

# KANSAS FARMER AND MAIL & BREEZE



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## To Develop Farm Co-operation

CO-OPERATION is becoming a mighty force in the developing of a more prosperous Kansas agriculture. The united effort of the producers is having a decidedly beneficial effect in many communities, not only in selling and buying but also in production. We are gradually learning to work together.

The encouraging success of the Grange and of the Farmers' Union has been especially pleasing. These organizations, which are on the strong basis of efficiency in their work for the agricultural interests of the country, are doing much for farming in Kansas. They are in a position to do a great deal more in the future.

Some communities prefer to organize their local associations, and there are plenty of examples of where these have been successful. It is probable that the laws of Kansas will be changed slightly at the next session of the legislature, to make the legal end of community organization easier and better.

A study of agricultural co-operation in Kansas, no matter what communities are taken, indicates the great importance of selecting good leaders; the manager, especially, must be a man of more than ordinary intelligence, and with a real ability in handling men. Fortunately there is an encouraging disposition among farm associations to pay larger salaries than in past years, and this is naturally attracting a higher type of officials. Further progress along this line is needed. Rural associations must remember, if they expect to make the greatest progress, that they must bid against private business in getting men who will do the actual work of the association, and they must be prepared to pay as much, or more, than other business organizations will offer.

In addition to the economic benefits from agricultural co-operation, it is having a happy effect in developing better social relationships. It might be remarked in passing that the social problems in many Kansas communities are on a much better basis than five years ago. Co-operation in production and in selling and buying have taught farmers and their families to work together in developing a real country social life, which is helping greatly in holding the best of the younger people. Naturally the equipment for modern living which is found on many farms today is aiding in this.





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## Profits From Power Farming

*Excellent Results Have Been Obtained From Tractors on the Farm of Fred DeMott Near Arkansas City*

By Ray Yarnell

**O**XEN PULLED the plow that broke the first land for Fred DeMott. Today this successful Cowley county farmer rides a Rumely or a Fordson tractor when he goes out to prepare his ground for wheat.

And riding on the seat of a tractor, Mr. DeMott says, has had a whole lot to do with his success during recent years. His first tractor experience was with a Mogul. Two years later he bought a Rumely, 20-40 horsepower, a powerful machine. This spring he purchased a Fordson for lighter work.

There's a roll top desk in a cozy room in Mr. DeMott's house. In one drawer of this desk there are a dozen account books, wear on the covers testifying to their active use. In every book the history of various farm enterprises is recorded in dollars and cents. These books are guides to success. They show where profits were made or where losses occurred. There is no guess work. Mr. DeMott knows exactly where he stands. He didn't have any trouble figuring out his income tax. He knows how much money he lost in raising hogs and how much he made with cattle.

Mr. DeMott turned to the Mogul tractor account. This machine was a 10-20 and cost \$1,326 when new. During the two years he had it the Mogul cost him \$717.21, including all expenses of upkeep and operation, after he subtracted the amount he received when he sold it.

With this tractor, in two years, Mr. DeMott plowed 250 acres for wheat. The tractor pulled a binder two seasons over 125 acres of wheat. It was used in cutting oats, listing corn, and sawing wood. Eighty acres of corn were listed each year. During the harvest season the tractor ran night and day. It enabled him to complete his harvest in record time, thereby saving loss of grain and helping to get his wheat on the market promptly.

### Saved Him Many Dollars

"Cheap? Sure it was cheap," said DeMott. "The tractor saved me many dollars. Figure it out on the basis of the work done and the gross cost to me. An engine is a good investment and that is why I bought another tractor when I sold the Mogul. My experience has been that it pays to do as much work with tractors as you possibly can. It costs less."

When Mr. DeMott bought his Rumely 20-40 tractor he paid down \$3,300 in cash. It was a big investment but he had faith in the machine and he knew the size of the job he had laid out for it. The ledger in Mr. DeMott's desk tells the story of the Rumely during the year he has had it. The expenses listed are: coal tar for lubricating the gears, \$8.45; kerosene for fuel (one purchase), \$160.47, and lubricating oil and kerosene, \$83.33. The repairs purchased include a tube, cap and can, \$1.15; bushing, 67 cents; washers, 40 cents; oiler and top, \$4.26; draw bar, 65 cents and miscellaneous, 31 cents. The total expense was \$259.69.

Thus the operation and upkeep of the Rumely cost a total of \$259.69. To be entirely fair depreciation should be charged against the tractor, altho Mr. DeMott says the machine is as good as when he got it, and he really believes it will run better because he now understands it thoroly and the parts have been worn until they work easily. Interest should be charged on the \$3,300 investment. Allowing 10 per cent or \$330 for depreciation and interest at 6 per cent on \$3,300 or \$198, the total cost to DeMott for one year's operation of the Rumely was \$787.69.

That sounds like a lot of money to run a tractor a year. But listen

**T**HE GREATEST industry of the United States is being put on a power basis. It is daily becoming more important that machinery take the places of men who decline to work on the farms. Farming requires men and the need for more men is imperative, if production is to be maintained. There is a limit of production above which the men on American farms today cannot go.

Tractors are helping solve this problem of labor shortage. On thousands of Mid-West farms they are enabling farmers to do more work quickly and economically. Every industry has gone thru the process of getting on a power basis. The farming business is today going thru that process. When this is completed production can be maintained so long as the farmer is able to obtain a profit on what he raises.

The account books of Fred DeMott, who lives near Arkansas City, have a power farming story to tell. They show that under careful management a tractor will more than make its way.

to the other side of the ledger. It also has a story to tell.

During the year Mr. DeMott plowed 285 acres of hard soil 8 inches deep. A conservative estimate of the cost of plowing would be \$2 to \$2.50 an acre. Allow \$2 an acre and the tractor on this job alone earned \$570. Hauling an oil rig 17 miles, which took a little more than one day, netted \$150 in cash. He moved two churches with his tractor and received \$123. That makes a total income from the tractor of \$843. The total expense, including interest and depreciation, repairs, kerosene and oil, was \$787.69, leaving a net balance in favor of the tractor of \$55.31 in addition to the interest it paid on the money invested in it.

Labor has been left out because the man would have to work whether a tractor or horses were used. Time also was not considered, altho by using the tractor the time necessary for plowing 285 acres was reduced greatly. Because of the hardness of the soil last fall it is doubtful if the land could have been plowed in any other

satisfactory and efficient manner for \$2 an acre.

Mr. DeMott's book has nothing but figures in it. It is a record of cold cash transactions and the tractor came out on top. It was Mr. DeMott's test. His opinion is best shown by the fact that he is buying a lighter tractor for use on his farm. The big fellow is all right and profitable for the heavy work and he will keep it, but he says he feels the need of a lighter power machine for general all around work on the farm.

"I'm buying the lighter tractor," Mr. DeMott said, "because I believe it is a good investment. I have had experience enough with power machines to know that they have netted me good returns. My books prove tractors have paid and I believe in backing up the things that return a profit."

"It doesn't pay to permit a tractor to get out of repair. Economy demands that it be kept fixed up whether it is being used in the field or has been put away in the shed. And it should be kept in a shed. It is a crime to leave a valuable piece of machinery out in the open where the weather can do it untold damage. No tractor, treated in that way, will yield a profit."

Two and a half gallons of fuel an acre is required by a Rumely 20-40 tractor for good, heavy plowing, where the ground is inclined to be hard. In looser soil 2 gallons an acre is sufficient. Two gallons of lubricating oil a day for 18 acres of plowing is about an average, making the cost about 10 cents an acre.

Coal tar is used on the gears to prevent rapid wearing. It serves to polish the gears so dirt and sand slide off easily.

### Cement Buildings are Permanent

This is one of the best organized farms in the Arkansas City community. The buildings are in good repair, fences are up and nowhere can machinery be seen out in the fields or in fence corners. The yard about the house is well fenced and trees and grass make it attractive.

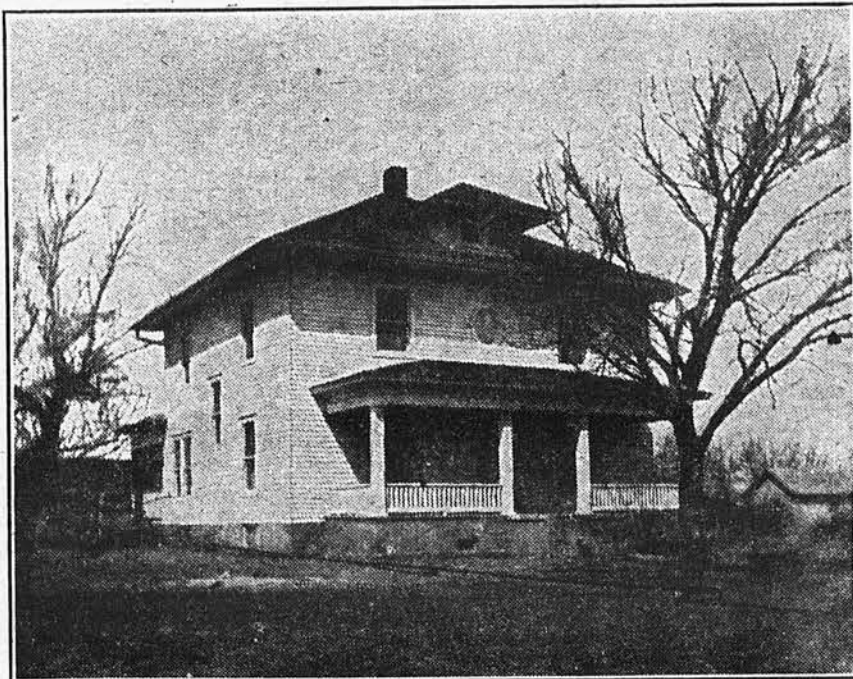
An idea of the building equipment can be obtained from this list: a cement silo and feeding barn, cement cattle shed, cement chicken coop, cement garage and tool shed, cement garage, cement water trough, cement walks, cement foundation for a large, 2-story house; a wooden barn, a windmill, two binders, a tractor, a manure spreader, several plows and a large quantity of miscellaneous machinery. Mr. DeMott has 11 horses, 90 head of cattle and 50 purebred Poland China hogs.

There's a good tip for farmers in Mr. DeMott's desk. One drawer is a labor, trouble, worry saving proposition. He calls it the repair drawer.

At the end of every season, when the machinery is ready to be put in the shed, Mr. DeMott goes over it carefully, noting worn parts and breakage and makes a list of needed repairs. With these lists complete he goes to his desk and opens his repair drawer.

In this drawer he finds a book of instructions on every piece of machinery he possesses. These books contain lists and numbers of parts with the prices for each. Mr. DeMott obtains the numbers and prices of the parts he needs to put his machinery in good condition and orders them. When the parts arrive he places them in the drawer where they remain thru the winter.

When the spring season draws near Mr. DeMott takes advantage of a day when work is not pressing and repairs his machinery. When the time to begin work comes around he never has to stop and make a hurried trip to town for some repair (Cont'd on Page 8.)



The Modern Farm Home of Fred DeMott, Who Has Been Especially Successful in the Developing of Efficient Power Farming



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# Passing Comment—By T. A. McNeal

I HAVE just been reading the prize plat-  
 forms prepared by college youths compet-  
 ing for the prizes offered by Truxton  
 Beale. Mr. Beale offered prizes aggregat-  
 ing \$10,000; the first prize to be \$6,000, the  
 second \$3,000 and the third \$1,000. The condi-  
 tion was that the writer must be under 25 years  
 old. The platforms were to be what the writers  
 think should be the expression of party prin-  
 ciples adopted by the Republican party at  
 Chicago.

The winner of the first prize is a student of  
 Harvard university, only 21 years old who is  
 working his way thru college. All the winners  
 I may say are college men, the winner of the  
 second prize being a student at Ann Arbor,  
 Mich. I said that I had read the platforms pre-  
 pared by the young men, but as a matter of  
 fact I have only read the platforms prepared  
 by the winners of the first and second prizes.  
 It goes without saying that the writers are  
 young men of ability and that there are many  
 fine things in their proposed platforms.

It seemed to me however that after all there  
 is not a great deal of originality shown in these  
 platforms. If there had been they would not  
 have drawn the prizes. The judges who passed  
 on the platforms are all men of decidedly con-  
 servative type of mind with the exception, per-  
 haps, of former Senator Beveridge, who is pro-  
 gressive in spots.

I note that each of the platforms I read de-  
 clares in favor of compulsory military service.  
 Now it is entirely probable that none of these  
 platforms will be taken as a model by the  
 Chicago convention, if they are it means al-  
 most certainly the defeat of the Republican  
 party in November. On a compulsory military  
 training platform the party would almost cer-  
 tainly lose the great agricultural states of the  
 Middle West and without them it cannot win.

## The Rule of Howat

I AM IN receipt of a letter from a reader  
 living near Girard who signs his name O.  
 B. Server. I have a very strong suspicion  
 that this is not a genuine name. If satisfied  
 that it were I would print the letter in full,  
 because I take it that a man who makes state-  
 ments over his own signature such as this  
 writer makes is likely to make them in good  
 faith and to have the facts to back his state-  
 ments.

The substance of this letter is that Howat  
 is a czar who retains his power by election  
 methods which would put Tammany to shame.  
 The writer states that in a certain union with  
 a membership of 175 when the election for dis-  
 trict president was held there were present and  
 actually voting only about 60 of the 175. Of  
 these 10 voted for Howat and the remainder  
 for another candidate. However the henchmen  
 of Howat controlled the election and proceeded  
 to count all the absent members of the local  
 union as voting for Howat, giving him a large  
 majority when as a matter of fact he was only en-  
 titled to 10 votes or possibly not quite that many.  
 Terms of employment, according to the writer  
 are completely dominated by the union. He  
 declares that the miners on the average do not  
 produce more than from one-third to one-half  
 as much coal as they could produce and such  
 miners as desire to do a full day's work are  
 prevented from doing so by the miners who  
 have no intention of doing a fair day's work.

He declares that miners hired to do a certain  
 kind of work will not do any other kind, no  
 matter how much leisure time they may have  
 on their hands. He asserts also that operators  
 are compelled to put incompetent men on jobs  
 because the union so decrees. In one case an  
 operator was compelled to put an incompetent  
 man to running an engine and as a consequence  
 it was damaged to the extent of \$2,200 before  
 he could get rid of the incompetent engineer.  
 In order to break even, according to this writer,  
 the operators simply add enough to the price  
 of coal to cover deficiencies and the general  
 public becomes the goat.

How much truth there is in these charges I  
 do not pretend to know, but of one thing I am  
 reasonably certain, the public in the controver-  
 sies between employers and labor unions has

been the goat. The industrial court law was  
 intended to give justice to all three of the  
 parties concerned, the employers, the employed  
 and the general public. Whether it will do  
 what was intended remains to be seen, but the  
 purpose of the law is good.

I have also a letter from a reader at Grass,  
 Kan., who signs himself Jack Cullar. He does  
 not say that he is a miner, but I presume he is.  
 He seems to be quite bitter on account of the  
 review of the industrial court law which ap-  
 peared in the issue of May 15. He accuses me  
 of misrepresenting the facts in the article in  
 question, but as a matter of fact only cites two  
 statements as being wrong.

In the review the statement was made that  
 the initiation fee for the members of the miners'  
 union was \$50. Mr. Cullar says that the initia-  
 tion fee is only \$10. I made the statement re-  
 garding the initiation fee on what I had reason  
 to suppose was entirely reliable information.  
 Mr. Cullar says the statement was not true.  
 If that is the case I regret that the statement  
 is made, as I have no desire to make any state-  
 ments that are not true. On the contrary I  
 wish the public to know the facts. The other  
 statement to which he takes especial exception  
 is in regard to a fine which was imposed upon  
 a miner on account of the kind of pick he was  
 using. I was told that this was brought out in  
 the testimony taken before the industrial court.  
 Mr. Cullar does not specifically deny it but  
 says that it was impossible that such a fine  
 was imposed.

Granting however that both of these state-  
 ments were errors they do not affect the ques-  
 tion as to whether the industrial court law is  
 right or wrong. It may be that my informant  
 was mistaken about the size of the initiation  
 fee and about the fine in that particular in-  
 stance. Neither is material further than both  
 the initiation and fine would be outrageously  
 exorbitant. The only important question after  
 all is whether the law affords a reasonable and  
 just plan for the settlement of labor disputes  
 so that the interests of employers, employees and  
 the general public will be protected.

I do not know whether it will prove to be a  
 workable and just plan or not. I am however  
 most decidedly in favor of giving it a fair trial.  
 It seems to me that so far as it has gone the  
 law and court have worked pretty well, but it  
 is too early yet to pass final judgment.

Of course this will not satisfy hot-headed  
 gentlemen like Mr. Cullar. He already has  
 passed judgment on the law and the court. He  
 made up his mind before the law was passed  
 and before the members of the court were ap-  
 pointed. And yet I have a hope that if the  
 court continues to deal justly and fairly with  
 all parties concerned, it will in time justify  
 itself even in the eyes of Mr. Cullar.

## Constitutional Amendment

THE LAST legislature submitted the fol-  
 lowing proposed amendment to the consti-  
 tution to be voted on at the next general  
 election:

Section 1, That the following be and the same  
 is hereby proposed as a new amendment to the  
 constitution of the state of Kansas and shall  
 be known and cited as section 11, article 15,  
 to wit:

To encourage the purchase, improvements and  
 ownership of agricultural lands and the oc-  
 cupancy and cultivation thereof, provision may  
 be made by law for the creation of a fund in  
 such manner and amount as the legislature may  
 determine, to be used in the purchase, improve-  
 ment and sale of lands for agricultural pur-  
 poses.

The legislature may provide reasonable pref-  
 erences for those persons who served in the  
 Army and Navy of the United States in the  
 World War and holding honorable discharge  
 therefrom.

Section 2, That this proposed amendment shall  
 be submitted to the electors at the general elec-  
 tion in 1920 for their approval or rejection, the  
 same to be designated on the ballot by the fol-  
 lowing title to wit: "Amendment to the consti-  
 tution relating to state aid in the purchase of  
 farm homes and the vote shall be for or against  
 such proposed amendment."

J. E. Olson of Dwight, who is evidently op-  
 posed to this proposed amendment, writes:

It is just as reasonable for the state to help  
 a man get into the hardware business or any  
 other line of business as to help him get a

farm. As farming is surely a business as much  
 as any.

No, Mr. McNeal, let's not advocate freak leg-  
 islation, our taxes are getting high enough as  
 it is. And I think I can prove to you that I am  
 intensely interested in folks getting homes of  
 their own. But the best way is to let them get  
 them in the old fashioned way by practicing  
 thrift and economy.

J. E. OLSON.

For more than half a century our government  
 has operated on the theory that it is the busi-  
 ness of government to help men get farms. It  
 was on that theory that the homestead law was  
 passed in 1860 and it was on that theory that  
 the Federal Farm Land Loan bill became a  
 law. It is questionable whether that law has  
 really helped men to get farms but that was  
 supposed to be one of the objects.

It is not proposed, however, to make dona-  
 tions out of the state treasury, the plan being  
 to lend the money on good security. If properly  
 managed the state should lose nothing and the  
 taxes would not be increased.

## Vinegar Catches No Flies

A RADICAL reader of this journal of agri-  
 culture writes me insisting that I denounce  
 the imprisonment of Eugene V. Debs as  
 an example of high-handed tyranny, and  
 the law under which he was tried and con-  
 victed as a blow at human freedom almost with-  
 out parallel. Incidentally also the writer de-  
 mands that I denounce the officials who in-  
 voked this law for the punishment of the So-  
 cialist leader as a lot of tyrants and scoundrels.  
 If I fail to do this it, in the opinion of the  
 writer, brands me as the hypocritical tool of  
 capitalism.

Now in spite of such fool letters as this I am  
 strongly in favor of releasing Debs and all  
 other political offenders who have not advocated  
 the overthrow of our Government by violence.  
 The espionage law may have been necessary as  
 a war measure. There are a great many things  
 that can be justified as war measures which are  
 not justified in times of peace. In times of war  
 it may be necessary to suspend the right of  
 habeas corpus; the right of trial by jury in  
 many cases. It may be necessary to abolish  
 civil law and resort to military law. But these  
 things are unjustified and intolerable in times  
 of peace.

Eugene V. Debs was tried and convicted after  
 the necessity for such action had passed. He  
 should not have been tried, but having been  
 tried, convicted and sent to prison he should  
 now be released. During the war Debs pursued  
 a course which in my judgment was wrong, but  
 it can be said for him that at no time, so far  
 as I have ever heard or read, has he advocated  
 violence. The fact is that Debs is a lovable sort  
 of radical, probably he has about as many im-  
 practicable ideas in his head as any man in the  
 United States, but he advocates putting them  
 into operation by the regular, lawful and peace-  
 ful means provided in the election laws of the  
 country. So long as a man does not advocate  
 violence, so long as he is willing to leave the  
 matter to the arbitrament of the ballot box, he  
 is within his rights as an American citizen and  
 should not be persecuted or imprisoned for his  
 views.

But it occurs to me that if I have a favor to  
 ask it is a decidedly poor way to get it by start-  
 ing in denouncing the person or persons who  
 have it in their power to grant the favor, as  
 a lot of red-handed tyrants and all around  
 scoundrels. I cannot think of any course that  
 would tend more than that to keep the Socialist  
 leaders in the penitentiary for an indefinite pe-  
 riod.

The officials who prosecuted Mr. Debs were  
 acting clearly within their rights and I have no  
 doubt they were doing what they did because  
 they believed it was their duty to prosecute the  
 case. I imagine that they had no feeling of  
 hostility toward Eugene V. Debs. If they came  
 in contact with him, as they necessarily did, I  
 imagine that they formed a liking for the un-  
 compromising radical, for men who know him  
 almost always do have a liking for him, regard-  
 less of how much they may differ from him. I  
 wish to pursue a course that I think will help  
 Debs to get out of the penitentiary because I  
 thoroly believe he ought to be released.



Vinegar has never yet been recommended as a fly catcher, but this self evident fact never seems to get thru the heads of the wild-eyed radicals. Their idea seems to be to denounce every man who does not agree with them as either densely ignorant or a fool or a knave.

The result is to create antagonism without accomplishing anything in the way of bettering conditions.

I will say this for Debs: among the radical leaders he is the most tolerant and generous in his treatment and opinions concerning those who differ from him and that is another reason why he should be released.

Let me make this suggestion. If you agree with me that Debs ought to be released I wish that you would write a letter to the Department of Justice, Washington, D. C., asking that a pardon be granted him. Remember that he has already been confined in the Federal prison at Atlanta for nearly a year. He will soon be 65 years old; is getting to be an old man. Remember also that he has not advocated violence. If you are a Republican or a Democrat mention that fact when you write. The fact that you are not one of his political followers and yet take the trouble to write in his behalf will help him I think. There is nothing to be gained for our Government in continuing his imprisonment.

And if you are a Socialist write, but use some sense. Do not write a long letter denouncing the Government and talking about the attack on human liberty, no matter how much you may believe it. The object of your writing ought to be to help Debs, not to air your views on social, economic or political questions.

### Hope for Mexico

MEXICO has disappointed the world so often that I am cautious about making predictions concerning that country, but will say that it seems to me the outlook is rather more hopeful right now than it has been for a long time. Obregon talks like a statesman and a patriot and it looks as if he might succeed to the Presidency without having simply to depend on the force of arms.

There are several things Mexico needs: One is a system of free schools that will really give to the children of the peons a fair education; another is a much improved system of agriculture that will exchange the old crude implements for modern machinery; another is a land system which will break up the vast landed estates and give the peons a chance to own their lands.

It will be necessary to have foreign capital in order to develop the country, but the foreign capital must not be permitted to exploit the people of Mexico. Diaz failed because he was able apparently to understand only one-half of the problem. He realized the need of foreign capital and did everything possible to encourage it, but he failed to understand that in order to bring permanent peace and prosperity to his country, the rights of the humble peons must be protected and that they must be educated and developed.

Failing in this his government became most oppressive. Under it the condition of the peon, instead of being bettered, was actually made more intolerable than it had been before. The peon was driven from the land; he was forced to work for starvation wages. He was robbed and mercilessly exploited. All the troubles of the long, bloody years since the Government of Diaz was overthrown can be traced to the treatment of the peons, the infamous exploitation that was carried on with the consent and encouragement of the Government.

It may be that there is about to dawn a new day in Mexico. It is a land of wonderful possibilities. It is capable of sustaining in comfort many times its present population. It has mines of wonderful richness and vast mineral deposits wholly undeveloped. Obregon seems to have the right idea about the development of the country and the protection of the people. Let us hope that he will make good.

### Defends Bolshevik Government

AN OKLAHOMA reader, Isaac A. Daugherty, of Beggs, Okla., writes me defending the Bolshevik Government of Russia and takes exception to a statement made by me that the Government of Lenin was a Government of the minority and based upon force and violence. Let me say to begin with that I do not join at all in the general howl about Bolshevism. I am satisfied that there has been a great deal of talk about the Bolshevik Government that is not bottomed on fact.

I will also agree fully with Mr. Daugherty in his criticism of the action of our Government and other Governments in sending troops to Russia. I have said repeatedly that in my opinion the course pursued by the allied nations, including the United States, in regard to Russia has been most stupid and unjustified. I am also of the opinion that the supporters of Kolchak and Denikine were simply trying to

re-establish the old regime and therefore deserved no aid or comfort from us.

The course pursued by the United States and other nations in the Russian muddle, has had the effect of driving practically all of the Russian people, outside of the small per cent of imperialists who have only one desire, and that is to see the old order re-established, to the support of the Bolshevik Government.

I hold that it is the right of the Russian people to determine for themselves what kind of Government they should have. I also hold that the best way to test whether the Lenin theory of Government and economics is bad or good, is to open trade relations with Russia, take off all embargoes and do business as we would with other nations. That will bring the Lenin system into direct competition with our system. It will then stand or fall on its own merits. If we can demonstrate to the Russian people that we have something better to offer them than the Bolsheviks have to offer they will change their Government and Bolshevism will go out of business.

Why should we be afraid of the Bolshevik Government? If our economic system cannot prevail in a fair competitive test then it ought to be discarded. If we are mistaken about Bolshevism then the sooner we find it out the better. It is true I think that Lenin does not believe in the rule of the majority. He thinks, and possibly with reason, that the majority of the Russian people are not fit to rule and that the minority should govern. It is true that he has established the Soviet Government but I think it is also undoubtedly true that the Soviets controlled by him really constitute the Government.

I may say in this connection that sooner or later the other nations must recognize the Bolshevik Government. The only real certain information we get out of that troubled land is that the masses of the people are at this time supporting the Bolshevik Government. Lenin is a dictator but he has back of him at this time a great majority of the people. They prefer the dictatorship of Lenin to outside interference.

Every few weeks a rumor is sent out that the Government of Lenin is just about to be overthrown. The latest was the reported victory of the Polish armies. The Poles did gain some victories but at present they are getting whipped. It is only a question of time until they will be completely defeated. The result will be great loss and suffering in both Russia and Poland but the Bolshevik Government will be more strongly entrenched than ever.

## Does Uncle Sam Need a Guardian?

I DON'T know which Uncle Sam needs most, a receiver or a guardian. There are today 200,000 more employees in Government service in the United States than there were before the war. Then there were one-half million civil employees. Now there are 726,369.

I have made up my mind there is but one way to reduce the number of employees and that is to refuse to appropriate money out of the Federal Treasury to pay the salaries of unnecessary supernumeraries. When the head of a Government department finds Congress will not pay for thousands of useless employees, he will soon reduce his pay roll.

I am voting for reductions wherever possible. Before the war a billion a year in revenue covered all expenses of government. Now it takes 1 billion and 17 million to pay the interest on the National debt alone. This year instead of a Government expense account calling for a little more than a billion dollars, we shall need \$0,086,358,574, according to the most careful estimate made. And in June, by this same estimate, we shall have a deficit or shortage, of not less than \$3,050,508,574.62 and probably more as in the opinion of Representative Mondell of the House, the estimate of receipts of revenue is entirely too high.

The only thing that can save us from bankruptcy or from a bond issue—is to cut out every item of Government expense that is not imperative. Yet the Department of Commerce asks an increase of 300 per cent, the Department of Labor another 300 per cent, the Department of Agriculture asks for nearly a 300 per cent increase, the State Department more than 200 per cent, the Department of Justice 75 per cent, the Department of the Interior 50 per cent, and so on down thru the entire list.

It may be we shall need both a receiver and a guardian. We are running the most expensive Government on earth in the most expensive manner, altho this Congress to date has man-

aged to cut down expenditures more than a billion. If it wasn't that Uncle Sam has always paid his bills, he would be doing business in his wife's name right now.

The worst of it is, as the Secretary of the Treasury points out, that Government expenditures inevitably increase the cost of living. This year they are costing us more than \$90 a head for every man, woman and child in the United States, or \$450 a family. Add to that all other taxes real, personal and otherwise, also the high cost of living, and you won't need to have this statement proved to you.

Here is a birdseye view of the way Washington has learned to spend money while asking continually for more:

#### Total Appropriations

From 1789 to 1917 (128 years) ..... 40 billions  
From 1917 to 1920 (3 years) .... 36,818 millions

Every nickel of this came out of the soil, was dug out of the earth, or was produced in the shops. There are no other sources of wealth. It represents just this much toil and sweat of the American people. It represents more days of work than there are days of recorded time since man appeared on this globe. What we have to show for it, are these United States, the best and the happiest place to live on the face of the globe today. This, in spite of the great National "pork" barrel which has now become a cooper shop.

We had our first billion-dollar Congress in McKinley's Administration—a war Administration. In Wilson's first term the Government for the first time reached and exceeded a billion-a-year in expenditures. We jumped from 1 to 20 billions when Wilson's became a war Administration.

As showing how Governmental expenditures have climbed during the 15 years of the last three Administrations, a little table compiled by Elisha Hanson is instructive:

#### Theodore Roosevelt

1905	.....\$	755,350,207.00
1906	.....	752,163,780.00
1907	.....	766,424,575.00
1908	.....	850,880,415.00

#### William H. Taft

1909	.....\$	905,132,383.00
1910	.....	911,025,594.00
1911	.....	913,098,258.00
1912	.....	925,695,713.00

#### Woodrow Wilson

1913	.....\$	867,737,255.00
1914	.....	1,006,662,216.00
1915	.....	1,052,848,682.00
1916	.....	1,072,394,094.23
1917	.....	3,046,183,746.19
1918	.....	21,813,356,568.39
1919	.....	18,514,000,000.00

And here we are in 1920 with the National Government more than 3 billions in the hole, borrowing money by millions from the banks at 5 and 5½ per cent interest, or 1 per cent more than we paid while the war was in force.

We can't increase taxes. We can't issue any more bonds. Chairman Mondell goes so far as to say it will be a crime even for the Government to borrow any more money during the next fiscal year which begins in July.

That makes what we must do simple. We must economize. Congress sees its duty but will it do it? That will depend a great deal on the news Congress gets from home which is the place whence Congress gets its dollars. Four omnibus bills in the 63rd and 64th Congresses were reduced 86 millions. For instance it is costing us \$1,200,000 a day to keep the American forces in Germany. We can and should bring them home where they will cost less.

Up to 1917 we spent 1 billion dollars on rivers and harbors, and in the last 20 years 180 million dollars on public buildings. We can stop that. This has been mostly wasted money. The Big Sandy River was improved at a cost to the Government of \$350 for every ton of commerce it carried in 1913. At Seattle \$160,500 was paid for a site for a public building on the "tide flats," a place submerged by water every 24 hours and so far from the railroad station it would have cost an additional \$19,000 a year to haul the mail to and from it.

We can dispense with nearly 200,000 superfluous Government employees. This is hitting only the high places. This Government wastes money almost every time it spends money. It has now got to stop the waste finally and forever. For the next few years every item of expense not imperatively and urgently necessary must be relentlessly lopped off. New projects and enterprises must wait.

It is this or we shall and will go from bad to consequences far worse. Ultimately I hope much from a budget system, but just now I hope much more from the insistence of the people for economy when the facts are brought before them. Briefly as possible I have tried to present some of these facts.

*Arthur Capper*

Washington, D. C.



# Let's Use More Good Paint

## A Large Proportion of the Buildings on Kansas Farms are Badly in Need of Better Surface Protection

**W**HEN considering the suitability of a paint for Kansas farm buildings, it should be remembered that more durable products can be made with some colors than with others. An effort has been made to show that color, considered by itself, is an important factor and in many cases everything else must be more or less secondary to it, but when more latitude can be allowed in this direction it is well to bear in mind that dark colors generally are the most durable. Lead and zinc paints are good, but those made up with ochres, sienna or the oxides of iron in general are superior.

Lampblack is an exceptionally durable material and makes perhaps the most rugged paint for wood, other things being equal. There also are many reds, browns and yellows which generally will outlast lead or zinc paints.

### Careful Work Essential

After all these points have been settled and the paint chosen, the next thing is to see that it is applied properly. On a farm, where the work done ranges all the way from painting fences and sheds to the finishing of the parts made and perhaps an occasional going over the woodwork and furniture, it can be seen that a considerable degree of skill and versatility is required to give every job the attention it should receive. The painting of ironwork also differs from the finishing of wood, so it is not possible to give detailed information as to how every case should be treated, but there are certain principles which broadly underlie all painting, and the observance of these will go far toward insuring the success of the work.

Wood surfaces should be thoroly dry, free from dust and dirt and whenever possible, painting in very cold or very damp or rainy weather should be avoided. Ironwork must be perfectly clean and free from rust and dirt; all rust and scale should be removed as completely as possible with a stiff wire brush.

Wood which is being painted for the first time may have knots full of pitch

or other material that will make a spot later on. It is best, therefore, to coat over such places with orange shellac, which will effectually seal up all offending substances.

The pores of bright wood are empty, consequently it is absorbent, altho some woods are much more so than others, so if paint were to be applied directly the oil would be absorbed and the pigment left without a vehicle or binding material to keep it tight. In other words, it would chalk or powder and soon wear away. To prevent this a primer is used.

About the best primer is a good coat of raw linseed oil, well brushed in and plenty of time to dry. Afterward a second coat of oil, or oil containing a small amount of pigment, may be applied. On cheap work the priming may be poorly done or left out altogether, but bad results are pretty sure to follow. Thoro priming fills the pores with oil, thereby keeping out water and moisture and preventing decay; it also gives a better surface for painting.

As ordinarily received from the factory, paint is ready for use and nothing should be added or done to it except to stir thoroly. The pigment is much

heavier than the oil and naturally tends to settle-out more or less, altho many paints contain certain substances which prevent or retard this action. In any case, however, a good stirring up and mixing of the constituents is essential, and should be done before starting to paint and at frequent intervals thereafter. Neglect of this precaution may lead to serious trouble.

In the matter of driers and thinners, too, mischief often is caused by the irresistible desire which some workmen have to dope up the paint and make it conform to their own ideas, rather than what it should be. Certainly, more thinner will make the paint "go" much farther and work easier, and more drier will make it dry more quickly, but in the first instance the balance between pigment and vehicle has been upset and in place of the fairly tough, thick film which should be produced, a thin, weak coating results. A drier is a sort of necessary evil. Without it, the film would take so long to dry that it would be practically worthless. A drier overcomes this difficulty, but in so doing hastens the final destruction of the film. A well-made paint contains just the

right amount of drier to maintain the proper balance between all of these factors, and it can be easily seen that adding anything to it is likely to result disastrously.

A paint film at best is only a few thousandths of an inch thick and when it is considered how much wear and tear it will stand, yet protect perfectly the underlying surface, it seems little short of marvelous. It ought to be clear, therefore, that anything which reduces the thickness of the film even slightly or destroys in any way its wearing and resisting qualities will cause a serious loss in effective protection.

### Driers and Thinners

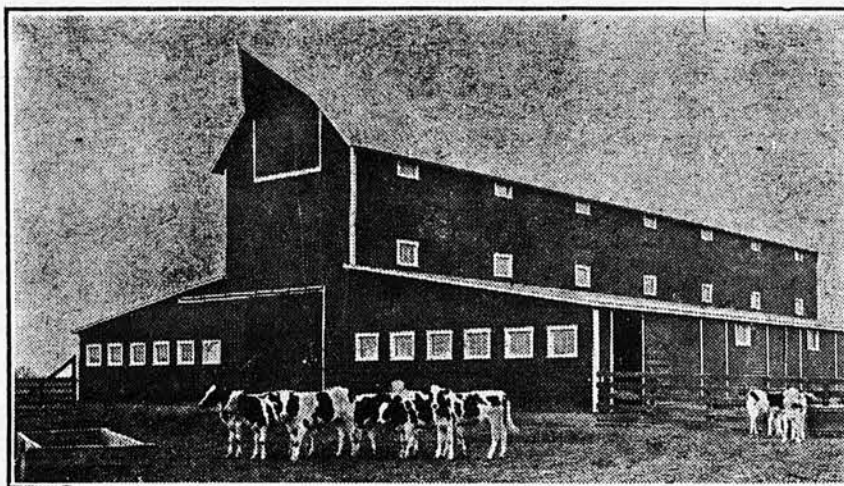
In skilled hands, driers and thinners are useful tools and serve legitimate ends; paint which has become thickened by standing may need to be thinned, or special cases may arise where these materials are needed, but their use should be left to the expert.

As a general proposition, a gallon of paint should cover not more than 400 square feet of surface, and at least two coats should be given, allowing each to dry thoroly. For very good work, or that which is exposed to severe service, three coats may be applied.

Besides by brush work, paint frequently is applied to farm machinery by dipping and by spraying. By simple immersion the whole piece is covered in an instant, much more quickly and cheaply than it could be brushed on. In the spray process, compressed air breaks up the liquid paint into a fine spray as in the operation of an atomizer.

Paints, oils and all inflammable materials should be kept in metal cabinets when not in use and great care must be taken to leave no oil-soaked rags lying around, as the oil absorbs oxygen and often takes fire spontaneously. All brushes must be well cleaned and washed out in turpentine every night and laid flat on a board.

In painting, as in everything else, it is attention to the little things that goes far toward accounting for the difference between good and poor work. On this depends our success or failure.



Good Paint is Necessary in Protecting the Surface of Farm Buildings in Kansas and Its Use Will Pay Well Even at Present Prices.

## Where Co-operation Has Won

### A United Effort is Doing Much to Aid in Working Out Better Farming Methods in the Middle West

By F. B. Nichols

**S**ERIOUS economic problems confront the business of farming today, which will require the best brains available in solving them. Much of the thought in agriculture, both by the working farmers and the specialists, has been given to production problems. As a result, remarkable progress was made along these lines—the man production of the farmers of the Middle West is the largest of that in any large agricultural section in the world. This probably always will be true—at least for a great many years—for the use of power machinery, in connection with the favorable conditions for this type of extensive production, give an excellent opportunity for the men who go into agriculture on a big scale.

But the Great War completely upset all of the established economic factors. That is true in city as well as country; indeed, it is especially evident when considered on a world wide basis. Naturally we still are in a twilight zone so far as rural economics goes, and there is considerable indication that this will be the case for some time. Only the man who is alive to the business end of agriculture, and who makes a close study of markets and world demands can hope to get the greatest profits. And still larger returns are essential in building up the satisfactory

type of agriculture which we all hope for in the New Day in farming which is at hand.

In other words, we must look to the future, and not place too great a reliance on the demonstrated principles of rural economics as they were before 1914. That is why there is such a real opportunity in investigational work in rural economics today. The trained, intelligent specialists in this important phase of farming, such as the members of the department of rural economics of the Kansas State Agricultural college for example, have a big opportunity for service, and a chance to take a real part in the working out of farming methods on the new basis of today.

I think that the feature in the new economics systems which are coming is going to be the development in co-operation. The day of the individualistic go-it-alone farmer has passed, and in his place is coming the man who can work with his neighbors, to the mutual profit of all. The value of co-operation has been well demonstrated in the work of the Grange and the Farmers' Union, and in the community co-operative organizations which may or may not be directly connected with

other neighborhoods. Oklahoma, especially, has been very successful in developing community co-operation; this state has a law that is very favorable to local community effort, to the great profit of farmers. Other states in the Middle West would do well to make a study of the co-operative laws of Oklahoma, and especially of the effect these have had in increasing co-operation there.

Nebraska has been successful in its co-operative effort; it has made greater progress than Kansas in some lines. J. O. Shroyer of Humboldt, Neb., a prominent member of the Farmers' Grange of that state and who has made a close study of the co-operative effort there, recently said: "I am especially proud of the progress which is being made in co-operation in dairying. With three big co-operative creameries—at Rusk, Falls City and Superior—all the cream from Southern Nebraska ought to be made into butter in co-operative churns. Thus the profits will be left in the towns and surrounding country that produces the cream, instead of being handled by the big institutions financed from Chicago, Boston and St. Louis, to which a large part of the profits have been going.

"When churning, milling, packing and distribution bring back the profits to the community that produces the cream, wheat, hogs and beef, then only will we have the stimulation of home industry so long talked of by some economists, and the whole solution of our agricultural problems will be left to the farmers themselves. Put the profit that comes from the manufacturing and distribution of his profits into the hands of the farmer and he quickly diverts it into the channels of trade, and the money keeps on circulating, instead of accumulating in some Eastern financial center.

"I have been visiting among farmers recently—meeting hundreds of men, women and children—the folks who are doing their share and more to feed the world and keep it right side up. Tell the world to watch the farmer. He has produced as his country told him to—produced so much that the railroads broke down under the traffic—produced so much that the packing houses are filled—produced so much that mills are running day and night, and the elevators can't hold the golden grain. The old channels of trade were broken under the weight of the farmer's products. Now, can you blame him for stepping into those same channels to clear them of the debris of ages of in-

(Continued on Page 8.)



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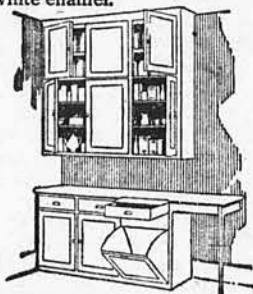
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# Letters Fresh From the Field

Editorials by Rural Correspondents

## Farmers Discuss the Evils of Profiteering, and Commend Senator Capper's Efforts to Obtain Legislation That Will Protect the Consumer

**F**ARMERS are urged to make free use of this page to discuss any subject connected with farming or marketing that they consider of general interest. Short letters will answer our purpose best, and we will publish as soon as possible all that we accept. Address all communications intended for this page to John W. Wilkinson, Farm Letter Department, Kansas Farmer and Mail and Breeze, Topeka, Kan.

### Kentuckian Indorses Capper

My husband and I have decided that Senator Capper is the farmer's best friend. We and other parents on the farms are surely opposed to any form of compulsory military training. We have 125 acres of land with only one boy to help us and can't get help at any price to take that boy's place while he finishes school. If they take him from us we will have to sell out and quit. We wish that Senator Capper could be the first President that I can vote for, as we now have suffrage in Kentucky. I am one of Senator Capper's staunch supporters.

Mr. and Mrs. C. H. Sidwell.  
Crittenden, Ky.

### Californian's Choice for President

I have just read Senator Capper's bill providing for physical training. It is one of the grandest bills ever introduced for the bettering of humanity. Every one to whom I have talked is highly in favor of it and if we can be of any assistance let us know.

By all means let us have compulsory physical training but never compulsory military training. His works are a light to humanity so I hope he will go on until we win. Hurrah for Capper for President. A cash bonus for each month in the service, payable monthly suits me.

Julian, Calif.

### A Missouri Woman's Choice

I feel as if there should be something done with the profiteers. I would be glad to do my part to have them punished. I am only a poor laborer's wife but I would like to help. I do hope that the women of Missouri will have a part in the elections this year.

I am opposed to compulsory military training and so is my husband. I have five boys and would dislike very much to have them taken from me and put in such a place. I enjoy Senator Capper's articles and think he is doing a good work. I wish that we had him for our next President. I know that we need such a man in that office.

Arletha Twichell.  
Lock Springs, Mo.

### Farmer is the Goat

In behalf of the farmers of Oregon and in fact, the United States, I want to take the liberty to thank Senator Capper for his recent speech in Congress relative to the farmers' problems and our present economic system. He is certainly right in his statement that the farmer has been the goat of the lawmakers. I wish again to thank him.

Umatilla, Ore. R. G. Dykstra.

### Oregon Man Indorses Capper

We admire the stand of Senator Capper in regard to the profiteers. We do not wish military training for our young folks. We still have too much Germany in this country. Here are two votes against compulsory military training and also two votes for Arthur Capper for our next President.

J. L. Robinson. Philomath, Ore.

### What a Missourian Thinks

My claim on your time is that I am a native Kansan and a reader of two of your papers. I have just read ex-

tracts of your speech in the Senate. So far as I know, you are the only man in public life with the courage to say publicly what is making all the trouble in this country. Surely a large majority of the public men with the ability to win and hold public honors know that just as well as you do. It seems to me there is great peril to the country in the restraint that is laid upon them.

I am expecting a very powerful and concerted effort will be made to destroy you but if you could get your case before the people you could easily get a powerful organization.

I desire you to know I admire your courage and I desire to support and serve you in any way I can.

James R. Dougan.

St. Louis, Mo.

### Hurrah for Kansas

As a former townsman and friend I hail the opportunity to commend you for your stand against excessive profiteering. I am proud of our Senators from Kansas and hope you will be as successful in the accomplishment of this much needed reform as Governor Allen has been in the matter of coal. All praise to the governor and his coal diggers. They have saved lives in Kansas, and this money madness is more dangerous than was coalless zero weather. I lived in the state 27 years and my heart is there still. Hurrah for Kansas.

J. H. McEwen.  
Kansas City, Mo.

### A Voice from Indiana

Noting your speeches in the Senate as published in the papers, I heartily indorse all you said and am glad to know that there is at least one representative of the people that has backbone enough to declare himself in regard to present conditions. I wish we had more like you. Perhaps we could get some results, as all we get are investigations. We all know without any further investigations that things are absolutely rotten. I hope Senator, that you can get some of your colleagues to see things as they are and get the much needed help I know you must have in order to get any results.

Edward J. Luther.  
South Bend, Ind.

### Opposes Militarism

I have been reading Senator Capper's writings with much interest. I approve of his stand on profiteering and compulsory military training. I am very much opposed to militarism. I will not vote for any military man for President. I believe that Senator Capper is for the people and for the good of the people so here is another vote for Capper.

John Biddlecome.  
Neosho, Mo.

### Profits from Power Farming

(Continued from Page 3.)

part he must have before his machine will work, and run the chance of the dealer not having it. All the new parts he requires are in that repair drawer. Once the orders are placed in the fall Mr. DeMott can cease worrying about his repairs. He knows that long before he needs the new parts they will arrive and all he will have to do will be to put them on the machine. That drawer and the habit of keeping it going, Mr. DeMott says, has not only saved him a lot of time and worry but also many dollars of useless expense.

Every piece of machinery on the farm, every building and every bunch of livestock has a separate account in Mr. DeMott's books. In these accounts he enters the cost, the amount of repair on machinery and buildings or the amount of feed consumed by livestock. When he sells the livestock he enters

the selling price and he can immediately determine his profit.

### Takes Inventory Every Two Years

Every two years Mr. DeMott takes an inventory of his farm. He places a value on his land, livestock, crops and machinery and for the next two years uses this as a basis for figuring his costs and profits.

Record books on purebred livestock also are kept in the desk and are always available for quick and easy reference. The account books are not complicated and can be kept by any farmer, even if he has not had training in bookkeeping. There is no necessity of buying high priced leather bound books. Mr. DeMott has several paper bound journals and a cloth bound, but not costly, ledger.

The DeMott house is two stories and has 10 rooms. It was built in 1915. Gas is used for lighting and heating; a main runs in front of the house and Mr. DeMott obtained a contract for gas a year ago.

A pressure water system is to be installed soon with the pump in the bottom of the well so the water will always be fresh and cool. Mr. DeMott doesn't like the overhead storage tank. He says it gives too much trouble by freezing and that it is unsatisfactory because the water becomes warm in the summer. Water is now piped thruout the house. Sewage is taken care of thru a deep disposal pool in a field.

### Believes in Co-operation

Mr. DeMott believes in a closer co-operation between city folks and farmers. Being a member of the Farmers Union he is a convert to co-operation in general, and he believes there is a great opportunity for the city folks and the farmers to work together for their mutual advantage. He is doing his part in promoting this idea as he is a member of the Arkansas City Commercial club and an active worker in that organization.

Vocational agriculture, which is being taught in the Arkansas City High school, has a warm supporter in this successful farmer. Mr. DeMott recently made a talk to the class in which he told of the methods he uses in farming and the experiences he has had. In his Farmers Union promotion work in various sections of the community, he loses no opportunity to urge farmers to adopt new methods of tilling the soil and to advocate the raising of better livestock.

### Where Co-operation Has Won

(Continued from Page 6.)

efficient distribution systems, and to open them to real, modern-day progress, thru co-operation?"

Co-operation in the handling of dairy products has never made any astonishingly great success in Kansas, to say the least. This has been especially true in the last few years. Probably this is because dairying has not, until recently, been developed in any very intensive way in any one locality. With the progress which dairy farming is making in some communities, however, we can expect a real growth along this line soon. This will put the state more nearly in line with some of the leading dairy sections, such as Wisconsin, where the business has made the greatest progress.

### More Co-operation Needed

Some of the other states where dairying is featured are viewing the lack of progress of the co-operative effort here with concern. For example, the Kansas Farmer and Mail and Breeze received this letter recently from S. N. Ayres of San Francisco, secretary of the Associated Dairymen of California, in a state where co-operation has done much to aid farming:

"We are just in receipt of a letter from H. M. Jones, state dairy commissioner of Kansas in answer to an inquiry sent out by this office to ascertain the activities of the dairymen of Kansas along the lines of co-operative manufacturing and marketing. Much to our surprise, it is stated in this letter that Kansas has formulated no definite policy concerning such an organization, and the knowledge we have of your interest in such matters has led us to address you on the subject, because we are interested in the principles of co-operation as a means to eliminate waste, effect economy and efficiency and bring about a better condition of standardization of the products of the soil, and a better distribution of these products.

"May we not hope that in the near future some activity will be started in the great state of Kansas along these lines?"

"We in California do not believe in any fraternalistic or political movements to solve these problems, but we do feel that it is the duty of farmers to develop a better understanding of business, and we believe that a properly organized and conducted co-operative organization forms the best medium for bringing about this result."

A better system of accounting must be developed in farming, keeping a close record on production, to determine the more profitable lines. It must be admitted that farm bookkeeping never has got very far in this state. But few men have an intelligent idea concerning production costs; this is made evident in every general investigation into the cost of production with any crop or line of livestock farming. As a result agriculture is placed at a great disadvantage when it comes into conflict either with organized business or with organized labor.

### Investigating Production Costs

How will we go about it to get more definite information concerning production costs with agricultural products? Well, there seems to be several methods that will be helpful. J. C. Mohler, secretary of the Kansas state board of agriculture, is doing an excellent work in the preparation of reports, such as the one on wheat growing, for example. As might be expected, this investigation is showing that costs are higher than most men believed. Secretary Mohler plans to extend this investigation until it covers all lines of agricultural activity in Kansas, and it will be a mighty helpful thing.

The Kansas State Agricultural college is doing some excellent work in keeping farm records in certain localities, carefully selected so they will be as representative as possible, and these will be helpful. They will give real information for the working out of more profitable farm management systems in this state if they are continued over a series of years, according to the present plan.

But in addition to all these, we need a large number of men, in all sections, who will keep definite records of their activities which are complete enough to stand the questioning of cost accounting experts. And this will come slowly. If there is anything evident in the whole realm of farm bookkeeping it is that farmers do not view the keeping of accounts with any enthusiasm. It is probable, however, that men will get started into record keeping to a greater extent in the future.

The encouraging thing about the whole economic situation is that farmers are considering it more carefully than ever. There is plenty of indication of this every time a group of farmers get together, and especially in the farmers' institute meetings. This interest is going to develop into the intelligent farming methods we will have in the coming Kansas agriculture.



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# Our Washington Comment

## An Interesting Discussion of Farmers' Co-operative Associations, Farm Loan Bonds, European Credits and Other Important Subjects

By Senator Capper

**T**HE JUDICIARY Committee of the Senate has just concluded its hearings on the Capper bill to legalize farmers' co-operative associations. It is hoped to have the measure reported soon, but this is not likely to occur in time for its enactment before the summer recess. Favorable action by Congress after the recess and, if not then, certainly at the next session of Congress is expected by me and by the farm organization supporting the measure.

The unjust prosecution of farmers' co-operative associations and milk producers' organizations has properly and naturally enraged the farmers throughout the country, and emphasized the need of protective legislation for farmers desiring to co-operate.

### Collective Bargaining

Nearly a year ago I introduced a bill to amend the Sherman Anti-trust law to exempt farmers' co-operative organizations organized for mutual benefit and reasonable profit and not for profiteering from prosecution under the anti-trust laws. Vigorous opposition both in the House and Senate to any such bill, which it is said would give special privilege to farmers, caused me to change my plan and introduce an enabling act to authorize associations of producers of agricultural products. Congressman Volstead introduced a similar measure in the House.

The hearing just concluded developed the fact that not only the farmers of the country, but the progressive labor forces as well, who sympathize with the difficulties of the farmers, favor such legislation.

Among the representatives of big farm organizations, who appeared in support of the principles of the Capper bill, and urged its prompt enactment, were Benjamin C. Marsh, secretary and director of legislation of the Farmers' National Council, and also of the All American Farmer Labor Co-operative Commission; Nat T. Frame, for the American Farm Bureau Federation; Charles A. Lyman, secretary of the National Board of Farm Organizations, and A. M. Loomis of the National Grange.

Some idea of the situation confronting the farmers was given by Mr. Frame, who stated that Judge McCall of Tennessee in a recent decision held that any exchange of information through a common secretary of farm organizations is a violation of the Sherman Anti-trust act, and makes the farmers liable to prosecution.

### The Capper-Hersman Bill

Mr. Loomis stated that the National Grange at its last annual convention had specifically by name endorsed only one bill—the original Capper-Hersman bill, out of which the present bill grew—and favor the principles of the pending bill.

Mr. Lyman told of the great effort which the farmers are making to organize co-operatively and urged the necessity of some action to protect them from misconstruction of the anti-trust laws.

Senator Walsh of Montana, a member of the Committee, appeared not to understand the real significance of the bill and asked whether farmers' co-operative organizations were not already legal. His idea was that all these organizations needed to do was to incorporate like any other corporation. I explained that farmers' co-operative associations are not in a position to compete with highly organized and highly capitalized trusts and combinations, and Senator Norris pointed out that while the Clayton law provides that the anti-trust provisions shall not apply to farmers' co-operative associations, it also provides that such societies must be organized without capital stock and not for profit. This would suggest that if they are organized for profit and have capital stock, the exemption in the law would not apply to them, and farmers naturally fear this interpretation of the law.

Mr. Marsh, who appeared for the hundreds of thousands of farmers united in the Farmers' National Council, stated that not only was the Capper bill in line with their reconstruction program, but that several of the railway brotherhoods and state federations of labor had endorsed the principles of this bill.

### Must Let Farmers Co-operate

In answer to Senator Walsh's expressed fear that farmers might effect a big combination, Mr. Marsh said it sounded strange for a member of Congress to express worry about combinations of farmers organized for mutual help, when the milling combine, the packer combine and other big combines are fighting the farmers and are opposed to real co-operation and direct trading between farmers' co-operatives and consumers' co-operatives.

