

KANSAS SECTION THE CAPPER FARM PRESS

# KANSAS FARMER AND MAIL & BREEZE <sup>g. 2</sup>

Volume 58

July 10, 1920

Number 28



## In This Issue

Rebuked by a Lumber Journal  
Senator Capper

Cows and Wheat Buy a Home  
George C. Wheeler

Baby Tractors Prove Worth  
Charles Edgars

Summer Silos for Our Cows  
John W. Wilkinson



# Q and A

## About Threaded Rubber Insulation

This trade-mark is branded in red on one side of the Still Better Willard—the only storage battery with Threaded Rubber Insulation.



**Q. What is Threaded Rubber Insulation?**

**A.** A storage battery insulating material made up of rubber pierced with thousands of tiny threads.

**Q. How does it differ from other battery insulation?**

**A.** Ordinary insulation is wood, cut in the form of thin sheets, and is neither as uniform nor as durable as Threaded Rubber Insulation.

**Q. Why is insulation so important?**

**A.** Because battery life depends largely on insulation and because any defect or weakness of insulation is quickly evidenced by buckled plates, short circuits, failure of the battery to hold its charge and so on.

**Q. What has this insulation to do with battery shipment?**

**A.** The kind of insulation determines whether the battery must be kept wet, or can be shipped in "bone dry" condition. Wood insulation must never be allowed to dry out, hence makes necessary wet or partially wet shipment. With Threaded Rubber Insulation the battery can be shipped absolutely "bone dry."

**Q. Why is "bone dry" shipment and stocking preferable?**

**A.** Because it is the only method by which chemical action in the battery can be entirely held up, so that the battery reaches the buyer in truly brand-new condition.

**Q. Why does wood insulation need to be replaced?**

**A.** Because wood insulation being soft, wears out more rapidly than any other part of the battery. It is also subject to cracking and checking, which, if allowed to go too far, seriously damages the battery.

**Q. Why does Threaded Rubber Insulation outlast the battery?**

**A.** Because the basis is hard rubber which resists wear and does not crack or check.

**Q. How can I be sure my battery has Threaded Rubber Insulation?**

**A.** Look for the red Thread-Rubber trade-mark. It can be found **only** on the Still Better Willard Battery.

**Q. How many car and truck manufacturers have selected Threaded Rubber Insulation?**

**A.** 136 in all. The complete list is printed at the right.

*Willard Service*

### 136 Manufacturers Using Threaded Rubber Insulation

Acason	Madison
Acme	Marmion
All American	Menominee
Allis-Chalmers	Mercer
American	Mercury
LaFrance	Meteor
Aper	(Phila.)
*Apperson	M E C
Armstrong	Mitchell
Atterbury	Murray
*Auburn	McFarlan
Austin	McLaughlin
Bacon	Napoleon
Ball	Nash
Belmont	Nelson
Bessemer	Nelson & LeMoon
Betz	Noble
Biddle	Northway
Brockway	Ogren
Buffalo	Old Hickory
*Buick	*Olds
Cannonball	Oneida
Capitol	Oshkosh
*Case	*Paige
*Chevrolet	Parker
Clydesdale	Peerless
Cole	Peugeot
Collier	Phianna
Colonial	Pierce-Arrow
Comet	Premier
Commerce	Preston
Commodore	Ranier
Cunningham	Reo
Daniel	Republic
Dart	Revere
Dependable	Riddle
Diamond T	Robinson
Dixie Flyer	R & V
Dodge	Knight
Dorris	Rowe
Fargo	Sandow
Fergus	Sayers
Ferris	Seagrave
F W D	Selden
Franklin	Service
Fulton	Shelby
Garford	Signal
G M C	Singer
Giant	Southern
Glide	Standard 8
Great Western	Standard
Hahn	Stanley
H C S	Studebaker
Hurlburt	Stutz
Hawkeye	Sunbeam
Haynes	Tarlington
Henney	Tiffin
Highway	Titan
Holmes	Tow Motor
Holt	Transport
Hupmobile	Traylor
Indiana	Ultimate
International	Vellie
(I H C)	Vulcan
*Kissel	Ward LaFrance
Koehler	White
Lancia	Wilson
Lexington	Wintner
*Liberty	Winton
Luverne	Wolverine

\*For Export

# Willard STORAGE BATTERY



## Cows and Wheat Build a Home

*Dairying and Farming Make a Very Successful Combination in Western Kansas for Chris Petersen of Ellis County*

By G. C. Wheeler

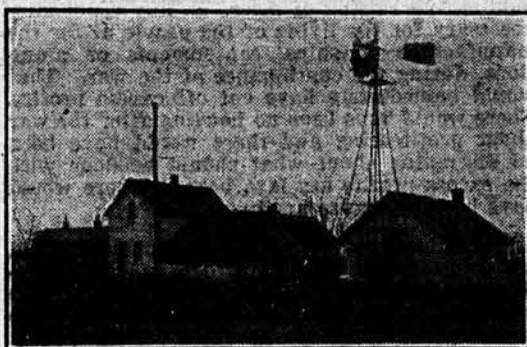
**I**N THE wheat growing sections of Western Kansas, farms equipped with buildings and other facilities for handling milk cows are the exception rather than the rule, and yet it has been demonstrated over and over again that milking cows will prove a much surer means of bringing in a steady income year in and year out than exclusive wheat farming. In years of poor wheat crops milking cows proved to be the anchor to the windward on many a Western Kansas farm. Statistics of cream shipments from Western points show that in years of good wheat crops fewer cows are milked, but when the adverse years come milking cows and selling cream is resorted to as a means of paying the grocery bills and other living expenses.

Chris Petersen of Ellis county did not wait for the years of crop failures to take up dairying as a side line to wheat farming. He came to this country from Denmark and the dairy farming instinct acquired in his native land was too strong to be killed, even if he did cast his lot among the wheat farmers from Russia who settled in that county. Mr. Petersen came to Ellis county 33 years ago and began life in a sod house. He now has a comfortable home, a good, warm barn for his cows and horses, owns two quarters of land and rents a third quarter. These improvements are strikingly conspicuous in a neighborhood where most of the farms are very meagerly equipped almost in every way.

### A Good Type of Barn

The first thing noted in driving up to the Petersen farm is the barn. Exclusive wheat farmers do not build barns and sheds. Mr. Petersen's barn is 86 feet by 54, the long way extending north and south. It consists of a central part 20 feet wide, having a loft above for storing hay and feed, flanked on either side by a low part with shed roof. The hay and rough feed is taken in thru an end door by a hayfork running on a track the full length of the loft. On the ground floor feed bins are located at the north end of the central part, reached by doors from the alley in front of the cow stalls. At the south end is a small room tightly inclosed, used for a milk room. This is equipped with a separator and other facilities for handling milk and opens into the cow stable. In the low part at the south end is a big box stall for the calves, opening on a yard outside. The rest of the low part on the east side is taken by the cow stalls. They are equipped with modern stanchions. The floor is cement, having a gutter behind the cows which drains to the south. In front of the cows is a continuous cement manger which drains to the north. The cows can be watered in this when the weather is cold and stormy. Mr. Petersen explained that this was an old country custom but was not so necessary in Kansas. This part of the barn is provided with plenty of windows, as will be noted by referring to the cut. An elevated tank at the south end kept filled by a windmill located at the house supplies the water to the tanks outside and to the trough. The feed trough can be cleaned easily by turning in the water and scrubbing it with a broom.

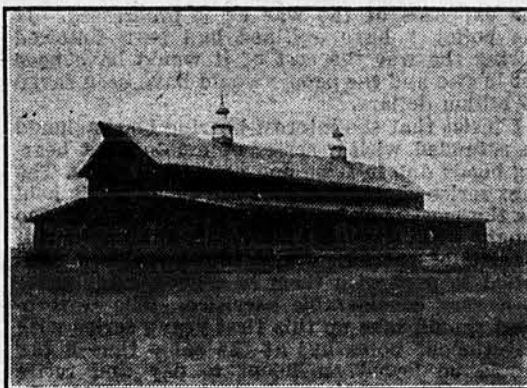
Mr. Petersen pointed out that this type of barn is far more rigid and less likely to be damaged by the wind than the more modern, self-supporting roof type of barn and for that reason he believes is better adapted to that part of the country. He believes in making his farm buildings warm. The walls of the cow stable part of the barn are double-boarded, matched lumber being used on the outside. In the central part on the ground floor he keeps a feed cutter and a gasoline engine to run it. All the bound fodder fed is run thru this cutter. This reduces waste, makes it much more convenient to feed in the mangers, and the rejected portions make good bedding. On the west side of the barn are the stalls where the horses are kept.



Cows and Wheat Built This Comfortable Home.

Mr. Petersen's milking herd consists of grade Red Polled cows. He has bred along this line because cows of this breed are good milkers and have good beefing qualities as well. At the present time they are making butter on the farm, turning out 40 or 50 pounds a week, selling it in Hays. This makes considerable work in the home, but they thought that it increased the returns sufficiently to make it worth while.

Convenient equipment for handling wheat was another feature of this farm, for this is the cash crop and all the other farm work must hinge around the wheat. The wheat from the thresher is handled direct from the wagon by a portable elevator operated by a gasoline engine. The grain can be spouted to bins on either



Every Farm Needs a Good Well Equipped Barn.

side of the granary. On many of the exclusive wheat farms of this section there is little or no provision for storing wheat on the farm. This necessitates marketing direct from the thresher and as a result the crop cannot be marketed to the best advantage. Mr. Petersen has wisely protected himself against this handicap of forced marketing.

Some farmers wait until they have made a big stake before attempting to provide for the comfort and well-being of the family. It is interesting to note how this home has been added to, a feature at a time. The kitchen is a large room, occupying the spot where the original sod house stood. It was the first part of the permanent home. As the family grew, an addition

of two rooms was built. This part has been rearranged and now is one big room used for a living room and dining room. It has a large screened-in porch to the east on which the family take their meals in hot weather. Next came the two-story part. It might seem difficult to have a bath room and complete water system with hot and cold running water in a home built as this one was, but this has been accomplished. A range boiler has been attached to the kitchen range, a storage tank in the upstairs part supplying the water. The kitchen has a sink, and a bathroom with complete equipment has been provided on the ground floor. Mr. Petersen explained that he considered it very important to fix up the home so as to make it as pleasant as possible for the family. "If you don't," he said, "they will pull out and leave as they grow up." His oldest son, Nels, who is now of age, seems well content to remain on the farm. He drove the car up town in response to my telephone call and as we returned took his father to the school house, where the annual school meeting was to be held that afternoon. The next day Mr. Petersen and Nels drove to the Hays Experiment Station Farm for the Cattlemen's Roundup meeting. The young man had taken a course in an automobile and tractor instruction school and was the chauffeur and engine man of the family. He has largely taken over the management of the field work in general on his father's farm.

### How the Milking is Done

Mr. Petersen is the dairyman and with the help of the smaller children milks the cows, separates the milk and cools the cream, feeds the calves and does the many little chores incident to transforming farm-grown feed into the highly finished product, butter. This feature of the farm practice virtually consists in taking low-grade raw material, having little or no market value, and by putting into it the skilled labor of the trained dairyman turning out the manufactured product having a high market value. It is selling skill and ability instead of selling raw material and for that reason is not so dependent upon seasonal conditions as growing wheat for market.

The building in the cut back of the windmill is the laundry. It is double-boarded like the cow barn. A range to heat water stands in one end. The washing machine is operated by a gasoline engine and a line shaft carries pulleys which operate emery wheels and other small machinery. A pumping jack can be used with the engine when the wind does not blow enough to operate the windmill. This pumping plant supplies water to the barn as well as the house and laundry. These improvements and conveniences have all been added one by one as the money was available.

A well built garage, also double-boarded, large enough for four cars is the last improvement. Mr. Petersen said he might want to buy a truck some day and thought he would build for the future. He already has a tractor.

Thrift and industry, skillfully combining the growing of wheat with milking cows, not spasmodically but as a carefully worked out program are the things which have made this farm success possible. Adding the new improvements one by one instead of trying to get along until a modern home and modern farm buildings can

be built all at one time is a practice which should commend itself to many. Mr. Petersen believes that by following this plan the family is more contented on the farm and he feels that it is not right to deprive the wife and children of the ordinary comforts of life if it is at all possible to have them. He is looking forward to other improvements as soon as they can afford them. Too often when it is possible to have these comforts and conveniences there is probably no one left to enjoy them.



Thrift and Industry, Skillfully Combining the Growing of Wheat with Dairying Made Farming a Success for Chris Petersen of Ellis County.



**DEPARTMENT EDITORS**

Livestock Editor ..... T. W. Morse  
 Farm Editor ..... Dr. C. H. Lerrigo  
 Medical Department ..... Stella Gertrude Nash  
 Young Folks' Pages ..... I. B. Reed  
 Farm Engineering ..... C. E. Jablow

Entered as second-class matter February 16, 1906,  
 at the postoffice at Topeka, Kansas, under act of  
 Congress of March 3, 1879.

**ADVERTISING RATE**  
 90c an agate line. Circulation 125,000.

Changes in advertisements or orders to discon-  
 tinue advertisements must reach us not later than  
 ten days in advance of the date of publication. An  
 ad cannot be stopped or changed after it is inserted  
 in a page and the page has been electrotyped. New  
 advertisements can be accepted up to and including  
 Saturday preceding issue.

## Kansas Farmer and Mail and Breeze

Member Agricultural Publishers Association.  
 Member Audit Bureau of Circulation.

Published Weekly at Eighth and Jackson Streets, Topeka, Kansas.

**ARTHUR CAPPER, Publisher**  
**F. B. NICHOLS, Managing Editor**      **T. A. McNEAL, Editor**  
**JOHN W. WILKINSON and G. C. WHEELER, Associate Editors**

**SUBSCRIPTION RATES: One dollar a year; three years two dollars.**

**OUR TWO BEST SUBSCRIPTION OFFERS**  
 One old subscriber and one new subscriber, if sent together, can get  
 the Kansas Farmer and Mail and Breeze one year for \$1.50. A club  
 of three yearly subscriptions, if sent together, all for \$2.

**DEPARTMENT EDITORS**

Women's Pages ..... Stella Gertrude Nash  
 Grain Markets ..... Sanders Sosland  
 Livestock Markets ..... Samuel Sosland  
 Horticulture ..... John W. Wilkinson  
 Women's Field Editor ..... Mrs. Ida Miltner  
 Capper Pig and Calf Clubs ..... E. H. Whitman  
 Capper Poultry Club ..... Mrs. Lucile A. Ellis

No medical advertising accepted. By medical ad-  
 vertising is understood the offer of medicine for in-  
 ternal human use.

**ADVERTISEMENTS GUARANTEED**  
 WE GUARANTEE that all display advertising in  
 this issue is reliable, and should any subscriber suf-  
 fer financial loss thru fraudulent dealing resulting  
 from such advertising, we will make good such loss.  
 We make this guaranty with the provisions that the  
 transaction take place within one month from the  
 date of this issue; that we are notified promptly, and  
 that in writing the advertiser you state: "I saw your  
 advertisement in Kansas Farmer and Mail and Breeze."

# Passing Comment—By T. A. McNeal

**B**Y THE time this moral and agricultural guide is circulated among its readers the Democratic National convention will have ended its labors, nominated a ticket and put out a platform. In November either the men nominated at Chicago will be elected or those nominated at San Francisco. There will be another ticket, maybe two or three other tickets in the field but none of them will stand any possible show of winning. What annoys me about the whole situation is that in my humble opinion neither of the great political parties will get down to the root of things and do the things I think they ought to do. Now I will frankly admit that my judgment may be at fault. It may be that the things I think ought to be done ought not to be done, but still as one American citizen who has a hundred millionth interest in this, the greatest Government the world ever has known, I have a right to my own opinion.

I have a firm conviction that if the right course had been pursued during the recent war there would not only be no National bonded debt at this time, but that the cost of the war would not have been more than one-half of what it was. I also have a very firm conviction that there would be far less of discontent and bitterness in the country than there is at present; that there would be comparatively little complaint about the high cost of living and that the country would now be entering upon an era of unprecedented prosperity instead of sailing on a sea of doubt, threatened with storms and disaster.

Our Constitution provides that there shall be neither slavery nor involuntary servitude except as a punishment for crime of which the person so punished shall have been first duly convicted. The Government, however, has the inherent right in case of war to suspend the courts if necessary and compel every citizen to give up his or her ordinary business and enter the service of the Government, not on terms of the citizen's choosing, but on such terms as the Government may prescribe. In addition the Government claims and exercises the right to seize so much of the property of the citizen as may be necessary to use in the defense of the Government.

It might seem at first glance that the first quoted provision of the Constitution conflicted with the power assumed by the Government in time of war. It does not, however, because it is recognized that the Government, like an individual, has an inherent right to preserve its life and may use whatever means may be necessary for that purpose.

However, if the Government exercises this extraordinary power over the citizens it should be used impartially. It should apply as far as possible to all citizens alike.

When the United States entered the war it was decided to exercise at once the extreme power of the Government and raise an army by conscription. Under the general draft, a certain class of citizens, men between certain ages, were subjected to involuntary servitude. They were compelled willingly or unwillingly to leave their occupations, go to training camps, put on the military uniform and subject themselves to the harsh discipline, the discomforts and dangers of military life. They were not permitted to name the wages they were to receive for their services, or to dictate the conditions under which they should serve. They did not even have a choice as to what they should eat or what they should wear.

