

KANSAS FARMER

For the improvement  of the Farm and Home

Volume 50, Number 11. TOPEKA, KANSAS, MARCH 16, 1912. Established 1863. \$1 a Year

THE AMERICAN self-made aristocrat, born with a silver knife in his mouth, is too much our exemplar of success.

In business, in school, the church, the home, children are taught that success means money and that only, yet the winner of a vast fortune has used only one of his talents, developed one side of his character and gained one thing in the world. A horseshoe pitcher does that.

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Whether rich or poor, savant or simple, the death rate is the same everywhere—one for each person.
—I. D. G.



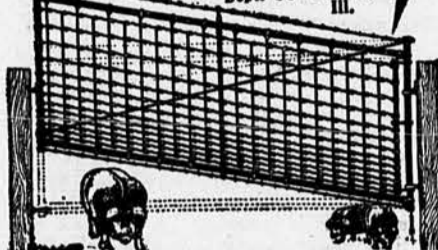
A living model of what is best in humanity the teacher wields more influence over childish minds and character than any save only the mother. Her heart and mind are reflected in the child

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Every farmer who has Cyclone Farm Gates takes a conscious pride in that fact. He knows that he has made a good investment and saved money, and that every other farmer respects his good judgment and progressive spirit.

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This book contains practical talks on the care, adjustment and use of modern farm implements. Every farmer should get this book and keep it.

Deere & Mansur Corn and Cotton Planters, Disc Harrows and Hay Loaders No. 9 Edge-drop Planters, Model B Disc Harrow—single and double—are the world's best sellers. Gold medal winners at every exposition.



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Owing to sickness I will sell my fine new HALLADAY 50-h. p. five-passenger touring car at a sacrifice. It cost me \$2,750, but I will sell for a great deal less.

This car has 129-in. wheel base, 36x4 1/2 Diamond tires, 4-cyl., 4 1/2-in. bore by 5-in. stroke; water cooled, pump circulation; double ignition; three speeds forward and reverse. Car is finely equipped over all, and has been run less than 200 miles.

If interested in owning a specially fine and reliable car, at a specially low price, write me by return mail. I will send full detailed description, answer any questions you may ask, and give you the price I will take for a quick sale. Address 215, care Kansas Farmer, Topeka, Kan.

THE HINGE-DOOR SILO



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Shall Oleo Destroy Your Market?

EVERY farmer should take notice that at this session of Congress and probably within the next thirty days some oleomargarine legislation will be enacted.

Advices received by me from Washington within the last few hours indicate that if the present program is carried out the farmer is very likely to get the short end of this lawmaking. Without taking the time and space on this short notice to prepare for KANSAS FARMER readers a detailed statement of the situation, I now want to urge every reader to write his Representative and each of his United States Senators, asking them to support the Haugen House Bill No. 21225, which is the farmers' bill and which, in my opinion, is ample to take care of his interests.

The packers, who are the principal manufacturers of oleomargarine, have been busy for a year. They have carried on an active campaign among retail grocers, retail grocers' associations, laborers, labor organizations, women's clubs, etc., and by misrepresentation of the facts have elicited a lot of sympathy, resulting in letters, telegrams and petitions, which have caused Congressmen to feel that the Lever bill, which is the oleo manufacturers' bill, if made into law is the only thing needed to reduce the cost of living.

A woman's club here in Topeka last week petitioned Congress to remove the tax from colored oleomargarine. Are the farmers of Kansas going to be legislated for by the women's clubs of the cities? Is it not time that the farmers do some writing and resolving?

If you are a member of the Grange, Farmers' Union, Farmer's Institute or any other organization, get such organization to petition your Congressman to support the Haugen bill.

One of the points of misrepresentation made by the oleomargarine manufacturers in their campaign is that the 10 cent tax on colored oleomargarine works a hardship on the consumer, and they want the tax removed to give the poor spread for his lacy is shown oleomargarine seven per cent uncolored, so on the colored tle to do with cost of oleo-the consumer is what Swift & Company say in an advertisement:

WRITE TO YOUR CONGRESSMAN TODAY

"The high price of butter puts it beyond the reach of thousands of families who could afford oleomargarine with the 10 cent tax removed."

With only three pounds of colored oleomargarine sold to ninety-seven pounds of uncolored, this statement is absurd and shows the extreme to which the oleomargarine manufacturers go in their appeal to the consumer for aid.

The desire of the oleomargarine makers is to color all oleo and to sell it for and in the place of butter. With oleo colored it is practically impossible for the consumer to know whether he is buying oleo or butter. Every pound of oleo sold to the consumer under the belief that he is getting butter displaces one pound of your butter and narrows your butter market just that much.

The 10 cent tax on colored oleo has been the only safeguard against the sale of oleo as butter. Ninety-seven per cent of the oleo sold in 1911 was uncolored, showing that people will buy oleo when they want oleo. Why is it necessary to permit all oleo to be colored and cause every pound to become a deceiver of the consumer and a deceitful competitor of butter?

To color all oleo makes that product a thief in the night which steals from you the value of your butter and the value of your cows.

Write Senator Charles Curtis and Senator Joseph Bristow to support and work for the Haugen bill. If you live in the First Congressional District, write D. R. Anthony, Jr.; if in the Second District, Joseph Taggart; if in the Third District, Phil Campbell; if in the Fourth District, Fred Jackson; if in the Fifth District, R. R. Rees; if in the Sixth, I. D. Young; if in the Seventh, George Neeley, and if in the Eighth District, Victor Murdock. Address senators and congressmen, Washington, D. C.

When you write these men tell them you want a reply. If they do not say they will support the Haugen bill, write them again. If they will not support this bill, send their letter to Kansas Farmer.

J. A. Borman

Hire The Red River Special

CAN you afford to put the amount of your thresh bill into your straw pile? That is what too many ordinary and indifferent threshers do. The RED RIVER SPECIAL is the only machine which beats the grain out just as you would do by hand with a pitchfork.

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The uplifting shakers keep tossing the straw up as long as it is in the machine, beating out all the grain.

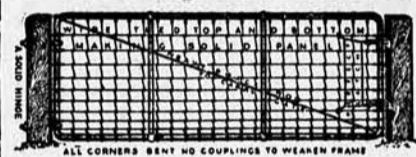
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Save Your Thresh Bill

Put that money into your pocket instead of wasting it. If you buy, buy a RED RIVER SPECIAL. If you hire, tell your threshmen to bring a RED RIVER SPECIAL to do your job.—It will Save Your Thresh Bill.

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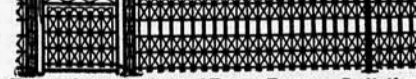
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is an all-purpose farm paint, preservative and disinfectant. It kills lice, mites and vermin. Hundreds of farmers find it worth many times its cost. Our free booklets give complete uses, directions and testimonials. Write for them today. Trial can, five gallons \$1.00.

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KANSAS FARMER

With which is combined FARMERS' ADVOCATE, established 1867.

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

Entered at the Topeka, Kansas, postoffice as second class matter.
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OUR GUARANTEE

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



THE AMERICAN FARMER.

The farmer of the old world is most frequently a tenant who does little or no work. He is the brains and the financier of the farm and the work is done by peasants who are not paid for brain work and who succeed each other, from father to son, on the same farm for generations. The land is owned by the capitalists, it is operated by tenant farmers and the labor is done by peasants.

To American eyes this does not look like a desirable state of affairs. The American land owning farmer is at once the basis of our social order and the bulwark of our institutions. He produces the bulk of the wealth of the most wonderful country on earth, upon his prosperity the world of business depends and his vote controls the political destiny of the nation. There is no class of citizens so important. Not only does business success, but our very existence, depend upon his prosperity.

To such a man the change of condition to that of the European farmer or peasant would be most violent and intolerable and yet, what is he doing to prevent it?

During the last hundred years, when our farming area has so rapidly expanded, it has been the common practice to take from the soil all it would give and then move to virgin land and continue the robbery. The land worn by this method has sold for what it would bring, and naturally fell into the hands of the men who had surplus money to invest. The result of this has been the increase, in numbers, of the very large farms and of the very small ones. The last census of the United States shows the greatest percentage of increase in the number of farms of 10 acres or less. The next greatest increase is in the numbers of farms of from 175 to 499 acres and those from 500 to 999 acres, while those of 30 to 99 acres and those of 100 to 174 acres have decreased in numbers in the 10 years covered by the census.

Are these figures significant? They seem to indicate that successful farmers, capitalists, business men who play at farming as a side line, and the "idle rich" are getting increasingly larger holdings, while the real farmer, or the man who "retires to the farm," is obliged to do with less land. It might also seem a threat that, if this condition continues and farmers keep on moving to town, the land would gradually pass into the ownership of the few to be operated by tenants or "hired help," while the real, land owning farmers will be forced into the class of truck gardeners or small dairymen.

There is but one remedy—better methods. Better methods mean better live stock, better machinery, better home conveniences, better seed and better training for the young. They mean the use of more brains and less brawn. They mean the making of farming a profession and not a job, and they mean the salvation of the country from this possible threat of becoming one of landlord and peasants. In the last analysis it means that "it is up to you" as an individual. The welfare of the nation is involved, to a large extent, in the course which the farmer of the next generation will pursue for himself and his children. No country can retain its maximum prosperity unless its farms are operated by the men who own them. Upon the action of the individual depends the welfare of the community.

GIVE ADDRESS WHEN WRITING.

Will T. S. Rankin, who wrote KANSAS FARMER on February 24, please write again, giving his post office address? Please be sure to give address when writing. On KANSAS FARMER mailing list are more than 60,000 names, and it is a big job to locate a name when post office is not known.

WASTING MONEY ON ROADS.

There is a feeling among KANSAS FARMER readers that the present road laws of Kansas are not good, and farmers are dissatisfied with them. We will be glad to hear from farmers on the subject and to assist in securing the passage of such laws as seem to best meet the state's demand. The Kansas Good Roads Association has in mind a revision of the Kansas road laws as indicated by H. S. James, the president, who says Kansas is spending \$3,000,000 a year on road work, nearly half of which is wasted because of the lack of a systematic good roads plan and the fact that some of the work is of a temporary character.

Mr. James says his organization hopes to have a new road law passed at the next session of the Legislature. Some of the features which they hope to secure is a state highway commission, with headquarters in Topeka, and a state good roads engineer, with headquarters in Topeka. All road work done in the state, whether by county or township, would come under the supervision of the commission and engineer. In such a way the officers of the association believe that some comprehensive scheme of highway improvement could be worked out and more effective road work secured by the co-operation of different road districts and counties.

The good roads association is conducting a campaign for the organization of county good roads associations in every county of the state and through these local associations expects to crystallize the good roads sentiment of the state so that the proper kind of road laws may be secured.

IMITATED AND COPIED.

It is said that "imitation is the sincerest flattery." KANSAS FARMER is flattered, then, by numerous publications which are imitating our seed corn articles, our front page cartoons and our front page epics. These features of KANSAS FARMER are increasingly popular. Almost daily the mail brings commendatory letters, while personal expressions of approval are numerous. The front page epics have been quoted very widely by other papers, and at least one of them is attempting a similar feature. One of these epics was made the subject of a feature in a public school entertainment. They are found neatly framed and hung on the walls of business houses and in residences all over the state. Scrap books contain them, live stock sale catalogs quote them, and no less than three of them are found in an official state report of another state.

In another place in this paper is printed a letter from a swine breeder who tells of the conversion of a former Iowa man from corn to alfalfa as a hog feed. Old breeders who were in the business in 1901 will remember how their hogs had alfalfa only to live upon and of what strong, vigorous litters the brood sows produced the next spring. Our correspondent is making a gain of three pounds per day on his hogs by feeding alfalfa and Kafir corn stalks left by the cattle. He states that he never could make such gains before. Experience everywhere teaches that our hogs get too much corn, and necessity occasionally enforces this knowledge.

Last week in our editorial on investing surplus money in bringing the farm up to the highest degree of efficiency and comfort by way of improved methods of cultivation, improved machinery and up-to-date buildings, we failed to mention the value of paint. A coat of paint will add a hundred dollars' worth of value to a house or barn, if the farm is for sale, and if not for sale well painted buildings will last at least one-third longer than unpainted. Do not neglect the painting. It pays, and pays big.

AN AGRICULTURAL BILL.

As has already been stated in these columns a bill has been introduced in Congress and known as House Bill No. 18180, for the establishing and support of agricultural extension departments in connection with agricultural colleges, to give instruction and demonstrations in agriculture and home economics, in other words conducting farmers' institutes, farmers' short courses, educational trains, field and domestic science demonstrations, exhibits, lectures, etc. This work heretofore has been supported by state funds only.

The bill anticipates the payment of \$6,000 annually to such departments, with an additional sum of \$300,000 annually for each fiscal year, and a like annual increase every year up to an annual budget of \$3,000,000 for the purpose set forth in the bill. The amount is then to be paid out to the various state departments of agricultural extension, proportionate to the state's ratio of agricultural population with reference to the entire agricultural census of the United States.

The whole matter is in the hands of Congress, and Kansas representatives and senators will quite likely vote on it as the people want. The bill has the approval of the American Association of Agricultural Colleges and Experiment Stations, and we presume has the endorsement of the Kansas Agricultural College. Ten million dollars are annually appropriated for the maintenance of the soldiery and we say nothing about it, now let's say something about \$3,000,000 for the progress of agricultural affairs in this country. If farmers fail to get what they want it is largely due to their failure to go to the fountain head.

This country does not need more farmers, but better ones. There is already enough competition in the country, and the use of modern machinery makes the man from six to ten times more efficient than he was when Kansas became a state. The effort to induce working people to go from the cities to the farms to better their condition springs from interested motives. Farmers don't want this kind of help, and such people could not hope to win a livelihood on the farm except in the capacity of hired help. The only thing that will drive the city man to live in the country is an empty stomach and if he has this it is evidence that he has failed, through fault or misfortune, and will be a failure on the farm. Changing the courses of study in our public schools so as to inject a little common sense into them and make of them the means of training our young people for their future business and lives, is the solution of the matter.

The decision of the officers of the National Dairy Union, in consultation with other organizations representing the agricultural and dairy interests, to unite in favor of a bill designed to prohibit the manufacture of oleomargarine in imitation of yellow butter, is a logical one. This has been accomplished in the Haugen bill. In no other way can there be any assurance that oleomargarine will be consumed under its own identity and upon its own merits by those to whom it is served at table. The dairy interests, in spite of the common assertions to the contrary, have no wish to impose upon oleomargarine the burden of any tax beyond what is necessary to place its manufacture and sale under supervision, to the end that fraudulent sale and substitution may be prevented. They desire only that the substitute for butter shall be not only sold but consumed as such. None can deny the righteousness of this purpose. Write your two United States senators and your congressman at once to protect your butter and the consumer against fraud.

INSTITUTE INSTRUCTION.

The farmers' institute is becoming more and more a factor in the preparation of the farmer for better farming and live stock methods. This is so because the institutes are today more practical in their teachings than ever before. Speakers are learning that their talks must be adapted to the conditions of soil and climate in the community in which the institute is held. More than this, however, is that the institute lecturer of today better understands the fundamentals of agriculture than ever before. The institute lecturer, like everyone else, has had a great deal to learn. He is learning constantly.

The demonstration in stock judging, resulting in horse, mule and cattle shows and exhibits of farm crop products, is an important feature in practical instruction. These demonstrations are valuable. They have been made possible by co-operation of farmers and business men in the institute idea. Often the business men of the town in which the institute is held offer liberal prizes for the best exhibit of corn or wheat, or for the best horse or cow. These prizes have the effect of bringing out a show and give the institute lecturer a good chance to illustrate his talk. A horse show in connection with the farmers' institute recently held at Clearwater, Kansas, proved exceptionally interesting. Prizes amounting to \$350 were contributed by merchants and stock owners. Twelve stallions, 60 colts and 20 mules were shown. Five hundred persons attended the institute, and more than that number were present at the horse show.

Kafir is coming into its proper place in the recognition of the Kansas and Oklahoma farmer. It is a vindication of the long time preaching of KANSAS FARMER. The editor has for 20 years known the value of Kafir. Its value was impressed upon him by the uncertainty of corn and the ability of Kafir to supply plenty of grain and forage during years when corn failed. The certainty of a Kafir yield justifies every farmer in the western two-thirds of Kansas in planting an acreage which will take care of his grain and forage needs. After this has been done, plant the remaining acres to corn if he wants to take a little gamble on the weather. We would use Kafir as we would a life insurance policy. Every western farmer, banker and merchant should whoop it up for Kafir. It is the nearest sure thing in the feed crop line.

The continued cultivation of cotton has ruined the agriculture of the southern states. The southern press is making a desperate effort to build up a successful diversified farming, but cotton growers hesitate to give up the cotton. The press is urging that growers keep tab on the cost of growing cotton and ascertain for themselves the loss or profit in its cultivation. Those in a position to know claim that the cotton is grown at a loss or at least at a small margin of profit. If a cost tab was kept on a good many of the crops we grow in Kansas there would be less growing of grain for market and the growing of more feed to be marketed through live stock.