Marsh cited the decision of the United States Supreme Court that the United States steel corporation is not a trust and pointed to the compromise decree with the packers entered into by Attorney General Palmer as proof of the need of giving farmers a chance to work together. He said it is not reasonable, until the big aggregations of capital are controlled, for anyone to object to farmers organizing for mutual self-protection.

In order that true co-operation might be assured, Mr. Marsh said the Farmers' National Council would prefer to have the enabling act definitely provide that only organizations should be included in which no member is given more than one vote, regardless of the amount of stock or membership capital he may own therein and which does not pay dividends on such stock or membership capital in excess of 8 per cent a year, but since such requirements would exclude certain established co-operative organizations it would be better to adopt the bill as it stands, requiring either the limitation of capital stock owned, or one vote for each member.

### No Farm Monopoly Feared

Senator Walsh raised the point whether if some farmer co-operative elevator should buy out a competing elevator, the co-operative elevator would not create a monopoly which would enable it to shut off the market to non-members of the association. Mr. Marsh replied that the danger of this was remote but that under the terms of the bill he thought the Secretary of Agriculture, who is charged with administering the law, could take action to prevent any unfair practices.

The necessity for this legislation was made very clear at the hearings. So long as the fear of prosecution, of summary arrest, of indictment and of trial, even the conviction may not follow, rests upon farmers who desire to associate themselves together to improve their economic situation in a perfectly justifiable way, they are going to be afraid to enter into arrangements to sell their products co-operatively.

Farmers' representatives at the hearing emphasized the fact, which Congress now is beginning to appreciate, that the constant discrimination and unfair treatment of farmers is having a bad effect. No law can compel a farmer to produce at a loss. The cost of production has increased so materially that farmers must get higher prices or loss is inevitable. Unless they can do this, farmers will not be encouraged to increase their production, and the world will wake up one of these days to find itself hungry. Farmers' co-operative organizations, by eliminating the speculative middleman to some extent, and making it possible for producers to deal more directly with consumers, afford the most practicable method of enabling farmers to get more for their products without improperly burdening the consumer.

The Capper Enabling act is designed

to encourage just such direct trading between farm producers and city consumers, and if passed will be a practical encouragement to a practical reduction of the present high cost of living.

### Helps Grain Gamblers

I have a letter from W. E. Cassingham, of Lyons, Kan., referring to the recent meeting called in Washington by Julius Barnes of the United States Grain Corporation, having in view a continuance of its activities beyond June 1. Mr. Cassingham asks me:

"Will you please inform me how the United States Grain Corporation has made the wheat farmer any money since its formation?" Then Mr. Cassingham continues: "Mr. Barnes has drawn a big salary and so have his subordinates, and the Grain Corporation has made a net profit of 53 million dollars. All of the private grain firms still exist with an increased guaranteed commission. All of these profits must come out of the wheat and the grower certainly has to pay it. Every time wheat has started to go up Mr. Barnes has thrown a scare into the market. He has cautioned commission firms and millers to be careful of high prices. This Grain Corporation is the rottenest thing that was ever forced on any people by any government. It has given a lot of wheat gamblers jobs at big salaries. It has played into the hands of the big miller and, according to Mr. Hoover, has prevented wheat from going to \$5 a bushel and has put the little miller out of business, as it did George Hearn of Hutchinson a few days ago. The farmers as a whole lost money on last year's crop. The commission firms and millers made thousands each and the grain corporation made 53 million dollars. Tell me who it is going to benefit to continue it."

I think Mr. Cassingham answers his own question. It certainly cannot be denied that, however much Mr. Hoover's Food Administration benefited the consumer and certainly he was not benefited much considering the profiteering in foods that went on during the war and continues to go on—that part of it which dealt with the producer; that is, the United States Grain Corporation, has operated to rob the farmer and enrich the grain dealer and miller, especially the miller. I can see no benefit to accrue to the farmer from a continuance of the wheat price guaranty as manipulated by Hoover and Barnes in the interest of the middlemen. I believe the whole move has been in the interest of the grain dealers, millers and wheat gamblers, and against the interest of the producer.

### A Good Remedy

Another Kansas correspondent, Arthur Jones, of Eskridge, writes to me thus:

"If the Republican Congress would pass a law making it a crime to gamble in grain and foodstuffs, you would see how quick prices would come down and yield to the law of supply and demand. If the Republicans would pass such a law I do not believe President Wilson would dare veto it, and you would see how soon these gougers would unload and things would soon go back to normal."

Mr. Jones goes on to explain that he must pay \$28 a hundred pounds for sugar, while it is selling in Denver for just half that amount, or \$14 a hundred. "This is the sort of thing," he says, "that brings on revolution."

There is no question about the public smarting under the lash of the profiteer and when sane, sober and patient people begin to talk about revolution it is time for the grafters and robbers to take heed. It is this that I have been endeavoring to impress on Congress and the country.

I think our fight against profiteer-

ing is beginning to bear fruit. There are some evidences of a reaction. For one thing, the law-enforcing department of the Government appears to be showing more signs of activity. There is plenty of law to prevent gouging if the Attorney General and his assistants will do their duty. It is up to the law-enforcing branch of the Government, not to Congress, to stop the saturnalia of loot and graft now being enjoyed by the profiteers. Congress has given plenty of legislation in the anti-trust laws, the Food Control act, the anti-hoarding laws and other measures if those laws are only enforced rigidly. Congress will give the law-enforcing department of the Government any other legislation it asks to aid in efforts to stop the profit hogs.

The merchants themselves are beginning to wake up to the danger, too. They realize they have gone too far with the gouge game. Following the lead of John Wanamaker, many big merchants throughout the country have made 25 per cent cuts in retail prices of all goods they have on their shelves. This downward trend of prices once started is likely to become general, and normal conditions may thus be restored without much activity on the part of the Government.

### Let Soldiers Return

A letter recently received by me from an American soldier written in Tientsin, China, recalls that 18 months after the war ended we still have American soldier boys scattered in out of the way places over the globe. In Europe, Asia and perhaps Africa. This soldier is Leon D. Gibbens, a first lieutenant in the 15th Infantry, and his home is Nickerson, Kan. Lieut. Gibbens tells me something about the high cost of living, which apparently is not altogether an American institution. He says:

"The 15th Infantry is the only military organization among those of the several powers represented here (England, France, Italy and Japan) which is not paid with a fixed rate of exchange. Even our own consular service, the United States Navy, the United States Marines, are all paid at a rate of \$2.32 Chinese currency for every dollar United States currency that they are supposed to draw. This is the prevailing rate and the one used by the Standard Oil, the British-American Tobacco company, Texas Oil, and numerous other American and European firms which have representatives in China.

"Yet the officers and men of the United States Army are forced to take in exchange whatever a local Chinese loan dealer will offer for United States gold. At the present writing it is quoted at 95 cents for \$1 United States gold and in the past six months it has been as low as 76 cents. Imagine putting down a \$20 United States gold piece and getting back \$17.60 Chinese currency."

I can see no good reason for American soldiers in China or any other foreign land. The place for these American boys is in America.

### Postal Clerks

There is one class of Government employe, however, who more than earns the money he is now receiving. I refer to the postoffice employe. Postal workers, including clerks, carriers, railway service, and many postmasters, are the poorest paid employes of the Government, glass and amount of work done considered. I am glad to say that I believe justice is soon to be done them. A commission composed of members both of the House and the Senate has been working for many months on a reorganization of the Federal postal service. Senator Townsend, chairman of the Postoffice Committee of the Senate, announced that this Commission soon would report.

(Continued on Page 12.)





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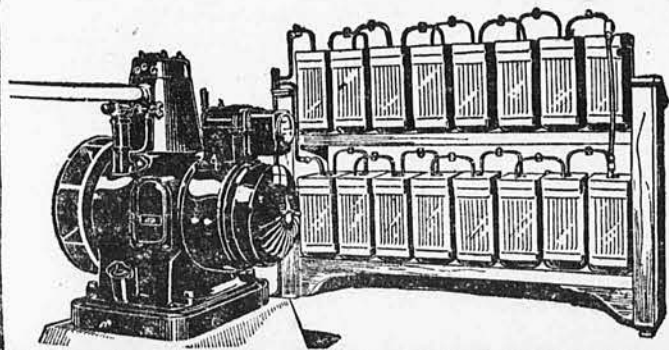
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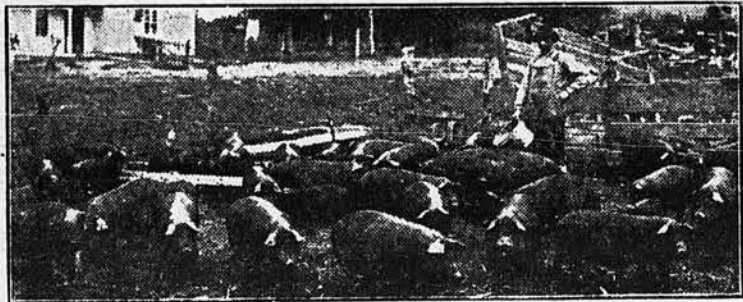
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# Saving Hogs From Cholera

Proper Vaccination Will Prevent Many Losses

BY DR. H. M. GRAEFE



**H**OG CHOLERA is again causing considerable uneasiness among farmers and swine breeders, but fortunately there is a safe and sane method of combating the disease within easy reach of every one. Vaccination with the simultaneous method using both serum and virus when the pigs weigh from 60 to 75 pounds is the most reliable insurance against cholera.

The term "vaccination" defined means any measures taken to protect the animal body against the invasion of disease-producing germs by the administration of serums, viruses, bacterins or other immunizing products. It is very evident then that the full measure of success from vaccination is the protecting or immunizing of the healthy animal as the virtues of vaccination are more in protection than in effecting a cure.

## Permanent Immunity

The use of anti-hog cholera serum and cholera virus in producing an absolute permanent immunity against swine cholera is the greatest asset the swine industry has. No longer need the stock raiser stand helplessly by when his hogs are two-thirds fed out and observe his entire herd die with this destructive disease if he be an alert and progressive stockman and will resort to vaccination in time, when his herd is endangered or is in close proximity to cholera infection.

This vaccination if properly done with a sufficient amount of potent serum and virulent virus will stand the "acid" test for a permanent immunity against cholera. However, while the virtues of this procedure when properly done are thoroughly established in the minds of those of us who know about these matters, we must not lose sight of the fact that there are also many dangers which accompany the use of anti-hog cholera serum and virus when not properly and skillfully administered. Therefore, it behooves the man who is going to have his swine herd treated to employ the most competent service.

## Use the Best Serum

Shortly after the process of manufacture of anti-hog cholera serum and virus was discovered by the United States Bureau of Animal Industry, which is the veterinary organization of the Department of Agriculture, private concerns began to manufacture these products, and as a result, many unscrupulous concerns put on the market almost any kind of a product in order to make undeserved financial gain for themselves without regard to the stock raiser's losses. It has been stated that in 1912, one concern sold prune juice for anti-hog cholera serum. This naturally put serum and serum vaccination in bad repute and forced the United States Bureau of Animal Industry to require the manufacture of these products be done under their supervision and the products tested on live pigs for potency before being placed on the market. When the Federal Government took over the supervision of these plants, most of them went out of business and others were prosecuted for their unscrupulous dealings. This supervision better insures the swine raiser that a potent serum will be used on his hogs, if the product is properly kept since leaving the serum plant by the veterinarian who is to treat the hogs. It must be remembered, however, that serum is an animal product the same as a ham, and will decompose if

not kept at the proper temperature. The use of spoiled serum will produce septicemia and the hog will die of blood poison in two or three days. Again, insufficient dosage of serum when used against the virus or natural infection will not afford protection and that improper treatment will produce instead of prevent cholera. Mistakes in diagnosis sometimes cause increased losses. Anti-cholera serum is a preventive against cholera only. When cholera is diagnosed, large doses of serum and virus (double or triple amounts) should be used, with better success. The writer has observed many instances where some curative effect was received by the administration of large doses of serum in the early stages of infection, however, there is no claim made of any curative virtues for serum.

Animals of low vitality which have a weak resistance to disease are poor subjects for vaccination and when so treated should be given large doses of serum which is the artificial protection, in an effort to make up for the natural body protection which the unthrifty pig does not possess.

## Sanitary Premises Necessary

Sanitary premises are a necessary adjunct to the proper vaccination of hogs. Animals that are in filthy premises are exposed at all times to other germ infections which may invade the animal system while undergoing the process of immunity and result in complications of pneumonia, enteritis, necrotic inflammation of stomach and bowels, and other allied infections. In these instances, bad results may be experienced. Another precaution which is essential in the proper vaccination of pigs is to properly diet the animals both before and after treatment. The use of shorts and bran, swill, alfalfa pasture in season and light feeding especially for 10 days to two weeks after vaccination is necessary. None, or at least only a small ration of corn should be fed hogs which have been recently vaccinated. Corn causes too much animal heat and is hard to digest.

In summarizing, the writer wishes to impress that the use of anti-cholera serum and virus has passed the experimental stage and is an absolute preventive when properly used on healthy and thrifty pigs.

Vaccination is recommended in all infected and exposed herds and the sooner it is used the more satisfactory will be the results, provided plenty of serum is used, as it is a preventive treatment. The proper time to vaccinate pigs to produce a permanent immunity is when they weigh from 60 to 75 pounds, and if thrifty at that time, they should not lose a meal from the effect of vaccination. Proper sanitation, dieting and care should assist materially in the elimination of bad results following vaccination, provided a sufficient dosage of serum is administered to protect the hog. Serums and viruses that are manufactured are usually reliable at the time they leave the place of manufacture and when properly administered no bad results should follow.

## Wool Hoarders Hike Prices

From the St. Louis, Mo., Times:

More than 1,265,000,000 pounds of virgin wool have accumulated in the storehouses of the world since the beginning of the World War, according to statistics compiled by the National Sheep and Wool Bureau of America. When the world's wool clip of 1920 is

completed a few weeks hence, this amount will be increased by 2½ billion pounds, it is expected.

Despite the high prices of wool fabrics, the storehouses of America alone contained 700 million pounds of virgin wool last September, 10 months after the signing of the armistice, or 100 million pounds more than the country's annual consumption.

The National Sheep and Wool Bureau, which has its office at 29 South La Salle street, Chicago, is attempting to force cloth manufacturers to withdraw virgin wool from the storehouses thru the passage of the so-called "Truth in Fabric" bill, which is now before the Interstate Commerce Committee of both Houses of Congress.

## Bill Would Aid Public

The bill is designed to compel manufacturers to stamp "wool" cloth with the percentage of cotton or shoddy used in its manufacture. Shoddy is made from woollen rags, and is much less expensive for manufacturing purposes than virgin wool, which is wool that never has passed thru manufacturing processes. In discussing the situation recently Howard E. Greene, secretary of the bureau, said:

"The reason huge stocks of virgin wool are now lying in storehouses unmanufactured is that the use of unidentified shoddy enables manufacturers to make more money.

"The Truth in Fabric bill, when enacted into law, will make the manufacturers come out in the open and tell what their goods are made of. Then people who want virgin wool and are ready to pay for virgin wool can get honest cloth, and goods made of shoddy will take their rightful place and price and can no longer masquerade as virgin wool.

## Product is Sufficient

"The world produces scarcely a third less wool than it needs annually. With proper encouragement, farmers would increase their flocks of sheep, and that, in the long run, would mean more and cheaper wool and more and cheaper lamb and mutton.

"Every voter is vitally interested in honest cloth, cheaper wool and cheaper meat, and should write his Congressman and Senator at once and urge that the Truth in Fabric bill be reported out of committee and made into law. All voters are also urged to call upon their political parties to incorporate the Truth in Fabric demand in their National platforms. Pure cloth is second only in importance to pure food."

The Truth in Fabric bill was introduced in the House of Representatives on January 7 by Congressman Burton L. French of Idaho. John J. Esch of Wisconsin is chairman of the Interstate Committee of the House. Senator Arthur Capper of Kansas introduced the bill into the Senate.

## Our Washington Comment

(Continued from Page 10.)

and it is expected a bill will be promptly passed providing for an increase and a readjustment of salaries thruout the service. If this bill is enacted before June 30, it will be made effective on that date; if enacted after that date, the salaries will be made retroactive to June 30. I hope the bill will be promptly reported and passed, and that these faithful, hard-working and underpaid employees will be treated justly by the great Government which they serve.

## Farm Loan Bonds

The resolution authorizing the Secretary of the Treasury to buy 100 million dollars of farm loan bonds, thus permitting the Federal Farm Loan Banks to continue their business pending the decision of the United States Supreme Court in the case brought against the system, has passed the House, and an effort will be made to pass it in the Senate before the summer recess is taken. This legislation is made necessary because the Supreme court will not pass on the constitutionality of the provision of the law exempting these bonds from taxation before October and in the meantime there is no market for the bonds. Unless the Government buys the bonds therefore, the banks are without funds to lend the farmers, altho all the banks have made applications for loans. I have a letter from Thomas S. Ambrose,

who lives away out in the state of Washington, asking me to further the passage of this resolution thru the Senate.

"Will you not do all in your power to see that this resolution is called up and passed?" Mr. Ambrose asks, "so that many thousands of farmers will be enabled to obtain loans to finance their operations this spring and summer. They have their applications in for loans and have been depending upon them to buy seed, employ labor, buy stock and to pay off existing high interest-exacting indebtedness."

I am well aware of the importance of this legislation. The Federal Farm Loan Board has ordered the banks to discontinue their operations pending the decision of the United States Supreme Court, but this resolution will provide the banks with money so that this order of the farm loan can be rescinded and loans can continue to be made even in the absence of private buyers of the bonds. Then, if the Supreme Court sustains the exemption of Federal Farm Loan Bank bonds from taxation the system can continue to operate just as it did before suit was brought. If the decision should be adverse, other legislation will be necessary to insure the continuance of this farm loan system that has proved such a benefit to the farmer.

## Foreign Bonds

The scheme of European financiers and statesmen to have the United States carry the whole debt of the Great War has bobbed up again, this time in the proposal that this country shall absorb 22½ million dollars of bonds which the European allies propose to have Germany issue and pay to them in satisfaction of the reparations provided for in the war settlement. Of course, England and France and Italy offer to stand behind Germany and compel her to pay these bonds in due time, but they desire this country to absorb them at present and thus give the European nations the cash.

In my judgment this country will do nothing of the sort, and the sooner Europe learns that the United States does not intend to supply cash with which they can continue to finance their quarrels the better. I have expressed this view before, and I heartily concur in the statement made in the Senate recently by Senator Borah, in which he urged the European nations to tax their profiteers and begin paying their debts instead of making new ones.

"The time has come," said Senator Borah, "for the American people to let two things be known: First, that they do not intend to underwrite bonds in Europe caused by profiteering and unsound financial policies; and, second, before the American people undertake to feed Europe, Europe must settle down and go to work."

Senator Borah at the moment was discussing the proposal of Henry P. Davison of J. P. Morgan and Company, that Congress appropriate ½ million dollars to feed European peoples.

"What will ½ million dollars do," continued the Senator, "if Europe refuses to go to work, and continues to operate under present financial systems? It would have no more effect than the 100 million dollars we recently appropriated. Europe now is worse off than ever."

Senator Borah said he doubted the authority of Congress to feed Europe by taxing the American people. As a matter of fact the appropriation of 100 million dollars, to which Senator Borah referred, went largely to Poland, and enabled that country to continue to feed the Polish army, and thus really to keep up the war between Poland and Russia. If the European countries are to continue to war with one another they may as well understand first as last that they cannot continue to look to the United States treasury for money with which to feed their civilian populations. If they will cease warring with one another they will be able to work and support themselves without depending on the generosity either of the American government or the American people.

*Arthur Capper*

Washington, D. C.



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implement. Saddles instead of seats would have been in general use.

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# Use Care With the Binder

## *The Efficiency of Grain Harvesting Machinery Can be Increased Greatly as a Rule by a Little Study*

**F**EW implements are more important on an average farm than the binder. It is an expensive tool to buy—especially in this good year of 1920—and it is of the greatest importance that it “go” when harvest comes. A little more care in handling the machine will pay well.

In some cases a few repairs will give an old binder, which perhaps was about due to be thrown away, a chance to do efficient work again. Before binders are put away after a season's work they should be gone over with the same care that a good engineer would bestow on his engine. All old grease and dirt should be removed from the surface as well as from the bearings. This can be done with kerosene and waste. The binder should be carefully oiled and all bright parts greased to prevent rusting.

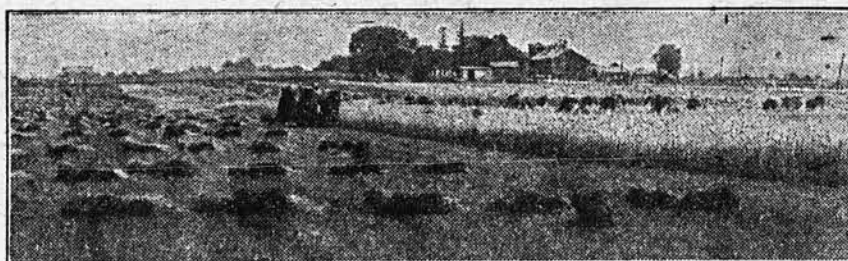
Binders are often operated by inexperienced or careless persons who, knowing nothing about the machine they are using, sit serenely in the seat and do nothing but drive. Such men are as surely out of place as they would be on an engine platform. A binder operator should be familiar with and understand the function of every part of his machine, and what is more, he should be able to make all necessary adjustments and repairs without the aid of an expert. He must know where to oil, when to oil and how to oil. Many a good binder has been prematurely relegated to the scrap pile because of improper oiling. The man who gives his binder an oil bath when starting and then fails to oil again until it fairly screams for more may succeed in using a great deal of oil but his binder will soon wear out. All oil that does not get into the bearings does more harm than good as it serves to gather dust and grit which will work into the bearings. The proper way to oil is to use a little at a time and often. All parts of a binder do not need the same amount of oil and the operator should decide which parts, by virtue of their work, need the most and give them frequent oiling, while other parts may require only occasional applications. To enable the operator of a binder to make proper repairs, the following tools should be found in the tool box of every binder in the field: One or two good wrenches of such size as to fit most nuts on the binder, one monkey-wrench or pair of pliers, at least one good cold-chisel, a punch, a drift for driving out keys and a light mechanic's hammer. Equipped with these tools and a desire to thoroughly understand his binder, any person of average intelligence can soon learn to detect the difficulties and make all necessary adjustments and repairs.

### Watch the Sickle Bar

One of the first things to observe when getting a binder into condition for harvest is to see that the guards on the sickle bar are in line. First, see if all guard bolts are tight, next sight along the points of the guards and if any are out of line bring them into line by tapping with a hammer. Examine the ledger plates in every guard and if there are any with deep nicks, such as may result from an encounter with fence wire, replace them with new ones. Sickle sections that are nicked or broken should be renewed and new ones substituted. Be sure the clips which hold the sickle in place are firm so it and the ledger plates work with a true, shear cut.

Next determine if the sickle registers—that is, if during a stroke of the pitman, a sickle section moves from the center of a guard to the center of the next. If it does not, the lost motion in the pitman and connections must be taken up so that it does. If this cannot be done effectively buy a new pitman—it usually is made of wood and costs but little.

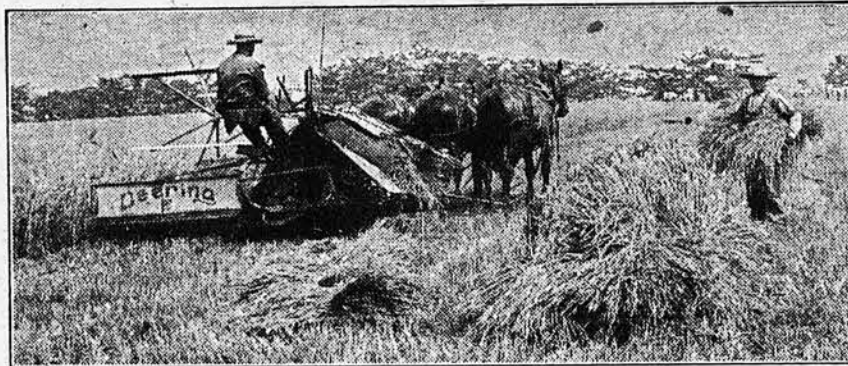
In order that a binder may run with the least possible wear and friction, the crown wheels carrying the main chain, as well as those carrying the elevator chain must be in perfect line. This can be determined easily by sighting along the face of the wheels and,



if any are out of alignment, they often can be put back by taking up the end-play of the shafts by means of washers. The chains should be run just tight enough to stay on the wheels—for tight chains increase wear, friction and draft.

Many binder operators fail to note that there is a right and a wrong way for the binder chains to run. When putting a main chain or elevator chain on the sprockets be sure it is placed according to the method in the guide book.

Considerable trouble often is experienced because the main, or bevel, gears do not mesh properly, and if allowed to run this way they will soon wear out. In making the adjustment, half the play should be taken up with this device and the rest by putting washers on the pitman shaft. If all the play is taken up on the counter shaft, the gears will not mesh properly and consequently will wear out faster.



In case one of the gears must be renewed the other also should be replaced as old and new gears will not mesh well.

The adjustment of the reel has a great deal to do with the condition of the bundles. It should be so placed as to strike the grain near the top, straightening it up for the sickle and bending it back over the platform without throwing it rearward as the reel will do if placed too low. In uneven grain, especially if it contains spots that are lodged or tangled, the reel requires constant attention if good work is to be expected.

To adjust the reel slats, lower the reel and place the slats so they pass close to the inner grain shield.

On account of its weight, the reel will sometimes sag to such an extent that if it is run close to the platform the outer ends of the slats may strike. Nearly all binders are now provided with a guy rod attached to the reel post which may be lengthened or shortened

to make the reel parallel with the platform.

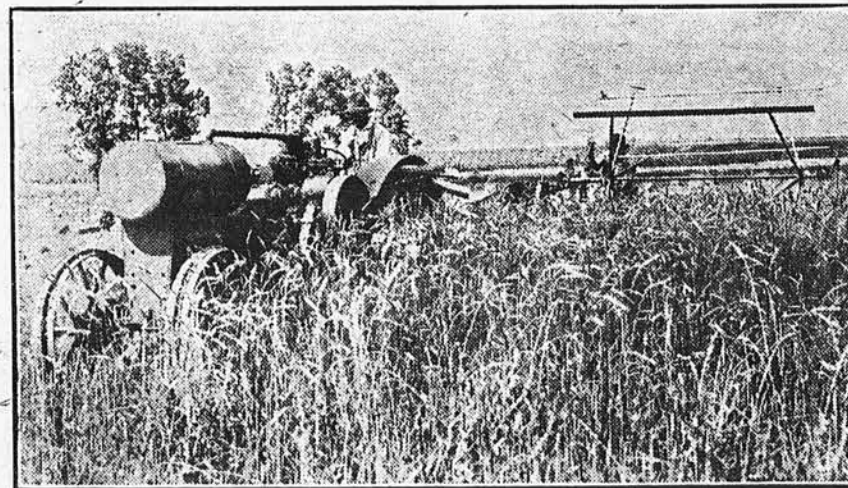
The reel on most binders is placed so the inner ends of the slats travel slightly in advance of the outer ends, thus forming an angle between the slats and sickle. The reel is placed in this position to counteract the tendency of grain to go head first into the elevator. Altho this is, strictly speaking, not an adjustment, this angle may be increased, if need be, by bending or otherwise shortening the brace rod, usually extending from either the U-tube or elevator frame to the reel post.

The objection to the open elevator frame has been that the upper elevator frame was not rigid enough to permit the canvas to run true. This objection has of late years been overcome largely by most manufacturers who have given special attention to bracing and strengthening this part of their binder. Nevertheless, it often happens that the

lower as well as the upper elevator frames get twisted, or, as is often the case, have not been properly squared when first erected. If the elevator frame is not square, the canvases run hard, the slats break and come loose from the canvas, the bearings wear out, and the draft is increased. The canvas should be run only tight enough to prevent slipping.

A binder will do the best work when slightly tilted forward, as that will serve to keep the butts of the grain well toward the front of the elevator and against the butter, thus insuring even butted bundles.

The lever for shifting the binder to place the band on the middle of the bundle should have a range of at least 15 inches. This device should be kept working easily and the operator should keep the binder attachment in such a position that it is not necessary to move the butter much to equalize the bundle. If the butter is run at a considerable angle the deck not only



chokes up easily, but the draft also is greater, more grain is shelled out, and the bundles will not be square.

The grain cover over the deck is made adjustable and may be raised or lowered to provide more or less space on the deck as required. When heavy grain is cut it may be desirable to raise the grain cover. When cutting ripe oats, for example, which is often so light and fluffy that it piles up so the packers cannot reach it, lower the cover to force the oats down to the packers.

The binder attachment contains the vital parts of the binder and on account of its somewhat complex mechanism is more likely to get out of order than any other part. One of the first things to learn about the binder attachment is that its mechanism must be accurately timed so all its parts act at the right instant. The failure of the operator to realize this is a fruitful source of trouble. The manufacturers in order to facilitate the taking apart and putting together of the mechanism ordinarily make use of time marks. These time marks usually are small projections cast on a pair of opposite cogs in wheels meshing together. If it becomes necessary to take the attachment apart and no marks can be found, trouble often may be avoided by first making time marks with a cold chisel.

Perfect smoothness so the twine may be readily stripped off is a prime requisite for the good working of the knottor bill. When the binder was last stored away the knottor bill should have been oiled to prevent rusting. All rust should be removed from the bill with emery cloth or fine sand paper and care should be taken not to bruise its surface.

### Proper Adjustments Required

The slide of the knottor pinion often wears to such an extent that the pinion rocks against the face of the tyer wheel. A rocking knottor pinion may be detected by jerking the knottor bill up and down with the hand and, if it moves to any extent, the lost motion should be taken up or the pinion renewed. On some binders there is sufficient space between the hub of the tyer wheel and the knottor frame so the former can be driven in on the shaft and the play taken up in this manner. Care should be taken not to drive the tyer wheel up so tight as to cause unnecessary wear and friction.

Most machines use the swinging knife arm. This type of knife arm by means of a deep notch holds the cord while the knot is being formed, after which it strips it off the knottor bill. When the knot is being made, this notch must hold the cord rigidly in place or the knottor may lose one or both cords. To hold the knife arm rigid the breast of the needle drops into the notch and should fit closely enough so the knife arm cannot be moved in either direction. If the knife arm is held loosely, the needle may be thrown forward a trifle, but care should be taken not to throw it so far forward that it will bend the knife arm. If it is not desirable to move the needle the knife arm may be raised by putting a washer on the knife arm pin. Sometimes one of the cords fails to drop into the notch on the knife arm. If it does the knottor will fail to secure it and a knot is formed only on one end of the cord. This may be caused by the lost motion of the knife arm which permits it to move out of place.

The knife must, during a season, cut several thousand twines, and like any other edged tool it becomes dull and needs resharpening. A small whetstone or milled file should be kept in the tool box for that purpose. A dull knife often is responsible for loose bundles where the cord has been broken. It also entails an unnecessary strain on the knottor bill and other parts.

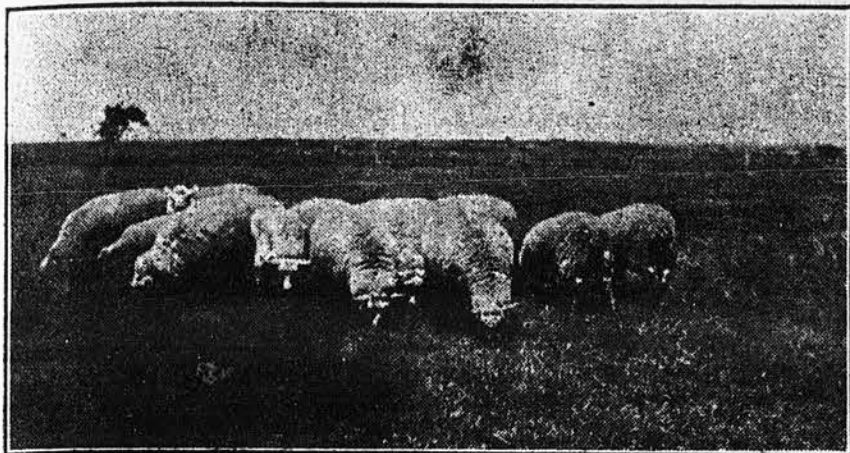
The knife must be timed accurately, for if the cord is cut too soon, the knot will come apart and if cut too late the twine may be broken by the discharge arms. When the knife is too late the twine is broken on opposite side of bundle and the knot remains on the bill.



# Summer Care of the Flock

Sheep When Properly Managed Prove Profitable

BY A. M. PATERSON



**G**IVE the sheep some attention during the summer and increase the profits from the flock. After the sheep are turned on pasture in the spring they usually are forced to rustle for themselves, which a great many times results in a financial loss to the flock owner.

When they are first turned on pasture the grass is young and palatable, there is some danger of the animal over-eating which may cause sickness and loss from death. The flock should be given a liberal feed of dry roughage and turned on pasture a short time at first, the length of time should be increased each day until they become accustomed to the new feed, when they may be left on pasture all the time. The lambs should still have their grain ration to keep them growing.

## Keep the Flock Thrifty

If the flock is in a thrifty condition and grass is abundant they will need no other feed. However, if some of the ewes that are nursing lambs are very thin it is a good plan to give them a light grain ration for a short time so that their bodies will be built up to a thrifty condition.

At this time too, the sheep are sheared and in case of cold weather the flock should be given shelter which will sometimes overcome the danger of losing animals from pneumonia and other diseases. Some means of shade should be provided—where natural shade is not available a few posts set in the ground and a roof of boards or straw, or some like material is inexpensive and efficient for this purpose.

## Suggestions About Dipping

Always dip the flock at least once a year and in case of external parasites as often as may be necessary. Dipping is done to kill all external parasites, put the animal's skin in a more healthy condition, and to make a more luxuriant growth of wool.

If ticks are present in the older sheep after being sheared the ticks will infest the lambs and a ticky lamb will not be thrifty nor give satisfactory returns for the feed it eats. If only a few head are to be dipped they can be dipped in a barrel but the most satisfactory way is to use a dipping vat, leaving the animal in the solution about 1 minute.

There are several makes of sheep dip on the market that are good, provided they are carefully handled and applied according to directions given with every package. A warm sunny day should be selected to do the work. It is well to dip in the morning in order that the animals will become dry before night. It is also a good plan to warm the solution if possible.

## Methods of Weaning

There is no set time to wean the lambs as this depends somewhat on the condition of the ewes and lambs; 4 or 5 months old is a good age to wean them generally. However, if the lambs are big and growthy and the ewes sucked down to a thin condition, the lambs should be weaned early in order that the ewes will have time to regain a thrifty condition before the breeding season. If on the other hand the lambs are not as growthy as they should be, they should be permitted to run with their mothers a little longer.

When lambs are weaned they should be fed a liberal grain ration if they

are not already getting it. The lambs should be taken away from the ewes for about 12 hours, then returned to their mothers to nurse; then they should be taken away for about 24 hours and returned to their mothers to nurse. This should be repeated in 24 hours again to avoid milking the ewes. The lambs should then be put on a good succulent pasture and fed so they will not lose any weight from weaning. The ewes should be put on a dry roughage ration and their udders watched closely until they are dried up. They should then be put on a good pasture and begin to get ready for breeding.

One of the biggest drawbacks to the sheep industry is the stomach worm. This pest can be combated very successfully by proper methods of prevention and management. It generally affects the young lambs in July and August, especially when they are run on pasture that is infested. By having fresh pasture or cultivated pasture to turn the lambs on at weaning time this will go a long way to eliminate this trouble. Liberal feeding is also a good method of combating this disease. Animals that are affected show a very unthrifty condition, they scour and sometimes swell around the jaws, and if not treated will soon die.

Copper sulfate or gasoline are good methods for treating this disease, and treatment should be given according to instructions from a veterinarian.

## Culling the Ewes

Spring and summer are good times to cull the flock. Ewes that did not drop lambs in the spring should be marked and marketed. Ewes that produced inferior lambs should also be marked and marketed. This class of ewes can be fattened much easier on grass and with the addition of a little grain much better than at any other time of the year.

The summer months are the time of the year to get the ram ready for the breeding season, or for the purchasing of a new ram. Too many people do not select the ram until near the breeding season which a great many times results in the use of an inferior ram.

## To Destroy Cutworms

The most effective and practical method of destroying cutworms is to poison them with the poisoned bran mash preparation worked out by George A. Dean of the Kansas Experiment station. The formula for a small quantity is as follows: bran 1 pound, Paris green or white arsenic 1 ounce, sirup or molasses 3 ounces,  $\frac{1}{4}$  of a lemon or orange including the peel and  $1\frac{1}{2}$  pints of water. If a large amount of poison is necessary, use 20 pounds of bran, 1 pound of Paris green or white arsenic,  $\frac{1}{2}$  gallon of sirup or molasses, 3 lemons or oranges and  $3\frac{1}{2}$  gallons of water. To prepare this poisoned bait mix the bran and the poison in a pan or tub while dry. Add the sirup or molasses and the finely chopped lemons or oranges to the water, pouring this liquid over the poisoned bran, stirring it thoroly until it is uniformly wet.

Since the cutworms feed only at night or on dull, cloudy days, the best time to spread the bait is late in the afternoon or just at dusk. It should

be scattered broadcast about the plants where the worms are working. If they are working in large fields of corn, sow the poisoned bait broadcast over the whole field. Twenty pounds is enough for 4 or 5 acres of corn or alfalfa. If the worms seem to be coming in from some adjoining pasture, alfalfa land or turning row, the corn can be protected by sowing broadcast a narrow strip of the poisoned bait along the edge of the field. It may be necessary to make two or three applications of the poison at short intervals.

Remember that the mixture is a poison and do not leave it around where children, livestock or chickens may get to it. With proper care there is no danger. Always scatter it broadcast.

## For Better Library Service

BY FLORENCE K. MILLER

More than 1 million persons in Kansas are not provided with free library service, according to an estimate made recently by the United States Bureau of Education. This means that only 29.7 per cent of the population has access to the institution which does more than any other to promote adult self-education—the public library. This estimate should give the residents of Kansas a conception of the importance of the "books for everybody" movement which the American Library Association is launching. This association is gathering 2 million dollars which will aid greatly in giving the public library the place it should hold as an educational factor in the United States.

There are 83 free public libraries in Kansas, containing 440,580 volumes. The Bureau of Education believes that to render adequate service, a public library should contain 5,000 volumes. Only 29 libraries in Kansas measure up to this standard. Twenty-seven counties in the state have libraries with as many as 5,000 volumes, and there are 78 counties that do not have a library of this size.

In most of these counties it would be possible to organize a county library system. In sections of the state where the population is scattered, most of the people being farmers, a county library system would be of untold value. The isolation which many times discourages the farmer and his family might often be overcome if they had access to good reading matter. Then, too, there is no better way to keep up with the progress of the outside world than by reading.

The Kansas traveling libraries commission, with offices in the state house at Topeka, has done much to educate the people of Kansas to the important place which reading should hold in the American home. Many communities without public library service have been supplied with good reading matter thru this commission, and it is eager to supply many more. Let us hope that the time is not far distant when the communities in Kansas without public library service will awaken to the advantages they are missing.



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# Harvest Alfalfa With Care

Properly Cured Hay Will Bring Best Prices

BY G. C. WHEELER



**W**ITHIN the next 30 days a million acres of alfalfa will be harvested in Kansas. Haying on the alfalfa farm will be an almost continuous performance for the next five months. Since well cured alfalfa probably will continue high in price, it will pay to use every effort possible to save the alfalfa in prime condition.

It requires dry air and sunshine to cure alfalfa properly. A ton of green alfalfa contains when cut at least 1,500 pounds of water. To be stored as hay fully four-fifths of this water must be evaporated. This can be accomplished only thru the agency of dry air and sunshine. A hot day is not always a good day for haying. In fact when the heat is most oppressive the air is usually full of moisture and hay dries slowly.

While the right kind of weather is a factor of great importance in hay making, it is well to understand thoroly some of the principles which govern the rapid removal of water. When plants are alive and growing they constantly give off moisture thru the pores of the leaves. After the plant is cut the process continues, the water passing from the leaves into the air as the hay cures. The stems of alfalfa contain more moisture than the leaves, but since they do not have the pores that give off moisture, the water they contain cannot be evaporated rapidly except as it is pumped out by the active pores of the leaves.

## Thoro Drying

One might think that alfalfa would cure most quickly by letting it lie exposed to the sun in the swath. The leaves, however, cease to pump the moisture from the stems and they become dry and brittle. Exposure to the hot sun may dry the leaves quickly, leaving the stems full of moisture. It is not at all uncommon to have hay apparently cured with the leaves dry and brittle, but having so much juice in the stems that it can be wrung out by twisting a wisp of the hay in the hands.

In spite of the uncertainties of the weather it is a good plan to have a system in hay making and work to it as nearly as possible. The foregoing explanation of the principles of rapid evaporation may seem rather theoretical, but a full knowledge of these principles is of the greatest importance in working out a plan of procedure in curing alfalfa hay.

The first point to consider in any system is to try to keep the leaves in condition to remove moisture from the stems as long as possible. Windrow or cock curing furthers this object. The hay is raked before the leaves become dry and brittle. Alfalfa in a light, fluffy windrow such as is left by a side delivery rake will cure more rapidly than if left in the swath, even tho the sun is shining and the air is dry. In the windrow the leaves continue to remove the moisture from the stems and the curing process proceeds rapidly.

## To Prevent Waste

There is another most important reason for delaying the drying of the leaves. If they become too dry and brittle while the hay is yet in the swath there is much waste of the most valuable part of the hay. Whatever the method of raking the hay will be of better quality if it can be placed in the windrow before the leaves have become thoroly dry.

A method was worked out by John Greenlund of Washington county, which enabled him to cure alfalfa successfully under very adverse weather conditions. During the season of 1915 which will be remembered as an unusually rainy year, he managed to

save all the alfalfa produced on 50 acres. Mr. Greenlund is a farmer who uses his head and he conceived the idea of attaching two windrowers to the sickle bar. These leave the hay in a rope about a foot wide, throwing the leaves in such a way that when they wilt they overlap forming a sort of roof or cover for the hay underneath. On turning these ropes of hay with a side delivery rake following quite a heavy rain, fully 50 per cent of the hay would be as dry as before the rain fell. In spite of the frequent rains during the season of 1915 Mr. Greenlund was able to save his hay by following this method and now he does not worry so much about curing alfalfa in rainy weather.

## Labor Saving Machinery

Where much alfalfa is grown it is almost necessary to employ all the labor saving machinery possible, such as hay loaders, slings or forks and stackers. Good hay weather is none too plentiful and the work must proceed rapidly when the conditions are favorable. With plenty of equipment and sufficient labor haymaking can be rushed along when the weather is right.

The hay maker must ever keep in mind that hay is always more likely to be injured by moisture that is on it than by moisture that is in it. Therefore it should not be raked, bunched or put into stacks when it is wet with dew or rain.

## Soil Fertility School

From the Kansas Industrialist.

A soil fertility school conducted by the Kansas State Agricultural college in co-operation with the soil improvement committee of the National Fertilizer association will be held at Manhattan on Tuesday, Wednesday, Thursday, and Friday, June 1 to 4. The purpose of this school is to train salesmen and others interested in the fertilizer industry in the proper use of fertilizers in different sections of the country and to make them familiar with the best agricultural practices in these sections.

Among the out of town speakers will be W. H. Stevenson, professor of agronomy and vice director of the Iowa Experiment station; M. F. Miller, professor of soils at the University of Missouri; W. W. Burr, professor of agronomy, University of Nebraska; Dr. H. J. Waters, editor of the Weekly Kansas City Star, and F. B. Nichols, managing editor of the Capper Farm press.

## Productive Fruit Culture

Another interesting and valuable farm manual has just been issued from the press of J. B. Lippincott Company of Philadelphia. The title of this book is "Productive Small Fruit Culture" and it is the work of Prof. Fred Coleman Sears of the Massachusetts State Agricultural college.

Professor Sears is a former Kansan and is a graduate of the Kansas State Agricultural college and ranks high as a specialist in pomology. His book is well written and is handsomely illustrated. Every farmer and every progressive horticulturist should have a copy of this book. The price is \$2 a copy.

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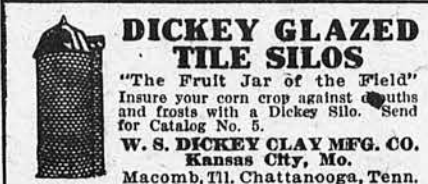
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## Fall Pigs are Profitable

Five Year Records Show Some Surprising Results

BY H. B. WINCHESTER



**B**REEDING time for fall pigs is close at hand since it is considered most advantageous to have fall pigs come from September 1 to October 1. The locality, of course, also will have some bearing on this question. If the hog raiser lives in Nebraska, Iowa, or Illinois September 1 usually is deemed the best time. If he lives in Kansas, Missouri or Oklahoma, September 15 to October is all right.

As the gestation period, or the time from service to farrowing is from 112 to 120 days the best time to start breeding for fall pigs in the first three states mentioned would be somewhere around May 15. For the other three states about June 1 to June 15. Until recently the fall pig was scarcely considered by the farmers, but with advent of improved buildings and methods of management he is being considered more seriously.

Perhaps one of the biggest drawbacks to the production of fall pigs is that they do not usually have the full advantage of forage crops that spring pigs do. Another reason that often is advanced and it is one to consider thoughtfully, is the weather. The spring pig comes in cool weather and

he grows and thrives as the weather moderates. In other words the weather is advantageous. The fall pig on the other hand goes from warm to cool weather and into conditions that are not always the maximum for the development of good thrifty pigs. Finally, due to the shortened grazing period the fall pig naturally requires a little more feed than the spring pig to keep him growing and to maintain his body temperature against the cold fall winds and unusual wet weather.

If the fall pig is being considered the question of labor arises. The pig might, perhaps, need to have a board or two nailed over the cracks in the old hog house, he might require a little more bedding and a little more energy might have to be spent occasionally in seeing that his needs are properly supplied, but that is well taken care of as labor is more available in the late fall and winter when other work is not so rushing. Consequently the labor spent in looking after the fall pigs is put to good advantage whereas it might otherwise be idle.

It is well therefore to bear in mind the following points:

1. Have the pig well fed. Perhaps some extra skim milk can be given.

Give his dam while he is a suckling a liberal amount of good milk producing feed such as wheat shorts, corn, skim-milk or buttermilk, tankage and if possible a pasture crop of some sort for range. Incidentally fix up a "side line" for him in the nature of a creep where he can get an additional "hand-out" and thus supplement the "home" feeding.

2. Keep him in warm quarters with lots of clean straw and fresh air and sunlight. Keep these quarters clean and sweet and you will be surprised to see how well he will respond. Don't keep him in a mud hole because he is a pig. You would not do that with your horses or your cows so why treat your pigs that way? Incidentally, if the pig is given one-fourth the care given the rest of the domestic animals on the farm you will find him by far the cleanest.

Considering the fall pig from another angle one must not overlook the question of markets. Some people say that the fall pig goes on the market at a time of the year when the markets are low. However this is by no means true. The time of the year that the spring pig goes to market is during the months of January, February, March, October, November and December. The fall pig reaches the market during the months of April, May, June, July, August and September. On the basis that both spring and fall pigs will average 225 pounds in weight when marketed and using Chicago as our market, the average difference between these two classes of pigs for the five years 1912 to 1916, inclusive, is 66 cents a hundredweight in favor of the fall pig again, and the total average difference for the whole eight years is \$1.22 a hundredweight in the favor of the fall pig. Hence, it will be noticed that the fall pig has a splendid chance to break even and under most circumstances a better chance to make some money for his feeder than his brother, Mr. Spring Pig.

Among the advantages credited to the fall pig may be mentioned the following: 1. Usually ready for market when the market is high; 2. It decreases cost of keeping sow by having two litters a year; 3. He has advantage of cheaper labor; 4. The fall pig can be fed off on new corn which is cheaper in price than old corn, such as the spring pig usually gets; 5. The fall pig usually is about best size to follow steers in feed lot; 6. The hired man is kept busy.

Among the disadvantages of the fall pig may be mentioned the following things: 1. He requires slightly more feed for his gains; 2. The cost for shelter is increased; 3. He is unable to graze on green forage as long as spring pigs; 4. He requires more labor than spring pigs; 5. He is not likely to get necessary amount of exercise due to weather conditions; 6. He is more susceptible to disease on account of the inclement weather.

### Co-operative Marketing Successful

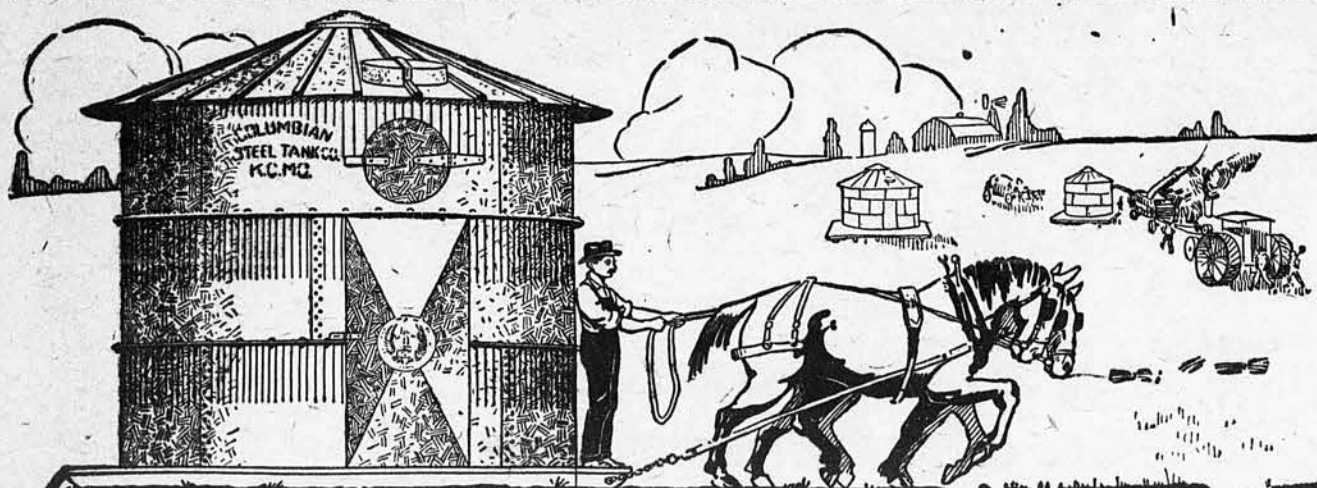
During the first 100 days of 1920, 68 co-operative carloads of hogs were shipped from 22 Arkansas counties. The 6,480 hogs in the cars were owned by 700 different farmers, or an average of more than 10 shippers to each carload. Returns totaling \$127,590.52 were received for these hogs at the central markets. The average cost of shipping was only 94.3 cents a hundredweight. The amount made above the highest price offered locally, where there was a local market, amounted to \$260 a car, or a total saving of more than \$17,500 on all shipments.

The season for shipping Arkansas cattle has not started; but in 1919 cattle shipments from that state exceeded the co-operative shipments of hogs, and indications this year are that almost all the Arkansas cattle will be shipped co-operatively.

The co-operative shipping of livestock by the method advocated by the United States Department of Agriculture has been found practicable and profitable in all sections of the country where livestock is produced in connection with general or specialized systems of farming.

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# Best Cure for Lumpy Jaw

Diseased Animals Should be Carefully Isolated

BY DR. R. R. DYKSTRA

**A**CTINOMYCOSIS or lumpy jaw is a non-contagious disease caused by the entrance into the animal tissues of a fungus known as the "ray fungus." This fungus is found on hay, alfalfa, fodder, grain, and other feeds. Small wounds in the lining membranes of the mouth or tongue, or decayed teeth permit the fungus to get into the tissues. Sometimes the fungus is inhaled, lodging in the lungs. It may lodge in wounds, or it may pass into the udder thru the milk ducts. It produces its characteristic symptoms in those parts in which it becomes lodged.

Cattle are most frequently infected, especially in the region of the head; swine are commonly infected in the udder, while the disease is quite rare in horses, sheep, goats, dogs, or human beings.

## Usual Symptoms

These vary according to the location of the ailment. In cattle the skin in the region of the lower jaw is the most common seat of the disease. A round swelling develops at this place, usually very firm, and it becomes firmly adherent to surrounding parts. It may break open, discharging a thick, yellow, sticky pus, the inside of the swelling becoming filled with raw, easily bleeding tissue.

When the bone of the jaw is primarily involved it becomes much thickened, throwing out masses on its external surface, and frequently interfering seriously with mastication, so that the animal becomes unthrifty.

Sometimes the lips are affected, becoming much thickened and hardened, or firm, round enlargements may be felt in their substance. Occasionally the tongue is the seat of the trouble, sores developing on its upper surface, especially towards the hind part of this organ. In the course of time the muscles of the tongue may become involved, causing a stiffening, the so-called "wooden tongue," which interferes with mastication, causes salivation, and produces a bad odor. The tip of the tongue, owing to its swollen condition, may be forced out of the mouth.

Actinomycosis of the lungs is comparatively rare. The animal shows no characteristic symptoms to distinguish it from any other lung trouble. There is usually in the advanced stage difficult breathing, coughing, and the animal loses flesh. It may be distinguished from tuberculosis by the tuberculin test.

The udder, when infected, becomes either uniformly hardened and may be enlarged, or small, round, hard masses may be felt in the interior. These latter are usually filled with thick pus.

## Best Treatment

When large numbers of animals in a herd are affected it is advisable, if possible, to keep them away from low, swampy soil as grazing ground. A change of feed is desirable, or the same feed may be used if it is first steamed or scalded.

The best line of treatment is to cut the growth out completely. This is accomplished easily when it is not firmly adherent to surrounding parts, or where it has not infiltrated neighboring structures. The wound thus produced should afterwards be washed out daily with a 2 per cent, watery solution of carbolic acid.

When the growth cannot be removed entirely it may be cut open, the pus washed out with a 2 per cent solution of carbolic acid and water, and the wound packed with a piece of cheese-cloth that has been saturated with tincture of iodine. The gauze may be left in position for 24 or 48 hours.

## Use of the Trocar

In those cases where the growth cannot be cut out, or if it does not contain pus, but is hard, a large cattle trocar and canula may be passed into the most prominent part of the enlargement until the center is reached. The trocar is then withdrawn, a piece of trioxide of arsenic the size of a bean is forced into the canula and the latter withdrawn, leaving the arsenic in the

tumor. In the course of from four to eight weeks the entire tumor drops out.

When the tongue is affected, and in the early stages, several superficial incisions may be made in the surface, and afterwards painted with tincture of iodine. Finally, when the preceding forms of treatment cannot be carried out, the iodide of potash treatment may be adopted. It is as follows: Young animals should receive from 1/2 to 1 dram of iodide of potash in the drinking water daily. Adult animals

should receive from 2 to 3 drams daily. This treatment should be continued from four to six weeks, or until the growth has disappeared. If, during this treatment, the eyes begin to water, with an excessive nasal discharge, skin eruptions, loss of hair, and emaciation, then the dose must be decreased or discontinued for a week. This treatment is successful in about 75 per cent of all cases treated. The milk should not be used during this treatment, nor when the udder is the seat of the trouble.