They were told that they would be clothed and fed according to the standard set by the military authorities and that for their services when in active duty they would receive \$1.10 a day in addition to the food and clothing provided by the Government. If they were men of families certain provision was made by the Government for the partial support of the family and they were compelled out of the meager wage provided to contribute so much a month to the support of their families.

Now I hold that as a war measure this action on the part of the Government was justified,

but it seems also entirely clear to me that the same rule should have been applied to other citizens. They and their wealth should have been conscripted and without giving them any interest bearing bonds.

When the Nation entered the war a sweeping Government order should have been issued forbidding the raising of prices on any commodity necessary for the living of the people or for the manufacture of ships, cantonments or munitions, during the continuance of the war. That would immediately have cut off excess profits. There would have been no howling after the war about profiteering and there would have been no discussion about what should be done with the excess profits tax law, because there would have been no excess profits.

Now I have never talked with a man who did not acknowledge that the program I have outlined would have been just. But did the leaders of either of the great political parties propose anything of the sort? So far as I know they did not and for that reason neither has any right to criticize the other. Nothing has tended so much to create discontent and bitterness as the discrimination practiced during the war. It is utterly impossible to defend a system which calls on the men of one class to give up everything and risk their lives while others are permitted to grow rich on account of the opportunities opened up by abnormal demands of the Government.

It is now too late to rectify entirely the wrong that was done during the war but so far as it is possible it ought to be righted. As we should not have issued any interest bearing bonds in the beginning so now we should make arrangement to pay the bonds that have been issued as soon as possible. The wealth of the country should be taxed now to pay these bonds as it should have been taxed during the war to pay the expenses of the war as it progressed. If the policy I have outlined had been followed during the war the cost of it would have been cut in two and the people would have been saved 15 billion dollars.

I insist that the interest bearing bonds should be refunded with a series of non-interest bearing bonds due in from one year to 10 years. The first series should embrace the small bonds held for the most part by people of small means who bought what they could not afford to buy out of a spirit of patriotism and who have been compelled to part with them in a good many cases at a very considerable sacrifice. The Government should take up this first year's series with Government notes but at the same time a tax should be levied sufficient to pay and retire these notes or their equivalent when paid into the Treasury for taxes.

There would be under this plan no inflation of the currency because each year there would be retired as many of these Government notes as were issued. The holders of the other bonds could be permitted to use them as preferred security in borrowing money if they so desired. My friend Pete Goebel, for whose financial judgment I have great respect, declares that my plan is utterly impracticable, but so far has not demonstrated why it is so. My opinion is that Pete in this particular case is talking thru his lid.

## The Hoop Snake

**O**NE OF OUR subscribers, Mrs. L. S. McKenzie of Black Fork, Ark., writes me that I am talking thru my hat, so to speak, concerning the hoop snake. She says: "You state that there is no such thing as a hoop snake. There may not be any now but about 50 years ago my two brothers and sister and myself, all now living, were chased out of a wild strawberry patch near Morristown, Cass county, Mo., by a hoop snake. It came very near us and we all saw it only too well. So we ran home and told mother and she would never let us go there any more. The memory of that scare is with me yet."

Webster's unabridged dictionary says that there is such a reptile as the hoop snake; also

that it is a harmless snake and got its name from a mistaken impression that it took its tail in its mouth and rolled like a hoop. It is found in some of the Southern states. The scientific name of this snake, according to Webster, is Abaster Erythrogrammus, which seems to me to be some name.

So I stand corrected to the extent that I must admit there is a snake called the hoop snake but still must be shown that it takes its tail in its mouth and rolls like a hoop.

## Edmonds' Ten Commandments

**R**EPRESENTATIVE Edmonds, of Pennsylvania, not long ago promulgated what he called the "Ten Commandments of Americanism." Here they are:

1. Thou shalt buy only American products. This develops the home market, encourages manufacturing and provides employment.
2. Thou shalt import only necessary raw materials, using American materials whenever possible. This encourages the building up of home facilities, prevents dependence and provides employment.
3. Thou shalt produce on farm and in factory to the limit of capacity. This increases home wealth and reduces cost of living expenses.
4. Thou shalt co-operate and conserve. This will automatically increase production and reduce costs.
5. Thou shalt develop export markets and facilities. This reduces overhead costs, stabilizes the home market and steadies employment.
6. Thou shalt make quality of first consideration. This will promote confidence at home and abroad in American products.
7. Thou shalt use American facilities whenever possible, ship by American ships and use American insurance and banks.
8. Thou shalt develop American resources to the limit. The war has disclosed many new resources in the field of minerals and manufacture. Protect and utilize them.
9. Thou shalt be fair to labor. Without fairness there can be nothing but unrest, with its consequent loss.
10. Thou shalt be fair to capital. Without fair treatment and understanding of capital no development can come and the consequent stagnation will be unfortunate to all.

E. Z. Butcher of Solomon, Kan., who is a student of economics and a single-taxer, takes exception to at least a part of these so-called commandments. "In the same paper in which I read the Decalogue," says Mr. Butcher, "I read of an American who had imported a cargo of fat lambs from New Zealand and sold them to counteract the high cost of living. Look on your breakfast table and notice the products from outside the United States. What would be the price of sugar if we did not have Cuba to help us? We only produce a small supply in proportion to our consumption. There also is your coffee, tea, and many other things, for which we are dependent on other countries."

Referring to Representative Edmonds's commandment that "Thou shalt be fair to capital," Mr. Butcher says: "There is not and never was any capital in the true sense of the word, except what was produced by labor, all the capital destroyed by the late war could be replaced in time. It is only from the earth that capital is produced. All that labor desires is a free opportunity and it will provide its own employment and produce all the world needs. The future that looms up so dark calls for all the good there is in man to face and solve the problems with justice and good will, free from class distinctions and class struggles, hoping and doing for the right, that our economic surroundings may be so altered that there will be a new world."

Every right thinking man and woman will join with Mr. Butcher in this hope even if they differ from him concerning the way in which it can be brought about. To say that if labor is given a free opportunity it will provide its own employment and produce all the world needs, may be entirely clear to Mr. Butcher,



but it seems to be rather vague and meaningless to me.

What does he mean by labor? He declares himself against class distinctions, but apparently draws here a class distinction. I assume that he would abolish all private ownership of land, as he holds that land is the basis of all capital. But there would still be need for the organization of the stored product of labor which is capital. Mr. Butcher is of course quite right in saying that the first of the so-called American commandments is not practicable. We all know that we must buy a great many things not produced in America.

Furthermore if we refuse to buy the products of other countries we cannot sell to them and the talk about promoting confidence in American products abroad is foolishness. If we are going to confine our trading to the United States then there is no use to build American ships. The future prosperity of the American people does not lie in provincialism and isolation but in world-wide trade.

Finally I will agree that the solving of the problems that confront us call for the best thought and the most honest endeavor of the people of this and other countries, but especially of the people of the United States.

### More Questions Asked

In the Kansas Farmer and Mail and Breeze for June 12 you discuss my two questions regarding the tax amendment at some length, and I feel thereby encouraged to ask a few more. Before I do, however, I should probably first answer your question as to what I would do if I had money invested in farm mortgages and a law were passed compelling me to pay taxes on the same. Why, Mr. McNeal, every assessor during the last 30 or 40 years has given me the impression that such a law has been on our statute books all this time! So when this question you ask, recently became a real, instead of a hypothetical one, I answered it much in the way you opine, for the simple reason that I could not compete with Mr. Tax Dodger for farm mortgages, while his competition did not make itself felt in municipal and Government bonds. Had he been forced to pay taxes on his mortgages by some such method as I suggested, instead of letting him "get by" if he is willing to perjure himself, he would in all probability have beat me to the bonds, and I might have been able to help some deserving chap to become the owner of a farm without financially injuring myself.

But here are my questions:

First: Why tax bank deposits  $\frac{1}{2}$  per cent, when other property, according to your statement, pays 3 per cent, or in the case of a man burdened with a mortgage for half the value of his farm, even 6 per cent?

Second: How many more bank deposits would you get on the tax roll with your  $\frac{1}{2}$  per cent tax on same, than were there in 1919, when there were 29 per cent according to your figures? If you tax them  $\frac{1}{2}$  per cent, and the general rate is 3 per cent, you are virtually taxing only one-sixth, or 16 2-3 per cent, instead of 29 per cent under the present constitution. Am I right or not?

Third: Suppose the case, this tax on bank deposits were actually put on (which if I understand it right, could, but would not necessarily have to, be done under the amendment), would not the banks pass it on to the borrower by the increased rate of interest route?

Fourth: You say my plan of taxing mortgages would immediately have this effect. Granted: tho in this case for the purpose of this argument only. Would not the net result to the borrower be just the same, whether he paid this 3 per cent in increased interest, or whether he pays it now in double taxation on land he does not really own?

Fifth: You have discussed and criticised one of the two solutions I offered to do away with double taxation, but have not touched upon the other, nor, so far as I am able to see, shed any light upon what the amendment will do in this respect, unless this contained in the quotation from Solomon of old. Or have I overlooked something in your answer?

I should be glad indeed to have you answer a number of other questions on this subject in your valuable paper, but, realizing that it will be necessary to print the questions as well as the answers, and that you may not wish to grant the necessary space, I will confine myself to those above.

J. H. CLAASSEN.

I will try to answer Mr. Claassen's questions as well as I am able. I wish to say frankly that the only justification for much of the classification I have suggested, is the hard and somewhat ugly fact that experience has shown that property which is easily concealed always has escaped its just share of taxation.

For a long time I was opposed to the classification of property along the lines I have suggested because it seemed to me inequitable that property such as notes, bonds and money should be taxed at a less rate than property which cannot be concealed. Mr. Claassen states a fact when he says that mortgages, or to be more exact, the notes secured by the mortgages, are taxable under the law at their full value. Not only that, but the law seems to provide rather severe penalties for trying to evade taxation on this kind of property, but as Mr. Claassen knows in spite of laws and penalties more than two-thirds of that kind of property has managed to escape taxation. I have, therefore, been reluctantly compelled to accept the view that it is better to get this property on the tax rolls if possible at even an inadequate rate of taxation than to let it escape taxation entirely.

Mr. Claassen asks why bank deposits should be taxed at the rate of say  $\frac{1}{2}$  of 1 per cent

when other property is taxed at the rate of nearly 3 per cent. I think I already have answered that. We know that more than 70 per cent of bank deposits do escape taxation and if the law were amended so as to compel the banks to disclose the names of the depositors and the amount of deposits carried by each, we know that the result would be a withdrawal of a very large per cent of the deposits before March 1. In my opinion no law could be framed which would catch these tax dodgers. It is a condition, not a theory, which confronts us.

"But," asks Mr. Claassen, "how many more bank deposits would you get on the tax roll with your  $\frac{1}{2}$  per cent tax on same than were there in 1919?" Banks are required to make a statement of the aggregate of their deposits but not the names of individual depositors or the amount belonging to each. The banks would therefore pay the tax on whatever the aggregate of deposits might be.

Mr. Claassen then asks, "Would not the banks pass the tax to the borrower by the increased rate of interest route?" Undoubtedly the banks would undertake to do that very thing but I believe this evil might be remedied by a stringent interest law fixing the contract rate of interest at a lower rate than banks are permitted to charge at present. I presume some banks manage to evade our usury laws but it is not the rule, and with a vigilant banking department there ought to be almost no evasion of this kind, because it is entirely possible to discover the evasion.

In Mr. Claassen's previous letter he suggested as a remedy for present inequalities in taxation, the listing of all property at its full intrinsic value. That is, of course, what our law requires now, but as I have said, experience has shown that property which is easily concealed will manage to escape taxation. It always has done so and I presume it always will do so.

I note from Mr. Claassen's letterhead that he has named his farm "The Golden Rule Farm." I have no doubt he is trying to live up to that theory. If everybody would do so all the problems of taxation, Government and society would be solved. There would be no need of constitutions or laws providing punishment for crimes or imposing penalties for violations of contracts, but unfortunately human selfishness has not yet been supplanted by the Golden Rule. I am therefore in favor of adapting laws to conditions as they are, not as I would like them to be. This is the reason why I favor the proposed amendment to the constitution. That it will bring about a perfectly equitable system of taxation I do not believe. All I hope for is that it will lay the foundation for a more equitable system than we have at present.

### Rebuked by a Lumber Journal

THE EDITOR of the Southern Lumberman gives me a trade-paper dressing down in his issue of June 5. He is virtuously indignant that a person from "a state without a sawmill," should presume to have any ideas about lumber, much less to accuse "the second greatest industry in the nation"—and he seems to think the most sacred—of being in a condition "fundamentally bad."

My belief that the mill owners and the jobbers have been running up prices unconscionably—an opinion held by all the retail lumber dealers with whom I have been corresponding for months—the Lumberman's editor says indicates my ignorance and lack of grasp of the general subject. He doesn't say the lumber dealers are ignorant about the "second greatest industry" of which they are a part. But of course, they must be or they could not hold this opinion.

The dealers, without doubt, are willing to admit the mill men do have a better grasp of the subject, for they have proved it the last three years by grasping everything in sight that looked like increased profit, only being surpassed in grasp by the cotton mills and the sugar industry.

"We have a flag-waving, American-loving firm down here," Mr. Clyde Doss writes me from Monticello, Ark. "This firm pays \$8 a thousand for logs and sells the lumber at \$100 or more a thousand feet, and then has the gall to kick on its excess profit taxes."

Mr. Doss has been selling logs to the second greatest industry, consequently isn't as ignorant about it as some of us who have not had his opportunity for close personal observation.

Federal Judge John E. McCall of Tennessee also has been getting some "close up" information lately. He finds that the 333 members of the American Hardwood Lumberman's association systematically increased the price of hard-

wood lumber from 150 to 250 per cent in 12 months. A private letter from a manufacturer in the same locality informs me that it was 500 and more per cent on some of the items.

But what strikes the editor of the Southern Lumberman as the most glaring display of lack of knowledge on my part is, as he expresses it, that any "self-constituted guardian of the people's rights" should have the gall to suggest (or to hope) that some "well-judged and constructive legislation leading up to a complete program," and reforestation, could straighten out those fundamentally bad conditions in the lumber industry.

Altho I don't quite think this was the meaning he intended to convey, I am bound to admit the force of the meaning he does convey. And when I think how the big profiteers in the lumber industry have unmercifully sandbagged the Government and the people these last few years, any suggestion as safe, sane and reasonable as this one seems too gentle, mild and forbearing. However, I intended it to apply to the industry as a whole and not to the pirates who during the last year or two have exploited lumber up to and beyond the absorption price-limit, as their present price hedging now confesses. They should go to jail.

Personally, and just between us, I think Editor Horn's use of the expression, "self-constituted guardian of the people's rights," ill-chosen. An official sent to Washington by a majority vote of 131,911 of his fellow citizens, has a right to consider himself fully constituted, which is the way I feel about it.

However, I am far from finding fault with Editor Horn. He has his job. It is his business to defend and uphold the lumber industry and its practices, both good and bad, against all comers, and just now that is trouble enough for one man. The editor of a lumber trade-paper must get advertising from the mills and jobbers, and subscribers among the lumber dealers. Doubtless Editor Horn has enough worries without having anybody in Washington suggesting that the lumber industry is controlled by an organization of cold-blooded, plausible and gentlemanly cut-throats.

To back up his case, the lumber editor cleverly quotes a few passages from Secretary Meredith's letter transmitting the report of the Forest Service on timber depletion which the Senate asked for at my request several months ago, and just as cleverly fails to quote certain other passages. One he does quote is to the effect that lack of freight cars is one of the prime factors of high prices for lumber. In his June 5 issue he makes the most of this alibi.

Eighteen days later, June 23, with the car shortage shorter than ever, the Associated Press announced to the country a general reduction in lumber prices ranging from \$5 to \$15 a thousand. This rather weakens the car shortage theory as a fixer of profiteer values.

But there is a sensible and a true reason for the downward trend, and the Southern Lumberman gives it to those who can read between the lines, in its leading article on "market conditions" in the same issue.

According to the Lumberman's market review, it seems that "the complex situation in the commercial world appears to have brought about a general curtailment of buying, but"—the Lumberman hastily adds—"lumber has fared no worse than other commodities!" Further on we read that business in Southern pine circles is distressingly light. (And in this country there are 10 million people living in tents and crowded rooms.) "Failure of building to reach the anticipated volume," says the paper, "is given as the reason for the modest requirements of the retail trade, and many of the dealers, in view of the uncertain outlook, are more than ever disposed to hold purchases down to the barest necessities."

Wise dealers. They are acting like prudent business men. Now if the consumer will show the same good sense and will continue to stay out of the market, he will get more and more price concessions from on high, just as the people did this spring from the clothing princes when they refused longer to buy clothing at grossly inflated values.

The big lumber interests are even now testing out the market to discover just how much they will have to take off to stimulate buying, altho history cannot show a time when lumber was in such great demand as now.

But conversation is not going to get us anywhere. I am convinced the facts revealed by the Forest Service report will put force behind the bill I have introduced to prevent forest devastation and waste of the nation's timber reserves. As for putting a permanent end to gross profiteering, a new governmental policy is demanded to deal with a profit system which has become a system of robbery by privilege. The people see it clearly. And that is the main thing. For it means the rest will come—that already it is on the way.