It costs a billion dollars annually to pay the bills of the federal government, and of this \$10,000,000 are used in expenditures directly toward the upbuilding of agriculture and \$10,000,000 more used in a manner which indirectly benefits the farming public. One-fifth of our entire population is engaged in farming. On that vocation more than upon any other does our business prosperity depend. We claim that it does not get its share of the government's expenditure. We are for more money to help the agriculture of the country and less for navies and the like.

SELECTING THE SILO

Comment Suggested By Numerous Inquiries Regarding Most Every Phase of Construction

By T. A. BORMAN

Silo inquiries have been coming thick and fast the past few months. Inquiries, until recently, pertained to the value of silage as a feed, the methods and manners of feeding silage, crops for silage, methods of filling silo, etc. All these have been answered by KANSAS FARMER in a manner not even approached by any other agricultural publication in this western country.

Recent inquiries have nearly all been directed to the kind of silo a farmer should build. It is my judgment that salesmen are urging upon Kansas farmers every kind of a silo ever constructed. Silo manufacturers have learned that the Kansas farmer is in the market for silos, and the best as well as the poorest structures are being offered. Some of these structures are those which years ago were discarded in other sections. The relative merits of the different structures, as presented by salesmen, are so confusing as to leave the farmer in doubt as to the kind of silo he should erect.

It is the purpose of this article to give my opinion of the value of these different structures. Be it understood that what is here written is my opinion, based on what I have been able to read and hear and reason therefrom and from what I know by experience.

H. S. C., Garnett, Kan., writes: "Give me information on silos built of 2x4's, mitred and cribbed as the old grain elevators were; also those built square in the same manner except that 2x6's or 2x8's are used and blocked apart, then cut across the corner with 2x6's and lined by flooring put on vertically. Would like your opinion as to the efficiency in keeping the silage and the different methods of making them air-tight. Would also like to know if this type is displacing the stave silo in localities where both have been used for a number of years."

In this inquiry are involved the same questions presented in a large number of inquiries, and in commenting thereon will answer numerous readers.

The two kinds of silos mentioned in the above inquiry are being pushed by local lumber yards as an offset against the Washington or Oregon fir stave silo. These two types are not claimed, I believe, to be any more, if as efficient, in the preservation of silage than the stave silo, but are represented as costing less money and less liable to damage by wind. In my conversation with farmers who have considered the building of the 2x4 cribbed silo I find the farmer has an idea that it can be built from the poorest kind of lumber—culls and refuse—and lined with building paper, and become a good silo. This, I say, is the impression I gain from farmers with whom I have talked, and I feel safe in saying that such a structure will prove a disappointment and an unnecessary and expensive experiment.

In presenting the matter in this light to one dealer who is selling such silo, I learned that it was regarded by him as necessary that clear, straight and sound 2x4's be used; that the inside be lined with matched lumber nailed up and down, the lining treated with a preservative, and treated every few years, and that the exterior be covered with drop or lap siding or metal siding. I have obtained at this writing no figures on cost of this silo finished in this manner, but I am confident it will cost as much as the best stave silo, and I do not believe it will be so durable. A cribbed silo erected in this manner will absorb moisture, the moisture penetrating every one of the 3,000 or more joints therein and, not readily drying out, will rot. Such silo should not blow over. The doors as cut and placed are not convenient. The hexagonal or 8 cornered slope, too, will result in greater loss from spoiled silage than in a round silo.

The erection of such silo, even in the best possible manner, cannot be other than an experiment, and built in the cheapest manner, with paper or roofing for lining and with no outside covering, cannot prove other than a makeshift and disappointing.

In Kansas a few of the 2x4 cribbed silos were built last year in the neighborhood of Tonganoxie. I understand it is claimed that 30 were erected. I have been able to locate only three. They have been used only one season and how built and with what results, I cannot say. When roads are passable I will visit these silos and may have something further to write.

The type of silo mentioned in the above inquiry wherein 2x6's or 2x8's are framed up in an octagon and lined, has been, in days past, used and regarded as the best silo of their time. This is what I read, never having seen one. A strong frame is built. The 2x6 or 2x8 lumber framed in sets or girts, each girt to occupy on the silo a position relatively the same as a hoop on a stave silo. These girts are spaced by 2x6's upright at the corners, the frames being closer together at bottom than at top. The girts should be of the best lumber obtainable. The silo book from which I take the facts says they should be of oak 3x8's and 16 inches apart at bottom third of silo and 2 feet apart to the top. If 2x6 pine girts are used, I would recommend spacing only one-half above distance. Each of the eight corners is blocked out on inside to make a less sharp corner and to more nearly approximate a circle.

On the inside, this frame is lined with the best matched lumber, the

shift failed the farmer, would buy a good silo. Fifteen years ago I gave "Buff Jersey" \$100 to lecture before the Kansas Dairy Association and make his talk. I was secretary of the Association and it was the Association's money I spent. The expenditure was worth while, too, because the first silos built in Kansas were the result of his talk.

Pine is not a good lumber for a silo, regardless of the kind of structure in which it is placed. I am confident experience has proved this. Some stave silo manufacturers are supplying yellow leaf to customers who desire a cheap silo. It is tongued and grooved, is straight and free from knots, and I believe ranks next to the Oregon or Washington fir staves. In a frame silo I am confident that Oregon or Washington fir is the best there is. Such lumber has proven the best for the purpose. It does not warp and does not easily rot. There are grades and grades of fir. Buy the No. 2 clear; it is the best grade

In the language of the show fakir, "Pay your money and take your choice." But choose between the best fir stave silo and the best re-enforced tile or concrete—all to be guaranteed by responsible builders. But, erect a silo. You are silo each year losses, and you build the best



paying for a good through your can afford to you can choose.

boards being put on up and down. One thickness of matched flooring is nailed onto the girts. Over this a thickness of tarred paper is carefully placed. On top of this a second thickness of matched lumber lining is used. The inside is coated with tar or other wood preservative. The entire exterior is then finished with siding. Care should be taken that the carpenter understands his job; that he gets the sides vertical; that the girt joints are well matched and thoroughly well nailed; also, that proper spacing is given girts to assure the desired strength.

This silo appeals to me as probably the best of the home-made frame type. It will be remembered, however, that the responsibility of securing good lumber, acquiring proper strength, etc., lies with the builder, and he assumes his own risk in proper construction and consequent durability and efficiency of the silo.

Another reader wants to know about a silo made of two thicknesses of 2x4's nailed together, with broken joints, set on end and hooped up as a stave silo would be. I have not seen such a silo and do not know that any such were ever built. I would not recommend it; think such silo would be troublesome to erect, almost impossible to keep together and practically impossible to match joints to prevent great loss of silage. I think it would fall down when empty.

A subscriber who remembers reading of the Buff Jersey silo years ago asks why he never hears of it through the papers of these days. Our reader does not hear of such silo because it proved an expensive makeshift. Such silo was of the stave type, but built of 2x6's, not tongued and grooved, and not even the edges made straight. Knotty and sappy pine lumber was used, and it soon rotted out, the knots fell out and frequently the silo tumbled down. "Buff Jersey" was an Illinois dairyman. He did as much to interest the western farmer in the silo as any other one man. He urged a silo of any kind. He figured that a makeshift like his, without roof, only a door or two, and barbed wire for hoops, would give a farmer a taste of using silage, then when the make-

milled. A responsible silo concern will deliver any length of stave up to 40 feet, with no staves showing sap or loose knots, and a silo of such staves painted outside and in and the hoops and anchors kept taut will last a long, long time. It is my guess that 75 per cent of all the silos in use are such.

Some inquiries are made with reference to the tile silo. This is a structure built of hollow tile and laid up as stone or blocks. I know of none of these silos in Kansas. The manufacturers of such silos claim they are efficient. I have photographs of such silos showing them cracked, one side fallen out, etc. I have no doubt tile structures can be built in such way that they will not break. An occasional inquiry is received as to the building of brick and stone silos. I do not find that such structure have come into general use, and for that reason assume that there are objections to them. I do not believe that stone or brick structures are sought by Kansas farmers and have given little study thereto.

By far the largest number of inquiries received regarding the various structures apply to the 2x4 cribbed silo. I take it that this is because this type is new, at least in Kansas, and because the stave and concrete silos are better understood—especially, I think, is this true of the stave silo. Farmers as a rule desire to build permanently when possible, and on this account the concrete or cement silo attracts attention. Beyond any question a concrete silo is as durable as it is possible to build. This is a type of silo in which mistakes in building frequently occur. Cement and concrete are such good and useful things that they are frequently abused with disappointing and disastrous results. The man who builds such necessarily takes chances on failure. If he builds himself he expects to assume the responsibility of failure. If a contractor builds, make him guarantee the structure against failure. Not every farmer will build a cement silo any more than every farmer will build a concrete barn—although cement and concrete are equally good and durable for each.

There are several types of concrete or

cement silos. There are the solid and hollow wall silos built of cement blocks. The hollow wall type should be chosen in preference to the solid block type. The dear air space is advantageous. I know of these types of silos breaking and on such account rendered of no value. If the structure fails the breakage is due to faulty construction. The metal lath type of cement silo has been built in considerable numbers in Kansas, the idea being that of the Kansas Agricultural College, which has supervised the building of quite a number of these silos. This is a silo formed out of metal lath and then plastered inside and outside, coat upon coat, until it is built up to the desired thickness which, in the case of a silo 30 feet high, would probably be four or five inches thick at the bottom and two or three inches thick at the top. Some of this type have cracked and been rendered useless. This, too, has been the result of faulty construction, and not the fault of the general plan. I cannot say that any of those, except one, the building of which was supervised by the college, has failed.

Some concrete silos have been built in Kansas. A form is necessary for the building of such silos. In some instances home-made forms are used, and in other instances patented forms. The material is a mixture of cement, sand and crushed stone. I understand that the contractors who build such silos recommend the use of Joplin grit instead of stone.

In the erection of a silo built of cement or concrete, particular attention must be given to the use of clean, gritty sand. A cement salesman not long ago told me that next to the use of too little cement, the use of the wrong kind of sand was responsible more than anything else for the failure of all kinds of cement structures. Clean, sharp river sand should be obtained for use in silos. Bank or sandbar sand is not believed to be good.

Insofar as the structure itself is concerned there is no disputing the fact that a cement or concrete silo is more durable than the best wood. When it comes to the initial cost I believe that a first-class reinforced concrete silo will cost more money than the best wood. It is argued that the concrete silo, when built by the farmer himself, costs less than wood. The farmer can figure any way he pleases—whether his time is worth nothing or whether it is worth \$1.50 or \$2.50 per day. As a rule, in silo building the help and teams are needed either in or caring for the crop. Unless men and teams are idle it costs something to work on the silo, and the farmer is justified in charging his labor against the cost of silo. If the farmer builds his silo himself and the silo fails, he loses the entire amount of labor and money invested. I recommend employing a competent cement and concrete worker as supervisor. Better still, I believe, employ a contractor to do the job and make him guarantee it.

It would seem that cement silos, likewise steel and galvanized iron—the latter two of which seem to be in the experimental stage—would be permanent and satisfactory silos. The quality of the ensilage coming from such silos is, of course, a matter of great importance. There is quality in silage just as there is in feed taken care of in any other way. Roughage cut and cured and placed under cover has greater feeding value than the same roughage stacked in the field and allowed to bleach and deteriorate as a result of the elements. This roughage put into a silo should be placed in a structure which will preserve its greatest feeding value. There seems to be a belief that the steel, concrete, brick and tile silos do not preserve silage as does the wood silo.

The experiment station of Storrs, Connecticut, has recently gone into the question of silage preservation very thoroughly in a recent bulletin which is by all odds the ablest and most complete work written on the subject of preservation of silage. The bulletin treats principally on the changes which corn undergoes after it has been placed in the silo, and explains the curing process minutely. From this bulletin we learn there are two acids developed during the curing process of the silage, which are lactic acid and acetic acid. These acids serve not only as a preservative but also as

(Continued on page 22.)

HOGS AND THEIR FEED

Breeders of Pure-bred Hogs Not so Much Affected by High Cost of Feed

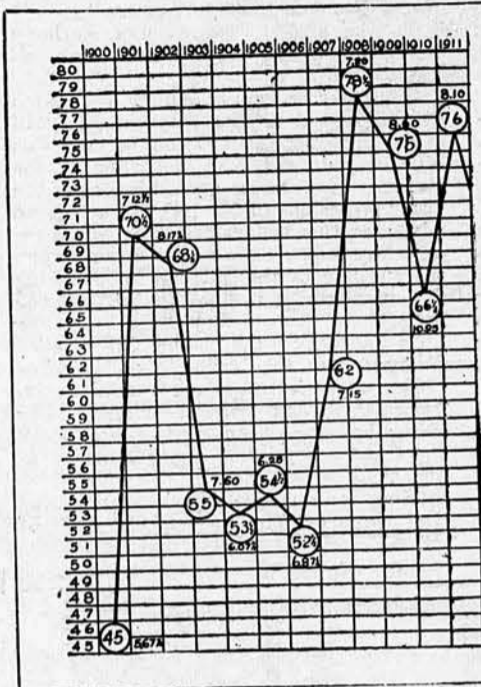
By I. D. GRAHAM

Over in southwestern Iowa, just a few miles from the Kansas line, there were recently held two hog sales on the same day. These sales were at different towns, held in the midst of the snow blockade, and one of them was held at night after the other one closed. One of these sales averaged over \$88 per head and the other over \$85. Only a few days prior to these sales there was another hog sale held in Missouri, in which one litter of pigs sold for over \$800, and other sales in other states have attained to almost as good results. Such sales are getting more and more numerous, while some greatly exceed the figures here given. Another Iowa breeder just held a sale in which the average price per head was nearly \$105, but the sale reports from states further west do not show such averages.

Why is this true? Why is it that the breeders of other states who use the same blood lines and feed the same high priced corn, can get such averages as those quoted above, while the breeders of the west side of the corn belt must sell on a lower level? There can only be one answer to this question. Buyers are willing to pay these prices because the animals bought are profitable to them at such figures. And this is just the difference between breeders. Those who know their business and pay these high prices do so because of the real value of the hogs as money makers. Those who are forced to sell at lower averages are simply taking their own medicine. When they attend a sale or send a bid they select the cheapest animals, and when they make a sale of their own, the greater majority of their buyers do the same thing. This puts a premium on the cheap stuff, and this cheap stuff will produce cheap stuff. As a breeder says in a letter printed in another part of this paper: "Breeders should be more particular about what they sell for breeding purposes. I seldom attend a sale in which there is not eight or ten head, and sometimes half the offering, which ought never to sell for breeding purposes." Good hogs bring from \$50 up, and the farmer who buys a cull for \$25 or \$30 advertises that he has a hog of certain lines of breeding, when he is simply a registered scrub.

Kansas has good hogs of all breeds and many of them, but the breeders do not get enough money for the good hogs which they sell and they often get too much for the poor ones. The time has come when, with the high price of feed and the increasing price of land, this condition must change, and there is only one way to change it. There is no animal on the farm that responds as readily to good care as the hog, and this care must be given by the breeder himself. In very few cases can hired help be depended on to give the care and attention to the hog breeding business that the farmer himself must give if he succeeds. The stock on the small farm must be of the kind and quality which will bring the most profitable returns, and here is where the small farmer has the advantage over the large one. He can and does give his hogs personal attention.

And this brings up the question of feed. In the accompanying chart is shown the fluctuations in the price of corn on the Kansas City market for the years 1900 to 1911, inclusive. The corn prices are shown in the circles and are the top prices reached in the several years. The other figures represent the top prices of hogs for the same years, though these prices do not coincide with the prices of corn in the same months. It will be noticed that the general trend of prices for corn is upward, and it does not get as cheap as it has been in some former years. The top prices for corn are easily explained by the season, but they show an upward tendency. But the real information contained, and the real purpose of the chart, is to show the margin between the price of corn and of hogs each year. Excepting 1910, when the price of hogs attained an abnormally high figure, and 1908, when the other extreme was reached, there has always been a margin in favor of the hog, which shows comparatively slight variations. These figures prove that, with good methods and good stock, it is possible to feed hogs at a profit every year, and that the man who has good stock and uses good methods will make money on



TOP prices for corn on the Kansas City market are shown in the circles. Top prices for hogs for the same years are placed adjacent. These do not always coincide in months, and corn prices vary much more widely than do hog prices. Note the margin is always in favor of the hog except in unusual years, and they are few. Left hand column shows cents for the corn chart.



hogs more often than he will lose. Under our present conditions and those which are likely to confront us for years to come, success in the hog business cannot be insured without good blood. The pure-bred hog is the most economical machine for converting the crude grains and grasses of the farm into a product for which there will be a market as long as mankind eats pork. The pure-bred hog is the poor man's friend, and with him in the pen the question of price for feedstuffs need not cause concern. It will settle itself. With the pure-bred hog of quality the high priced feeds are more economical than are low priced feeds with the scrub.

