTON FRESH CRISP AND FLAVORY
AND ARE IMPROVED BY WARMING IN THE OVEN BEFORE SERVING
LOOSE-WILES BISCUIT CO.

BARGAINS IN LAND

ARKANSAS VALLEY HAY AND STOCK RANCH

170 ACRES in fine alfalfa, sweet clover and prairie hay. All well fenced, house of 7 rooms, bearing fruit trees; nice grove, 3 miles town, 7 miles county seat and Division Ranch joins free range. Price, \$50 per acre. Can furnish good title and terms. 6% int. Owner must retire on account of old age. Also have a few quarters smooth raw land real cheap. Commission to agents. Write today. BOX 451, SYRACUSE, KANSAS.

Book of 1,000 Farms, etc., everywhere, for exchange. Graham Bros., El Dorado, Ks.

80 A. VALLEY FARM, \$2,500; imp.; list map free. Exchanges. Arthur, Mt. View, Mo.

BUY or Trade with us—Exchange book free. BERSIE AGENCY, El Dorado, Kan.

CLOUD COUNTY LANDS

160-acre well improved farm for sale. W. C. WHIPP & CO., Concordia, Kan.

FOR SALE—Improved and unimproved grain and stock farms, \$10 to \$30 per acre. A 320-acre homestead relinquishment, level, good soil, cheap. Jas. Hildreth, Dighton, Kan.

VIRGINIA FARMS & HOMES

Free Catalogue of Splendid Bargains. R. B. Chaffin & Co., Inc., Richmond, Va.

TO TRADE—Fine hotel in a good town to trade for land in Kansas or Oklahoma. Price, \$30,000; mortgage, \$12,500. W. J. TROUSDALE, Newton, Kan.

FARMER INVESTOR—I have in Arkansas, Missouri and Oklahoma, farms of all sizes and prices. I have the choice of Benton Co., Ark., fruit farms. Write for prices and terms. FARRICK, The Land Man, Hiwassee, Ark.

ALFALFA FARM BARGAIN. 110 acres best river bottom land, only 3 miles of Emporia; well improved, 40 acres fine alfalfa. Price, \$100 per acre. Always have a bargain. Write me what you want in first letter. FRED J. WEGLEY, Emporia, Kansas.

CALIFORNIA LANDS. ALFALFA LANDS—ANTELOPE VALLEY, only 70 miles from Los Angeles, on S. P. R. R., 40 to 640 acre tracts, \$10 to \$45 per acre. Ten years' time. One-tenth cash. Ask for pamphlet. Please mention this paper. SOUTHERN PACIFIC LAND AGENCY, 410 Grosse Bldg., Los Angeles.

WHEAT LAND FOR SALE. One of the finest quarters in southwestern Alberta, Canada, all in cultivation. Fenced, 5-room house, small barn. Price, 30 dollars per acre. Will trade for eastern Kans. mow land. Address owner, E. R. Koontz, Richards, Mo.

FOR QUICK SALE, \$35.00 PER ACRE. 200-acre improved farm in Vernon Co., Missouri. Well located, good land; 7-room house, good barn and other outbuildings; nice grove and orchard; 1 mile to inland town, 6 miles to good railroad town. \$1,500 cash, balance easy terms. If you are looking for a big bargain and fine home, investigate at once. Address owner, M. MILLER, Petrolia, Kansas.

Fine Butler County, Kan., Stock Farms. 360 acres, 4 miles from county seat; 100 acres first-class first bottom and 100 acres finest smooth deep soil second bottom in cultivation and alfalfa; good improvements, timber, abundance water, 180 acres pasture. Price, \$20,000. No trade. 160 acres, five miles county seat; 70 acres finest bottom and second bottom, 40 acres fine alfalfa, 70 acres best alfalfa soil, 40 acres wheat, abundance water, timber, highly improved, beautiful home. Price, \$11,500. No trade.

The above are two of the best farm propositions in Southern Kansas for the money, no exception. V. A. Osborn, El Dorado, Kan.