Arthur Capper.  
Washington, D. C.



# Baby Tractors Prove Worth

*Small Power Machines are Economical for Gardeners and Will Lighten Many Tasks and Save Much Valuable Time*

By Charles Edgars

COME OVER here, Bill, and look at the cunning little toy."

A bronzed young farmer so hailed his friend at the tractor show last winter as he walked slowly around a little two-wheeled machine that stood scarcely as high as his waist. It was his first inspection of what has loosely been termed the "garden tractor," and compared with the standard tractors the baby of the family did seem to be in reality a mere toy.

The little tractor in its four short years of existence has proved its worth, however. Today there are no less than 14 companies manufacturing the so-called garden type, and the production for this year is said to be more than 35,000 machines. Mechanically they adhere much more closely to a standard type than do the large machines, practically all being two-wheeled models with plow-handle control. While they are reasonably efficient mechanically, their work is such that utility is to be considered more than mechanical efficiency, and their utility apparently has been proved beyond all doubt.

When considering the baby tractors, it should always be borne in mind that they are built for certain fields of work and that they should not be compared with a standard size tractor. In the agriculture of the Midwest they cannot take the place of the big machine in any sense whatsoever. They can supplant one horse in most field work which one horse does; can supplement some of the work of their big brothers and perform a lot of chores around the farm house and barn. Before going into the duties the baby

tractor can perform, let's consider briefly the principal mechanical details. First these little machines must be divided into two classes—plowing

from a 6-inch to a 10-inch bottom. The engines are one and two-cylinder types, rated from 1/2 horse-power for the smallest machines to 3 1/2 horse-power



Small Tractors Now are Manufactured for the Use of Truck Growers. They Make the Cultivation of Large Areas an Easy Matter.

and non-plowing. Of the 14 machines now on the market only two or three are of the non-plowing type. They weigh 250 pounds or less. The plowing types weigh from about 535 pounds to 1,100 pounds and are capable of draw-

ing from a 6-inch to a 10-inch bottom. The largest machines are rated about 6 horse-power, on the belt. The engine is set between the two drive wheels of which the average size is 23 inches high with a 4 1/2 tread. The

smallest machines have only 17-inch wheels, while the largest wheel is ordinarily only about 34 inches.

Most baby tractors have some type of castor wheel in the rear, which is removable when implements are used. This gives the machine a good balance without their aid. Practically all makes are guided and controlled with a plow-handle arrangement, which is modified in the minor details, but conforms largely to a standard type. Generally speaking, the operator walks but many of the larger machines are equipped so that the operator can ride while plowing, and mowing the lawn.

On some makes of these small tractors the width of the tread is variable, so that it may be adjusted for different kinds of cultivation. The average clearance is 10 1/4 inches, but some of the larger types have a clearance of 13 inches, so that they may be used astride the row in cultivating some crops until the plants are quite large.

The average speed under load is 2 1/2 miles an hour and the average fuel consumption is about 2 gallons for 10 hours' work. Of course, the larger 2-cylinder machines probably will use more. Compared with a horse it has been found that an average horsepower can be developed for about a half of the cost of the same work with horse flesh. The cost of the baby tractor varies from about \$200 to \$450.

Having outlined the principal mechanical features of the small tractors let's see what they can do; what is this field in which they are "in a class almost entirely by themselves."

(Continued on Page 8.)

## A Crop of Real Merit

*The Acreage of Sweet Clover is Increasing Rapidly on Kansas Farms; it Pays to Use Good Production Methods*

By R. Kenney

MANY MEN have tried Sweet clover for a year or two and have given it up. They had been led to believe it could be handled by ways and means that apply to the alfalfa or Red clover crop. This cannot be done in all cases. A thorough understanding of the proper utilization of the crop creates friends, while the lack of such understanding has led to many disappointments.

Sweet clover is rapidly becoming so important a crop in Kansas agriculture that we cannot learn, too early, what not to do if we would get satisfactory returns in the form of pasture, hay or seed crops. The least exasperating of all troubles in growing Sweet clover is a failure to get a stand. We simply take it as a bit of hard luck and resolve to try again, wondering meanwhile what was wrong. Such failures are, more frequently than we think, the result of our carelessness.

### Poor Germination Explained

A lot of Sweet clover seed that is apparently as fine as can be produced may contain 98 per cent of hard seeds. These have seed coats that will not absorb water. They are worthless for planting unless run thru a scarifying machine which grinds and cracks the impervious layer. The high percentage of such seed in what was sown has caused many of the failures. A few years ago it was believed that these seeds were cracked by a winter's freezing and thawing and that the most of them would grow.

Experiments at the Kansas State Agricultural college on several lots of Sweet clover containing a high percentage of such hard seeds have shown that the winter's freezing and thawing have no such effect. Part of this seed was buried in the surface layer of soil in an open field all winter and there were as many hard seeds left in the spring as in the fall. Part of the seed was soaked in moist blotters and frozen and thawed 60 times in suc-

cession. Not a single seed was made capable of growing. The ground in an open field does not freeze and thaw nearly so often as this in an average winter. It must be remembered that, if 1 pound of the 15 or 20 usually sown is not hard seed but is capable of growing, the 200,000 seeds in 1 pound when spread over an acre will give about five seeds to the square foot. This is enough to give the good stands obtained by men who say their experience is that winter freezing makes more seeds grow. These facts must not be taken as an argument against winter and early spring seeding.

Seed threshed in an ordinary clover or alfalfa huller is subjected to more or less scarifying in the machine, and careful tests show that more of such seed will grow than of seed threshed in a grain thresher. A Kansas farmer of 18 years' experience in growing Sweet clover and harvesting seed states that in his opinion machine threshed seed that germinates promptly above 55 per cent is better than the average. This must be considered in sowing seed from sections that do not have hullers. Hand threshed or flailed seed fre-

quently may germinate less than 15 per cent and a poor stand will result.

The beginner in growing Sweet clover should plan to use the first summer's crop, from spring seeding, for hay. The second year's growth is too coarse for the best quality of hay and there is too much danger of killing the stand by mowing it. When cutting hay from the first season's growth only one cutting should be made in the season. This should be about frost time in the fall, if one desires a maximum hay crop and wishes at the same time to grow as strong roots as possible for the next year's start. From 1 to 3 tons of hay an acre is a normal yield. Such fall cut hay usually will be as leafy and fine stemmed as a first crop of alfalfa. Mid-September usually is a good season for curing and it can be cut close to the ground for the crown for next year's growth is then already formed about an inch below the surface. Of course a fair stubble is desirable for winter cover but the live portion of the plant is protected by a soil cover as well.

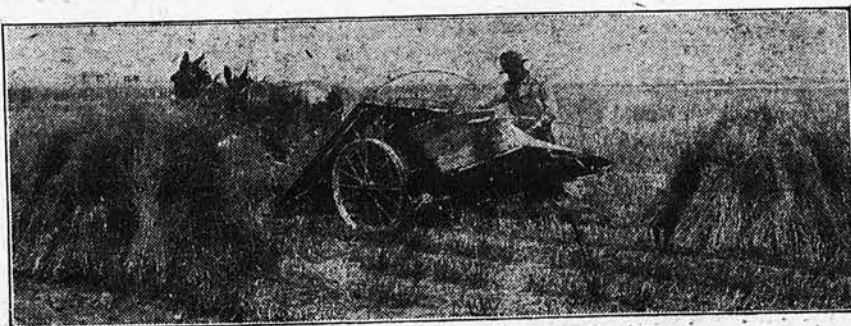
Altho many men are successful in mowing two crops of hay during the

second year's growth, this is the most dangerous operation in handling the crop. The beginner almost invariably kills it then. Some men have mowed as high as 10 or 12 inches and still it died. No one can say what is the safe height of stubble for the thickness of stand and vigor of plants vary greatly. For these reasons it is safest to pasture, off the second year's growth entirely or else pasture until about the middle of June and then let the crop grow up for seed. A 2-foot or higher growth may be pastured down successfully with a full stand remaining, while mowing the same growth would in many cases kill 95 per cent of it. A profitable season's return on the land can be obtained by pasturing into June, and the seed crop then is clear profit.

### Proper Time to Cut

When the average man thinks of harvesting a Sweet clover seed crop, he pictures a field of coarse heavy stuff 6 to 8 feet high. Such a growth is ruinous to the machine used to cut it. Furthermore, there is so much seed shattered in handling it that a 10-bushel crop may materialize into 2 bushels when finally threshed and sacked. Such a crop, unless an accidental pick up, is the result of poor and very unprofitable management.

The crop that comes on after spring pasturing will be short enough to be harvested readily with a grain binder. It is finer stemmed. The fine stems are full of seed from top to bottom and will as readily give a maximum yield as will the unpastured crop. This fine stemmed growth is handled easily and is a far more desirable method of producing seed. Even with it one can easily lose most of the seed from shattering unless a shallow box is slung beneath the end of the platform canvas, and another beneath the packers and the bundle carrier, to catch such seed. These boxes must be emptied frequently for in many cases they handle three-fourths of the seed crop.



Good Results are Obtained the Second Year if the Sweet Clover is Pastured in the Spring and the Second Crop Cut for Seed.



# Sanitation in the Hog Lot

Many Cholera Outbreaks Can Easily be Prevented

BY DR. HENRY M. GRAEFE

**H**OG CHOLERA, the most costly menace to the swine industry, can be prevented to a great extent, by the use of proper sanitary measures, if swine raisers will study sanitary conditions and eliminate any objectionable insanitary features observed in their hog lots. Sanitation on the farm should be dealt with from two angles. The first will be measures to prevent the dissemination of disease from farm to farm, and the second will be measures to prevent the recurrence of disease on farms which have been infected.

## Two Important Matters

Under the first heading, consideration should be given to the segregation of animals sick with infective diseases, the proper disposal of all carcasses and the infection disseminated on the premises by such animals, and as measures to prevent a recurrence of disease in hog lots we should consider the construction of housing and feeding facilities so that swine may be kept clean, also the arrangement of the premises to preclude the possibility of the accumulation of dirt, filth or soiled litter, and other material, so that the lots and houses may be readily cleaned and disinfected and the premises rid of harbored infection. Each of these angles to the sanitary problems on the farm are equally important and will be discussed in detail.

Almost two thirds of all cholera that appears in any community is usually traceable to failure to dispose properly of cholera infected carcasses by thorough cremation or burying at least 4 feet under the ground where they will not be unearthed by heavy rains. If the infected carcass is permitted to remain on the premises, dogs, buzzards, crows, and other carrion-eating animals and birds may pick up the infection and carry it to distant farms, there to set up a new center of infection. It is no uncommon occurrence to the Federal or local veterinarian, when investigating an outbreak of cholera, to have the swine raiser advise that about 10 days or two weeks before, his dog dragged in to the hog lot a part of the carcass of a cholera-infected hog, that started the trouble.

## Other Sources of Danger

Another common and less frequent cause for dissemination of cholera is permitting carcasses to get into creeks and streams. This usually infects the herds below. It is criminal negligence not to dispose properly of carcasses that have died of any infective disease, as a sanitary preventive measure. The contamination of the shoes of persons, feet of animals and birds, wheels of wagons and other farm implements, by driving or passing thru lots where cholera infected hogs are confined makes it possible to carry infection from farm to farm.

Harbored infection on the premises caused by the elimination of the cholera germ in the faeces and urine

will remain virulent and capable of producing disease for months, if deposited on the premises by the sick hog in dark, damp and poorly ventilated sheds, in old straw stacks, filthy, muddy and stagnant hog wallows, or among the litter, trash and accumulated material in the hog lot. This infection may remain on the premises for a long period of time.

Another point that should receive the earnest attention of every progressive hog raiser is the necessity of having all quarters clean, with sanitary hog wallows, fresh, clean drinking water, and well lighted, ventilated and comfortable quarters in order to insure for the pigs the greatest amount of vitality and resistance to disease. With the idea of assisting the swine raiser to eliminate a large amount of the losses, especially in the pig crop, the following suggestions relative to the elimination of infection on the farm are offered:

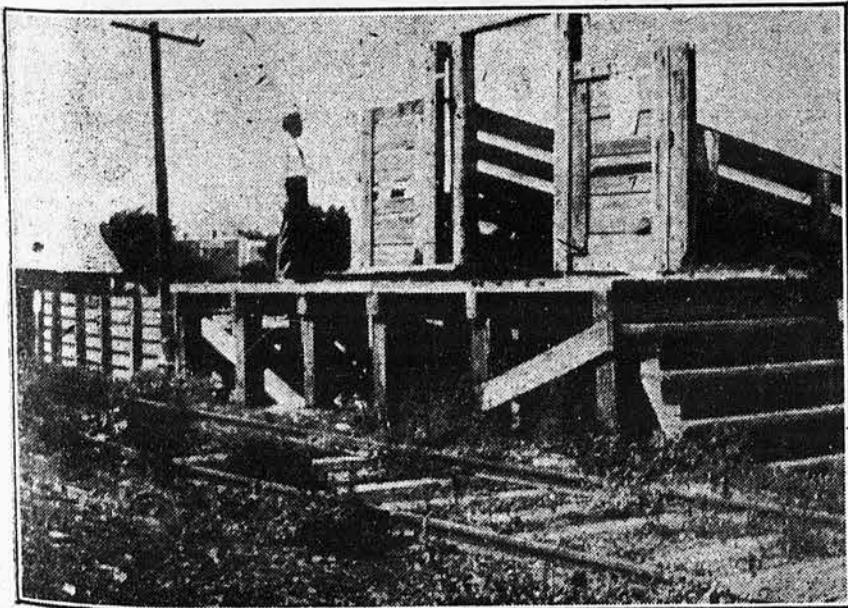
## Proper Drainage Essential

Hog houses and lots should have proper drainage and be so arranged that they may be well lighted and easily and readily cleaned and disinfected. After proper cleaning at regular intervals, the direct rays of the sun should be permitted to reach every nook and corner, as sunlight readily will destroy infection. Sunshine is one of the most efficient and economical disinfectants. However, when such means of disinfection cannot be used, a 3 per cent solution of cresol, or any disinfectant approved by the United States Bureau of Animal Industry, should be used in the form of a spray. This will be found to be very effective. In addition a plentiful use of air slaked lime is very valuable. Swine raisers are cautioned to determine the value of disinfectants before using the same. Many people believe in the theory that the stronger the smell of any disinfectant, the greater the power to destroy infection. This idea is erroneous, for it is a fact that many strong deodorants do not have much germ destroying qualities.

## Other Suggestions

Hog lots and sheds should be located away from streams and public highways. Burn all cobs, litter and trash that accumulate in your hog lot. Use only concrete construction in your hog lot for feeding, watering and wallowing purposes, as it can be frequently and readily cleaned.

Too much stress cannot be placed upon the value of sanitation in the prevention of disease in livestock. While vaccination is acknowledged as the best insurance against the losses of swine from cholera, it must be remembered that that procedure does not always give satisfactory results unless proper sanitary measures are used in connection with the administration of serum, and virus in order that the swine may be thrifty enough to withstand the reaction from the virus.



The Loading Chutes, Stock Pens and Platforms at Shipping Stations Often Cause the Spread of Hog Cholera When Not Kept Strictly Sanitary.

# AJAX CORD

**EXCLUSIVE** features built into the Ajax Cord combine to give the extra life and strength which "country" service requires.

First and foremost is the method by which these tires are constructed.

Each ply of cord is laid gently in position—*never pulled or stretched*. This means that full resiliency is retained, so that the tire can flex and give as it should when it strikes a rut or bump.

And that Cleated Tread—it holds like the heavy calks on a horse-shoe. And those "Shoulders of Strength"—they brace and re-inforce the tread.

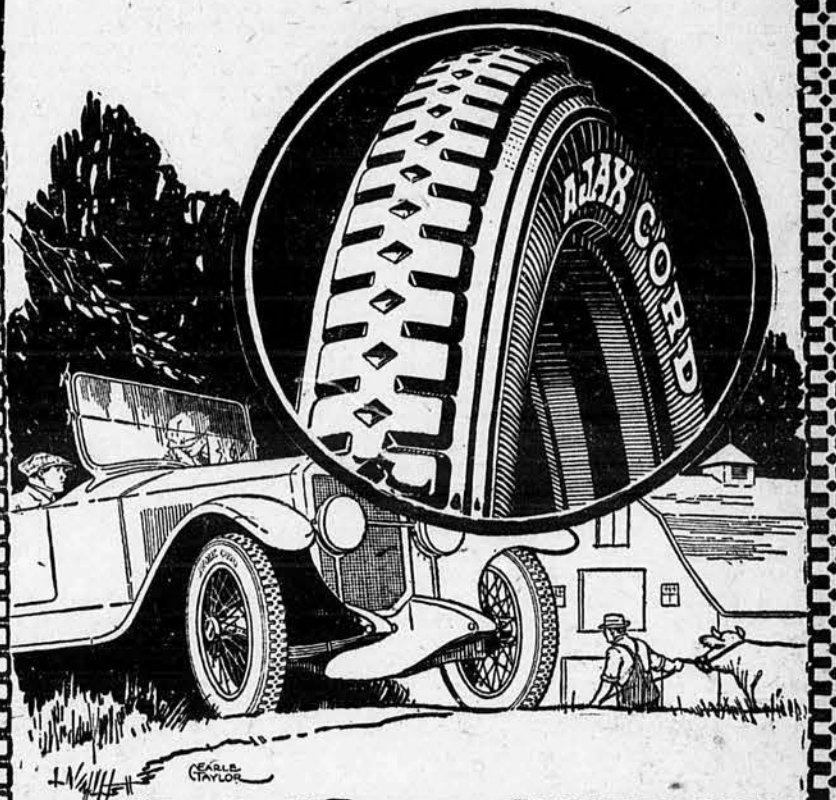
There is exceptionally good mileage in Ajax Cords. Your car should wear them.