A larger supply of the food of the family can be grown on the home farm as a rule.

The use of commercial fertilizers is increasing in Kansas.

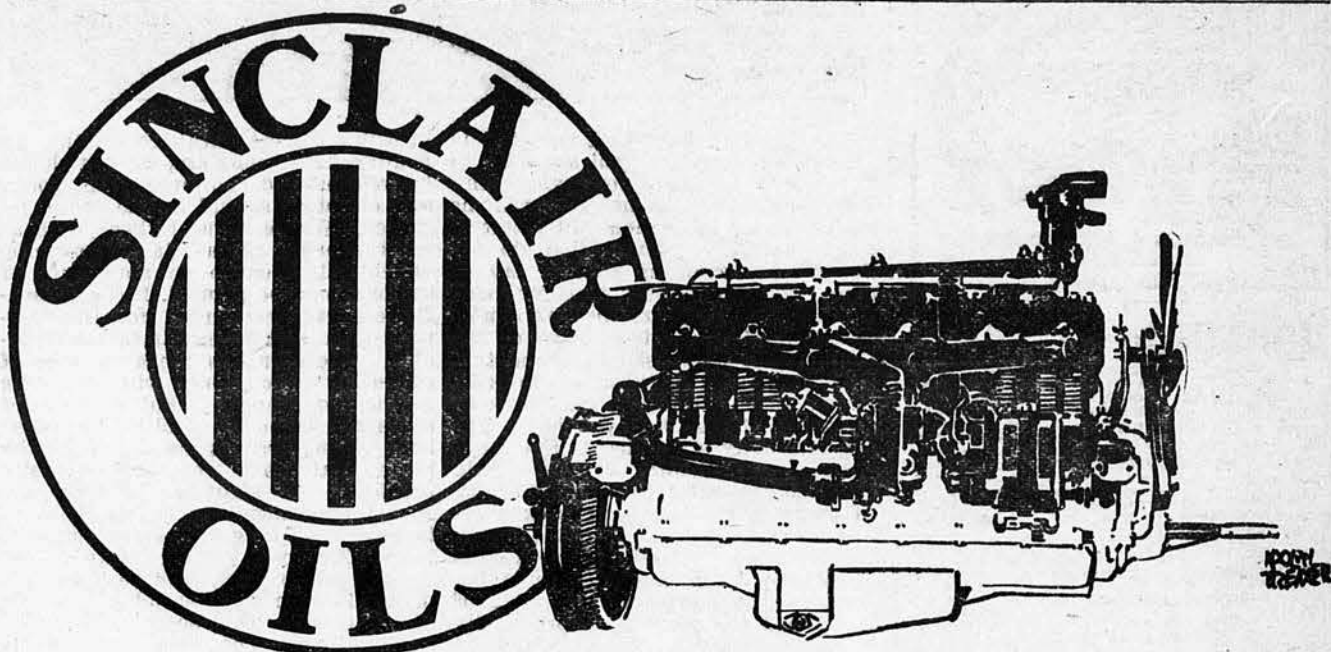


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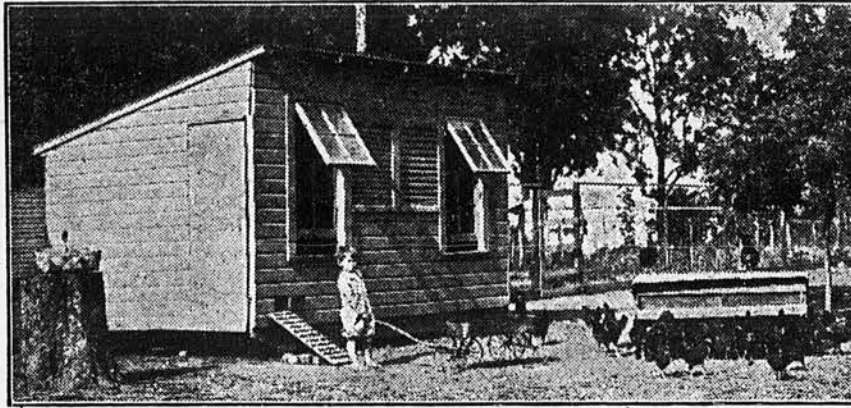
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# Summer Shade for Poultry

Chickens Should Be Comfortable in Hot Weather

BY H. L. KEMPSTER



**S**HADE is an important essential in raising summer chicks. It is equally necessary for laying hens. Extreme exposure to hot sun with no provisions for protection will result in heavy mortality. Those that do not die will not grow as well or lay as many eggs as when provisions for shade are made. Ducks are also extremely susceptible to the direct rays of the sun and one never should attempt to raise them in yards where there is no shade. It is a difficult task to keep chicks thrifty in hot weather. The task is greatly simplified if the range is adequate. Poultry raisers should recognize the value of summer shade.

Usually on the farm it is an extremely easy task to make suitable provisions for shade. Trees of various sorts are usually abundant. If the laying house can be located in the edge of an orchard the problem is practically solved. A range of cultivated orchard

provides almost ideal conditions for poultry, both young and old. It should be remembered, however, that young and old stock should not be raised together. Where natural shade such as trees afford is not available some crop which will produce an abundance of shade should be planted. Probably sunflowers are best suited for this purpose with corn being almost as desirable. The corn has the advantage of producing a crop which will contribute to the food supply. While sunflower seeds are eaten by poultry the great bulk of the seed is consumed by the birds. Patches of corn can be easily provided. In planting the crop one should remember that unless the corn is permitted to get a start one will have difficulty in getting a stand. The time at which chicks can be permitted to run in corn will depend on the age of the chicks. One should allow sufficient time. The chicks should be

temporarily fenced away from the corn. Perhaps, after the chicks are old enough to do without artificial heat they can be removed to the regular cornfield. There is no more ideal place to raise chickens than the edge of a cornfield. As the cultivator works up and down the field there will be a flock of chickens following. They will get bugs and worms and tender new weed plants will be devoured. Weeds do not thrive with a flock of chicks to eat them. Such conditions are conducive to rapid growth. Chicks can be grown economically. They will thrive even in hot weather and will grow to be strong vigorous chicks. One farmer of my acquaintance practices a system of crop rotation in which the hay field always adjoins the cornfield. As soon as the hay crop is removed the colony houses containing the chicks are moved to the hay field being situated next to the corn. Hoppers of feed are kept in the houses and the care of the chicks is reduced to a minimum. The labor resolves itself into replenishing the feed hoppers, cleaning and watering. Such an arrangement has a decided advantage in that the chicks are grown on fresh clean ground each year. There is no danger of yard contamination and the crop utilizes the droppings which are a considerable source of plant food.

Another means of providing shade is to elevate the colony house on blocks so that the chicks can run underneath. From the standpoint of comfort this procedure is all right. The objection to such an arrangement is that the ground under the house very soon becomes covered with manure and the conditions are not healthful.

### Canvas Frames Often Used

Some persons resort to more expensive measures for providing shade. Frames covered with burlap are common in the poultry yard and are much to be preferred to no shade at all. Even sheds are in some extremities used but are too expensive to be considered. Where poultry is yarded, fruit trees should be planted. This enables one to get a crop from the yard at the same time it is being used for poultry yards. Poultry yards should not have too dense a shade for at times it is necessary for a certain amount of sunshine to get in to dry off the yards. The main thing for one to remember is that summer shade is absolutely necessary. One will raise more and better chicks and will do it more economically. The laying hens will lay more eggs and there will be fewer deaths because of extreme heat. This inexpensive necessity should be appreciated and some means provided whereby the poultry will be kept comfortable during the hot weather which soon will arrive.

### A Serious Car Shortage

BY L. A. FITZ

The average Kansas wheat crop is about 90 million bushels. The estimate for the 1920 crop, based on reports of present conditions is about 100 million bushels. At least 10 million bushels of this probably will remain on the farm for seed purposes. Possibly 5 to 6 million bushels more may be hauled by wagon direct to mills. This leaves a possible 84 to 85 million bushels which must be shipped to market in cars. This would amount to approximately 60,000 carloads.

Judging by past experience and present prospects it will require a good many months to secure cars and market this much wheat. The car shortage is intolerable and it probably will become even worse.

With these facts in mind it is fitting that a farmer should begin right now to consider seriously what he shall do with his 1920 wheat crop. Present farm storage, so far as good farm elevators or granaries are concerned, is wholly inadequate. Storage in many country elevators is likewise just as inadequate, as few of them have room for more than 15 or 20 cars of wheat.

Unless we plan for the future, a dry harvest and a favorable threshing season will cause a flood of wheat to move to market. Cars cannot be secured, elevators will be full and the farmer who has not prepared to hold his wheat must sell to the country elevator at a price such that the manager can afford to pile it on the ground and assume the risk as well as the shrinkage, loss, and increased cost of handling. It also should be remembered

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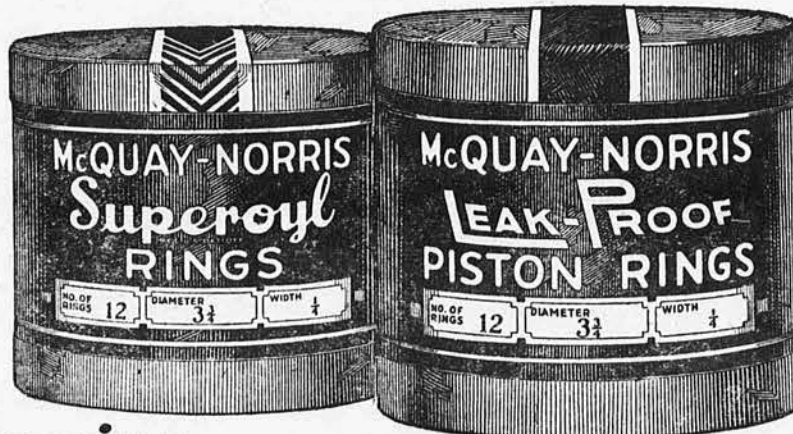
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that this flood of wheat going on the market immediately after harvest is the cause of a market like Kansas City receiving 50 per cent of its annual wheat receipts during the first three months of the crop year—July, August and September—and 75 per cent of such receipts in the first six months of the crop year. Hence the supply of wheat thrown on the market during the weeks immediately following harvest far exceeds the demand for wheat during the same time, and under such circumstances the price of cash wheat is bound to decline until the demand catches up with the supply.

If cars cannot be secured it will not be possible to ship large quantities of our 1920 crop to market no matter what the price may be. Consequently the wise course to pursue is to make the arrangements necessary to hold this surplus grain on the farm until the local elevators can secure cars to handle it.

There are two kinds of storage which may be provided on the farm, permanent storage and temporary storage. Owing to high price of material, scarcity of labor and limited time, it is unlikely that any large amount of permanent elevator or granary storage will be provided on the farms this year. In many cases when the farm is under lease to a tenant the landlord will not provide such storage and the tenant cannot.

Consequently most of our increase in storage facilities on the farm for the 1920 crop must be of a temporary nature such as proper stacking, especially of bundle grain; re-arranging or repairing of buildings already on the farm, and possibly, as a last resort, storing in bulk on the ground.

Stacking wheat in a proper manner so it will turn water and keep well seems to be almost a lost art. However, the farmer who stacks his grain well this year is thereby able to hold it in good condition until the car situation is somewhat improved. As he is able to market his surplus when threshed he will occupy an independent position as compared with the man who threshes from the shock and is forced to market his wheat immediately after harvest because he has no suitable place to store it in bulk.

Wheat well stacked, especially bundle wheat, will keep for several months with comparatively little loss. But if it is allowed to stand out in the shock for any considerable time more or less damage is sure to result, and it is quite likely to deteriorate in quality two or three grades.

On many farms there are barns or other buildings that can, in an emergency, be fixed up so wheat can be stored temporarily. Movable galvanized iron tanks or bins holding 500 or 1,000 bushels also are becoming quite popular and can be utilized by tenants to provide storage facilities which can be moved from one farm to another.

There is still another phase of the matter which must not be overlooked. Many of the country elevators are now full of wheat and the owners have borrowed all the money the banks will lend. Consequently they must be able to ship this wheat to market before they can finance the movement of the 1920 crop.

#### Kansas Shorthorn Breeders Meet

One of the most representative gatherings of Kansas breeders of Shorthorn cattle ever seen in the state met at Manhattan May 26. The occasion was the annual meeting of the state Shorthorn Breeders' association and the consignment sale in which the Kansas State Agricultural college was co-operating with the association.

Aside from the successful sale (reported in another column) the feature of the day was the exhibition of the college cattle, and especially the famous herd of thick fleshed cows that are making a record in the production of prize winning steers and breeding animals of high rank judged by the usual Shorthorn standards, and are at the same time showing annual milk production ranging from 6,000 pounds to more than 10,000 pounds, making an average butterfat test of 4.3 per cent.

There was no mistaking the remarkable impression made upon the visitors by these cattle and the facts concerning them, which Dr. McCampbell presented. This applied not only to Shorthorn breeders present, but also the many who were there wholly be-

cause of their interest in the commencement exercises at the college. In the sale later, purchases were made by five men who said they had no intention of buying cattle when they came.

A few short talks followed inspection of the college cattle, and just preceding the sale, addresses were delivered by President Jardine of the Kansas State Agricultural college and Secretary Harding of the American Shorthorn Breeders' association. At a business session following the sale the following officers were elected for the ensuing year: President, John R. Tomson, vice-president, Park E. Salter, secretary-treasurer, G. A. Laude.

The Kansas association has a membership of over 400, representing nearly, if not quite, every county in the state. By unanimous vote the association went on record as requesting that the American Shorthorn Breeders' association use its influence to cause the management of all fairs and expositions receiving premium money from the association, to require the tuberculin testing of all cattle brought to the grounds or buildings of such fairs and expositions.

Supplementing the day's doings already reported there was an interesting contest for premiums by members of the Riley county Shorthorn Calf club and the entrants later were sold at auction at an average of about \$200 a head.

#### New Shorthorn Association

Shorthorn breeders of Wilson county organized a county association May 20, electing J. W. Hyde, Altoona, president, R. C. Watson, Altoona, R. E. Schwartz, Fredonia, and Bert Kimball, Neodesha, respectively first, second and third vice presidents, and C. O. Grandfield, Fredonia, secretary-treasurer.

R. W. Kiser, livestock specialist from the Kansas State Agricultural college, spoke on the possibilities of such an association of breeders. The charter membership consists of 35 breeders. There are more registered Shorthorns in this county than cattle of all other breeds combined. In addition to a program of education, the association plans to arrange for public sales when conditions are favorable. Every animal offered will be passed upon by competent inspectors.

The association also plans to arrange for exhibits of cattle at local and other fairs, selection of individuals to be made from several herds in order that the exhibits may represent the best of the association stock. A committee of three was appointed to organize and conduct a purebred Shorthorn Calf club.

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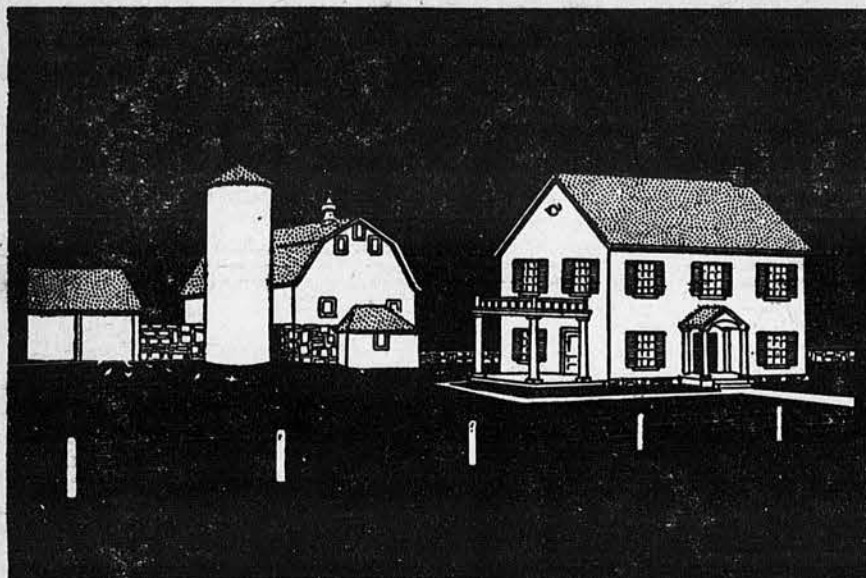
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## Kansas Farm News Notes

**A** CARLOAD of purebred Guernsey heifers is to be purchased in Ohio for shipment to Cherokee county, Kansas. Representatives of the Cherokee County Guernsey Breeders' association will make the selection. They expect to spend two weeks assembling enough cattle for a carload and will attend a series of sales which begin June 14. A Guernsey association in Ohio is co-operating with the Kansas organization in obtaining the stock desired.

### Reno County Forms Bureau

Reno county is to have a farm bureau organization. The idea has been discussed over the county for several weeks. The enrolled membership is now reported to be 274 and only about half of the townships have made their returns.

### Builds Big Silo

A concrete silo 60 feet high and 18 feet in diameter has been built at Spearville by Hiram Colburn, one of the cattlemen of that section. It will hold 400 tons of silage. Mr. Colburn has built this in order to have an assured supply of cheap feed for wintering his cattle.

### Dairy Farm Changes Hands

The well equipped dairy farm of Coleman & Son near Denison, Kan., has been purchased by R. A. Gilliland of Mayetta, newly elected secretary-treasurer of the Kansas Jersey Cattle club. The Colemans have developed one of the good Holstein herds of the state on this farm. The barn and other equipment are thoroughly modern.

### Livestock Interest in Comanche

The county agent of Comanche county reports that 10 men in the county are breeding purebred Short-horn cattle. Poland China breeders of the county have formed an organization and plans are now being made to unite the breeders of Herefords, Short-horns and Holsteins and the breeders of hogs into a county purebred livestock association.

### Breeder Buys Cow Family

A 7-year-old Holstein cow with seven of her daughters and granddaughters and a 7-months-old bull calf were included in the herd of cows purchased in Carthage, Mo., by F. H. Bock of Sedgwick county. The owner of this cow purchased her as a 2-year-old heifer five years ago. Before making the sale to Mr. Bock he had sold three of her bull calves.

### Petersen to Minnesota

W. E. Petersen, who has been extension specialist in dairying at the Kansas State Agricultural college for the last year or two, has resigned his position to become assistant secretary of the Minnesota State Holstein Breeders' association. Mr. Petersen has rendered valuable service to Kansas during the time he has been in the state. He has been particularly active in promoting cow testing associations. His successor in Kansas, C. I. Gearhart, is already on the job.

### School for Rural Pastors

Rural pastors from Kansas, Missouri, Nebraska, Iowa, Wisconsin, Minnesota and Illinois are invited to attend a summer school at Iowa State college, Ames, June 14 to July 3. Ten or 12 denominations are co-operating in conducting this school. Its object is to stimulate interest in the rural work of the church and the community. George H. Von Tungeln, professor of rural sociology at Ames, is director of the school.

### Start From One Cow

Eight head as the increase from one cow since 1916 is the record made by T. E. Weddle of Sedgwick county. Mr. Weddle bought a 2-year-old Holstein heifer November 1, 1916. Within a month she produced a heifer calf and has produced regularly since. She has had three heifers and one bull calf, the bull calf being sold for \$75 when it

was 6 weeks old. In three and one-half years since Mr. Weddle bought the heifer he has sold, or now has on hand, as the increase from one cow eight head.

### Banner Jersey County

Jackson county claims the record for attendance at the recent picnic meeting of the Kansas Jersey Cattle club held on the Dornwood farm near Topeka. Eight automobile loads of Jackson county breeders made the trip. Among those attending were R. A. Gilliland, Charles Gilliland, J. A. J. B. and A. M. Porter, W. W. Walton, E. C. Latta, Frank Knopf, Will and Ben Linton and the county agent, C. H. Leker.

### Wheat Growers' Milling Company

The stock in the newly organized Associated Mill and Elevator company with headquarters in Kansas City and mills and elevators thruout the wheat-belt of Kansas is held by a thousand or more Kansas and Nebraska wheat growers. When completed the central mill and elevator will have a capacity of 2,500 barrels of flour daily and a grain storage capacity of 390,000 bushels. The country elevator capacity of the new corporation will provide grain storage capacity for 200,000 bushels in addition. The associated elevators of the corporation are located at Kingman, Clifton, Sylvia, Morganville, Dwight, Rago, Sedgwick, Basil and Mound City, Kan.

### Begin Royal Building Soon

Business men of Kansas City are being solicited to add \$60,000 to the \$40,000 pledged by the purebred livestock interests of the country for the building of a permanent home for the American Royal Stock show. The work on the building, which is to be at Twenty-third and Wyoming streets, will start soon. It will be of ample size to house the stock show, the Kansas City automobile show and other expositions of agricultural and industrial character.

### Kansas Holstein Prizes

Special cash prizes added to the amount of 10 per cent of the general classification are offered by the Holstein-Friesian association at the Topeka Free Fair, Kansas State Fair, Hutchinson, and the Kansas National Livestock Exposition of Wichita. A pamphlet giving the details of these prize offers has just been issued by the extension division of the association. Prize money amounting to \$50 is offered at Hutchinson for exhibits of county Holstein clubs. Breeders expecting to show should send for a copy of this pamphlet.

### SOMETHING DIFFERENT

#### A Farm Paper Edited on a Farm

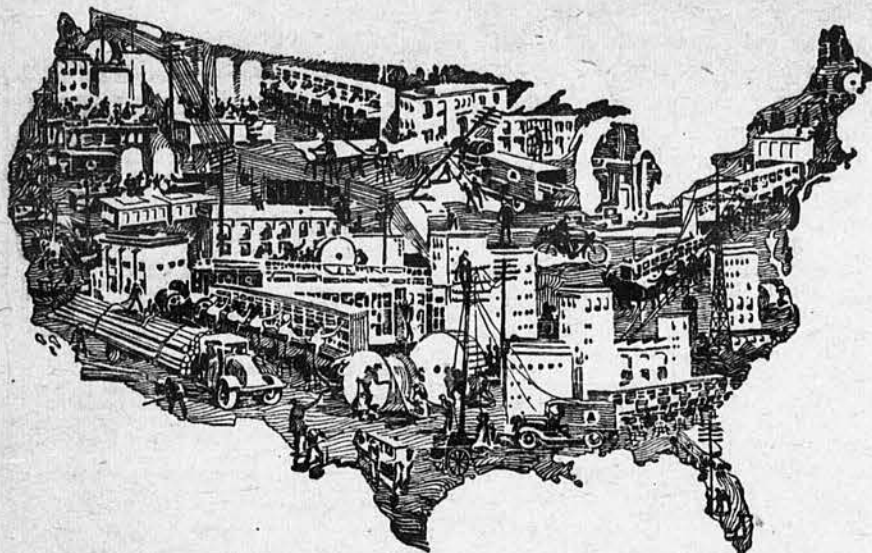
Capper's Farmer, published by United States Senator Arthur Capper, of Kansas, is a farm paper that is different. It is edited on the farm by a farmer and for the farmer. It is published in the heart of the greatest agricultural country in the world. It stands for a square deal for the consumer and fair profits for the producer thru eliminating grain gamblers, market jugglers, and other trusts and combines. For that great body of American farmers who live with ideals, who want to be progressive, there is no such favorite as Capper's Farmer. There is a department for the women folks, boys and girls, marketing, livestock, poultry, dairy, field crops, farm machinery, horticulture, health, etc. In addition to the regular editorials, Senator Capper's Washington Comment is one of the most interesting and instructive.

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The Grain-Saving Stacker Originated With the Indiana Manufacturing Company, Indianapolis, Ind., Who Also Originated the Wind Stacker.

## Among Colorado Farmers

The material for the Colorado department this week was written by E. J. Maynard, a specialist in animal investigations with the Colorado Agricultural college.

**D**URING the last few years the Colorado cattle feeder has been confronted with the problem of determining just what value could be placed on his beet tops as compared with other standard cattle feeds. Should he pasture these tops, running his cattle on the land to clean them up in the fall, would it be more economical to ensile them or should he dry them and haul them in to be fed in the lot?

Beside these questions of how best to handle his tops and their value compared to other feeds there have been numerous problems concerning the value and most economical utilization of other sugar beet by-products, namely wet beet pulp, dried molasses beet pulp, beet molasses and beet top silage when used in the steer feeding ration.

The Colorado Experiment station at Fort Collins has been carrying on tests covering a period of years, to determine the answers to some of these questions, and the results covering the trial just completed are now available.

It is the object of the station to run another test next fall after which a bulletin will be published, dealing with the general results secured. At the same time realizing that the individual trials will be of interest to the farmer and feeder, a pamphlet has been prepared covering this year's results, which is available for distribution.

The steers which were marketed during the latter part of April sold on the Denver market in all cases for a loss, due to the high cost of feed and the abnormal market conditions. The tests at most of the stations register this loss. The comparative results, however, as secured from the different rations are valuable and it is possible at this time to show some interesting facts.

Sixty grade Hereford steers, averaging in weight 860 pounds, were purchased by the station on the Denver market early in November and taken to the feed yards at Fort Collins, where they were divided into six lots of 10 steers apiece for the experiment.

#### How Tests Were Handled

To determine the value of the tops handled in different ways the test was divided into two periods, a preliminary 40-day feeding trial, during which time roughages alone were fed and a subsequent 110-day fattening period at which time the concentrates were added. The line-up for the first 40 days, average daily gain, and cost a pound gain of the six lots were as follows:

Ration Fed	Aver. Daily Gain, Lbs.	Cost a Lb. Gain
Wet pulp and alfalfa.....	2.4	9.6c
Beet tops (pastured) and alfalfa.....	.6	42.0c
Beet tops (dried and fed in lot) and alfalfa.....	1.3	17.6c
Beet top silage and alfalfa.....	1.6	16.8c
Corn silage and alfalfa.....	1.3	17.7c
Alfalfa.....	1.0	24.1c

The weather during the preliminary feeding period this year was most severe in Northern Colorado. There were five distinct storms with heavy snowfall, and the temperature on several occasions was around 12 to 15 degrees below zero, at one time going to 34 degrees below.

Naturally, with such climatic conditions to contend with, the cattle feeders who pastured their tops in the field were at a disadvantage and the returns secured from an acre of beet tops handled in this way were consequently small. Then, too, there was an abnormally low yield of tops. Tests at the station showed an average yield an acre of only 3.2 tons, as against a normal yield of 8.5 to 9 tons. With these conditions it was found that 1 acre of tops pastured in the field was actually equal in feeding value to only 132 pounds of alfalfa hay. This figure was secured by comparing the pastured lot with the lot fed alfalfa hay alone.

The year before, tops pastured in the field, under ideal weather conditions and on the same basis of comparison, showed a value an acre equal to 4,025 pounds of alfalfa hay.

The two years' tests have demon-

strated clearly that the value of tops pastured in the field will depend largely on weather conditions and that, altho returns secured during a dry, open fall will show a high value for the tops, there will always be the chance that severe weather, snow and rain may cut down their value to almost nothing. Feeders in Northern Colorado for the most part got no appreciable gain on pastured tops this year.

#### Drying the Tops Unsatisfactory

Drying the tops in the field and hauling them to the lot did not prove satisfactory, the reason being that with bad weather the tops would not dry and when piled in a considerable quantity in the field or near the feed lots they would ferment and rot. This made it necessary to haul them in small quantities as fed, and those left lying in the field for any length of time weathered badly.

The tops made into beet top silage were hauled from the field a day or so after the beets had been topped. They were loaded into carts which were driven thru the trench silo, where they were thrown off. The horses and carts going over the tops, tended to pack them tightly. In the tests here the tops were put into the silo alone, no straw being put between layers of the tops, a practice which is sometimes followed. After the silo had been filled a foot of clean straw was spread over the top and about 8 inches of dirt thrown over the straw. The silage was in good condition to feed about one week after the tops were covered. It was taken from one end as fed, being cut in layers from 6 to 8 inches in thickness with a spade.

Data kept on the weight of green tops going in and subsequent weight of beet top silage coming out of the silo tend to show that there is a 60 per cent recovery of the tops as silage. In 1918, when 44 pounds of the beet top silage was fed a day along with alfalfa, it took a much greater amount of silage and hay to put on a pound of gain than in 1919, where 23 pounds were fed. This may be explained by the fact that, fed in large quantities, the silage has a tendency to scour the animal, causing a waste of nutrients. The hay fed during 1918 was not as good quality alfalfa as was fed in 1919, which also may have had some influence here.

In 1919 the largest amount found practicable to feed 2-year-old steers was approximately 20 pounds a head daily.

In 1918, where 44 pounds of silage was fed the gains cost more than those secured by pasturing tops that year, for one reason because of the much greater consumption of hay. In 1919, with bad weather conditions, when approximately 20 pounds a head daily of the silage was fed along with alfalfa, the cost of gains on silage was cheaper than the cost of gains on pasture in a good year.

It is generally conceded that the greatest value of the tops can be obtained by silaging, and while it is still doubtful if the silaging proposition will, in all cases, fit in with prevailing farm methods in Colorado, still there are more and more farmers every year who are coming to the practice of handling their tops in this manner.

#### Beet Tops Must be Clean

The principal secret of good beet top silage is clean beet top silage. Unless the tops can be put up with the least amount of dirt possible good results cannot be secured from the resulting product. It is impossible to clean any dirt from the silage after it is made, and dirt won't fatten steers. Tops should be shaken free from dirt in the field and kept in small piles until hauled to the silo.

When fed along with alfalfa hay, corn silage showed up wonderfully well in the test this year, a ton of silage being equal to, or replacing 1,719 pounds of alfalfa. The silage supplied the carbohydrates necessary to balance the excess of protein in the alfalfa.

The steers fed alfalfa alone required 28 pounds for every pound of gain secured.

(Continued on Page 43.)



## Farming in Western Kansas

**T**HERE WILL be a great increase this year in the number of pit silos in Western Kansas. Farmers have a greater appreciation than in any past year of the value of silage, and of the importance of saving feed from the good seasons to the more unfavorable years. Silage space can be constructed at a low cost if pit silos are used, and this will enable one to carry feed for several years, if necessary. An increase in the number of pit silos will result in a development in livestock farming, which is needed greatly.

### Grass for Old Lands

Frequently the question is asked, "What kind of grass can be seeded on upland fields in Western Kansas in order that they might be used for permanent pasture?"

As yet no satisfactory cultivated grass has been found that is well adapted to this section which can be left permanently as a pasture. Only the native grasses are able to withstand the severe summers common to Western Kansas.

*Bromus inermis*, otherwise known as "Brome" grass, has been recommended for semi-arid regions but experience has shown that it is difficult to get a stand. Out of 20 attempts on one farm to get a stand covering a period of 14 years only five stands have been to any degree successful. These stands were thin, altho the grass was seeded under favorable conditions. While Brome grass will grow in regions of relatively low rainfall as in the Northern Great Plains area, high summer temperatures and low humidity as is common in Western Kansas are adverse to it. If it were possible to secure a stand of Brome grass it might maintain itself long enough so the native grasses could establish themselves.

Cultivated fields of small dimensions, if left to nature usually will revert to grass in from 10 to 15 years, but during the first years weeds will give a great deal of trouble. The process can be hastened if strips of native sod are placed in the field at intervals early in the spring.

If it is necessary to supplement the pasture, Sudan grass is satisfactory. The ground should be plowed and worked into good condition and seeded at the rate of from 15 to 20 pounds an acre. It can be seeded as late as July 1 to 15 if the seedbed is well prepared. Its carrying capacity is from two to three times that of the native grasses. There is a slight danger from hydrocyanic acid poisoning, especially if the Sudan grass has been stunted by drouth or if it has been frosted. The danger, however, is not so great as with other sorghums. Sudan grass is a valuable supplemental pasture crop in that it comes on during the heat of the summer and early fall when the native grasses are often suffering from drouth.

### Millet for Sod Land

Occasionally in Western Kansas it is desirable to break up some grass land to straighten out a field or to make an addition to it. The question arises as to what might be a good crop to sow on the sod for the first year, especially if the ground cannot be broken until late in the season.

If the ground has been plowed it should be thoroly disked and pulverized as much as possible. With a grain drill it can be seeded to millet. A satisfactory variety is the Golden millet if the season is favorable, as it is the heaviest yielder. If the Golden millet cannot be secured either the common millet or the Siberian will answer the purpose. These two varieties are more drouth resistant but are not quite so heavy yielders as the Golden millet in a year of plenty of rainfall. The binder should be used in harvesting the crop.

There is a good demand for millet seed with prices at present ranging from 2½ to 4 cents a pound on the Kansas City market. The yield is satisfactory on new ground. A farmer in Logan county in 1915 harvested 8,000 bushels from 230 acres. Millet sown

on sod ground leaves it in a condition so it can be prepared readily the following fall for wheat, and being a quick maturing crop it can be sown later than any other crop.

### Planting the Sudan Grass

As good preparation of the seedbed as is given to corn will pay in the growing of Sudan grass. Maximum yields will uniformly occur only on ground that has been prepared early by deep plowing, that is free from weeds, that contains plenty of available plant food and moisture, that is warm, and that does not blow. However, Sudan grass seed germinates easily, and good results are sometimes secured on ground which has been poorly prepared.

In planting for hay purposes the seedbed should be comparatively smooth and well compacted. A seedbed that gives good results with millet will be satisfactory for Sudan grass. When the crop is planted in cultivated rows for seed production, ordinary preparation of the soil, such as is given to corn, is sufficient.

Seed to be used for planting pur-

poses should be of good germination, weigh 40 pounds to the bushel, uniform, contain no smut or other diseases of grains, and should be free from noxious weed seeds. The greatest danger in planting Sudan grass is adulteration with Johnson grass seed, and it is most important to make sure that the seed planted is free from it. As a precaution, Northern grown seed only should be planted. The most desirable seed is called "cream hull," from the color of the hull on the seed. Dark colored seeds are objectionable. They may be pure, but they are usually an indication of sorghum mixtures or of Johnson grass, and therefore, unless the seed is known to be pure, should be avoided. It is probable that temperature and moisture conditions affect the coloring of the seed considerably, and in many cases seed known to be pure is dark colored.

Planting should be delayed in the spring until the ground is thoroly warm. In general, the time for planting is the same as for other sorghums, but may be a little later.

Co-operation will be a great constructive force in developing agricultural methods in the Middle West in the next few years.

Make frequent sowings of peas, carrots, beets and spinach this year. The root crops are always more tender if grown rapidly.

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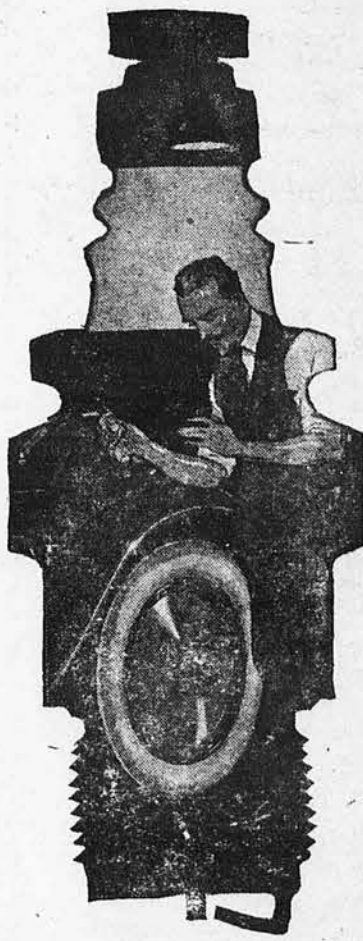
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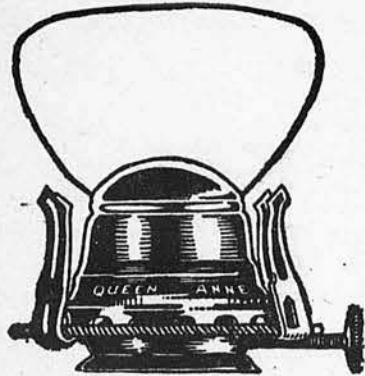
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## Financial News for Farmers

BY R. M. CLARK

**WHAT** about Liberty bonds? That short, indefinite question summarizes the bulk of the inquiries that come to this department from persons seeking information on investments. The public bought Liberty bonds solely on sentiment and knows little about them, except that it is repeatedly told that Liberty bonds and Victory notes are the best investment for the small investor, and the soundest, safest investment for any investor, large or small.

But when the Liberty bond market sagged and sagged slowly month after month and three and four weeks ago broke rather sharply, the big working public began to think, as well as feel, about Liberty bonds. Since the break of three and four weeks ago Liberty bonds have been stronger, but since they may sag again and will certainly slide up and down in the market, let's look into the matter carefully:

### Three Features to Consider

Three definite developments are certain to make up the life of the Liberty bond market. Bought largely on sentiment, patriotism, their interest rates and tax exemption features merely a side issue, as an inducement to invest, they were bound to decline from the first. The supply of the bonds was so much greater than the ability of the public to absorb them that business men and others needing money naturally dumped them.

Then with the signing of the armistice came the reconstruction period, which we are still in, the period in which the world must pay for its four-year debauch in war. In this time of readjustment two remedies only are available to bring the nation's industry and commerce back to a peace time basis. The first of these remedies is high money rates, to stop speculation and to guide production into the channel of essentials only, of which there is a shortage in almost all lines. The second remedy is foreign competition, which naturally follows the first remedy. With high money rates in force, many interests must unload their Liberty bonds, which they have done and are doing because they must borrow at 7 and 8 per cent and even higher to carry on their business. Curtailing of credits for speculation and for the business activities based on excessive credit expansion brings on a reaction that we are feeling now. Retail prices are being cut, as one step in the process of deflation, and this indicates the uncertainty in the market that exists at this time, for merchants and big dealers are buying very conservatively now. No one knows what the market is going to be and an uncomfortable uncertainty develops. Somewhere along this stage of our readjustment will come the lowest point in Liberty and Victory bonds.

### Investments Must be Stable

From this period of uncertainty develops the third stage of the Government bond market. Investors, turning from uncertainty to seek the most stable investment, will buy Government bonds and the upward movement in Liberty and Victory bonds will begin and continue. Eventually our industrial and commercial affairs gradually will straighten out and follow the Government bonds back to a normal, peacetime basis.

The present money stringency will continue for some time, for with money excessively tight at this time of the year no relief can be expected as we approach the autumn with its heavier need for money for moving crops and essential buying. There can be little doubt but that Liberty and Victory bonds will sag again. The work of readjusting our hugely inflated credits and of curbing speculation and non-essential business cannot be accomplished in a week or two. But thru it all Liberty and Victory bonds will continue to hold out the same opportunity for safe investment and profitable returns.

The other day, before Liberties and Victories took their little rebound, I went back thru Government bond history and I found that not in 47 years

could one buy Government bonds yielding so high a rate of return. I turned to the quotations on Liberties and Victories for that day and figured out the rate of interest they would yield. Here are the quotations, and interest yields in per cents:

	Market price	Rate int. per cent
First 3 1/2's .....	\$90.26	4.10
Second 4 1/4's .....	83.59	5.50
Third 4 1/4's .....	87.42	6.20
Fourth 4 1/4's .....	84.06	5.60
Fifth 4 1/4's .....	95.11	6.50

Of course, these bonds have rebounded quite a little above the foregoing figures, but as they will no doubt fluctuate for some time to come these figures will illustrate as well as will current quotations at the time of this writing, which give a slightly lower yield in interest.

### Why Bonds Fluctuate

Many questions come to me as to why certain issues yield more than others. The reason, of course, is apparent to any banker or trader in investment securities, but to the public which considered Liberty bonds largely from a sentimental, a patriotic attitude, the facts have not been kept in mind.

The first Liberty bonds, 3 1/2's, are exempt from all taxes except estate and inheritance taxes. Consequently they offer an inducement to the very large investor. He can, if he doesn't need money in other enterprises, afford the low rate of interest, around 4 per cent. Tax exempt, at 3 1/2 per cent they pay him better than would a 6 per cent bond that was subject to surtaxes. He buys the bonds and forgets about them, except on interest paying dates, which are June 15 and December 15. These 3 1/2's or the converted 4's of this issue may be converted into 4 1/4's and persons holding 3 1/2's that they wish to convert into 4 1/4's should do so before June 15, to avoid losing the additional interest for half a year. This First Liberty loan, issued at 3 1/2 per cent interest June 15, 1917, was November 15, 1917, supplemented by issuing 4's, into which the 3 1/2's might be converted. May 9, 1918, the first converted 4 1/4's of this loan were issued and October 24, 1918, the second convertible 4 1/4's were issued. The total of the First Liberty loan was for approximately 2 billion dollars. It is redeemable on and after June 15, 1932, but is not payable until June 15, 1947. This means that the First Liberty loan now has 27 years to run to maturity. If you buy 3 1/2's at \$90.26 you get a \$100 bond for \$9.74 less than its face value. But in figuring your total return on this investment you must spread that \$9.74 over the 27 years the bonds have yet to run, consequently that discount of \$9.74 doesn't swell the percentage of interest very much.

The Second Liberty loan, November 15, 1917, was for 4's, but was made convertible into 4 1/4's May 9, 1918. It is for approximately 3 1/2 billion dollars, is redeemable on or after November 15, 1927, and payable November 15, 1942. It has 22 1/2 years to run now and if you bought according to the foregoing figures you would pay \$83.59 for a \$100 bond, buying the bond at \$16.41 below par. But in figuring your total interest yield you would have to spread this \$16.41 over the 22 1/2 years yet to run until the bond matures, so that your rate of return would be, at \$83.59 for this 4 1/4 bond, 5 1/2 per cent. The interest paying dates for second Liberties are May 15 and November 15.

### The Third Liberty Loan

The Third Liberty loan, 4 1/4's, for \$3,780,831,050, is payable September 15, 1928. In the foregoing table we figured on a market price of \$87.42, which is \$12.58 below the par value of \$100. But this bond now has only eight years to run, so when you spread \$12.58 over eight years and add the interest at 4 1/4 per cent a year you get a net interest yield of 6.20 per cent. The interest-paying dates of this loan are March 15 and September 15.

The Fourth Liberty loan, 4 1/4's, for \$6,573,880,150, was issued October 24, 1918, is redeemable on or after October

(Continued on Page 43.)

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# Jayhawker's Farm Notes

By Harley Hatch

ONE of the most welcome rains I ever saw fell here this week. It was just, right in amount and put the ground in prime condition for crops. Altho less than an inch fell, the ground is still damp at this writing and both wheat and oats are responding promptly to most favorable growing conditions. Corn could use a little warmer weather and more sunshine to good advantage, but we feel that it is such ideal small grain weather that corn can wait awhile, especially since it is a good stand and virtually free from weeds and grass in all fields. July and August are the months that make our corn, but small grain will be made or marred in the next 30 days.

## Fertilizers Improve Wheat

Wheat on land plowed last fall is better than that sown on corn stalk ground. Wheat on which commercial fertilizer was used last fall is also better than that on which none was used. Two weeks ago a great difference could be seen between the fertilized and unfertilized wheat, but today not so much difference can be seen. On a field just north of this farm commercial fertilizer was used on the entire 55 acres except in occasional spots when the drill ran out of material. Up to a recent date those spots could be seen for some distance, but of late they have been closing up. But from present appearance I should say that commercial fertilizer is going to pay good dividends this year. Phosphorus seems to be the element lacking in much of our upland soil and when this is supplied by commercial fertilizer the result is usually better wheat.

## An Experiment with Corn

I am not an authority on the use of commercial fertilizers, never having used a pound in my life. Aside from last year, those who have used it in wheat growing on our upland soils say that it pays big dividends. A neighbor also has used some this spring on his oats and says that from what he has seen in other localities commercial fertilizer applied to oats gives as good results as when used on wheat. A field of kafir which was grown near Lamont several years ago was fertilized and it was very much better than other fields of the same grain growing close by. But a neighbor who farmed some land lying just north of this farm several years ago used some commercial fertilizer on certain strips of corn thru the field just as an experiment. For a time this fertilized corn outgrew the rest at a rapid rate. The rows on which the fertilizer was used could be noted clear thru the field by reason of their larger size, broader leaves and better color. But along came a regular dry spell and that growthy corn just shrank up like a tomato plant after a frost. It was, in the fall, the poorest corn in the field.

## Plant Food That is Needed

I rather think, in the corn instance cited in the foregoing paragraph, that only enough fertilizer was used to give the corn a good boost. When the fertilizer was gone the corn dropped back just as a man would after the effects of an old time shot of "Harvest King" had passed. And this again brings up the old argument so often heard about commercial fertilizers; one side says that it is a stimulant only and acts as does a stimulant on the human system. The other side says that commercial fertilizer, when used to supply elements the soil lacks, is a valuable plant food. A soil may be full of nitrogen and lack phosphorus; such soil will not produce well, but supply the phosphorus and the crop will at once proceed to make full use of the nitrogen and a full crop of the grain will be raised. On the other hand, some of the best farmers declare that commercial fertilizer will bring good results for a time, but say that in the end it enables the crops to extract the last bit of natural fertility from the soil and it is then left in an exhausted state, much worse than if no commercial fertilizer

had been used at all. On the whole, I think it safe to say that the best fertilizer for our soil is a combination of alfalfa and livestock and a frequent rotation of crops.

## Side Delivery Rakes

A letter from Stark, Kan., informs me that the writer has bought a hayloader. He wishes to know if it would also pay to buy a side delivery rake and also asks me to give him such points as I can regarding the use of the hayloader. On a farm where alfalfa was largely grown I have no doubt but what a side delivery rake would be profitable. With one in use, the loader could start in as soon as the rake had made one round, while with the common rake one has to wait until a good part of the field has been raked. There would also be no turning at the

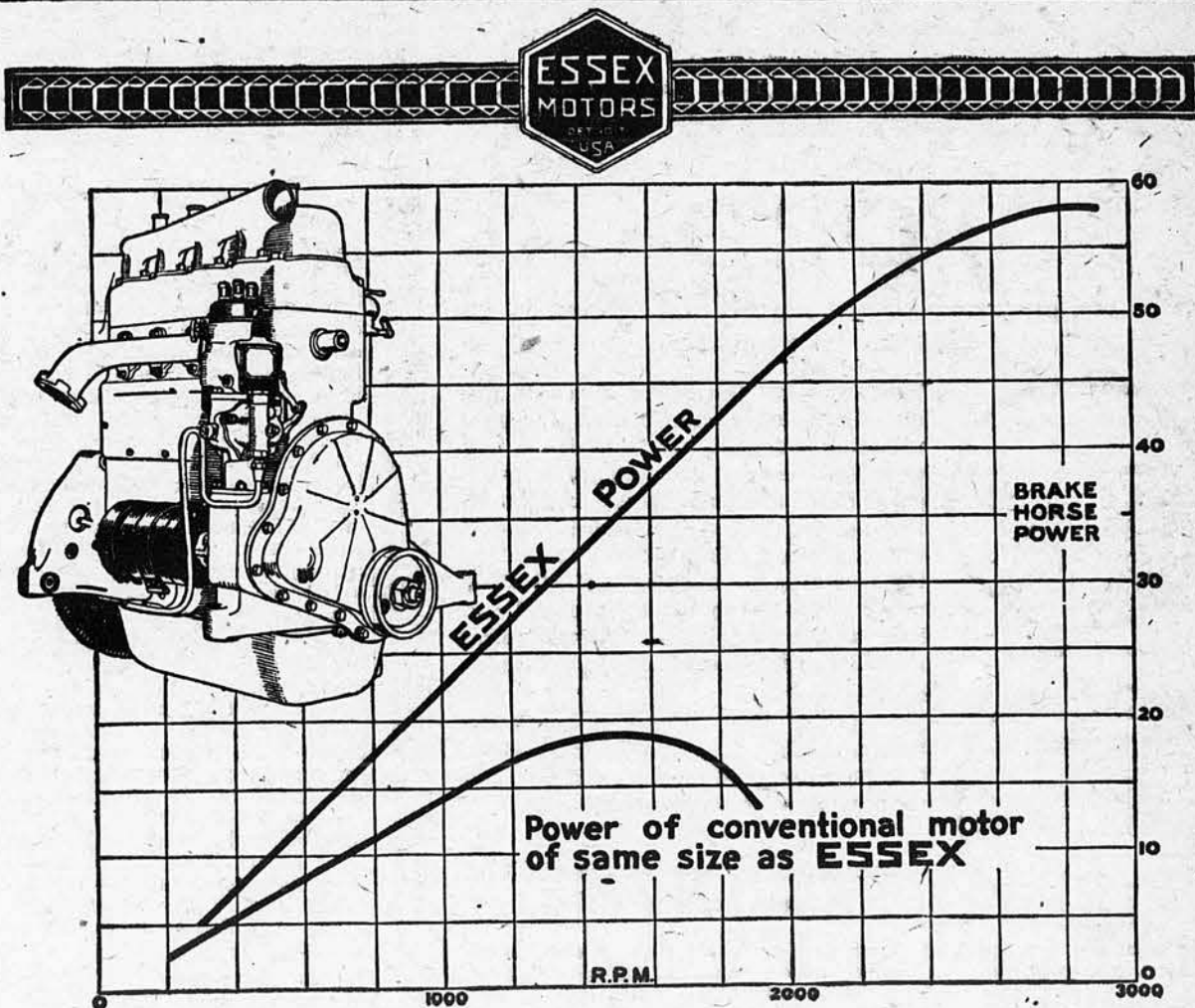
ends of the windrows at the side of the field as is the case with the common rake. If the hay got wet it could also be quickly and easily turned with the side delivery rake. The objections are the cost, for in nearly all cases a common rake must be used as well as the side delivery, thus compelling the buying of two rakes. Another objection is the amount of room taken by the side delivery, making it almost impossible to shed them. The shed room today would cost more than the rake. The final objection I have to the side delivery is that it will not handle short prairie hay very well. On the whole, I think the owner of a hay loader can get along very well without a side delivery rake. In operating a hayloader the windrows should be made small and a slow, steady team used on the hayrack. With a windrow of common size a team walking at an ordinary gait will put hay on a wagon with a loader as fast as four men could put it on with forks. Loading after a loader is a knack that must be learned by experience. The main thing is to keep the hind end higher than the front as long as possible so that the hay may be pushed down hill instead of being pitched up.

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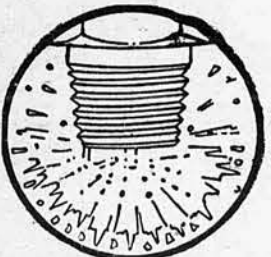
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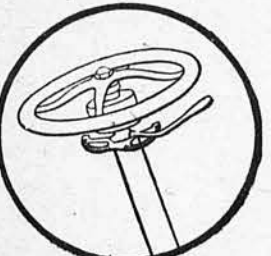
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## Rural Engineering Hints

By C. E. Jablow

AS NEARLY every farm home in this section of the country is dependent upon well water for their drinking supply, it would certainly be well to investigate methods of first obtaining a pure, wholesome and copious supply and then using methods to keep the supply of a high grade at all times.

The nature of underground flow should be understood when sinking a well of any type. As water seeks a permanent level on the surface of the earth causing the flow in creeks and rivers, so does the water underground flow from a high level. An artesian well in which water flows from underground to the surface, at times with considerable pressure, apparently contradicts the previous statement, but nevertheless when we investigate the source of the water we find it at some elevation much above the well. The water in such a case is carried in some porous stratum, for a considerable distance underground and may subsequently be tapped by the spade, the drill, or the drive point. It depends upon the height of the original source above the well, whether the well will be a flowing one, or will have to be pumped.

### Pure Water Essential

There is nothing perhaps that can cause as much misery in a household as an insanitary drinking water supply. Many cases are on record of whole families and sometimes of whole communities being stricken with disease, in which the direct cause was impure water. With the water supply it is similar to other cases where the innocent suffer. The man of the house, who is responsible for the polluted supply provided for the family, leads an outdoor and active life and may be able to ward off the effects of the bacterial laden water. Not so with the women and children of the household who lead a more secluded existence.

A cool, sparkling, refreshing glass of water may have millions of death-dealing germs in its contents, and everything will depend upon the resistance of the person who drinks the water, as to what effects are likely to occur. This is mentioned to emphasize the fact that superficial examination of the water is not at all adequate in judging the quality. A competent bacteriologist alone can be depended upon for a report on any water supply. Such examinations often are made at a very slight cost, if any at all, by a state, board of health or by the state college or university.

It is the practice of the writer to have a bacterial examination of his drinking water supply made twice during the year, but wherever and whenever a supply is suspected for any cause whatsoever, its use should be discontinued until it is known that the water is wholesome.

### Sources of Contamination

The dug well is perhaps more likely to be subject to contamination than any other type, but with proper care a dug well can be made sanitary. If the well is located on low ground where the drainage is poor and towards the well, the water is very likely to become polluted after every shower of rain. Surface filth is thus washed into the well to be pumped up later for the purpose of quenching a thirst. Certainly that does not sound appetizing, especially if the washings are from manure, chicken droppings and other such material. The point to observe, therefore is to first locate the well on ground that drains properly and then to wall up the well for a foot above the usual grade with a tight fitting cover over the whole. A concrete curb sloping away from the well is also very desirable. A loose fitting board cover will permit insects, rodents and other live things to fall into the well and die there. If the remains of insects, frogs, and rats are pumped from the well at any time, it is manifest that the well is not all it should be, and to use the water would be assuming a risk.

If typhoid or other intestinal disorders are common in a family the water is very likely bad. A well in a barnyard or within 100 feet of a privy or sewer is very likely to become contaminated from seepage under ground. Naturally the obvious thing to do, is not to choose such a location and then use the additional precaution of seeing that the lining is tight and practically impervious to water for a depth of 10 feet below the surface of the ground. A plank lining is not adequate. Brick laid in cement or concrete should be used.

A drilled or driven well is not quite as likely to become polluted especially if the water is drawn from a stratum below the first water-bearing stratum. It is known that the water in a well is continually changing; flowing in from a higher level and leaving at a lower level. The height that it will stand in the well, will depend upon the height of the original source.

### Types of Wells

The dug well has been discussed previously. Nothing scarcely can be simpler than to take the necessary length of 1½ inch piping with a drive point on one end and a drive cap on the other end and continue to drive until water is reached. This method of course is not suitable for penetrating a layer of rock. If water is struck at a level which causes it to rise within 20 feet of the surface the pump cylinder can be placed above ground. If water does not reach to this height a dry well will have to be sunk so as to permit the cylinder to be closer to the water.

In drilled wells it is common to use a deep well pump with the cylinder placed below the level of the water. A well on a hillside frequently can be used as a reservoir for water can be made to deliver water by gravity to the house which may stand at a lower elevation. Such a scheme eliminates the cost of pumping and gives all the advantages of running water in the house. This is particularly true if sufficient head or pressure can be obtained.

As a last word it is desired to point out that human beings are not the only ones that thrive on good pure water and a thought should be given the drinking supply of livestock as many cattle diseases can be traced to impure water.

Nature has provided in the soil an excellent filter and if the water passes thru the soil for a sufficient distance it will become purified, but too often the process of filtration is stopped by allowing an almost direct passage for polluted or surface water to reach the well. This may sometimes occur thru faults in the underground strata, allowing this short circuiting.

Where the water in a well appears murky after a rain, it is likely that the above conditions are taking place and the well is a dangerous one.