A DICKINSON COUNTY BARGAIN. Eighty acres all smooth land, fine black loam, can plow every foot of it. Large 9-room house, well finished; cellar, cistern, well and mill; good barn, plenty large; cow barn separate, some orchard. This is for sale at a bargain. Inquire of Briney, Pautz & Danford, Abilene, Kansas.

130 ACRES, 1 1/4 miles of fine city of 2,000; high school etc., best wheat, corn, alfalfa land in world; 80 a. in wheat now and you ought to see it, balance in best of timber. Produced better than 40 bu. wheat per a. 1913. In center of oil-gas belt. Unleased, can lease any time for cash rental and share. No income. Will sell at once, \$60 a. and is worth \$100. Come and see—you will buy. Terms. LOCK BOX 926, Fredonia, Kansas.

THE GRASS THAT FATTENS.

Butler County, Kansas, native bluestem pastures. Note the following: All improved, fenced, permanent water and near railroad, 5,000 acres finest, may be divided; \$25, 5,000 acres, 800 cult. two sets improvements; \$25.50. 948 acres, 150 alfalfa bottom, 250 cultivated; \$35. Other fine mixed alfalfa, grain and native grass stock farms. Ask for descriptions, telling me what you want. V. A. OSBORN, El Dorado, Kansas.

COLORADO TRADES.

600 acres, Greeley district, improved, irrigated, price \$40,000. 40-acre suburban tract, near Denver, well improved, paid water for irrigation, 10 acres fruit, alfalfa, etc., price \$35,000. Beautiful modern Denver residence, Capitol Hill location, price \$25,000. Will trade together or separate for good land or city property in Eastern Kansas, Nebraska, Missouri or Iowa. Send for details. W. B. FRASER, 412 Colo. Bldg., Denver, Col.

FARM LANDS FOR SALE

CHOICE FRUIT and poultry ranches for sale in western states and British Columbia—any size from 5 acres up—monthly, yearly or all cash payments. No irrigation needed. Price \$50 to \$150 per acre. Actual government reports show that ranchers making from \$400 to \$2,000 per bearing acre. Come and see. I have sold to over 500 people in eighteen months—send for the Kootenay Magazine—price 50 cents, but free to readers of this paper if you state your nationality, amount you have to invest and one reference. Beautiful mountain lake 85 miles long—never freezes—no rainy season, no crop-killing frosts. No severe storms, droughts or cyclones. Plenty of work in mills, mines and on ranches for laboring men. Wages the best. I live there myself. Write me personally. Fred L. Harris, President International Fruit & Farm Lands Co., (Inc. \$500,000), Minneapolis, Minn.

Where Irrigation Irrigates. No. 164-40 acres. Nearly all in alfalfa. Paid up water right, perpetual; 6 miles from Farmington. \$5,500. Terms. Also have many farms for exchange. Write and send list. The Farmington Land & Investment Co., Farmington, New Mexico.

LOOK 200 ACRES, \$4,000. \$1,200 cash, terms to suit buyer on balance. We sell or trade lands or anything anywhere. "Ask Kirwan & Laird about it," West Plains, Howell Co., Mo.

595 A., 4 mi. R. R. town, this county. All prairie, bottom and second bottom land, all tillable but 70 a.; no rock or overflow; 3 sets improvements; good neighborhood; 125 a. in cultivation, 200 a. meadow. \$16.50 per acre. SOUTHERN REALTY CO., McAlester, Okla.

FOR SALE

200 Acres of unimproved prairie pasture and hay land, 40 acres of which is smooth mow land; 160 acres rough prairie pasture land, about 100 acres of it could be mowed; spring water. Priced right. Terms reasonable if sold soon. No trades. W. L. WARE, GARNETT, KANSAS.