Ajax Cord, Ajax Road King, Ajax Tubes and Ajax H. Q. (High Quality) Tire Accessories, are sold by Ajax Franchised Dealers everywhere.

**AJAX RUBBER COMPANY, INC.**  
NEW YORK

Factories: Trenton, N. J.

Branches in Leading Cities



# DICKEY SEPTIC TANKS

**Hundreds of Farm Homes Have Been Modernized**

Through the installation of one of these home sewage disposal systems. Made of vitrified salt glazed clay. Lasts forever. No improvement you can make will add more comforts and conveniences to farm life than a Dickey Septic Tank. Send for descriptive booklet. Learn how easily one of these tanks can be installed.

**W. S. Dickey Clay Mfg. Co., Dept. 51, Kansas City, Mo.**  
Established 1885



When Writing to Our Advertisers Mention This Paper



# Care of the Home Orchard

Cultivate, Fertilize, Prune and Spray

BY ALBERT DICKENS



**H**OME orchards deserve better care than the commercial orchards but rarely do they get it. Too often the home orchard has been a hybrid combination of junk pile, general pasture and implement shed, not to mention such incidental uses as turkey roost and feed lot. No area can serve so many purposes and yield profit and satisfaction.

If fruit is worth a dollar a bushel to sell it should be worth twice that amount to use. If any man is entitled to the best in quality and variety it is the man who grows the fruit. It is pitiable to see the poor products that come from the home orchards compared with the high-class fruit that the commercial man ships to the markets of the world.

The man who is jealous of his cow pasture and arranges to have every cow supplied with good nutritious food thinks nothing of permitting the pigs, calves and colts and occasionally the sheep and goats to compete with the trees in the home orchard.

Fruit juices and vinegar are in such demand now that there is no excuse for letting the pigs or sheep into the orchard to clean up waste fruit. Apples are worth more for cider vinegar than they can possibly be for stock food and the use of fruit juices has increased so much that a load of cider apples is well worth the care necessary to deliver them to the mill.

## Things to Consider

Care of an orchard includes cultivation, fertilizing, pruning and spraying. Even the best soils will perhaps need some addition of fertilizing elements. By the time trees have been growing for from 10 to 12 years a good deal of plant food is locked up in the woody tissues and the addition of fertilizers is usually beneficial. However, some orchards have been killed by the addition of too much fertilizers. Occasionally the home orchard is about the only place where the accumulation of manure during the summer months can be spread and it gets an over supply of fertilizer that should have gone to the alfalfa field or even the pasture. An over heavy application of barnyard manure has been the ruin of many orchards. Ten to 12 loads to the acre applied every two or three years is better than heavier applications given more frequently. Wood ashes or even ashes from a straw stack are worth much more in the orchard or garden than for making paths or constructing dams. At the present price of potash fertilizers wood ashes are well worth the care necessary to protect them from the weather and apply them to the orchard or garden in such manner that they will not be blown away or wasted. If ashes are applied just before the soil is plowed or cultivated the maximum of fertilizing elements will be obtained.

## Proper Tillage Required

Methods of cultivation will vary with the quality, texture and character of the soil. In loamy or sandy soils very frequently the chief need is to add sufficient humus to the soil to provide plant food and increase the moisture holding power. In heavy clay soils very often the chief need is to get such aeration of the soil as will promote the formation of available plant food and obtain such condition as will promote the ready absorption of rainfall and cultivation following rainfall in order to conserve moisture. In some sandy soils occasional mulching with straw or other coarse material is a good practice. Such treatment frequently increases the danger of insects and when it is necessary in order to insure proper soil

conditions additional care must be taken to prevent insect injury. Where the soil is hard and compact and has not been cultivated for a number of years the plowing should be shallow in order to avoid cutting a large number of roots which are invariably found near the surface of poorly cultivated orchards. In loamy soils frequently good soil conditions may be maintained by occasional diskings.

Where the land is rolling and the orchard is on a steep hillside the prevention of soil washing is of the first importance. Cultivation should be across rather than in the same direction of the slope and the best results are obtained in plowing along the contour lines so that every furrow plowed may be made to help hold moisture rather than to hasten its escape.

## Fertilizers to Use

An old orchard may well have an application of commercial phosphate and potash fertilizers and in case of poor soil the addition of nitrate fertilizers has often been profitable. A mixture of 200 pounds nitrate of soda, 200 pounds of acid phosphate or 1,000 pounds of rock phosphate and if it can be obtained 200 pounds of sulfate of potash or in lieu of this 100 bushels of wood ashes an acre would not give an over supply of fertilizer. Ground bone may be used instead of phosphate if it is more easily obtained.

When it comes to pruning, practically every tree is an individual problem. If in the first few years of the tree's life sufficient thought has been given it to form a good head with branches well placed so as to admit light and allow space for fruit wood to develop in later years it will be necessary only to follow out the plan by removing surplus and interfering branches and keeping the tree cut back to prevent its intruding upon its neighbors. In locations where the rainfall is limited and irrigation is impossible the orchard varieties should be limited to those that mature early. Cherries, early plums and early varieties of apples succeed well in most localities. Care should be taken that the tree top is not permitted to overgrow the water supply. Often even forest trees die from lack of moisture during periods when there is deficient rainfall for two or three years. In these sections the trees should be cut back and grown as half dwarf to insure them sufficient moisture to carry them thru unfavorable seasons.

## Pruning Young Trees

Young trees should always be cut back well during the end of the dormant season. Usually February or March is a suitable time for this work. This insures a strong growth of young wood and if followed by a careful thinning will produce a few large, strong branches instead of a bushy top which is unfavorable for the production of good fruit. From three to five strong branches are sufficient for the scaffold or main branches. Each of these should carry as much wood as may be furnished with light and food.

Trees that have been neglected present a difficult problem for the man who attempts to reform them and often it is a question of getting the best results from a neglected opportunity. As a rule the removal of large branches should be avoided. Whenever it is necessary to remove large branches the work should be very carefully done. The tools should be clean. That is, they should be disinfected with "dip" of corrosive sublimate and the wound should be well disinfected and covered with paint. The best and cheapest disinfectant is corrosive sublimate used in the pro-

portion of 1 part to 1,000 parts water. The wounds should be well disinfected, permitted to dry and then painted. Common white lead and oil will make a satisfactory paint.

Dead wood should be removed as soon as possible and if there is any evidence of fungous growth all affected tissue should be removed if possible and particular care taken in disinfecting the wounds. Many times a diseased old tree may have its life prolonged and good results obtained for a number of years if careful work is done in removing the diseased wood. The tools should be sharp and cuts made close to the main branches in order that the healing may be as rapid as possible.

Insects and fungus are usually present in an old orchard and the grower should keep careful watch for evidence of injury. Vigorous growing trees usually require but little protection unless they are near an old orchard which contains diseased and insect infested trees.

## Sprays to Use

The best, safest and cheapest spray for all leaf eating insects is arsenate of lead. Three pounds to 50 gallons of water is a good proportion for quick control.

The spray schedule most followed by commercial orchardists and which is generally satisfactory is the cluster bud spray of lime sulfur, 1½ gallons of the concentrated solution to 50 gallons of water and 2 pounds of arsenate of lead. This is a combination spray for the control of canker worm, curculio and apple scab. The blossom fall spray is of utmost importance for the control of codling moth or apple worm. The third spray is a combination spray for the control of fungus and insects and for varieties such as Ben Davis, Missouri Pippin, Rome Beauty and Maiden Blush, which are particularly susceptible to apple blotch. The spray should be of Bordeaux mixture and arsenate of lead. Care should be taken in applying the Bordeaux spray during moist weather. In case moist weather is present, varieties that are easily burned, such as Jonathan and York, should have lime sulfur substituted for the Bordeaux mixture. If these three sprays are given regularly they have usually given a fair measure of control. In some seasons conditions are unfavorable for spraying and are particularly favorable for the development of insects and fungus. In such case later sprays are necessary for the control of insects. Bordeaux and lead sprays every three or four weeks will usually give a very high degree of control.

## Baby Tractors Prove Worth

(Continued from Page 6.)

First, on what size of farm can they be used to good advantage? Anything from 5 acres up. The manufacturers usually consider that farms of 50 acres and under are their primary market. When you consider that it takes about 5 acres of land to provide feed for one horse, it is seen why the baby tractor is favored for small cultivation.

In truck farming they are particularly useful and that is where they got the name of garden tractors. A machine that will pull a 6-inch to 10-inch plow generally can prepare the seed bed for garden truck, and small harrows, disks, gang seeders, corn planters, and cultivators are built fitted for little fellow to pull. The distance between crop rows varies from about 17 inches to 40 inches so that the baby tractor works astride the row or between the rows, depending upon the crop. As the tractor is absolutely under the control of the operator, there is no trampling upon the plants which so often happens when using a horse. The implements are usually so attached that the cultivator can be swung around to avoid or clear the plants that are out of line, without throwing the tractor out of its straight course. They are also well adapted for cultivation in orchards for they can be used around and under the trees without danger of breaking down the young trees or "barking up" the big ones. Being only about 3 feet high they go under branches and limbs where a horse or mule could not pass.

On large farms they have been used for cleaning up the headlands and near the fences where large tractors have plowed. Here they do the work often done with a team of horses, but it

should be remembered that the plowing is that of an 8-inch or 10-inch plow.

All the baby tractors are equipped with belt pulleys and they are admirably suited for operating the small corn shellers, feed grinders, cream separators, pumps, washing machines, grindstones, and for running the counter-shaft in the farm work shop. They are also used in some instances for the farm lighting plant. Operating so easily under their own power in moving from place to place, they are sometimes more favored than the ordinary small portable engine found on many farms.

On farms where a nice lawn is kept around the house, the baby tractor is a boon because a lawn mower cutting a fairly large swath can be attached and in the cool of the evening the man of the house can ride around his doorway and clip the lawn perfectly.

By the performance of the tasks briefly touched upon in this article the baby of the tractor family has proved its worth. It is, perhaps, unnecessary to add a final admonition; but to prevent any possible disappointments among future purchasers, it should be remembered what 1 to 3 horse power can do. Don't get the idea that the baby tractor is a substitute for its big brother. It is not. It is in a class by itself and not intended for the work a large tractor does.

## Selection of Breeder Sheep

BY A. M. PATERSON

The profits from a flock of sheep will depend to a large extent on the selection of the ewes and rams. When selecting grade or Western ewes select for uniformity in size, type, and conformation, because this class of ewes will produce lambs of more uniform conformation which will demand a higher price on the market.

The animals should be mouthed and all gummers cut back, as ewes with these conditions will not do well and a great many times fail to get with lamb.

Watch the udders, and cut back animals that have spoiled udders and teats cut off, which sometimes happens in shearing. Lambs from this class of ewes will have to be raised by hand which requires extra labor and expense.

The good breeding ewe should have a short, broad, feminine head. The neck should be short, the ribs should be well sprung, and the chest deep, as these conditions are indications of constitution and vigor which are very essential.

The back should be straight, strong, and medium in length; the hind quarters well carried out and full. The animal should be placed on four strong legs, one set on each corner of the body. The fleece should be medium in length, dense, showing good condition, quality, and crimp.

It is often said the ram is one-half the flock. However with the average grade or Western flock he should be considered more.

The ram should be purebred, with plenty of size, constitution and vigor. In the case of small ewes a larger ram should be selected and in the case of large, rangy ewes, a smaller, compact ram should be used in order to get a more compact bunch of lambs.

Before selecting the ram the ewes should be studied for weak points and a ram should be selected that is strong where the ewes are weak. The ram's head should be short, broad, and masculine. The ribs should be wide and deeply sprung; the back strong and wide; the hind quarters, long, deep, and full. He should stand squarely on four good strong legs, and he should have a good fleece.

## Broomcorn Men Exonerated

We are glad to inform our readers that the charge that the manufacturers of brooms and buyers of broomcorn had entered into a combination or conspiracy in restraint of trade has been investigated by special investigators of the Federal Trade Commission. They report that they found no evidence to support the charge of any combination or agreement among the manufacturers of brooms and the users and buyers of broomcorn to restrain trade or to depress the price of broomcorn. This statement is given out by Millard F. Hudson, Chief Examiner of the Federal Trade Commission.

Kansas soils need more humus.



# Summer Silos for Our Cows

Green Feed Will Increase the Milk Production

BY JOHN W. WILKINSON

**S**ILOS have gained steadily in popularity since their first introduction into this country, but the number of silos is still far from being sufficient to meet the needs of our livestock. Farmers in Europe even in ancient times appreciated the value of having silage for their cattle in winter time. The ancient Greeks and Romans often placed green feed in pits to preserve it for winter use. The preservation of beet leaves, beet waste and other green forage by gathering into heaps or into earthen pits and covering with earth has long been practiced in Europe. However, the first silage known in America was made by Francis Morris of Oakland Manor, Howard county, Maryland, by putting whole corn forage into a pit dug in the ground and covering it with dirt. The first silo in America built partly above ground was constructed by Dr. J. M. Bailey of Boston, Mass., in 1879. Since that date the number of silos has increased rapidly, but not half as many silos as are needed have been constructed.

## Silos in the Mid-West

In 1919, according to investigations made by the Research Department of the Capper Farm Publications, Kansas had 13,511 silos; Nebraska, 502; Missouri, 18,000; Oklahoma, 4,106; Texas, 674; Iowa, 25,000; Illinois, 30,000; Indiana 32,000; Minnesota, 18,000; Wisconsin, 64,000; South Dakota, 5,000; North Dakota, 3,161; Arkansas, 1,203; Colorado, 2,500; Wyoming, 181; New Mexico, 61. These estimates were based on assessors' reports made at that time and it is possible that the actual number was much larger.

Nearly every farm could use to good advantage twice as much silage as is now used. In fact, the silo can be used in summer as well as in winter. Every farmer, and especially every dairyman, should have a summer silo as well as a winter silo. In fact, silage can be fed to good advantage thru all seasons in the year. Everyone has observed the wonderful increase in milk production that comes when cows are turned out on pasture. Someone has said that a bountiful pasture is a cow's heaven. This season usually lasts thru June and the early part of July and that is the period when we have our largest milk and butter production. Later the approach of hot, dry weather dries up the grass to a large extent and then the cows begin to fail in their milk. When the grass is getting plenty of rain and moist temperature weather it becomes green and thrifty and supplies the milk cows and other farm animals with the maximum amount of food elements in a succulent and palatable form that can be easily assimilated by the digestive system.

If the green succulent feed afforded by pastures in the spring and early summer will cause such a wonderful increase in milk and butter production, why not supply cows with this kind of

feed thruout the year in the form of silage? The silo will enable us to have green feed every month in the year without any unusual difficulties.

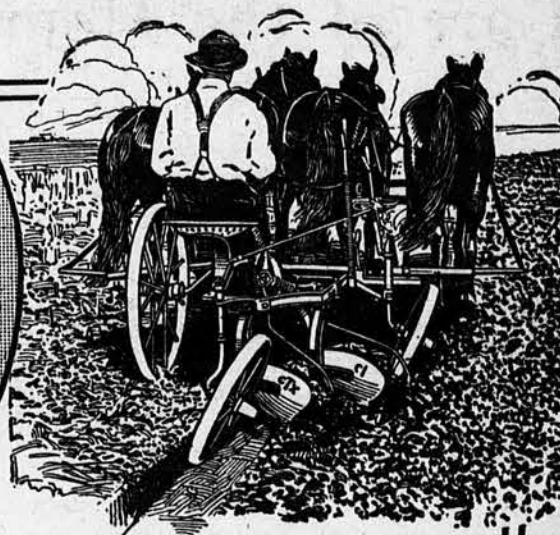
"Recently," says A. L. Haecker, who is one of our leading Western authorities on feeding, "I heard a very well informed dairyman remark that if he had to choose between winter or summer silage feeding, he would prefer to go without the winter supply. This man had much experience in the business; he knew that the biggest damage to a dairy herd is usually produced during July and August, when pastures become dry and short, flies are bad and conditions most unfavorable. The lure of the pasture is too great for the average cow-keeper. It is so easy to turn the cows on the pasture and then forget them except, perhaps, on a Sunday once in a while when they are salted, or when they are rounded up every morning and night for milking. True, there is a short season, especially in the corn belt, when pastures are exceptionally good. In May and June we generally find the grass tender and green and plentiful in quantity, but even during these months silage can be fed with profit to any class of cattle. During the early part of May the grass is more or less watery and lacks body and nutriment. Animals often are injured by the assumption that they are receiving all the green feed that they need. In June, as a rule, the grass is at its perfection, but the last half of July brings a drouth, flies become very numerous, weeds spring up in the grass and pasturage conditions, especially in the middle states, become poor. This is the time for the summer silo. With cows in a darkened barn and plenty of succulent silage, good records can be produced and that at little cost.