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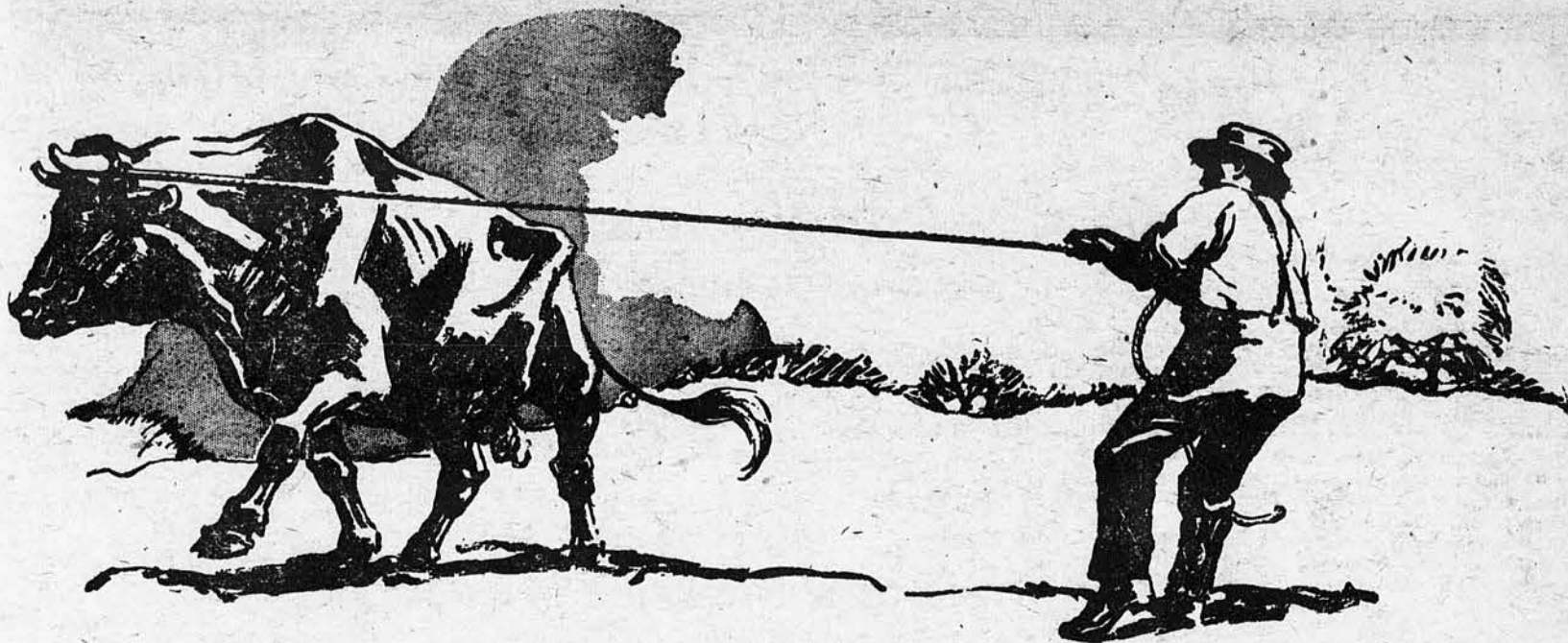
Summer comes,  
In garments green, majestic, fair,  
Decked with choicest flowers and ferns  
Dew-dipped jewels rare.

Summer comes,  
All Nature sings a welcome lay,  
Amid the gay sun tinted flowers  
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—Rachel A. Garrett.

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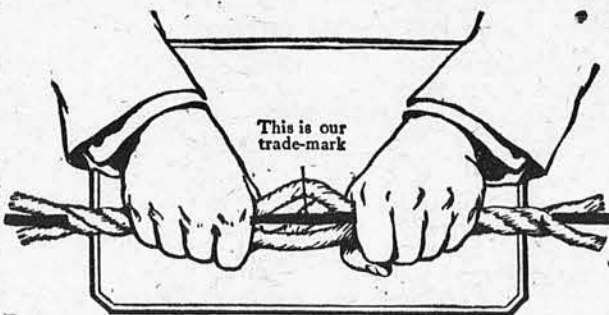
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# With the Homemakers

Stella Gertrude Nash  
— EDITOR —

## Co-operation is the Secret of One Kansas Community's Success

**I**F CERTAINLY is a fact that co-operation isn't a fancy as Ray Yarnell said in a recent number of the Kansas Farmer and Mail and Breeze. I spent part of last summer in a community where there was little or no co-operation. It was in the wheat belt where quite extensive farming is carried on. Naturally co-operation doesn't come easily when the crop is such that the work all comes in one bunch and where the farmers live some distance apart as is the case with the wheat farmer.

Header men put off their nearest neighbors until their grain was falling just because they were neighbors and they knew the job would be saved for them. A local thresherman charged his neighbors \$20 an hour for threshing so that with such exorbitant prices for labor, the wheat farmer was left without even a sack to hold. His boys were looking longingly toward, if not actually going, to town where other boys were getting good wages and working only eight hours a day; and he, in many cases, was endeavoring to sell his farm while the country looked prosperous.

Later in the season I visited another community in a part of the state where corn and alfalfa are the main crops. It was silo filling time. The work of filling the silos was done entirely by "swapping" work. No exorbitant prices were charged for labor. No money was exchanged at all and there was plenty of help. Several neighbor women came in to help the good wife cook the biggest and best dinner I ever ate. Everybody seemed to be having a good time, almost forgetting the hard work that attends the filling of silos. I wondered if the good old times, the days of husking bees, log rollings, and barn raisings had come back into style again.

"Yes, this is the way we do most of our work," said the friend whom I was visiting when I mentioned it to her. "We began it during the war when help was so scarce that it took every old man and boy in the neighborhood to do a job of shelling, and we women gathered to do Red Cross work. We had such good times that we have just kept on. We do our shelling, threshing, haying, silo filling and even butchering together. Often when our men folks were going to be away all day, Mrs. Smith, my nearest neighbor, would ask me to bring my washing over and wash with

her on her machine. You know she has an engine, and we would have a good visit and scarcely know we had worked."

Clearly there was no labor problem in this community. Co-operation had solved it. Of course, the fact that a greater variety of crops was raised and

telephone and automobile will help. Lyon Co., Kansas. J. S.

### Some Good Spring Dishes

**Mashed Potatoes and Young Beets**—Peel, boil and mash new potatoes, using cream, butter, salt and pepper

in a saucepan, add 1 tablespoon of vinegar and salt and pepper to taste, turn in the beets and potatoes, heat very hot and serve at once.

**Baked Sweet Potatoes and Chicken**—Parboil a fat chicken until tender, place in a roasting pan and surround with canned sweet potatoes. Pour in some of the seasoned stock and roast in the oven, turning the chicken to brown on both sides. Baste with butter frequently. Thicken the balance of the stock for gravy by mixing a little flour with cold milk and adding to the boiling liquid. Mrs. Clara Smith, Chase Co., Kansas.

### Notes From Clay County

In planning for labor saving for the summer months, we would suggest using less starch in the clothes. We do not have dresses that require starch; the crepes, seersuckers and such soft materials suit our purposes, besides being just as good in every way. We do not iron towels, everyday bed-clothes or underwear. Paper towels are fine for wiping hands or even faces. These can be secured in large quantities and destroyed as used.

We have an oil stove and fireless cooker which make cooking as cool as can be thru the summer. It is convenient to start the fireless while doing up the morning work, then the main part of the meal is all ready at noon, making much hard work over the hot stove at the warmest time of the day unnecessary.

It is such a convenience to have the simple wash dyes that are being used these days. A white coat of my little niece's was a nuisance to keep looking white so we decided to do it over with a tan dye. The dye does the work of washing and dyeing at the same time and is fine for faded old dresses or anything that needs freshening.

Our missionary society met recently with a member who has just moved into a new house which is modern thru-out. The greatest conveniences in it are the built-in closets and cabinets, including one each for clothes, china and books, besides the kitchen cabinet. These built-in features are a great saving of work in moving and cleaning, as well as furnishing plenty of places to put things. Isabel Gray, Clay Co., Kansas.

## Try Music as a Medicine if Your World is Out of Tune

BY RAY YARNELL

**M**USIC BROKE down the reserve of a nation when war came. It helped to weld the citizenship of the United States into a unit. It unlocked emotions and into patriotism put enthusiasm. America became a singing nation. Not only did the khaki clad folks sing, but all others sang, too. The sorrows, the fears, the uncertainties of war time were alleviated by music.

America again is at peace. Music has a giant task still to perform in keeping the reserve of a hurrying citizenship from again rising as an unfriendly thing to distort our national life.

Kansas has been and still is a singing state. It should remain one. Out in Lindsborg a music heart beats steadily, driving the blood of musical culture to every corner of Kansas. There are other music hearts in every college, all of them beating in harmony.

But these hearts must draw their life from Kansas homes. If music is lacking in the home, that home contributes nothing to those institutions on which the state depends for its musical culture. The home is the ultimate test as to whether the state is musical.

And the home without music is a liability to its owner as well as to the cultural development of the state. The folks who live in it are missing something which they have a natural right to have. They are cheating themselves out of many pleasures, but they are also aiding, in a small way, in retarding the musical development of the state.

The singing home will be found to be a happier home than the one in which music is never heard. There is something about music that is tonic in effect, that inspires friendliness, that cheers when sorrow comes, that heals mental hurts and awakens kindly emotions.

City folks can attend concerts or occasionally hear band music. The country folks less often have these opportunities. So it is more essential that in every farm home there should be some musical instrument and some one to make music with it. The money spent for a musical instrument is an investment in something more than a thing of wood and wire or brass. It is a deposit in a bank which pays generous dividends in happiness.

If there is something wrong with your world, try music as a medicine.

that farming was done on a smaller scale than in the wheat belt, makes conditions conducive to co-operation. It would seem, however, that the labor problem of the first community could be remedied if not solved, by more group action. Natural conditions may hinder the fullest co-operation, but the

for seasoning. Have ready half the quantity of freshly boiled young beets. Peel and mash in with the potatoes, beating with a fork until creamy. Pile on a hot dish and serve immediately. **Beef Hash**—Dice 1 cup of cold boiled beets and 1 cup of cold boiled potatoes. Melt 3 tablespoons of meat drippings

## When the Men Entertained

**T**HE EFFINGHAM Community club had another evening of fun recently when the men gave the women a big spread. The dinner was served at 6:30 in the dining room of the Presbyterian church. Covers were laid for 176 persons.

The first glimpse of the table suggested spring with its green and white. Rows of potted geraniums with their handsome green foliage were arranged in rows down the center of the tables, while at every plate was a white salad arranged on lettuce leaves to look like a snowball. Circular white napkins with a wreath of leaves or flowers were used under the plates and the arrangement of the silver was perfect.

The Rev. V. K. Allison, of the Christian church asked the invocation while the guests stood. The first course was grapefruit followed with a hot plate of roast beef, boiled ham, baked potatoes and gravy, served with pickles, buns, butter, cheese and coffee. For dessert there was ice cream and angel food cake, the slices cut in the size men enjoy. The men used 40 pounds of ham, 52 pounds of short rib roast, 1 1/2 bushels of potatoes, 8 dozen grapefruit and 12 angel food cakes. Every cake con-

tained from 12 to 16 eggs. At the close the women sang the following parody:

There are cooks that make us happy,  
There are cooks that make us blue,  
There are cooks that drive away our troubles,  
Like the sunshine drives away the dew.  
But the cooking is only half the trouble,  
It's getting the grub these days,  
But the cooks that fill our hearts with gladness,  
Are the cooks who this banquet gave.

After the dinner an invitation was extended to all to assemble at the Masonic hall for an hour of fun. The "lean" quartet, Rev. V. K. Allison, Rev. L. R. Eakes, Frank Stever and William Sells sang a number of songs. The Midwest Jazz Orchestra of St. Joseph played during the dinner. During the intermissions there were cheers and toasts for the waiters, tables and men.

Fred Schurman, in a white cap, a cover-all white apron, with a button-hole bouquet of pansies was the real "Beau Brummel" of the waiters. John Wallack, who is becoming quite portly, wore his wife's house apron which half revealed, half concealed his "handsome" figure. J. A. Harmon was chairman of the affair. He appointed his brother, W. S. Harmon, head of the cooks and gave him six helpers. Fred Sutter was head of the waiters with

12 assistants. William Sells was chairman of the entertainment committee. Necktie and peanut contests followed, then after joining hands and singing, "Blest Be the Tie That Binds," the crowd dispersed.

Mrs. C. M. Madden,  
Chase Co., Kansas.

### Likes Her Fireless Oven

I have an oil stove with a fireless cooker oven that gives excellent satisfaction. The oven walls are quite thick and the bottom is sliding. The shelves are removable and when they are out the two burners are available for ordinary cooking. When used as a fireless cooker the oven is cleared and the food and soapstones put in hot. Then the sliding bottom is closed and the heat indicator on the door tells how the temperature is staying up. It is possible to open the bottom and light the fire and reheat the articles cooking without moving them, but this is never necessary for ordinary food.

The oven fireless cooker has the advantage over ordinary cookers in that it holds more and any sized or shaped vessels. I always bake my bread the last 15 minutes with the oven closed

up and the fires out. A whole meal will go in the oven and cook without any attention. I have cooked meat, macaroni, potatoes, rice and dried fruit at once and all in separate dishes. Mrs. E. C. Jenkins, Sheridan Co., Kansas.

### Reading Gives Much Pleasure

Even the busiest farm woman should take time to read. She, as well as the men, should keep in touch with the world at large thru papers and magazines and the farm journals. We hear women complaining, "I just can't find time to read." We should all take the time.

When I am tired and nervous and must rest a few minutes I have a magazine at hand, sit down in an easy chair or lie down on a couch, and read a short article. It is surprising how rested and fresh I feel. An entire change of thought brings relief. I do not attempt to read everything but spend my time reading things I know are interesting. A good way to find these easily is to mark with a blue pencil, all articles we think we would like to read when glancing hurriedly thru them. Mrs. B. B. King.



## Believes in Canning Food

I have had such good success in canning vegetables that I want to pass on my methods. When I can vegetables, I gather them just as early as I can in the morning and while I am preparing them for canning, I have the water on heating so no time is lost. I use the cold pack method and generally blanch a milk bucket full at a time. While I am filling my jars with these vegetables, a second bucket full is being blanched. The jars must be perfectly clean and good rubbers and tops used. I fill my boiler with water until the jars are covered a couple of inches, and boil briskly 2 hours or more. Corn and peas require more boiling than beans.

I use Mason jars generally, but have some snap tops that are very satisfactory. I canned beans, corn, peas, carrots, rhubarb, Brussell sprouts, pumpkins, beets, tomatoes, fruits, jams and pickles, and have lost very few cans.

Mrs. M. L. Carbiener.

El Paso Co., Colorado.

## The New Summer Designs

9638—Girls' Long-Waisted Dress. To obtain the popular blouse effect, the waist of this girl's dress is joined to a lining. The skirt is gathered and also attached to the lining of the rather long waistline. Sizes 8, 10, 12 and 14 years.

9655—Ladies' Two-Piece Skirt. Trimming pieces of the same material



as the skirt are applied to finish off the slash pockets at each side of the front. Sizes 26, 28, 30 and 32 inches waist measure.

9645—Ladies' Dress. Flowered voile fashions this frock for warm summer days. Rows of Val lace fill in the front opening of the waist and run around the oval neckline. Sizes 36, 38, 40 and 42 inches bust measure.

These patterns may be ordered from the Pattern Department of the Kansas Farmer and Mail and Breeze, Topeka, Kan. Price 12 cents each. State size and number of pattern.

## The May Prize Winners

May prize winners for the best letters to the women's department are Mrs. W. T. Barrett, Brown Co., Kansas, and Mrs. N. A. Van Dyke. Mrs. L. R. Carter of Russell county won the prize for the best recipes.

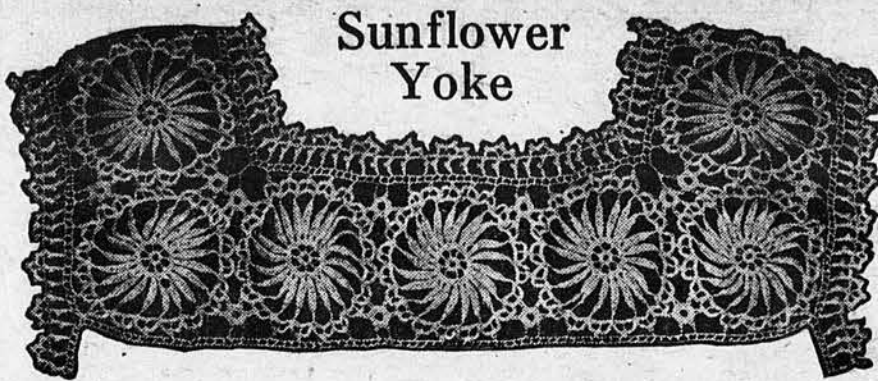
## Fruit Gelatin Salad

Mix together 1 can of pineapple, 3 large apples, 3 bananas, 3 oranges and 1 cup of chopped nuts. Soak 1 envelope of gelatin in 1 cup of cold water 5 minutes and dissolve with 2 cups of boiling water, add  $\frac{3}{4}$  cup of sugar, stir until dissolved and cooled, then mix with the fruit.

Mrs. H. H. Neff.

Linn Co., Kansas.

## Sunflower Yoke



THIS SUNFLOWER design makes a very pretty yoke for a nightgown.

Begin in center of flowers with a chain (ch) of 8 stitches (st), join.

1st row—16 single crochet (sc) in ring.

2d row—Ch 7, \* skip 1 sc, 1 double crochet (dc) in next, ch 4, repeat from \* 6 times, ch 4, join.

3d row—4 sc in 1st 6 spaces (sp); 5 sc in last 2 sp, 1 sc above each dc, (42 sc in all), join.

4th row—Ch 18 for petals, skip 1, 1 slip stitch (sl st), 2 sc, 1 half dc, 10 dc, 1 half dc, 2 sc, skip 1 sc in center, 1 sl st in next; ch 18, and make remaining petals like first. Break thread, fasten in point of petals, ch 8, fasten in next, repeat around; join last 8 ch to first.

5th row—8 sc in 8 ch, turn, ch 6, 1 dc in 4th sc, ch 6, sl st in last sc, turn, 4 sc in the 6 ch, 1 sc in top of dc, ch 4 for picot (p), 1 sc in same dc, 7 sc in other 6 ch, 1 sc in top of next petal, repeat all around, join to first. In making second sunflower, join to two picots of first flower.

Small Circle—Ch 10, join.

1st row—18 sc in ring, join.

2d row—3 sc above sc, 1 p, 3 sc, ch 2, join to p of flower, ch 2, finish p with sl st, 3 sc, ch 2, join to next p of flower, ch 2, finish p, 3 sc, ch 2, join to p of next flower, ch 2, finish p,

3 sc, ch 2, join to next p, ch 2, finish p, 3 sc, 1 p, join with sl st. Fill in between flowers with these circles.

Upper Edge—Join thread to 2d p to the right of a corner, 8 ch, 1 dc in next p, ch 6, thread 4 times over hook, fasten in p of small circle in corner, casting off 2 loops and again 2 loops, thread over twice again, catching in next p, casting off 2 loops until all are cast off, ch 6, 1 dc in p of next flower, 8 ch, 1 sc in next p, 8 ch, 1 sc in next p, 8 ch, sc in next p, 8 ch, 1 dc in next, 8 ch, 1 treble crochet (tr) in p of small circle, ch 3, 1 tr in next p of small circle, ch 8, 1 dc in next p of next flower. Repeat around.

2d row—1 row of meshes (ch 2, skip 2, 1 dc, and so forth).

3d row—Ch 18, fasten in 1st mesh, turn over last part of ch of 18 make \* 5 sc, 1 p, 5 sc, ch 10, skip 1 mesh, fasten in next mesh, repeat from \*.

4th row—\* 3 sc over 1st 3 sp, turn, ch 5, 1 dc above next post of beading, ch 5, 1 dc in same place, ch 5, 1 sl st in next post, turn, 3 sc, 1 p, 3 sc in 1st sp, repeat same over next 2 sp, repeat from \*.

Lower Edge—Fill in same as upper edge for armholes and 1 row of meshes for bottom.

There will be a rapid growth in the movement for more hard surfaced roads in Kansas in the next five years.

## Our Unpleasant Voices

As a nation we are famous for our unpleasant speaking voices. Foreigners say they are always able to tell an American by his harsh unpleasant tones. This is rather severe criticism, but listen to the voices of the first half dozen persons you meet, criticize them mentally as to pitch, flexibility, and beauty of tone and there is no doubt but that you will agree that the average American needs to have his attention called to this matter.

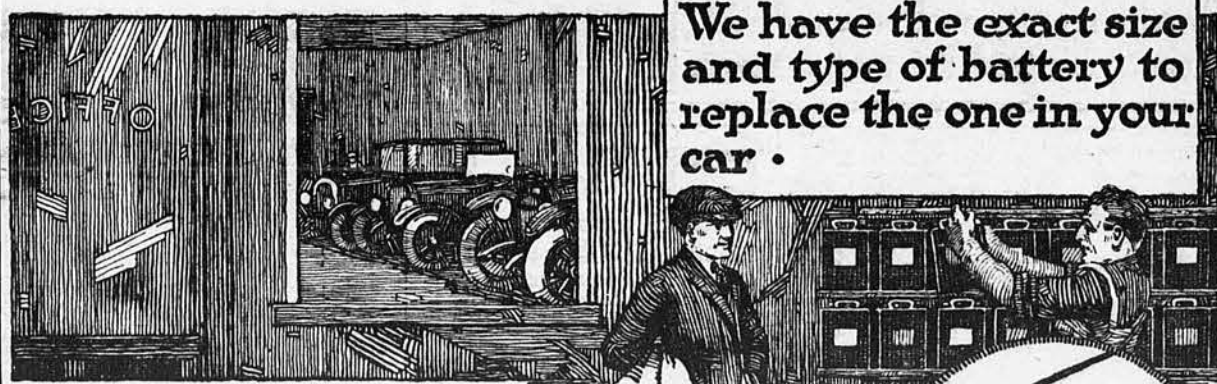
The human voice is the instrument of power which places us above the brute and it is capable of cultivation to a high degree. We unconsciously form an opinion of every person we meet and that opinion is based as much upon the person's voice as upon what he says. The voice plays a large part in that almost indescribable something termed personality.

Some homes present such a pleasing appearance to the eye that one feels on entering them a keen sense of pleasure, restfulness and calm, but too often this restful dream is disturbed by the harsh, high pitched tones of some member of the family. Immediately the pleasing effects of the furnishings are forgotten and one has a feeling of nervousness and irritability. The ideal home should aim for pleasing voices as well as pleasing furnishings. Our schools are doing much to cultivate the singing voices of our children and that is an excellent thing, but they are utterly disregarding the training of the speaking voice.

But how shall we train our speaking voices? Largely by conscious effort on our part to secure pure tone and proper pitch. We need, too, work in clear enunciation, breath control and ear training. We cannot have a good voice if we have poor health. Also any defects in the speech organs will make a pure tone impossible. All of these things can be worked out by anyone who believes the result is worth the struggle.

Anna Mae Brady.

Why not grow more alfalfa?



We have the exact size and type of battery to replace the one in your car.

## You want a battery that fits

"YOU'RE right. You can't put a short, fat battery into a long, slim box in your car. Then you want a battery with terminals that will shake hands like old acquaintances with your car's wiring terminals.

"But the main thing is to give you a battery with the right capacity to work in harmony with your car's electrical system. Your cutting-in-speed counts—that's the speed at which your generator begins to do business—and the number of amperes it feeds into the battery. Those are just some of the conditions your battery must work under. What it all means is that you want a battery of the right capacity to digest the current fed into it and to handle its work without strain.

"We have USL Batteries in all sizes and types to replace batteries of all makes. But we won't sell a battery if your old one is repairable. No matter what its make, if its plates are still sound enough, we'll rejuvenate and guarantee it."

When you do need a battery, your nearest USL Service Station will sell you a USL with extra-wear Machine-Pasted Plates. It will be an actually new battery, too. The factory ships it "Dry-Charged" so you get it—not partially worn out but fresh.

## USL Golden Rule Service Stations—everywhere.

U. S. Light & Heat Corporation, Niagara Falls, N. Y.

Likely there's one of our fifteen hundred service stations in your town. If there isn't, for the address of the handiest, just drop a post card to the nearest of the following distributors:

Pack Battery & Equipment Co., Kansas City, Mo., The Auto Storage Battery Co., Denver, Colo.  
Metropolitan Garage, Oklahoma City, Okla., Master Sales Co., Omaha, Neb.



The USL Farm Lighting Storage Battery



## 1847 ROGERS BROS. SILVERWARE



### Start with good silver

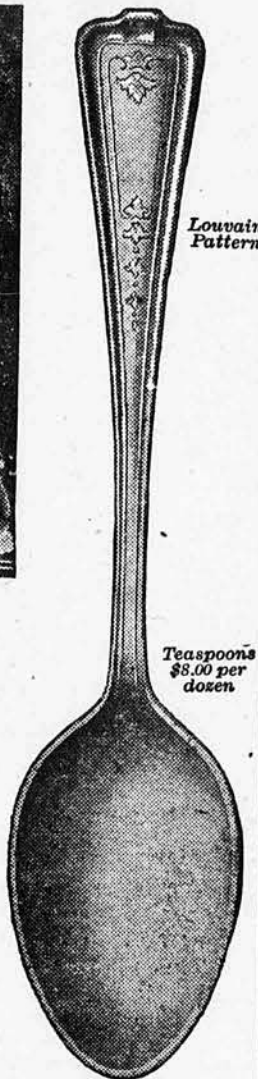
As time goes by, patterns of silverware change. But, though the designs in "1847 Rogers Bros." silverplate have perhaps become more beautiful and graceful with the passing years, the quality has remained the same—that wonderful quality which your mother and her mother before her recommended as distinctive with "1847 Rogers Bros." And so the young bride of today, in selecting "1847 Rogers Bros." silverware, is choosing wisely.

Sold by leading dealers. Other patterns are illustrated in "T-75A." Write for it.

International Silver Company, Meriden, Conn.

The Family Plate for Seventy Years

MADE BY **INTERNATIONAL SILVER CO.**



Teaspoons  
\$8.00 per dozen

## Women's Service Corner

Send all questions to the Women's Service Editor, Kansas Farmer and Mail and Breeze, Topeka, Kan.

### How Much for Portieres?

Will you please tell me at about what price a double door portiere made of wall paper and finished with wooden beads should sell?—Rowena.

It would be difficult to set a price on your portieres without seeing them. The amount you could get for them would depend, of course, upon how neatly they are made and how attractive they are. I should think you might sell them for \$5, however.

### Stories and Poems for Sale

Do you know of a publication that would buy some stories and poems I have written?—A Reader.

I suggest that you send your stories or poems to some magazine that publishes the kind of material you have written. If you enclose postage they will return the articles to you if not available.

### Has Wool for Yarn

Can you tell me where I can get wool made into yarn?—H. M. T., Kansas.

I do not know of any firm that makes wool into yarn for private use. If you will write to the Textile Division of the Home Economics Department of the Kansas State Agricultural college, Manhattan, Kan., they may be able to tell you of such a firm.

### To Make Pork and Beans

Please tell me how to make pork and beans like those sold at grocery stores.—Mrs. F. J. M., Oklahoma.

I believe you will find the following recipe a good one: Pick over and wash a quart of dried beans the night before you wish to bake them. Put them to soak in cold water. In the morning, pour off the water, put in a kettle, cover with plenty of cold water, and set to boil. Cook until tender; turn off the water, and put the beans

in a baking dish. Score in lines the rind of a piece of pork and bury it all but the surface of the rind in the middle of the beans. Add enough boiling water to the beans to cover. Stir in 2 tablespoons of molasses. Cover the pan and bake moderately 5 hours. If the water wastes away so as to be below the surface of the beans, supply enough just to cover them. Two table-spoons of tomato sauce may be added before baking if liked.

### Oiling the Kitchen Floor

Will you please suggest a way to treat an old kitchen floor that has been covered with linoleum for the last few years?—Z. M., Reno Co., Kansas.

The best way to treat an old kitchen floor is to oil it with paraffin or linseed oil. Be sure that the floor is clean before the oil is applied. If the floor has not been oiled before apply several coats, as the wood will absorb a great deal of it. The more coats that are put on, the darker the finish will be. Either of these oils can be purchased at a drug store or at any store where paints are sold. The floor, of course, will have to be refinished whenever it becomes dull looking. Most housewives who use this treatment, apply it once a month.

### Protect the Nervous Child

When one has "nerves," he is to be pitied more than censured. To nervous children anything out of the ordinary becomes a terror. If a nervous child is punished his condition will become much exaggerated; he will be so afraid of doing wrong that he will be very likely to develop the story-telling habit in order to avoid a scolding, and often he is at a loss to know what is right and what is wrong. Such a child should be led and guided with great care, but he should not be spoiled, lest he become selfish and disobedient.

Mrs. B. B. King.

Neosho Co., Kansas.

Why not get a larger proportion of the fuel from farm woodlots?

## From Thin Children to Plump Ones



A Class in Red Cross Home Nursing at Berryton With Miss Mary Alexander as the Teacher and Demonstrator.

AN APPALLING percentage of underweight exists in the Shawnee county schools, according to Mary Alexander, county school nurse, who has visited and examined the children in three-fourths of the schools. Out of 1,450 examined, 968 were found to have defects. Of this number, 654 were referred to medical attention.

"The defects are not serious in many cases," Miss Alexander explained. "Perhaps the need of the extraction of a tooth or the correction of some minor ailment. But the number of underweight cases is alarming."

In a school of nine students, five were more than 10 pounds underweight. In one of the larger rural schools near the city 27 out of 153 children were underweight.

Miss Alexander has discovered that many of the underweight children are drinking coffee and tea. Milk was recommended and hot lunches advised.

Children with defects were advised to visit the nutrition and better health clinics from 3 to 5 o'clock on Wednesday and Friday afternoons at the city hall in Topeka, where the Public

Health Nursing association gives free examinations.

When Miss Alexander visits a class, weighing and measuring tests are given to find out if the correct weight and height for the age has been attained. Examinations are made for enlarged tonsils and adenoids, and eyes are tested. Parents are visited and recommendations made regarding the child's health.

Classes in home nursing are being established by Miss Alexander. She has a large class of high school girls at Berryton interested in the work, which corresponds to the course being given Topeka women by the Red Cross. Miss Alexander's salary as county school nurse is paid by the Red Cross.

The rural citizens seem glad to have a nurse working with the school children and Shawnee county parents are co-operating excellently with Miss Alexander in her new work. The old feeling that a school nurse "meddles" with private affairs has vanished with the realization that thru the efforts of the school nurse a child may gain better health and be a better, brighter student.



## OTTAWA ENGINES

Better Built—Kerosene, Gasoline, Distillate and Gas

Easy to start—easy to operate. Fewer parts to adjust. Uses less fuel. Lowest price for highest quality engine. Reliable, even power always at any minute. Each size 20% to 50% surplus power. Use cheapest fuel without making any changes on engine. Utmost durability. Very latest design. More sizes to choose from—2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16 and 24 horse-power. Stationary, Portable and Saw-Rig Styles.

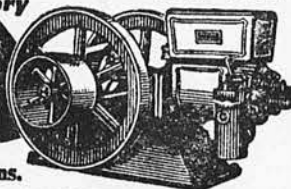
**Special Factory Prices**

Direct From 90 Days Trial Factory

Let us ship you an engine to earn its own cost while you pay for it. I make the price low—cash or easy terms. Thousands of shopmen and farmers in every section of America prefer the OTTAWA Engine because it delivers lowest cost power.

**Book Free** Easy to understand engines after you read it. Gives present prices and 10-year guarantee. Write today.

OTTAWA MFG. CO., 554 King St., Ottawa, Kans.



## \$200.00 IN GOLD GIVEN

### How Many Words Can You Make?

This Puzzle is a sure prize winner—absolutely everyone in this Club gets a prize. It is not hard, either—just a little ingenuity and skill. The Puzzle is to get as many words as possible out of the letters here-with given. Use only the letters given and only as many times as they appear in the ad. For instance, the letter Y appears three times, so in all your words you must not use Y more than three times. If you use Y twice in one word and once in another, you cannot use Y in any other word as you have already used it as many times as it appears in the advertisement. It is not necessary that you use up all the letters. The Puzzle looks easy and simple, but if you can make as many as twelve words, send in your list at once, as the person winning first prize may not have more than that many words.

**OUR OFFER** We are the largest Magazine Publishers in the West and are conducting this big "Every-Body Wins" word building and prize contest in connection with our introductory and advertising campaign, and we want to send you a sample copy and full particulars as to how you can become a member of this Word Contest and share in the \$200.00 in gold and the other valuable premiums. We give 100 votes at the close of the Contest we will give \$100.00 in Gold; to the second highest, \$50.00 in Gold; to the third highest, \$25.00 in Gold to the fourth highest, \$15.00 in Gold and to the fifth highest, \$10.00 in Gold. In addition to these prizes we are going to give away a number of other valuable premiums of all kinds, too numerous to mention in this advertisement.

**NOTICE**—Every new Club Member this month also receives a beautiful genuine, gold filled, orange blossom ring, guaranteed for five years free and postpaid—just for promptness. Any one may enter and bear in mind, there is absolutely no chance to lose; positively every Club Member gets a prize. If there should be a tie between two or more club members for any of the prizes, each tying member will receive the prize tied for. Get your share of this \$200.00. Send in your list of words TODAY.

**WORD CLUB, 801 CAPPER BUILDING, TOPEKA, KANSAS**

A N O E O Y R S  
T F L M I M R A  
O O A I N M T O  
M O F I A E B L  
Y A P B I N O H  
G N O S A A O T  
T A A C R B O Y  
A R M N A N T W

## Classified Ads Bring Returns



# Cooking With a Fireless

This Popular Time Saver Bakes, Boils and Fries

LETTERS FROM READERS

**T**HE FIRELESS cooker is ideal for cooking meat, dried fruit, rice, beans and such things that require long and slow cooking. I have used one three years and consider it one of my necessities. I have cooked for threshers, company and on all occasions with a two-compartment cooker and a three-burner oil stove. I like the cooker best for stewing and roasting.

I fill up the cooker the day before company or threshers come or a prospective picnic or outing trip. The next day's dinner is then ready and out of the way. I have taken boiled cabbage and ham out of my cooker when I had company and they were amazed to know where it had been cooking all morning without any odor. The ornamental little box can sit in the room with your company and cook their dinner while you visit with them, or it will cook supper while you go visiting or shopping.

The cooker can be filled and set on the running board of a car when going on a trip or picnic and a warm meal will be ready when it is time to eat. What a relief to go away from home for a few hours and know that the meal is cooking without burning, boiling dry or the fire going out.

Mrs. Harry Dean.

## Bakes Cake and Bread, Too

The fireless cooker is not a luxury but a necessity. Mine is gray enameled on the outside and aluminum lined. It has an automatic valve steam escape.

I have cooked almost everything in my cooker. I often bake sweet potatoes in it, also. To prepare the potatoes, wash and dry them, and rub a little grease over them. I also bake chicken, roasts, meat loaf, cake, light bread and custard in the cooker. The cooker is especially good for baking loaf cake; there is no danger of the cake falling and it browns so nicely. I cooked all my beets for canning in it last summer.

It certainly is fine to open the cooker on a day when I am very tired or on Sunday when I wish to rest and take out a nice baked chicken and dressing and some vegetables.

I heat my rocks on an oil stove and make sure the wind is not blowing over them so that they will heat quickly. My cooker cost \$32.50.

Mrs. A. C. Arnim.

## Farm Home News

After an especially good lecture or demonstration the remark is often made that the ones who most needed the information given were not present. This was especially true in the case of our dressmaking demonstration.

One reason the home dyer is likely to fail in dyeing a garment is that she often uses too small a vessel. The vessel used should permit plenty of liquid to cover the cloth and should leave space for easy stirring and lifting of the goods.

Failure, too, is likely to attend the efforts of a home dyer if she leaves a garment sewed together. The seams gather the solid matter in the dye; they dry more slowly and so are usually darker than the remainder of the garment.

Dyeing of silk was discouraged as the boiling needed to set the dye removes the body or stiffness of the silk and makes it limp and "lifeless." Other methods of giving a color to a white silk waist that has become yellow were discussed. These consisted of using the dye soaps, ink and crepe paper. Especially in the use of inks and paper, we were advised to try a sample before placing the waist in the colored water. Red and green inks are sometimes used to secure pink or a green. Red crepe paper dipped in water will make a pink or red dye, depending upon the amount used. These dyes or colors are not lasting. The garments should be pressed before they dry and a cloth between the material and the iron is almost a necessity. Without the cloth, a shiny surface is certain.

Faded ribbons may often be made to give excellent service by having a dye bath. Old hats in many cases are made



The Fireless is a Friend Indeed

of better straw than the newer ones. The yellowed or undesirable colored hats may be made black by a brushing

with hot dye. Silk hose and camisoles may be tinted to match the new frock.

It seemed, from the suggestions given us, that the fleshy woman has a bigger problem to solve in dressing becomingly than her slender sister has. Figures in dress goods that are like the old-fashioned wall paper are undesirable for all. Any design that may be enclosed in a circle or square gives a large person an appearance of increased size. Plaids seem to produce the same effect. The prettiest plaids are not those with strikingly contrasting colors but those in which soft colors are so blended that one can scarcely see where one color stops and another begins.

Everyone enjoyed the discussion of colors, of the universally becoming navy blue, the shades of purple or plum color for gray hair and the trying black. Most older persons think black the most suitable. It is often called the grandmother's color when in reality it is the granddaughter's color. It serves to deepen the shadows of wrinkles and to show most startlingly any lack of healthy color.

The V-neck was said to be the most generally becoming cut. Older women should have a collar in the back of the neck. Round faces and round necked dresses are poor combinations as are square faces and square necks.

The speaker said if she were planning to make a good dress she would look at the best ready made garments in a good store. In such garments one often finds color combinations or touches of trimming, ways of making collar or sleeve finishings that are very suggestive.

Mrs. Dora L. Thompson.  
Jefferson Co., Kansas.

## A Bathroom for Every Home

The modern bathroom is as much a part of the modern farm house as the dining room or bedroom. There are renters and beginners on many Kansas farms who cannot at present afford a modern bathroom, yet even among the less favored a bathroom is not a luxury but a necessity. It takes such a small space for a bathroom. Even in this time of expensive lumber the cost of building would not be great. The cost of the bathtub would be practically all the expense. The work could be done at home by the man of the house. A pipe inserted thru the wall and connected with the bathtub would furnish drainage.

A shelf on the wall for accessories, another for towels, and so forth, and a hook or two for bathrobes are the needed articles. A small box with shelves enameled with white inside and out makes a good medicine cabinet. A small curtain hung in front makes it quite an ornament as well as an article of use. Under the cabinet hang the emergency bag. This can be made from a small sugar sack. In winter a little oil stove will warm a small bathroom.

But suppose you haven't the bathroom to fit out? Then put up your first-aid shelf in a corner of the kitchen. Prepare a curtain with a wide hem at top and bottom. This can be hung on a heavy wire and hung across the corner when needed. A folding bathtub does not cost much. It could be filled from the kitchen stove reservoir and when emptied be folded and placed out of the way.

Mrs. Levi Gingrich.  
Hodgeman Co., Kansas.

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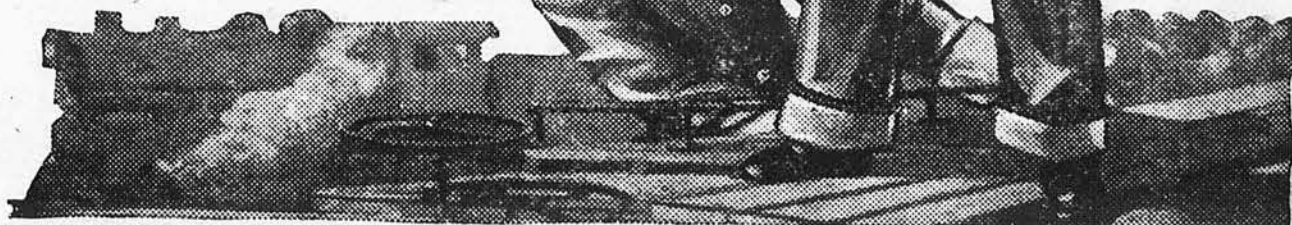
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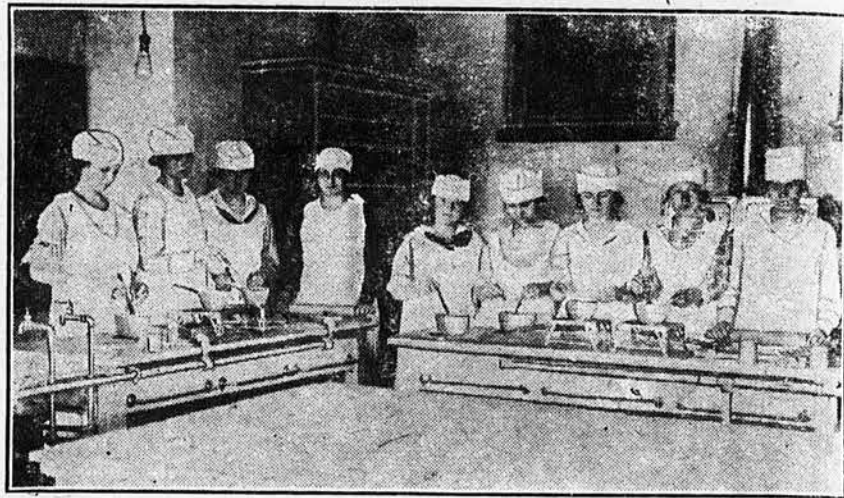
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## For Our Young Readers

### Girls Win Sewing and Cooking Contest Prizes

BY JESSIE GERTRUDE ADEE



These High School Girls Are Demonstrating Their Ability to Make Light, Flaky Biscuits and Creamy Tomato Soup.

CONTESTS IN oratory, music and athletics are ages old but ever new. In almost every school district of the state the women hold an annual cooking contest which they call the last day of school dinner, but cooking and sewing contests for girls are new. In fact, the first state contest in cooking and sewing for high school girls was held at the Kansas State Agricultural college, Thursday morning, May 6.

At an early hour 27 girls from Alta Vista, Wamego and Manhattan were on hand ready for business. They went right to work in an earnest and business-like way. Each contest occupied an hour and a half.

In the cooking contest every girl made biscuits and cream of tomato soup. The ingredients were given, but the girls were expected to know how much of each to use. They were scored not only on products, but on technique, handling of utensils, plan of work, efficiency, neatness of desk and appearance and suitability of dress.

In the sewing contest a dainty apron, cut out and ready to put together, was given each girl. A diagram and directions were on the board and were carefully explained. The girls were divided into groups and sent to different rooms, so that no girl had to wait for a machine. They were expected to finish only half of the apron.

At 5 o'clock the girls met in the home economics rest room to receive the awards. First place in the cooking contest was awarded to Blanche Brooks and second to Lillian Fairley of Manhattan. Celia Regnier and Dorothy Giltner of Wamego received honorable mention. First place in the sewing contest was awarded to Clo Bixler of Manhattan and second to Rhoda Bramburg of Manhattan.

The cooking contest prizes were first, a choice of all laboratory fees in the home economics course in the agricultural college for the freshman year, or an electric grill; second, a choice of all laboratory fees in the home economics course for the first semester,

or a Boston School Cook book and a thermos bottle.

The first prize in the sewing contest was a choice of all freshman year laboratory fees in the home economics course, or a sewing basket and stand. The second prize was a choice of first semester laboratory fees, or a leather case containing three pairs of scissors.

As the contestants handed in their aprons, one little girl said, "I know I won't get a prize, but I like to try anyway."

The work was a credit to the girls and their schools. A grown woman needn't have been ashamed of any of it, altho some could make a smoother buttonhole than others or sew a straighter seam or stitch a little nearer the edge. And altho some of the biscuits were a little lighter and flakier than others, there weren't any that were bad enough to cause a family jar.

The girls' teachers with several other visitors watched the contest with interest.

As one little girl received her prize she exclaimed,

"My mother will think this is a fine way for me to earn part of my college expenses."

Every little girl was allowed to keep her apron, and as she received hers one of them remarked,

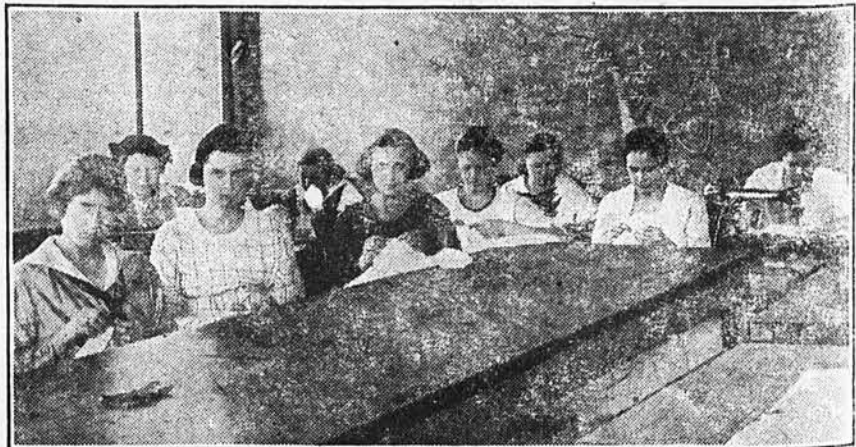
"I am going to take mine home and finish it just as nicely as I began it."

The contest created much more interest than was expected and will be made an annual affair.

### Letters to a Farm Girl

This is the sixth letter in the series written by Mr. Case to the farm girl. He suggests contentment as the sixth stone for the foundation wall of a successful life.

Dear Elsie:—As I write to you this morning I look from my study window over fields of waving grain. Off in the distance I can see a plodding team and a farm boy who is plowing corn. The sun shines with shimmering heat and cud-chewing cattle recline peacefully beneath the shade. A mother hen has called her brood to the cooling shade of an apple



High School Girls Show That They Can Handle the Needle too, and Make Neat Dainty Aprons and Smooth Buttonholes.



tree. But the scene upon which my eyes dwell longest and most lovingly is but a few yards away from the window ledge. In a tiny bird house a pair of wrens are rearing their small brood. In and out the father wren flits tirelessly, bringing choice morsels to his little ones. The mother wren with soft chirpings answers his tender call.

Elsie, dear girl, I have painted you a picture of contentment. Such contentment can only be found in the open country and among those we love. Our friends the wrens could build their nest in a box on a crowded city street and rear their family but it would not be such a home as they have found in their tiny house nearby. Their little ones will go forth to build other homes to gladden the hearts of men. To me the wren typifies cheerfulness and industry and contentment. Such a small thing to give so much! Be glad if a wren family has favored you with its company.

I know a farm home, Elsie, where the homemaker is a little wren. Such a demure and sober little person that only those who know her well know what rich promise she gave in her school days. Back in the line of her ancestry a brilliant musician shone and Lelia's golden voice even in grade school days had thrilled a country side. Her father had a vision and hoped some day to give Lelia an opportunity to study under a teacher of recognized ability, but fate willed otherwise. The mother died and Lelia carried on at home. The eldest of six "brown wrens", she found every day too full for study but not too full for play. She was the "pal" of her careworn father and the big brother in high school. To the little ones she was the tender mother they had lost. And in that home happiness and contentment dwell.

Contentment is the sixth stone for our foundation wall. It seldom is placed there without sacrifice. I doubt if any singer who has traveled the long highway to success has found so much joy in her work as has Lelia in doing the things for her loved ones that she knew her mother wanted done. No home can be happy unless contentment is enthroned. Nor can it be a real home unless its inmates are content. Remember, too, that one discontented person in a home will inoculate with the germ of discontent the whole family. The most unhappy homes I have known were those where the mother and daughters were unhappy and discontented without cause, and where no apparent remedy could be found.

Inconsistent as it may seem, tho, I would not have you entirely content. Few of us are rendering such unselfish service or have found such perfect happiness that we could not rise to greater height. Discontent may serve as a medium for the bringing of greater content and happiness. My friends, the wrens, were not content with the first home of their choosing. Man like, Sir Wren found first a home close to the feeding grounds. It was not well protected from wind and rain, tho, and Madam Jennie protested violently. Such chattering and chirping until finally she induced him to change the nesting place! I am sure they are happier in the home I see from my window than the one of their first choosing. And so may you be happier in later years if contentment does not come fully when first you seek happiness.

Your good friend,  
John F. Case.

#### What About the Fourth?

How are you planning to spend the Fourth of July this year? Perhaps the picnic or other celebration to which you are looking forward will be quite different from those other folks are planning. For the three most interesting brief letters on "How I Expect to Spend the Fourth this Year" we will give prizes of \$1 each. All letters must be submitted by June 24.

Address your letters to the Editor of the Young Folks' Department, Kansas Farmer and Mail and Breeze, Copper Building, Topeka, Kansas.

#### An Unfinished Rhyme

If you can complete this unfinished poem, making the first three lines of every stanza rhyme, send your answers to the Puzzle Editor, Kansas Farmer and Mail and Breeze, Topeka, Kan. There will be packages of postcards for the first six boys and girls who send in the best rhymes.

The day was bright and \_\_\_\_\_  
The bees were making \_\_\_\_\_  
A lively little \_\_\_\_\_  
Was hopping 'round the yard.

The birds were sweetly \_\_\_\_\_  
The fairy bells were \_\_\_\_\_  
The butterflies were \_\_\_\_\_  
Their way across the yard.

The frogs were softly \_\_\_\_\_  
The willow trees were \_\_\_\_\_  
And a little girl was \_\_\_\_\_  
In a hammock in the yard.

Solution May 22 puzzle—What four animals? Bear, Deer, Wolf, Mink. Prize winners are: Sylvan Tyler, Sublette, Kan.; Alice Berggren, Morganville, Kan.; Esther Avery, Riley, Kan.; Thelma Buechner, Topeka, Kan.; Eugene P. McCulley, Blue Rapids, Kan.; Edward McNutt, Bucyrus, Kan.

#### A Music Dictionary, Too

I have taken music lessons three years. I do not take lessons now but I intend to next spring. My favorite pieces are "Marching Thru Georgia,"

"Long Boy," "Keep the Home Fires Burning," and "Missouri Waltz." Among the pieces I have are "After the War is Over," "Liza Jane," and "Kilima Hawaii Waltz." I also like "The Acrobat" and "The Toy Balloon Man."

I practice every night and play at church. I have about 50 pieces of music now. I have one Hawaiian piece and it is very pretty. I bought a music dictionary last summer.

Holly, Colo. Maurice Kimmel.

#### Likes Best Grade Best

An evening seldom passes without some music in our home. I have been taking music lessons for some time and I am beginning to play sheet music. I have several pieces. Among them are "Beautiful Ohio," "There's a Long, Long Trail," and "Till We Meet Again." We do not buy the cheapest grade of music. We all enjoy the best grade so much more. I have two sisters who like to sing. One of them sings alto and the other one sings soprano. When our work is done we enjoy a few minutes of music and singing. It is one of the most pleasant ways to pass away a rainy day. Even if it is rainy and dull outside it does not have to be so inside. Sometimes on Sunday afternoon we gather around the piano and sing church songs. We enjoy these most of all.

N. N. S.

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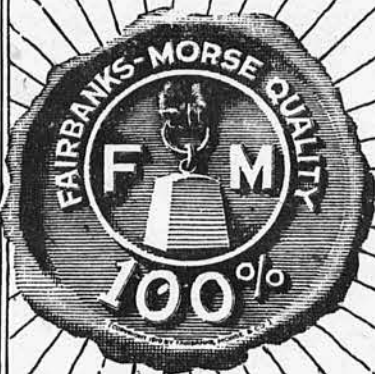
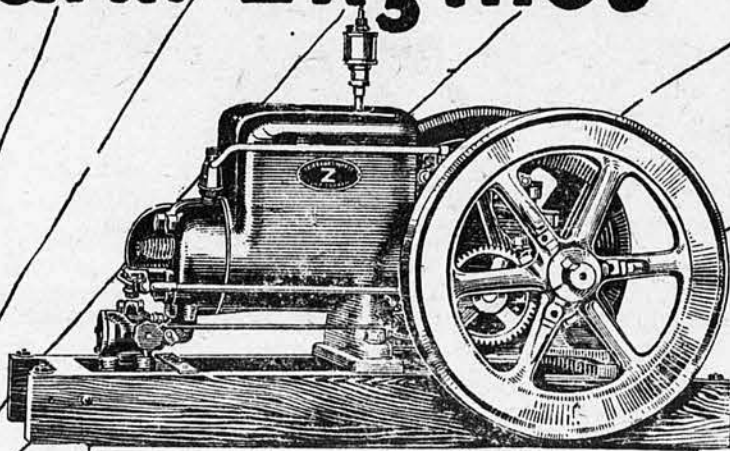


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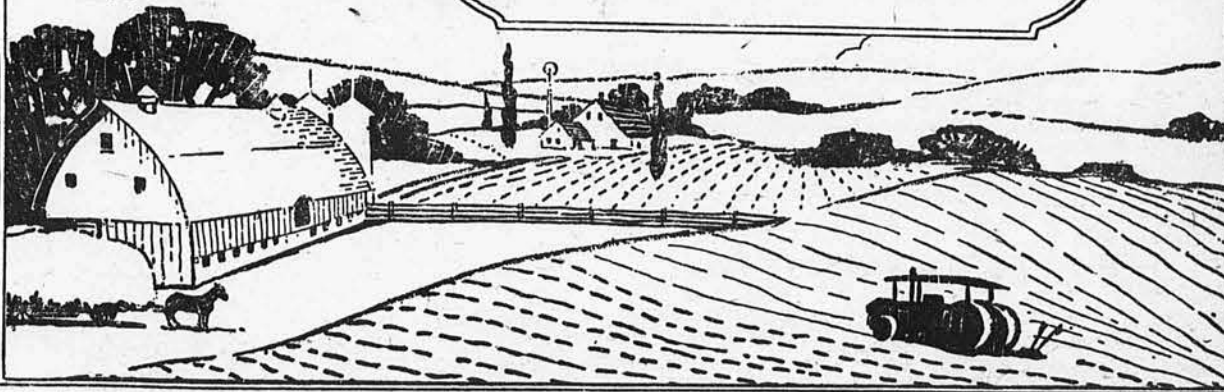
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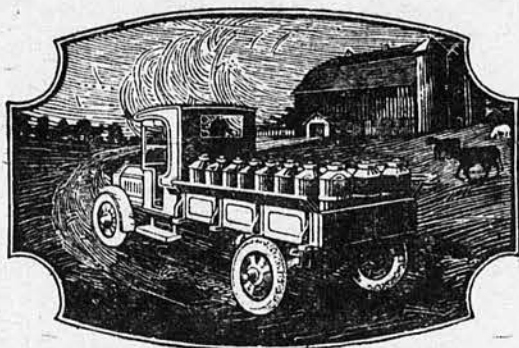
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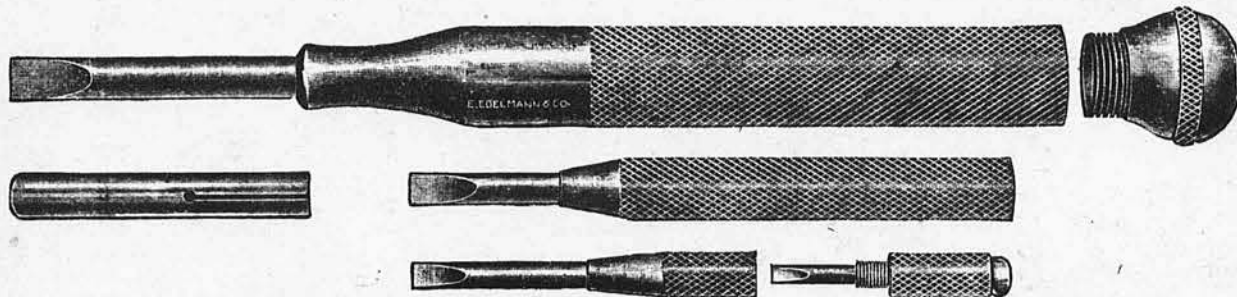
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State whether subscription is new or renewal.