Close to County Seat 400 Acres, 3 miles from Iola, county seat of Allen County, Kansas. Good 5-room house, barn and other outbuildings; grove and orchard; on rock road, telephone line and R. R. D.; 280 acres under plow; 80 acres fine meadow, 40 a. pasture. All choice land. Will raise alfalfa and other paying crops. Splendid neighborhood. For quick sale, \$50 per acre. \$5,000 cash, balance easy terms. Investigate. It is a snap. Address owner, M. MILLER, Petrolia, Allen County, Kansas.

HERE IS A SNAP

320 Acres, finest land in county. Smooth and level, 3 1/2 miles to church, post office, railroad and three elevators; 8 miles from county seat. Good barn, granary, well and wind mill; comfortable house. Price, only \$40 an acre; mortgage \$8,000 can be carried 4 years at 7 per cent. The place has 200 acres of finest wheat in the county. H. B. BELL LAND COMPANY, Room 5 Commerce Bldg., Phone 2. Dodge City, Kansas.

HOME ADJOINING TOWN.

240 acres, 6-room house, plumbed for gas; good barn; 140 acres in cultivation, 40 acres alfalfa, balance meadow and pasture; natural gas on farm; royalty, \$300 per year. Price, \$10,000; one-half cash, balance 5 years at 6 per cent. Also other farms for sale in corn, gas and oil belt of N. E. Oklahoma. J. A. WETTACK, Nowata, Oklahoma.

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

160 ACRES, located half mile of good town; extra fine land; on the main traveled road; 70 acres alfalfa land; 125 acres in cultivation; good 7-room house; barn 30x40; other good outbuildings. Price, \$56 per acre. Terms to suit. Write for land list. MANSFIELD LAND CO., Ottawa, Kan.

FOR SALE.

Greatest bargain within the 7-mile radius of Topeka. 80 acres N. E., nice upland, orchard, alfalfa, clover, prairie meadow; plenty of water; 20 acres in cultivation, 75 can be. \$4,500. B. F. ARMYER, Grantville, Kansas.

WISCONSIN

Official publications concerning the soils, rainfall and crops of Wisconsin may be had free by writing Wisconsin State Board of Immigration, Madison, Wis. State Capitol 555.

THE STRAY LIST

T. T. DAVIS, COUNTY CLERK, WOODSON County. Taken Up—One red heifer, white face with horns; T on left hip. Appraised value, \$25, by John Stock, Yates Center, Kan., December 17, 1913.

FIELD NOTES

Good Breeder Writes.

Dana D. Shuck, our Duroc Jersey advertiser out at Burr Oak, Kan., writes that he is all sold out on spring boars and asks us to change his card to fall boars and gilts sired by his great line of herd boars. Low prices are being made on the fall pigs because Mr. Shuck wants to close them out quick. Mr. Shuck says he will have a great line of tried sows and fall gilts for his February 21 sale. He will sell about 40 head, quite a number of which will be tried sows. A big per cent of the offering will be daughters of Model, Chief and they will be bred to Missouri Climax, a son of Climax 2d, sweepstakes boar at two Kansas state fairs and American Royal. Others will be bred to Crimmon Burr, a son of Pawnee Crimmon. Mr. Shuck will have a great lot of stuff for this sale, and everyone intending to buy Durocs this winter should remember and secure catalog early.

H. O. Sheldon Goes to Deming Ranch.

On January 1, 1914, H. O. Sheldon, who for many years was known as one of our leading Poland China breeders, of Lees Summit, Mo., and Wichita, Kan., will take charge of the hog department of the Deming Ranch at Oswego, Kan. Mr. Sheldon at one time owned one of the good herds of hogs in Kansas. We congratulate the Deming Ranch on being able to hire a man with the ability and experience of Mr. Sheldon.

Classified Advertising

Advertising "bargain counter." Thousands of people have surplus items or stock for sale—limited in amount or numbers hardly enough to justify extensive display advertising. Thousands of other people want to buy these same things. These intending buyers read the classified "ads"—looking for bargains. Your advertisement here reaches over 300,000 readers for 4 cents a word per week. No "ad" taken for less than 40 cents. All "ads" set in uniform style, no display. Initials and numbers count as words. Address counted. Terms, always cash with order.