## The Best Feed Insurance

"A cow is more or less of a machine, and as any other machine it can run to capacity providing it is properly tended. We hear every once in a while about some big dairy record. The other day I called at a farm and looked at a cow that was making a wonderful dairy record. She had averaged more than 100 pounds of milk for 160 days, and was at that time producing more than 100 pounds a day. This cow was receiving June pasture conditions without any June pasture; in other words, she was supplied with all the good food she wished to eat, and was in a comfortable, happy condition. The great butter and milk records of this country are not made on pastures, but are made on the best pasture condition, in which they are supplied with all they wish to eat and enjoy all necessary bodily comforts."

Corn has always proved a very satisfactory crop for making silage, but kafir, milo, feterita, cane and other sorghums make good silage crops and have almost the same feeding value.

(Continued on Page 11.)



## Turn Furrow Slices Clear Over

No air spaces below furrow slices means moisture is not cut off. **Moisture is conserved.** Your crops get all the benefit. They are saved from drought.

This is your **added gain** when you use Rock Island CTX Plows. On account of corkscrew twist of moldboard CTX bottoms turn furrow slices clear over and lay them flat on subsoil. CTX Plows pulverize soil—save one harrowing. Long wheel-base—easy and positive-acting footlift—high wheels—do not gather trash.

Send for book on Rock Island CTX Gangs and Sulkies

# ROCK ISLAND

PLOW COMPANY, 226 Second Ave. Rock Island, Ill.  
Established 1855

# Lowe's



## Made for three things

## Looks—Protection—Lastingness

You can't tell by looking into a can of paint, how it's going to look when the painting is done. Neither can you tell whether it will protect your building the way you want it protected. And surely you can't tell whether it will have lastingness.

There is only one way to tell about any of the three; and that way is by a paint's reputation. Lowe Brothers

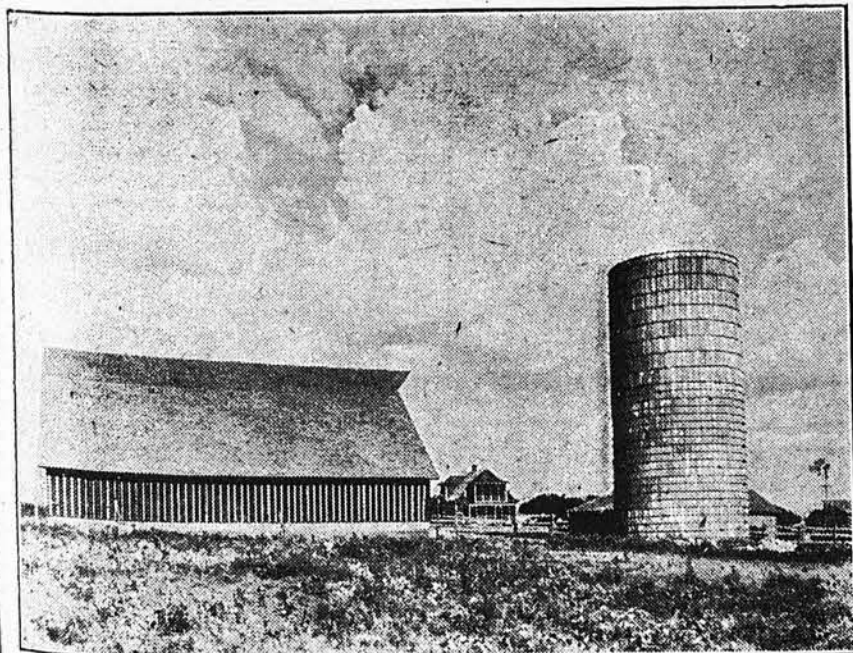
have a reputation for making paints of the highest quality. It's like buying Gold Medal Flour—you know it's good, because it always has been good. With exactly the same confidence you can buy any paint or varnish Lowe Brothers make. They are sold by the one leading dealer in each town. Send for circular—"Figure Your Paint Cost with a Brush—Not a Pencil."

The Lowe Brothers Company

512 EAST THIRD STREET, DAYTON, OHIO

Boston New York Jersey City Chicago Atlanta Kansas City Minneapolis Toronto

# Paints



This is a Good Type of Cement Stave Silo That Will be Found on Many Western Farms. Its Durability and Low Cost Make It Very Popular.



# Farm Crop Cost Accounts

Accurate Records Will Show Losses and Gains

BY G. C. WHEELER



Every Farmer Needs Roomy Barns, Good Silos, and Purebred Livestock. These Coupled with an Accurate Cost Accounting System Insure Success.

FARMERS can and do keep books. There has been a far too prevalent idea abroad that farmers are so slovenly in their business methods that few of them have any sort of knowledge as to where they are in a business way. While farm accounts from the very nature of the business cannot be kept with the exactness of the accounts of city business concerns, I am convinced that farmers are not so ignorant of the business side of their operations as many of us have thought. There is room for much improvement, however, along this line. The economics of farming and farm management problems are demanding the attention of all forward-looking farmers and leaders of agricultural thought at this time. It is in this line that we can look for the greatest progress in agriculture in the future.

## Careful Accounting Necessary

While the most successful farmers are keeping more or less accurate records of their business transactions, few are doing cost accounting in the true sense of the term—in other words, their accounts tell them little or nothing as to how much any particular crop or product has actually cost. The various operations of farming are so interlocking and the life of the family is so intimately related to the business that it is a most complicated matter to distribute the various items of expense in such a way as to reveal the true cost of each crop or product, and even after this is done in the most accurate manner possible the results as to any one project cannot be held up and analyzed without considering its relation to the business as a whole. For example, some certain crop studied as a separate project might appear to be losing money, but its relation to the whole might be such as to make it of vital importance in the general plan of operation.

Some real cost accounting work is being done in two Kansas areas at the present time, one in Jackson county, involving 23 farms and one in McPherson county. I visited nine or 10 of the farms in the Jackson county area last month and found the co-operators all most heartily in accord with the work being done. It is under the direct supervision of the agricultural economics department of the Kansas Agricultural Experiment station at Manhattan, which is headed by W. E. Grimes, professor of farm management. The expense is borne jointly by the Kansas Experiment station and the Office of Farm Management of the United States Department of Agriculture.

The Washington office stands ready to finance work in a number of similar areas when the state will provide the money for half of the expense. Work in an area located in the Flint Hills region, where the cost of producing beef could be studied in detail, should by all means be started at once. This will probably be the next area where cost accounting work will be done. There should be 10 or perhaps more of these cost production areas operating in Kansas in order to cover the state properly. This cost accounting work is by no means in the experimental stage. It has been carried on in Minnesota in co-operation with the United States Farm Management Office for a number of years and some very valuable results have been obtained.

Surveys of special areas or special lines of production, such as have been made in Kansas in a number of counties by Professor Grimes and his assistants and the information obtained

by the questionnaires sent out by the state board of agriculture, are of value in getting at facts in a general way and without much cost, but the results so obtained never can be used as a basis for constructive development along the line of greater efficiency in conducting farming operations and the farming business.

## Jackson County Project

In the Jackson county area where the work started January 1, 1920 all the main types of farming of that section of the state are included. On nine or 10 of the farms general farming is being followed, the principal crops grown being corn, wheat, clover and alfalfa. On all of these farms some stock is kept, milking cows, the selling of cream and the raising of a few hogs being features of the business. On four farms dairying and the breeding of registered dairy cattle is the main livestock project. On at least two, purebred beef cattle are handled and on two farms Percheron horses are kept. Several of the farmers specialize in the production of market cattle and hogs, while a few handle sheep as a feature of the livestock production. The keeping of these accounts will continue indefinitely. At the end of each year a detailed summary will be returned to each co-operating farmer, giving his business for the year in detail, and the averages of the other co-operators.

The men on these farms are above

the average in managerial ability. On every farm I visited a little inquiry developed the fact that business accounts were being kept before the men agreed to co-operate in the more accurately detailed cost accounting work now being done. In every area a route man is located who has been especially trained in agricultural economics. E. M. Hiested, who has been located at Holton since January 1, dropped the work June 1 to begin farming for himself in Woodson county. W. W. Fetrow, a farm-reared man who just graduated at the Kansas State Agricultural college after doing his bit in the 35th division, going thru the Argonne drive, succeeds Mr. Hiested and was making his first rounds the week of my visit. Three routes have been laid out from Holton as a center, the longest requiring about 30 miles travel to cover. These routes are covered three times each week.

On practically every farm visited the women were the bookkeepers. On each farm a daily labor report is kept, showing in detail the number of man hours and horse hours to every class of work performed. The route man transfers this to his book, a carbon sheet duplicating the record, this carbon copy being retained to guard against the possibility of the original record being lost in the mail or otherwise. At the central office in Manhattan one girl is employed full time on each area and proper distribution of all the items of expense chargeable to the different crops and projects is made. This detailed labor report is a feature of accounting which few farmers have attempted. Without the constant supervision of the route man it probably would not be kept with any degree of accuracy.

A cash received and cash paid account is also kept on every farm in duplicate, one copy of which is collected by the route man at the end of every month. He inspects this record however, on every visit in order to be sure all details are being recorded properly. Then there is a monthly chore account in which the labor involved in caring for every class of farm animals appears in detail. A monthly feed account shows feed consumed by every class of livestock. Of course the work calls for a very carefully itemized inventory which was taken in the Jackson county area Jan-

uary 1, 1920. Some time during the year the farms will be surveyed and maps drawn showing the exact area of each field. A produce sheet is kept showing the eggs laid, butter made and the amount of these products sold or consumed, also the weight of any farm animals slaughtered during the month for farm use. This sheet gives the average number boarded daily and the extra meals provided during the month and the number of women doing the housework. All these monthly sheets are turned over to the route man at the end of the month. That the co-operators heartily approve the work and recognize its value is evidenced by the spirit which they are showing in keeping all these various records.

## Showing of Kanred Wheat

J. B. Reeves, one of the co-operators, is specializing in Kanred wheat. He purchased his farm five years ago. It had been a rented farm for a number of years and as Mr. Reeves expressed it, was a "big cocklebur patch" when he came to it. He has 135 acres of wheat which he fertilized with a commercial fertilizer of a 2-12-2 formula at a cost of about \$2.50 an acre. A check round of the drill without fertilizer was made in each of two fields and at the time of my visit this unfertilized strip was barely coming into head, was not much more than a foot high and had stooled but little, while the remainder of the field was apparently a week farther advanced than the average wheat of the community and from present indications will yield considerably more to the acre than the unfertilized strip.

On the R. E. Keim farm the records were in especially good order. Mrs. Keim was the bookkeeper. The J. M. Ryan farm was next on the list and as we drove thru the fertile Straight Creek bottom we saw Mr. Ryan up to his waist in a field of Kanred wheat. Fully a third of the 50,000 acres of wheat in Jackson county is Kanred. Mr. Ryan had only 6 acres last year. It yielded 30 bushels to the acre while ordinary wheat in the same field threshed out only 20 bushels to the acre. All of his wheat is Kanred this year and he sold all of last year's crop he did not need for his own seed for \$3 a bushel. Driving to the house the routeman proceeded to get the necessary records from Mrs. Ryan. This farm has been increased greatly in value by the straightening of the creek which was done a few years ago at a cost of about \$14 an acre assessed against the land benefited. Mr. Ryan recently refused \$150 an acre for a tract which he bought for \$49 an acre a few years ago.

The last place on the route was that of H. J. Haag and here we found no one at the house, but the records were hanging up in a back room and the necessary inspection and copying were quickly done. The route man completed his day's work by driving to Holton and writing up the records he had gathered in preparation for his report to the Manhattan office.

## Drugs Injure Dairy Cattle

The use of drugs with the idea of increasing the fat production of test cows has been tried out by Iowa State Agricultural college dairy section. In most cases it was found that drugs decreased rather than increased the fat production.

Such drugs as alcohol, castor oil, pituitrin, aloes, magnesium sulfate, nux vomica and sodium chloride were tried and in all cases they were detrimental to the cows. All cows used were in good normal condition at the start of the tests and various sizes of doses were used.

In some cases it was found that the flow of milk and butterfat was increased slightly, but this soon fell off and in the end a decrease was noticed.

Up to date no drug has been found that will increase the butterfat. Dairy-men are strongly advised not to resort to this method as it injures the cows and is not a fair way to gain a record.

There will be a great increase in the number of tractors in Kansas in the next two years.

Kansas Orange sorghum is a satisfactory silage crop most years in Eastern Kansas.

## Give a Thought to the Farmer Who Feeds the World

BY RAY YARNELL

THERE ARE 6 million farm families in the United States. More than 30 million persons live on the farms, almost a third of the population of the nation. Those persons produce the food for the other 80 million inhabitants. They work on a 10 or 12-hour a day schedule, a good deal of the time out under a hot sun or in the cold of winter.

When the season is favorable they raise good crops but they are absolutely dependent on the weather as regards their profits and the return on their original investment. Very often they lose the investment. Hail, in 30 minutes, can ruin the wheat crop awaiting harvest that has taken many months to grow. Corn will wither and die under a blazing sun.

Folks in the big cities go to the market and buy the things they have to eat. But it is seldom that they give a thought to the man who produced those things. Many of them do not know how their food is produced or where. They don't seem to care. They seldom stop to think that it takes quite a while for a beefsteak to grow and for a ham to develop.

The farmer, too long, has been taken for granted and his rights ignored by other classes. It has been assumed that he was all right, that there were no serious problems he had to face and that all he had to do was to put the seed in the ground, watch it grow and harvest the product at the proper time. Then he could take it to market, sell it, get the money and be happy ever after.

But that archaic view is beginning to get some solid bumps. Some persons in the city are waking up to the fact that the farmers are a mighty factor in the future development of the Nation. They have begun to realize that they must help the producer of food improve his condition and realize a profit from his work and investment if he is to continue maximum production. In nearly every respect the farmer has been "the goat" as the cost of living has advanced. At the same time the price of one of his principal products, wheat, was arbitrarily fixed, the prices of the things he had to buy were allowed to soar to enormous heights.

More than ever before the farm and the farmer is figuring in magazine and newspaper articles. New York City newspapers are printing many columns of material about farmers and their problems. In Congress the question has been repeatedly discussed. Magazine writers have made investigations and reported their findings.

And it is time that the greatest industry in the United States got some attention from the big men of the Nation. The farmers deserve such consideration. Their business is of vital importance. It needs the protective tariff of National interest and consideration.

Give a thought to the farmer—the man who feeds the world.



### Where Caution Counts

What a lot of pleasure folks are getting out of automobiles and what a world of efficiency has been added to business life by the advent of these wonderful machines.

It cannot be denied, tho, that the truth of the old saying that there is no rose without its thorn has once more been exemplified. When we read in the papers about the terrible accidents at railroad grade crossings, caused by motor cars being struck by trains, we are greatly shocked, but few of us realize how frequently these disasters take place.

A recent compilation shows that in the year 1919 nearly 4,500 people, a very large majority of whom were riding in automobiles, were killed or injured at railroad crossings. This indicates a great deal of heedlessness or forgetfulness on the part of drivers.

All persons, even quite young children, have a fair understanding of the force and power of moving trains of cars. We know that an engine could destroy one of us as easily as we kill a fly. We are aware of this fact, but sometimes, unfortunately, we forget it.

When we see a train coming, the very rush and roar of its approach ought to remind us that anybody with the temerity to dispute with it the right of way over the crossing, must expect to pay the penalty.

More than once—many times, in fact—the writer has observed with deep concern the kind of thoughtless behavior that leads to tragedies at crossings. Recently a farmer driving over a country highway running parallel to a railroad track, heard a train coming behind him. His wife and children were with him. When he made the turn at the point where the highway crosses the tracks, the locomotive was whistling at the whistling post a quarter mile away. The driver did not realize that a fast train can run that distance in 15 seconds.

Unwisely he decided to try to "beat the across." That was a fatal resolve. The car was struck squarely and that whole family perished.

If the attempt had been successful, what would have been gained? Nothing worth mentioning. The driver might perhaps have felt a little gratified vanity—but such a slight reward would not compensate for the risk he took. He ran the hazard of losing his own life and the lives of others dear to him.

Let's pass the word all along the line that this chance-taking at the crossing must cease. The war is over. Are we going to have no pleasant interval of freedom from tales of sudden death and destruction?

These accidents at railroad crossings are quite unnecessary.

Most of them happen because people forget to read the crossing sign, "Railroad Crossing—Look Out for the Cars."

It is such a pity that people do not look out more than they do.

When we think of what is at stake—life—that greatest of all gifts, it seems as if so many reminders should be necessary.

We beg our readers to take this admonition to heart. When, in the course of your motoring trips, you approach railroad tracks that must be crossed, remember that the experiences of thousands have demonstrated that this is the place where unusual caution must be exercised and where chance-taking must not be tolerated.

### Summer Silos for Our Cows

(Continued from Page 9.)