## Killing Gophers and Prairie Dogs

BY T. R. PHARR

The necessity of eradicating prairie dogs and pocket gophers is increasing each year in communities that are not taking any steps to stop the damage done by the rodents. The pests cost the farmers in the state of Kansas thousands of dollars each year in damage done to pasture land, alfalfa and small grain crops.

In communities where the work has been properly undertaken the process of eradicating the pests is a simple method. Poisoned oat bait is one of the most successful methods of controlling the pest. A heaping teaspoon of poisoned oats is scattered on a clean surface soil just outside of the prairie dog hole. Best results will be obtained if the oats are put out in the late afternoon. The dogs come out hungry in the early morning and are ready to partake of a hearty breakfast. The prepared breakfast will prove to be the dogs' fate.

Poisoned oats must be kept from all farm animals. It is not difficult to use the poisoned bait near the farmstead if the proper precautions are taken.

Pocket gophers seldom are seen above the surface of the soil during the day. The opening to the mound is closed during the day and is found open when the animal is out feeding. The only means of telling whether the mound is occupied is by the fresh soil being thrown up on the outside surface. Where the fresh soil is thrown up the mound is occupied and the contented occupant is moving things in a lively method under the surface of the soil. During the breeding season only, do you find more than one animal in a mound.

Pocket gophers do their largest amount of damage to alfalfa fields. Large mounds of soil are thrown out on the surface and the alfalfa is covered up. The mounds of soil make mowing alfalfa a difficult problem. When alfalfa is badly infested with gophers the loss in yield of hay has been estimated as great as 1/2 ton an acre.

Poisoning gophers is not quite such a simple process as poisoning prairie dogs, however, the method is not difficult.

In poisoning gophers it is necessary to first find the run by inserting into the soil near the mound a small wagon rod. As the rod passes into the run you can feel it "give" and therefore know when you have reached the run.

When the run has been located you should use an old broom handle to enlarge the hole. After the hole has been enlarged drop a heaping teaspoon of poisoned oats into the run. Cover the hole on the surface soil with your foot. Special care should be taken to prevent the oats being covered up by loose soil falling into the hole. Two treatments should be given each mound if the best results are to be obtained.

In order to make the follow-up 100 per cent perfect it may be necessary to use the exhaust of an automobile to asphyxiate the victim. If this method is used place a rubber hose over the exhaust pipe on the automobile and extend the hose into the gopher mound. Pack the soil tight around the hose to prevent the gas from escaping.

Poisoned sweet potato blocks, trapping or shooting may be necessary in the follow-up process.

The problem of eradicating prairie dogs and pocket gophers will prove successful only in communities where the farmers work together. Individuals working alone will get only temporary relief. The community plan is the only possible way for completely solving the problem.

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# Health in the Family

BY DR. CHARLES H. LERRIGO



SERVICE in this department is rendered to all our readers free of charge. Address all inquiries to Dr. Charles H. Lerrigo, Health Department, Kansas Farmer and Mail and Breeze.

## Babies and Hot Weather

"Why is a baby's second summer more dangerous than the first?" asks a young mother. "Why do so many more babies die in hot weather?"

The reply to the first part of the question is that the second summer is only disastrous if parents are careless or ignorant. To the well kept child the second summer is safer than the first because the baby is stronger and has more powers of resistance. It is true that there are cases in which a baby does well the first summer because she is breast-fed, and succumbs in the second summer because the mother is ignorant of proper feeding plans, but these cases are the exception. Usually a baby is safer in the second than in the first summer.

## Care in Hot Weather

"Why do so many babies die in hot weather?"

Usually because the mother does not realize that hot weather demands special care.

Acute diseases of the stomach and intestinal tract cause increased death rates. In June there is a sudden upward jump in the mortality curve showing that the number of babies dying from diarrhea and enteritis more than double the figures for May. In July there is a further increase. And in August four times as many babies die from such diseases as in any of the winter or spring months. It seems that the old-fashioned name of "summer complaint" has some justification.

Mothers must remember that hot weather calls for special care in everything that pertains to a baby's welfare. Warmth favors the rapid growth of bacterial life. Things that may be done with impunity in the cold weather of winter may be fatal in the heat of summer.

A young mother who had been getting along very well with her baby until hot weather came cannot understand the difference.

## Sterilization Important

"Baby is 6 months old," she said, "and I never have sterilized her bottles or nipples; just washed 'em. Why should it cause bowel trouble now, if it never did before?"

She was really bringing into light one of the traits of the fermentative bacteria; their ability to multiply with overwhelming rapidity under favorable temperatures.

There is no season of the year in which it is safe to neglect sterilization of all utensils used in preparing and giving the baby her food, but in hot weather the danger is tremendous. All bottles and nipples must be boiled. Mothers must never permit a partly used bottle of milk that has been laid by for an hour or so to go back to a baby's mouth. The sucking of "pacifiers" becomes especially dangerous at this time.

Aside from the effect of the heat upon the baby's food it has a depressing effect upon the baby herself.

In hot weather the baby should be in the coolest, shadiest spot possible, preferably out of doors. She should be dressed in less material than a summer girl at a bathing beach, the clothing used being for convenience rather than for style. She should never be

dressed up for long, hot trips to town, but should stay quietly at home.

It has been demonstrated that babies very seriously ill with "summer complaint" have recovered promptly upon being placed in hospital wards wherein, by artificial means, the temperature had been lowered to a comfortable degree of coolness.

## Questions and Answers

Our cemetery is by the church and the other side of the church is the school. What do you think of children drinking water out of a well on the school grounds in a case like that? Will they get typhoid?

M. D.

I think it depends a little upon the relative location of the cemetery and the school well. If the cemetery should be on higher ground and drain toward the well I would advise against it for ordinary type of shallow well. But if the cemetery drains away from the well there is no objection. There are things much more likely to contaminate wells than cemeteries. The school privy is much more likely to be an object of danger. Every well should be carefully located so that no excreta from human beings or livestock can drain into it. Then, if the well is an ordinary dug well, its walls should be laid up in cement, from the water bearing portion up to a well curb that should be at least 8 inches above the ground. A tight platform should cover this, preferably of cement. If you take such precautions to exclude burrowing of small animals and seepage from the surface, you will have good water. A cemetery will have to be very close to do any harm to a well of that kind.

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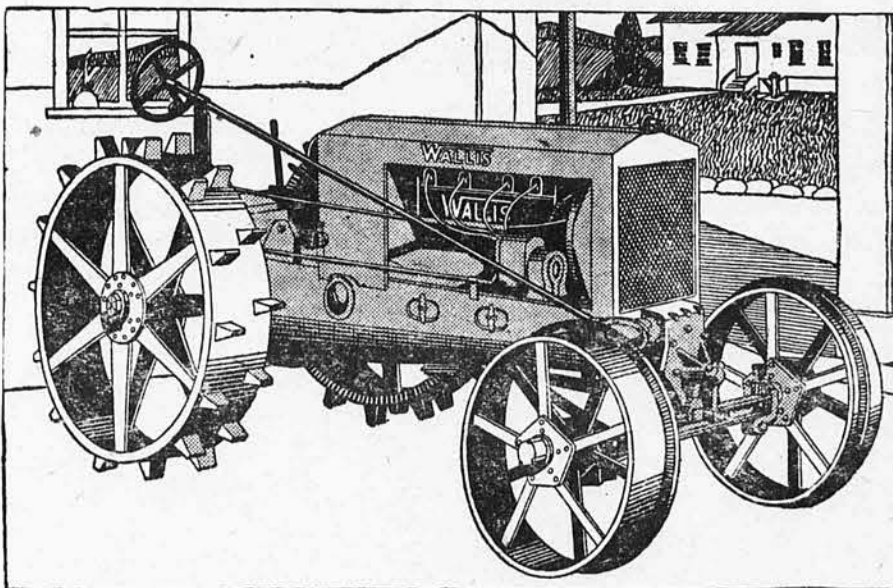
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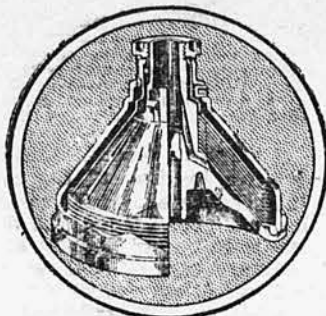
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## Capper Poultry Club

There's Something New at Every Meeting

BY MRS. LUCILE ELLIS  
Club Secretary

I'VE JUST returned from attending my first Capper club picnic—the one at the Prairie Center M. E. church at which Governor Allen presented the pep trophy cups won by the Johnson county pig club boys and the Linn county poultry club girls in the contest for 1919—and I want to tell you what fun it was. I enjoyed every minute of it, that is, after I got to the picnic grounds. We went in a car, one of the nicest and easiest riding cars I ever rode in, but the roads were so rough and there were so many hills that I got seasick. However, I recovered before the trip was over and in

now you're all tired of taking tests and examinations, but this won't be like the rest of them and it will help you ever so much with your club work. The letter which I am planning to send out this month, taking up the subject of lice and mites, will be your fourth lesson and you must be sure to read it over carefully because questions will be asked about it later on. After you give the test, I should like to have you write and tell me which girls answered all the questions correctly.

1. Give the two purposes for which hens must be given food. 2. What should they be fed besides grains in order to produce eggs? 3. Why do chickens need lime or oyster shell and grit? 4. How old should chicks be before they receive their first feed? 5. Tell what their first feed should consist of. 6. What and how often should they be fed during the first week? 7. Give a good growing mash. 8. Describe the method of shipping eggs in a half bushel basket. 9. What is a good way to keep chicks warm on cool days?

Not very hard, are they? I know one girl who would be able to answer all of them, but there is no leader in her county. This is Florence Preston of Russell county. Florence wrote: "I feed my chickens just what you told me to. I copied the directions on a slip of paper and nailed them on the wall of my coop." Conscientious, isn't she?

### County Club News

As my space is limited I cannot give you extracts from as many letters as I should like to, but if your county is left out this time, no doubt you will find it mentioned in the next club story.

I am feeling quite happy this evening as I gathered eight eggs today. I got seven one day, but this is the first day I have gathered eight, so you see I have cause to be proud of my chickens.—Badythe, Brown, Johnson county.

I have my little White, Plymouth Rock chicks now and they surely are beauties. They are growing so fast. I am going to do all I can to make Jackson a leading county.—Violet Booth, leader, Jackson county.

I started to keep records April 1 and in 12 days I gathered 48 eggs. I think that is doing very well for a beginner. I will give you a description of my hen house. It faces the south and is 12 feet long, 8 feet wide and 10 feet high. It has two parts to it, one where they lay and roost over night and the other is where they stay when they are not out of doors. My brother helped me make my yard.—Ramona Barner, Sumner county.

I received a letter recently from Mr. Baker of Abilene, Kan., the breeder from whom I won my prize pair of Buff Plymouth Rocks. He said that my cockerel is a son of his first prize New York cockerel, Ivanhoe, and the hen is a daughter of Caruso, first prize cock at Kansas City, so you see I have some good chickens.—Lenore Rosiska, Clay county.

I have about 60 chickens almost 4 weeks old. They are doing fine. I started them on sour milk so they wouldn't have diarrhea. I did not feed them until they were 48 hours old and then I gave them chick feed. I feed them kafir now and sometimes wheat.—Gladys Davey, Greenwood county.

I feed my chicks rolled oats, milk, mash and a little grain. I put potash in their drinking water and I also give them charcoal. I have a feeder and a water fountain.—Madeline Berry, Rice county.

To show you what we have out in Rice county, I am using the picture of Pauline Griffin and her contest pen cockerel. Pauline raises Buff Orpingtons. Fine additions to our club, aren't they?

### KANSAS MAP TO READERS.

We have arranged to furnish readers of Kansas Farmer and Mail and Breeze with a big three sheet Wall Map of Kansas. This large map gives you the area in square miles, and the population of each county; also name of the county seat of each county; it shows the location of all the towns, cities, railroads, automobile roads, rivers and interurban electric lines, and gives a list of all the principal cities of the United States. For a short time only we will give one of these big wall maps of Kansas postpaid to all who send \$1.10 to pay for a one-year new or renewal subscription to Kansas Farmer and Mail and Breeze. Every citizen of Kansas should have one of these instructive wall maps. Address Kansas Farmer and Mail and Breeze, Topeka, Kan.—Advertisement.

time to enjoy that fine picnic dinner. Club folks certainly can cook. One of the men from the promotion department of the Capper Publications, who was in line near me on the way to the ice cream and cake, said, "I didn't know there was so much to eat in the world." And that's what I thought, too. I wanted to sample everything, it all looked so appetizing, but that was altogether impossible.

And then there was the program. The pig club manager has already told you about that, but I do want to tell you about the rainbow drill which the Johnson county poultry club girls gave inside the church after the program out-of-doors was over. The girls, dressed in blue, pink and yellow, did indeed resemble a rainbow as they gracefully went thru the different parts of the exercise in time to music. I don't believe I got to compliment each one of them in turn, so I shall take this opportunity of doing so. Girls, you did fine. I know the pig club boys appreciated your help with the program.

I was proud, too, to have so many counties represented by Capper Poultry club girls. Of course, the Johnson county girls were all there, but who should walk up and introduce herself to me but Beth Beckey, leader of Leavenworth county. With her were four of her team mates. And then a little later Hallie Huntington of Miami county introduced herself and her mother. You have already read about the important part Linn county club folks took in the celebration. There were four carloads of them—poultry club girls, pig club boys, fathers and mothers. We're hoping to have as many Johnson county folks at our meeting in Linn county. I don't remember who it was, but it was one of the Johnson county members who said, "If they could come this far to our picnic, I guess we can go to theirs." One of the longest drives was made by Mr. and Mrs. C. F. White, Shawnee County.

News of the Linn county presentation picnic will be in the club story for June 12.

### Attention, Leaders

Here's a new stunt to have at your monthly meetings. Of course, you remember the letters on different poultry topics which have been sent to you from time to time. We're going to call those letters lessons, and I'm going to give you a little test to have at your next meeting. I know that just



## Farm Questions

Address all inquiries intended for this column to John W. Wilkinson, Farm Question Department, Kansas Farmer and Mail and Breeze, Topeka, Kansas.

### Possibly Chicken Cholera

I have a good flock of hens and I have lost a large number. You can't tell that they are sick. I find some on the nest dead and some drop off the roosts dead. Can you tell me what the trouble is? We have been feeding them oats, wheat and corn. Please tell me what is good for it.  
Manchester, Kan. A READER.

I am unable to tell what is causing the trouble with these chickens, but the symptoms are very similar to those of chicken cholera.

There is no sure cure for this disease and the only method of treatment is to prevent the spread of the infectious material from one bird to another. This may be accomplished to some extent by the use of potassium permanganate in the drinking water, enough crystals to give the water a deep wine red color. We also recommend Epsom salts as a physic, about one teaspoon for each bird. This may be given by mixing with moistened cornmeal or bran.

The chicken house should be cleaned each week, and if the weather is warm enough, it should be sprayed with a good stock dip. The stock dip not only acts as a disinfectant and destroys bacteria, but also kills lice and mites. The birds should not be permitted to collect under barns, sheds, stacks or any place not reached directly by sunlight, since it is in places of this sort that infectious material may live for a long time and may cause a new outbreak of the disease. We have found that feed has considerable influence upon susceptibility of chickens to disease. Birds fed on a ration too high in grain are always more susceptible than those fed on a balanced ration. We recommend the addition of sour milk, meat scraps or tankage to the grain feed.

The sick birds should be removed from the flock as soon as they show the first signs of disease and should be given special treatment. The dead birds should be burned or buried several feet deep in the soil.

L. D. Bushnell.

### Straw Dressing for Alfalfa

I read your valuable paper with interest and profit. I am desirous of more alfalfa, clover, timothy and pasture on my farm. The article on alfalfa in the Kansas Farmer and Mail and Breeze by L. E. Call was an inspiration. The great hindrance to the growth of these crops is the drought of the latter part of July and August.

I am wondering if a light spread of straw after sowing in the spring would be helpful in conserving moisture; also if such treatment would be beneficial to the oat crop. I would appreciate an opinion from you or any of your readers who have had experience in such practice.

Parsons, Kan. J. T. FOMBELLE.

While it is true that the dry weather thru July and August is very hard on timothy, clover and other cultivated grasses, I would not consider dry weather at this period of the year especially injurious to alfalfa except that it reduces the yield of the summer cuttings. It will help any young seeding of grass to top dress it with straw or light manure. I would not recommend seeding alfalfa with a nurse crop of oats; in fact, I would very much prefer to seed the alfalfa in the fall without a nurse crop. In that case, any top dressing put on the crop should be applied in the fall to serve as a protection over winter. It would then be beneficial in serving as a mulch too, thru the following summer.

Timothy and clover can be seeded with oats used as a nurse crop but when the summer is dry these crops will suffer after the small grain is harvested and there will be many summers when they will fail to make a stand. It is possible to seed clover and timothy in the fall of the year. The objection, of course, to this method is the expense involved in preparing ground especially for the grass crop.

L. E. Call.

### Remedy for Colic

I have a horse which is subject to colic. Can you tell me a sure relief?  
Cumtux, Idaho. P. C. HENNE.

I wish to state that it is very difficult to prescribe for a horse in which no other symptoms are given than that the horse is subject to colic. The term "colic" means that the animal has pain in the abdomen, and as this may be due to a good many different causes, you can readily understand

that no single remedy will be of value in all of them. In fact, a remedy indicated for one form of colic might be positively harmful for other forms.

A most frequent cause of repeated attacks of colic is acute indigestion. Acute indigestion in turn may be due to diseased teeth or having improper food. I would therefore advise that you have this animal's teeth examined and treated if they are diseased, and that you feed the animal on wholesome, easily digested food. The bowels should be kept cleared out by an occasional feed of bran or flaxseed meal.

Dr. R. R. Dykstra.

### Johnson Grass

Now that there is no law against Johnson grass, how would it do to broadcast on a poor pasture? Will it stand drouth and does it come on quick in spring and last late in fall? How many head would 40 acres of it carry? Where can you get seed and how much should be sowed to the acre? Give cost a pound or bushel. I have been told that you can get rid of it with sheep and that will eat it down into the ground. Is it true?  
Howard, Kan. R. RUSSELL.

While there is no law against the planting of Johnson grass in this state, I believe that you would be making a very serious mistake in sowing a pasture to Johnson grass. The grass cannot be easily killed in your part of the state. In fact, it would be extremely difficult to eradicate it after it was once established. It cannot be killed by grazing with sheep, at least

not in a single season. It grows not only from seeds but from underground root stocks which enable it to live over from year to year. The only way that it can be killed out is to prevent its seeding and to fall plow and expose the root stocks to severe freezing in the winter. I believe that Johnson grass seed could be obtained from the Barteldes Seed company of Oklahoma City, Okla., but I am unable to give you any information regarding the cost.

L. E. Call.

### Capacity of Silo

How many tons of green cane silage will a silo hold that is 12 feet wide and 16 or 20 feet high? Must I use water in putting up green cane silage? Send me dimensions of smallest silo that can be used. I only wish one for a few milk cows, one span of mules and a few hogs. I plan to use 2 by 4 studs and side it up on the outside with 1 by 4 flooring with a heavy hoop around center.  
Rich Mountain, Ark. C. E. BURK.

Your silo 12 feet in diameter and 16 feet high will hold about 33 tons of settled silage. A silo 12 feet in diameter and 20 feet high will hold approximately 42 tons of settled silage.

Whether or not you use water in putting cane in the silo, will depend upon the condition of the cane. We usually allow the cane to get quite mature before putting it into the silo. At the time it is ready to go into the silo the seeds should be hard enough that they cannot be crushed between the thumb and finger. At this time the stalk will

usually contain sufficient water to cause it to pack well. In case you think it is not sufficiently heavy I would add water to it to make it pack well.

In most cases, a silo less than 8 or 10 feet in diameter is impracticable. A silo 8 or 10 feet in diameter probably would feed about 10 head of cattle.

In erecting a silo with 2 by 4's and 1-inch flooring, it will be necessary for you to put more than one hoop around the silo. The greatest pressure will come toward the bottom of the silo and your heaviest re-inforcements should be in the bottom 4 or 5 feet of your silo.

J. B. Fitch.

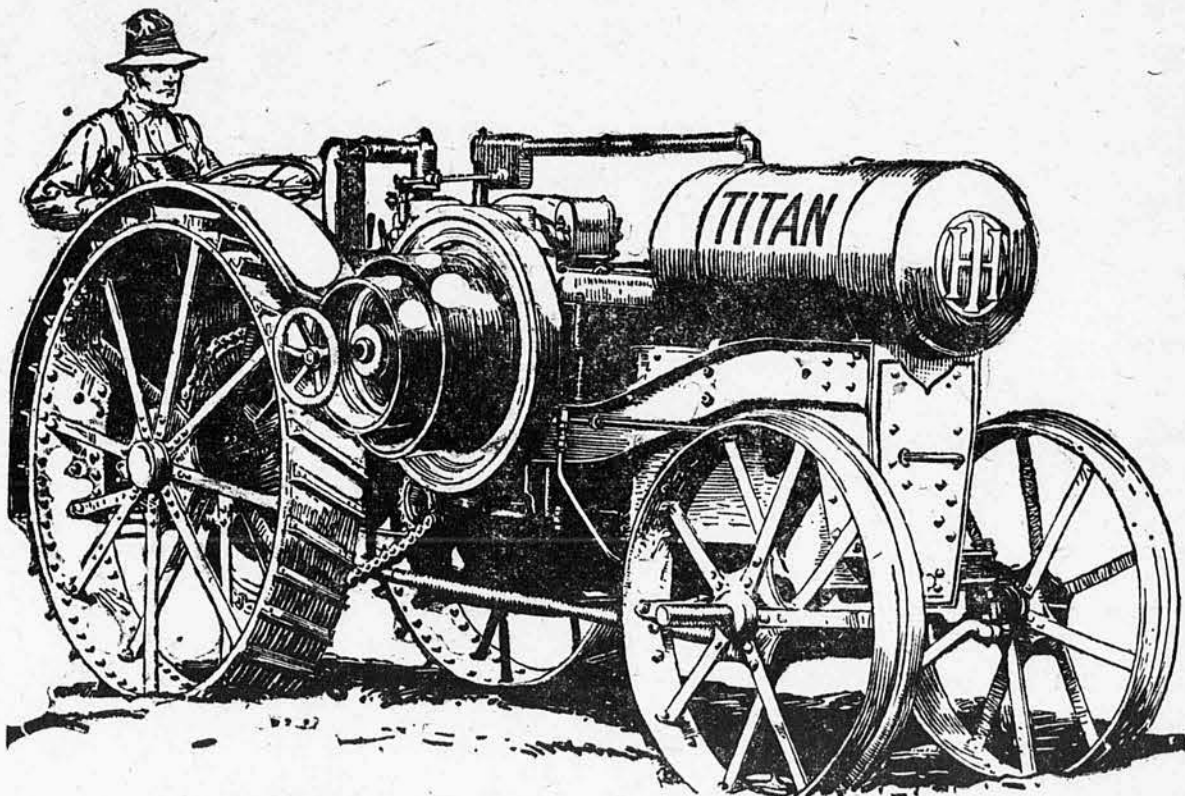
### Planting Foreign Seed Corn

Will 90 day corn from Iowa or Ohio produce well in South Central Kansas?  
A SUBSCRIBER.

It would not be advisable to plant in South Central Kansas corn the seed of which had been grown in Iowa or Ohio. We find that corn brought from an Eastern state into Kansas is usually very unsatisfactory for seed the first two or three years.

If you wish to get an early variety of corn I would suggest a variety such as Colby Bloody Butcher, Freed's White Dent or Pride of the North that had been grown in Kansas two or three years or the seed of which had been obtained from Central Nebraska.

L. E. Call.



## Drawbar Time— and Titan Tractors

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Rely on the good material in Titan construction, and in kerosene economy. Be sure of practical details and conveniences—such as Titan wide fenders, comfortable platform and seat, and adjustable drawbar—making for day-after-day satisfaction in the field.

A little later when the belt-power season looms biggest, such essentials as the throttle governor, and the large, wide friction-clutch pulley in **Titan 10-20** will demonstrate again the wisdom of your choice.

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Take into consideration the fact that of the 1,434,909 new motor vehicles put into service in 1919, approximately 573,964 went to farms, and you will appreciate the necessity for this vast distributive system.

The Standard Oil Company (Indiana) appreciates that the automobile has passed from the realm of luxury and has become an essential, and that gasoline to run it has become an industrial necessity.

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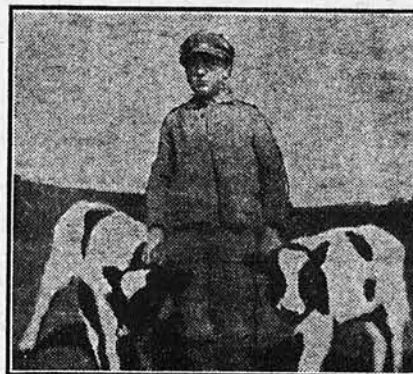
## With the Capper Calf Club

Let's Get a "Running Start" for Next Year

BY EARLE H. WHITMAN  
Club Manager

YOU ALWAYS can jump farther if you get a running start, can't you? That's foolish question No. 376, isn't it? Of course you can. Did you ever stop to think, tho, that you can go much farther in many ways if you get a good start? The principle can be applied often, but just now we want to make it work for the success of the Capper Calf club.

The club for 1920 had to take what the boys call a "standing" start for the contest. Next year, tho, we're going to get a "running" start, and how much of a start it will be depends upon this year's members. Here's what



John Morschauser, Geary County

we're going to do. In every county in the state boys and girls will be invited to enroll as associate members for 1920 and become active members for 1921. Recommendation blanks will be provided by the club manager, and every associate member will be required to file recommendations with the county leader or with the club manager. The work of associate members this year will be entirely social—that is, they will be expected to attend county meetings and to familiarize themselves with the club work. When the new contest opens, these associate members will be enrolled as active members without further recommendations, and they then will get their contest calves. Associate members who show proper interest in club work will be invited to attend the big pep meeting at Topeka in September.

This is a big opportunity for every present club member. Lining up your friends as associate members will mean companionship this year and a better team in 1921. I know every boy or girl who is alone in a county would like very much to have company. In the contest for the pep trophy, every new associate member added will mean extra credit. And perhaps we'll be able to fix up a prize of some sort for the associate members to compete for. Every Kansas boy or girl who will be between 12 and 18 next year is eligible to become an associate member. Any club member who can get friends interested should write to the club manager for blanks. Only five associate members will be enrolled in a county.

What do you think of the club members and calves I'm showing you this time? Pretty fine—all of them—aren't they? First, meet Bertha Dawdy of Shawnee county with her two Guernsey calves. I wonder whether Bertha is prouder of her Guernseys than John Morschauser of Geary county is of his Holsteins. Club pictures are coming along well now, and I'm glad to use all that are clear enough to print.

This is a tremendously busy morning for the club manager, and now that he's told you about the plan for associate members and introduced you to Bertha and John, why shouldn't he let club members themselves finish this story? The biggest pleasure in club work is reading the many interesting letters that are received. If they interest me, they'll interest all the girls and boys in the club, so I'm going to give you extracts from the few for which I have space:

My Holstein calves are doing just fine. I named them Bonnie Bell and Daisy Dell. Bonnie has a little black spot on each knee, and both have white spots on their faces. I have been trying to get the calves to eat grain. They drink milk all right.—Mildred Brown, Reno County.

My little calves surely are doing well, and I couldn't begin to put them back into the crates in which they came. They never miss a meal and always are ready to eat and play. It is hard to tell who is the club member around here, as the whole family pets them. For the benefit of other club members I will tell my experience with calf meal. I tried feeding it in the milk and had lots of trouble with scours for a few days. So then I decided to try feeding it with the dry grain and am having fine success. I tried using eggs for the scours, but as they did no good I used one of mamma's old recipes—extract of ginger. I gave them 1 teaspoon every hour or two until several doses had been given, and this remedy did the work and they have not had scours since.—Bertha Dawdy, Shawnee County.

John isn't here to tell you about his calves so I'll tell you. I wish you could see them. They are so pretty. Of course, they are rather thin after their journey from Wisconsin, but we'll soon have them in good condition. We got word Friday evening that they were in town, so father quit work right away and got them. We children could hardly do our chores, as we were so afraid father would get home and we wouldn't see him as soon as he got here. Well, father finally came and we all dropped work and ran to see the calves. I was surprised when I saw them, as they were so much bigger than any of ours of the same age. When we fed them we could hardly keep their noses in the pail as they were so hungry they wanted to drink it all at once. We turned the calves out in a big lot this morning, and they were so glad to get out. I want to join the calf club next year, if John or Dorothy doesn't get in first. I have a cow and calf now, but they are just scrubs. If I join the calf club next year I'll sell them to buy my calves.—Myrtle Dirks, Butler County. (Myrtle is the hustling poultry club leader in Butler this year, and we'll look forward to having her in the club next year.)

We had a lot of fun when the neighbors came in to appraise my calves. I turned them out and the men looked at them and decided what they thought they were worth. No sooner had they spoken than both calves began kicking, and one man said they were objecting to the value put on them.—William Bryan, Johnson County.

I have my calves now. They certainly were glad to get out of their crates, for they were so stiff they could hardly stand. They're running and playing now, tho. I have named them Cupid and Domino. I'm going to do my best in keeping my records. I'm surely proud of my calves and hope to win a prize.—Merle Harms, Pottawatomie County.

I have two nice Red Polled calves, and they surely are pretty. They had been running with the cows and were quite wild when I first got them home, but now they are getting more gentle and tame.—Wendell Hayes, Pottawatomie County.

I have named my Holstein calves Daisy and Dollie. My father said one is a "daisy" and I think the other is just like a little doll. I have read quite a few letters in the club stories about the members having to break their calves to drink. Mine were broken when they came. Nearly everyone who sees them says they are nice. I feel sorry for the boy who was so unfortunate as to lose one of those fine-looking calves. My little brother is 4 years old now, but when he is older he's going to be a calf club member. He likes my calves and says one of them is his.—Mildred Pressnall, Republic County.

My calves were very lank and hungry when they reached me after their long ride. I fed them two eggs apiece as soon as they came in the morning, then fed them eggs



Bertha Dawdy, Shawnee County

again that evening, also 1 pint of milk apiece. I didn't have to break them to drink their milk, just stuck their heads in the bucket. They never turn their milk over. I made rope halters for them and I can lead them anywhere. Every person who sees my calves says they are beautiful. I don't believe any member can have much finer calves.—Anna Wise, Ford County.

### John Burroughs Still Lives

The famous naturalist, John Burroughs, celebrated his 83rd birthday April 3 at the home of his friend, Frank Seaman, in Ulster Co., N. Y. He began the day by chopping wood before breakfast, as usual, and later he collected sap from maple trees. In response to many congratulations he gave to the world the following message: "Keep cheerful and get out more and better newspapers, that the world may be benefited."

Most soils need more humus.



## Orchard and Garden

UNTIL a few years ago there was no satisfactory fungicide which could be sprayed on peaches during the growing season without seriously injuring the foliage. Everything which was tried to control the brown-rot fungus resulted in damage that made it prohibitive. Finally a simple mixture made by adding flour of sulfur to slaking lime was found by the investigators of the United States Department of Agriculture to have just the right qualities.

The peach crop of this country, according to the 1910 census, was valued at approximately 20 million dollars. It is estimated that, with the increased production and increased prices resulting from control of brown rot and other fungous diseases, the present annual peach crop of the United States is worth between 50 million dollars and 60 million dollars. Of this probably 15 to 20 per cent would be destroyed annually by brown rot if no control measures were used. On the other hand, between 5 million dollars and 10 million dollars is saved to the fruit grower and at the shipping points as a result of the discovery mentioned. Not only is the grower able to produce an increased quality of fruit but the sprayed fruit is much superior to the unsprayed, so that its value is enhanced and all concerned—growers, carriers, dealers and consumers—benefit correspondingly.

### Trees on the Farm

When planning a farm home select a location near some good trees if possible so that shade may be enjoyed by the family all the hot summer days of the year.

It takes so long to grow good shade trees that the existing ones should be cherished and utilized to the fullest extent. According to United States Department of Agriculture experts, trees should not be planted right in front of a house but somewhat on each side so that a view can be had from the house and the house may be seen from the road.

### Vines for Screens

A few vines around the porch will shut out the hot sun in the summer and make it a more comfortable place in the afternoons. Try planting a few velvet beans or Kentucky Wonder beans. The vines will make a good screen and also will afford considerable shade.

### Watch for Currant Worms

To control currant worms a spray of any arsenical poison can be used. This should be applied as soon as the worms appear. Use 1 to 1½ ounces of arsenate of lead to a gallon of water and apply when the foliage is dry. Paris green can be used and if it is put on the leaves when they are dry it will do the work in 24 to 36 hours.

If the worms do not appear until the fruit is ripe then do not use arsenical sprays, but white hellebore as the latter is not poisonous to individuals, altho it kills the worms.

### Fertilizers for Orchards

All fruits are borne on new wood. This may be the wood at the end of the fruit spurs; or from lateral buds springing from the annual new twig growth. Naturally this new wood must be grown before the fruit can be produced.

Ammonia is the plant food most effective in producing new wood and vigorous foliage. When, therefore, the wood growth of apple, peach or other fruit is poor, or when the loss by death of old wood out-balances the annual gain from the growth of new, the fruit grower may be certain that the time has come to fertilize his orchard. High ammonia fertilizers are then needed.

Where apples are grown in sod, as under the sod-mulch system, the fertilizer has a double duty, first that of producing a satisfactory growth of new wood and secondly that of growing a heavy mulching crop. A fertilizer carrying 5 or 6 per cent of ammonia often gives excellent results under these conditions.

When apples are grown in tilled orchards, less ammonia is needed. For

a time the ammonia may be made available from that in the soil, thru tillage supplemented by leguminous cover crops. However, the fruit grower should watch his crop and when it gives indications of plant food shortage, supply the necessary fertilizers.

### Aids Onion Dealers

The inspection of a total of 20,000 sacks of Egyptian onions, which recently arrived at Boston and New York, illustrates the value of the fruit and vegetable inspection service maintained by the Bureau of Markets, United States Department of Agriculture, for the benefit of any shipper, purchaser, or other interested person who desires reliable information regarding the con-

dition of any specific shipment of fruits or vegetables. Soon after the arrival of these onions, which came in lots ranging from 400 to 10,000 sacks, the Federal inspectors were able to certify the exact condition of the vegetables after their long ocean journey. Most of the onions were in good condition. The fact that this could be definitely established was of importance to those concerned, for some of the lots arrived when the market was not altogether favorable. Had there been any doubt as to the condition of the shipments it probably would have worked to the serious disadvantage of the shippers or their representatives. As it was, the sellers were able to demand a price based, for the most part, on the goods being in first class condition.

### Growing Carrots

Amateur gardeners will find carrots an easy and satisfactory crop, experienced vegetable growers say, and they point out that if the garden is very large several rows of carrots should be

planted both for early use and for storage.

The ground should be thoroughly prepared and a fine loose seedbed worked up. Since carrot seeds germinate very slowly they should not be planted deep. It is advisable to mix a few radish seed with the carrot seed to indicate the rows, so that cultivation can start early; the radish seed also serves the purpose of breaking the crust that often forms over the row before the carrots start to grow. The radishes should be pulled as soon as the carrots are up.

An early variety of carrots will make roots large enough for table use and be out of the way in time to utilize the space for a fall crop of lettuce or some other vegetable.

Early varieties planted after the removal of early peas, lettuce or onions will make roots large enough for table use in the fall, but not for storage. For storage, a late variety should be chosen, which will require the entire season for growth.

## It Is The Market That Pays Farm Dividends

IN log cabin days, money was almost a curiosity to the farmer. He did not produce more than his community could use, for there was no demand for his surplus. Goods were produced and bartered locally; there was no distinct market.

The chasm between the dirt-floored log cabin in the stumpparr'd corn patch and the electric-lighted farm home of today with its machine-farmed acres was bridged by Distribution—transportation plus business organization. Railroads plus such food-preparing and food-marketing concerns as Armour and Company, have made possible the selling of a tremendous surplus from every farm community.

### Cash Market Means Prosperity

Ready cash paid the farmer means tiled bathrooms, automobiles and labor-saving machinery for the farm and prosperity for the manufacturing city.

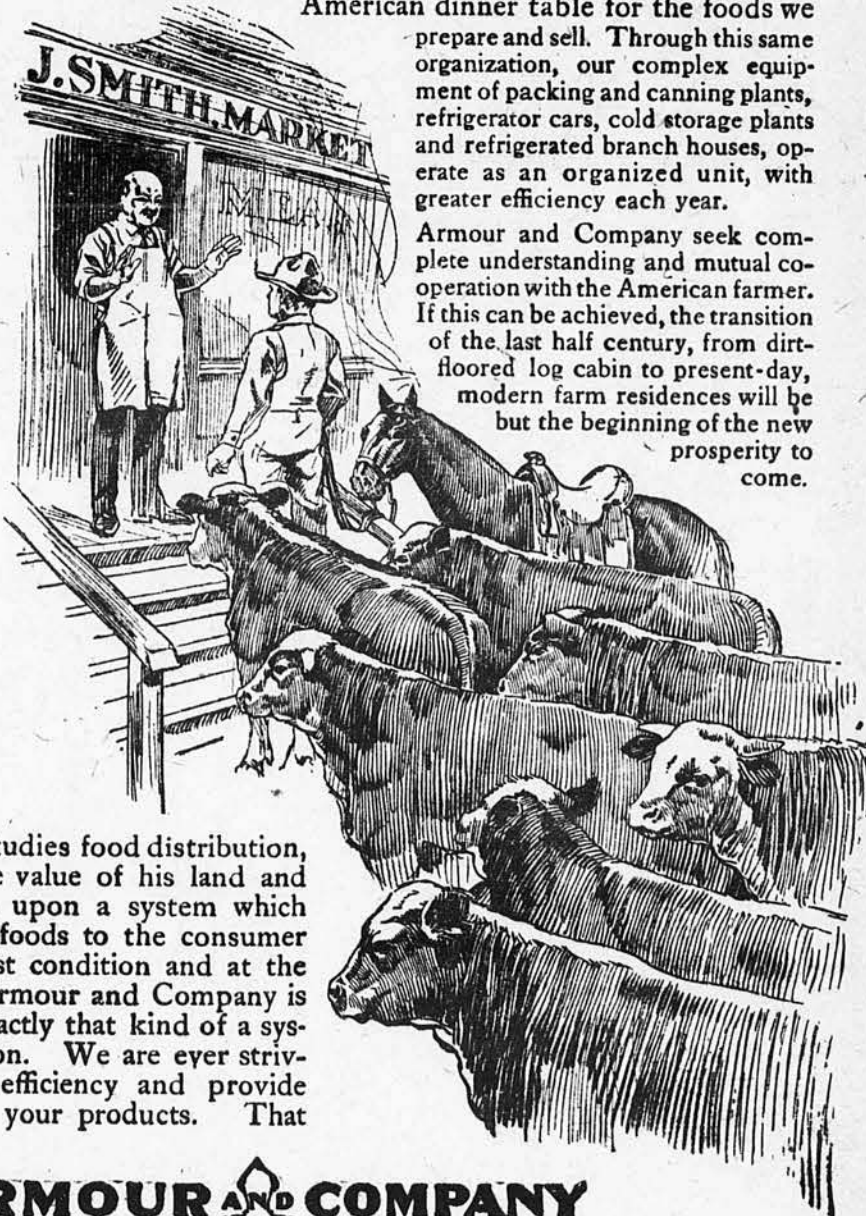
The modern farmer studies food distribution, for he knows that the value of his land and its products depends upon a system which prepares and delivers foods to the consumer swiftly, evenly, in best condition and at the least possible cost. Armour and Company is helping to provide exactly that kind of a system of food distribution. We are ever striving to improve our efficiency and provide a better market for your products. That

is good for you and good for us—since it increases the volume of our business.

The organization of Armour and Company, in spite of the complexity and breadth of our work, is the great reason for our ability to provide you a perpetual cash market. Through it, Armour standard quality and dependable service have won a permanent pathway to the American dinner table for the foods we

prepare and sell. Through this same organization, our complex equipment of packing and canning plants, refrigerator cars, cold storage plants and refrigerated branch houses, operate as an organized unit, with greater efficiency each year.

Armour and Company seek complete understanding and mutual cooperation with the American farmer. If this can be achieved, the transition of the last half century, from dirt-floored log cabin to present-day, modern farm residences will be but the beginning of the new prosperity to come.



**ARMOUR AND COMPANY**  
CHICAGO



# The Adventures of the Hoovers

*There's a Wedding at the Hoover Ranch and Buddy Gets in Bad as Usual Because Too Much Joy is in Actual Evidence on His Part*





## Among Colorado Farmers

(Continued from Page 24.)

At the end of the 40-day period dried molasses beet pulp, beet molasses and cottonseed cake were included. Lots 1 and 2 were fed the standard beet by-product combination. Where available there is no ration to compare in economy or fattening qualities to this. Here are the results secured during the 110-day fattening period:

Ration Fed	Aver. Daily Gain	Cost a Lb.
Wet beet pulp, cake.....	2.31	14.4c
Beet molasses, alfalfa.....	2.45	13.5c
Dried molasses beet pulp, cake, alfalfa.....	1.71	23.1c
Dried molasses beet pulp, beet top silage, cake, alfalfa.....	1.55	23.2c
Corn silage, beet molasses, cake, alfalfa.....	2.30	15.4c
Alfalfa.....	.82	29.4c
Beet molasses, \$20 a ton; dried molasses beet pulp, \$25 a ton; wet beet pulp, \$2.50 a ton; cottonseed cake, \$80 a ton; corn silage, \$8 a ton; beet top silage, \$3.24 a ton; alfalfa hay, \$20 a ton.		

The standard beet by-product combination is therefore used as the standard with which to compare the other rations.

The steers in lot 2 pastured on tops this year got a serious set-back from which they never recovered, even tho fed the standard ration to the end. This fact showed up plainly when they were marketed. Compared to lot 1, fed wet pulp and hay during the first period, they sold for 25 cents a hundredweight less and dressed out  $\frac{3}{4}$  per cent less.

## Value of Molasses Feeds

Dried molasses beet pulp fed as a lone carbohydrate along with cake and hay altho it cost more did not prove so valuable a pound of dry matter contained as did the wet pulp and molasses fed in lot 1. The dry matter required a pound of gain with dried molasses beet pulp was 5.3 pounds and with wet pulp and molasses was 4.9 pounds.

Results secured last winter by some feeders in Northern Colorado have tended to show, however, that the dried molasses beet pulp mixed with corn, barley or some other cereal grain is a valuable feed, a finding which will be tested out in the experiment next fall.

Experiments carried on at this station have clearly demonstrated the value of a limited amount of beet molasses added to the fattening ration. At present prices this feed has proved most economical and if available should not be left out of the ration.

The results secured with corn silage this year tend to show that steer feeding may be profitably carried on at points where wet pulp is not available.

Silage fed steers put on economical gains and brought the same price a hundredweight as did the pulp fed steers on the Denver market. They dressed out  $\frac{1}{2}$  per cent better and were graded next to them in quality and uniformity of carcass, coming next to the top in that respect.

One ton of silage produced the same gains as 2.54 tons of wet pulp. Many feeders are unable to secure enough pulp to last them thru the feeding period. It has been found that corn silage can be used to replace pulp in the ration, and keeping a succulent feed before the steers always pays in the end.

## Financial News for Farmers

(Continued from Page 26.)

15, 1933, and is payable October 15, 1938. In the foregoing we took the market at \$84.06 and spread the difference between \$100, par value, and \$84.06 over the 18 years the bonds have to run, giving a return of 5.00 per cent.

Victory loans are in two series. The 4 $\frac{3}{4}$ 's, to the amount of \$3,551,023,850, are redeemable June 15 or December 15, 1922, and payable May 20, 1923. They have only three years to run now and when you buy at \$95.11, for example, you get a saving of \$4.89. Spreading this \$4.89 over only three years and adding it to the interest at 1 $\frac{3}{4}$  gives a total interest of 6 $\frac{1}{2}$  per cent. Interest on this issue is payable June 15 and December 15.

The 3 $\frac{3}{4}$  Victories were issued May 20, 1919, for \$940,465,100 and run to May 20, 1923. They may be figured exactly as shown in the other issues.

Tax exemptions vary among the different issues, but for the man or woman with a few hundred dollars or a few thousands, taxes on this investment need not be considered. If you are thinking of buying Liberty bonds, pick out

the series that appeals to you, because of interest rate and length of time until maturity and then ask the nearest banker what are the tax regulations on that issue. He has two or three little books that tell all about it.

Today the man with money to invest is the only consumer who is getting more for his money than he did before the war. That is true, if he will only select Government bonds or some other sound security and not insist on buying one of these fakes that are being so widely peddled to farmers at this time.

## Away with the Flies

A Farmers' Bulletin, No. 1097, on The Stable Fly, has just been issued by the Government. It contains much material of great value in aiding in reducing losses from these pests. It is especially timely just now and should

be in the library of every Kansas farmer; it can be obtained free on application to the United States Department of Agriculture, Washington, D. C.

## Raising Capons Profitable

George Beuoy, who owns the Dingley Dell farm at Cedar Vale, Kan., and who raises Barred Plymouth Rock chickens, says capon raising is one of the most profitable industries in which a farmer can engage at this time. The prices paid for good, well fattened capons last year were exceptionally high. Poultry raisers in some sections received as high as \$1 a pound for fancy dressed capons. These capons weighed, when dressed, about 8 pounds each.

High prices and scarcity of meat producing animals caused the capon

industry to increase. Many farmers entered into the business who previously neglected this part of poultry raising. Of course, everyone was not able to get as high a price as \$8 for capons. To bring that price producers must be near a market where capons are in demand as special table meats. However, the price of good capons in almost every state has not gone far below \$5. The average price of good capons has fluctuated between 35 and 60 cents a pound during the last two years. As capons cost less to raise them pound for pound than any other kind of poultry, the profit is correspondingly greater.

The use of commercial fertilizers, especially those strong in phosphorus, is increasing in Southeastern Kansas.

A larger acreage of the sorghums will be planted in Kansas in the future.

# HERMOLINE

A BETTER LUBRICANT

—FROM THE FORMULA OF A MOTOR COMPANY

## Refined Especially for Tractors

Tractor Service is hard service for a lubricant. While an automobile engine works at about 25% of its capacity a tractor motor works at 75% of its capacity or more.

There is no such thing as coasting with a tractor motor. Its great internal combustion engine carries tremendous loads and develops terrific heat. Even under average working conditions the cylinder walls are heated to 350 degrees.

Naturally, then, the matter of a lubricant is vitally important in the efficient operation and life of a tractor.

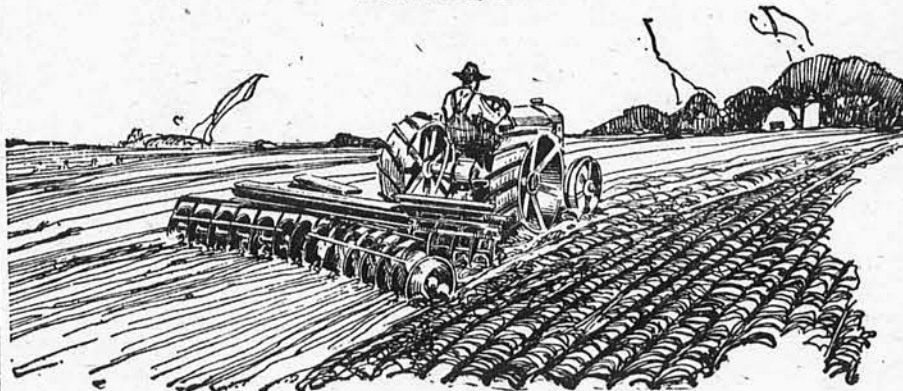
HERMOLINE is especially refined for the extremely heavy work and the excessive heat developed within a tractor motor. Any oil expert will tell you that the best lubricants are made from Pennsylvania crude. And in developing HERMOLINE for use in tractors there was just one best field from which the finest oil could be secured—Pennsylvania—and the HERMOLINE engineers went there.

There was just one formula from which this Pennsylvania crude could be made into an ideal lubricant, and HERMOLINE engineers—the engineers of a motor company, not an oil company—did not stop until they had discovered that formula.

HERMOLINE possesses that much-sought-for but seldom-found feature of withstanding terrific engine heat without breaking down and allowing speeding metal surfaces within the motor to come in contact. HERMOLINE provides this protective oil cushion, stops overheating and retards wear.

Put it to any test you like, HERMOLINE is the lubricant you should insist on.

HERRING MOTOR COMPANY  
Des Moines, Iowa



## The Test of Oil Value

There are five tests by which the supreme quality of lubricants made from Pennsylvania crude oils are shown, and by these tests HERMOLINE lubricants are proved superior for use in your motor car, truck, tractor or aeroplane.

## Gravity

The gravity of an oil shows its density. Lubricants like HERMOLINE, made from Pennsylvania crude oils, run high in gravity (from 30 to 33 degrees), and are invariably filtered oils that contain a small percentage of carbon.

## Viscosity

The viscosity test shows the ability of oil to retain its body under extreme heats. Inferior oils usually have a high viscosity, while Pennsylvania oils have low viscosity (from 150 to 240 at 70°), but when subjected to a heat anywhere near the temperature of a working motor Pennsylvania oils surpass all in viscosity and lubricating capacity.

## Flash and Fire

The flash test shows at what temperature the vapors coming off the oil will ignite when a small flame is brought close to its surface.

The fire test shows at what temperature the oil itself will burn. Oils refined from Pennsylvania crude show a flash of 400° Fahr. and over—a fire test of 450°.

## Color

Some of the lightest colored oils often contain the most carbon, so that tests of color should never be taken as proof of quality without the other tests described in this column.

## Filtering

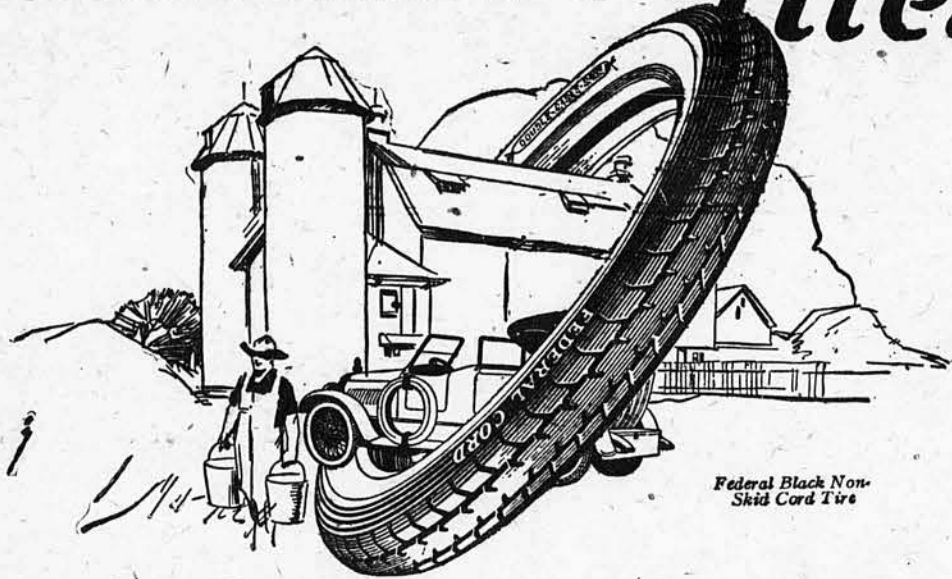
Oils made from Pennsylvania crude may be depended upon as being truly filtered oils when they have a high gravity (from 30 to 33 degrees). You will note that HERMOLINE oil has both light and color and high gravity.

Ask your dealer for the HERMOLINE booklet—it tells in detail how to prove oil value.



# FEDERAL

## Double Cable Base Tires



### Tire and Wheel Are One

When you use Federal Tires, your power drives the car—it doesn't run a grist mill, of wheel-rims against tires.

Federal Tires are grappled inseparably to the rims by four steel cables—the Double-Cable-Base—exclusive to Federal Tires.

This is why Federal Tires do not come off, slip, slide or creep, rim-cut or blow out just above the rim.

Avoid rim-troubles—get the mileage that thousands of other Federal users are getting. Go to the Federal dealer and equip with Federals.

THE FEDERAL RUBBER COMPANY, of Illinois, Factories, Cudahy, Wis.  
Manufacturers of Federal Automobile Tires, Tubes and Sundries, Motorcycle, Bicycle and Carriage Tires, Rubber Heels, Horse Shoe Pads, Rubber Matting and Mechanical Rubber Goods

### Silage and Maintenance Rations

BY G. C. WHEELER

Beef breeding cows should come thru the winter without losing weight. Getting cows thru the winter with a minimum of expense is necessary, but economy cannot be carried to the extent of bringing them up to calving time in a weak, emaciated condition. Silage is becoming an important factor in maintenance rations, for it has been shown that an acre of fodder in the silo will produce on an average as much gain as 2.4 acres of the same feed in the form of dry fodder.

The relative efficiency of silage and dry fodder in maintaining beef breeding cows thru the winter period was tested at the Fort Hays Experiment station the last season. Two groups of cows were fed, the cows in one group getting cane silage at the rate of 30 pounds a head daily and the cows in the other group cane fodder, approximately the same weight to the animal daily. In addition the cows in both groups had free access to wheat straw and were given 2 pounds daily to the cow of either cottonseed cake or linseed oil meal. A comparison of cottonseed and oil meal was involved in the test, but this did not interfere with comparing the silage and dry fodder.

Silage fed cattle seem to have a craving for a certain amount of dry feed. Even tho getting all the silage they will eat, they will consume more straw than cows fed dry fodder. In this wintering test in which the feeding period considered was 90 days, the silage fed cows ate almost 12 pounds of straw a head daily. The fodder fed cows consumed 8 pounds of straw daily.

The cows fed silage made an average gain to the cow of 64.16 pounds. The fodder fed cows gained 74.03 pounds to the cow. The cows had really lost in actual body weight, for the gain was not enough to account for the calf developing in utero, but the average stockman expects his cows to show losses in weight during this period. A study of the records shows that in the silage fed lot the feed consumed to each 100 pounds of increase was 4,220 pounds of silage, 1,630 pounds of straw and 280 pounds of cottonseed meal. In the fodder lot the gains cost at the rate of 3,520 pounds of fodder, 970 pounds of straw and 240 pounds of cottonseed meal to each 100 pounds of increase.