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

HELP WANTED.

GOVERNMENT FARMERS WANTED. Make \$125 monthly. Free living quarters. Write Ozment, 44E, St. Louis.

MEN WANTED TO LEARN BARBER trade. Term not limited. Tools free. Call or write. Topeka Barber College, 327 Kansas Ave., Topeka, Kan.

BIG MONEY — MAILING CIRCULARS for others. Send 25c for copyrighted instructions. Chas. Chenoweth, G. D., Tulsa, Okla.

WANTED — MEN AND WOMEN FOR government positions. Examinations soon. I conducted government examinations. Trial examination free. Write Ozment, 44E, St. Louis.

MEN FOR ELECTRIC RAILWAY MOTORMEN and conductors. Fine opportunity. About \$80 monthly. Experience unnecessary. No strikes. State age. Address Box M, care Kansas Farmer.

WANTED — AMBITIOUS MEN FOR GOVERNMENT positions in railway mail and post office service. Large pay. Short hours. Write for catalog H. Standard Correspondence School, Minneapolis, Minn.

PARCEL POST AND INCOME TAX mean hundreds government jobs now available. "Pull" unnecessary. \$65 to \$150 monthly. Write immediately for free list of positions available. Franklin Institute, Dept. B82, Rochester, N. Y.

FREE ILLUSTRATED BOOK TELLS OF about 300,000 protected positions in U. S. service. Thousands of vacancies every year. There is a big chance here for you, sure and generous pay, lifetime employment. Just ask for booklet S-809. No obligation. Earl Hopkins, Washington, D. C.

REAL ESTATE.

FOR TRADE — QUARTER SECTION TIMBER land for quarter section land in Kansas. Martha Travis, Echo, Oregon.

FOR SALE OR TRADE — FINE IMPROVED bottom farms close to town; high school free. J. H. King, Cawker City, Kan.

CHOICE 80-ACRE FARM IN BUTLER County for sale. Terms easy. Write State Bank, Canton, Kan.

96 A. GOOD LAWRENCE CO. DIRT. Good location and improvements, good income. \$3,000. Want farther west. King Collier, Marionville, Mo., Route 3.

WRITE FOR BOOKLET OF IRRIGATED farms and truck patches. No failures. Three miles of water. E. C. Stovall, owner, Graham, Texas.

80 ACRES WELL IMPROVED, 6 MILES southeast Topeka, 3 miles Tecumseh. Good soil and water, all kinds fruit. Price, \$10,000. Part time. No trades. C. A. Woodworth, Tecumseh, Kansas.

FOR SALE — MISSOURI OZARK FARMS — 10 acres to 640 at \$300 each; \$1 cash, balance \$5 per month. Wm. C. Uphoff Land Company, 409 Times Bldg., St. Louis, Missouri.

BARGAINS IN OKLAHOMA WHEAT farms and ranches. Level, deep, fertile soil; fine water; great country. Write W. R. D. Smith, ex-County Treasurer, Guymon, Okla.

OFFICIAL BULLETINS RELATING TO the agricultural opportunities of Wisconsin may be had by addressing Wisconsin State Board of Immigration, Capitol 133, Madison, Wis.

WANTED — IMPROVED FARMS AND wild lands. Best system for quick results. Full particulars and magazine free. Don't pay big commissions. Western Sales Agency, Minneapolis, Minn.

FARMS WANTED — WE HAVE DIRECT buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property free. American Investment Association, 43 Palace Bldg., Minneapolis, Minn.

FOR SALE — ELEVEN HUNDRED ACRES unimproved Northern Arkansas. Fine white oak timber. Seven hundred acres suitable for cultivation. Will make fine stock farm. Thirteen dollars per acre. Good terms. Box 15, Ozark, Ark.

MISCELLANEOUS.

LEGAL ADVICE, ANY SUBJECT, \$1.00. The Law Bureau, Box 917-C, Wichita, Kan.

FOR SALE — THREE HUNDRED TONS ensilage. J. E. Bibens, Kincaid, Kan.