Alfalfa, cowpeas and soybeans also have been used successfully for making silage, but require careful packing and handling. All of these crops have been in most places enough rain to give them a good start and the corn crop has been making rapid progress during the past 10 days, but it is still in an uncertain stage and may yet be injured seriously by dry weather that is almost sure to come later in the season. The silo is the best feed insurance that can be provided. Even when seasons are favorable and there is plenty of rain it is a mighty good plan to fill the silo with green succulent feed and carry it over to the next year, when a dry season may come and cause a shortage of both feeds and pasture. The man who is wise always plans to make the fat years tide him over the lean years. The silo offers the most

practicable means of carrying out such a plan.

Any kind of a silo is a good one if it is what you desire and you give it the right kind of care and attention. The kinds of silos we usually find are made of wood, cement, clay block or tile, brick and metal. Good suggestions on building silos will be found in Farmers' Bulletin 589 of the United States Department of Agriculture and also in Bulletin No. 21 of the Portland Cement Association of Chicago, Ill.

### Popular Types

The stave silo is very popular, largely because of its low cost and comparative ease and quickness of construction. A number of manufacturing concerns have put on the market patent stave silos of various patterns which are in general demand and give good satisfaction. If cement construction is used the silo should be built at least three weeks before the corn or other silage crop is cut. But regardless of the material or plan of construction, the essential requisites of every silo are that it shall be water-proof, airtight and substantial, and that it shall permit an even settling of the silage. Storing silage is a "canning process" in which the air must be excluded. When fermentation begins the entrance of air is very detrimental, as it encourages the growth of molds that will cause the silage to spoil. Other desirable requisites are durability, or per-

manence, low upkeep, frost resistance, fire, wind, insect and vermin-proof construction, and good appearance. A fire-proof silo filled or partially filled with silage remaining uninjured in case of a disastrous fire is a valuable asset and source of comfort to any dairyman or farmer. His chief concern should be to have a sufficient number of silos to keep his dairy cows and livestock supplied with succulent feed every month in the year. This will help to reduce the high cost of feeding and will reduce the cost of production for all dairy products. The saving thus effected and the consequent increase in production will greatly increase the dairy profits.

### See \$4-Wheat Market Ahead?

Storing of wheat is particularly advisable this year, not merely because of car shortage and inability of interior elevators to handle the crop, but because of prospects for a higher market later in the season. Close observers of wheat trade conditions are now forecasting a \$4-a-bushel market, and, barring any serious financial situation, such a price level is quite probable. If you do not need the money immediately, store your wheat in a good place, and forget you owned any. Later markets will offer a reward.

Wheat yields can be increased on most farms by the use of better seed.

### Summer Work Clothes

should be roomy, strong and washable. That's why



**FITZ OVERALLS**

suit men exactly. They are tailored of genuine blue indigo denim in 66 sizes. Most economical because they wear longest. Guaranteed to satisfy. Ask your dealer. Any size not in stock supplied in 24 hours by BURNHAM-MUNGER-ROOT Kansas City, Mo.

### The Everlasting Silo

Thousands in use. More being sold than ever. Construction better and stronger. Guaranteed. Built of curved, hollow "Flint" Tile blocks. "Flint" Tile cuts glass. Lasts forever. Most economical. No expense of up-keep.

### AMERICAN FLINT SILO

Prompt We have 14 factories and shipment kilns on main lines of different railroads and can make prompt shipments of any products ordered from our latest catalog. FREE—Write at once for our free catalog, and lower prices on silos, corrugated roofing and building tile.

COATES MANUFACTURING CO.

Dept. 102, nearest office: Kansas City, St. Louis, New York, Chicago, Denver, San Francisco, Cincinnati.



**Cletrac**  
TANK-TYPE  
TRACTOR



Wheels on a track—the Cletrac way—take less power

### Follow Binders With the Plow

**YOUR** Cletrac fleet keeps going steadily through the heat and strain of the harvest rush—and helps you beat the labor shortage.

Each sturdy Cletrac hauls binder easily, cutting full, clean swaths and getting all the corners. Quick response to the steering wheel and short-turn ability fit this tank-type tractor for accurate, profitable harvest work.

While part of your fleet is finishing the harvest, the others "get away" to an early start in plowing, and they make quick work of it before the sun dries out the stubble.

Cletracs follow close behind the plows, too, in fitting. They prepare a moisture-holding top mulch. They do not sink into fresh-plowed ground—do not form tractor hard-pan.

An improved water air-washer protects the powerful Cletrac motor on these dusty, dirty jobs. Keeps the tractor working smoothly as it helps you farm more acres.

Cletracs are a big-paying investment for the grain farmer. Let us tell you more about them.

### The Cleveland Tractor Co.

"Largest Producers of Tank-Type Tractors in the World"

19045 Euclid Ave.  
Cleveland, Ohio

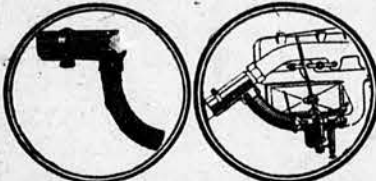
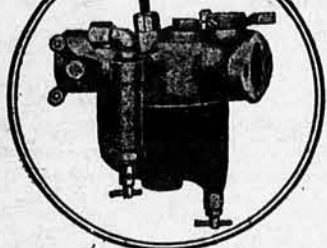
Hullet McCurdy Tractor Co.,  
1307 Waldheim Bldg., Kansas City, Mo.



# KINGSTON

## CARBURETORS

Ford \$10.00



Kingston pep, Kingston economy, Kingston durability have long been known to Ford owners. Here is the best Ford carburetor Kingston has ever devised,—quick on pickup, turns fuel into perfect gas, cleans it and delivers it HOT to motor. Thousands of enthusiastic users. Sent complete with fuel strainer and separator and special air preheating device, ready to install. At all dealers, or send direct to us.

Special Kingston models, all fully guaranteed, for Chevrolet, Maxwell, Buick and Dodge cars. Smoothness and flexibility, quick pickup, sustained power with any Kingston carburetor. At all dealers, or send order direct to us.

Chevrolet \$12.25



Maxwell \$12.25



Buick \$16.25



Dodge \$15.25



BYRNE, KINGSTON & COMPANY  
KOKOMO, Department A INDIANA.

## Rural Engineering Hints

By C. E. Jablow

IN THIS day and age it is scarcely necessary to dwell at great length upon the value of silage as a winter and dry weather feed, for the feeding of silage has long passed the experimental stage. All up-to-date farmers today know something of the saving in time and feed and the resulting profits when the silo is being used. Even considering this fact, it is nevertheless true that in many instances the addition of a silo could permit feeding more stock from the same acreage or the same stock from a lesser acreage. It is certainly true that all the gain possible has not been made, even on the farms throught this portion of the country.

### Advantages of Silage

The advantages of silage as enumerated by the Association of American Portland Cement Manufacturers are very much to the point and are given in the following:

1. The value of a crop preserved by the use of a silo is increased about 40 per cent over a crop harvested in the usual way.
2. At a conservative estimate, two cows can be kept by feeding silage at the cost of one cow from the same acreage, fed on hay or other roughage.
3. The moderate cost of husbanding into silage compared to the cost of making hay, husking corn or shredding fodder.
4. Convenience in feeding and economy of storage room. Ten tons of silage can be stored in the same space as 1 ton of hay.
5. When fed with proper rations silage is a greater milk producer and fattener than any known feed.
6. Ensilage-fed stock, as a rule, are in a healthier state than when other feeds are used.
7. When properly taken care of, there is absolutely no waste of any part of the corn crop.
8. By providing a succulent forage, winter dairying is made profitable and no reduction of stock is caused by a dry season.
9. The acreage needed for pasture is greatly reduced and consequently more land can be brought under cultivation.
10. It is the cheapest feed that can be produced, as well as the best.
11. It is a certain supply, notwithstanding the drought or the flood.
12. Inclemency of weather does not hinder its harvesting. This silo is the cheapest method of handling and storing a crop and the best method of saving and realizing the fullest value of the crop as feed.

### A Good Silo

It is very much the same with silos as it was with the Kentucky colonel when speaking of liquors. Any kind is better than none. Be that as it may, we should not be satisfied with anything less than the best for eventually it will be apparent that in the long run the best is also the cheapest.

The points that go to make up a good silo are rigidity of construction, walls that are air-tight, walls that present a smooth surface to the silage. These three qualities can be met to a varying degree with frame construction, with sheet metal, with tile or with concrete. Additional desirable qualities of concrete, are its non-corroding, non-swelling, non-contracting properties as compared to wood or metal. The fact that the concrete structure is a substantial affair and fire-proof is also much in its favor.

Perhaps the one with which we are most familiar and the one best suited for this portion of the country is the

solid wall monolith. The hollow wall monolithic concrete silo is scarcely warranted in this latitude and is naturally more difficult to construct.

The cement stave silo meets with some favor as it eliminates the labor and expense of the forms but the wall may not be as tight and the structure would not be as rigid as if cast into one solid stone. The concrete block silo has the same shortcomings as the cement stave, explained above.

As regards the handling of cement in making concrete, much has been written in these columns. The reader may refer to his back numbers of this paper or may procure helpful bulletins from the agricultural college in his state, from the United States Department of Agriculture in Washington or from his cement dealer.

### Monolithic Forms

Two silos recently built on a farm in which the writer is interested were built of concrete of the monolithic type with solid walls. These were cast in sheet metal forms rented for the short interval of time necessary for the construction. These forms came knocked down and were assembled by being bolted together. A very smooth job resulted. However this was perhaps more the result of careful tamping and spading next to the forms in order to eliminate any outward evidence of honeycombing. Wooden forms when properly made and wet previous to placing the concrete should give satisfactory results.

A good silo will not necessarily insure good silage unless the crop is taken at the proper stage, is properly wet down and packed into the silo and when it is fed, enough is removed at frequent enough intervals to prevent decomposition getting a start.

Much can at times be gained by partnership or community ownership of a corn harvester and ensilage cutter. Unfortunately under some such circumstances what is the business of more than one man is nobody's business and therefore the machinery does not get the care that it should.

### Easy to Preserve Eggs

Fifteen dozen eggs can be preserved in a 5-gallon jar of water-glass, says a United States Department of Agriculture circular. This is enough to supply an average family during the high-priced winter months. Eggs laid during May and early June have been found to keep better than those laid later in the season. Only eggs known to be absolutely fresh should be used. Infertile eggs keep better than fertile eggs. Only clean unwashed eggs should be used and the shells should be strong about egg preservation will be sent free by the United States Department of Agriculture.

Field selection of the seed for next year's crop should be the rule this year with both corn and the sorghums.



## Jumbo Truck

### Saves Valuable Hours in Haytime

BY the time the dew is off the hay, your Jumbo Highway Express is back from a ten mile trip to the creamery—the Jumbo carries 4000 pounds at 25 miles an hour—almost as fast as your passenger car.

Then hook your Jumbo Truck to the hay loader—it gives the steady, even pull necessary, carries a full two-ton load, gets to the barn or stack in a hurry, right back to the field for another load. It's a big help getting your hay in at the right time.

The Jumbo Truck works fastest where horses are slowest, never gets tired, never runs away, is not affected by the weather, requires no land for its feed, eats only when working, always ready to go, easy to maintain. Completely equipped—no extras to buy, except body.

Other Models to 4 tons.

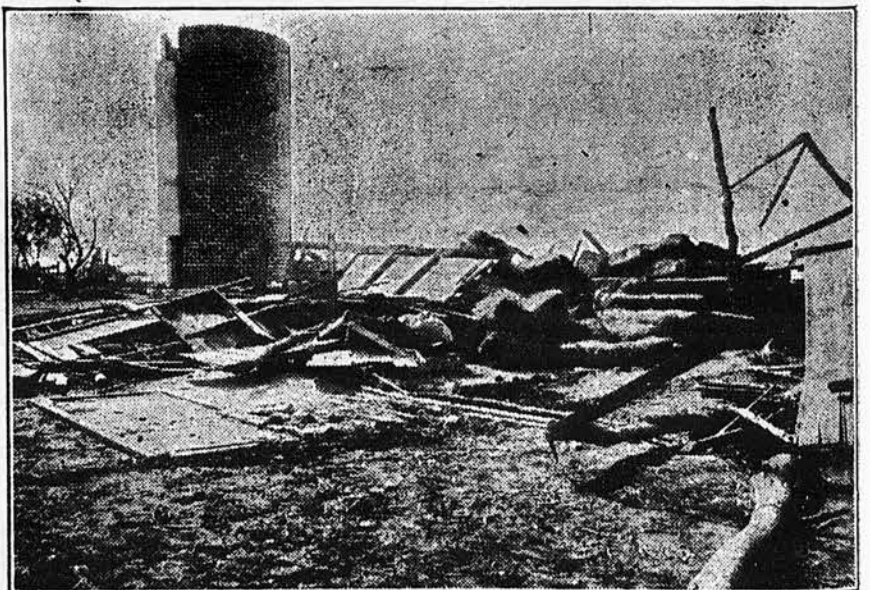
Write for catalog and name of nearest dealer.

NELSON MOTOR TRUCK COMPANY, Saginaw, Mich.

Also makers of the famous line of Jumbo Farm Engines  
Feed Mills and Pump Jacks

WICHITA AUTOMOBILE CO., WICHITA, KANSAS, Distributors

# JUMBO



Here is a Silo That Stood the Test of a Storm and Saved the Feed. A Good Durable Silo is the Best Crop Insurance a Farmer Can Have.



# Jayhawker's Farm Notes

By Harley Hatch

**THE WEEK** which ended June 26 was, in the main, a favorable one both for crop growth and for harvest work. The unexpected cool weather has held back the ripening of all grain, no doubt to its great benefit. Small grain can scarcely help but fill well in such weather and most wheat and oat growers are adding an extra bushel or two or three to their prospective yield. Most soft wheat has been cut in this vicinity. It is uniformly good but some growers report a rather thin stand due to winter-killing. This seems to be a fault of soft wheat here; it kills during the winter when hard wheat pulls thru. On the other hand, soft wheat stands a wet spring and harvest much better than the hard varieties.

## Oats Ripen Before Wheat

Harvest has begun on this farm. The oats ripened before the wheat and the 19 acres grown on this farm were all in the shock at noon, June 24. The same crew shocked them that shocked the oats last year and they seemed agreed that the 1920 crop will out-yield that of 1919. That crop made us 42½ bushels to the acre and just to look at the shocks one would say this crop would make 45 bushels. The threshing machine is the only correct reporter, however. The 19 acres took 48 pounds of twine or about 2½ pounds to the acre. There are no weeds or grass in the shocks; they are all oats.

## Every Moment Utilized

A visit to the wheat, when the oats were cut, disclosed that it ought to stand for two days more so we pulled to the oats field of a brother where the grain was ready to cut. We have so much to cut that we cannot afford to waste a moment and the oats were cut just a shade green but that did not injure them last year and I do not think it will now. They would have been entirely ripe in 24 hours more, so we decided they would draw substance from the straw for that period of time, even if they were in the shock. Oats seem to have ripened as they should, this harvest, for the heads are fully filled and most of them are yellow in color while the straw has a green cast with not a trace of rust.

## Harvesting by Contract

We have taken the job of cutting 55 acres of wheat for a town man. This wheat lies just across the road from this farm so it will be handy. The price to be paid an acre is the "going" price and I have not yet heard what that is. Last year \$2.50 was the usual price for cutting all small grain but this spring I heard it was to be advanced to \$3. On most farms the usual price for field hands is \$5 a day or 50 cents an hour. In some cases board is provided at this figure while in others the noon meal alone is given and in some instances both dinner and supper. Some hands thought they should have the 70 cents agreed upon by certain persons in the main wheat belt but the farmers here refuse to pay that. They say \$5 a day with board is good wages and I agree with them in this, for the harvest work here is mainly shocking which is not quite so strenuous as fighting a stream of wheat straw in a header barge.

## Getting a Binder Hitch

As I said last week, we ordered a tractor hitch with the new binder but it failed to come with the machine. It arrived later and proved to be for an entirely different make of machine and in addition it was a double hitch; to pull two binders with one tractor. An urgent re-order was sent at once and that brought an exact duplicate of the first one—a double hitch for an entirely different make of machine. We then set to work in our blacksmith shop and made a hitch which is most satisfactory in every way. With it one can turn an almost square corner without riding down a bit of grain, and by keeping the edge of the fender of the tractor just at the edge of the standing

grain it brings the binder just right. Then, when we had our own patent working all right, came the right hitch from the factory but we did not go after it and do not think we shall. I can scarcely tell you how pleased we are, so far, with our little tractor as power for the grain binder; the horses are all out in the pasture, the chores are cut down to the cows, pigs and hens and there are no animals in use to suffer from heat and the flies. When we stop the binder there is no holding of a team, so that adjustments can be made in peace and safety.

## Tractors Supplant Horses

We started in harvesting this year with an entirely new outfit. For power we used the tractor and found it much better than horses. It moves along just a little faster and 20 acres is a fair day's work with the 8-foot binder. The tractor handles this binder very easily and the operator says that it can be sent right along with the use of no more than ¾ the amount of gasoline required for plowing. It costs less for fuel and oil to cut 20 acres a day with the tractor than it costs to provide feed for a double shift of horses cutting an equal amount. To make sure of allowing plenty we called the daily consumption of gasoline 10 gallons, which would be \$2.65 a day. To feed eight horses would require at least 4 bushels of oats which cost anywhere today \$1 a bushel. We figured that the oil and other things used on the tractor would no more than equal the value of the hay eaten by the horses; as a matter of fact it will not be nearly so

much but to be fair we called it that. We have no figures on the depreciation of the tractor or of the horses; both depreciate during a strenuous campaign like harvesting but whether in equal degree or not I cannot say. To buy eight horses at present prices would cost much more than our tractor did and to cut 20 acres a day requires that number. With one team only in use 12 acres is all that can be figured as a fair day's work.