At the Nebraska Station it was found that by the proper feeding of pigs they can be made to pay a profit even at the present high price of corn. Corn worth 60 cents brought 80 cents when fed to growing pigs. Pigs fed on corn alone cost \$4.35 per 100 pounds of gain and made a daily profit of 16 cents per pig. These pigs required 518 pounds of grain for each 100 pounds of gain. Pigs fed on corn and alfalfa hay in racks consumed only 448 pounds of grain for each 100 pounds of gain and cost \$3.81 per hundred, with a daily profit of 26 cents per head, as compared with the daily profit of 16 cents made by the corn alone lot. Another lot was fed on corn, 9 parts and chopped alfalfa, 1 part. These consumed 441 pounds of grain for each 100 pounds of gain; cost \$3.94 for each 100 pounds, and made a daily profit of 25 cents per pig. Another lot fed on half corn and half alfalfa meal only, ate 346 pounds of grain for each 100 pounds of gain; cost \$5.49 per 100 pounds of gain and made a daily profit of only 4 mills per head. Although a part of the same experiment the last result is quoted only to emphasize the absolute necessity of proper feeding. Both corn and alfalfa meal are good feeds, but when they are improperly combined they become poor feeds. These hogs that had the half-and-half ration were not in marketable condition when all the others were ready

and it seemed impossible to fatten them on such a ration.

The importance of these feeding experiments lies in the fact that they were conducted during a series of years and that each year brought practically the same results, thus showing that it is possible to make money, even when hog feed is high. They also show, in no uncertain manner, that it is possible to waste money when the feeding is not properly done. The combination of corn and alfalfa hay in racks required 7 pounds more grain per 100 pounds of gain, but the cost per 100 pounds of gain was 13 cents less and the daily profit was 1 cent more than with the lot fed 9 parts corn and 1 part chopped alfalfa, while the lot that was fed half each of corn and alfalfa meal ate only 102 pounds of grain less per 100 pounds of gain; cost \$1.68 more per 100 pounds, and showed a daily gain of 25.8 cents less. In other words, the man who feeds corn and alfalfa hay in racks is producing pork at a cost of \$3.81 per 100 pounds. If he uses 9 parts corn and 1 part chopped alfalfa he makes pork at a cost of \$3.94 per 100 pounds, while if he feeds one-half each of corn and alfalfa meal his pork product costs him \$5.49 per 100 pounds, and his hogs are not in good condition.

In another experiment where sorghum seed was used as an element in the ration, it was found that when corn alone was fed to hogs it brought 80 cents per bushel; 9 parts of corn and 1 part of chopped alfalfa made the corn bring 82 cents per bushel; 9 parts of sorghum seed and 1 part of chopped alfalfa brought 50 cents per bushel for the sorghum, while a ration of 45 per cent each of corn and sorghum with 10 per cent of chopped alfalfa, made the grain part bring 55 cents per bushel.

A ration of barley and corn with alfalfa does not give as fast gain or as much profit per hog during the growing and the fattening periods as a ration of corn and alfalfa.

The substitution of 5 parts tankage, 5 parts bone-meal, or 25 parts shorts,

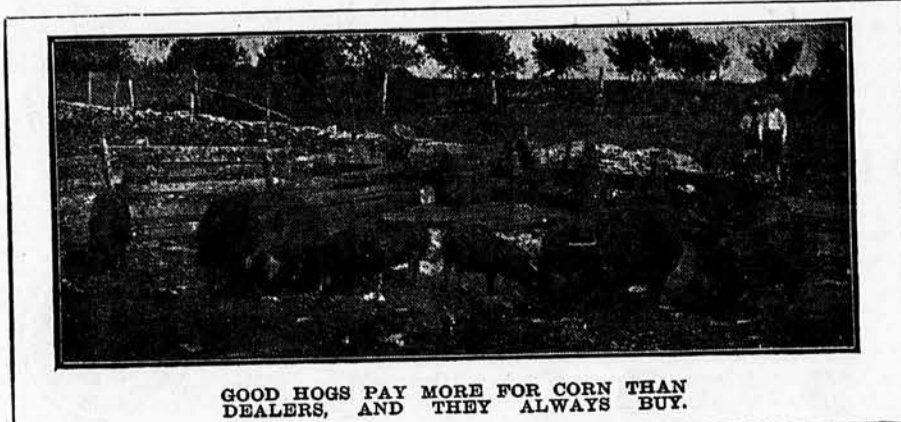
for corn, in a ration containing 90 parts corn and 10 parts chopped alfalfa, increases the cost of gains and decreases the profit per pig during the fattening period.

The substitution of 25 parts emmer, barley, wheat, or milo, for corn, in a ration containing 90 parts corn and 10 parts chopped alfalfa, increases the cost of gains and decreases the profit per hog during the fattening period, excepting emmer, which in this test only increased the profit per hog. The wheat increased the gains but decreased the profit. The emmer also increased the gain. Barley and milo decreased the gain as well as the profit. Milo was worth the same price per bushel as barley in this test.

These results are given in some detail, not because they are final, but because they agree with results obtained in other states and because they show that any farmer who will equip himself with good hogs and feed them properly can make them pay him 82 cents per bushel for his corn, but he cannot do it with poor hogs. No feeder can afford to waste his high priced corn on cheap, scrub stock for any length of time. High priced feed compels the farmer to use well bred stock or none. If he would make a profit he must have the right kind of hogs or go out of business, and it is doubtful if it is ever profitable for any farmer to be without hogs at any time. Besides supplying the farmer with the best possible market for his corn, the hog will buy, and pay for, much of what would become waste material without him, while the fertility he brings to the farm will reduce the actual cost of his keep. Also, the tremendous marketing of hogs from all parts of the corn belt on account of the cholera scare has forced the price down to about 6 1/2 cents when conditions, in all other respects, would now indicate a 9-cent value. This low price with high priced corn can only mean one thing: Hogs will be high priced before another year rolls by, and the man who does not have on his farm, a goodly number of these money making machines should buy now.

The breeder does not need to worry himself so much over the high price of feeds. His prices will be remunerative if he has the right type and quality of hogs for sale. And he will never want for a market. If any breeder or farmer needs the best hog the genius of man has been able to develop it is the man on the small farm, where every acre must be made to produce the greatest possible revenue. Under present conditions no man can afford to "fool" with scrub stock. It is simply a handicap which prevents him from getting on and which, in too many cases, fools him till he wonders why this is so. The breeder of pure-bred swine has a world of opportunity before him which is not exceeded by that of any other breeder. But he can only aspire to the top of his profession when he breeds and sells only top-notch hogs. Kansas needs better hogs and more of them. There are few herds where the general average of quality cannot be raised. This is true in any state or country, but Kansas cannot reach the prices that are attained in other states until she gets the hogs and the buyers which they have. Breeders of these other states have reached their success by a careful study of their business and an equally careful study of the methods and successes attained by other breeders.

In reaching the successful plane to which the breeders of these other states have attained, they have been immeasurably helped by the state fair. Kansas has as good hogs as any state, but not nearly so many of them, and the young or inexperienced breeder is sorely handicapped by having had no state fair in which he could learn the lessons he so badly needs, by comparing the results obtained by other breeders. Iowa breeders make money with their hogs on high priced lands and high priced feeds. Kansas breeders do not yet get such prices for breeding stock as they should because the public appreciation of their real value is not what it should be and because there are not enough of the right kind of hogs. A good, well managed state fair, supported by the state, would do much to correct this, educate the people up to the real value of pure-bred stock and bring the breeders such prices as they should have.



GOOD HOGS PAY MORE FOR CORN THAN DEALERS, AND THEY ALWAYS BUY.

Kansas Congressmen on Oleo Legislation

On the afternoon of March 4 the editor of KANSAS FARMER telegraphed United States Senator Charles Curtis, as follows:

"Are you supporting the Haugen bill, House Number 19338? Answer."

On March 7, KANSAS FARMER editor received this reply from Senator Curtis:

"Haugen bill has not yet been considered by the House and has not reached the Senate. Have had no opportunity to read or consider it. I supported the Grout bill, which protected the producers of butter. The measure that will best protect consumers and dealers in dairy products and substitutes therefor against fraud will have my support."

When the Grout bill was being made into law some 11 or 12 years ago Senator Curtis was representative of the First district. He not only supported the Grout bill but worked hard for it. The Grout bill became a law and, under that law, the butter consumer and butter producer is now being protected against the fraudulent sale of oleomargarine, although the law is not sufficient to prevent entirely the fraudulent sale of oleo. This is the law oleo manufacturers are now striving to overthrow by the passage of the Lever bill. The Haugen bill is the bill of the farmer and dairyman, and of the consumer as well, because it will enable him to buy butter as butter and not oleo as butter.

It is plain from the above where Senator Curtis stands. Write him a letter backing him up in his position. Such letters will help him. The more urgent the demand of Kansas people that he support the Haugen bill, the stronger he can defend it.

On March 4 the editor of KANSAS FARMER wired United States Senator Joseph Bristow as follows:

"Are you supporting the Haugen bill, House Number 19338? Answer."

On March 7, Senator Bristow wrote this letter:

"I have your telegram of the 6th instant. The bill you refer to (H. R. 19338) had never been brought to my attention until I received your wire, therefore I have given it no consideration."

The inference from the above letter is that Senator Bristow, upon receiving the above telegram, obtained a copy of the Haugen bill and while, before writing, he may not have had opportunity to study it carefully, he nevertheless must have known by reading its title, that it was a bill to protect the consumer and the producer of butter against fraud, and he could have stated whether or not he was in favor of such protection.

It is apparent that KANSAS FARMER readers have some missionary work to do on Senator Bristow. Write him as this paper in this issue urges you to do. You cannot afford to loaf on this job—

write Senator Bristow at once. The editor is writing him and hopes by the date of another issue of KANSAS FARMER to tell its readers where the Senator stands.

On March 7 the editor of KANSAS FARMER wired D. R. Anthony, Jr., Representative of the First district, as follows:

"Are you supporting Haugen bill, House Number 19338? Answer."

To the above, Congressman Anthony replied by letter, dated March 8, as follows:

"In reply to your inquiry of March 6th in regard to the Haugen Bill, will state that my information is that this bill has not yet been reported to the House. Not being familiar with the exact provisions of the bill, am unable to advise at this time whether it would receive my support; it would depend upon the wording of the bill and upon having the opportunity to inquire into all the facts."

On February 2 the Haugen bill was introduced into the House, given Number 19338, was referred to the Committee on Agriculture, and ordered printed. The editor has a printed copy on his desk and from this printed copy the above information is obtained.

Congressman Anthony, if he read the first three or four lines of the title of the bill, could not help but know the purpose of the bill. Our telegram gave

him an opportunity to say in his letter whether he was opposed to the fraudulent sale of oleo and in favor of the protection of the farmer's butter and in favor of protecting the consumer.

Is it to be inferred that Congressman Anthony is loafing on his job when he says he has not looked into this bill?

The Haugen bill was introduced into the House—his body.

First district farmers must get busy and write Congressman Anthony. Tell him that you want him to stand for the sale of oleo for what it is. He will do what you tell him to do, if you say it in enough letters, strong enough.

On March 8 the editor of KANSAS FARMER wired Congressman Taggart, of the Second district, as follows:

"Are you supporting Haugen bill, which prohibits coloring oleo same shade as butter, and which prohibits use of butter in manufacture of oleo, and which protects the farmer's butter; also, the consumer against fraud? Wire answer."

On March 9, Kirk Prather, secretary to Congressman Taggart, wired:

"Congressman Taggart is out of the city. Will call his attention to your wire on his return."

Congressman Taggart is a member of the Agricultural Committee of the House. His committee is considering both the Lever and Haugen bill at this very minute. That committee will recommend one or the other of the two bills. If the majority recommends the Lever bill the Haugen bill is sure to be reported by the minority. Write Congressman Taggart at once. In the committee his work will count doubly either for or against your interest.

On March 8 the editor of KANSAS FARMER wired Congressman Phil Campbell, Fred Jackson, I. D. Young, George Neeley and Victor Murdock, as follows:

"Will you support the Haugen bill and oppose the Lever bill, thereby protecting the farmer's butter; also, the consumer, against fraud? Wire answer."

Note that we asked each to wire his answer. No wires to this date have been received, but it is our guess that each, not hearing from his agricultural constituents, has given very little attention to this legislation.

You see the real situation in so far as it has been possible for KANSAS FARMER to ascertain it during the past few days.

You must get busy with your letters and petitions. KANSAS FARMER will furnish you with blank petitions free for the asking.

Send for some of these free petition blanks and circulate them among your neighbors, your town people, at your Grange and Farmer's Institute meetings.

Here is what George M. Whitaker, secretary of National Dairy Union, who is spending all his time in Washington on this matter, wires KANSAS FARMER:

"Oleo hearing opened 28th. Judge Hainer, of Nebraska, made strong argument for dairymen. Commissioner of Internal Revenue made points for oleo interest along color lines. Opposition to farmers is very strong. Urge every one to write, telegraph and petition Senators and Congressmen. Hearing continued until 15th. Situation acute."

Here is what Prof. George L. McKay, secretary of National Buttermakers' Association, who is representing dairymen and who is spending his whole time in their interest, wires KANSAS FARMER:

"If Lever bill becomes a law, the dairy business will largely pass into the hands of the packers. It permits oleo to be colored the same shade as butter. It permits them to use any amount of butter with oleomargarine. Haugen House Bill 21225 prohibits both. Urge you to support Haugen bill."

Prof. McKay's message and that of George M. Whitaker sets forth the situation and these men, representing their associations, are located for the present in Washington looking after this legislation.

The legislative committee of the Patrons of Husbandry, National Grange, composed of Oliver Wilson, Peoria, Ill., T. C. Atkeson, Morgantown, W. V., N. P. Eml, Dimondale, Mich., also has an office in Washington and will maintain that office until oleo legislation is disposed of. This committee recently spent \$200 a day for several days telegraphing Grange officers to get busy with letters and petitions to their Congressman.

NOTE—Haugen House bill 19338 has been changed to Haugen House bill 21225.



OUR EXPERIENCE IS YOUR SAFEGUARD

IHC Harvesting and haying machines and tools, as sold today, are the result of over fifty years of careful work by trained experts. Through every harvest season these men have followed our machines in the field in every grain-growing country, correcting all difficulties as they appeared or developed. The binders which are the result of such thorough work are now offered to you with the fullest assurance that when you use these machines your harvesting will be well done. Whatever the conditions under which your crop must be harvested, whether the grain be short or tall, standing, down or tangled, there is an IHC machine which will reap and bind it all; easily, surely, and with no annoying and expensive delays. IHC harvesting machines as sold today, are a finished product as much as any machine can ever be finished. All the difficulties that have developed up to date are overcome. Our experience is your safeguard. You have no experiments to make. You take no risk when you buy a machine bearing one of these famous names:

Champion Deering

McCormick Milwaukee

Osborne Plano

Take plenty of time to consider, compare all the points of all the machines you know of, before you buy a binder. If you do this thoroughly, you will become convinced that an IHC binder will do the best work for you, be the most dependable, efficient, and durable of all the machines you investigate.

There is quality in the material and construction of IHC harvesting machines that only a half century of experience can assure. There is a simplicity in the design which makes the working of the machines easy to understand and makes it safe to trust them in the hands of unskilled help. Last, and most important, IHC binders are backed by an organization that insures your getting interchangeable repair parts—parts that fit where

they belong—quickly in time of emergency. IHC harvesting machine owners know that if by accident any part of their machine should happen to break, an exact duplicate of that very part can be obtained quickly from the IHC local dealer. This point is of the utmost importance when the grain is ripening or the harvest begun. It does away with all delays, all risks, all possibility of losing part of the harvest profit.

Their many years of constant improvement place IHC harvesting machines in a class by themselves. Whether you choose a Champion, McCormick, Osborne, Milwaukee, Deering, or Plano binder, you are assured of getting a machine built right and tested under every condition that you will ever have to meet at harvest time.

The IHC local dealer handling these machines is the man for you to see. From him you can get information that will help you to make up your mind as to which binder will best insure the full profit of your season's work. Decide only after the most careful consideration and you will surely buy an IHC machine.

When you have decided upon your binder, you will need a supply of binder twine. To get through the season with the least waste and trouble, buy one of the seven perfectly dependable brands of twine—Champion, McCormick, Osborne, Deering, Milwaukee, Plano, or International—in Sisal, Standard, Manila, and Pure Manila grades.

Your most important work now is the selection of machines for this season's harvest. See the IHC local dealer handling these machines. He can help you decide. If it is not convenient for you to see him now, sit down and write for catalogues. A post card will bring you full information.

International Harvester Company of America

Chicago

IHC Service Bureau

U S A

The purpose of this Bureau is to furnish, free of charge to all, the best information obtainable on better farming. If you have any worthy questions concerning soils, crops, land drainage, irrigation, fertilizers, etc., make your inquiries specific and send them to IHC Service Bureau, Harvester Building, Chicago, U. S. A.