CLEANING, PRESSING, DYEING, WORK guaranteed. Manhattan Cleaners, 609 Jackson, Topeka.

EXPERIENCED MAN, SINGLE, AGED 41, wants work on farm. Address Theo C. Miller, Salina, Kan.

GROCERY AND MEAT MARKET DOING \$5,000 per month. Best town in Kansas. Cash or trade. Lock Box 71, Manhattan, Kan.

FOR SALE — ONE NO. 4 SHARPLES Cream Separator in good repair; all new; will sell cheap. Too big, cause of selling. Jacob H. Hauptle, Route 2, Glen Elder, Kan.

EXPERIENCED FARMER, WITH small family, wants position as manager of Kansas or Missouri farm. Understand farming and stock raising. Address, H. D., care Kansas Farmer.

WANTED — COMMUNICATION WITH 500 farmers wanting to buy Silver King seed corn that will grow, direct from their neighbor farmer. H. H. Meyer, Fontanelle, Neb.

TYPEWRITERS, ALL MAKES, ALL prices. Guaranteed same as new. Will ship for trial. Crane & Co., Topeka, Kan. "45 years in business." Write for Catalog "G." When writing advertisers, please mention Kansas Farmer.

CATTLE.

REGISTERED JERSEY CATTLE. C. S. Hart & Sons, Milan, Mo.

THOROUGHbred POLLED DURHAM bull. Robert Kyles, Greenwood, Nebraska.

FOR SALE — CHOICE REGISTERED RED Polled males. P. J. Murta, Cuba, Mo.

FOR SALE — SHORTHORN BULLS, 6 TO 11 months old. J. Hammerli, Oak Hill, Kan.

ABERDEEN ANGUS BULLS. TWO pure-bred bulls 16 months old. Alex Spong, Chanute, Kan.

GRADE HOLSTEIN CALVES, BOTH sexes, for sale. Arnold & Brady, Manhattan, Kan.

GUERNSEYS — REGISTERED BULL calves. R. C. Kruger, Burlington, Kan.

FOR SALE — REGISTERED HOLSTEIN bulls. Smith & Hughes, Topeka, Kan., Route 2.

THREE RED POLLED YEARLINGS, the best of breeding and good individuals. J. B. Davis, Fairview, Kan.

HOLSTEIN CALVES, EITHER SEX, beautifully marked, \$20.00 each, crated. Edgewood Farm, Whitewater, Wis.

ABERDEEN ANGUS BULLS, REGIS- tered, ready for service. Quality the best. Sure to please. K. H. Brown, Route 1, Bolivar, Mo.

TWO REGISTERED GUERNSEY BULLS, one grade bull of serviceable age; May Rose breeding, for sale. Also a few bred heifers. C. A. Mountain, West Liberty, Iowa.

FOR SALE — TWO CHOICE COMING 2- year-old high-grade Holstein heifers, and three cows, all coming fresh to service of registered bulls. W. B. Van Horn, Overbrook, Kan.

REGISTERED HOLSTEIN BULLS ready for service; good straight individuals from high producing dams. Grandsons of Iowa State Fair's champion bull. Prices reasonable. E. J. Erickson, Cambridge, Ia.

REGISTERED HOLSTEIN BULL CALVES from large producing dams. Butter from 500 to 600 lbs. per year. Sire of calves' three dams average 32 lbs. butter in 7 days. O. J. Duncan, Route 4, Coffeyville, Kansas.

REGISTERED HOLSTEIN BULL calved Jan. 20, 1913. Sire Prince Mercedes Wayne of Deerfield. Seven nearest dams average 25.51 pounds butter. Dam Mercedes, Tatty Geneva. Price, \$75.00. For full particulars address Budd Lantz, Madison, Kansas.

FOR SALE — AT ONCE, 12 REGISTERED Guernsey heifers, 6 to 12 months old; four registered cows, 4 to 6 years old. Also a few high-class good Guernsey females, priced right. Best of breeding. Hillcrest Farm, A. L. Hyzer, Mgr., Route 2, Valley Junction, Iowa.