Comparing ton weights alone the figures show that a ton of fodder was equivalent to 1.2 tons of silage, but it required twice the acreage to produce 100 pounds of gain in the lot where fodder was fed instead of silage. On this basis an acre of cane in the silo was enough for four or five cows for a 5-month period when fed with straw and a little cottonseed cake or linseed oil meal. Ten acres of silage would winter 43 cows, estimating a yield of 10 tons to the acre.

### Guernsey Facts

The following interesting facts and figures were brought out at the 43d annual meeting of the American Guernsey Cattle club recently held at Chicago. During the year 1920, Guernsey registrations show the gain of 18.82 per cent and transfer a gain of 35.8 per cent. About 780 Guernseys were imported during the year of which 664 were from the Island of Guernsey, 82 from the Island of Alderney, 15 from England and the remainder from other points. The number of cows of official test May 1, 1920, was 2,125, a gain of 74.2 per cent over the corresponding date of one year ago. The 9,186 records in the Advanced Registry averaged 9,042.91 pounds of milk and 452.57 pounds butterfat. The registration fees were increased to \$2 for members and \$3 for non-members. The increased revenue to be used for promotion work.

### To Save Butterfat

Skimmilk tests which show more than .03 of 1 per cent of butterfat are evidence that butterfat is being lost. These tests are made at regular intervals by cow-testing associations and constitute one of the good points of the system. Unbalanced bowls and a deficiency in the speed of separators are responsible for loss of butterfat. Why not join an association and stop some of the leaks?

## Money Saving Order Blank

RENEW  
THREE  
YEARS  
SAVE  
\$1.00

### Presidential Campaign

A great political battle is approaching—the 1920 presidential election. Congress is solving the great after-the-war problems. Renew your subscription now and keep posted on all the big issues of the day.

### How To Save a Dollar

The regular subscription price of Kansas Farmer and Mail and Breeze is \$1.00 a year. You can save \$1.00 by sending us your order for a three-year subscription at \$2.00. Or you can send us two yearly subscriptions at \$1.00 each and get your own subscription free.

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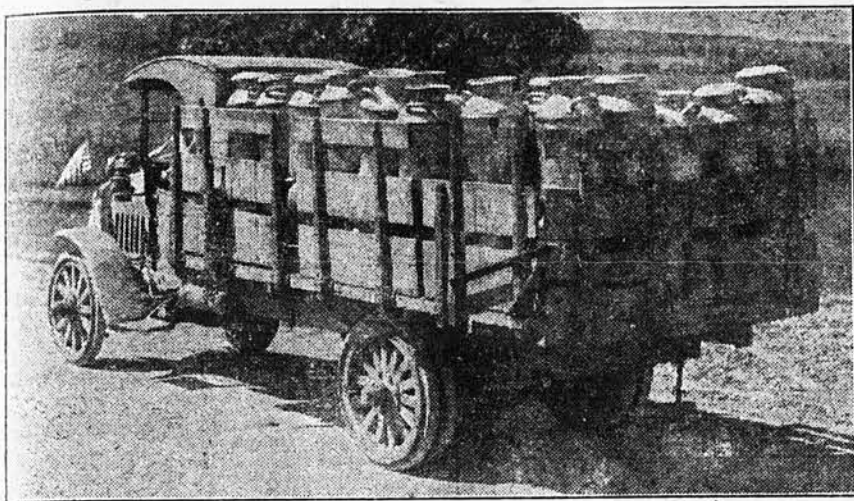
WHEN WRITING OUR ADVERTISERS MENTION KANSAS FARMER AND MAIL AND BREEZE



# Motorize the Dairy Farm

Trucks Cheapen Hauls and Speed Up Deliveries

BY JOHN W. WILKINSON



**M**OTOR cars and motor trucks have done more to popularize farming and dairying than any other kind of farm power machinery. Within the next 10 years it is estimated that the farmers of America will absorb at least 2 million motor trucks. This means that the motor truck will be more responsible for good highways than the motor car in the future. There is not a thing that the farmer raises that does not show an unanswerable argument for the need of a good truck. This is especially true of dairy farming. Milk, cream and butter must reach the markets and the customers with as little loss of time as possible. Railroad transportation during the past two years has been very unsatisfactory and unreliable. For short hauls the motor truck has been found far more satisfactory and trustworthy. For all short hauls of 60 to 100 miles the motor truck can easily compete with the railroad. This is especially true in hauling perishable goods such as milk, fruit and vegetables on which the rate of transportation is high. The motor truck is always ready and waits for nothing. It receives its load at the dairy farm and in a short time deposits the load at the door of the purchaser. It also insures the prompt return of the empty milk cans to the dairymen.

## Adapted to Many Needs

The motor vehicle lends itself admirably to every need of haulage by road, and possesses the further advantage that the motor can be used as an auxiliary power for operating a hoisting winch, driving a pumping engine, and varied other purposes. Development of dumping bodies, removable bodies, and tractors and trailers, has greatly enhanced the utility of the motor truck, permitted its more economic use in short-haul work, and cut down the expense of haulage by enabling the truck itself to be kept moving practically all of the working hours of the day.

Besides reducing hauling costs and the cost of retail delivery, the use of motor vehicles enables the dairyman to reach out into new territory and to make quicker deliveries, thereby materially increasing the radius of the territory from which trade can be drawn. There is a very definite limitation of the distance at which delivery can be made by horse vehicles, whereas it is not at all uncommon for daily deliveries to be made by motor truck at distances of 30 to 50 miles.

So long as the labor shortage continues and the railroad congestion is not very materially relieved, the ownership of a motor truck is going to be much more of an asset to the owner than ordinarily, as it will save him many annoyances and delays in moving his product and freight and generally expedite his business.

Milk is one of the most perishable foods and requires, perhaps more than any other, rapid transportation and quick distribution. Milk is being shipped in by motor trucks from all farming communities round about Detroit up to 42 miles. A report recently received states that one tractor hauls as many as 200 cans of milk, 11 2-10 tons, in one load from Plymouth to

Detroit, a distance of 32 miles, over good concrete roads. Shipments from Belleville into Detroit average 200 cans a day. The report from that source states that the rapidity of motor transportation has doubled the amount of milk and cream produced in the districts serving Detroit and has cut the loss in spoilage to practically nothing, while Detroit is getting a better product.

F. G. Stadmueller, of the Vine Hill Farm Company, Elmwood, Conn., uses motor trucks to cover a retail milk route of about 50 miles a day. In spite of the fact that each truck makes upwards of 150 daily stops, he has found maintenance and upkeep cost extremely low.

Robert W. Lohr, proprietor of Pleasantvale Farms, Boswell, Pa., whose specialty is purebred Holstein cattle, hauls dairy products from his 420-acre farm to Johnstown, 15 miles away, and altho the roads are bad he has no trouble in making two round trips a day.

At Mulvane, Kan., the motor trucks have been in use for some time in collecting milk for the condensery located at that place and their use has contributed much to the success of that plant. Several regular truck routes have been established there for that purpose. The truck has also proved its usefulness in bringing in much of the milk used by the condensery at Fort Scott, Kan.

Dairymen everywhere in the West have found the motor truck a great help in delivering their products to their patrons. It cheapens the haul, speeds up the delivery, and saves much valuable time and labor. It also insures the delivery of the dairy products in much better condition which will insure better prices and better satisfied customers. The only wonder is that more dairymen have not purchased motor trucks.

There are now 300,000 motor trucks in service in the United States. There are 4,100,000 farms of 50 acres or more in extent, every one of which could use one or more motor trucks to good advantage. According to a recent report of the United States Department of Agriculture at least 50,000 farmers in the United States own motor trucks which they use on their farms. The exact number of motor trucks reported is 49,195, divided among the states as follows: Alabama, 847; Arizona, 95; Arkansas, 721; California, 1,019; Colorado, 804; Connecticut, 357; Delaware, 100; Florida, 380; Georgia, 1,808; Idaho, 329; Illinois, 2,261; Indiana, 1,548; Iowa, 2,773; Kansas, 1,732; Kentucky, 818; Louisiana, 310; Maine, 435; Maryland, 596; Massachusetts, 661; Michigan, 1,636; Minnesota, 1,255; Mississippi, 957; Missouri, 2,065; Montana, 359; Nebraska, 2,739; Nevada, 41; New Hampshire, 283; New Jersey, 862; New Mexico, 104; New York, 3,171; North Carolina, 1,450; North Dakota, 501; Ohio, 2,261; Oklahoma, 723; Oregon, 369; Pennsylvania, 2,760; Rhode Island, 152; South Carolina, 1,190; South Dakota, 1,708; Tennessee, 978; Texas, 1,668; Utah, 173; Vermont, 282; Virginia, 1,128; Washington, 682; West Virginia, 465; Wisconsin, 1,465; Wyoming, 174.

Of course there are many more

(Continued on Page 51.)

You May Not Wisely Delay  
Ordering Your 1920

## DE LAVAL CREAM SEPARATOR

There are a dozen reasons why this is so.

For three years it has not been possible to make enough De Laval machines to meet the demand. More than ever are being made this year, but the demand is still greater.



Cream Separators have advanced less in price than anything else used or produced by the farmer during the war years. If labor and material costs continue to advance so must separator prices.

Such an advance must very soon come from increased freight rates, if from no other cause.

Freights are still slow and uncertain. There may be unavoidable delay in getting a machine when you badly need it from this reason.

The flush of milk and hot weather are near at hand, when a De Laval saves most and an inferior or half-worn-out separator wastes most.

There are still other reasons, which a De Laval best demonstrates for itself. You will have no difficulty in observing them. Every local De Laval agent will be glad to afford you the opportunity to do so.

If you don't know the nearest agent simply address the nearest main office, as below.

## The De Laval Separator Co.

165 Broadway  
NEW YORK

29 East Madison Street  
CHICAGO

61 Beale Street  
SAN FRANCISCO

50,000 Branches and Local Agencies the World Over



**SANDWICH**  
Hay Press  
**FREE BOOK**

**Big Profits in  
Baling This Year**

Write! Learn how big crops, high prices and demand insure tremendous profits for balers. Also why Sandwich bales 2 to 8 more tons per day without extra labor—saving \$4.00 to \$16.00 a day on labor alone. The Sandwich is all steel—lasts a life-time. Supplies own motor power—gas or kerosene fuel. Hopper cooled; magnets; friction clutch on press and other wonderful improvements. Tremendous power to handle hay, alfalfa, straw. FREE BOOK gives guarantee and full details.

SANDWICH MFG. CO., 27 Wood St., SANDWICH, ILL.

## Presidential Campaign Offer Daily and Sunday Capital

**\$2.50 From Now Until November 15 \$2.50**

The regular subscription price of The Daily and Sunday Capital is \$7.00 per year. On account of the coming Presidential Election we will send the paper from now until November 15, 1920, for only \$2.50.

United States Senator Arthur Capper, the publisher, is in Washington, and gets the news of the Nation's Capital first hand. Charles Sessions, managing editor, will attend and report the Republican Convention in Chicago and the Democratic Convention in San Francisco. The Capital leads in keeping its readers advised in all the news of the day. Its news is unbiased and unexcelled. Mail your check. Do it now.

DAILY CAPITAL, Dept. 6, Topeka, Kansas.

Enclosed find \$2.50 for which send me The Daily and Sunday Capital until November 15, 1920.

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Address .....



# FARMER'S CLASSIFIED ADVERTISING

Rate: 12 cents a word, each insertion, on orders for less than four insertions; four or more consecutive insertions the rate is 10 cents a word. Count as a word each abbreviation, initial or number in advertisement and signature. No display type or illustrations admitted. Remittances must accompany orders. Real estate and livestock advertising have separate departments and are not accepted for this department.

## TABLE OF RATES

Words	One time	Four times	Words	One time	Four times
10.....	\$1.20	\$4.00	26.....	\$3.12	\$10.40
11.....	1.32	4.40	27.....	3.24	10.80
12.....	1.44	4.80	28.....	3.36	11.20
13.....	1.56	5.20	29.....	3.48	11.60
14.....	1.68	5.60	30.....	3.60	12.00
15.....	1.80	6.00	31.....	3.72	12.40
16.....	1.92	6.40	32.....	3.84	12.80
17.....	2.04	6.80	33.....	3.96	13.20
18.....	2.16	7.20	34.....	4.08	13.60
19.....	2.28	7.60	35.....	4.20	14.00
20.....	2.40	8.00	36.....	4.32	14.40
21.....	2.52	8.40	37.....	4.44	14.80
22.....	2.64	8.80	38.....	4.56	15.20
23.....	2.76	9.20	39.....	4.68	15.60
24.....	2.88	9.60	40.....	4.80	16.00
25.....	3.00	10.00			

**Special Notice** All advertising copy discontinuance or change of copy intended for the Classified Department must reach this office by 10 o'clock Saturday morning, one week in advance of publication.

## EMPLOYMENT

**EXPERIENCED THRESHER COOK WANTS** Job. Suber, 2912 Kensington, Kansas City, Mo.

**WANTED—POSITION AS MANAGER** dairy farm. Experienced. Give information, also wages. Aaron Purdy, Canton, Kan.

**RAILWAY MAIL CLERKS WANTED.** Examinations July 14. List vacancies free. Franklin Institute, Dept. W 15, Rochester, N. Y.

**MASON SOLD IS SPRAYERS AND AUTO** washers one Saturday. Profits, \$2.50 each. Square deal. Particulars free. Rusler Co., Johnston, O.

**WANTED—MAN TO WORK AN 80 ACRE** fruit and chicken farm. 10 acre orchard started. Stocked. Working interest to right party. Box 1266, Memphis, Tenn.

**RAILWAY MAIL CLERKS NEEDED** everywhere. Experience unnecessary. Particulars free. Write Modern Civil Service Institute, Department 304, Denver, Colo.

**RAILWAY TRAFFIC INSPECTORS EARN** from \$110 to \$200 per month and expenses. Travel if desired. Unlimited advancement. No age limit. We train you. Positions furnished under guarantee. Write for booklet CM 17. Standard Business Training Institute, Buffalo, N. Y.

**DON'T WASTE YOUR SPARE TIME—IT** can be turned into money on our easy plan. We have a splendid offer for ambitious men or women who desire to add to their present income, and will give complete details on request. Simply say, "Tell me how to turn my spare time into dollars" and we will explain our plan completely. Address, Circulation Manager, Capper Publications, Topeka, Kan.

## BUSINESS OPPORTUNITIES

**FOR SALE—GOOD, CLEAN STOCK OF** drugs, including good 10 ft. fountain and sideboard, also good cases and store fixtures. Reason for selling, poor health. Tiger Drug Co., Box 132, Drumright, Okla.

**HANDLE MORE BUSINESS? ARE YOU** getting all the business you can handle? If not get big results at small cost by running a classified ad in Capper's Weekly. The Great News Weekly of the Great West with more than a million and a half readers. Sample copy free for the asking. Only 12c a word each week, 10c per word on four consecutive orders. Send in a trial ad now while you are thinking about it. Capper's Weekly, Topeka, Kan.

**PUT YOUR BUSINESS BEFORE MORE** than 1,000,000 farm families in the 16 richest agricultural states in the Union, by using the Capper Farm Press. A classified advertisement in this combination of powerful papers will reach one family in every three of the great Mid-West, and will bring you mighty good results. The rate is only 65c per word, which will give you one insertion in each of the five papers, Capper's Farmer, Kansas Farmer and Mail and Breeze, Missouri Ruralist, Nebraska Farm Journal, and Oklahoma Farmer. Capper Farm Press, Topeka, Kansas.

## SERVICES OFFERED

**PLEATINGS—MRS. M. J. MERCER, 800** Topeka Ave., Topeka, Kan.

**SWITCHES FROM COMBINGS, \$1.25** strand, postpaid. E. Elstrom, Kenmare, N. Dak.

**AUCTIONEERS MAKE BIG MONEY; 67** paged annual free. Mo. Auction School, Kansas City, Mo.

**PATENTS, BOOKLET FREE. WATSON E.** Coleman, Patent Lawyer, Pacific Building, Washington, D. C.

**TOBACCO OR SNUFF HABIT CURED OR** not pay. \$1 if cured. Remedy sent on trial. Superba Co., Sy. Baltimore, Md.

**SEND DEVELOPED FILM AND STAMP** for sample of our lustre prints. Nothing better. Reed Studio, Dept. A. Norton, Kan.

**LET US TAN YOUR HIDE. COW, HORSE,** or calf skins for coat or robe. Catalog on request. The Crosby Frisian Fur Co., Rochester, N. Y.

**BE AN EXPERT PENMAN, WONDERFUL** device guides your hand. Corrects your writing in few days. Complete outline free. Write C. J. Ozment, 40 St. Louis.

**VEIL MATERNITY HOSPITAL FOR** young women before and during confinement; private; terms to suit; babies adopted free. Mrs. C. M. Jones, 15 W. 31st, Kansas City, Mo.

**FAIRMOUNT MATERNITY HOSPITAL** for confinement; private, prices reasonable, may work for board, babies adopted. Write for booklet. Mrs. T. B. Long, 4911 East 27th St., Kansas City, Mo.

**INVENTORS WRITE FOR OUR ILLUSTRATED** book and evidence of conception blank. Send model or sketch for our opinion of its patentable nature. Highest references, prompt service. Reasonable terms. Victor J. Evans & Co., 825 Ninth, Washington, D. C.

## SERVICES OFFERED.

**KODAK FINISHING BY MAIL. FILMS** developed free. Prints 3 to 6 cents. W. W. White, Box 326, Birmingham, Ala.

**HIGH PRICES PAID FOR FARM AND** dairy products by city people. A small classified advertisement in the Topeka Daily Capital will sell your apples, potatoes, pears, tomatoes and other surplus farm produce at small cost—only one cent a word each insertion. Try it.

## WANTED

**WANTED—12 OR 14 FOOT PUSH BINDER.** State make, time used, condition, and cash price. Hal Phillips, Spring Hill, Kan.

## FOR SALE

**FOR SALE. HEDGE OR CATALPA POSTS,** carlots. H. W. Porth & Co., Winfield, Kan.

**HAY FOR SALE—500 TONS ALFALFA** and prairie. Ask for our prices. A. M. Brandt, Severy, Kan.

**WRITE FOR DELIVERED PRICES ON** cedar posts. Pay after unloading. J. B. Overton, Sagle, Idaho.

**FOR SALE—GARAGE AND MACHINE** shop. Most completely equipped in Kansas. On Santa Fe Trail and Kansas, Colorado Boulevards. Price right, good business, first class location. W. P. Schultz, Great Bend, Kan.

## MACHINERY.

**FOR SALE—New HUBER THRESHING** Rig. Geo. Wegman, Conway, Kan.

**NEW THREE-BOTTOM POWER LIFT EN-** gine plows, \$165. S. B. Vaughan, Newton, Kan.

**THE WEEDER FACTORY, HILL CITY,** Kansas, is now delivering knife weeders for listed crops.

**WRITE FOR LIST AND PRICES ON RE-** built and new tractors and plows. Young Garage, Larned, Kan.

**TWO THRESHING MACHINES COMPLETE.** One 20 horse steam engine. Paul Herman, R. 6, N. Topeka, Kan.

**WANTED TO BUY—THRESHING OUTFIT,** good condition. Not over 20 horse. E. Thonen, Hiawatha, Kan.

**CASE ENGINE 15-45 STEEL SEPARATOR** 32-50, 1 bbl. steel tank and wagon, \$1500. D. M. Archer, Densmore, Kan.

**15 HORSE CASE STEAM ENGINE, IN** good running order, for sale or trade for gas tractor. S. A. Long, Geneseo, Kan.

**FOR SALE—TWO REEVES SEPARATORS,** 25-43 and 33-56. Out two years. Complete and ready to run. W. E. Bates, Westphalia, Kan.

**JONES SIX, TOURING, NEARLY NEW,** for sale or trade for lighter car; large tractor; good threshing machine. W. E. King, Byers, Kan.

**COMPLETE AVERY THRESHING RIG;** 40-80 tractor, 36-60 separator, shack, etc., almost new. Price \$5500 or trade for land. Henry Green, Wellington, Kan.

**FOR SALE AT A BARGAIN—2 NICHOLS** and Shepard grain separators, one 32-52, one 24-40 and one Deering grain header. Write for prices. P. W. Good, Wilsey, Kan.

**WE HAVE A FEW JAMESVILLE THREE** bottom power lift tractor plows, both old ground and sod bottoms at \$150. No better tractor plow made. L. M. Taylor & Son, Bucklin, Kan.

**PLOWING AND THRESHING RIG FOR** sale; 25-75 Case steam tractor; 36-58 Case steel separator; 12-bottom Reeves steam lift plow; very reasonable. Geo. Hall, 10 Ewing St., Kansas City, Kan.

**TRACTORS, THRESHERS, TRUCKS, ALLIS** Chalmers tractors, 18-30, a real four-plow tractor sold at a three-plow price, and 6-12 general purpose cultivating tractor, Cape threshers; 24-40 tractor special; ball bearings; rotary straw racks; handle the straw three times as fast as a shaker straw rack and can not choke or clog; will thresh more grain and requires less power. Any good two or three-plow tractor will operate this 24-40 satisfactorily. Bell motor trucks, built for country use. Two sizes, 1½ and 2½ ton capacity. Write for information on tractors, threshers or trucks. Dealers wanted in every locality. Responsible, influential users considered who can sell farm power equipment. Hulseman Brothers Company, Southwest Blvd. and Broadway, Kansas City, Mo.

## TRACTORS

**WATERLOO BOY TRACTOR, GOOD SHAPE** \$550. H. H. Kruse, Grinnell, Kan.

**TWO TITANS—30-20, \$400; 15-30, \$700.** Newly overhauled. Claus Bergner, Isabel, Kan.

**NEW STAUE TRACTOR ATTACHMENTS,** priced to sell. C. E. Gardner, Minneapolis, Kan.

**FOR SALE—ONE HEIDER TRACTOR,** first class condition, a bargain. Chas. H. Daenzer, Sterling, Kan.

**14-28 HORSE POWER RUMELY TRACTOR.** Bought year April. First class shape. Address R. Kubick, Table Rock, Neb.

**USED TRACTOR—20-30 AVERY; 15-30** Aultman Taylor. Priced to sell. Abilene Tractor & Truck Co., Abilene, Kan.

**FOR SALE—AVERY 25-50 TRACTOR AND** 5-bottom plow only used 10 days. Price \$3,050. Vern Engle, Wakarusa, Kan.

**20-40 AVERY TRACTOR, JOHN DEERE** four-bottom plow for sale or trade for car, price \$800. A. W. Buxton, Utica, Kan.

**FOR SALE—NELSON 24-36 TRACTOR,** price \$1,000. A 4-14 LaCrosse plow, price \$200. This outfit has plowed about 150 acres. W. V. Jackson, Coldwater, Kan.

**FOR SALE—25-50 AULTMAN-TAYLOR** tractor; 32-56 Aultman-Taylor separator, good condition; 20 horse Reeves steam engine, simple double cylinder; 42-64 Aultman Taylor separator, bought last season, good condition; excellent new cook shack. Location Protection, Kansas. Abner Duncan, Winfield, Kansas.

## TRACTORS.

**FOR SALE—18-36 AVERY TRACTOR; 12-20** Heider. Good condition. Late models. Albert Henry, Platte City, Missouri.

**WANTED—GAS TRACTOR, OR STEAM** threshing rig. State conditions and cash price. Will Broden, Clay Center, Kan., Rt. 4.

**FOR SALE—CASE SEPARATOR, 40-INCH** cylinder; LaCrosse tractor; 10-20 Mogul tractor. John Gustafson, McPherson, Kan.

**FOR SALE CHEAP—TWO FORDSON** tractors, good as new. One Bull tractor in good running order. Chas. H. Daenzer, Sterling, Kan.

**WANTED—40-80 AVERY OR 30-60 AULT-** man-Taylor tractor. Must be in good working condition. Gene Childs, Simpson, Kan.

**FOR SALE—12-25 CASE TRACTOR,** Grand Detour 4-bottom plow. Good condition, \$1,000. C. H. Prothe, Paola, Kan., Route 9.

**USED NELSON 18-35, RECENTLY OVER-** hauled. Also bargains in used cars and trucks. Cash or terms. Sunflower Truck and Tractor Co., Wichita.

**FOR SALE—ONE 15-30 TITAN; ONE 10-20** Titan tractor. Both in good order; one Hudson, model M; five good tires. Write for prices. M. E. Norman, Latimer, Kan.

**3 NEW INTERNATIONAL TITAN 10-20** tractors, complete with belt pulleys, steering devices, and grousers. 3 new P & O 3-gang plows for the above tractors. Closing out business and will make interested parties good proposition on any or all of above machinery. The Oklahoma Tractor and Implement Co., Okmulgee, Okla.

## SEEDS

**AMBER CANE, \$2.75 PER CWT., SACKS** free. John A. McAllister, Route 3, Russell, Kan.

**SUDAN SEED, RECLEANED, 15 CENTS** pound. Samples free. S. A. Ramsey, Mayfield, Kan.

**ALFALFA SEED, 95% PURE, \$13.50 PER** bushel. Send for sample. Geo. Bowman, Concordia, Kan.

**GOLDEN MILLET SEED \$2.50 BUSHEL;** Schrock kafir, \$2 bu.; Red Amber cane, \$2.25; Sudan 15c pound. All good clean 1919 seed. Jas. R. Caldwell, Culver, Kansas, R1. Send sacks.

**SIBERIAN COMMON MILLET, \$1.50** bushel; Golden, \$2 bushel; feterita, milo, white cane, \$1.50 bushel; V. A. Fritts, Quinter, Kan.

**BLACK HULLED WHITE KAFIR, PURE** hand gathered re-cleaned seed, \$2 f.o.b. Russell, sacks free, sample mailed. John A. McAllister, Russell, Kan.

**BARNES BLACK HULLED DWARF** white kafir. Threshed, re-cleaned, tested. \$3.60 per bushel; 10 bushel lots, \$3.40 per bushel f.o.b. H. D. Barnes, Banner, Okla.

**ORANGE CANE, \$2.50 CWT. BLACK AM-** ber, \$2.25; Red and White kafir, Milo Maize, and Feterita, \$3.20. All re-cleaned. Union Mill and Elevator Co., Severy, Kan.

**ALFALFA SEED, \$35. SUDAN GRASS,** \$12.50. Amber cane, red or black, \$2.50; Sumac, \$2.75; Kafir, \$3; Golden millet, \$3; Siberian millet, \$3; Feterita, \$3. All per hundred pounds. Winona, Kansas. Sacks 30 and 75c. The above seed is fine quality, well matured. Samples sent on request. L. A. Jordan Seed Co.

**SUDAN SEED, \$15 CWT.; GOLDEN, SI-** berian and Hersha millet seed, \$2 bushel; common millet, \$1.75 bushel; cane seed, Coleman Red, Red Amber, Black Amber and white, \$2 bushel; pink and white kafir corn, \$2 bushel. Sacks 25 cents extra. All sales accepted upon cash with order and prior sale. Our reference, Farmers and Merchants State Bank, Colby, Kan. Harris & Haynes, Colby, Kan.

## FOR THE TABLE.

**CHOICE WHITE GRANULATED HONEY** in 60 pound cans at 30c per pound, f.o.b. Hutchinson. A. D. Ruffington, 509 R & W Bldg., Hutchinson, Kan.

**FANCY SUNDRIED APPLES 25c POUND** delivered parcel post in 10 pound lots. Smaller quantities, 30c. Delivered parcel post, cash with order. Winston Grain Co., Winston, N. C.

**OLD FASHION "CUBAN MOLASSES," SPE-** cial price for a few weeks. Guaranteed to keep all summer. 30-gal. barrels, 45c gal.; 60-gallon barrels, 40c a gallon. Cash with order. Winston Grain Co., Winston, N. C.

**"THE BEST" ROCKY MOUNTAIN** honey, light colored, thick, fine flavored. Per can, five pounds net, postpaid anywhere west of Ohio river, \$1.50. Send remittance with order. The Colorado Honey Producers' Association, Denver, Colo.

## PLANTS

**TOMATO, SWEET POTATO, CABBAGE** and pepper. 50c 100; \$4 1,000. A. M. Samuelson, R. 3, North Topeka, Kan.

**CABBAGE AND TOMATO, 50c 100; \$4 1,000.** Sweet potato, 75c 100; \$5 1,000. John Patzel, 501 Paramount, North Topeka, Kan.

**PLANTS—TOMATO, EARLIANA, 50-DAY;** sweet potato, Red Bermuda, Yellow Jersey, 50 cents per 100, postpaid. Ernest Dardland, Codell, Kan.

**POTATO PLANTS, PORTO RICO, NANCY** Hall, Bunch Yam, Southern Queen, Triumph, Dooley Yam, Yellow Yam, Yellow Jersey, Cuba Yam. 1000 postpaid for \$3.50; 500, \$2; 100, 50c. Ozark Nursery, Tahlequah, Okla.

## PLANTS.

**EACH YEAR GIVES ADDITIONAL PROOF** Richardson's plants that grow excel. Write M. E. Richardson, Jr., Sterling, Kan.

**CABBAGE AND TOMATO PLANTS, 100 50** cents; 200, 85 cents; 500, \$1.50; 1,000, \$2.50; prepaid. Sweet potato slips, \$3 per 1,000, postpaid. All cash with order. Write for prices on large quantities. Hope Plant Farm, Hope, Ark.

## LIVE STOCK COMMISSION FIRMS.

**SHIP YOUR LIVE STOCK TO US—COMPE-** tent men in all departments. Twenty years on this market. Write us about your stock. Stockers and feeders bought on orders, market information free. Ryan Robinson Commission Co., 425 Live Stock Exchange, Kansas City Stock Yards.

## PET STOCK.

**FOXES WANTED—YOUNG OR OLD ONES.** Ross Brown, McFall, Ala.

**RAISE RABBITS FOR US. WE SHOW YOU** where to market all you raise at \$4 to \$25 each. Remit \$5 for large, illustrated, typewritten print on one side of paper, "Course in Rabbitcraft," which remittance also applies on purchase of pair Belgian Hares, including contract. Co-Operative Supply Company, Department 80, St. Francis, Wis.

## TOBACCO

**KENTUCKY HOMESPUN TOBACCO, 10** pounds, \$4; 20 pounds, \$7. Rufe Veal, Jonesboro, Ark.

**TOBACCO—CHEWING AND SMOKING,** pound, 50c; 10 pounds, \$4.50. Mild smoking, 40c, prepaid. Chas. Goff, Norfolk, Ky.

**TOBACCO—KENTUCKY'S BEST "OLD** Homespun" chewing or smoking. Direct from farmers. Trial offer, 2 lbs. postpaid, \$1. Kentucky Tobacco Ass'n, Dept. 35, Hawesville, Ky.

## POULTRY

So many elements enter into the shipping of eggs by our advertisers and the hatching of same by our subscribers that the publishers of this paper cannot guarantee that eggs shipped shall reach the buyer unbroken, nor can they guarantee the hatching of eggs. Neither can we guarantee that fowls or baby chicks will reach destination alive, nor that they will be satisfactory because opinion varies as to value of poultry that is sold for more than market price. We shall continue to exercise the greatest care in allowing poultry and egg advertisers to use this paper, but our responsibility must end with that.

## ANDALUSIANS.

**THOROUGHBRED BLUE ANDALUSIANS.** Eggs for hatching, \$9 per hundred; \$2 per 15. Mrs. C. W. Parks, Eureka, Kan.

## ANCONAS.

**S. C. ANCONA EGGS, \$6.50 HUNDRED;** \$1.25 setting, prepaid. D. N. Miller, Hutchinson, Kan., R. 5.

**FANCY SINGLE COMB ANCONAS—EGGS,** \$1.50 fifteen, \$3 hundred. Matchless layers. A. L. Wylie, Clay Center, Kan.

## BRAHMAS

**THOROUGHBRED MAMMOTH LIGHT** Brahmas, 15 eggs, \$2. Cora Lilly, Westphalia, Kan.

**THOROUGHBRED MAMMOTH LIGHT** Brahmas, 15 eggs, \$2; 30, \$3. Mrs. V. E. Rogers, Sharon, Kan.

## BABY CHICKS

**JUNE HATCH, MIXED, \$14.50; BARRED** Rocks, Rose Comb Reds, \$16, prepaid. Jos. Schneider, Howard, Kan.

**BABY CHICKS—SPECIAL JUNE PRICE.** White and Brown Leghorns, 13c; R. I. Reds, 14c. Fleda Jenkins, Jewell, Kan.

**BABY CHICKS—SINGLE COMB WHITE** Leghorns our specialty. 5,000 for June delivery. Order now. Live delivery. Prepaid. Myers Hatchery, Clay Center, Kan.

**YOU BUY THE BEST CHICKS FOR THE** least money, guaranteed alive or replaced free, 150,000 to ship everywhere, 18c each, 500 for \$89. From Colwell Hatchery, Smith Center, Kan.

**YOUNKIN'S DAY OLD CHICKS, WHITE** Rocks, 20 cents; Buff Orpingtons, 18 cents; Brown Leghorns, Barred Rocks, 17 cents; White Leghorns, 16 cents; 50 postpaid. Live delivery. July chicks one cent less. Younklin's Hatchery, Wakefield, Kan.

**BABY CHICKS—JUNE HATCHED LEG-** horn pullets begin laying in November, lay high priced eggs all winter. S. C. Brown, Buff and White chicks, \$16 per 100 postpaid, live delivery. Pure bred farm flocks, range raised, heavy laying strains. Clay Center Hatchery, Clay Center, Kan.

**BABY CHICKS—PURE BRED, HEAVY** laying strains, select farm flocks, White, Golden, and Silver Wyandottes, White and Barred Rocks, Rhode Island Reds, both combs, Buff Orpingtons, Blue Andalusians, White, Buff, and Brown Leghorns. Carefully inspected and selected. Live count at destination, express office. Write for price list. Berry & Senne, Route 27, Topeka, Kan.

## DUCKS

**BUFF ORPINGTON DUCK EGGS, 12—\$2** Herbert Kruger, Seneca, Kan.

**BUFF ORPINGTON DUCK EGGS, 13, \$2.10;** 25, \$3.75, prepaid. Mrs. Chas. Snyder, Effingham, Kan.

## HOUDANS

**HOUDAN EGGS, 15, \$1.60; 50, \$4.50. HENRY** Haberman, Great Bend, Kan.



## EGGS.

**MODLIN'S POULTRY FARM, LARGEST IN the West.** Hatching eggs. Free circular. Write today. Thirty best varieties. Route 7, Topeka, Kansas.

## LANGSHANS.

**PURE BLACK LANGSHAN EGGS, 15, \$2; 100, \$8.** Dewey Lilly, Westphalia, Kan.  
**SPECIAL FOR JUNE—PURE BLACK LANGSHANS, large, healthy, profitable.** Chicks, 18c. Eggs, \$1.25 per 15; \$6.50 per 100, prepaid. Ethan King, Solomon, Kan.

## LEGHORNS

**SINGLE COMB BUFF LEGHORN EGGS, 6c,** postpaid. Walter Axtell, Axtell, Kan.  
**SINGLE COMB WHITE LEGHORN BABY chicks.** J. D. Lundeen, McPherson, Kan.  
**PURE BRED S. C. W. LEGHORN EGGS, 100, \$7, postpaid.** Jos. F. Carpenter, Garnett, Kan.  
**CHILLVIEW WHITE LEGHORN EGGS, \$5.85—100 postpaid.** Allen Bilderback, Nortonville, Kan.  
**PRIZE WINNING ROSE COMB WHITE Leghorn eggs, 30, \$2.25; 100, \$6.** A. Dorr, Osage City, Kan.  
**PURE BRED SINGLE COMB BUFF LEGhorn eggs, \$5.50 per hundred.** Adam Zilinger, Logan, Kan.  
**YESTERLAIN'S SINGLE COMB WHITE Leghorn chicks, \$17 hundred.** Hayes Showman, Sabetha, Kan.  
**SINGLE COMB BUFF LEGHORNS, egg breeding, "You tell me," \$6 100; \$4 50.** Chester Hines, Emporia, Kan.  
**300 SINGLE COMB WHITE LEGHORNS on free range.** Orders filled promptly. 100 \$6. H. W. Chestnut, Kincaid, Kan.  
**IMPORTED ENGLISH S. C. WHITE LEGHORNS, averaged 288 eggs each per year.** Eggs, chicks. George Patterson, Melvern, Kan.  
**EGGS—SINGLE COMB WHITE AND Brown Leghorns, \$7, 100; \$4, 50; \$2, 15; 250 egg strain.** H. N. Holdeman, Meade, Kan.  
**RUSSELL'S RUSTLERS, AMERICA'S famous Single Comb Brown Leghorns—would \$195 per month from a farm flock interest you? Write for our big free catalog.** George Russell, Chilhowe, Mo.

**WINTER-LAY—BARLOW'S WELL KNOWN strain, Single Comb White Leghorns.** Standard, bred to lay and do it. Flock of 100 laid 146 Jan. 17. Eggs, chicks, catalog. Barlow and Sons, Kinsey, Kan.

**FOR SALE, WORLD'S BEST SINGLE Comb White Leghorn chicks, 20 cents each, \$99 for \$98.** Ferris, Young and Smith strains. Hens pay each \$8 per year. Clara Colwell, Smith Center, Kan.

**REDUCED PRICE FOR JUNE AND JULY.** S. C. Golden Buff Leghorns of 220-297 laying strain. \$1.50 for 15 eggs; \$3.50 for 50; \$7 per 100. 3 month old baby-cockerels, \$1 each. Mrs. John Witmer, Oskaloosa, Kan.

**SINGLE COMB WHITE LEGHORNS YESTERLAIN strain direct, the greatest laying strain in existence.** Can furnish choice eggs for hatching from the best we have at \$2 per 15; \$5 per 100. Satisfactory hatch guaranteed. Order direct from this advertisement, or address Speer & Rohrer, Osawatomie, Kan.

## MINORCAS.

**PURE GIANT STRAIN SINGLE COMB Black Minorca eggs, \$7 100.** Martha Greenwood, Clifton, Kan.  
**PURE BRED SINGLE COMB BLACK Minorca eggs, 8 cents each.** Fertility guaranteed. Herbert Rhodes, Clifton, Kan.  
**CLAUDE HAMILTON STRAIN SINGLE Comb Black Minorcas.** Eggs postpaid, \$7 100; at farm, \$6 100. S. J. Croner, Garnett, Kan.

## PIGEONS.

**10,000 COMMON LIVE PIGEONS WANTED.** R. S. Elliott, 7500 Independence Avenue, Kansas City, Mo.

## PLYMOUTH ROCKS

**BUFF ROCK EGGS, WILLIAM A. HESS,** Humboldt, Kan.  
**WHITE ROCK EGGS, \$6 PER 100.** NORA Lamaster, Halliwell, Kans.  
**WHITE PLYMOUTH ROCKS, EGGS \$10 hundred.** Peter Desmarreau, Damar, Kansas.

**BUFF ROCK EGGS 100 \$7; 50 \$4.** PRIZE winning stock. Maggie E. Stevens, Humboldt, Kan.

**BRED-TO-LAY BARRED ROCKS, HENS, \$2.50.** Eggs, 15, \$2; 100, \$8. Mrs. J. B. Jones, Abilene, Kan.

**PARKS STRAIN BARRED ROCKS, SPLENDID layers, \$2 setting; \$8 hundred.** Stella Lamoree, Burden, Kan.

**PURE BUFF ROCK EGGS, WINNERS** nine shows, 15, \$2; 50, \$4.50; 100, \$8. Mrs. C. N. Mason, Uniontown, Kan.

**PURE BARRED ROCKS, ALL SIREs "Aristocrats" direct.** 50 eggs \$5. Mrs. Lester Benbow, La Crosse, Kan.

**THOMPSON'S IMPERIAL RINGLETS,** trap-nested, bred-to-lay. Each pen headed by prize winner cockerel mating egg record 240. 15, \$2; 50, \$6; 100, \$10; prepaid. E. B. Dorman, Paola, Kan.

**THOMPSON'S RINGLET BARRED ROCKS,** heavy winter layers. "Pen quality," eggs, 15, \$2; 30, \$3.75; 50, \$5.50; 100, \$10. Safe arrival guaranteed. Jno. T. Johnson, Mound City, Kan.

## RHODE ISLAND REDS.

**ROSE COMB REDS, PRIZE WINNING** trap-nested, Pens, \$5, \$3 per 15; \$10 per 50. Range \$3 100. Alice Clinkenbeard, Wetmore, Kan.

**MEIER'S SINGLE COMB REDS, FIRST** prize winners at world's fair, Chicago, and Kansas City. 50 eggs, \$5; 100, \$10. H. A. Meier, Abilene, Kan.

**SINGLE COMBED COCKERELS, VIGORous, farm raised, big boned, standard** weight, early hatched from winter layers. Winners at big Free fair. \$3.50 to \$10 each. Longview Farm, Route 7, Topeka, Kan.

## Kansas Expects Good Crops

## Large Yields of Wheat and Oats Assured

BY JOHN W. WILKINSON

**C**ROP conditions are still regarded as fairly satisfactory except for corn which has gotten a late start on account of the cool damp weather that prevailed last month. Corn planting has been finished and some of the early planted fields are now receiving their first cultivation. Most of the corn is from 10 days to two weeks later than usual this year. According to S. D. Flora, state meteorologist, good rains have fallen in most of the counties of the state and the soil is in good condition.

Wheat is growing fine. It is mostly in the boot in the eastern half except the Nebraska border counties, and in many western counties and is heading out in the south-central and southeastern counties, some of which report nearly all the crop in head. The condition of oats and barley is almost as satisfactory as that of wheat. Oats are heading in the south-central counties and stooling well and jointing farther north. In the western part of the state barley is generally from 5 to 8 inches high and is stooling.

## Many Silos Will be Built

A large acreage of sorghums has been planted but more will be planted later. There will be a great deal of kafir, feterita and milo planted this year. Many new silos will be built and if dry weather should interfere with the proper development of any of these crops they will be converted into silage. More concrete, cement stave, wooden stave, and metal silos should be built on Kansas farms to meet all such emergencies.

Alfalfa is late this season but first cutting has started in several counties and good yields are reported. Pastures are in good condition and are reducing the cost of feeding very materially.

Cutworms, grasshoppers, and the Hessian fly are doing some damage in certain localities, but it is thought that these pests can be controlled so that the damage will not be serious. Farmers now know better how to handle such situations than they did a few years ago. Gardens are in excellent condition, but Irish potatoes have not made a satisfactory stand on account of the cold weather in May. A great many sweet potatoes are being planted this season.

The farm labor situation is still serious and there will be a great shortage of harvest laborers. Kansas will require almost three times as many harvest hands as any other state in the West. J. M. Gilman who is Federal Director of the Federal Free Employment Bureau has arranged to establish branch offices at Hutchinson, Kansas City, Salina, Wichita, Parsons and Topeka for obtaining employment for harvest hands and for supplying them to farm communities where they may be needed. The number needed has been estimated at several thousand. The harvest season will open in Southern Kansas about June 20.

The state board of agriculture in its weekly crop report says:

## WYANDOTTES.

**SILVER LACED WYANDOTTE EGGS,** standard bred 15—\$1.50; 100—\$7. Herbert Kruger, Seneca, Kan.

**LAYING STRAIN WHITE WYANDOTTE** cockerels, \$3.50, \$5 and \$7. Eggs, \$2 15; \$8 100. Ira Ives, Liberal, Kan.

**QUALITY ROSE COMB WHITE WYANDOTTES.** Martin-Keeler strains direct. Noted winter layers. 15 eggs, \$2; 30, \$3.50; 50, \$5; 100, \$9. Satisfaction, safe delivery guaranteed. Garland Johnson, Mound City, Kan.

## SEVERAL VARIETIES.

**COLUMBIAN WYANDOTTE EGGS, FANCY** pigeons. J. J. Pauls, Hillsboro, Kan.

## POULTRY WANTED.

**WANTED—BABY CHICKS, ANY QUAN-** tity. Give hatching dates, kind, etc. Shelton Poultry Co., Denver, Colo.

**BROILERS, HENS, NON-FERTILE EGGS.** Active demand. Write for coops and cash offers. The Copes, Topeka.

**PREMIUM POULTRY PRODUCTS CO., 210** N. Kansas Ave., Topeka, buys poultry and eggs on a graded basis. We furnish coops and cages. Premium prices paid for select eggs and poultry.

## POULTRY SUPPLIES.

**THE BEST MILK AND BUTTER PRODU-** ction in the world, La-Mo-Pep. Write for particulars. Box 122, Kansas City, Mo.

"The week has been an exceptionally good one for the growth and development of crops and farm work has progressed with expedition except in the eastern and southeastern sections where the soil has been wet and slightly heavy for cultivation. Good rains prevailed in the eastern half of the state on Sunday, May 23, while Central Kansas was visited by rains on Wednesday, the fall becoming lighter in the western and southwestern counties on that day, the south-central counties receiving good rains on Thursday. Warm temperatures were the rule for the week except in part of the state on Wednesday and part of the state on Thursday when it was cool and cloudy. Conditions in the northwestern counties have much improved, very little rain having fallen there during the past week."

Local conditions of crops and farm work in the state are shown in the following county crop reports:

**Atchison**—Wheat and oats are growing satisfactorily. Soft wheat will begin heading in a few days. Some corn has come up. The hay crop will be good.—Alfred Cole, May 29.

**Barber**—We have had another rain that lasted 24 hours and the ground is thoroughly soaked. Wheat is heading satisfactorily. We expect a normal yield. Spring crops are good. Alfalfa is beginning to bloom. Pastures are excellent.—Homer Hastings, May 28.

**Barton**—Wheat is heading out fairly well. Harvesting will begin about July 1. Oats are excellent and are heading out. A great deal of kafir and cane were planted last week. We had another good rain on Wednesday and Thursday.—E. J. Bird, May 29.

**Chautauqua**—Wheat and oats made excellent growth last week. Corn is making satisfactory growth and looks very well. Hogs are selling from \$9 to \$13 a hundredweight. Eggs are worth 30c, butterfat, 50c; corn chops, \$4; shorts, \$3.25, and bran, \$3.—A. A. Nance.

**Cherokee**—Wheat and oats are heading. The first week in May did considerable damage, but the favorable weather since has caused wheat, oats and grass to make wonderful growth since that time. Potatoes are in excellent condition. Fruit will be almost a failure.—L. Smyres, May 30.

**Cheyenne**—Crop conditions are favorable here. Wheat is in good condition and corn planting is about finished. Wheat is selling at \$2.25 to \$2.35 a bushel. The first crop of alfalfa will be cut soon.—F. M. Hurlock, May 29.

**Clay**—Local showers have greatly benefited all crops. Wheat is heading out. Some chinch bugs and grasshoppers have made their appearance. Pastures and gardens are in excellent order.—P. R. Forslund, May 29.

**Cowley**—Good rains the past 10 days have put the ground in excellent condition. Corn is growing slowly on account of the cool weather, but it is satisfactory. Pastures also are making slow growth. Wheat is beginning to head. Farmers have almost finished kafir planting. The first crop of alfalfa is ready to cut. Wheat is worth \$2.83; eggs, 35c; butter, 40c.—L. Thurber, May 21.

**Decatur**—We have been having excellent weather for growing crops. Corn planting is almost finished. Some wheat is beginning to head. Corn is selling for \$1.50; wheat, \$2.60; cane seed, \$1; eggs, 32c.—Harry Hanchett, May 22.

**Dickinson**—We had a good rain on May 22. Wheat is heading out rapidly. Oats are unusually good. Alfalfa is being cut for the first crop, but weather has not been favorable for haying. Stock are doing well.—F. M. Larson, May 30.

**Doniphan**—Almost all the corn is planted, and a few farmers are replanting their fields. Apples will make about half a crop. Some orchards are in satisfactory condition, while others will have no apples. Pastures are not growing because the weather is so cold. Alfalfa looks well, and soon will be ready to cut. The pig crop is small. Farmers are complaining about the cattle and hog market. Corn is \$1.85; hogs \$14; eggs 35c; cream, 60c; potatoes, \$5.50.—B. B. Ellis, May 23.

**Elk**—Weather has been cool and wet. Some corn is getting grassy and weedy. More sunshine is needed. Two new co-operative grain elevators are to be built soon. Wheat and early oats have begun to head out. Stock is doing well. Hogs have sold from \$13.25 to \$13.50. Eggs are worth 28c, sugar 25c, and butterfat 52c.—D. W. Lockhart, May 29.

**Franklin**—Some of our wheat is very good, but a large part of it will not make more than 12 to 15 bushels an acre. Oats are doing well, but some fields are too rank. Corn shows a good stand, but acreage is small. Pastures are excellent.—E. D. G., May 29.

**Gray**—Nearly 2 inches of rain fell May 14 and 15, which gave wheat, oats and barley an excellent start. It is raining again today. Wheat is beginning to head, but it is short, and some fields are thin. Too much pasturing and dry weather injured it very much. Grass is getting good, but was very late in starting because of lack of moisture. Livestock is doing well. Corn planting is finished, and other crops are well advanced. Potatoes look good. A great many young hoppers are seen in fields.—A. E. Alexander, May 27.

**Harvey**—We had a good rain May 25 and the weather is still favorable for more rain. Livestock of all kinds is doing well. Alfalfa harvest has begun, but the crop will be short. No sale for wool at present.—R. E. D. Prouty, May 29.

**Hodgeman**—Wheat condition is satisfactory. We had good rains on May 15 and 27. Barley and oats are doing well. Harvest hands are needed. Cream is worth 55c; and eggs, 35c.—W. B. Levers, May 28.

**Haskell**—We had a good rain May 19 that did much good. Wheat, oats and barley will be short this season. Corn, cane, and kafir show good stands. Some grasshoppers have appeared.—H. E. Tegarden, May 29.

**Jackson**—Corn has been about all planted. Cutworms made it necessary to replant some of it. First crop of alfalfa is about ready to cut. Wheat is excellent, and oats are making good growth. Corn is worth \$1.65; wheat, \$2.75; oats, \$1.25. Hogs are selling at \$13.75 a hundredweight.—F. O. Grubbs, and Earl Askers, May 29.

**Jewell**—The weather still continues cold, but it is ideal for wheat and oats. Farmers are listing corn between showers, but the stubble ground has not been dry enough to work properly this spring. We had 2 inches of rain May 22 so we will be planting corn in June. Pastures are excellent, and cattle and horses are fat. The pig crop is small. There is some complaint of cutworms in the early planted corn.—U. S. Godding, May 24.

**Kearny**—Crops are making satisfactory growth. Farmers are busy planting. Wheat is excellent.—Cecil Long, May 29.

**Kiowa**—Quite a large per cent of the wheat land was planted to corn, so the acreage is unusually large. Many farmers have more corn planted than they can take care of properly. We are having plenty of rain, but the weather is too cool for growing crops. Many farmers still have wheat in the bin, and the bankers need the borrowed money. Car shortage never has been so severely felt as now, and farmers fear the prices will fall when cars can be obtained.—H. E. Stewart, May 29.

**Leavenworth**—We have had plenty of rain. Wheat is heading out. Some chinch bugs have appeared. Corn shows the best stand for several years. Very few fields had to be replanted. Pastures are good and alfalfa is ready to cut.—George S. Marshall, May 28.

**Linn**—We had a few warm days last week with local showers. Wheat that wasn't plowed up is making a good showing now. Many farmers are plowing corn. The stand is good, but moles are working in some fields. Few peaches are left, but there will be a satisfactory crop of grapes, gooseberries and blackberries. Farmers are doing most of their own work, as labor is scarce and high. Some of our young men are working with the drills, and others are at the pumping station in town.—J. W. Cline-Smith, May 28.

**Morris**—Good rains last week helped all crops. Wheat and oats have improved wonderfully. Alfalfa cutting has begun. Potatoes and gardens are making excellent growth. Some old wheat is still stored on the farms.—J. R. Henry, May 29.

**Nemaha**—We have had many spring rains but the weather is cold. Grazing is excellent and stock looks well. We will have very little fruit. Peach leaf curl is damaging the peach trees, and caterpillars are eating all the leaves on gooseberries and currants. Alfalfa is in good condition, and nearly ready for the first cutting. Corn sells for \$1.60; wheat, \$2.65; oats, 90c; cream, 58c and 60c; potatoes, \$1.50 a peck.—A. M. C., May 25.

**Neosho**—We are having excellent growing weather. Farmers are cultivating corn. It is clean, and the crop is good. Kafir also is in good condition. Pastures are satisfactory, and oats and prairie grass are growing well. What wheat is left probably will make half a crop. About one-fourth of the acreage has been plowed up. Potatoes came up uneven on account of the cold weather. A great many sweet potatoes are being planted. Gardens look well. There are some chinch bugs in wheat. We have no corn or wheat to sell, and no cars to ship baled hay. Eggs sell for 33c; butter, 50c.—Adolph Anderson, May 24.

**Osage**—Wheat and oats will make good crops, but corn prospects are not so encouraging. The ground is too wet to cultivate. Potatoes are in good condition, but few are planted. Hotbed plants are scarce and high. Alfalfa is late, but will make a good crop. Loose hay in stacks sells for low prices. Hired help is too high for farmers to employ.—H. L. Ferris, May 29.

**Phillips**—Spring is very backward. Corn is nearly all planted; the seed was poor. Wheat is in excellent condition. Some of it blew out, but about 90 per cent of the crop is left. All stock is doing well as pastures are good. Some blackleg has been reported. Wheat is worth \$2.35; corn \$1.55; butter, 50c; cream, 53c; eggs, 38c; hogs, \$11 to \$12.—J. M. Jensen, May 27.

**Reno**—Plenty of rain is reported. Wheat is heading out. Corn is showing satisfactory growth. Roads are muddy. Fair crops of apples and peaches are expected.—D. Engelhart, May 28.

**Republic**—We have had a great deal of rain. Corn is being cultivated for the first time. Wheat needs sunshine, as it is getting too rank. Oats and pastures are in good condition. Alfalfa harvest will begin about June 7.—S. S. Shepard, May 29.

**Rooks**—We have had plenty of moisture. Some wheat is excellent but some fields are very thin. Weather has been too cold for kafir. Any harvest hand wishing to work in Rooks write to C. O. Thomas at Zurich, Kan. Cattle are doing satisfactorily.—C. O. Thomas, May 29.

**Russell**—We have had plenty of rain. Farmers have nearly finished planting corn, and kafir is coming up. Wheat looks good, and is beginning to head, especially on the fields that were not pastured. Distemper among horses is quite bad. Gardens are good. The price of wheat has dropped, but most farmers have sold their crop.—Mrs. M. Bushnell, May 26.

**Scott**—We have had good rains. Small grain crops are in satisfactory condition. Nearly all of the corn has been planted. Grass is good and stock are in good condition. Some excitement about oil prevails. Land values are advancing. Many new settlers are coming into this county.—J. M. Helfrick, May 29.

**Sherman**—Rye is heading out rather short. Fall wheat is spotted and some of it will be plowed up. Corn has been listed for the most part and is making a good stand. More forage than usual will be planted. Cane and millet are being planted now. Pasture and hay crops are satisfactory.—J. B. Moore, May 29.