## Alfalfa Crop is Light

Before starting harvest we cut the second crop of alfalfa in one of our fields and found it, like the first crop, very light. The cool, dry weather which was so good for the small grain was not good for the alfalfa and scarcely ½ ton of alfalfa to the acre was harvested as the second crop from one field. The other field seems about like the one harvested but it will now have to stand until the small grain is cut. Unless we have plenty of moisture our alfalfa crop is going to be a mighty light one this year but we will have plenty for our own use because so much of the 1919 crop was carried over. In fact, I don't see what we will do with our hay this year for we still have considerable baled prairie carried over from last year which is occupying space in the barn needed by the coming crop. It looks as if a very large tonnage of prairie hay would have to be stacked out in the open this year for if one cannot ship it, it will not pay to go to the expense of baling it.

Beemen of the Eastern division of the Kansas State Beekeepers' association held a meeting June 28 at the apiary of J. W. Swickard in the western part of Topeka. Among the subjects discussed were artificial increase and surplus honey by O. A. Keene, foul breed by George A. Pratt, the jumbo hive by J. W. Swickard and the mission of the entomological commission by O. F. Whitney.

### LOOK FOR THIS TRADE MARK



**CHIEF**

**Chief Farm Equipment**

Our big free catalog will show you how you can save labor, time and expense; make your farm more sanitary and attractive; add to its value by installing CHIEF steel equipment. Ask for our Free Book for House Plans, four complete blue prints of latest type hog houses. Write today. Address: **SHRAUGER & JOHNSON**, 515 Walnut St., Atlantic, Iowa.

**Chief Line of** Cupolas, Chimneys, Windmills, Log and Stock Waterers, Poultry Feeders, Hog Houses, etc. Specialties.

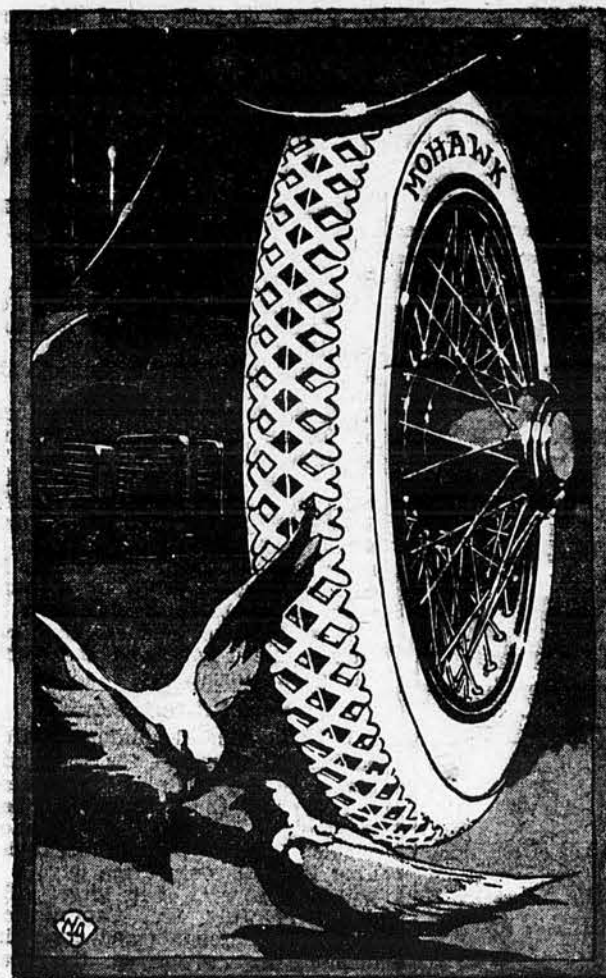
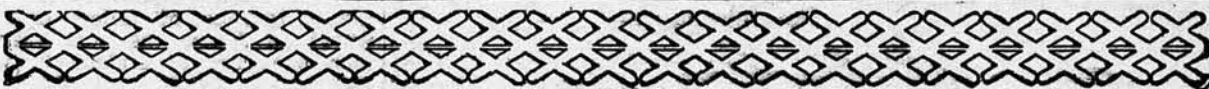
**SEND FOR FREE CATALOG**



**Does Ten Men's Work**

**One Man Saws 25 Cords a Day**

The Ottawa Log Saw falls trees or cuts off stumps level with ground. Saws up logs, cuts up branches, ice cutter, runs pump jack and other belt machinery. Mounted on wheels. Easy to move anywhere. 10 Year Guarantee. 30 Days Trial. Write for Free Book and Cash or Easy Terms. **OTTAWA MFG. CO.**, 1461 Wood St., Ottawa, Kans.



Made in Cord and Fabric Types

Good dealers everywhere handle them

## CORDS CAREFULLY BUILT

If we were asked to name the one point of greatest superiority which marks Mohawk Cords above other tires, we would name "Care that Goes In to Their Making."

Careful work was the solid foundation on which the Mohawk Rubber Company was organized seven years ago and on which it has grown to a position among the leading tire companies of the country.

This dominating principle has been maintained in the selection of materials and in the building of all Mohawk Tires—both Cord and Fabric—and Mohawk Tubes. We have adhered strictly to the policy of using only pure rubber and the best of fabric obtainable, plus the necessary compounding materials, in spite of the alluring cost-cutting possibilities of the thousand of substitutes which are to-day common in the tire business.

Mohawk tires are built by hand because that is the more careful way.

Mohawk Cords range in size from 30 x 3½ for Fords to the 40 x 8 pneumatic for trucks. You will find that Mohawk Cords weigh more than the average cord tire—as much as 8 to 10 pounds in the larger sizes.

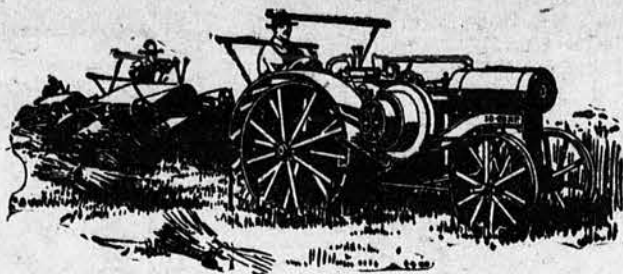
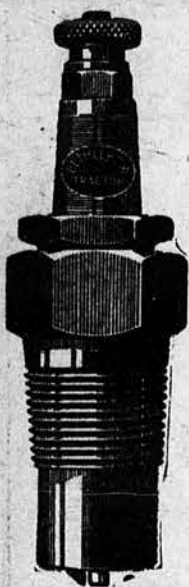
MOHAWK RUBBER COMPANY, AKRON, OHIO

Branch: 1928 Grand Ave., Kansas City

# MOHAWK "Quality" TIRES

HAND MADE





## Spark Plugs and Harvesting

**T**HERE you are, 'way out in the field, far from the barn. A spark plug goes dead. You've got to hold up the binders until you can send back to the barn for a new plug. The hands have to wait till you make repairs.

The surest guarantee we know of against these spark-plug delays is to use sure-fire Bethlehem Spark Plugs in every cylinder. Bethlehem construction lessens the possibility of their misfiring when there's work to be done.

The mica in the de Luxe Tractor Plug is wound around the center spindle, *then reinforced* with mica washers, compressed into a granite-like whole. This plug stands the brutal punishment of tractor operation.

The great International Harvester Company, after exhaustive tests, has adopted Bethlehem Spark Plugs as standard equipment. Bethlehem Automobile and Truck Plugs are equally dependable. Studebaker, Marmon and 48 other manufacturers equip with Bethlehem Plugs.

Write for free copy of "Hit or Miss", which tells what you want to know about spark plugs.

**BETHLEHEM SPARK PLUG CORPORATION**

E. H. Schwab, President

Bethlehem, Pa.

*Bethlehem*

**SPARK  
PLUGS**

"They Pull You Through"

## Answer Puzzle—Get Big Cash Prize



### Names of Eight School Books Are Hidden in This Picture

Can you answer this puzzle? Here's one that will bring back your school days. You should be familiar with these books, having studied your lessons from them. Can you name them? Take your time in solving the puzzle—be sure you are right. Then mail in your solution. \$500.00 in gold to be given. Participate in this big cash distribution. Your solution must be mailed AT ONCE to the address below.

**PUZZLE MAN, Dept. 900, Topeka, Kansas**

## Farming in Western Kansas

**T**HE question often has been asked, how long will silage keep in the silo? It is hard to answer as there is no record of silage spoiling from old age. At the Colby Experiment station silage was fed in 1918 that was put up in 1914 and with the exception of where air got into it around the edges, it was as good as fresh silage and was eaten as well by the livestock. Silage put up in an airtight silo will keep indefinitely.

### Hessian Fly

The Hessian fly has caused considerable damage to the volunteer and early sown wheat as far west as the western edge of Trego county this year and there is enough infestation in all of this section to cause very serious damage another year, if nothing is done to prevent.

In order to prevent Hessian fly injury all land should be plowed or listed early as it has been shown that in early plowed land about one out of 20 of the flies emerge that would emerge if land was not plowed. In the fall seeding should be delayed until after the fly-free date, which for Northwestern Kansas is October 2. By plowing under the stubble and sowing late the fly can be controlled until it finally will be killed out in this section.

### Successful Wheat Farming

One of our wheat growers, C. P. Schnellbacher, of Colby, Thomas county, says that he never has had a failure of wheat during the last six years that he has been farming for himself and has averaged about 800 acres of wheat every year.

Mr. Schnellbacher raises two crops of wheat every three years by practicing a rotation of fallow one year, wheat on fallow the next year and then one crop of stubble in wheat, then back to a fallow. By this method he has 400 acres of fallow, 400 acres of wheat on fallow and 400 acres of wheat on stubble each year. He says

that one summer fallow is good for two crops and has proved it very successfully the last six years.

In the early spring he either disks his land to be fallowed or plows it very shallow to kill the early weeds and then about the time the second crop of weeds is starting, which is usually early in June, he plows it about 6 or 7 inches deep. After this if the weeds start he cultivates the ground with a common shovel cultivator and the ground is left in small ridges and does not blow. About September 10 or 12 Mr. Schnellbacher begins to sow his wheat and usually gets a good growth for winter pasture. If the growth is light he does not pasture as he believes that it does not hurt to pasture a heavy growth in the winter, but that it does damage to pasture a light growth.

Mr. Schnellbacher believes that unless a farmer is fixed so that he can follow immediately behind the header with a plow that plowing after harvest is not a paying proposition in Thomas county. Following this method he has averaged about 12,000 bushels of wheat every year for the last six years and he says his big crop was in 1919, when he raised about 35 bushels an acre on his fallow land.

### Concerning Grasshoppers

All of Northwestern Kansas is raising a very vigorous crop of young grasshoppers this year and every farmer must keep close watch or he will have a serious time this fall with his row crops as well as with the wheat at seeding time. They may even get so bad that they will do considerable damage to the wheat before harvest as they did last year when they ate off the heads of the wheat.

Every farmer should have a supply of the material on hand to make the poisoned bran mash, and he should use it whenever necessary. It is 100 per cent effective when properly prepared and used in the right way.

## Financial News for Farmers

BY R. M. CLARK

**W**HILE the credit strain continues unabated, the Federal Reserve Board sees a wholesale condition in that high interest rates have curbed a great deal of speculation and cut down expansion. The New York Stock Exchange had a turnover of 9,634,800 shares last month, the smallest June business since 1914. Call money running from 7 to 12 per cent, and commercial paper rates at 8 and 8½ per cent in New York cut down trading. Normally when rates raise in New York every banker in the country tries to profit by it, but now with all the banks having their hands full with home business they cannot finance New York and the stock exchange as formerly.

### Food Prices to Advance

It is the general opinion of informed bankers that prices for food will be higher in the fall and that shoes and a few other commodities will be permanently lower. The American Woolen Company, which has been running its mills only three days a week will close several of its larger mills indefinitely July 10. Cancellation of orders by merchants and curtailing of demand are given as the reasons. There are, however, no over large stocks of clothing and it is not expected that prices in clothing will drop at all. Closing of the mills will keep them up to the high level. The wool and leather markets continue in a demoralized condition.

### Steel Mills at Full Capacity

With 2 million tons of steel piled up in their yards the steel mills' policy in working close up to capacity, although there was no possibility of relief for the car shortage, is now seen in the outbreak of fresh labor troubles among

steel workers. Should a strike occur, the mills are in a position to sit back and take it easy while the railroads slowly carry away their huge accumulations of steel.

A Federal grand jury in New York has indicted four oil companies, 10 brokerage firms and 50 individuals on charges of using the mails to defraud in selling alleged fake stocks. Certain firms, it is charged, bought shares at 7 cents and sold them for \$2 and \$3 by circularizing them. Another time-worn method was to pay back a part of the sucker's money in dividends. In Kansas the promoters of various kinds of doubtful securities are harvesting millions by personal solicitation, backed by various plausible recommendations for this or that stock. Apparently the Kansas Blue Sky law is leaking badly, if reports that come to me of some of the stocks being sold and the methods used are true.

### How Many Friends?

We know you have many friends who would be very glad to receive a sample copy of Kansas Farmer and Mail and Breeze. You believe in the policies of Kansas Farmer and Mail and Breeze—your friends would, too, if they could see the paper. Send us the names and addresses of eight or more of your friends who are not now readers of Kansas Farmer and Mail and Breeze and we will not only send the copies free but we will send you a clutch pencil for your trouble.

Field selection of corn and kafir pays well; there is a great need in Kansas for better seed.

Sheep farming is developing in Kansas to an encouraging extent.



## Kansas Farm News Notes

**PRAIRIE DOGS** in a period of seven months have taken almost complete possession of a 60-acre pasture belonging to Joseph Henry of Saline county. These pests were practically destroyed as a result of a vigorous poisoning campaign conducted by the Kansas Experiment station at Manhattan several years ago, but a few remained and they are spreading rapidly. The experiment station supplies the poison at cost.

### Many Families to Finney

More than a hundred families have moved into the beet sugar district of Finney county this year, according to a report of the colonization department of the Santa Fe railroad. It is expected that these families will engage in growing sugar beets.

### New Sorghum Sirup Plant

A complete steam evaporating sorghum sirup plant has been purchased by A. M. Bates and Fred Hamilton of Downs, Kan. These men expect to start the new industry in the fall when the sorghum crop is ready to be manufactured into sirup. The concern will be known as the Downs Sirup Company.

### Wheat in Northwest Kansas

Northwest Kansas never has had a more favorable season than the present. The rain of three weeks ago, which extended over several counties, came just at the right time to insure the filling of the wheat and barley. Last week a heavy rain fell over Thomas, Rawlins and Cheyenne counties. On the fields of listed crops the furrows caught all the water that fell and the corn, cane, feterita and other sorghum feed crops are in fine shape to make rapid growth.

### Holsteins to Cloud County

Fifty registered Holstein cows and a herd bull are to be bought in Minnesota by a purchasing committee of the Cloud County Holstein Friesian company during August. These will constitute the first unit to be placed by this company, which is organized on the same plan as similar companies which have placed cows in Lyon and Bourbon counties. Another unit will be purchased later in the fall and a third unit, for which the money has already been subscribed, will be placed in the county next spring.

### High School Uses Sale Pavilion

This year's graduating class of the Atwood high school held its commencement exercises in the livestock sale pavilion built at a cost of \$20,000 by the cattle breeders and business men of that section. It has an auditorium with seats arranged in a half circle in amphitheatre fashion. The stage is of ample size for such events. This is one of the best and most convenient buildings of its kind in Kansas and while built mainly as a place in which to sell purebred livestock, is admirably adapted to holding public meetings of various kinds.

### Herd Makes Good Average

An average of 1,045 pounds of milk and 55 pounds of butterfat was made for the month of May by the 19 cows of the A. B. Wilcox herd in the Shawnee County Cow Testing association. This is the highest herd average in the association for the month. Mr. Wilcox formerly lived in Dickinson county and helped organize the first testing association in the state. Dickinson county has become one of the leading dairy communities of the state and much of its progress can be attributed to the testing association work which was conducted there for several years before any other associations were organized. Shawnee county now has a strong and active testing association. Miss Louise Krigbaum is the tester.

### Cream Brings Steady Income

During June Charles L. Zoller of Goodland purchased 410 cans of cream for which he paid more than \$5,000. The checks were made out the day the cream was delivered. The Equity Union Business association purchased

and shipped about the same amount. "I can make more money milking cows than farming," said a tenant farmer one day last week as he pocketed a check for \$7.25 which he said represented the work of two days in milking 12 cows getting nothing but buffalo grass. B. Straughn, another farmer delivering cream the same day, expressed himself strongly in favor of milking a few cows as a sure and safe method of bringing in some money every week in the year.