HORSES AND MULES

FOR SALE — TWO EXTRA GOOD young jacks, three and five years. W. J. Strong, Moran, Kan.

WANTED — HORSES TO BRAKE AND train by an experienced horseman. W. J. Oxendale, Stockton, Kansas.

SHETLAND PONIES FOR SALE, MARES, colts and geldings, all ages and sizes. Write your wants. C. R. Clemmons, Coffeyville, Kan.

FOR SALE — FIVE PURE-BRED AND registered Percheron stallions, from 1 to 2 years old. W. E. Dustin, Route 1, Topeka, Kan.

TREES, SEEDS AND PLANTS.

SEED CORN SUITABLE FOR KANSAS soils. John Dunlap, Williamsport, Ohio.

WINFIELD RELIABLE TREES, DIRECT to planter at wholesale prices. Fruit book free. Cooper & Rogers, Winfield, Kan.

GOOD WHITE BLOOM SWEET CLOVER seed and alfalfa seed for sale. Geo. Bowman, Logan, Kan.

TREES THAT THRIVE AND PAY, FROM grower to the planter at wholesale prices. 1914 illustrated fruit book free. Write today. Wichita Nursery, Box K, Wichita, Kan.

STRAWBERRY PLANTS AT \$1.00 FOR 1,000, etc.; quality guaranteed as good as any man's plants; all varieties. V. Everbears. Catalog free. Allegan Nursery, Allegan, Mich.

HOGS.

THREE GOOD O. I. C. MARCH BOARS and a few good gilts. E. E. Smiley, Perth, Kan.

REGISTERED TAMWORTH PIGS, IM- mune from cholera, two months old, \$10.50. Howard Pendleton, Yukon, Okla.

WANTED — TO BUY ONE-YEAR-OLD big-type Poland China male hogs, with pedigrees. Mention weights and price. Jacob H. Hauptle, Route 2, Glen Elder, Kan.

TOBACCO.

TOBACCO — SEND \$3.00 AND GET 10 pounds of fine Kentucky Chewing or Smoking Tobacco, direct from the farm. C. D. Easton, Easton, Ky.

TOBACCO — I HAVE THOUSANDS OF pounds of fine old Kentucky chewing or smoking tobacco, 30 cents per pound, postpaid. Chas. T. Daniel, Owensboro, Ky.

VIOLINS.

GOOD VIOLIN FOR SALE CHEAP. Excellent toned. Could send on trial. Write Miss Bertha W. Mardis, Route 5, Rosedale, Kan.

POLAND CHINAS

ADVANCE 60548

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PERCHERON STALLIONS, MARES AND COLTS

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The mares are all bred and in foal by the two grand champion stallions, Ilmen (80190) 78696 and Kangourou (92369) 91241. Ilmen (80190) 78696 was awarded grand championship at the American Royal Live Stock Show at Kansas City in 1912. Kangourou (92369) 91241 was awarded reserve championship at the American Royal in 1913.

Most of these mares were worked on my farm the past summer and every attention was given to secure them safe in foal.

My stallions consist of yearlings, two's and three-year-olds, with as much weight, bone and action as you could ask for.

I have several colts that now weigh over 900 pounds, and among them are the second and third prize winners at the Iowa State Fair.

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100 Head of Imported Stallions and Mares that will land by sale day.
100 Head of Imported Stallions and Mares that have been here a year.
100 Head of the Best Registered Mares that ever went into an auction ring.
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100 Reg. Stallions of the very choicest breeding and individuality.
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Herd Bulls—Financial Countess Lad, the only national champion whose dam, Financial Countess, was also national butter champion. Ruby's Financial Count, Register of Merit dam with milk record of 56 pounds per day, sire a Register of Merit son of Financial King. Cows in calf to Financial Lad for sale.
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Headed by the Island-bred bull, Cicero's Rochette Noble. One choice registered cow bred to him for sale.
Johnson & Nordstrom, Clay Center, Kan.