Overland

\$1200 worth for \$900

THE several important things that you demand in an automobile are power, performance, service, wear and appearance. You must have a car that has all of the practical things—one that will serve your purpose (both for pleasure and work) for as little money as possible.

Let's start with some of the higher priced cars made—say those selling from \$1250 to \$1500—and see if they give you any more practical or useful value than this \$900 car. We have not the space to go over the entire car, but take the five fundamentals—power, speed, capacity, durability and appearance.

Practically every \$1200 to \$1500 car in America has a 30 horsepower motor. Our \$900 car has a 30 horsepower motor. They all seat five passengers. Our \$900 car seats five large passengers. In fact, it is just as roomy and comfortable as you could possibly want it to be. Those higher priced cars seldom develop over forty or fifty miles an hour. Our \$900 car will go forty miles an hour with ease and will take your toughest hill with just as much ease.

Nor can the \$1200 to \$1500 give you a better made car. In fact, in some instances it cannot be as well made, for most of the other factories are so small that they are forced to do work by hand that we do by machinery, and everyone knows that machine work is better and more accurate than hand work.

This \$900 car has a pressed steel frame. Same as the \$1250 car. The front axle is a drop forged I section—drop forged in our own forge plant. Same as the \$1250 car. The transmission is selective—three speeds forward and one reverse. Same as the \$1250 car. The

transmission is fitted with F. & S. annular bearings, which are used on the most expensive cars made. You get a fine Splitdorf magneto. Same as the \$1250 car.

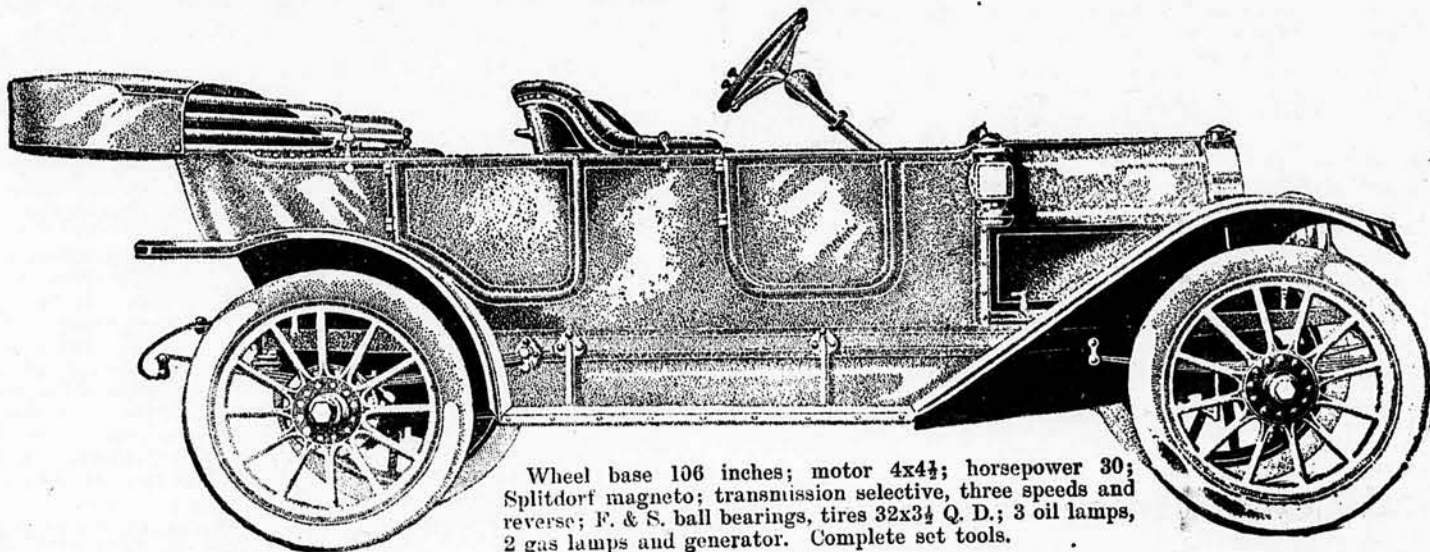
The motor itself is a beautiful job. It will never give you a particle of trouble. Just as true and sound as any of those big powerful engines you see on famous racing cars. It is of the most modern design, and as simple in operation as A B C. All the gear and crank casings are of pure aluminum, which are found only on very expensive cars. The gears are of Vanadium steel, found only on very expensive cars.

In appearance it is just as carefully and thoroughly finished. The body is in dark Overland blue. The upholstery is of good leather hand stuffed with fine hair. A car could not be made more comfortable. The body design is graceful, pleasing and right up-to-date in stylish appearance. Why should you pay \$1250 for a 30 horsepower five-passenger touring car when you can get a car like this for \$900?

And remember, this car is built by the greatest organization of skilled men—5000 of them—in the largest automobile plant in the world. Our enormous manufacturing and financial facilities enable us to do what is impossible for the smaller manufacturers.

Our handsome and well-written book gives you the detailed value of this car. It tells you all about our great big factories—shows you interior views of every department and contains a colored set of illustrations showing the complete Overland line for 1912. It is free. Write for your copy today. Please ask for book R33.

The Willys-Overland Company, Toledo, Ohio



Wheel base 106 inches; motor 4x4 $\frac{1}{2}$; horsepower 30; Splitdorf magneto; transmission selective, three speeds and reverse; F. & S. ball bearings, tires 32x3 $\frac{1}{2}$ Q. D.; 3 oil lamps, 2 gas lamps and generator. Complete set tools.



ONE of the first things a farmer wants to know about an automobile is—**who makes it?**

Farmers have learned by buying wagons and such things that a great deal depends on the manufacturer. Ask any farmer what kind of wagon the Mitchell wagon is, and he will say—**“There isn’t any better wagon than the Mitchell.”**

Same way about Mitchell automobiles, made by the same people, in the same honest way. Mitchell automobiles are built to give long and steady service without much expense—the ideal car for the man who can’t afford to make a mistake.

Send for a catalogue of Mitchell automobiles and get full particulars; the more you learn about these cars, the more reason you’ll see for buying a Mitchell in preference to any other car.

For 77 years our vehicles have given satisfaction; they’ll continue to do so for another 77 years.

Buying a Mitchell means knowing what you are getting.

The new Six-cylinder—48 Horse Power—is a great country or city car; carries five comfortably; and gets there; \$1750.

The Six-cylinder—60 Horse Power—is a big 7 passenger car for the whole family; \$2250.

The four cylinder, five passenger Mitchell, 30-H. P., equipped, \$1350

The four cylinder, four passenger Mitchell, 30-H. P., equipped, \$1150

The four cylinder, two passenger Mitchell Runabout, 30-H. P., equipped, . . . \$950

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Kansas City Branch: Sixteenth St. & Grand Ave

Grain Dealer and Agriculture

*Abstract of Address By J. H. Miller, Director
College Extension, K. S. A. C., Before Kansas
Grain Dealers’ Association, Kansas City, Mo.*

Our census returns for 1910 and 1900 show in very many states and in hundreds of counties an alarming decrease in our rural population and show at the same time a marked increase in our town population, a distinct increase in size of farms and a decrease in practically every state of the yield per bushel of all grains. This would be an alarming situation if people will only stop long enough to see it in this right light and in its tendencies. The other day I selected out 18 counties of Kansas representing different soil and climatic conditions without knowing exactly what the wheat yield had been nor how the record was being maintained. Upon a study of the state grain report, however, I found that 17 of these 18 counties had shown very marked decrease in the average yield of wheat from 1900 to 1910. Only one of the 18 counties had the same average in 1910 that it had in 1900—14 bushels per acre. In 1902 and in 1907, however, that county had an average yield of 7 bushels of wheat per acre, less than the average cost of producing, harvesting and marketing. These are the records, notwithstanding the fact that the farmers of Kansas are reading more agricultural literature and studying methods of farming more than ever before; notwithstanding the fact that the Agricultural College is spending a good many thousand dollars every year to bring to the attention of the farmers the importance of better agriculture. This does not mean that what has been done in this direction should not be continued, but it does mean that we must spend a good deal more money and exert far greater effort, and we must have co-operation of more organizations. I come to this association, therefore, not with a plea, but with the plain suggestion that as a business investment money should be spent by this association in this great campaign.

Somehow we have continued to delude ourselves with the idea that Kansas is the greatest wheat state in the world, and have bragged about it so much and our real estate men have used so many isolated facts and so much imagination that we, ourselves, have been made forgetful of the fact that the present methods of farming are wasteful and ruinous. The growing of wheat the last 20 years has not yielded to the average farmer in western Kansas even teamster’s wages, let alone the interest on his investment. There is need today of more active co-operation of this splendid body of men, not only in the greater annual yield but in the building up of the soil that is the basis of permanent prosperity. There is need of co-operation in many ways, whether we know it or not, whether we believe in it or not. The idea of co-operation in business is developing in this country with wonderful rapidity. In the most prosperous countries in Europe it has practically taken possession of the agricultural business. It is bound to come here, gentlemen, and whether it takes possession of your business or not will depend upon whether you accept it or fight it. It strikes me that the sane thing to do is to meet it half way. May I suggest a few of the lines of co-operation?

(1) Why should not every grain dealer become a careful student of this science of agriculture, a student of soils? Why should he not personally investigate the work of every good farmer in this territory and carry the ideas of one good farmer to others not so successful? Why should he not become an authority and gain the respect of those whose business it is to grow wheat in order that they may grow the right kind and deliver it in the right condition in order that he may market it the right place and for the right purpose and at the right price? Why should not every grain dealer become a milling expert by careful study of the milling business in order that he may know just what the wheat in his territory will do in the mill? The Agricultural College maintains a department of milling industry, with a most capable man in charge, and his services are offered free for all kinds of instruction when it is so desired, relative to the handling of wheat for the right kind of product.

(2) The permanent prosperity of Kansas is going to depend more upon our live stock interests than upon any-

thing else. You ask how that has anything to do with your business. Unless we grow more live stock we cannot maintain our soil fertility; unless we maintain the fertility of our soil you cannot get grain to ship, and you might as well begin to close up half the elevators.

(3) The study of the agricultural history of European and Asiatic countries will be a revelation to any thoughtful man. Every country that has persisted in being a cropping country, whether nation, state or province, has shown a decrease in prosperity as the decrease in fertility became more apparent. China, with its hundreds of millions of people subsisting for centuries, mainly on one crop and that a soil robbing crop, is but to be compared to Denmark, that maintains the largest population per square mile in Europe and with probably the greatest degree of individual prosperity, of any country in the world.

(4) We want your help in discouraging the shipping out of corn and alfalfa hay. The farmers should be urged to feed that corn and hay to cattle and other stock and then the wheat that we grow should be shipped and milled in Kansas mills in order that the by-product—bran and shorts, containing a large proportion of the elements of fertility taken from the soil may be shipped back to the farm at the least possible expense, fed out to the stock, and ultimately returned to the land whence it came.

(5) Then, we want your co-operation in our farmers’ meetings, farmers’ institutes—we want you to attend, and we want you to urge farmers to attend, we want you to make such a study of wheat growing and soil fertility as to become an authority and recognized by the farmers of your neighborhood as worthy of being recognized as an authority. We want you to be the first to come forward with prizes for boys and men for a big yield of wheat and corn. The grain dealers of North Dakota and Minneapolis and the bankers and millers of North Dakota have undertaken the greatest piece of agricultural work ever undertaken by a commercial organization. They have subscribed \$100,000 for a five-year campaign among the farmers of North Dakota for better farming. The business men’s organizations and the farmers’ institutes of DeKalb County, Illinois, has recently pledged a sum of \$10,000 for three years and have employed an expert from the agricultural college to become “soils and crops advisor” for that county. Alabama has a farm advisor for every county, and the province of Ontario, Canada, one of the most progressive states in the world, now employs 16 farm advisors and will add four each year until there is one for each county.

Why should not this organization get behind a movement in Kansas, a great campaign for changing our low standard of wheat production from 14 bushels to 30; our low standard of corn production from 22 to 40 bushels per acre?

And finally, gentlemen, I wish to remind you of what you as clear-headed business men know full well, that the prosperity of Kansas depends upon a square deal all around. The farmer must give his land, his soil, a square deal; he must give those who handle his produce a square deal; he must give the merchants a square deal, and you who buy his produce must give him a square deal—yea, more than a square deal, because your opportunities of knowing the wider markets of the world give you an unfair advantage if you don’t give him a little of what you have learned. In other words, why not take the producer a little more into your confidence and become not only his agent, but his friend and his advisor.

Every reader of KANSAS FARMER should write his congressman and each of our United States senators telling them to vote for the Haugen bill, which is the farmers’ bill protecting butter against the sale of oleomargarine. The Haugen bill does not in any way restrict the sale of oleomargarine, but if it becomes a law will prevent its sale as butter. Take it from this editor that you should now write your congressman and senators telling them to support the Haugen bill.

Thousands Running Year-In-and-Year-Out

Long Test of Use Proves Satisfaction,
Low Cost of Up-Keep and Fuel Economy

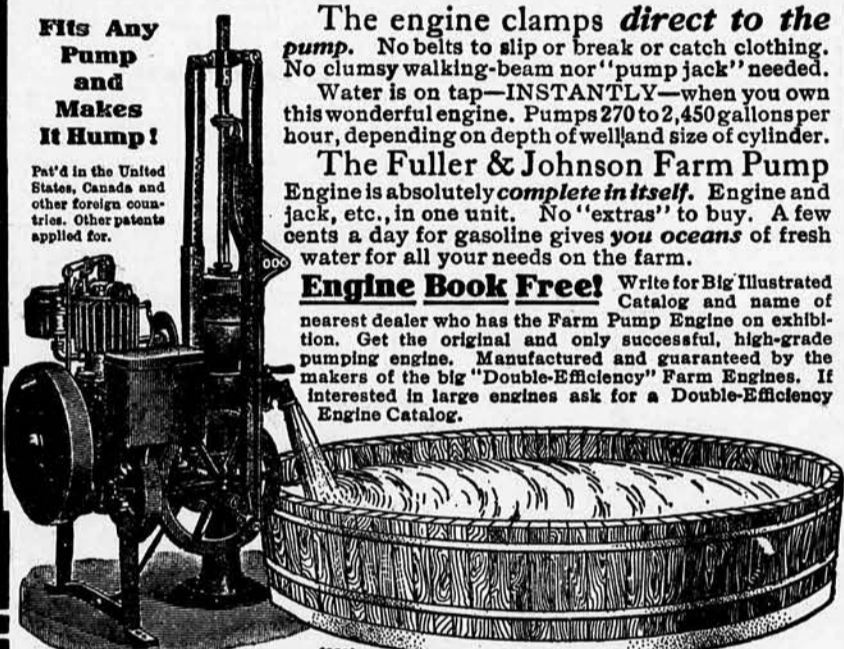
Since first introduced, the Fuller & Johnson Farm Pump Engine has been making good on every claim we make. It has been through the test of severe winters—and hottest days of summers. Its low cost of up-keep and economy of fuel have amazed the engine world. In comparative work tests with other pumping engines it has always come out ahead. In all this time the little demand for repair parts has been remarkable. You get the minimum of repair expense when you buy this high quality engine.

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The engine clamps *direct to the pump*. No belts to slip or break or catch clothing. No clumsy walking-beam nor "pump jack" needed. Water is on tap—INSTANTLY—when you own this wonderful engine. Pumps 270 to 2,450 gallons per hour, depending on depth of well and size of cylinder.

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Engine Book Free! Write for Big Illustrated Catalog and name of nearest dealer who has the Farm Pump Engine on exhibition. Get the original and only successful, high-grade pumping engine. Manufactured and guaranteed by the makers of the big "Double-Efficiency" Farm Engines. If interested in large engines ask for a Double-Efficiency Engine Catalog.

THE FARM



Seed and the preparation of soil are the two important items determining the yields of crops. In grain crops the preparation of the soil and the seed usually amounts to between \$2 and \$3 per acre. Oftentimes a little additional effort and care in seed selection or in the preparation of the soil, costing perhaps \$1 or \$2, will increase the yield a great deal more than that amount.

The steel wagon wheel has been on the market for at least ten years, but has not come into such general use as it deserves—especially the low wheel. Every farm has need for a knockabout wagon, and the low-wheeled steel truck fills the bill admirably. Such truck is exposed to all sorts of weather and serves a variety of uses quite severe on the wood frame and wheels. Investigate the low-wheeled steel truck if you have not already so done.

The land speculator is not a good man for the community. When he deals in improved farms he leases for short terms only and drives the best possible bargain with the tenant. He gets all out of the land he can. He makes his investment as small as possible and is not interested in the building up or in the maintenance of soil fertility. It is legitimate to invest in land with the idea of later selling at an advanced price, but the investor owes something to the community and to the soil he owns. These two debts are very rarely paid by him.