**Stafford**—Weather continues cool with plenty of rain. Corn is backward and cutworms are bothering it considerably. Wheat is heading. Livestock is in good condition. Old wheat sells for \$2.47 and there is a scarcity of room at elevators.—H. A. Kachelman, May 28.

**Sumner**—If rain does not come soon, wheat will be so short that it will be hard to get with a header. Some fields are heading now and are not more than a foot tall. Oats are heading from the ground up. Corn

(Continued on Page 49.)



## Real Estate Market Place

Real estate advertisements on this page (in the small type, set solid and classified by states) cost 65 cents per line per issue. Send check, money order or draft with your advertisement. After studying the other advertisements you can write a good one and figure the cost. About six words make an agate line. Count initials and numbers as words.

There are 7 Capper Publications totaling over a million and a quarter circulation and widely used in this advertising. Ask us about them.

### Special Notice

All advertising copy discontinuance or change of copy intended for the Real Estate Department must reach this office by 10 o'clock Saturday morning, one week in advance of publication.

### KANSAS

160 A. IMP., \$85 a. Many alfalfa farms for sale. M. T. Spong, Fredonia, Kan.

BARGAIN in improved 80 to 160. Very liberal terms. Parsons & Stewart, Fredonia, Kan.

240 A. nice level land, good buildings, \$65 acre. W. J. Poire, Westphalia, Kansas.

BEST FARM BARGAINS for sale in S. E. Kansas by G. W. Meyer, Fredonia, Kan.

FOR SALE—Good farms from \$80 to \$125 per acre. Call on, or address, O. C. Paxson, Meriden, Kansas.

IF YOU WANT to buy, sell or exchange your farm, write W. T. Porter of the Kansas Land Company, Ottawa, Kansas.

WANT TO RENT RANCH or two smaller farms with good water and improvements. C. Mayes, Buffalo, Kansas.

CHEAPEST LAND in Kansas. Churches of all denominations. Klingberg & Skinner, Osage City, Kansas.

EASTERN KANSAS FARMS Large list Lyon and Coffey Co. for sale by Ed. F. Milner, Hartford, Kansas.

CORN, wheat, alfalfa lands and stock ranches and pasture lands. Priced to sell. S. L. Karr, Council Grove, Kansas.

GOOD IMP. FARMS and ranches in Lyon and Greenwood counties, have some trades. Write for prices. Theo. Voeste, Olpe, Kan.

100-ACRE OIL LEASE FOR SALE, near oil well test now drilling. Rossville, Kansas. J. W. Watkins, Quenemo, Kansas.

CLOVER, timothy, bluegrass and alfalfa land, cheapest in state, exchanges made. Clark Realty Co., Garnett, Kansas.

CARY & HOARD, Real Estate Exchange and Loan Agent. Ranches a specialty, sold on commission. Phone 13, Anthony, Kansas.

FOR SALE—All kinds of farms in N. E. Kan. Send for printed list. Silas D. Warner, 727 1/2 Commercial St., Atchison, Kan.

WRITE for our free list of eastern Kansas farms and ranches for sale. The Eastern Kansas Land Co., Quenemo, Kan.

HAMILTON AND STANTON county lands, \$8 up. Write me your wants. Tomson, Syracuse, Kansas.

IF YOU WANT TO BUY OR TRADE for a farm in Franklin county write J. T. Priddy with Kansas Land Company, Ottawa, Kansas.

150 ACRES, 5 miles of Wichita, imp. fine home, good reason for selling. \$115 per acre. Some terms. K. L. Shank, R. 5, Owner, Wichita, Kansas.

480 ACRES, all fine smooth, rich, tillable land, black soil, no rock, 2 sets buildings, 1/2 mile town, only \$85 per acre. Easy terms. Sewell Land Co., Garnett, Kansas.

BEST BARGAINS in Kansas for Catholics, good wheat and corn land, prices ranging from \$75 to \$125 per acre. Jake Brown, Olpe, Kansas.

80 ACRES, Wilson Co., on gravel road, 4 miles Fredonia, 1/4 mile to school, well improved. \$8,000 terms. Box 38, Thayer, Kansas.

WHY NOT BUY a good alfalfa and wheat farm also producing oil. Owner gets one-eighth oil free. For lists, write E. H. Bideau, Chanute, Kan.

240 ACRES ALFALFA LAND Near Emporia, highly improved, 60 acres alfalfa, on good road, \$125 an acre. T. B. Godsey, Emporia, Kansas.

HALF SECTION—\$25.00 per acre 3 miles from town, 1 mile to school. All choice level farm land, 1/2 cash. No trades. Write owners. Griffith & Baughman, Liberal, Kan.

SOUTHEASTERN KANSAS. Farms, all sizes; lowest prices. Terms \$2,000 up. Send for booklet. ALLEN COUNTY INVESTMENT CO., Iola, Kansas.

820, well improved, eight miles Emporia, 28 alfalfa, 55 wheat, 150 acres fine pasture, 30 hay meadow, 57 acres spring crop. Owner will take 80 or 120 as part payment. Ira Stonebraker, Allen, Kansas.

160, WELL IMPROVED, bottom land, east of Dodge City. Owner will consider suburban property in or between Emporia or Hutchinson. H. D. Scarbrough, Bucklin, Kan.

120 ACRES, 9 miles Ottawa, 2 1/2 good town. Good improvements, land lays well, well watered. Possession fall. \$100. Write for list. Dickey Land Co., Ottawa, Kansas.

DIRT CHEAP 160 acres, Lane county, unimproved, 11 miles from Dighton. Am anxious to sell and will let it go for \$16 an acre. Mortgage \$1,000. Geo. C. Weber, Owner, La Crosse, Kansas.

GOOD RANCH Three quarters, one quarter alfalfa land, good improvements. Price forty dollars per acre. Write for land list. Come and see our wheat. Justin T. Avery, Traer, Decatur County, Kan.

### KANSAS

WE DON'T OWN THE WORLD, we sell it. Write for farm list and pictures. Kansas Land Company, Ottawa, Kansas.

BARGAINS. Bargains in wheat farms and stock ranches. Write for list. W. B. McAdams, Brewster, Kansas.

NESS COUNTY, KANSAS, LANDS Good wheat, alfalfa and ranch lands at bargain prices. Several excellent ranches. Write for price list, county map and literature.

FLOYD & FLOYD, Ness City, Kan.

DICKINSON COUNTY 220 acres all in wheat. 2/3 of 160 acres and 2/3 of 60 acres goes delivered to buyer; all rich smooth land, 100 acres from bottom; 6 room house, fair barn, 5 miles from market. Price \$150. Write for list. A. R. PAUTZ, Abilene, Kansas.

BEAUTIFUL 117-ACRE FARM, 4 1/2 miles Ottawa, choice location, well improved, alfalfa, wheat, oats, corn growing; possession now. Price \$170 per acre. Real bargain; come at once or write for full particulars; ask for descriptive booklet. Mansfield Land & Loan Co., Ottawa, Kan.

240 ACRES, 5 miles from small town, 10 miles from county seat, nearly new house, good barn, 135 acres hog tight, 50 acres wheat, half goes with farm, plenty of water and timber. Price \$100 per acre. Want smaller farm or income. LeRoy Realty Co., LeRoy, Kansas.

A PERFECT SECTION wheat land four miles from elevator, no improvements. Price \$27.50 an acre, very easy terms. Write for our bargain list and folder. More value for the money in Scott county than any spot on the map. The King Realty Company, Scott City, Kan.

A CHOICE WHEAT FARM 360 acres within 3 miles of market, Lane County, Kansas. 240 acres in wheat, looks fine, share with place. About 100 acres pasture. Good well and plenty of water. House and stable not in very good condition. Priced right at \$11,000. Terms on part. Jas. H. Little, La Crosse, Kan.

STOCK AND GRAIN RANCH 400 acres 7 miles from Lenora, Norton county, Kansas. 200 acres under plow; 200 acres grass. Cheap at \$50 per acre. Owner will sell for \$14,000 and give possession Sept. 1st, 1920. Write for full description. J. H. BROTHMAN, Lenora, Kansas.

ONE OF THE BEST FARMS IN KANSAS. 465 acres 7 miles Ottawa; 52 miles Kansas City, 1 mile railroad town; 160 acres fine blue grass; extra fine improvements; all tillable; fine location. Will make special price for 60 days. Possession this fall. CASIDA CLARK & SPANGLER LAND CO., Ottawa, Kansas.

A GREAT SECTION 500 acres smooth, 140 acres rolling. Living water fed by springs. On graded highway only three and one-half miles from good town. Wonderful soil. Nothing better for wheat. A snap at \$22.50 per acre, if taken quick. Terms. THE BROOKE LAND & TRUST COMPANY, Winona, Kansas.

240 ACRES, 2 1/2 miles west of Baldwin, Kansas, near Baker university, 8-room house, large barn, cattle sheds, silo, plenty of water and windmill; farm on Santa Fe Trail, 100 acres in blue grass pasture, 40 in wheat, 100 acres in other crops. This farm is good one for grain and stock. Possession September 1st, 1920. Price \$125 per acre. Clawson & McPheeters, Lawrence, Kansas.

HALF SECTION, 7 miles N. W. Rozel, Kan. 270 acres wheat, 1/2 to buyer, \$50 acre. 160 acres, 3/4 mile town on Santa Fe R. R., 1/4 mile high school. All bottom, 10 alfalfa, 40 pasture, 2 1/2 timber, 40 wheat, balance corn. 9-room house, basement barn 38x50, stock barn 30x40, granary, poultry and wood house. Everlasting water. Possession September 1, 1920. Price \$28,000. Mortgage \$12,000, 7 years 6%. Hosford Investment & Mortgage Co., Lawrence, Kansas.

160 A. KAW Bottom, 3 miles of Lawrence, fair improvements, fine farm. Priced right. 160 a., 3 miles from Lawrence, never failing water, very fine improvements. Priced at \$25 less than its value. 200 a. farm 13 miles from Lawrence, 3 miles from station on U. P. R. R., good improvements at \$90 per acre. Suburban and city properties. W. S. Clawson, 744 Mass. St., Lawrence, Kan.

FARMS BOUGHT AT PRESENT PRICES in the San Luis Valley, Colorado, are the best investment a man can make. We offer 320-acre farm, 5 1/2 miles of Alamosa, with good improvements, 80 acres fine alfalfa, fenced with woven wire, has first class water right, for irrigation, fully paid up, also has two artesian wells, for domestic and stock use, on good highway, telephone, and close to school. Price \$75 per acre. We have farms of 80 acres and up. ELMER E. FOLEY, 1001 Schweitzer Bldg., Wichita, Kansas.

### KANSAS

560 ACRES, 230 acres of which is good bottom land, 2 miles from Medicine Lodge, on Elm creek. 200 acres in cultivation; 80 acres in alfalfa. Good improvements, plenty of pasture and plenty of good running water. Price \$50 per acre. Terms on \$20,000.

2,000 acres of fine grass land, Ochiltree Co., Texas. On Wolf creek, 300 to 400 acres bottom land, plenty of running water, large per cent can be cultivated. This is an A No. 1 ranch. Price \$12.50 per acre. John Ferriter, Wichita, Kansas.

1,273 ACRES WICHITA CO., KANSAS Solid body; 6 mi. north of Leoti, County seat. 250 acres Beaver Creek Bottom land 5 to 15 feet of sheet water, splendid alfalfa land, does not overflow. 2 mi. running water; small per cent rough land; graded county road running by place; unimproved. Will make splendid stock, grain and alfalfa ranch and a real home close to county seat. Price \$27.50 per a. Terms one-half cash, balance on place at 7%. For further information write D. F. CARTER, Owner, LEOTI, KANSAS.

222 ACRES, 6 miles town, 12 miles Emporia, on main county road, well imp., good soil, lays perfect, 10 acres alfalfa, 80 acres cult., 8 acres timber, balance fine grass, a snap at \$16,000, good terms.

433 ACRES, 3 mi. high school town, imp., 8-room house, large new barn, etc., 120 a. fine bottom, 40 a. alfalfa, 110 a. more in cult., bal. fine meadow and pasture with plenty good timber, only \$75 per a., good terms and poss., if wanted.

160 ACRES, 6 mi. town, well imp., good soil, lays well, half cult., half good grass, big bargain at \$60 an a., poss. any time. Write for land list and pictures of Lyon Co. grain, alfalfa and dairy farms. E. B. Miller, Admire, Kansas.

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433 ACRES, 3 mi. high school town, imp., 8-room house, large new barn, etc., 120 a. fine bottom, 40 a. alfalfa, 110 a. more in cult., bal. fine meadow and pasture with plenty good timber, only \$75 per a., good terms and poss., if wanted.

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DOWELL LAND CO., Walnut Ridge, Ark. Fine corn lands, easy terms, plenty rainfall. BUY A FARM in the great fruit and farming country of northwest Arkansas where land is cheap and terms are reasonable. For free literature and list of farms, write J. M. Doyel, Mountainburg, Ark.

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20 IMPROVED eastern Colorado farms for sale at bargain prices; terms; information and literature on request. Frank Sutton, Akron, Colo.

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\$2,000 CASH gets level 320, rich loam soil, corn, wheat, beans, grass, good neighbors, healthful climate, balance easy terms. Frank Gass, Fowler, Colorado.

40 ACRES irrigated land 1/4 mile of Fowler, choice tract, 15 acres alfalfa; price \$200 per acre, \$1,500 cash, balance time to suit purchaser at 7%. For sale by B. T. Elliott, Fowler, Colorado.

FOR SALE Relinquishments from 320 to 640 acres. Choice deeded upland, \$10 to \$20 per acre, 10 to 40 acre irrigated ranches close in on easy terms. Write the Western Realty Co., Fowler, Colorado.

LAND AND STOCK SALE JUNE 10, 1920 480 acres, 4-room house, barn 28x56, 12 wells, water, 140 acres in crop, 100 head stock and farm machinery. A. J. MAUSOLF, Parker, Colorado.

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**IF YOU WANT** a large or small prairie or timber farm, pure spring water, no crop failures, write J. E. Loy, Flemington, Mo.

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Do you want a home in a mild, healthy climate, where the grazing season is long, the feeding season short, waters pure, soils productive? Good improved farms, \$30 to \$50 acre. Frank M. Hamel, Marshfield, Mo.

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**80 ACRES** of the best irrigated land, two and a fourth miles from Culbertson. \$300 per acre. A. R. Smith, Owner, Culbertson, Nebraska.

**PIERCE COUNTY, NEBRASKA, FARM** for sale. 160 a. 7 mi. from Pierce. 40 a. corn, 40 a. oats, 35 a. rye, bal. pasture. Good imp. Good water. \$125 a. Good terms. Good soil. Pierce Investment Co., Pierce, Neb.

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**OWN 20,000 ACRES** fine imp. farms. Must be sold. Write for big free list. Agents wanted. Fried Land Co., Jamestown, N. D.

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**MANY KINDS FINE FARM LANDS** from which to select. Markets, climate, schools and roads good. State in first letter (1) crops and (2) livestock you want to raise; (3) acreage wanted; (4) improved or unimproved; (5) terms wanted. Descriptions can then be sent to suit you. Railroad Farm Bureau, San Antonio, Texas.

**THE SANTA FE** has built a new branch railway line through the South Plains region of West Texas. A new farming and livestock region with new towns is being opened up. This territory already is partly occupied by a good class of settlers and crop possibilities proven by actual experience. Here you can profitably raise cotton, corn, sorghums and fruit. It is an ideal livestock and dairy country. Low prices for untitled lands and very easy terms. Move in early and take first pick. Write today for free illustrated folder.

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## SALE OR EXCHANGE

**WANT TO HEAR** from party having farm for sale. Give particulars and lowest price. John J. Black, Capper St., Chippewa Falls, Wis.

**FOR EXCHANGE**—320 a. Improved Mont. ranch 8 mi. County seat. What have you? T. A. Pritchard, Collins, Mo.

**FOR EXCHANGE**—My choice 190-acre Jewell Co., highly improved farm for Colorado irrigated or dry land. Weld Co. preferred. A. Johnson, 1805 6th Ave., Greeley, Colorado.

**FOR SALE AND EXCHANGE**—Northwest Missouri farms, the greatest corn belt in the United States. Also western ranches. Advise what you have. M. E. Noble & Co., St. Joseph, Mo.

## REAL ESTATE WANTED

**LARGE FARM OR RANCH WANTED**. Situated in any state. Will purchase place \$20,000 to \$50,000 value and will pay 20% per year for 5 years. Will expect you to deed farm to me immediately free of mortgage and I will turn over to you apartment house household, income of which goes to you for 5 years or until you are fully paid. One property pays \$5,000 net per year, another \$4,000. I am not trading my property but will pay for farm out of income as above provided.

Do not answer unless you send details of your farm or ranch and are ready to do business. MACK, 41 Broad St., Room 509, New York City.

## MISCELLANEOUS

**SELL YOUR PROPERTY** quickly for cash. No matter where located, particulars free. Real Estate Salesman Co., 515 Brownell, Lincoln, Nebraska.

**PRODUCTIVE LANDS**—Crop payment or lease terms. Along the Northern Pacific in Minnesota, North Dakota, Montana, Idaho, Washington and Oregon. Free literature. Say what state interests you. Mr. H. E. Byerly, 81 Northern Pacific Bldg., St. Paul, Minn.

## The Grain Market Report

BY SANDERS SOSLAND

**W**HEAT acts as if groping in the dark for a stable level of prices at which it can sell when the approaching movement of the new crop grain is inaugurated. The price fluctuations in recent weeks have been very erratic, the market, however, displaying its ability to recover losses. At what level new crop wheat will open is doubtful, and the views of the trade are sharply divided. Some see the probability of even a \$4-market; others extremely bearish on the price situation claim a \$2-market would not be a surprising development. One view has as many strong arguments as the other, tho it is quite improbable that prices will either recede from the present \$3-level to \$2 a bushel or advance to \$4 before the advent of the new crop. Speculative trading in wheat futures will not be resumed for at least 45 days, and despite official decontrol of the United States Grain Corporation, no definite plan has thus far been announced as to any method for resuming the wheat future market. Without any hedging facilities, at least in the early part of the new crop year, producers may encounter serious difficulty in the sale of their wheat. Country elevator operators will be very reluctant to buy wheat without being able to hedge their purchases by selling a deferred delivery in the speculative pit. Some dealers already have given notice that they will buy only 1,500 bushels, then await receipt of a car, and after disposing of this lot, purchase another similar quantity. While all country elevator operators may not follow such an extremely cautious policy, they will stay "close to shore." The country elevator men fear that if they purchase wheat reflecting \$3 or \$3.50 prices in Kansas City, the market could easily break 50 cents or more a bushel with a resulting loss to themselves.

## Storing Wheat Advised

The elevator men may demand heavy margins, but they are fearful about operating even on such a basis. Grain storage facilities on farms are not sufficient to take care of the entire wheat crop of Kansas or of other Southwestern states, and heavy damage to the grain might result from the forced holding. If conditions surrounding markets are not materially changed before harvest, producers should now make preparations for storing their new wheat, either in the shock, stack or by other methods. Conditions surrounding the market do not favor early marketing of wheat, so forced holding of the grain may prove profitable in the end, particularly if the storing can be accomplished without damaging the wheat.

Exporters were not buyers of wheat on a large scale the past week, but a moderate recovery in prices occurred from the recent sharp break. This is a highly favorable development, strengthening the view that exporters alone have not been entirely responsible for the bulge in prices. It is true that the withdrawal of exporters from the market precipitated the break in prices, but in the past week the foreigners, who have been forcing values down in order to purchase additional grain, were doubly surprised at the recuperative powers of the market even in the absence of a foreign demand. Gains of 14 to 20 cents

a bushel occurred on hard winter and dark hard varieties, while the advances on red winter amounted to 10 to as much as 23 cents a bushel, sales again having been made above the \$3-mark.

Reason for the improved tone of the market is to be found in the broadening demand for flour in domestic channels. Sales of flour increased to the largest volume in months, and millers, who have been holding only insignificant stocks of wheat, were forced to enter the open market for large quantities. Dealers in Kansas City shared

## Rebound in Wheat Prices

The rebound in wheat prices in face of continued absence of exporters from the market indicates the strong undertone of the bread grain trade. Domestic millers, who are sharing a broad demand for flour, provided sufficient competition to force values up about 20 cents a bushel. So there should be no fear on the part of producers over the possibility of the bottom dropping out of the wheat market. While early marketing of new wheat may be advantageous, holding for later sale may prove profitable.

a broad inquiry from the Northwest, the East, South, Southeast and in surrounding territory. How long the mill demand will hold up is doubtful, depending entirely on the character of the flour buying the remainder of the old crop year. The course of the exporters in the wheat market also is problematical. Some have anticipated a resumption of buying on an enormous scale, resulting from fear on the part of foreigners that domestic demand may be of sufficient volume to force prices back to the recent high level around \$3.18 a bushel in Kansas City. A very erratic market may be expected the remainder of the old crop year. Government efforts to increase the movement of wheat from interior points may, if successful, force another break in prices, but there is no need for fear on the part of the country trade over a possible permanent downturn in prices for the bread grain. Foreign requirements are too large to permit this.

## The Corn Situation

The fluctuations in prices in the corn market represent largely a difference of opinion as to the probable car situation. One day we hear of strained transportation and prospects for little improvement which cause a sharp rise in prices. Possibly on the following day, the news indicates a continued strain but highly encouraging prospects for the future, and the result is a reaction. It's a car market, and if one could foretell the probable position of transportation, to gauge the trend of prices for the coarse grain would not be so difficult. The order of the Interstate Commerce Commission requiring Eastern and Southern lines to provide a total of 660 cars daily for a month to Western roads is not yet proving successful, tho it has been in effect about 10 days already. So far as corn is concerned, the rail order is expected to prove a failure. In the past week carlots of corn were as much as 6 cents a bushel higher, generally unchanged to 4 cents up. The speculative market, after scoring sharp early gains, reacted moderately and closed about 2 to 4 cents net higher.

## Oats Show Small Advance

Increased attention to the progress of growing oats is being given by market operators. The plant is more or less backward, owing to cool temperatures, and many anticipate a smaller out-turn than recent official estimates have indicated. Also, a delayed movement to market is probable. Prices rebounded slightly last week, carlots closing at a range of \$1.05 to \$1.11 a bushel, or 1 to 4 cents higher. The

deferred deliveries were about 2 cents net higher. Exporters were liberal buyers of the minor cereal, which together with the broad domestic demand from sections of the country where spring work is progressing rapidly, resulted in the moderate offerings being readily absorbed.

Bran and shorts are offering opposition to bearish pressure. Contrary to views expressed by many that if prices ever begin to recede the bottom will drop out, the market is holding up remarkably well. The apparent strength is the result of a lack of offerings on markets to produce sufficient pressure to cause a downturn in prices. Mills have been operating on a restricted scale and their production of millfeed has been light, consequently the dearth of supplies available for markets. But country demand has fallen off sharply, owing to broad use of pastures, which has permitted a freer flow into commercial channels. Bran is selling around \$52 a ton, sacked, for carlots, in Kansas City, and shorts around \$58 to \$59 for gray and \$55 to \$56 for brown. Bran should be purchased only for immediate needs, and at current price levels, alfalfa and pastures should be substituted as much as possible.

## Hay Prices Re-adjusted

Re-adjustment in hay prices, particularly on alfalfa and prairie, has begun. Prairie has reacted about \$5 a ton from its high point, and the cheaper grades of alfalfa were down about \$2 the past week. The better grades of alfalfa display a strong tone, but this is based on the extremely light offerings rather than any broad consumptive demand. Feeders are buying on a very light scale, pastures providing an abundance of feed. Millers have been the principal buyers of alfalfa, but reduced demand for meal has caused a lessened interest in the hay market. New crop alfalfa is being bought in Kansas and Oklahoma around \$15 to \$18 a ton, shipment to be made two weeks after curing and baling, f. o. b. cars. New alfalfa of sound, good quality, will command strong prices, but producers may expect heating or damaged hay to be sharply discounted. Tame hay is strong, owing to scarcity of offerings and a good demand from the cotton belt. Tame hay is selling up to \$38 a ton.

## Kansas Expects Good Crops

(Continued from Page 47.)

is in good condition. Kafir, milo and maize are coming up well. Wheat will not average more than 7 to 8 bushels an acre. Wheat is worth \$2.50; corn, \$1.60; oats, \$1.10; butterfat, 55c; eggs, 32c.—E. L. Stocking, May 22.

**Trego**—We have had some good rains this month, and vegetation is growing rapidly. Wheat is beginning to head, and oats and barley show up well. Farmers are nearly thru planting corn. Crops of the sorghum variety are being planted, and some of them are coming up.—C. C. Cross, May 27.

**Wabaunsee**—The continued wet weather is delaying spring crops and all spring work. Wheat, oats and all crops are making excellent growth. Wheat will make a better yield than it did last year and it is heading out now.—A. H. Reynard, May 29.

**Washington**—The cool weather continues with considerable rain. Wheat and oats are in good condition. Alfalfa is growing fast, and soon will be ready to cut. Farmers are beginning to work corn. All livestock has been turned into pastures. Gardens are doing very well, and a great many plants have been set out. Corn is worth \$2 a bushel; eggs, 30c; butterfat, 48c; sugar, 30c; flour, \$3.75.—Ralph B. Cole, May 28.

**Woodson**—We are having good rains. Alfalfa is ready to cut, but it is too wet to get into the fields. Oats are doing well. Wheat is growing, but some fields are very thin. Others are good. Corn has a good color, but is growing slowly on account of the cool weather. The weather is favorable for pastures and meadows and livestock is healthy. Potatoes are in good condition.—E. F. Opperman, May 28.

**Wyandotte**—Wheat is showing a very satisfactory stand and growth. Oats are doing well. Corn, alfalfa, potatoes, and pastures are all in excellent condition.—P. H. Bowser, May 29.

## Milk and Cream Weights

Skimmilk weighs 8.63 pounds a gallon.

The foregoing figures were based on milk with a fat content of 2½ per cent at 68 degrees temperature. Similar milk testing 3 per cent weighs 8.6 pounds.

Mixed milk and cream of 10 per cent butterfat content weighs 8.53 pounds.

The general rule is to estimate milk testing from 3 to 5 per cent as weighing 8.6 pounds a gallon.

The sorghums give a larger acre profit under Kansas conditions than corn.

## MISCELLANEOUS

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We will book your order for September litters so send them along; still have a number of extra good September male pigs for sale.  
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Address R. O. Sheldon, Supt. Swine Dept.

## 75 Extra Good, Big, Stretchy Polands

Fall pigs, some real herd boar prospects; very best of breeding; pairs or trios no kin; immunized; priced to sell. Guaranteed to please you or your money back.  
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## REAL POLANDS AT FARMER'S PRICES

Choice gilts of Big Bob Wonder and Big Timm breeding bred to Hillcrest Orange Model by the \$10.00 Orange Model. Fall pigs, both sexes, by Sheridan's Bob Wonder by Big Bob Wonder. Real ones at right prices. Write us. J. B. SHERIDAN, Carneiro, Kan.

POLANDS—DISHER'S GIANT BREEDING March 1919 boar by Morton's Giant by Disher's Giant; 56 in. high; 60 in. long; 9 in. bone; exceptional boar; proven breeder. Spring pigs both sexes. Dams: Big Bob, Col. Wonder, Big Orphan, and Orphan Grand Master. Immunized. Satisfaction. Phone Wichita 589. GSELL &amp; WEBB, WICHITA, KANSAS

## BIG TYPE POLAND CHINA HERD

Improved boars for sale; grandsons of Caldwell's Big Bob, grand champion World on one side, and of William's Wonder, Giant Joe and Liberty Bond on the other side. Immunized against cholera and ready for service.  
The Hall Stock Farm, Coffeyville, Kansas

## HUFF'S SQUARE JUMBO

A son of P. W. Young's Square Jumbo heads my herd. He is the kind that sires the high-up kind and big litters. Write me to price you a real boar pig at three months old.  
Chas. Hoffhine, R. 4, Washington, Kansas

## Ross &amp; Vincent's Poland Chinas

Gilts and boars, Sept. and Oct. farrow. A few bred sows. Herd sires are Sterling Buster and Sterling Timm, two of the breed's best boars in Kansas. The hogs we are offering are good both in individuality and in breeding and are priced right. Satisfaction guaranteed. ROSS &amp; VINCENT, STERLING, KAN.

## Big Type Polands

We now have a fine lot of spring pigs for sale. Also sows and gilts bred to Jack Buster. Cholera immunized. Satisfaction guaranteed.  
Frank L. Downie, Route 4, Hutchinson, Kan.

## 60 POLAND CHINA PIGS

Sires the famous Carver's Best (wt. 1,000 lb.) and Convincing Bob, an excellent individual. Choice pigs, registered, vaccinated, guaranteed, \$20 each, trio \$50.  
LLOYD MULLIN, WALNUT, KANSAS

## Big Type Polands

2 Oct. and 6 spring boars. Carry the best blood of the breed. Priced \$30 to \$35 for quick sale. Write your wants. LAWRENCE HOUGHTON, SEVERY, KAN

## CHESTER WHITE HOGS.

## Hume Herd Chester White Hogs

For sale. 4 fall boars, well grown and ready to use; priced for quick sale \$50 to \$65. First check gets choice; satisfaction guaranteed or money refunded; 50 spring pigs priced in pairs and trios not akin. Write at once. CLAUDE B. THOMPSON, HUME, MO.

## Prince Tip Top, Grand Champion of Kansas, Heads My Herd

Gilts bred for May and June pigs and a few more fall boars sired by Prince Tip Top. Gilts \$75; boars \$50, \$60 and \$75. HENRY MURR, TONGANOXIE, KAN.

## Kansas Herd Chester Whites

18 fall gilts sired by and out of Kansas state fair prize winners. Bred to Don Big Joe. Descriptions and prices by return mail.  
Arthur Mosse & Daughter, Leavenworth, Kan.

## Chester Whites For Sale

Tried sows; herd boar; fall boars and gilts; spring pigs. Respective prices \$65, \$35 and \$15 each. C. W. R. registration. WILL ACKLEY, PORTIS, KANSAS.

## CHESTER WHITES

Reg., large, stretchy, male March pigs for sale. HOLYROOD FARM, IOLA, KANSAS

## CHESTER WHITES

Bred gilts all sold. Choice fall boars and gilts for sale. E. E. SMILEY, PERTH, KAN.

## CHESTER WHITE BOARS

Nov. farrow. Wt. about 100. \$25 each. One at \$30. F. J. Scherman, R. F. D. 7, Topeka, Kan.

## O. I. C. REGISTERED PIGS

For sale: Nat. prize-winning show blood. Price \$15 each at weaning time. Earl Anderson, Elwood, Mo.

## O. I. C. PIGS

Pairs or trios, not akin. HARRY HAYNES, GRANTVILLE, KANSAS

## O. I. C. PIGS

Either sex; priced to sell. E. S. ROBERTSON, REPUBLIC, MISSOURI

## O. I. C. PIGS

FOR SALE. VERG CURTIS, Larned, Kan.

## SPOTTED POLAND CHINA HOGS.

## REGISTERED SPOTTED POLAND BOARS

for service; gilts open or bred for English fall litter and dandy spring pigs of English breeding.  
C. W. WEISENBAUM, ALTAMONT, KAN.

## Matthews Spotted Polands

Choice boars, all ages.  
EARL J. MATTHEWS, Clearwater, Kan.

## The Livestock Markets

BY SAMUEL SOSLAND

DECREASES amounting to millions of pounds in the exports of pork and beef continue to exert a bearish influence on prices of livestock at Kansas City and other markets. The decreases in the shipments to Europe and other foreign lands would be more bearish than reported on prices except for the fact that there has been a shrinkage in market supplies which has offset in part the lessened demand.

The latest official compilations show that in the month of April the United States exported only 86,477,000 pounds of pork products, compared with 445,971,000 in the same month in 1919. The producer of hogs can best appreciate the significance of these figures by making note of the fact that the April exports of this year were equal to the product of about 540,000 live, average hogs. In the same month last year the exports were equal to the product of 2,787,000 live hogs. In the 10 months between July 1 of last year and May 1 of this year the exports of hog products aggregated 1,465,000,000 pounds, compared with 2,013,000,000 in the same period of the preceding year. These totals are equal to about 9,162,000 live hogs for the last 10 months and 12,586,000 head for the preceding year.

## Beef Exports

In the trade in beef, where export business is normally less important than in the hog market, excepting in periods of war demands, the foreign shipments in April were 29,239,000 pounds, against 34,864,000 a year ago. It should be remembered in this connection that the export outgo of beef fell off sharply last year from the total during the period of the war in 1918. The beef exports for the month were equal to the product of about 49,000 live cattle, compared with 58,000 a year ago. For the past 10 months the beef exports aggregate 241,968,000 pounds, compared with 479,813,000 in the same period of the preceding year. These shipments are equal to 403,000 live cattle for the past 10 months and 796,000 head in the same period a year ago.

Before weighing the full significance of the drop in export business, we should look at the market movement. At the 69 leading markets of the United States the April receipts of hogs were 3,064,984 head, according to Federal compilations, compared with 3,702,167 in the same month last year. This is a decrease of 637,183 head. The exports decreased 2,247,000 head for the month, but the April drop this year was sharper than for earlier months of the year. Also, there was undoubtedly increased domestic consumption, for labor is receiving higher wages and is in a position to pay for more pork today than a year ago. The cattle receipts for April at the 69 leading markets of the country were 1,560,800 head, compared with 1,772,904 in April, 1919, a decrease of 212,104 head. Thus, the decrease in cattle receipts was sharper by far at the 69 leading markets than the falling-off in the export outgo of beef. While the movement at 69 markets does not represent the aggregate for the entire country, it is an excellent barometer.

Two conclusions may be reached from the export meat statistics. First, the export business in beef can scarcely be cited as an extremely bearish influence, especially when the reduced domestic supplies on markets are considered. Second, the export trade in hog products is really bearish. But production of pork is decreasing more and more, and it is necessary to ship less to Europe on this account. Therefore, any improvement in the exports of hog products should help prices at Kansas City and on other stock yards.

## SPOTTED POLAND CHINA HOGS.

## OLD ORIGINAL SPOTTED POLANDS

Sows bred and proved. Ready to ship. Young stock of all ages priced to sell. Write your wants to CEDAR ROW STOCK FARM, A. S. Alexander, Prop., Burlington, Kansas.

## Big Type Spotted Polands

Ten-month boars, \$75; fall gilts, \$50; weaned pigs, \$25; papers furnished. John B. Young, Cedarredge, Colo.

## REGISTERED SPOTTED POLANDS

Pigs for sale. Good bone and breeding.  
T. L. Curtis, Dunlap, Kansas

An indication of the reductions already effected in domestic production of hogs is the fact that the latest estimates of the Department of Agriculture make the total number of breeding sows in the United States only 8,985,000 head, compared with 9,970,000 a year ago. This is a decrease of nearly 10 per cent. It is necessary to go back to the spring of 1914, prior to the opening of the European war, to find a

## Meat Exports and Output

While the reduced exports of pork and beef are exerting a bearish influence on prices, the fact that production shows a reduction is an offsetting influence. The beef export trade has declined to a volume which makes it of little importance as a domestic price factor. Any improvement in the export trade in hog products from the sharply reduced totals of recent months promises to strengthen prices of hogs.

smaller number of breeding sows on farms. In other words, the breeding sow population is nearly back to the pre-war total. Besides, the pig crop this spring is generally believed to be lighter than last year and below the average a sow in recent years.

While discouraging for past months, the export situation in hog products in particular may prove bullish in the near future. Packers have reported improvement in the export trade in recent weeks. The Armour plant at Kansas City, for example, is engaged in loading out 2½ million pounds of pork products for shipment to Great Britain.

Bargains are available on the Kansas City market so far as stock hogs are concerned. It is a notable fact that cattle and sheep interests on the whole manifest no enthusiasm over current prices of stockers and feeders, but this cannot be said of the members of the hog trade. The hog salesmen feel that, if there are any bargains in the market, surely stock hogs belong in that class. At this time of the year stock hogs usually command a premium of \$1 or more over finished porkers. The unfinished porkers now can be purchased at a discount of \$2 as compared with fat hogs. Indicative of the position of the stock hog market is the fact that the best grades are quoted around \$12.75 a hundredweight. Fat hogs sold as high as \$14.80 the past week. The margin is inviting because of the peculiar position of hogs and also on account of the artificial level of corn prices. It has been more profitable in recent months to sell corn rather than to feed it to hogs, but the markets of the country are facing a reversal in the relationship between grain and pork.

The average cost of hogs at Kansas City last week rose well above \$14, reaching \$14.44, and the top price advanced 20 cents. Medium grades of hogs rose as much as 65 cents, and the average advances were 20 to 40 cents. On the other hand, stock hogs were weak, declining about 25 cents. The top on hogs a year ago was \$20.55.

## Cattlemen Lose Money

Weakness continued in the market for cattle despite a small decrease in receipts. Kansas sold heavy steers weighing over 1,600 pounds, at \$12.80 and less, losing fortunes. One bunch that sold at \$12.80 cost \$19.50 as stockers at the Denver show more than a year ago, having been purchased with the intention of competing at fat stock shows when finished. The cattle were in show condition when they arrived. Prices in general were mostly 50 cents to \$1 lower and at the lowest level in more than two years. The bulk of sales were at \$10 to \$12 on steers going to packers. Cows and heifers broke in sympathy with steers and lost around \$1. Veals moved up 50 cents, with tops around \$12. Stockers and feeders were dull on account of the further declines in fat cattle, but the sales made were still considered too high. Light

stock cows of a good grade were quoted down to \$7, light stock steers at \$8 to \$9 and good to choice feeders at \$9.25 to \$10.75. There is some hope of a reaction in the best fed cattle, but the general market is still in a weak position.

Sheepmen described the gains of 50 cents to \$2 in the sheep and goat market as in the nature of a reaction from the preceding week's drop. It was stated that demand for breeding ewes was rarely, if ever, so light as at present, with good, young stock available at \$8.50 to \$9.50. Feeding lambs were down to \$11. Native lambs sold up to \$16 to packers. Cull native lambs ruled between \$10 and \$11.50. Browsers are quoted at \$5.50 to \$6.25.

The best grades of heavy horses and mules held steady, while other classes displayed an easy tone. The trade can absorb only small numbers at this season.

## Some Shorthorn Milk Records

BY T. W. MORSE

The records of the American Milking Shorthorn Breeders' association for March show that 41 cows on test during that month averaged 1,000 pounds of milk and 40 pounds of butterfat. The biggest record was 1,473 pounds of milk and 63.5 pounds of butterfat.

As illustrating the fact I often have pointed out, that milking ability is not limited to any one of the old pedigree classifications, the list contains pure Bates, pure Scotch and a Polled Shorthorn of mixed breeding. Descendants of Bates bred cattle occur in largest number, due partly at least to the fact that for some years owners of herds representing this line of breeding have developed the milking ability of their cows as a business protection against the popular demand for Scotch breeding. A pure Bates cow (Pure Roguish Eyes 5th) made 1,379 pounds milk and 51 pounds butterfat, the high mark for 4-year-olds during the month. She is owned by O. M. Healey & Son of Iowa. The pure Scotch cow (seventh in the mature cow list) is a Campbell Ury owned by Pine Valley Farms Company of Colorado. Her record was 1,397 pounds milk and 51 pounds butterfat. She has a yearly fat test of 5 per cent.

Eleven states, from Massachusetts to California, are represented in the list.

## Cattle Tested for Tuberculosis

From time to time the Bureau of Animal Industry publishes a "communiqué" showing conditions along the wide battle front where the allied forces of Federal and state authorities are fighting cattle tuberculosis.

The latest report indicates that since the beginning of the movement in 1917 the owners of 500,000 cattle have placed their herds under supervision.

On April 10, 1920, 25,793 herds scattered throughout the United States, with a total of 537,240 cattle, were under the co-operative supervision of the Department of Agriculture and state veterinarians. There were 2,230 accredited herds—60,237 cattle known to be free from the plague. Over 115,000 cattle were on the waiting list to be tested as soon as the veterinarians can work with them. Still another lot of 258,331 cattle have passed thru the first stage of the test without showing any dangerous symptoms. The least optimistic estimate indicates that two-thirds of this number will conclude the test satisfactorily, and add 170,000 cattle to the accredited column.

## More Information on Corn

The government has some excellent publications on corn growing. Any of the following Farmers' Bulletins will be sent free on application to the United States Department of Agriculture, Washington, D. C.

414. Corn Cultivation.
415. Seed Corn.
537. How to Grow an Acre of Corn.
553. Popcorn for the Home.
554. Popcorn for the Market.
729. Corn Cultivation in the Southeastern States.
768. Dwarf Broom Corn.
773. Corn Growing under Drouthy Conditions.
872. The Bollworm or Corn Earworm.
875. The Rough-headed Corn Stalk Beetle and Its Control.
891. The Corn-root Aphid and Methods of Controlling It.
950. The Southern Corn Rootworm, and Farm Practices to Control It.
953. Standard Broom Corn.
1046. The European Corn Borer.



## DUROC JERSEY HOGS.

## Jack's Orion 3rd

10 October gilts out of dams of popular ancestry. Either bred to my boar or sold open. Price right if you want gilts.  
J. O. HONEYCUTT, BLUE RAPIDS, KAN.

## Choice September Gilts

Bred for September farrow, \$65; March pigs, pairs and trios not akin, \$27. All stock immuned. D. O. BANCROFT, Osborne, Kan.

## Purebred Duroc Pigs

Boars and gilts, 9 weeks old; about 50 lbs.; double immuned and weaned; from such boars as Joe King Orion; boars \$20, gilts \$25. Write for descriptions.  
J. V. SHANNON, MORRILL, KANSAS

**DUROCS** Defenders! Largest herd of intensely bred Colonels in the West. Breeding stock of all ages for sale. DAYTON CASTLEMAN, BUNCETON, MO.

## HAMPSHIRE HOGS.

## Start Right With Silver Hampshires

Buy your breeding stock from herd that stands supreme in SHOW RING AND BREEDING PEN. For sale—Bred sows and gilts, also boars, one or a carload. Buy by mail. "Silver guarantee" back of every hog. Drop postal card today for price lists.  
Wickfield Farms, Box 55, Cantrill, Iowa  
F. F. Silver, Prop.



**Walter Shaw's Hampshires**  
Will sell pigs both sex, pairs and trios, unrelated. Ready to ship now. Messenger Boy and Amber Tipton breeding. Phone 3918, Derby, Kan. Address Route 6, WICHITA, KAN.

## SUNFLOWER HERD HAMPSHIRE

20 extra good boars (the tops from 200 fall pigs) registered, double treated, ready for service, priced right. Farm just out of town on the Southwest Trail.  
GEO. W. ELA, VALLEY FALLS, KANSAS



**WHITEWAY HAMPSHIRE**  
On Approval  
Choice bred sows and gilts. Spring pigs, either sex. Noted blood lines. Priced for quick sale.  
F. B. Wempe, Frankfort, Kan.

## BERKSHIRE HOGS.

**Berkshire Pigs** A few weaned pigs for stock combining length, depth and quality. Cholera immune, pedigreed, either sex \$15 each.  
L. I. COLLINS, R. 1, MANHATTAN, KAN.

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Experienced auctioneer. Pedigreed livestock and big sales of all kinds.

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Claim your 1920-21 dates with me early.

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My reputation is built upon the service you receive. Write, phone or wire.

## HORSES AND JACK STOCK

**Percherons—Belgians—Shires**  
State Fair prize-winning stallions and registered mares bred to Champion stallion for sale. Also extra heavy black Mammoth Jacks.  
Fred Chandler, Rt. 7, Chariton, Ia.

## 3 JACKS, 7 JENNETS

Herd headed by Barr's Bryan, a prize winner and good producer. Most of the Jennets by Kansas Chief. Priced to move. Write today.  
E. W. DALES, EUREKA, KANSAS

## SHEEP

**42 EWES WITH LAMBS**  
I want to close them out and they are very desirable. The lambs are February and April ages. Low prices for quick sale.  
G. M. ALBRIGHT, OVERBROOK, KANSAS

**Shropshire Rams and Ewes**  
For sale. Best breeding in America. Stud sires Senator 1533y III and Bibby Champion. Gilmorelands were more firsts at Wichita National than all others. Killing under \$75.  
GILMORELANDS, FREDONIA, KANSAS

## 300 WESTERN EWES

Young, acclimated and bred to a registered Shropshire buck to drop lambs in June. Priced right.  
E. L. Jewett & Sons, Rt. 6 Burlington, Kan.

## Hog Cholera Epidemic

Hog cholera is causing serious losses in Shawnee county. The disease was found in eight herds recently. On one farm north of Topeka, the whole herd, 26 hogs has been lost. All infected farms have been quarantined and farmers of infected neighborhoods have been warned to take every precaution possible to prevent additional spread of the disease. The low price of hogs, increased expense of vaccination and general discouragement over the hog outlook is given as the cause for not protecting hogs by the serum treatment. Vaccination with proper sanitation and quarantine of infected localities is the only means of preventing a widespread epidemic over the state. Reports of hog cholera outbreaks have come from Cloud, Osage and Sedgwick counties.

## Topeka Dealers' Farm Truck Tour

Topeka dealers have arranged a four-day Farm Truck Tour for June 8, 9, 10 and 11. Their route is thru Meriden, Valley Falls and Denison to Holton for the first night's stop. Wednesday, the ninth, they will drive thru Mayetta, Hoyt, Silver Lake, Rossville, St. Mary's, Wamego and to Alma for the night. Thursday their route leads thru Paxico, Maple Hill, Willard, Dover, Eskridge, Burlingame and to Osage City. Friday they will return to Topeka thru Lyndon, Scranton, Overbrook and Richland. There will be 12 to 15 trucks in the caravan, all of which are handled in Topeka, and many of them will be equipped with special farm bodies which can be used for either hauling grain or livestock. A speaker will accompany them, who will make short talks regarding "the truck on the farm" at all stops.

## Motorize the Dairy Farm

(Continued from Page 45.)

trucks in use in the cities in all of these states than there are found on the farms, but the proportion on the farms should be greater. Certainly there should be more motor trucks on dairy farms than there are at the present time. In many instances a truck of only moderate size will be needed. A lesser cost of operation and a greater speed commend the light machine for those errands in which the size of the load cannot be increased. If in some seasons a larger carrying load becomes necessary a trailer can be purchased at moderate expense and used to good advantage. With a truck-trailer combination it is possible to meet a wider variety of conditions than can be accomplished thru the use of a truck alone. The Louisiana University Creamery at Baton Rouge, La., has tried this arrangement for several years and it has proved very satisfactory.

## Public Sales of Livestock

## Hereford Cattle.

June 22—S. W. Tilley & Sons, Irving, Kan. Angus Cattle.

Oct. 16—Boys' Calf Club, Effingham, Kan. Frank Andrews, Mgr., Muscotah, Kan. Shorthorn Cattle.

June 1—C. S. Nevius & Son, Chiles, Kan. June 5—A. L. Johnston, Lock Box 86, Lane. June 11—H. L. Burgess, Chelsea, Okla. Sale at Ft. Scott, Kan.

June 12—Park E. Salter, Wichita, Kan. Sale at Stafford, Kan.

June 16—E. Ogden & Son, Maryville, Mo. June 17—Bellows Bros., Maryville, Mo. June 18—(Forenoon) J. H. Degginger, Albany, Mo., at Maryville, Mo.

June 18—(Afternoon) Dr. O. W. Neuman, Craig, Mo., at Maryville, Mo.

June 18—(Evening) John Crist, Skidmore, Mo., at Maryville, Mo.

Oct. 13—East Kansas Shorthorn Ass'n, at Ottawa, Kan. F. Joe Robbins, Sec'y.

Oct. 14—Linn Co. Shorthorn Breeders' Ass'n Sale, Pleasanton, Kan. E. C. Smith, Sec'y.

Oct. 16—Boys' Calf Club, Effingham, Kan. Robt. Russell, Muscotah, Kan., Mgr.

Nov. 9—Shorthorn Ass'n sale. O. A. Holman, Mgr., Peabody, Kan.

## Holstein Cattle.

June 28—F. M. King, Grandview, Mo. W. H. Mott, Sales Mgr., Herlington, Kan.

## Poland China Hogs.

Aug. 25—The Deming Ranch, Oswego, Kan. H. O. Sheldon, Supt. Swine Dept.

Oct. 20—Fred G. Laptad, Lawrence, Kan. Spotted Poland Chinas.

August 24—Henry Field, Shenandoah, Ia. September 17—Henry Field, Shenandoah, Ia. October 9—Henry Field, Shenandoah, Ia.

## Duroc Jersey Hogs.

Oct. 7—L. C. Kirk, Vandalla, Mo. Oct. 15—Jno. C. Simon, Humboldt, Neb.

Oct. 18—Robt E. Steele, Falls City, Neb. Oct. 20—Fred G. Laptad, Lawrence, Kan.

Nov. 6—A. C. Brockman, Centralia, Mo. Feb. 3—J. C. Theobald, Ohiowa, Neb.

Feb. 15—Lyden Brothers, Hildreth, Neb. Feb. 16—Earl Babcock, Fairbury, Neb.

Feb. 16—Geo. H. Burdette, Auburn, Neb. Feb. 17—Jno. C. Simon, Humboldt, Neb.

Feb. 18—Robt. E. Steele, Falls City, Neb.

## Kansas Shorthorn Association Sale.

## SUMMARY.

8 bulls averaged.....\$454.00  
42 females averaged.....530.60  
50 head averaged.....518.30

A fair money return and an excellent influence for the future are two results from the Kansas Shorthorn Breeders' association sale at Manhattan, Kansas, last week. Thru the efforts of Dr. McCampbell, head of the Animal Husbandry department of the College, about 20 Kansas breeders were induced to consign cattle good enough to make a representative offering. These cattle, numbering fifty, brought a total of \$25,915, resulting in the average prices shown in summary above. Bulls sold from \$135 to \$1025, the top price being paid by Meall Brothers for a roan yearling from the herd of Tomson Brothers. Females brought from \$125 to \$3900, the top price being paid for College Duchess 2d and bull calf. This cow was consigned by the Agricultural College and was bought by the Sni-A-Bar Farms over competition from the ringside as well

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of the Capper Farm Press

Founded on four great papers, each excelling in prestige with the farmers and stockmen of its territory, the four covering, respectively, the states of Kansas, Nebraska, Missouri and Oklahoma and adjacent sections of adjoining states.

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It is a good idea to keep in touch with your territory manager as much as possible. His judgment, experience and constant travel and observation always will prove valuable to you. Inquiries and instructions to headquarters can be addressed:

The Livestock Service of the Capper Farm Press, Topeka, Kan.

T. W. MORSE, DIRECTOR AND LIVESTOCK EDITOR

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## DUROC JERSEY HOGS.

Timber Hill Stock Farm  
Our DUROCS Make Good

We have some especially good fall herd boar prospects and gilts by our Orion Cherry King, Pathfinder and King The Col herd boars. Out of matured sows weighing 700 to 800 lbs. Write for circular.

Lant Bros., Dennis, Kansas

## PETFORD'S DUROCS

Spring pigs, both sex, immuned. Sired by: Model Alley, Kansas grandchampion; General Pathfinder, a good breeding son of Pathfinder; Illustrators Orion 3rd.; and J. D.'s Wonder 1st. Will sell J. D.'s Wonder 1st, a half brother to Great Wonder I Am by Great Wonder. Extra good boar. Guaranteed in every respect. Write today  
JNO. W. PETFORD, Saffordville, Kansas

## Big Type Durocs

Three big yearlings bred to Shepherd's Orion Sensation for June farrow. Three big yearling boars sired by Pathfinder Junior. All priced to sell.  
G. M. SHEPHERD, LYONS, KANSAS.

## WOOD'S DUROCS

Spring pigs, both sexes. Great Wonder strain; registered; immuned; double treatment; satisfaction guaranteed.  
W. A. WOOD, ELMDALE, KANSAS

## THIS SPACE RESERVED FOR

Sawhill & Son, Clarinda, Iowa  
BREEDERS OF DUROC JERSEY HOGS.

## Wooddell's Durocs

15 topdy fall boars for sale. Sired by Chief's Wonder, Pathfinder Jr. and I Am Great Wonder; from big mature sows. One of the best sow herds in Kansas. Priced to sell at once. G. B. Wooddell, Winfield, Kan.

## McComas' Durocs

Fall boars: Great Sensation and Pathfinder breeding Spring boars: Orion Cherry King and Pathfinder breeding. Good supply of good individuals priced reasonably. Write, phone or call at my place.  
W. D. McComas, Box 455, Wichita, Kansas

## Gilts Practically All Sold

but we have a few good fall boars sired by Uneda High Orion our Grand Champion boar. We are practicing these to sell. We also have one yearling by the same boar that is going to make a real herd boar. We will sell him worth the money.  
ZINK STOCK FARMS, TURON, KANSAS.

## SPRING AND FALL BOARS

Big stretchy fellows ready for immediate use. Sired by Reed's Gano, Potentate's Orion. Dams by Pathfinder, King the Col. and Crimson Wonder. Immuned. Priced to sell.  
JOHN A. REED & SONS, LYONS, KANSAS

**Replogle's Durocs** Now booking orders for June delivery sired by John's Combination 2nd and Jack's Great Orion, a good son of the \$10,000 international grandchampion, Jack's Orion King 2nd. Guaranteed to please. Some fall and winter boars. Write today. SID REPLOGLE, Cottonwood Falls, Kan.

**VALLEY SPRING DUROCS**  
Early March pigs of all popular big type strains; reg. and immuned; pairs and trios not related. A few fall boars and weanling pigs, \$15 and up.  
E. J. BLISS, BLOOMINGTON, KANSAS

## MUELLER'S DUROCS

A topdy bunch of fall gilts and boars ready for service, sired by Uneda King's Col.; priced to sell. Also spring pigs of classy breeding. Geo. W. Mueller, St. John, Kan.

## FULKS' BIG TYPE DUROCS

For sale—Two extra good spring yearling boars. Spring boar pigs after weaned and immuned \$50 to \$100. Ripping good ones sired by I Am A Great Wonder Giant (grand champion at the Kansas National Show) and Victor Sensation, a real boar, guaranteed to please. W. H. FULKS, TURON, KANSAS.

## GREAT WONDER AND ORION DUROCS

February and March pigs; best of blood; quality; from 600 and 700 lb. sows; some by 1,100-lb. boar. Write for breeding. Priced at one-third value. Gilts, \$25; boars \$20. I pay express and record fee.  
HERB J. BARR, R. 3, LARNED, KANSAS

## Wreath Farm Durocs

For sale: 7 fall gilts bred for Sept. farrow. 3 fall boars. Young boars (March farrow) and bred right for sale.  
A. B. MORRIS, MGR., MANHATTAN, KAN.

## Duroc Fall Boars

Ready for spring service. Also baby boars for May delivery. Reasonable prices. Circular free. Searle & Searle, R. 15, Tecumseh, Kan.

## FALL AND WEANLING BOAR PIGS

Orion Cherry King and Pathfinder breeding. Satisfaction or your money back.  
R. P. Wells, Formoso, Kan. (Jewell County)

## DUROC PIGS

Either sex; sired by Pathfinder's Image 2d, Illustrators Orion 4th and A Critic's Chief; \$17.50 to \$25.00 each at 2 months.  
EDWARD M. GREGORY, READING, KAN.