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Offer a fine young cow in milk and bred to Oakland's Sultan for \$150. Also a granddaughter of Golden Fern's Lad bred to same bull, \$200. Choice heifers, \$100 up. Bulls from high-testing dams, \$50 to \$150, including a son of Gambo Knight.
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For Sale—Several young bulls up to 15 months old, sired by Viola's Majesty. Dams American and imported cows of choice breeding and individuality.
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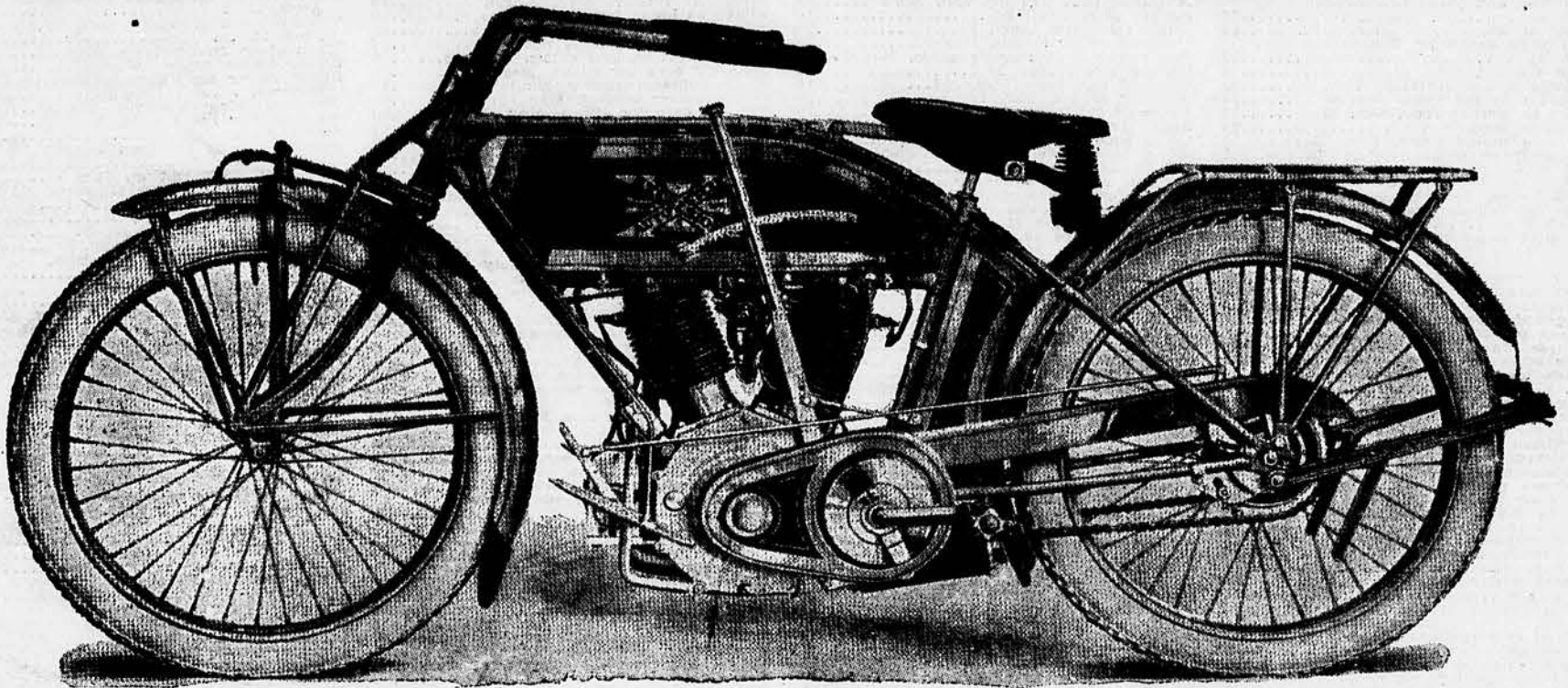
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