We believe in spring plowing following winters of unusual snow or rainfall. The excessive saturation leaves much of the soil compact and soggy, particularly that soil short on humus. If in such fields the spring crop is disked or cultivated, the compact ground beneath will not permit the roots to grow deep into the soil below. Such soil and cultivation prevents the rains from soaking deep into the ground. This compacted condition of soil is sometimes relieved by late spring freezes, but not often is this the case in this latitude. An examination of the soil will enable the farmer to decide whether deep spring plowing is necessary or whether favorable results may be expected from seeding by surface cultivation.

The tendency of many of us is to keep an eye open for new crops or plants the growing of which in this section are still in the experimental stage. We admire the man who is keeping his eye peeled for the new thing or new idea. He should, however, be able to discriminate between the fad and the practical. Experiment with what might seem the impractical in a small way only at the beginning. Wheat, corn, Kafir, sorghum, alfalfa, millet and oats are standard grain and feed crops for Kansas. Varieties of each are particularly adapted to the conditions of the state. Find those varieties and stick to them. The use of the silo will reduce the number of crops needed for feed to corn or Kafir and alfalfa, and this alone seems to us as one argument for the silo.

In Kansas we do not grow as many oats as we should. KANSAS FARMER believes that a crop of oats can be grown with as great certainty as a corn crop. We think the oat crop is handled more carelessly than any other crop we sow or plant. Very rarely are we careful to select good seed. Then we do not treat the seed for smut and rust. The seed bed is too often poorly prepared. We favor thorough disking if the surface and subsoil is loose. If compact, plowing is necessary for greatest assurance of a crop. We do not believe in broadcasting and harrowing in the seed. The drill is the best method of seeding. The seed oats should be well cleaned, removing all weed seed and light grains. Oats should be seeded on clean ground.

The Bermuda grass articles recently printed by KANSAS FARMER have prompted several inquiries, each of which is answered by the following: Bermuda grass is of southern origin and is extensively used in the latitude of Oklahoma and in sections where the rainfall

is somewhat limited. The Oklahoma station, which has recently issued a bulletin on this grass, does not recommend growing it where alfalfa and similar crops can be grown. The grass does best on a sandy loam and is admirably adapted as a grass to prevent soil erosion and for a pasture on rough land not well suited to agriculture. Except in the southernmost parts of the country the grass does not mature seed and is best propagated by planting the roots, which is done in the spring and which is not laborious. It is believed that Bermuda will do well in Kansas south of a line drawn from Kansas City to the southwest corner of the state.

When the frost is surely out of the ground for the season and the surface is dry enough, do not neglect disking the alfalfa field. The disking of alfalfa is now good practice—particularly fields three years old or older. The disking puts the ground in good condition to take up the spring and summer rains, the splitting of the crowns has the effect of giving the plant renewed life and vigor and results in thickening the stand. You have seen many alfalfa fields in which the ground was so compact that you wondered at the alfalfa plants doing as well as they did. The plant is extremely vigorous and accomplishes wonders under adverse conditions, but with favorable conditions of soil and cultivation it will well pay for the extra labor. Our theory, too, is to plow up the alfalfa field after it has passed its prime. Give another field the advantage of growing alfalfa a few years. Wheat, corn or other crops on fields formerly in alfalfa make a surprising showing.

The editor at a farmers' institute recently was talking with a farm hand. This man had been with his present employer four years at \$22.50 per month and seemed pleased with his wages and job. He must be giving his employer good satisfaction or he could not have stuck so long. The hired man said if farmers would employ help regularly—the year around—and keep a man as long as he gave satisfaction, he thought a long step would be taken toward the solution of the hired man problem. He said many men now in the cities—not making any more money than he, but employed 12 months in the year—would be glad to go to the farm and would give good service. We are wondering if there is not wisdom in this man's talk. Of course if the farmer is to employ labor the year around he must have a means of converting his hired man's time into money during the winter season. This suggests the necessity of more live stock to feed, more cows to milk and more manure to haul. Will some of our readers express themselves on this matter? Tell us how you employ your help. Your plan may help other KANSAS FARMER folks. If a hired man chances to see this, will he please write.

A KANSAS FARMER subscriber who lives in town and rents his farm contemplates building a silo for his tenant and wants to know on what basis he could afford to lease or rent to the tenant a wood silo. We commend this subscriber for his action. He will help his tenant, improve his farm equipment, and bring about a condition favorable to the maintenance and upbuilding of his soil's fertility. The plan on which we figure out this silo rental proposition is in line with the idea of our inquirer. It is his purpose to charge the tenant about 5 per cent on the cost of silo and enough more per year to wipe out the silo investment in ten years. The land owner does not apply this method of business to other farm buildings or to the farm itself. The land owner in these instances shuts his eyes to depreciation and pockets his loss when it comes. If the silo cost \$300 the tenant could reasonably be expected to pay 5 per cent on the investment, or \$15 per year. Figuring that the life of the silo is 10 years—as our correspondent suggests, but which is too few years for the life of a first class fir stave silo—a rental of \$30 per year

PLANT CATALPA SPECIOSA

IT PAYS \$30 TO \$50 PER ACRE PER YEAR.
IT IS A SURE CROP. Grows forever with one planting, and requires but little cultivation to start.



But only the Genuine Catalpa Speciosa will do this. The common scrub kind, seen in so many places, is worthless. The two pictures here are drawn from real life. The common kind makes only an indifferent shade. The genuine makes fence posts, telephone poles, bridge piles and lumber in a few years—lumber equal to oak and mahogany.

An acre of Catalpa fence posts is worth \$150 to \$250. It takes only four years for fence posts—six years for telephone poles. Catalpa posts outlast all others in the ground. They don't split or let loose of nails or staples.

Catalpa will grow anywhere in the corn belt. No trouble to get it started, or to cultivate and keep growing. We tell you how to do it.

Send for Our Free Bulletin of Information.

This Bulletin tells how we grow our FOUR MILLION CATALPA TREES. (We are the largest growers of Catalpa Speciosa in America.) It also tells how other growers in Kansas are making from \$30 to \$50 net per year from each acre they have.

Some Kansas growers have 400 acres and have had large incomes for ten years. Costs you only a postage stamp to get all we have learned about Catalpa in the last 15 years. Send for our Free Bulletin right now. Costs only a post card. WINFIELD NURSERY CO., BOX 2, WINFIELD, KAN.



You Won't Have EXPENSE On This Car
\$1600 Great Western \$1750
FORTY
You will get service all day and every day. Past record shows economy in gasoline, oil and almost total absence of repair expense. All owners say so. The handsomest car you ever saw. The United States Government thinks Great Western cars are about right too, for they use them in the Indian service out West for the hardest kind of service. The Great Western gives full measure of everything a man wants, power, comfort, low up-keep and the greatest mileage for the smallest quantities of gasoline and oil.
The Great Western "40" has Self-Starter, detachable fore-doors, Typhoon signal horn, demountable rims, electric headlights, gasoline gauge, large tires, finest hand buffed leather upholstery, plenty of room and everything of the best.
Send right away for copy of our handsome 1912 Art Catalog and read all about the Great Western. We will also put your name on our list for free subscription to "The Tattler," a little monthly magazine, most valuable to all who are looking into the automobile question.
GREAT WESTERN AUTOMOBILE COMPANY, Dept. PERU, INDIANA

Make Them Healthy and Keep Them Healthy with



KOW-KURE

KOW-KURE, the great cow medicine, is the only doctor the herd needs for most of the ailments peculiar to cows. A positive cure and preventive for BARRENNESS, ABORTION, RED WATER, SCOURS, BUNCHES, LOST APPETITE, MILK FEVER, GARGET and BLOATING.

KOW-KURE is not a "food." It is a specific remedy for diseases of cows, and the only one in the world for cows only. Used according to directions, it will make sick cows well and keep well cows in the best of condition. Regulates the digestive and generative organs and tones up the entire system.

No dairyman or farmer can afford to be without KOW-KURE. J. R. Steel of Co., Pa. writes: "This medicine has saved me hundreds of dollars worth of cows. It saved a \$75 dollar cow this winter."

Write for free book, "More Money from Your Cows." It is full of information you ought to have.

DAIRY ASSOCIATION CO., MFRS.
Lyndonville, Vt., U. S. A.

A Safe, Sane Hoist that LOCKS ITSELF

30 Days' Free Use Here's a bully work saving device and a great plan for trying it out. This device does everything from stretching wire fences to lifting the wagon while you're shifting the gears. As a hoist it's a winner. Strings 'em up—holds 'em up alone. Saves time, money, muscle 40 different ways. Can't be beat—can't let go. It's a



JUMBO
Safety Hoist and Wire Stretcher

Earns Cost—Costs Little. It lifts loads like ordinary block and tackle. But the minute you let up on pull rope the automatic locking device of the Jumbo grips onto the pull rope and it's fast. The heavier the load the tighter that grip. It's the grip that can't slip! It treats all ropes alike, whether they're old, new, wet or frayed. Adjusts itself to size of rope. Made of best steel, critically tested and inspected before shipment. Shipped for 30 days' FREE use anywhere; guaranteed everywhere. Nine different sizes; capacity 400 lbs. to 5 tons. Mail your name and your dealer's for the catalog and that BIG FREE OF-FER—right now!

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Wanted Farmer or Farmer's Son

with rig in every County to introduce and sell Family and Veterinary Remedies, Extracts and Spices. Fine pay. One man made \$90 one week. We mean business and want a man in your County. Write us, Shores-Mueller Co., Dept. 64, Cedar Rapids, Iowa



Wind Mill \$29.70 and Tower

Complete with Anchor Posts Sold Direct At Manufacturer's Prices

Also Full Line of Pumps, Windmills, Pipe, Plumbing Goods, Water Works Systems and Lighting Plants.

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Gopher Death

Kills Prairie Dogs and Gophers of all kinds. Endorsed by State Experimental Stations. 1400 tablets prepaid for \$1.25. Warranted. Raticide Tablets, 25c. Ask druggist or send direct. Booklet Free. F. D. Chemical Co., Ft. Dodge, Ia.

VETERINARY COURSE AT HOME.

\$1200 Year and upwards can be made taking our Veterinary Course at home during spare time; taught in simplest English; Diploma granted, positions obtained for successful students; cost within reach of all; satisfaction guaranteed; particulars free. Ontario Veterinary Correspondence School, London, Can.

will accomplish the land owner's purpose, and is the item the tenant will have to pay. So it would seem that \$15 plus \$30, or a total of \$45 per year, is what the tenant should be charged. If the tenant has dairy cows and other cattle sufficient to consume 100 tons of silage during the winter feeding season, the tenant can well afford to pay \$45 per year for the use of a 100-ton silo.

Build Cement Bridges.

The people of the state must decide whether they will have good, substantial, permanent bridges, built under the supervision of men who know their business, or light, shaky, dangerous bridges, put up by a foreign contractor.

W. S. Gearhart, the state highway engineer, has been urging the people to build cement bridges which will be safe, and a credit to the community, and the bridge companies have been doing their best to defeat his plans. Reason it out. Which is the better, a cement bridge which will last for a century and cost nothing for upkeep, or a tin bridge which will be a constant expense to the taxpayers?

Washday Abolished in Allen County.

Often we go away from home to learn the news. This comes by way of a California paper. KANSAS FARMER asks its Allen County readers who are interested in this laundry to tell of their plans through this paper.

"Washday is to become a memory on the Kansas farms. In Allen County an experiment is being tried which is to provide a laundry for the farmer. The idea of a rural laundry which would go from farm to farm and gather up the clothes originated with Miss Frances Brown of the State Agricultural College at Manhattan. Miss Brown had noticed how the city housewives were escaping the drudgery of washday, and decided that a rural laundry would pay as well as any city laundry. The plan is not to have a money-making enterprise, but merely to pay expenses of operation."

Trees and Fruits for Western Kansas.

V. W. Goodrich, a successful fruit grower of Goodland, Kan., in answer to a KANSAS FARMER inquiry names the following trees and varieties of fruits as adapted to the western third of Kansas:

Forest trees for groves and windbreaks: Honey locust, black or yellow locust, elm, hackberry and Russian olive, Osage orange hedge and Russian mulberry. Cottonwood and willow on low wet soil.

Fruit trees: Apple—Red Astrakhan, Duchess, Wealthy, Winesap, Missouri Pippin, Ben Davis, Jonathan and Gano. Cherry—Early Richmond, Montmorency, Dyehouse, Wray, English Marillo. Pears—Kieffer, Duchess, Flemish Beauty, both standard and dwarf. Peach—well, just plant some more cherry trees and let your neighbor plant peach trees. Plum—Forest Garden, De Soto, Wolf, Wyant, Miner, Weaver, Surprise.

Those new fine delicacies, grand high-priced varieties, don't buy or "bite" just now, but wait two or three years and let the other fellow experiment with the fancy high-priced varieties. His method of planting he will write later.

Potato Half Acre Preparation.


As a rule people neglect their potato ground, plow it too late and too shallow and either work it too much or not enough, or put too little or too much manure on it, or put it on too near planting time not letting it rot, or keep the same patch in potatoes year after year, or cultivate it too seldom or at the wrong time. Disc early, plow deep, work often, don't plant all at same time, rotate, keep the half acre under control, for drainage if too wet, or in moist condition if the season is dry. In western Kansas big yields have been obtained by mulching with straw, hay or trash after the first or second cultivation. In western Kansas a half acre can be made to produce 200 bushels by irrigation from the stock well, using the overflow from the tank or by night-flooding. Why not flood the "potato half acre" and the whole garden, now—right away? What if we have had "lots of moisture"? As soon as surface is dry, disc the ground and then flood it for one or two days, and then as soon as possible disc it again and plow in a week—way down deep, and then work it occasionally until planting time. But let's raise "spuds" for the family this year. Won't the institute and Grange officers announce an "honor roll" for this "potato half acre"? —J. H. MILLER, Director College Extension, Kansas Agricultural College.

Live Stock Per Acre

HOW much live stock will 100 acres carry? Properly divided into small fields and protected with high-grade woven wire fence, 100 acres of land will support profitably a far heavier number of cattle than is common on American Farms.

In Germany 100 acres of used land carry 36 head of stock; in Denmark the total runs up to 41 head. How to know the right amount? Calculate the quantity of feed grown, subtract the quantity necessary for carrying draft animals, then divide the remainder by the quantity of dry food (26 pounds) required by the standard cow and the result will be the number of head possible to keep.

The fence is important. Use



Anthony Fence AMERICAN STEEL POSTS & GATES

ANTHONY FENCE is made of the best quality hard spring steel wire. The fabric is held together by the strongest and best staple tie known—the Anthony knot. Carefully galvanized and every rod thoroughly inspected and warranted.

Anthony Fence Sold Everywhere

Call on the dealer in your town. His advice and assistance will be valuable to you. Another advantage is the full stock of different designs displayed, enabling you to make a selection of fence adapted to your particular needs. The fence is shipped to him in carload lots at low freight rates and therefore he can quote you low prices.

American Steel Fence Post Cheaper than Wood and More Durable. Get Catalog.

Send for copy of "Anthony Fence Post" also book "How to Make the Farm Pay," profusely illustrated, devoted to the interests of farmers and showing how fence may be employed to enhance the carrying power of farms. Distributed free upon application.

W. S. Swales, Vice Pres. & Gen. Sales Agt., AMERICAN STEEL & WIRE CO., Chicago, 12 W. Adams St.; New York, 30 Church St.; Denver, U. S. Steel Products Co., San Francisco, Los Angeles, Portland, Seattle.

POTASH

The corn crop fooled lots of farmers last year. Many fields looked good but fell down on the yield. This was owing to a lack of available Potash, for Potash is primarily a producer of grain.

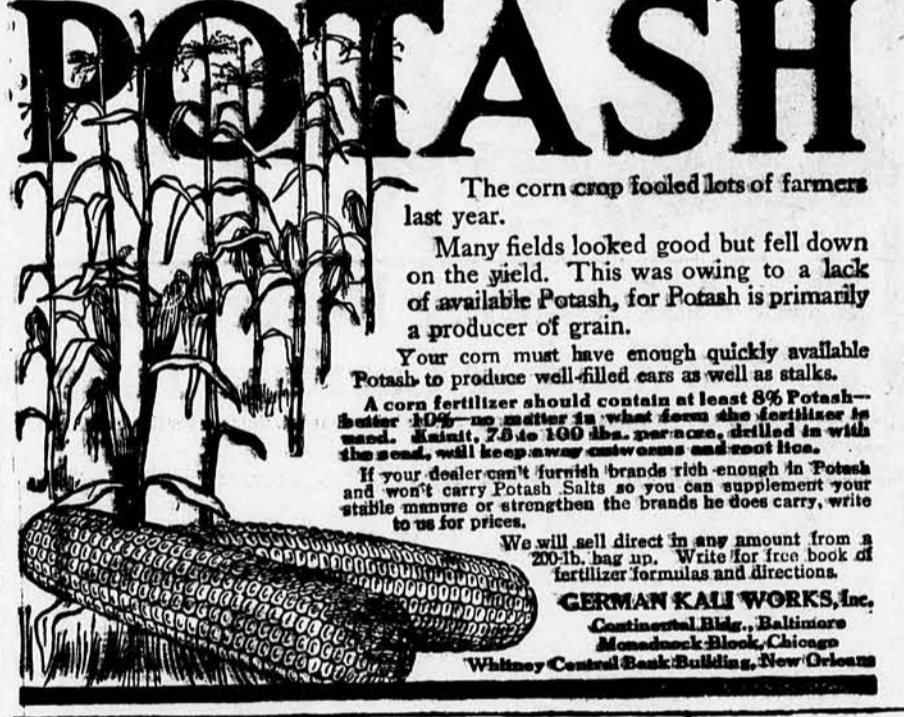
Your corn must have enough quickly available Potash to produce well-filled ears as well as stalks.