## Duroc Pigs, Express Prepaid

Ten gilts farrowed 83 pigs March litters. Sell at weaning. Col. Wonder, etc., immuned, guaranteed, express prepaid. Write today.  
OVERSTAKE BROS., ATLANTA, KAN.

## Big Type Durocs

Tried sows bred to Pathfinder's Pride, son of world's grand champion. Spring pigs at bargain prices.  
ED LOCKWOOD, KINSLEY, KANSAS



# Longview Stock Farm

will sell a select offering from their herd of

## Fairfax Herefords

Frankfort, Kan., Monday, June 21

4 BULLS—46 COWS AND HEIFERS  
from a herd founded with daughters  
of Imp. Majestic, Keep On, Weston  
Stamp, Onward 18th, and Perfection  
Fairfax Bred Bulls.

featuring one of the greatest breeding sons of Perfection Fairfax

### Letham Fairfax 414471

whose dam is Miss Ruth 341216, a double granddaughter of  
Disturber. There is no better breeding in the herd books and  
better yet the get of Letham Fairfax prove him worthy of his  
blood.

With Few Exceptions Every Lot in the Sale is  
Either Sired By or Bred To Letham Fairfax

Three sons which are real herd headers; 28 daughters of  
which 20 sell open and 8 sell with calf to the service of Wood-  
ford Lad 714165, by the noted Woodford and out of Disturber's  
Lassie by Disturber; 18 cows bred to or with calves at foot by  
Letham Fairfax.

Your Opportunity to Buy Fairfax Blood at much less than it  
would cost you in record sales. Get your catalog today and  
please mention this paper when writing.

**S. W. Tilley & Sons, Irving, Kansas**

Col. Fred Reppert, Auctioneer.

## Hereford Bulls For Sale

### Anxiety Breeding

40 head sired by Beau Gaston 366153 by Beau President and Sir Dover  
540942 by Beau Dover. 20 of these bulls are from 24 to 30 months old,  
the other 20 from 16 to 22 months. These bulls are in nice condition,  
have extra heavy bone; short broad heads and drooping horns; good dark  
Hereford colors. Priced to sell either one or both car loads or single  
animals. Have also two extra good herd bulls for sale.

**Geo. J. Anstey, Prop.**

Fairview Herefords

Massena, Iowa

#### HEREFORD CATTLE

### Discriminating Hereford Buyers

#### We Offer NOW

12 coming yearling bulls, Columbus, Anxiety  
strains. Bred by character and proper conforma-  
tion. Unrumped but in better than pasture  
condition. 7 registered, 5 unregistered, but equal-  
ly well bred. All high class farm bulls.  
If you want one or more of the 12 yearling  
bulls write now to W. C. Cummings, Hesston, Kan.

### PLEASANT VIEW STOCK FARM

#### Herefords, Percherons, Durocs

For sale. Five bulls from 10 to 12 months  
old, by Dominator by Domino. A nice  
string bull calves and six bred cows. A  
nice young stallion. Address,  
**Mora E. Gideon, Emmett, Kan.**  
(Pottawatomie county)

### 250 REGISTERED HEREFORDS

Headed by Don Balboa 14th 596021, by Don  
Carlos 263493. For sale—50 cows about half  
with calves at foot; 20 open heifers; 15 bred  
heifers; five good young bulls, herd header  
prospects. **LEE BROS., HARVEYVILLE,**  
(Wabunsee County), KANSAS.

### Registered Hereford Bulls

I have a nice lot of young bulls for sale very reason-  
able. Address **HENRY L. JANZEN, Lorraine, Kan.**

#### RED POLLED CATTLE.

#### RED POLLED BULLS

Some extra fine registered bulls for sale. Write for  
prices and descriptions, or better come and see them.  
Bred bulls used in the herd were from the breeding  
of some of the best Red Polled herds in the country  
such as Luke Wiles, Chas. Gruff & Sons and Mahlon  
Greenmiller. **GEORGE HAAS, LYONS, KANSAS.**

**RED POLLS.** Choice young bulls and heifers.  
Write for prices and descriptions.  
**Chas. Morrison & Son, Phillipsburg, Kansas.**

#### RED POLLED CATTLE

### FORT LARNED RANCH

200 HEAD OF REGISTERED  
RED POLL CATTLE

A number of choice one and two-year-old  
bulls and heifers from one to three years old.  
**E. E. FRIZELL & SONS, FRIZELL, KAN.**

**Pleasant View Stock Farm**  
Registered Red Polled cattle. For sale, a  
few choice young bulls, cows and heifers.  
**Halloran & Gambrell, Ottawa, Kansas.**

#### ABERDEEN ANGUS CATTLE.



### MARTIN'S ANGUS

20 Bulls, 12 to 30 months  
old. Car of 3 and 4 year  
old cows, bred, at \$125.  
Come or write.

**J. D. MARTIN & SONS**  
**R. 2, Lawrence, Kan.**

### Special Angus Offering

30 registered young cows bred to show bulls.  
15 three-year-old heifers bred. 35 yearling  
heifers. Young bulls serviceable ages. A  
few two-year-olds.

**SUTTON FARM, RUSSELL, KANSAS**

**IF YOU WANT GOOD REGISTERED ANGUS CATTLE**  
offered at very reasonable prices for early sale, come  
and see mine. There are two carloads of cows and  
calves, one carload of heifers and a carload of choice  
bulls. Will be sold in lots to suit purchaser.  
**D. J. WHITE, CLEMENTS, KANSAS**

#### AYRSHIRE CATTLE.

**Young Ayrshires** Three calves, (two bulls, one  
heifer), out of advanced reg-  
istry dams. Also one bred heifer. Attractive prices  
for quick sales. **Dan D. Casement, Manhattan, Kan.**

as from several bids which came thru the  
mail to be handled by the Animal Husbandry  
Department. The sale, occurring in the midst  
of Commencement Week at the Agricultural  
College, may have sacrificed something in  
cash returns because of the many conflict-  
ing attractions, but on the other hand, the  
consigning breeders seemed to feel that the  
advantages offered in securing the interest  
of new men, as a result of the attendance  
of farmers from all over the state, more than  
out-weighted any possible sacrifice in price,  
and expressions were general in favor of  
making this sale an annual event. Follow-  
ing is a list of representative transactions:

#### BULLS.

Auburn Dale, 4 years, Haskins & Con-  
ger, Natoma, Kan. \$400  
Nonpareil Emblem, 1 year, W. B. Hau-  
ser, Willis, Kan. 445  
Gloster Premier, 1 year, J. M. McCray,  
Zeandale, Kan. 195  
Lavender Marshal, 1 year, Meall Bros.,  
Cawker City, Kan. 1025  
Harmon, 1 year, J. M. Davis, Blue  
Mound, Kan. 335  
Gipsy's Dale, 1 year, Arthur Cox, Leav-  
enworth, Kan. 750  
Urban Champion, 1 year, K.S.A.C., Man-  
hattan, Kan. 185  
Cumberland's Nominee, 1 year, C. M.  
Arnold, Long Island, Kan. 300

#### FEMALES.

College Duchess 2nd, and calf, 6 years,  
Sni-A-Bar Farms, Grain Valley, Mo. 3900  
Village Victoria 2nd, 6 years, J. H. Hol-  
comb, Humboldt, Kan. 800  
Orange Sultana, 6 years, Geo. J. Car-  
son, Alida, Kan. 325  
Savilla, 6 years, Conway Rees, Emporia,  
Kan. 400  
Nonpareil 45rd, 7 years, Tomson Bros.,  
Wakarusa & Dover, Kan. 650  
Nonpareil 57th, three years, E. H. An-  
derson, Topeka, Kan. 650  
Mc's Wood Salvia, 2 years, M. E. Beren,  
Mankato, Kan. 270  
Jubilee Rose, 6 years, Tomson Bros.,  
Mysie 5th, ten years, G. A. Laude,  
Humboldt, Kan. 560  
Winsome Lady, 5 years, J. L. Holcomb,  
Butterfly, 3 years, Olson Bros., Leon-  
ardville, Kan. 250  
Violet Goods, 4 years, R. W. Dole, Al-  
mena, Kan. 390  
Velvet Eyes, 3 years, J. O. Martin, Har-  
veyville, Kan. 510  
Roan Duchess 5th, Wm. F. Baer, Ran-  
som, Kan. 490  
Rosemary, 1 year, H. H. Holmes, To-  
peka, Kan. 725  
Spley 5th, 1 year, A. O. Stanley, Sher-  
idan, Mo. 850  
Sarcasm Girl, 4 years, Park Salter,  
Wichita, Kan. 700  
Lovely Maid, 2 years, A. L. Harris,  
Osage City, Kan. 450  
Fame's Jill, 5 years, A. L. Harris, 325  
Sweet Orange 5th, 2 years, R. M. Dole,  
Bridemaid 5th, 1 year, Sni-A-Bar  
Farm, 1000  
Goldendrop 6th, 6 years, E. H. Ander-  
son, Secret Maid 2nd, 6 years, E. H. Ander-  
son, 345  
Rosewood Spray, 4 years, Sni-A-Bar  
Farm, 1150  
Pleasant Leaf, 1 year, Jas. Springer,  
Garrison, Kan. 490  
Sweet Viola 2nd, 1 year, J. P. Springer,  
Stockdale, Kan. 125  
Imported Fair Peggy, 2 years, H. F.  
Burgess, Chelsea, Okla. 775  
Mayflower, 8 years, Frank Wilson, 180  
Lady Marshal, 2 years, Conway Rees, 235  
Dimple's Lady 2nd, M. E. Beren, Mus-  
cotah, Kan. 160  
Walnut Row Belle, 2 years, J. O. Martin,  
Lady Blanche 2d, 2 years, Aug. Kaester,  
Junction City, Kan. 220  
Scottish Beauty, 2 years, M. E. Beren, 325  
Emerald's Choice, 8 years, J. E. Paton,  
Winfield, Kan. 225  
Frosty, 8 years, J. O. Martin, 215  
Lillian, 2d, 4 years, R. E. Mather, Cen-  
tralia, Kan. 250  
Josephine's Daisy, 4 years, Aug. Kaester,  
Bluemont Beauty Queen, 1 year, Tom-  
son Bros., 475  
Celia Girl 4th, E. J. Barnes, Clay Cen-  
ter, Neb. 235  
Rosewood's Dorothy, 1 year, E. J. Barnes,  
Victoria, 4 years, John Fuhrman, Lan-  
caster, Kan. 225  
Phyllis, 4 years, J. O. Martin, 310

#### Good Sale at Fort Scott.

22 bulls average \$140.45  
9 females average 190.00  
31 head average 150.50

The Interstate Shorthorn Breeders' asso-  
ciation held a very successful sale at Ft.  
Scott, Kan., Thursday, May 20. Thirty-one  
head of cattle, mostly calves and two-thirds  
of them bulls, sold for \$4,800, or an average  
of \$150.50. Most of the consignors expressed  
themselves as well pleased with the sale  
altho there were some cattle that should  
have brought more money. Lot 33, Lavender  
Dale, an August calf bred and consigned by  
S. M. Knox, of Humboldt, Kan., topped the  
sale, selling to H. B. Morr, of Ft. Scott,  
Kan., for \$300. A white heifer, also con-  
signed by Mr. Knox, topped the female of-  
fering, selling to Dr. J. R. Newman, of Ft.  
Scott, for \$250. Most of the cattle sold  
stayed in Bourbon or adjoining counties.

#### Field Notes

BY JOHN W. JOHNSON

Wreath Farm Duroc Jerseys are adver-  
tised in this issue of the Kansas Farmer and  
Mail and Breeze. A nice lot of fall gilts  
by Select Chief and out of dams by such  
boars as Select Chief, Joe Orion 5th, Fear's  
Orion Cherry King, Sensation and others.  
The Spring pigs are by Junata's Premier.  
The best boars from this good crop of  
spring pigs are for sale at moderate prices  
at private sale. You can't do better than  
write this firm for prices. Address, A. B.  
Morris, Mgr., Manhattan, Kan.—Advertisement.

C. M. Albright & Son, Overbrook, Kan.,  
are breeders of Polled Shorthorns, Holsteins,  
Chester Whites, hogs and sheep. However  
they plan on selling the sheep right away  
and are advertising them in this issue of  
Kansas Farmer and Mail and Breeze. The  
42 ewes have lambs ranging in ages from  
last February to April first and they are a  
nice lot of young ewes that will be priced  
right with the lambs thrown in. They are  
also offering a few choice fall Chester White  
boars and gilts and purebred Holsteins, in-  
cluding nine females and the herd bull,  
Walker Klondyke. See their advertisement  
in this week's issue.—Advertisement.

#### GUERNSEY CATTLE

**GUERNSEYS** Baby bull calves, beau-  
tiful fellows, 31-32 by  
registered bull and out of our heaviest pro-  
ducing cows. Some class to these calves.  
**HENRY MURR, TONGANOXIE, KANSAS**

cluding nine females and the herd bull,  
Walker Klondyke. See their advertisement  
in this week's issue.—Advertisement.

Arthur Mosse & Daughter, Leavenworth,  
Kan., is the well known firm of Chester  
White breeders that show at the leading  
shows every fall and hold fall and winter  
sales at Leavenworth. They are starting  
their advertisement in this issue of Kansas  
Farmer and Mail and Breeze and offer some  
fall gilts bred for September farrow. These  
gilts are by Don Bolshevik and other boars  
of note. They are bred by Don Big Joe and  
are the daughters of prize winners at both  
Kansas fairs and at other leading shows last  
fall. They will be priced right to move  
them. Address, Arthur Mosse & Daughter,  
Leavenworth, Kan.—Advertisement.

#### Good Durocs.

M. R. Peterson, Troy, Kan., Doniphan  
county, is a young man that hardly needs  
an introduction to Duroc Jersey breeders,  
in Kansas at least. In the last two Kansas  
association sales he has consigned bred sows  
that tend to introduce favorably a breeder  
to his associates in the business. This spring  
he has 100 spring pigs and they are the  
kind that make history for the breed. They  
are mostly by Peterson's O. C. K. by Orion  
Cherry King and Long Orion by High Orion.  
These are two boars that Mr. Peterson has  
a right to feel proud of. A great litter by  
High Pathfinder and out of a Grand Won-  
der dam is one of the real attractions we  
noticed on this trip. Mr. Peterson will sell  
bred sows in the new pavilion in Ben-  
dena, February 17. He will not hold a board  
sale but will sell 20 boars from the 50 raised  
at private sale. He also has a nice herd of  
Scotch Shorthorn cattle.—Advertisement.

#### Kempin Bros. Have Good Pig Crop.

Kempin Bros., Corning Kan., Nemaha  
county, are fortunate breeders of Duroc Jer-  
seys in their spring crop of pigs. They have  
125 head and it is certainly a showy lot of  
youngsters. King Sensation, their great herd  
boar, and his assistant, Proud Pathfinder,  
have sired most of the pigs. Other litters  
by Joe King Orion and Pathfinder's Chief  
add to the attractions. Big Lizzie, the  
famous Pathfinder-Proud Col. sow that  
made Moser nearly \$10,000 and sold to the  
Kempins in the Moser winter sale is keeping  
up her record for big litters and promising  
ones. For the Kempins she farrowed 13 pigs  
and is raising seven dandies. They are by  
Joe King Orion. Another great King  
Orion litter is out of a Grand Wonder I An-  
dam. The Kempins have claimed November  
5 for their fall boar and gilt sale and Feb-  
ruary 18 for their bred sow sale.—Advertisement.

#### Their Usual Strong Duroc Offering.

Gordon & Hamilton, Horton, Kan., are  
well known breeders of Duroc Jerseys be-  
cause of the great bred sow offerings they  
are able to make at Horton in February  
each year. They will sell again at the same  
place February 16 and the outlook is good  
for a great lot of spring gilts to breed and  
make selections from. Sensation King is a  
great breeder. He is three years old in  
August and is surely making a reputation  
for himself as a breeder of the right type  
combining great size and conformation. He  
is assisted by Golden Pathfinder by Ideal  
Pathfinder and he is producing some great  
litters this spring. Another litter of great  
promise we noticed is one sired by High  
Pathfinder and out of an Investor dam.  
There are five in the litter. Another good  
litter is by King Sensation, Kempin Bros.  
boar. There are seven in this litter.—Ad-  
vertisement.

#### Real Durocs and Angus Cattle.

J. O. Honeycutt, Blue Rapids, Kan., is the  
well known breeder of Duroc Jerseys that  
formerly lived near Marysville. He has  
bought a splendid stock farm near Blue  
Rapids and "All Star" Stock farm in the  
future will be the home of real Duroc Jer-  
seys and Angus cattle. The farm consists  
of 240 acres and is located two miles south  
of town. In this issue he is offering 10  
October gilts, good size and the right type  
for sale either open or bred to his great  
young herd boar Jack's Orion 3rd. The  
dams carry the blood of the popular dams  
and sires of the day. These gilts would be  
just great for your bred sow sale. They  
are priced at \$50 each, which is actually  
half their value as they are being priced  
elsewhere. Mr. Honeycutt and his brothers  
are planning on a joint sale at Blue Rapids  
in January.—Advertisement.

#### Hilbert Develops His Durocs.

W. Hilbert, Corning, Kan., Nemaha county,  
is another breeder of Duroc Jerseys that  
is helping to make Corning a much talked of  
little town on the Central Branch. Last  
winter he sold jointly with Kempin Bros. a  
that place and their bred sow sale was one  
of which any breeder could feel proud. This  
year Mr. Hilbert is going to hold a bred sow  
sale the evening of February 18, which is  
the evening of the day on which Kempin  
Bros. sell. Both sales will be held in the  
same barn. Mr. Hilbert is a real breeder  
and his ability to mate and grow out the  
kind that every breeder is looking for is  
marked. He is a good feeder but believes  
in full development of the individual rather  
than the big fat. A large per cent of his  
spring crop is by Co. Orion by Great Orion  
with several litters by Joe King Orion. Also  
a great litter by Great Pathfinder. He is  
not going to hold a boar and gilt sale this  
fall but will sell privately some choice boars.  
—Advertisement.

#### Fairfax Herefords at Your Own Price.

On Tuesday, June 22, S. W. Tilley & Sons  
will sell the first offering from their herd  
of intensely Fairfax bred Herefords at  
Irving, Kan. The Tilley herd was originally  
founded on females sired by Imp. Majestic,  
Keep On, Weston Stamp, Onward 18th, and  
some of the best Perfection Fairfax bred  
bulls. At the head of the herd the Tilleys  
have Letham Fairfax, said to be one of the  
best producing sons of Perfection Fairfax.  
Fairfax as his sire but is out of Miss Ruth,  
a double granddaughter of Disturber. To  
breeders who want the blood of Disturber  
in its strongest mixture the Tilleys will offer  
eight heifers from Letham Fairfax and out  
of Woodford Lad sired by Woodford and out  
of Disturber's Lassie by Disturber. This  
gives practically half the blood of Dis-  
turber and the remainder Perfection Fairfax  
and Woodford. It would be almost impos-  
sible to write richer pedigrees than these  
calves will represent. Fairfax blood in de-  
mands a premium because it breeds on  
and on. In this sale the breeder, the farmer,  
the beginner will have the opportunity to  
secure Perfection Fairfax blood without pay-  
ing the prices that are demanded at record  
sales. This is the first sale from the Tilley  
herd. The offering will be a high class one  
and the bargains will be many. Get your



## HOLSTEIN CATTLE

## HOLSTEIN-FRIESIAN BULLS

Several ready for use. A good lot of younger ones from A. R. O. and prize winning ancestry.

Prices reduced for 30 days. Write us about what you are wanting.

McKAY BROS., CADDOA, COLORADO

## Carload of High Grade HOLSTEINS

Springers and fresh cows. Also a few registered cows for sale.

G. A. Higginbotham, Rossville, Kan

## Nemaha Valley Stock Farm

Registered Holstein-Friesians. One of the first government accredited herds in Kansas and one of the largest in the list. Young bulls for sale by Pontiac Beauty de Kol Segis 189642. His dam, as a 3 year old, made nearly 29 lbs. in 7 days and 114.63 lbs. butter and 2587.9 lbs. milk in one month. His grand-sires are King Segis and King of the Pontacs. Address H. D. Burger, Proprietor, Seneca, Kansas

## Western Holstein Farm

are breeders of the correct thing in Holstein-Friesian cattle. Young bulls of superior breeding for sale. Write for circular.

HALL BROS., PROPS., Box 2, South Denver Station, Denver, Colo.

## HOLSTEINS

Have a large number of heifers ranging from a few days old, to springing two-year-olds and young cows; also a few choice Guernsey and Shorthorn calves. Write ED. HOWEY, SOUTH SAINT PAUL, MINN.

## Holstein Heifers

8 to 21 months old. Extra fine individuals out of good producing dams and sired by good bulls. Also bull calf by my herd sire, a son of the \$50,000 King Segis Pontiac Chicago. All registered.

A. M. DAVIS, R. 3, HUTCHINSON, KAN.

## HOLSTEIN HEIFER CALVES

We have a few extra choice heifer calves for immediate delivery. \$30 express prepaid anywhere in Kansas. A. D. MARTIN, EMPORIA, KANSAS

**FOR SALE** High grade, well marked Holstein heifer calves; 31-32 pure, from good milking strain. 4 to 7 weeks old. Delivered to your station C. O. D. for \$30. A. L. RASCHKE, LAKE MILLS, WISCONSIN

## HOLSTEIN OR GUERNSEY CALVES

either sex, 6 to 8 weeks old, \$30 each; express paid by us. Write for particulars. Spreading Oak Farm, R. 1, Whitewater, Wis.

## WAUKESHA COUNTY

High grade Holstein and Guernsey calves, \$25 crated. Fernwood Place, Waukesha, Wis.

## JERSEY CATTLE.

## JERSEY BULLS FOR SALE

We are long on bull calves; 2 weeks to 3 months old; out of dams of proven worth and sired by Cocotte's Oxford Farm 153549, one of the best bred bulls from Bowmont Farms, Salem, Va. Can be expressed safely. Good enough to head purebred herds; cheap enough to place in grade herds. Registered, crated, f. o. b. Arkansas City, Kan., \$25 to \$50. They are worth double the price.

W. I. Miller, 8th & Adams, Topeka, Kan.

**Hillcroft Farms Jerseys** headed by Queens' Fairy Boy, pronounced the best bred Jersey bull in Missouri, a Register of Meritson of Raleigh's Fairy Boy, the greatest bull ever imported, 54 tested daughters, 86 tested granddaughters and 34 producing sons. Calves for sale. Reference Bradstreet M. L. GOLLADAY, PROPR., HOLDEN, MO.

REGISTERED JERSEY BULL, fine breeding. A. H. KNOEPEL, COLONY, KANSAS

## GALLOWAY CATTLE.

## Reilly Galloways

Won both grand championships at Denver 1920; first aged herd at the International 1919. For sale, 10 bulls coming two; two 2-year-old herd bull prospects; 60 select females all ages.

Jno. P. Reilly & Sons, Emmett, Kansas

REGISTERED GALLOWAY bulls, cows or heifers. J. M. INNES, BEARDSLEY, KANSAS

FOR SALE—REG. GALLOWAY BULLS V. R. Blush, Silver Lake, Kansas

## POLLED SHORTHORNS.

## POLLED SHORTHORNS

Some of the best of the breed. One of the largest herds. Four herd bulls perhaps not equalled in any one herd in the state. Anything in Polled Shorthorns.

J. C. BANBURY & SONS, PHONE 2803 PLEVNA, KAN.

## PROUD MARSHALL X 14590—504053

This is my herd bull for sale, August 1 delivery. 2 Polled Shorthorn bulls, 10 mo. old by him. Also one by Meadow Sultan. 2 Shorthorns, 13 mo. old. Ship- ping points, Phillipsburg and Stockton. Address T. S. SHAW, GLADE, KANSAS

## 10 POLLED SHORTHORN BULLS

Big husky reds and roans 12 to 20 mos. old. Priced to sell. Can spare a few females. C. M. HOWARD, HAMMOND, KANSAS.

catalog today, mentioning this paper, and be on hand at the sale. It will pay you.—Advertisement.

BY J. T. HUNTER

## Shorthorn Sale at Ft. Scott.

On June 11, H. L. Burgess, of Chelsea, Okla., will sell at Ft. Scott, Kan., 50 head of Shorthorn cattle, 20 head of pure Scotch cattle, several mature cows with calves at foot and bred again—several pure Scotch bulls that are real herd bull prospects. Please read in this issue and arrange to attend this sale; for catalogs write Col. H. L. Burgess, owner, Chelsea, Okla.—Advertisement.

## Good Shropshires For Your Farm

It is a recognized fact that a few sheep will pay a big dividend on every farm. The farmer who has a few good registered sheep gets a bigger dividend. Giffmorelands, Fredonia, Kan., have a card in this issue which should interest every farmer. They are offering purebred rams and ewes from their herd of Shropshires which is one of the greatest herds in the country. Founded on the best stock that could be procured in England and America, the highest class rams have been used and the herd today is one of the leading show herds of the country. They have nothing priced under \$75 but can and will give you more sheep for your money than most herds are offering.—Advertisement.

## Shepherd Offering Duroc Bargains.

G. M. Shepherd has three extra good May yearling sows bred to Shepherd's Orion Sensation. This boar is proving to be one of the best breeding sows of the Champion, Great Orion Sensation. These gilts are out of a big Pathfinder sow. One extra good April sow of Colonel and Orion breeding is bred to Pathfinder Junior. These gilts are priced for quick sale. They are splendid individuals and represent the most popular blood in Durocs. They also have three extra good May and June boars of Pathfinder breeding. They will be sent on approval and satisfaction guaranteed. Mr. Shepherd is also booking orders for spring boars sired by Shepherd's Orion Sensation and Pathfinder, Junior, and has several litters by other good boars. Please mention Kansas Farmer and Mail and Breeze when writing concerning this offering.—Advertisement.

## Holstein Heifers.

A. M. Davis, Hutchinson, Kan., must reduce his purebred Holstein herd and is offering at attractive prices some extra good heifers, ranging from 8 months to 21 months. Of these, two are twins eight months old, out of a cow that produced 20 pounds butter in 7 days. One heifer is 21 months old and sired by Sir Johanna 19th (a bull that has a large number of A. R. O. daughters), and out of an A. R. O. cow. One heifer freshens in July. Sires of these heifers are all high-class bulls and the dams are out of A. R. O. cows. In addition to the females for sale Mr. Davis has a young bull calf, (white) by his new herd bull, Pond View King Segis Pontiac sired by King Segis Pontiac Chicago that sold a few years ago for \$50,000. These Holsteins for sale are good individuals and not tail enders that Mr. Davis is selling. Good Holstein females are scarce. Write Mr. Davis today. Please mention the Kansas Farmer and Mail and Breeze. Address A. M. Davis, Route 3, Hutchinson, Kan.—Advertisement.

## Booking Orders for Weanling Durocs.

Sid Replogle, Cottonwood Falls, Kansas, is now booking orders for weanling Durocs for May and June delivery. These pigs are sired by John's Combination 2nd, and Jack's Great Orion, a good son of the \$10,000 Jack's Orion King 2nd, the international grand champion. These pigs are out of good dams and Mr. Replogle guarantees to please. In addition to these weanling pigs, there are some fall and winter boars for sale. Mr. Replogle has at this time the finest bunch of spring pigs that he has had at any previous time. His Jack's Orion King boar is developing fine. He has nearly a 10 inch bone as a yearling and has good conformation in other respects. Mr. Replogle has been selling a lot of Durocs all over Kansas, Oklahoma, some into Texas and Colorado and a few into California. He has been running an advertisement in the Kansas Farmer and Mail and Breeze for several months and makes it a practice to see that buyers are always satisfied. If you want some good weanlings, write him at once.—Advertisement.

## Shorthorns for Stafford County.

At the request of the Stafford County Purebred Breeders' Association, Park E. Salter, Wichita, Kan., will hold a sale of Shorthorns at Stafford, Kan., Saturday, June 12. The offering at that time will be one especially selected to fill the needs of beginners both as to females and good herd bulls. The sale includes 30 good individuals of which 15 are pure Scotch and the balance good Scotch tops. The five bulls and some of the Scotch females are good enough to go in any herd and the offering through is a good useful lot. The fact that the cattle will be sold on short notice and in ordinary condition insures there being many bargains. Mr. Salter has personally selected these cattle with the idea of offering cattle that will fill the needs of beginners in the Shorthorn business. The sale will be held at Stafford, Kan., so that farmers and breeders of that locality can get the cattle close to home and save a shipping expense. Farmers or breeders who live in other parts of the state might well attend this sale, however, as the cattle offered are worth travelling for. If you have time to send for a catalog address Dr. F. M. Myers, Stafford, Kan. If time is short get on the train and get your catalog at the sale. The cattle will please you and you will not regret the trip.—Advertisement.

## Polled Shorthorns—Double Standard.

J. C. Banbury & Sons, Plevna, Kan., have Polled Shorthorn seed stock of the most dependable sort for sale and buyers should not overlook the opportunity offered to get some of these good double standard Shorthorns. They have outstanding excellence, extra scale, and good fleshing ability and a comparison of offsprings with herd sires shows that these sires are very positive in reproduction and this positiveness with reasonable certainty will be transmitted to the offsprings. There are something over 200 head of these good purebred Polled Shorthorns in the Banbury herd and the herd is headed by four exceptionally good bulls as follows: Roan Orange by Orange Champion is a bull that weighs over 2400 in breeding condition; Sultan's Pride by True Sultan is an exceptionally blocky and low built bull with heavy bone and straight back line and sides; Grand Sultan by Meadow Sultan and Scott-

## 100 Head of Registered Holstein-Friesian Cattle

will be sold at the F. M. King Farm at

Grandview, Mo., Monday, June 28

Ten miles from Kansas City

A most unusual lot of young cattle representing the strongest blood lines of the breed. The larger part of the offering will be, two, three and four year old heifers, daughters of 30 pound bulls or better.

90 females, 40 cows and heifers are fresh or will be fresh soon. More than twenty of them have or will have A. R. O. records before the day of the sale. 17 handsome bred heifers due to freshen this fall bred to the 29¾ pound Korndyke bull owned at the King Farm. Eighteen yearlings and heifer calves and ten big robust bulls including the herd sire all from record dams.

Mr. King has in all about two hundred head of cattle. He finds himself overstocked and he is selling one hundred head, not of the culls but of the tops in his herd.

In coming to the sale from a distance come to Kansas City to the Dixon Hotel where cars will take you to the farm.

We want to especially urge the new man in the business to attend this sale and afford himself this great opportunity to buy some of the best blood lines of the breed and at a reasonable price.

The sale will begin positively at 10 o'clock and since the best bargains are usually to be had in the first part of the sale, it will pay every one to be there on time. Send today to the sales manager for catalog. Mark the date on your calendar now and write today for a big catalog of the sale to,

W. H. MOTT, SALES MANAGER, HERINGTON, KANSAS

Owner of Cattle

F. M. King Care Hathaway Motor Company Kansas City, Mo.

O. W. Devine represents The Capper Farm Press.

## A RECORD BREAKING HOLSTEIN

## AND HER SISTERS FOR SALE

I have a senior four year old Holstein that recently broke the 7 day state record on official test, 29 pounds butter and 603 pounds milk and is now continuing in yearly test. Have a four year old sister on yearly test at this time. Have fifteen sisters of these cows, two and three year old, that are bred to calve beginning next September. They are mated to a son of Canary Paul Forbes Homestead and to a brother of Iowa Sir Ollie, the 1919 grandchampion at the National Dairy Show. Have other cows and heifers for sale including two heifers by a 36 pound Sadie Vale bull. These Holsteins are guaranteed tuberculin free and sold on a 90-day retest. They are excellent individuals. Records were made at my home under supervision of the State Agricultural College. Ill health in the family and scarcity of help are the reasons for selling. I guarantee satisfaction.

Phone 216 Rose Hill, Kan. EUGENE SWINEHART, DERBY, KAN.

## Postponed Until Tuesday, June 8

on account of rain and bad roads. Prairie View Farm Holstein Dispersal of 35 purebred and high grade cattle will be held on above date rain or shine. Come.

H. W. Mudge, Gridley, Kansas

Farm 1 mile East and 4 miles South of Gridley (Coffey County) Kansas.

## GUERNSEY CATTLE

## GUERNSEY CATTLE

## Get Guernseys Here

Send For the Catalog Now.

A state association backs this sale. You want to know about it and attend if possible.

Storm Lake, Iowa, June 16

45 choice registered Guernseys, selected from 16 of Iowa's best herds, will be sold at auction. All stock tuberculin tested and sold subject to 60 day retest. Be sure to write for catalog, mentioning this paper. Address

Albert L. Hyzer, Sec., Storm Lake, Iowa

Sale at Dairy-Land Farm. Cattle selected by committee of the Iowa Guernsey Breeders' Assn.

## SHORTHORN CATTLE

## SHORTHORN CATTLE



## They Top The Market

Weekly reports received from three of the leading beef markets show that Shorthorns sell at the top more frequently than any other breed.

It pays to grow Shorthorn beef. You get weight and quality both.

Ask for literature.

American Shorthorn Breeders' Ass'n, 13 Dexter Park Ave., Chicago, Ill.





## The Beginner's Opportunity

to start right in the Shorthorn business  
will be offered in the sale to be held at  
Fort Scott, Kan., Friday, June 11

### 50 SHORTHORNS

In Breeding Flesh, 20 Pure Scotch, 30 Scotch Topped.

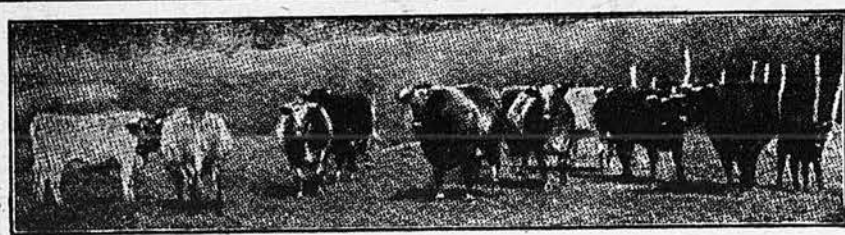
A few are choice Scotch bulls; the remainder good, useful females including several cows with lusty calves at foot. This is a useful lot to be sold in ordinary flesh. Such a sale means bargains for the buyers. They are cattle that will make money for any farmer or breeder with a little feed and care.

There is not time to send for a catalog so go direct to the sale. You will be pleased with the offering and the sale is bound to be one list of bargains.

Sale at Ft. Scott, Kan., June 11.

**H. L. Burgess, Chelsea, Okla.**

Auctioneers: P. M. Gross and Boyd Newcom.  
J. T. Hunter, Fieldman.



## Park E. Salter

will sell a select offering of Shorthorns at the request of the

### Stafford County Purebred Breeders' Association

Stafford, Kan., Saturday, June 12

5 Bulls, 25 Females, 15 Pure Scotch and 15 Scotch Topped. The females include 15 cows and 10 heifers. All are the good kind for the farmer who wishes to raise purebreds under farm conditions.

I have personally selected every animal in this offering to be the right kind of stock for beginners. There will be a few Scotch bulls and females good enough to go in any herd. Several I have selected especially for the milking strains they represent.

Park E. Salter.

This is a sale held to give the farmers and breeders of Stafford County an opportunity to secure extra good Shorthorn cattle at their own price. Of course the sale is open to the world but it is being held in Stafford County that breeders and farmers in that locality may secure these cattle close to home and cut out railway expense.

Plan to attend this sale. You may not have time to send for a catalog but if you do address your request, mentioning this paper, to

**Dr. F. M. Myers, Stafford, Kansas**

Auctioneers: Snyder, Newcom, Burgess; J. T. Hunter, Fieldman.

ish Orange are the two other herd bulls that show quality but not quite so outstanding as the first two mentioned. The herd dams are Scotch and Scotch topped and from the following families: Golden Drop, Alexandrina, Rose of Sharon, Princess, Orange Blossom, Ruby, Mrs. Motts, Josephine, Lady Elizabeth, White Rose, Wild Eyes, Eliza, Beauty, Young Mary, etc. The Banburys will sell some females including some good heifers. They have a good lot of young bulls, including twelve that are halter broke. They are all good herd sire prospects. In addition to the young bulls there are two ready for service. One of them is a white two-year-old by Sultan's Pride and out of Miss Modesty, a Barrington 4th cow. The other bull is a roan by Roan Orange. He is out of a Victoria bred cow and has five Cruickshanks on the dam side and six Cruickshanks on the sire side. His individuality equals his breeding. See the Banbury ad in this issue of the Kansas Farmer and Mail and Breeze. Write them today. Please mention Kansas Farmer and Mail and Breeze.—Advertisement.

#### Messenger Boy and Amber Tipton Hampshires

For Hampshires representing intelligent mixture of blood lines and showing to a marked degree the qualities desired in Hampshires, it is very doubtful if any Hampshire breeder in the country can show finer hogs than Walter Shaw, Wichita, Kan. The main herd sire is Githen's Choice, a boar that last year's senior pig won first at each of the following fairs: Topeka, Hutchinson, Oklahoma City, and Muskogee. This boar is a large active fellow with an unusually well arched back and heavy bone, an animal especially pleasing to the eye. Most of the herd dams are by a son of Messenger Boy who showed in 15 state and national shows and won grand championship in each show and was five times champion over all breeds. The son of Messenger Boy that sired these dams is out of Scottish Lady, one of Clayton's best sows. These dams are good ones and in addition there are others unrelated to them. Among them are two especially fine ones. One is Virginia 1st, the only sister litter mate of the world's highest priced Hampshire sow, Virginia, who with her litter sold in the recent Garland sale in Missouri for \$25,000. Virginia 1st has eight fine piglets by Amber Tipton, the 1919 grand champion of Oklahoma and Kansas. Virginia 1st weighed 512 pounds before she farrowed her first litter. The other sow is Patterson Queen. She was sired by Manley's Duke. She has a good litter. Mr. Shaw is an especially careful hog man or the fecundity and motherliness of the Hampshire is noteworthy. Perhaps both should be considered as contributing factors but Mr. Shaw states that last year his Hampshire sows farrowed slightly over an average of eight pigs per sow, producing 117 pigs and that he actually saved, vaccinated and marketed 115 of these 117 pigs. His pig producing record this season will not be so good but the visitor to the Shaw farm will see a wonderfully fine lot of Hampshire pigs that show that they have been grown under thrifty conditions where the mortality rate has been low and will continue low unless unexpected adverse conditions should prevail. If the reader wishes to purchase some nice thrifty Hampshire pigs of popular breeding and showing lots of promise the Shaw farm has such pigs. Mr. Shaw can furnish unrelated pairs or trios. He has them ready to ship right now and of course the early buyer has the opportunity for the choicest selection. They are Messenger Boy and Amber Tipton pigs. Mr. Shaw's telephone number is No. 3198, Derby, Kan., and his address is Walter Shaw, Route 6, Wichita, Kan. He is carrying an advertisement in the Kansas Farmer and Mail and Breeze. Write him today about these pigs. Please mention Kansas Farmer and Mail and Breeze when you write.—Advertisement.

#### BY O. WAYNE DEVINE

**Home of the Defender Durocs**  
Dayton Castleman of Bunceton, Mo., is one of the younger class of Duroc breeders who has made rapid advancement in the last two years with his herd of Defender and Colonel bred families. Mr. Castleman bought several herd sows from the McKee Brothers, founder of the Defender strain, and the herd sire used by Mr. Castleman comes from the McKee herd. This hog, Central Pilot No. 102943, is by the great sire Highland King Defender 75043 by Old Defender and his dam was Defender Bell by Old Defender, going back to Crimson Queen by Old Crimson Wonder. Mr. Castleman owns one of the best bred herds of Durocs in the cornbelt and as individuals they are equal to any in the West and one of the most intensely bred Colonel and Defender herds known to the breed. Parties wanting breeding stock to establish herds might do well to get in correspondence with Mr. Castleman about his famous herd of line bred Defender families of Durocs. Please read his card ad in this issue and write him for further information about his herd, mentioning this paper.—Advertisement.

#### BY G. L. BORGESON

**Get Guernseys Here.**  
The Iowa Guernsey Breeders' association is back of the sale to be held at Storm Lake, Ia., June 16. The offering will consist of 45 choice Guernseys selected from 16 of the best herds in the state. All of the cattle are T. B. tested and will be sold subject to a 60 day retest. If you want a good Guernsey, either sex, be sure to be at this sale. You can get the catalog by writing Albert L. Hyzer, Sec'y, Storm Lake, Ia., and mentioning this paper.—Advertisement.

#### Holstein Men to Minnesota

A party of Kansas Holstein breeders and their wives left Topeka in a special Pullman the evening of May 31 for St. Paul, Minn., to attend the annual meeting of the National Holstein-Friesian association which was held June 2. The National association never has met in the West before.

The Kansas delegation included Watter Smith of Topeka, president of the Holstein association of Kansas; Mark Abildgaard of Mulvane, secretary; W. H. Mott, Herington, sales manager; J. P. Mast of Scranton; and J. E. Fitch of Manhattan. There were 25 or 30 persons in the Kansas delegation. Including those represented by proxies, there probably were far from 100 votes by Kansas members.

#### SHORTHORN CATTLE.

### Genuine Herd Bulls by Master of the Dales and out of Collynie Bred Cows

Master of the Dales bulls are proving themselves splendid breeding bulls and we can show you a few real bulls of first class herd heading character.

They are a practical, husky and well grown lot that will appeal to breeders wanting bulls of real merit.

**H.M. Hill, LaFontaine, Kan.**

### More Scotch Breeding

We offer two bulls, 14 and 16 months old, and a few females. The opportunity to secure a proven herd bull that is right every way you take him. Write for further particulars.

**S. B. AMGOATS, CLAY CENTER, KAN.**

### Stunkel Shorthorns

Victor Orange-Star Goods females as dams bred to Cumberland Diamond have produced some of the hardest and thriftiest Shorthorns in the country. Good bulls for sale. Yearlings up to two year olds. Scotch and Scotch topped. Some proven breeders. All ready for service. Some females for sale. Select your Shorthorns from this foundation herd.

**E. L. Stunkel, Peck, Kansas**

### Get of Auburndale

Four choice yearling bulls by this sire. Two out of Bampton Knight cows. One out of Prince Valentine dam and the other a Village Knight dam. Address,

**Wm. Wales & Young, Osborne, Kan.**

### 1886 TOMSON SHORTHORNS 1920

200 high class cattle of most popular strains. Sires: Village Marshal and Beaver Creek Sultan. Several extra good young herd bulls for sale. Address

**TOMSON BROS.**  
Wakarusa, Kansas, or Dover, Kansas.

### Shorthorn Bulls

Special Mention—Red King, 21 months, weight 1425, by Jesse King by Sultan Kind by True Sultan. Senior calves, whites and roans. All priced to sell.  
**GREENWOOD FARMS, Emporia, Kan.**  
L. T. Richardson, Owner.

### High Class Young Scotch Bull

Grandson of Avondale and Cumberland Type. Good roan color, eleven months old. Out of a high class dam. Priced reasonable. Some extra good young Scotch topped bulls of heavy milking ancestry and also a few good females. Come and see them. Farm is nine miles east of Winfield, Kansas. Address

**Fred Abildgaard, Route 6, Winfield, Kan.**

### FOR SHORTHORN BULLS

All ages. Address  
**HUNT BROS., BLUE RAPIDS, KAN.**

### RIVERSIDE STOCK FARM

3 good reg. Shorthorn bulls; 12 months old; \$125 each. C. H. Wempe, Prop., Seneca, Kansas.

**Polled D. S. Shorthorn Cow and Calf**  
Shorthorn cow; one 2-year-old and one yearling Shorthorn heifer. All registered and priced at \$500.  
**WILL ACKLEY, PORTIS, KANSAS**

**TWO REG. SCOTCH TOPPED BULLS**  
13 months old; of the Young Mary and Victoria families; both reds and good individuals.  
**WARREN WATTS, Clay Center, Kansas.**

**FOR SALE:** 10 Shorthorn bulls; 7 to 18 months old. Prices \$100 to \$150.  
**W. T. HAMMOND, PORTIS, KANSAS**

### "INQUIRIES KEEP COMING"

Kansas Farmer and Mail and Breeze: Find inclosed check for last month's ad and I wish it discontinued as I have no more bred sows or gilts and the inquiries keep coming just the same.—C. H. COLE, Breeder of C. W. H., North Topeka, Kansas, March 12, 1920.



# SHORTHORNS; A FARM NEED

And a Most Fascinating Facility For Saving Labor And Increasing Profits On Our Farms, Pre-eminently Are  
**Adapted To The Agriculture Of Kansas And Colorado**

You Know This? Yes. Then Why Mention It Here? Because—

## YOUR OPPORTUNITY TO STUDY AND BUY;

The Most Convenient, Most Instructive And Most Economical Opportunity; Will Be In This Season's

**Series of Sales at Maryville, Mo.**

**300 Scotch Shorthorns Sell Here  
June 16, 17 and 18**

and every opportunity will be given visitors to inspect the parent herds of the five strong sale offerings while they are here. As a Shorthorn short-course and business event combined, possibly nothing so well worthy the time of progressive and ambitious farmers ever has taken place. Herd bulls (several of them, of the highest rank) can be studied, before buying their get. Dams and granddams of heifers can be seen before buying the descendants. Conditions under which these cattle have been grown can be considered. Forward looking farmers, successful breeders and beginners

from many states will be met. Lessons in care, and valuable new acquaintances, may alone pay a profit on your time and expense, but the **BUYING OPPORTUNITIES WILL BE EXCEPTIONAL** because of the large number to be sold and the uniformly high degree of desirability. The first step is to get the sale catalogs. Send at once for them without waiting to make your final decision as to the trip. These catalogs are especially interesting and instructive, each representing a man or firm who has worked out success from a somewhat different angle than the others. To get catalogs, address the following, whose sales come in the order named:

**E. Ogden & Son, Maryville, Mo., Sale June 16**

**Bellows Brothers, Maryville, Mo., Sale June 17**

**J. H. Degginger, Albany, Mo., Sale June 18 (forenoon)**

**O. W. Nauman, Craig, Mo., Sale June 18 (afternoon)**

**J. H. Crist, Skidmore, Mo., Sale June 18 (evening)**

Plan to come Monday or Tuesday before the sales start, so as to make the most of your study of the breeding establishments of Missouri's "Durhamshire." The Commercial Club of Maryville especially welcomes the opportunity to assist visitors to do this. How true it is that nowhere else within easy reach can such a study so conveniently be made of herds affording every element of Shorthorn excellence and interest, will be gathered from what already has been said; from the catalogs which are yours for the asking, and from the following brief notes on the breeders who invite you:

For forty years the name of Bellows Brothers has headed lists of prominent Shorthorn breeders of the West. Three generations of the Bellows family already have had active connection with the management of the breeding plants at Maryville. The state and national shows for a third of a century have recorded conspicuous winnings for this firm. A hundred herds have been founded on, or improved by, breeding stock bought from the Bellows herd. It contributes to the Maryville series, the most conspicuous offering it ever has made; 100 head.

E. Ogden & Sons, who open the series, trace their success to the conviction which came to Lawrence Ogden less than ten years ago, as to the superiority of Shorthorns over everything else for making money on the farm. Wholeheartedly he joined his father, buying for foundation stock only the type, quality and breeding to which successful breeders had come from long experience. Of necessity this start was small in number, for their cash was limited, but so good that in a recent sale 40 head from the Ogden herd of 80 made an average of over \$1,600 per head.

J. H. Degginger's herd is a striking example of how quickly a man of means and the character to give him high standing can put himself forward in this business. Having had to dispose of his herd when he entered the army, he lost no

time on return in getting back into the Shorthorn colony, as a climax, buying last fall to head his herd, and to use on young females going into this sale, the \$10,000 Villager's Rover, the white junior champion of the Iowa State Fair. Unanimously, almost, did the other breeders, with young herd bulls of their own to sell, join in approval of this selection.

Dr. O. W. Nauman is typical of a large class of professional men, who, in order to get profit from their investments in farm land, have had to put purebred cattle on their farms. With the help of experienced breeders he made his first selections from the Hallwood dispersion. Again, with experienced counsel, he was able to select from the bulls imported the past four years, one of the few that have become superior breeders, and fortunately this bull, Brandsby's Officer, gives new blood desirable to every herd.

To the great majority whose purebred herds simply are a part of better farming, the herd of J. H. Crist and his offering to be sold Friday evening, the 18th, will be of greatest interest. Mr. Crist's herd has more than built itself, paying a good dividend annually from the cattle sold during the improvement process, which has trebled its value in a very few years without making any larger demand on the feed production of the farm. His experience is an excellent demonstration of the place Shorthorns should have in good farming.

Pictures of the herd bulls most prominently represented, and of a large number of the animals to be sold, will be found in the catalogs, along with pedigrees and descriptions of everything, directions as to trains, and the terms and conditions of the sales. Write each separate firm, as per address above, for catalog, and mention this paper. Ask for any special information desired. Remember, Maryville, Mo., invites you also.



# The 15-35 Model E-A Wonderful Buy at \$1750

**Y**OU really get wonderful value and service in the 15-35 Model E Sandusky tractor at the price of \$1750.00 placed on the limited production that we are able to offer the domestic market this season.

With one of these tractors you can pull four 14 inch plows almost anywhere at a big saving in labor, not only as compared with horses, but also in comparison with either a two or three plow tractor. However, we can furnish you the popular 10-20 Model J at a correspondingly attractive price if you prefer a smaller tractor.

## Brief Specifications

Our own four-cylinder, four-cycle 5x6½ heavy duty, slow speed, vertical motor set crosswise to frame, with straight spur gear drive throughout and direct drive on belt pulley; 2½ inch diameter crankshaft; four bolt main and connecting rod bearings; positive self-contained combination force feed and splash oiling system; Dixie High Tension magnet, Kingston carburetor, Bennett air cleaner; three speed selective transmission, 2 to 5½ miles per hour with direct drive on low; ideal three-point spring suspension; all steel construction; small over-all dimensions and short turning brakes; easily handled; surplus cooling capacity.

**THE SANDUSKY TRACTOR**  
"THE LITTLE FELLOW WITH THE BIG PULL"

The 15-35 Model E Sandusky is equipped with our own four cylinder, four cycle, 5x6½ motor, set crosswise to frame, eliminating objectional bevel gear drive on both drawbar and belt power work. It will do all the belt jobs up to the operation of a 30 inch grain separator. Its three speed transmission, 2 to 5½ miles per hour combined with full steel construction and light weight for so powerful a job, also makes the Model E profitably adapted to the lighter tasks, such as discing, harrowing, drilling, harvesting, pulling combine, etc.

## YOU MUST ACT QUICKLY

To take advantage of this unusual offer you must act quickly. There is but a limited number of these tractors available for home demand. When these are sold, our offer must be withdrawn.

We suggest therefore that you *wire us immediately*--charges collect--to hold one of these tractors pending the receipt of your letter asking for complete information. This does not obligate you but does protect you on delivery at the \$1750 price if you decide to place your order.

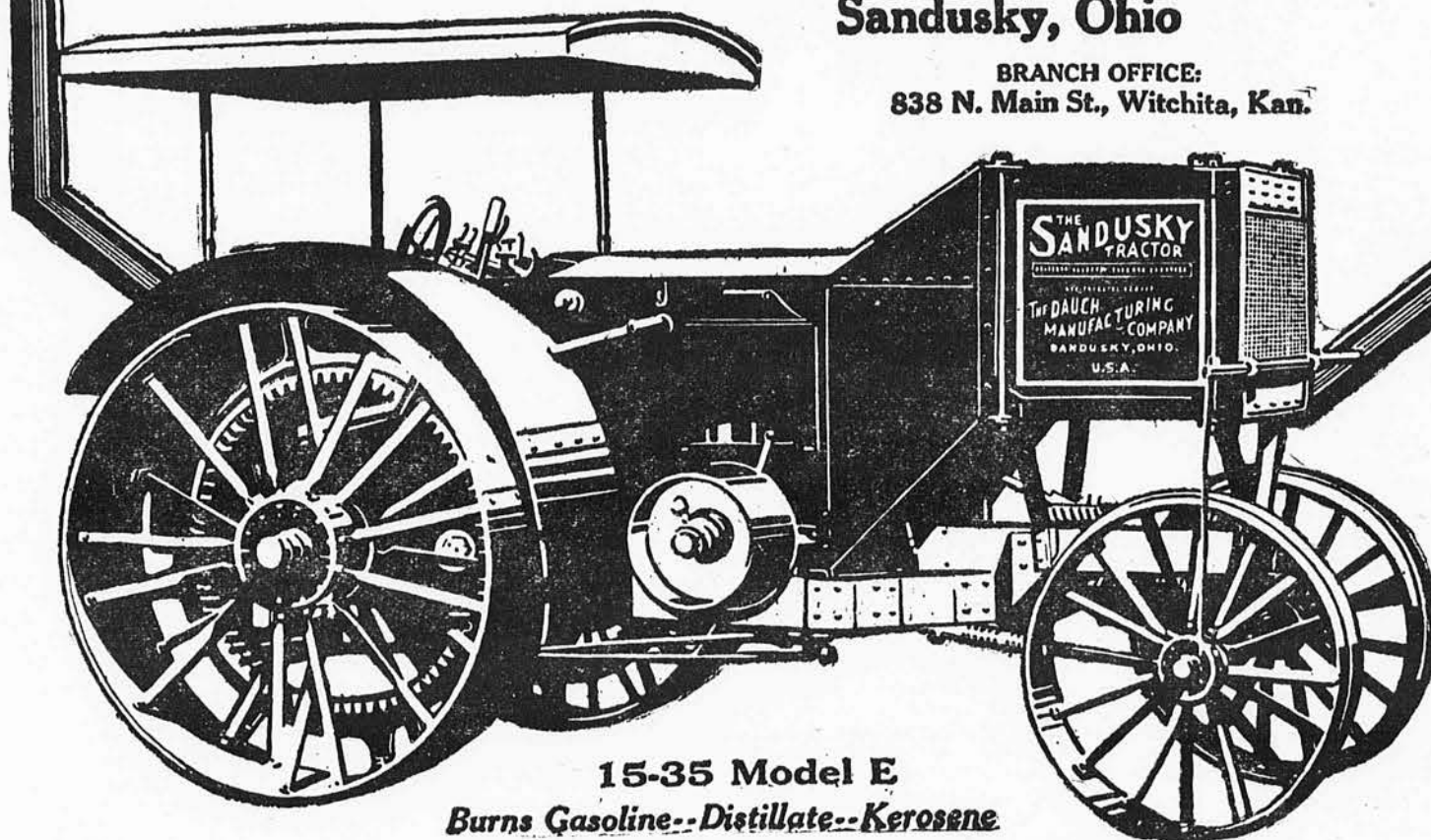
## FREE INSTRUCTIVE SERVICE

Sandusky service goes with every sale. We will have a competent service man deliver your tractor and remain with you two days, without charge. He will give you thorough instruction in its operation and care.

**The Dauch Manufacturing Co.**  
**Sandusky, Ohio**

BRANCH OFFICE:  
838 N. Main St., Wichita, Kan.

**\$1750**  
F.O.B.  
FACTORY



**15-35 Model E**  
*Burns Gasoline--Distillate--Kerosene*