A corn fertilizer should contain at least 8% Potash—better 10%—no matter in what form the fertilizer is used. Limit, 7.5 to 100 lbs. per acre, drilled in with the seed, will keep away cutworms and root lice.

If your dealer can't furnish brands rich enough in Potash and won't carry Potash Salts so you can supplement your stable manure or strengthen the brands he does carry, write to us for prices.

We will sell direct in any amount from a 200-lb. bag up. Write for free book of fertilizer formulas and directions.

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CREAM SEPARATOR

38,796 Users did so Last Year
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It's come to be an accepted fact that DE LAVAL cream separators are as much superior to other separators as other separators are to gravity setting systems, and that an up-to-date DE LAVAL machine will on an average save its cost every year over any other separator.

Aside from the actual saving in more and better cream and butter and in time of separation and cleaning, easier running, greater durability and less repairs, there's the pride, comfort and satisfaction which none but the owner and user of a DE LAVAL machine can feel in his separator.

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APPLIES TO OLD DE LAVAL USERS ALSO

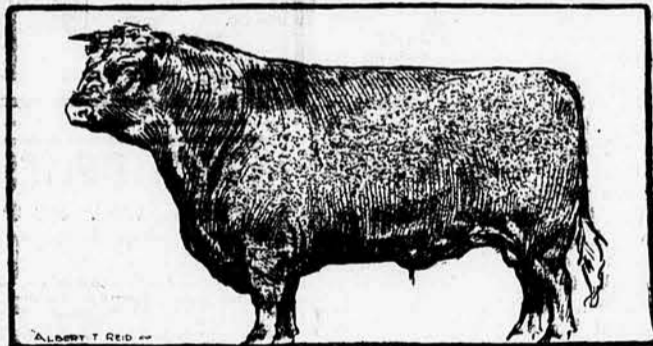
While all this applies particularly to the users of inferior separators it applies likewise to the many thousands of DE LAVAL machines 10 to 25 years old. They are not worn out and are still superior to other new machines of today, but there are so many improvements embodied in the modern DE LAVAL machines that these old DE LAVAL users can well afford to make an exchange and soon save the cost of doing so.

SEE THE NEAREST DE LAVAL AGENT

He will tell you how much he can allow on your old machine, whether a DE LAVAL or some other make, toward the purchase of a new DE LAVAL. If you don't know a DE LAVAL agent, write to the nearest DE LAVAL office giving make, number and size of your present machine, and full information will be sent you.

THE DE LAVAL SEPARATOR CO.

NEW YORK CHICAGO SAN FRANCISCO SEATTLE



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A Better Stove at a Lower Price

400 styles—30 days' free trial and 360 days' approval—choose your style
30 Days FREE—pay factory price—no more. It's not the biggest stove value you ever saw, send it back, we pay freight both ways—you won't risk a penny.

You can't make a mistake by paying factory price. 200,000 in use today. It's the quality stove, the KALAMAZOO.

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Kalamazoo, Mich.

Save \$5 to \$40
Cash or Credit

A Kalamazoo Direct to You

DAIRY



Aim at better dairying. If you aim at the mark the chances are you'll shoot near it.

The essential point in handling large producing cows is intelligent management and feeding.

Diversified farming is sure to impress itself upon us more and more as time wears on. The dairy cow must enter into this kind of farming.

A cow in Kansas is profitable when producing 200 pounds of butter fat per year. But a 300-pound cow can be had almost as easily as the 200-pound cow, and the dairy farmer should not stop short of 300 pounds, and when that is attained keep right on climbing.

When cream is separated by the hand separator it should be kept cool and in a clean place to be delivered to the creamery in the best condition. The separator should be thoroughly washed, steamed or scalded immediately after using, so that it will be perfectly clean and sweet.

The amount of inferior butter on the market is often charged to the more extended use of hand separators. It should be charged to the abuse, rather than the use, and more especially to the manner in which the cream is handled before it reaches the creamery and the length of time it is held before delivery.

A 14-year-old farm boy writing an exchange says: "I like farming and don't see how anyone can think farming to be any more tiresome than go and work in a shop with a boss over you all the while. I like the farm because you can shoot and hunt all you want to. I like to do chores and husk corn best of all."

We do not buy a surplus of farm machinery. We buy that up to date and use it for all it's worth. Why have a dozen inferior cow machines? Why not a half dozen good ones, and get out of them as much as from the dozen and save on the investment and save wear and tear on our muscles and dispositions—and save the farm, too?

There is skill in dairying, as in anything else. But, the greatest skill is not required to make good money from the cow in connection with general farming. The exclusive dairyman is the man who has the real skill—he needs it and makes good with it. There is a chance for real skill in every department of the farm work.

A subscriber asks how to break a cow from sucking herself. There are several humane methods. One is that of using a halter with a rein fastened to a girth just back of the forelegs. This prevents the cow from reaching her udder. Another is to use one of the several calf-weaning devices, preferably the one fastening in the nose and falling over the mouth. If the editor owned a self-sucking cow he would sell her.

It is safe for the dairy farmer to figure as an invariable rule that dairy performance follows dairy type—dairy conformation. Occasionally there is an exception to the rule, but these exceptions are so rare that they are not worth considering. Learn the dairy conformation—select cows having that conformation and breed for it. It is found in the dairy breeds, and in dairy-bred herds is the place to find it—either by buying the cows or by the purchase of a bull and breeding for it.

An exchange says there exists a deeply rooted prejudice among farmers against paying more than \$50 for a cow. This is due to the fact that they consider one cow about as good as another, that is if they give any thought whatever to the subject. They do not appreciate the fact that a good cow may return 50 or 100 per cent on the investment, while the poor cow may return a positive loss. As a man learns the comparative values of cows his prejudice disappears and he

figures more upon what profits will come from his investment than upon the price of an individual animal.

One of the demonstration cows at the International Dairy Show, Milwaukee, at one milking produced 16.1 pounds of milk testing 14.1 per cent butter fat. This is the highest test of authentic record. The previous day she gave 13.2 pounds milk, testing 5.8 per cent, and the succeeding day 21.6 pounds milk, testing 5.8 per cent, showing quite a fluctuation in the flow of milk. Thinking perhaps the abnormal test was due to a feverish condition, a veterinarian made an examination, and found her temperature in a normal condition, and otherwise right as far as could be seen. Truly, the methods of the dairy cow are shrouded in darkness. We have learned a few things about her, but not all.

There is no end to silo inquiries. Kansas farmers are sure enough studying the silo question. J. C. A., Ottawa, Kan., wants to know if it is feasible to feed cows the year around on silage. Such plan is feasible and it is often done. In such practice it is necessary that the farmer have two silos—one empty to fill when the corn is ready, and another filled and out of which to feed. The size of silo will, of course, depend upon the cows and other stock to be fed. The two silos need not necessarily be the same size—in fact it would be economy that they be not. Let the principal silo hold two times as much as the other. Out of this you would feed say eight months of the year, and the other four. The Illinois Experiment Station found that 1.34 acres of land raising corn and alfalfa would supply enough feed to keep a cow 365 days, and that such land in pasture would feed her but 78 days.

For 18 months dairy farmers have been resting easy on oleomargarine legislation. All this time the packers have been busy promoting their game. They have induced merchants, women's clubs, etc., to petition representatives in Congress to take down the bars and let oleomargarine be sold to the unwary consumer in every deceptive way possible. Every pound of oleo sold as and for butter displaces one pound of the farmer's product. You are willing that the consumer buy oleo if he wants it. You are not willing that he should buy oleo when he asks for butter. The Haugen bill puts oleo on its own reputation and in no way restrict its sale to people who want it, but it will protect the man who wants butter. Drop a line to your congressman and senators today to support the Haugen bill—it is your bill.

It is scarcely worth while to attempt improved dairying by breeding or selection until the shelter and feed questions have been settled. The dairy cow must be properly sheltered and fed—unsheltered and unfed the best dairy cow is as poor as the poorest scrub. The barn need not be expensive—let it be dry, ventilated, sun-lighted and convenient. The dairy barns of the millionaire farmer are often not so well adapted to successful dairying as hundreds of barns we have seen on Kansas farms. No hard and fast rule can be laid down for barn construction. Use your judgment, guided by reading and observation, keeping in mind the requirements herein named, and you will not go wrong in barn construction. Alfalfa and the silo furnish the easy means of solving the feed question.

Pontiac Clothilde DeKol 2d.

It was only a few years ago that the famous Holstein cow, Colantha 4th's Johanna, made her phenomenal record of 908 pounds of fat in a year. This was by far the largest record ever made up to that time. She has held the honor of being the champion dairy cow of the world until Pontiac Clothilde DeKol 2d appeared on the scene and last year produced 1,017.3 pounds of butter fat, 25,819 pounds of milk, producing 1,271.6 pounds of butter. Her average test was



KRATZER BUGGIES come through this kind of service good as new

SPRING mud service gives cheap or Eastern-made buggies a shabby, second-hand look. They are not built for such tough service. The Kratzer is. It is built for use on Western roads by men who have grown up with the country. It will stand the strain of the hardest road service for many years and always wash up bright and fresh.

How greater endurance is built into Kratzer Vehicles

Best hickory wood stock is used. Practically no one except us uses black hickory for poles and shafts. We use more drop forgings for reinforcement than any other makers. The "Kratzer Kurve" axles, all steel forged fifth wheels and Cambria steel springs are the most durable made. Kratzer finish is the result of 12 to 14 processes. Stays handsome through years of service. Yet all this extra durability costs you little more. You pay no extras for a Kratzer, no transfer charge, no jobber profit. The freight charge is very small.



No. 46 Panama
15-16 inch Bell collar, long distance axles; new "Kratzer Kurve" axles; wheel, 3-4 or 7-8 inch round-corner auto seat, 31 1-2 inches wide; back, 22 inches high; body, 23x56 inches; leather quarter top; cushions, 17x32 inches; trimmings and painting as desired.

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Write us and we'll be glad to tell you his name and send you our catalog. He will guarantee you satisfaction with a Kratzer. Buy at home and run no risks.

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108 W. First Street DES MOINES, IOWA

50 other styles shown in Catalog. Write for it.

Sam Thompson Makes The Only Guaranteed Incubator In The World

It's called the Fairfield. The World's Best Hatcher and my guarantee says plainly in black and white that it will hatch 90% or more of all hatchable eggs—not once but every time and in all climates. If it fails to do this for you I take it back and you get your money. **Try the Fairfield 2 Hatches at my Risk. Satisfy Yourself that it's the World's Best Hatcher.**

I have confidence in my Fairfield—I will back it against any incubator in the world. I will do better by you than any incubator manufacturer ever dared to do. I will ship you a Fairfield on trial. If it fails to make good, that is, hatch 90% or better, I take it back without a penny's cost to you. Can you beat it? **The Fairfield Brooder is Also Guaranteed.** Be sure to raise all the chicks the Fairfield hatches. The Fairfield Brooder, rat, weasel and storm proof, is the greatest and safest mechanical mother in the world. Guaranteed to do full duty.

Write for Free Catalog Full of Profitable Poultry Pointers. Contains complete description of the Fairfield Incubator and Brooder and special low combination Incubator and Brooder prices. Don't buy any incubator until you get this handsome free catalog.

Sam Thompson, President, Nebraska Incubator Co., 57, Main St., Fairfield, Neb.

GASOLINE ENGINES ARE DEPENDABLE. They always finish the job. Don't break down or act balky when you can least afford a delay. Loss of time to yourself and men makes the so-called cheap engines the most expensive. You are assured the best of material and workmanship in an Otto. They have been the standard everywhere for 36 years. Own the best, it is the cheapest, the most satisfactory. Descriptive bulletin mailed upon request if you state size that interests you.

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THE EFFICIENT SCHOOL FOR BANKS AND RAILROADS.
Furnishes more Bankers, Civil Service help, Commercial Teachers, R. R. Stenographers, and Telegraphers, than any other school. U. P. contracts to take all our male operators, and allow salary while learning. We guarantee position for complete course or refund tuition. Twenty instructors, eighteen rooms, one thousand students. **TERMS REASONABLE.**
NEW FEATURES—Farm Accounting, McCaskey Register, Wireless Telegraphy. Write for catalog and Free Tuition Prize Offer. No agents out to get you to sign up. Address, T. W. ROACH, Pres. 201 S. Santa Fe, Salina, Kansas.

IOWA NEW GALVANIZED GATES.
GATES Let me ship the gates you need for 60 days free inspection and trial. Save from \$50 to \$250 on your gate purchase. Iowa Gates are made of high carbon steel tubing and large stiff No. 9 wires. Rust proof—wear proof. Write for my special proposition today. Complete galvanized frame, also painted gates cheaper than ever before. Jos. B. Clay, Manager, IOWA GATE CO., 48 Clay Street, Cedar Falls, Iowa

Don't be humbugged any more! Gabel's World Beater Fly Repellent is sold on 30 day free trial. Good, reliable agents wanted. Reference, Bradstreet's Commercial Agencies and 1st Nat'l Bank, Hawkeye. GABEL MFG. CO., Hastings, Neb.

POULTRY



Here it is the middle of March, with snow on the ground, in place of young chicks.

The delay in the spring-like weather has a tendency to make poultry raisers despondent and sore at heart.

But we must possess our souls in patience, for many a fine day is in store for us, and the chirp of the newly-hatched chick will be heard all over the land before many days.

The quickest way to get a start in fancy poultry is to buy a pen of full grown fowls this spring, from which a large flock of chickens can be raised ready for next season's work.

The cheapest way to get a start in pure-bred poultry is to buy a few settings of eggs from a dealer in the breed of poultry that you admire, and have a flock of thoroughbreds ready for next spring.

Never begrudge a few dollars for fresh blood each year, either in the shape of a new male bird or a setting of eggs, for it will always be worth more than it cost you, if you get the right stuff.

All things being equal, buy your stock from breeders that live nearest to you, for expressage is high and there is just as good stock in the west as in the east. High prices are not always a criterion of the quality of the birds.

In answer to a subscriber, would state that the standard weight of White Plymouth Rocks is a pound heavier than White Wyandottes. Cock, 9 1/2 pounds; hen, 7 1/2 pounds; cockerel, 8 pounds; pullet, 6 1/2 pounds. White Plymouth Rocks have a single comb; White Wyandottes a rose comb.

A correspondent wishes to know which is the best incubator. We have frequently stated that we cannot answer such questions in the columns of KANSAS FARMER, for even if we did know which was the best, to state so publicly would be manifestly unfair to the manufacturers of the other incubators that advertise with us. But we do not know which is the best incubator, for we have not tried or tested all the incubators that are advertised, and without testing all and giving all the same treatment, no one could decide which was the best. Suffice it to say that we do not believe there is a poor incubator advertised in these columns, and that all of them will do good work if properly run. The best thing to do is to send for the catalogues of the different incubators and compare them. Read up on incubators, and decide in your own mind which you prefer—a hot air machine or a hot water machine. Then study the prices of the different makes. These vary a great deal. The size of your pocket-book ought to decide that. Then look at the testimonials of those who have already tried these machines, and be guided to a great extent by them. If you have neighbors who have used incubators, it would be well to call upon them and see what success they have had with the machines they use, and if they have been very successful with a certain kind of machine, that would be a good incubator for you to buy. The manufacturers, of course, are interested in their own machines, and think there are no others as good, but get a disinterested person's opinion, and you are likely to get the truth. This is the best advice we can give you about choosing an incubator.

Lice, like the poor, are with us always, though not in as great numbers now as they will be in warmer weather. But now is the very best time to fight them. By killing hundreds now you will anticipate killing millions in the near future. Though the most efficacious way of killing lice on poultry is to dust each fowl individually, it is a very tedious way and where there are great numbers of fowls an almost impossibility. Another way is to use liquid lice killer. This can be poured in the bottom of a large box, the fowls confined

therein for an hour or two. This usually proves a good job, much better than painting the roosts with lice killer, though the latter method will help to destroy a great number of lice. If a good dusting place is provided for the hens they will cleanse themselves of most of the lice. The best dust bath that can be provided is fresh earth, either dry or a little moist. We notice that hens prefer a moist soil to dust in, and that it sticks to their feathers better than when too dry. Any kind of dust is fatal to lice. The dust box should be in front of a window where the sun can shine upon it. If no dry earth is available, coal ashes will prove a good substitute. Wood ashes are not so good, for if they get damp the lye that is created thereby would prove injurious to the hens. By taking up this lice question at once, and attending to the extermination of the enemy, it will prove of immense advantage in the rearing of young chicks later in the season. While old fowls can stand a lot of lice without succumbing entirely to their ravages, young chicks will not thrive at all when pestered with lice. Old fowls will lay much better after they are rid of lice, for the sustenance that goes to maintaining parasites will go to the making of eggs.

Don't Breed from Immature Stock.

The custom of breeding chicks from cockerels and pullets of immature age has been too prevalent of late, and a halt should be ordered. For quite a number of years the demand for good stock from standard breeds of poultry has been so enormous, in nearly all varieties, that they have been sold off so close that the remaining pullets have been placed in the breeding pens before they had fully matured. Then again, from the fact that the pullets will usually lay more eggs than hens two years old, many writers recommend that the old hens be sent to market and to use pullets in their stead. Thus we have two causes for finding so many pullets in the breeding pens. It is all right to have early hatched pullets to lay eggs in the winter, but some of the best hens ought to be saved for raising the chicks in the spring. The progeny from mature stock will be much larger, as well as hardier. In the large breeds neither males or females fully mature until they are a year and a half old, and by following the advice of sending all the hens to the market, they are sent there when they are just entering their best age for producing vigorous offspring.

Fowls will reproduce at an early age, before they have their growth in size or vigor in vital forces, and such being the case, they are unable to transmit to their offspring a degree of strength and vigor which they do not possess themselves. The consequence is that the eggs produced by such fowls must of necessity be deficient in the same important requisites. In the first place the germ—the life principle—is weak and imperfect, and the chick cannot develop to the proper stage and with the necessary strength to make its way through the shell, and must of necessity die; and if perchance it survives the period of incubation, it comes forth weak and feeble and will not be able to live through the first stage of feathering. The continued practice of breeding from immature stock is fraught with great evil, and must result in the end, by the laws of heredity, to a progeny dwarfed in size as well as in constitutional strength and vigor. Some of these results can often be seen at our poultry shows, where some of the Leghorns and other non-weight classes are no larger than a good-sized pigeon. In fact we have seen some pouter pigeons that have outweighed the Leghorns. The weight clause in the standard for the Asiatic, American, English and other classes compel the breeders to keep them up to standard weight or risk losing prizes for being underweight. This also emphasizes the superiority of one phase of the score-card system of judging over the comparison method. Under the score-card the fowls must weigh a certain standard or they are docked two points for every pound they are below standard weight. In comparison shows the birds are not

Good Work.

It was our privilege a short time ago to visit a Grange which had been organized only eight months, and it was with pleasure and admiration that we watched the officers execute their part in the beautiful ceremony of conferring the degrees. Each officer gave the charge as if it was a part of his being, and acted and looked the part which was represented. The two assistants never so much as halted in their leading, and you Patrons know how well that is appreciated by the other officers. All parts that were given by their elected officers were very nearly perfect, but the lecturer was very proficient. Many of you know the lengthy charges that are given by this officer, and all of you would have admired this lady's efforts. Never once did she falter or hesitate for the right word.

What this Grange does can be done by all of our 140 subordinate Granges. You newly elected officers, get busy now. You who are holding over for another year, brush up and see if you can not improve a little on your last year's record.

We had a theory in our own Grange—and we believe it to be one of the best Granges in the state—that when we had elected to office an elderly sister or older brother that we should excuse them from committing their parts in the ritualistic work of the order, but observation proves that we should not make any exception, for if you excuse one the others think they are also excused, and the result is not progressive. Age does not bar anyone in our order from intellectual progress.

Fair and Reasonable.

A member of Congress recently commenting on the Grange influence in legislation, made this significant assertion: "The Grange has been very successful in its legislative undertakings, because in my observation it has always been eminently fair and reasonable."

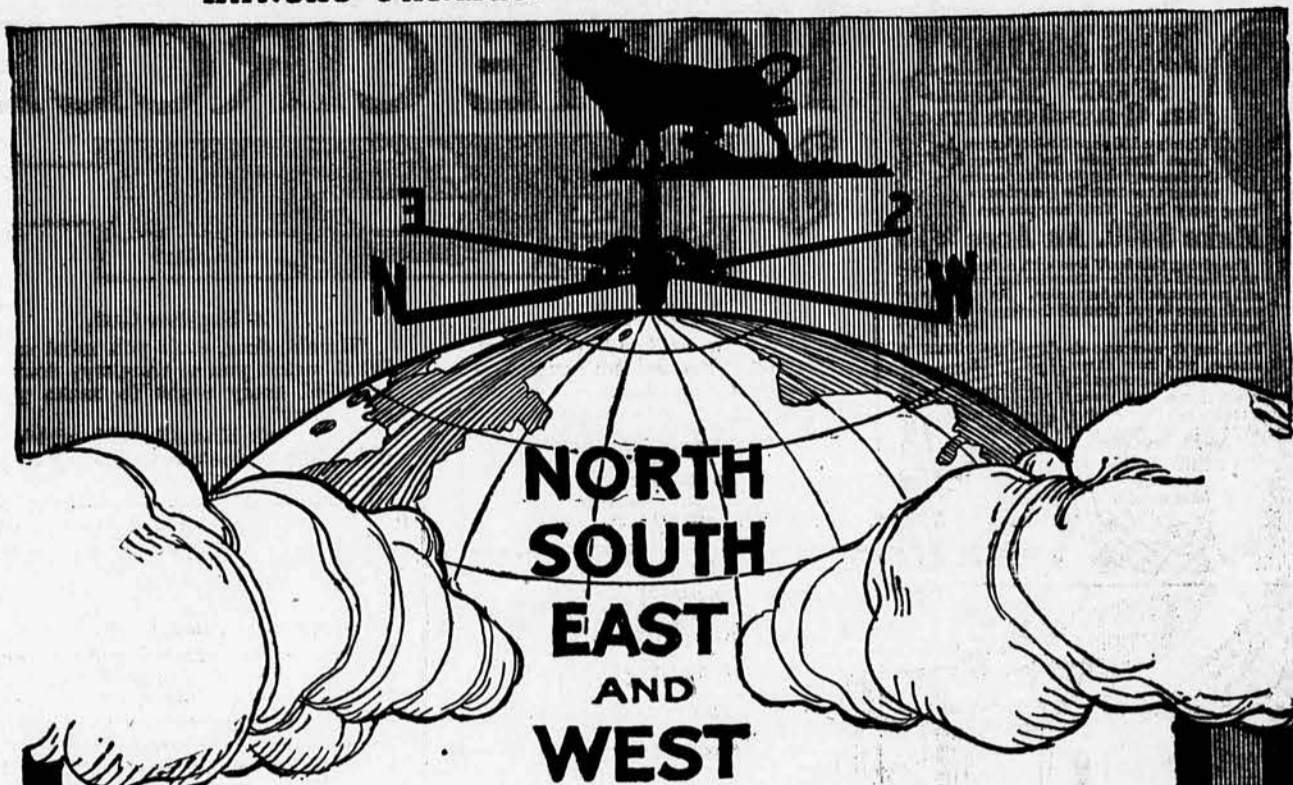
This significant remark, from a man who has been on the ground for years and in a position for thorough observation, touches the keynote of success and reveals the exact truth. Trace the efforts of the Grange in legislation back through the years to the beginning, in national and state circles, and to a noteworthy degree the words "fair and reasonable" may be applied to its undertakings. During those years the Grange legislative work has been directed by many different men, of widely varying opinions, yet the same underlying purpose has been present.

Many victories have crowned Grange legislative efforts, yet no flush of triumph has been permitted to bias further undertakings or to impel endeavors that were not worthy the best judgment and continuing good sense. While from such defeats as have been encountered the Grange has emerged determined and hopeful, and has immediately marshalled its forces for a new try. The legislative record of the Grange achievements is one of the phases of its work most to be proud of.

Unselfish in its fundamental purposes, the Grange has ever sought in legislative endeavors to promote the interests of the farm and the farm people—for their welfare and improvement it has assumed a large responsibility. But never has a Grange legislative enactment brought benefit and improved conditions to them without bringing it also to scores and hundreds of others not members of the order and perhaps not even tillers of the soil. There is no place in the Grange platform for class legislation and its efforts are never directed towards narrow ends. But to best serve rural life, its interests and its people, by legislation and by education, this is the true Grange program. And in legislation, as well as elsewhere, its work, its policies and its demands succeed because they are indeed "fair and reasonable" to all.

Farm and City Wages.

The farmer is often charged with refusing to pay his hired help as much money as the same man could earn as a laborer in the city. In defense of the farmer we deny the charge. The laborer rarely makes more than \$1.50 a day in the city, and during rainy days and winter weather he lays off. When labor is scarce he may get \$1.75 per working day. If he works hard, which he does usually, he requires substantial food, and \$4.50 to \$5 per week is what board and room will cost him. Besides he hires his washing and ironing done, and we do not know what that costs. Do your own figuring, though, and see how he comes out at \$25 per month with board, room, washing and ironing. On the farm he



The popularity of "Bull" Durham is not confined to any one section. It is smoked everywhere—and, whether smoked in a pipe or "rolled" into a cigarette, it is the favorite everywhere.

Not a rich man's tobacco—not a poor man's tobacco. It is the tobacco for every man who wants a pure, mild, sweet smoke—regardless of price or package.

GENUINE "BULL" DURHAM SMOKING TOBACCO

Forty "rollings" in each 5-cent muslin sack

This famous old tobacco is packed in a plain, homely, muslin sack that has become familiar to smokers the world over. It is not handsome or showy, but its cheapness permits just that much more goodness to go into the tobacco itself.

The Purest Form of Tobacco

"Bull" Durham is simply the granulated leaves of bright golden Virginia and

North Carolina tobacco. The purest form of tobacco human skill can produce.

Try a sack of this grand old tobacco today. See why more men smoke "Bull" Durham than all other high-grade brands combined. See why for three generations men have gone on smoking this glorious tobacco year after year, and will not be satisfied with anything else.



Sold by practically every tobacco dealer in the U. S.

A book of "papers" free with each 5c. muslin sack.



SEED POTATOES

NEW MAJESTIC; Earliest, biggest and best in the world; Early Ohio, Early Rose and Early Six Weeks, the standard of all varieties. Also Carmon No. 3 and Rural New Yorkers No. 2 and all other best sorts. All our seed grown in Red River Valley of North Dakota from strictly pure varieties. Write for big illustrated catalog of Seed Potatoes, seed corn, farm and garden seeds. RATEKIN'S SEED HOUSE, Shenandoah, Iowa.

CONCRETE SILOS

The best Silo that can be built. Write for prices for 1912.

HOPPER & SON, Manhattan, Kansas

will miss some entertainment and chances to spend his money, but by so doing he will close the year with more money in the bank.

SEED CORN Hildreth Yellow Dent Commercial White Two best varieties, yielding 10 to 20 bushels more per acre. Write for prices, and place orders early. C. D. RESLEE, E. D. 4, Chanute, Kan.

SEED CORN First prize six consecutive years at Manhattan—State Corn Show—proves I have the best strains Seed Corn in the West. Reid's Yellow Dent, Boone Co. White. Write for free catalog. S. G. Trent, Box K, Hiawatha, Kansas.

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For the farmer and breeder for sale at this office. Send for catalog. Address KANSAS FARMER, TOPEKA, KAN.

SEED CORN REID'S YELLOW DENT BOONE COUNTY WHITE This is good stuff. We guarantee it to please you. Our supply is limited. Price, shelled and graded, per bushel \$2; in the ear, crated, per bushel, \$2.50. F. M. REBEL & SON, Arbia, Mo.

OLD SEED CORN Most seed of 1911 crop will not grow. Have four varieties; can furnish ear or shell corn. Have tested my seed and will guarantee it. Write for my circular and price list. Frank J. Eist, Humboldt, Neb.

20 Concord Grapes \$1 Early - Vigorous Stock Guaranteed. 10 Budded Cherries \$1 Buy from a house that has a reputation for low prices and square dealing. Send for our Free Catalogue and See Our BILL. FAIRBURY NURSERY, Box 7 Fairbury, Neb.

TEN ASSORTED APPLE TREES, 10 peach, 10 cherry, 5 pear, and 5 plum trees prepaid to all points in Kansas and adjoining states for \$5.00. Free catalog of fruit trees, berry plants, shrubs and flowers. Holsinger Bros., Dept. 58, Rosedale, Kan.

FRANK IAMS' DRAFT-STALLIONS

Are "up-to-the-minute" and 10 years in advance. They are the "Drafty, big-boned type"—"Nifty Big Black Boys"—the real "medal winners"—sensational "show and business horses" of note, "ripe peaches" from the "select 400." Big, classy "Peaches and Cream"—"Black Boys." The "Iams Brand" of drafty "top notchers." Iams' 1912 importation of Percheron and Belgian stallions and mares are in the "Pink of Condition" and ready for a "good selling." "Ikey, Boy," smile sweetly, and hundreds of Iams' satisfied customers "will sit up and take notice" that Iams, the "King Pin" horse importer, is still "doing business" at the "old stand." Iams is "pushing" his horses to the front. The big "Peaches and Cream" "Boys and Girls" are attractions that can't be overlooked. Iams mesmerizes buyers with "real drafters," at "bargain prices," and having the "horses as advertised." Iams' "competitors" and "hammer knockers" are "boosting Iams" by their "knocks" until now he is known as the "Millionaire Horseman," and on "Easy Street," and growing fast. Ikey, "Come on along," and sing Iams' song. He is selling these "aristocratic," fancy "Black Boys" cheaper than ever—or better horses for less money—\$1,000 and \$1,400 (few little higher). Iams has

120 PERCHERON and BELGIAN STALLIONS and MARES 120

They are "Models"—"Humdingers." They are 2 to 5 years old, weigh 1,700 to 2,500 lbs., 80 per cent blacks, 50 per cent ton horses. All "approved and stamped" by European government. Registered in popular stud books of U. S. Many "prize winners" and "gold medal horses." Big, Drafty "top notchers," with big bone, quality, style, finish and action to burn. They are "Eye-openers"—larger and better horses than seen elsewhere. Big "business propositions" that make "the wheels work fast" under a "Buyer's hat." "Georgie, dear," Iams made a "big killing" by buying his horses in Europe in October 1911. "Dry weather," "bad crops," "close money" and "Iams' cash" caused the "prize winners" and "tops to be thrown on the market for a "good selling." Iams "cut the melon" and bought the "rippers" at "knockout prices." Iams will give his customers the benefit of his "good buy." "Ikey, boy," "come on down town"—get into

IAMS' "Get Rich Wagon" and Save \$1,000 on a "Top Stallion"

(and you wear the diamonds). Iams is a "big fly in the jelly" in the horse world. "He keeps the gang guessing." Iams sells "Imported horses only"—(They win 90% of prizes at big horse shows). No "American bred full bloods"—No "Auction stuff" or "Peddlers' horses"—only "choice drafters" of big size, bone, quality and finish. Iams imported horses are "approved"—"branded," "Inspected," and "Certificate stamped O. K." by governments of "France and U. S. A." Iams has the "crack stallions and mares" you "read about." Buy horses of Iams and you won't "get stung" in horse or price. "Dolly D.," waltz me around once again "Ikey," land me at Iams' box office and importing barns. Full to "the roof" with "Black boys" (and all must be sold). Reduced prices. All the world knows Iams and his "Peaches and Cream" horses. 1912 promises to be a bumper year to Iams and his customers. He saved \$300,000 to stallion buyers in 1911. Watch "Iams' smoke" in 1912. Iams' 30 years of successful business makes him a safe man to do business with. Iams sells horses "on honor." A boy or a lady can buy as cheap as a man.

IAMS' 1912 HORSE CATALOGUE IS AN "EYE-OPENER." IT HAS "A LAUGH" AND A \$1,000 BARGAIN IN EVERY LINE.

"A bunch of gold" THE "BOOK OF BOOKS" to stallion and mare buyers. It is full of "WIDE-AS-A-WAGON DRAFTERS"—the real "peaches and cream" stallions. It shows LARGEST IMPORTED stallions and mares in the United States, "TRUE TO LIFE," and TRUTHS, FACTS, "BUSINESS PROPOSITIONS," and 100 illustrations of "TOP-NOTCHERS" and the "TRICKS OF STALLION PEDDLERS" and "AUCTION BLOCK" SALESMEN. It is the finest, most elaborate, and original up-to-date horse book in the world. Iams, the "square deal" horseman, makes every statement in ad. or catalog good—or you get the \$500 he hangs up. Iams guarantees to sell you a better imported stallion at \$1,000 and \$1,400 (few higher) than are sold to stock companies for \$4,000. Imported mares, \$700 and \$1,000. Iams gives 60 per cent breeding guarantee; pays freight on horse and fare of one buyer. He can furnish \$1,500 insurance. IAMS buys and sells every stallion himself. Saves buyers \$1,000 in middlemen's profits. He buys stallions by "trainload." He speaks the languages—(saving 20 per cent). He is not in the "Stallion Trust." No partners—to share profits. He "pays cash" for his horses—and sells "top notchers" by "hot advertising" and having "the goods." "Big Ikey," leave your "happy" home and buy a "top" stallion or pair of imported mares (of Iams) that bring colts that sell at \$500 each. "Papa," don't let those "auction men" "hand you a lemon" in one of those "so-called" "American full-bloods" of questionable breeding. Buy an imported horse of Iams, the "reliable horseman." Then we will "all wear diamonds." Iams' "selling clothes" fit all buyers. Write for Iams' million-dollar horse catalog. Iams won't let you go without a Peaches and Cream stallion or mare. "He sells the tails off them." Iams' guarantees are backed by "half-million dollars." References—First National and Omaha National Banks, Omaha; Packers' National Bank, South Omaha; Citizens State, First State, and St. Paul State Banks, St. Paul, Neb. Iams buys big ad. space because it is cheaper than flannel-mouthed horse salesmen.

ST. PAUL NEBRASKA



Shorthorn Cattle Dispersion Sale

At Hutchinson, Ks., Wednesday, March 27, 1912

SIXTY HEAD OF COWS AND HEIFERS, 20 CHOICE COWS WITH CALVES, BY VICTOR ARCHER, AND MOST OF THEM BRED BACK AGAIN; 15 CHOICE HEIFERS, ALL BRED TO EITHER VICTOR ARCHER OR PROTECTOR.



VICTOR ARCHER 264156

Please write for catalogue, and arrange to attend my sale.

R. A. STEWART,

Auctioneers—R. L. Harriman, Lafe Burger. O. W. Devine will represent Kansas Farmer.

Remember the date—WEDNESDAY, MARCH 27—Hutchinson, Kansas.

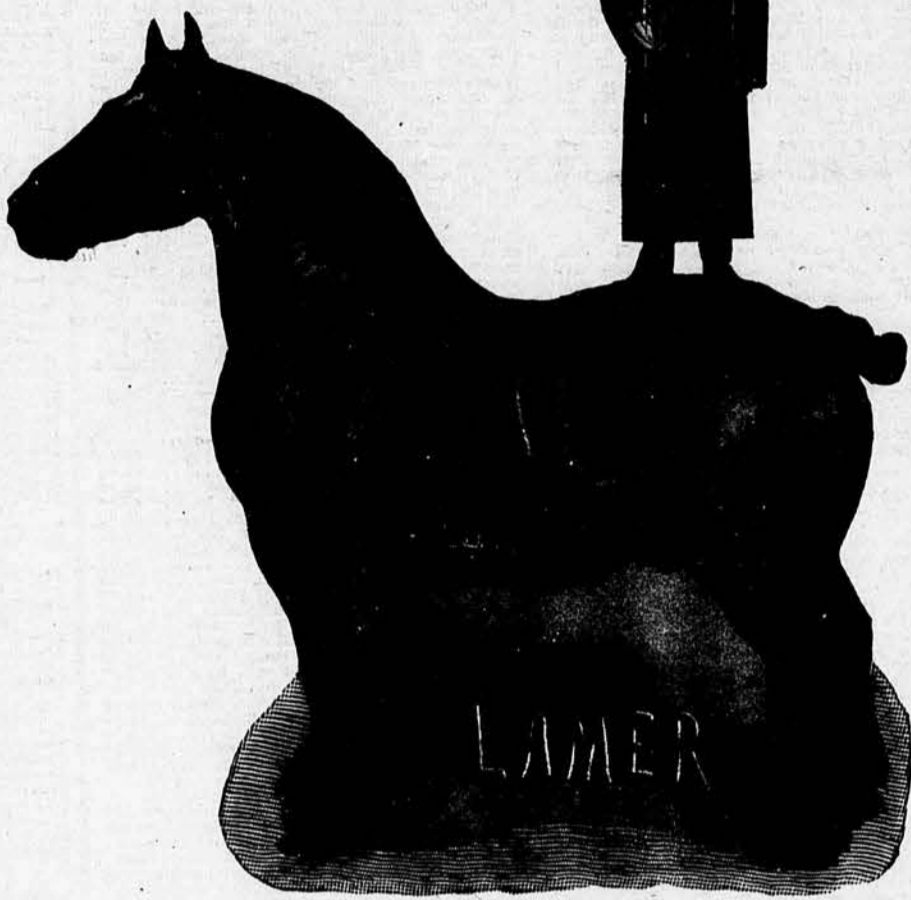
I am selling my two herd bulls, Victor Archer and Protector, and a number of young VICTOR ARCHER BULLS of SERVICEABLE AGE. On account of other business I am practically dispersing my entire herd, and am offering an exceptional lot of useful cattle, which will give farmers and breeders an opportunity to buy at a time when they are sure to go on and make them money. The leading attraction in this sale will be my valuable HERD BULL, VICTOR ARCHER, by ARCHER, dam ELDER LAWN VICTORIA. This sale will be largely a Victor Archer offering, including a number by Forest Knight, Gallant Knight's Heir, and Royal Archer. All of the calves are by Victor Archer. All of the cows and heifers with calf are bred to either Victor Archer, Protector, or Royal Archer.

Hutchinson, Kansas

PERCHERON SALE

Salina, Kansas

**THURSDAY,
MARCH 21, 1912**



I will sell, at SALINA, KAN., THURSDAY, MARCH 21, 1912, 51 head of Imported and Home-grown, Registered Percheron and French Draft Mares and Stallions, consisting of eight stallions from 3 to 5 years old, two stallions coming 2 years old, six stallions coming 1 year old, 21 mares from 2 to 5 years old, one Belgian mare, seven fillies coming 1 year old, one Belgian stallion 3 years old, weight 2000 pounds, one French coach horse, one jack, three jennets.

The above stock is large and growthy, with plenty of conformation and weight. If you are in the market for a first-class stallion or mare, the kind to start the foundation for a family of horses, don't miss this sale. These horses are all thoroughly acclimated and ready for service. Several of these horses that will be sold on above named date were first prize winners at the American Royal at Kansas City, Topeka and Hutchinson State Fairs. One automobile. Sale in pavilion. No postponement on account of bad weather. Come one or two days before the sale and look this stock over. Sale starts at 12 o'clock noon, March 21. Write for catalog.

AUCTIONEER—DAN SAYER.

C. W. LAMER,

Salina, Kansas

TOO LATE TO CLASSIFY TOO LATE TO CLASSIFY

SPRING PIGS

I am now booking orders for spring pigs, either sex, sired by Captain Hutch, King Hadley 2nd, Hutch, Jr., Mouw's Longfellow Price, Panoramble and A Wonder, out of Long King's Equal sows and sows of the best big type breeding, immense individuals in size and quality. Order early and get first choice. Pigs shipped at 3 months old. Nothing but first-class stuff shipped. Send for private sale catalog and prices. In buying at this age you save enormous express charges.

"THE HOME OF CAPTAIN HUTCH," C. W. JONES, SOLOMON, KAN.

FOR SALE—REGISTERED GUERNSEY bull calf. Henry's Ard High of Preel 19877. Also, a number of high-class Duroc Jersey gilts and boars. Prices reasonable. Breeding considered. Address, S. D. HENRY, Ard High Stock Farm, Excelsior Springs, Mo.

YOUNG HOLSTEIN BULLS.

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

HOLSTEINS FOR SALE.

Forty (40) head of heifers and cows; to freshen inside 30 days. Several cows heavy milkers; fresh now. Bulls from 1 to 15 months of age. Ira Romig, Station B. Topeka, Kan.

FIELD NOTES

FIELD MEN.

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

PURE BRED STOCK SALES.

- Percherons.
March 21—C. W. Lamer, Salina, Kan.
- Aberdeen-Angus.
April 9—W. W. Andrews and C. D. and E. F. Caldwell, at Maryville, Mo.
- Jacks and Jennets.
March 19—J. E. Clary & Sons, Sheridan, Mo.
- Holstein Cattle.
April 20—F. J. Searle, Oskaloosa, Kan.
- Jersey Cattle.
April 25—Sale at Hiawatha, Kan., Western Jersey Cattle Breeders' Henry E. Wyatt, Falls City, Neb., Manager.
- April 25—B. C. Settles, manager, Palmyra, Mo. Sale at Hiawatha, Kan.
- Shorthorns.
April 10—H. M. Hill, Lafontaine, and S. C. Hanna, Howard, Kan. Sale at Fredonia, Kan.
- Aberdeen Angus Cattle.
April 30—American Aberdeen-Angus Breeders' Association sale at Omaha, Neb. Chas. Gray, secretary, Chicago.
- May 2—American Aberdeen-Angus Breeders' Association sale at Chicago. Chas. Gray, secretary, Chicago.

REGISTERED PERCHERON STALLIONS.

Six head, 3's and 4's, blacks and roans, and extra good individuals. Will be sold reasonable if sold soon. G. S. HAMAKER, Pawnee City, Neb.

Young Holstein Bulls

Sired by Petertje Hengerveld Nannette and out of heavy producing dams, for sale. From young calves to yearlings. Won first at Topeka, Hutchinson and Oklahoma State fairs on young herd, 1911. Herd bull was Junior champion.

W. C. JONES & SONS,
Route 2. Topeka, Kan.

Poland Chinas.

March 23—S. W. Alfred, Enid, Okla.
March 28—Herman Groninger & Sons, Bendena, Kan.
April 20—Roy Johnston, South Mound, Kan.
May 14—Nevius & Wedd, Jales, Kan.
May 15—Matt Alton, Erie, Kan.
Sept. 27—John T. Curry, Winchester, Kan.
Oct. 15—H. B. Walter, Effingham, Kan.
Oct. 16—H. C. Graner, Lancaster, Kan.
Oct. 17—M. T. Williams, Valley Falls, Kan.

Duroc Jerseys.

July 26—E. W. Davis & Co., Glenwood, Mo.
John Sparrowhawk, Wakefield, Kan., has a Shorthorn bull for exchange.

Chapin's Durocs.

Grant Chapin, the old-time Duroc Jersey breeder of Green, Clay County, Kan., offers 25 bred sows and gilts for quick sale, also fall pigs. Write him for prices, etc. The Chapin Durocs are rich in the blood of the Col. and Crimson Wonder families.

The great success attained by Gopher Death, now sold in 30 states and foreign countries, is because it is made of a delicate, palatable morsel that prairie dogs, pocket gophers and ground squirrels love like children love candy. They eat it and die. Booklet free. See advertisement in this issue. Fort Dodge Chemical Co., Ft. Dodge, Iowa.

It Taxes the Typewriter.

We would like to write an article on the Holstein for publication in Kansas Farmer, but the subject is too big and, besides, our literary ability is taxed in answering the letters of inquiry about Holsteins which come from our advertisement in Kansas Farmer.—S. W. COOKE & SON, Breeders of Holsteins, Maysville, Mo.

Shorthorn Herd Book.

Volume 77 of the American Shorthorn herd book is just off the press. It contains pedigrees of bulls numbered 333,001 to 342,000 and females numbered 81,001 to 92,000. This volume is sold to non-members at \$2.50, prepaid, or \$3 at the office of Secretary John W. Groves, Stock Yards Station, Chicago.

Larned, Kan., Nov. 6, 1905.

CURRIE WIND-MILL CO., Topeka, Kan.
Gentlemen—Please find enclosed draft for the Wind-Mill ordered of you some time ago. In regard to the Mill will say for simplicity and power I think your Mill excels any of the market. I have three other makes of mills. J. J. NESBIT, Superintendent of Larned Water Works.

Jerseys and Guernseys.

Oren S. Day, Box 64, Footville, Wis., is advertising some choice things in Jersey cattle in this issue of Kansas Farmer. Mr. Day is in close touch with the importing business and is in a position to fill orders for imported Jerseys or Guernseys. He has developed a business which should be appreciated by the farmers and dairymen of Kansas, many of whom would buy imported bulls if they were accessible and priced right. Guernseys are rather hard to get, and Mr. Day offers the chance at just the right time. Ask him for prices on bred heifers of either breed, or on a herd header. Please mention Kansas Farmer.

Amcoats' Shorthorns.

S. B. Amcoats, the Shorthorn breeder of Clay Center, Kan., offers for sale the two-year-old pure Scotch tried sire Whirlwind. Whirlwind is a very large red bull and has already proved his value as a sire. He is in nice breeding form and will be priced reasonably. Anyone in need of a herd header should write Mr. Amcoats at once. Mr. Amcoats also has a choice lot of young bulls and some cows and heifers for sale. When writing kindly mention Kansas Farmer.

Henley Ranch Shropshires.

Henley Ranch, Greencastle, Mo., is offering some rare values in Shropshire ewes, mated to imported rams. They are offering 200 imported ewes and 500 American ewes. They are overstocked and will make prices to buyers wanting a number of ewes that will certainly interest parties wanting Shropshire breeding stock. The Henley Ranch flock is one of the largest in numbers and best in quality in the country, and when breeders purchase stock from this herd they always have the satisfaction of knowing they have the best that money will buy. Write for prices on ewes in lots. They will interest you.

J. C. Kerr & Co.'s Jack and Percheron Farm.

J. C. Kerr & Co., Wichita, Kan., have on hand at all times their barns full of good big and big-bone jacks from two to six years old. Their jacks are from 15 to 16 hands high, the kind that sires the sugar mules. Kerr & Company sold last week a good two-year-old jack to go to Riverside, Cal. This jack stood 15½ hands high and weighed 1,000 pounds, and will make a great jack, as he was bred right. Kerr & Company have a barn full of good Percherons, both stallions and mares, of all ages. They have some 2,000 and 2,250-pound stallions, the kind that sire the good big horses that are bringing the long prices in the market and are hard to get enough to sup-

ply the demand. Kerr & Company will be glad to show you their stock at any and all times. When you arrive at Wichita go to their office at 136 North Market Street and they will be glad to take you to their farm, near Wichita, Kan.

Perry O. Brown's Scotch Shorthorns.

The card of Perry O. Brown of Lamont, Iowa, commences in this issue of Kansas Farmer. Mr. Brown is one of Iowa's prominent young breeders, and owns one of the best Scotch Shorthorn herds in that state. The herd is headed by Lord Mutineer 279228, assisted by Crimson Lad, two Scotch bulls that are a credit to any herd. Lord Mutineer is a pure Scotch bull. He is a nephew of Whitehall Marshall, the grand champion Shorthorn bull of America. His dam was by imported Lorraine out of the show cow Laurie. He is the true beef type, and is a breeder of great quality. Crimson Lad is a pure Scotch bull. He was sired by Crimson Scotch, a prize winner and a sire of prize winners. Mr. Brown's cow herd is composed of individuals of the best families of the breed. They are strictly a high-class lot and the herd is noted for its number of outstanding good individuals. At this time Mr. Brown is offering a number of choice bulls of serviceable age. Some of them were sired by Royal Lavender, by Lavender's Best. Others by Mutineer. They are a fancy lot, the right kind for herd headers, and they will be priced right for quick sale. Write for description and prices. Mr. Brown guarantees description of stock and has a record for a long list of satisfied customers. Please mention Kansas Farmer when writing.

An "All Steel" Manure Spreader.

The Chase Manufacturing Co., of Mason City, Iowa, has put out a manure spreader which is attracting much favorable attention from farmers all over the country. The Chase "All Steel" spreader is made of steel. No rotted slits, broken slats or warped sides. It can't rust and is practically an everlasting spreader. Since there is nothing to break, there is no expense for repairs and no delay during the busy season. It is built low down so as to be easily loaded, and so light of draft that two horses can easily draw it. The feed mechanism can be adjusted from the driver's seat anywhere from 3¼ to 28 loads per acre. This prevents unnecessary distribution of manure, because when passing over a spot that does not require much fertilizer the feed can be shut down to the minimum. This not only saves manure, but it saves the labor of frequently reloading the spreader. When the Chase "All Steel" is not being used as a spreader, the spreader mechanism can be removed and a wagon box put on the trucks. This enables one to get a full year's use out of it, instead of only a few weeks. This spreader is sent out under an absolute guarantee under 30 to 90 days' trial, and is sold at a very low direct from factory co-operative price. Anyone interested is advised to write for the handsome catalog which this company will send free. Address Chas. F. Chase, President Chase Manufacturing Co., Mason City, Iowa.

Important Shorthorn Sale.

On March 27, Dr. R. A. Stewart, of Hutchinson, Kan., will disperse a valuable herd of Shorthorn cattle. The herd bull, Victor Archer, will also be sold. In the females, an offering of singular usefulness, good milkers and thick fleshed ones of refined, breedy type, are presented, represent-