### New Vocational Director

C. V. Williams, formerly in charge of the Federal vocational training in the western division with headquarters at Denver has been appointed to succeed H. L. Kent as state vocational training director. Mr. Kent resigned two months ago to become superintendent of the Fort Hays Branch Experiment station. The state board of education has decided to establish headquarters for the vocational training work of the state superintendent's office at the Kansas State Agricultural college in Manhattan. The state and the Federal Government share equally in extending aid to Kansas high schools giving vocational training in agriculture and home economics. Kansas received \$40,000 from the Federal Government in the fiscal year just ended.

### Good Field for Veterinarians

BY DR. R. R. DYKSTRA

At this time of the year, when a large number of boys interested in livestock have just graduated from the high schools of the state, many of them have not yet made up their minds as to the college course that they may wish to pursue next fall. This same question arises every year, and in the past has been settled in many instances by selecting a course in veterinary medicine. It is not the intention of all students enrolling in the veterinary course to practice veterinary medicine, but because they believe that such a course will be of greater value to them in the raising of livestock than anything else that they can select.

Veterinary medicine has advanced so rapidly the last few years that those not directly interested in it do not have a very clear understanding of the various phases of this important branch of both agriculture and medicine. In former years, practically the only outlet for the veterinarian's activities consisted in the treatment of sick animals. At the present time this is still true in a measure, but many other branches are equally as important.

A good deal of attention is paid to the prevention of disease in animals. This is exemplified in the very extensive vaccination against a good many diseases such as hog cholera, swine plague, blackleg, anthrax, hemorrhagic septicemia, and various other diseases. Preventive medicine has opened a big field for the veterinarian, not only in the application of vaccines, but also in their manufacture, which is witnessed by the very large and extensive establishments that have sprung up in various parts of the United States for the exclusive manufacture of veterinary vaccines. These establishments employ a large number of graduate veterinarians at salaries ranging from \$2,000 to \$5,000 a year.

### Many Inspectors Needed

There are but few persons in the United States to whose attention the fact is brought that practically every pound of meat and meat products distributed in the United States has been subjected to veterinary inspection. The Government regulations controlling interstate commerce state specifically that no meat may be shipped interstate unless it has been satisfactorily inspected by a graduate veterinarian and has been shown to be free from disease detrimental to human health. The United States Bureau of Animal Industry under whose control this work is being carried on, employs several hundred veterinarians and is constantly adding to the number. The Bureau of Animal Industry veterinarians are also stamping out some of

the big animal plagues of the country, notably, Southern cattle fever, tuberculosis, hog cholera, and mange. Work of this character appeals to a good many young men because it gives them an opportunity to engage in scientific work and at the same time see different parts of the country. A good deal of it is outdoor work, which is, in the minds of many, an added attraction.

Some of the students in veterinary medicine attending the Kansas State Agricultural college have become interested in military affairs and after graduating enter the army. Recent legislation has advanced the rank of the veterinarian in the army considerably, so that the army veterinarian after a certain length of service is eligible to the rank of colonel. This is going to be an added inducement for many young men to enter the army.

### Other Duties

The graduate veterinarian also is being called upon to act as meat and milk inspector for many of the more progressive towns in Kansas. There is no question in my mind but that in the course of time it will be found advisable to establish the office of county veterinarian. The livestock of the state has become so very valuable that to neglect it is to invite disaster. In 1919 the total value of livestock in the state of Kansas was almost 350 million dollars and in the United States in 1916 the estimated value was over 6½ billion dollars. To conserve the health of this immense investment is the duty of the veterinarian. Livestock owners are calling upon the veterinarian more and more every year as the value of their animals increases, and apparently the demand for the trained and qualified veterinarian has only begun.

On account of the bright future and the immense opportunities for usefulness, or for those young men that desire to know more about livestock, the state veterinary colleges are attracting many young men. This also has been true of the division of veterinary medicine of the Kansas State Agricultural college, and the prospects are that a large number of students will be enrolled in that division at the opening of the school year in September, 1920. A descriptive announcement of the veterinary curriculum may be had by applying to the Dean of the Division of Veterinary Medicine, Manhattan, Kan.



### Healthy Vegetables

The U. S. Department of Agriculture recommends that you rid your seeds and soil of infection before planting by using

**FORMALDEHYDE**  
The Farmer's Friend

Prevents potato scab and black-leg diseases that attack beets and other vegetables. Guards against onion rot, smut and smudges and cucumber root rot. Prevents mould in celery and lettuce, parsnips and other covered seeds when applied to the beds before planting. Buy Formaldehyde of the Perth Amboy Chemical Works Laboratories—at your dealer. Big book giving full directions for scientific seed treatment, free upon request.

Perth Amboy Chemical Works  
709-717 SIXTH AVENUE NEW YORK

## GOVERNMENT SHOES

at less than 1/3 USUAL PRICE

We have purchased direct from the local camps of the Government over 50,000 pairs GENUINE ARMY RUSSET DRESS SHOES. ASK THE BOYS WHO WORE THEM. Some of these shoes were repaired in the Government Shoe Shops; balance we are repairing with genuine oak leather. Uppers will wear two years. Note the following figures: New Army Uppers are worth \$7.00; first class shoe shops get \$2.50 for 1/2 soles and heels. Total \$9.50. OUR PRICE \$2.90, or less than 1/3 their true value. Mail \$1.00, giving size desired. Balance on delivery. Satisfaction guaranteed. Send orders to Gov't. Shoe Dept.

**KINGSLEY TIRE & SHOE SHOP**

Drexel Blvd. & Cottage Grove Ave., Chicago, Ill.

When writing advertisers mention this paper.

## As A Table Drink Postum Cereal meets every requirement!

The flavor, much like superior coffee, always pleases; and when health and economy are considered, this wholesome beverage fits every need.

Boil Postum Cereal fully 15 minutes, after boiling begins—or if you prefer a quickly prepared drink, buy the newer form—Instant Postum, which is made instantly in the cup.

**"There's a Reason" for Postum**

Made by Postum Cereal Company, Inc.

Battle Creek, Michigan



# The Adventures of the Hoovers

Buddy Again Meets the Dude Neighbor-- for about a Minute and Learns Something of the Beauties of Nature and Other Things





## Among Colorado Farmers

THE growth in dairy farming is one of the most satisfactory things in the agriculture of East-Cor Colorado. This movement, which is especially evident around Lamar, has done much to increase the profits in farming, and it has great possibilities for growth. It is evident that a close personal study is needed by everyone of the fundamentals of success which have been demonstrated by the leading dairymen.

### Care of Small Tools

A farmer who had difficulty keeping track of small tools set aside a section of his implement shed for a tool-room and work-shop, and required that every man, on returning from a job, drive thru the doorway of the shed and deposit the tools before unhitching. Since it was as easy to drive thru this door as to enter the yard by other means, the men always were willing to abide by this rule and since a place was provided for every tool, they had further inducement to put things away. Rusting of tools is prevented by this owner. He has tacked corrugated cardboard on the backs of the cabinets and racks where tools are kept. This is soaked with oil and never allowed completely to dry out. By keeping the cardboard well oiled he absolutely prevents rusting of the tools hung against it.

### For a Beautiful Country

Better planning is needed around the homes of Colorado if the farms are to have an appearance which will lend the greatest attractiveness to the open country. Visitors frequently complain that the producers of this state, especially on the dry land farms, do not pay so much attention to the surroundings of the homes as they should. Despite some evident troubles in home plantings under these conditions, it is evident that there is much justice in this complaint. The following extract from the opinions of a farmer writing in a recent issue of the Michigan Farmer are well worth considering:

The beauty of the farm in large part depends on what is in the hearts of the man and woman who make it their home. Beauty of thought, beauty of planning and beauty of doing cannot but make the farm home beautiful. For beauty comes from the heart where the issues of life are born. The character of the occupants may be learned from the premises quite as accurately as from association or from the printed page, and if that life be charming or sturdy these qualities will be everywhere evident. When the thinking is right, there will be well-kept buildings, not so much because of the money invested in them as on account of the little touches here and there that keep things looking well. A fresh coat of paint, which the farmer can put on himself in these days when we can buy fine paints all ready to spread, a weekly trimming of the yard about the house, and a minute or two spent in training a few vines up the side of the porch are all helps in obtaining a beautiful farm.

Then, too, the wife in the house may do many things that will tend in the same direction. The curtains and the shades at the windows tell their story of the thought back of them. A few pretty plants in the yard, with a flower or two in a jar on the porch; walks clean and neat; window glass free from dust, these all speak well for the beauty of heart of the one who is behind the pleasant service.

But, best of all, beauty of heart shines out and makes the home beautiful in the kindly living of those who love the farm best. Love counts for more than paint or any work of the hand; for love shows where the heart is, and love always makes the thing it touches radiant with beauty.

### Sheep Production in Colorado

Equipment for raising sheep on Colorado farms need not be expensive. Little housing is required and the main need is for fencing and pastures of sufficient number and size to allow frequent changing of flocks to fresh ground to insure health. Sheds are necessary to furnish protection from storms, tho no special provisions are needed for warmth. Dryness, good ventilation, and freedom from drafts are the first requisites of buildings for sheep. Convenience in feeding and shepherding must also be held in mind in locating and planning such buildings or sheds.

Small flocks can be cared for in sections of barns having stabling or feed storage for other stock, but with a flock of, say, 100 ewes, separate buildings are desirable. The interior arrangement of these buildings should be such as to require a minimum of labor and the least possible moving of the ewes in doing the feeding and caring

for them during the lambing season. A building of this type also can be utilized for fattening purchased lambs to be disposed of before lambing begins in the regular farm flock. A good supply of feed racks and grain troughs can be provided at small expense and will save labor and prevent waste of feed.

### Carelessness with Matches

All matches are dangerous from a fire standpoint. The ordinary "parlor" matches take fire at a low temperature and can be lighted in many ways. They sometimes fall to the floor unnoticed and are lighted by being stepped upon. When one is being scratched part of the flaming head may fly off into some inflammable material. Children are fond of playing with matches and do not realize the danger connected with them; even babies soon learn by imitation to strike them. Match holders should always be placed well out of reach of the younger members of the family. Many fires are started by matches carelessly thrown down while they are still

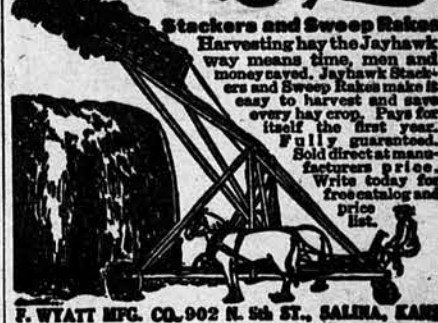
in flame or before the stick has ceased to glow.

At all places in the house where matches usually are struck a fireproof receptacle should be provided for the burned matches, and this should be emptied frequently. Smoking or striking matches in the barns or stable should never be allowed. Nor should hired hands or others be permitted to carry matches loose in their pockets. If the carrying of matches is necessary, insist upon the use of a good metal match safe; this will prevent single matches being pulled from the pocket accidentally.

The double-dipped matches which have come upon the market in recent years (those with heads of two colors) are much safer than the older kind, for they will not light except when scratched on the small tip, they are very unlikely to light when stepped upon, and the heads do not fly readily. But the least dangerous matches are those which will not light unless they are scratched upon the box which contains them. The manufacture and sale of single-dipped matches is recognized as undesirable by some states, which have laws forbidding it.

Livestock farming is being based more and more on quality production; this is one of the most encouraging things in the developing of the agriculture of the Middle West.

### Stack Your Hay The Easiest Way The Jayhawk



## Hotel Kupper

11th and McGee Sts.

Kansas City, Missouri

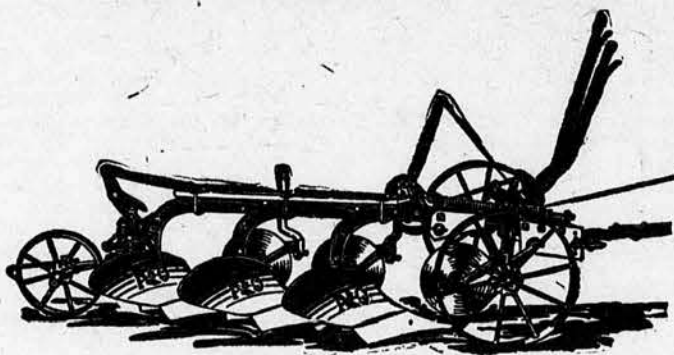
The hotel of quality and refinement for yourself, wife or family when visiting the city.

EUROPEAN PLAN—\$1.50 to \$4 per Day Centrally Located in the Shopping District

Automatic sprinkler system recently installed—making hotel thoroughly fireproof.

WALTER S. MARS, Manager

## "The Little Genius"



### A Name to Conjure With

**T**HIS PLOW was built, tried in the field, and then christened. Hence the name, "Little Genius." No farm implement was ever more aptly named. And no other plow ever gained the success and popularity attained by the P&O Little Genius Power-Lift Tractor Plow.

### A "One-Man" Outfit

The Little Genius is controlled by the tractor operator. The plow has a power-lift mechanism, and the bottoms are raised and lowered by means of one rope. The tractor and plow comprise a one-man outfit.

### Lives Up to Its Reputation

Praises given this famous plow continue to resound in every section of the country. But the Little Genius is here to back up any statements. It is a model of mechanical construction, noted for simplicity of design, great strength, and the ease and accuracy of its work.

Two and Three Furrow  
12 or 14-inch Bottoms.

Four Furrow  
10 or 14-inch Bottoms.

Ask the International Dealer for Catalog on "P&O Light Draft Plows."

## INTERNATIONAL HARVESTER COMPANY

CHICAGO

OF AMERICA  
(INCORPORATED)

U S A

The making of a plow involves several fundamental principles: Design, Simplicity, Strength, Ease of Operation, and Economy. All of these will be found in the old reliable

# P&O

## Light Draft Plows

These plows not only have behind them a long and honorable record—over three-quarters of a century—but their worth and reputation has resulted in the development of a plow factory that ranks in size with the three or four largest in the country.

It was this record that induced the International Harvester Company, in 1919, to purchase the immense P&O plow factory at Canton, Illinois, and add its product to their other lines of farm-operating equipment.

## International Service

Remember that when you buy P&O Light Draft Plows, you are not only getting the best plows made, but you are also arranging for the benefits of International Service. Every one of the 92 International Branch Houses and every one of the thousands of International Dealers in the United States operates a Service Station for your benefit.

It is a Service that is efficient, dependable, and everlasting.





# With the Homemakers

Stella Gertrude Nash  
— EDITOR —

## If You Wish to Get Full Benefit From Sleep Try the Porch

**W**HY SHOULD a porch be used only in the day time when all or part of it may just as well serve the purpose of a sleeping porch, too? It would be almost impossible for us to overestimate the benefits of our sleeping porch which evolved from an ordinary porch. I wish everyone might enjoy some sort of outdoor sleeping even tho it be nothing better than a hay frame which makes a much better sleeping place than some bedrooms.

Three summers ago we tried sleeping in the house for a month or so but since we had a large south porch 36 by 9 feet and several feet up from the ground, we thought how foolish we were to suffer from the heat when we might just as well be comfortable by putting an extra bed on the porch and purchasing some canvas to keep out the rain. Altho our rooms are larger and better ventilated than those in many homes, the house seemed stifling after we had slept on our porch for a few nights.

The first summer our porch lacked the ceiling and the drop siding but that did not in the least interfere with our enjoyment of it. Our canvas curtains which are excellent protection against wind and rain cost us only \$4.75 then, but would probably cost more now. We ran a rather heavy wire thru the upper hem of the curtains and tacked them at the top to the frame work of the porch. Then we planed off some 2 by 4's and made two neat poles 1 1/4 inches in diameter which we put thru the lower hems of the curtains, thereby weighting them down and keeping them smooth. We stretched a heavy wire below the canvas and fastened strips of carpet to it to keep out cold and rain. To keep the curtain poles from annoying us by hitting against the porch on windy nights we tie them securely to the posts.

The first summer we slept on our porch until almost Thanksgiving and last winter we used it until Christmas and then moved in only because my husband had toothache. By next winter we expect to make it warmer so that we may use it on the coldest nights. Except when the weather is very cold our little girl takes her nap on the porch.

Since the porch floor is cement it is very easily kept clean. We can attach our 75 foot hose to a force pump when we wish to scrub or cool the porch. In cold weather we spread rugs on the floor.

Perhaps one of the greatest benefits we derive from our sleeping porch is that when we get up in the morning we feel really rested, no matter how tired we were when we went to bed. The outdoor air is so cool and refreshing that we are lulled to sleep almost as soon as we hit the pillow, whereas many of us know what it is to lie awake for hours in a hot stuffy room, rolling and tossing in a vain effort to go to sleep. We never have a cold when we sleep on our porch. Sleeping on a porch not only aids greatly in warding off disease but also in curing those already contracted.

Mrs. George L. Glenn.  
Douglas, Co., Kansas.

### Is Yours An Ox-Cart School?

That Kansas ranks twenty-seventh in the relative standing of its schools compared with the schools of the United States is indicative that the state is maintaining an ox-cart school in an airplane age. One cannot but marvel at the inconsistency of man when he sees him riding to town in an automobile of the latest model, living in a modern house, dressing in costly fashionable clothing, but still sending his children to the same little box car school house where he learned his A B C's more than a quarter of a century ago.

Not that the one-teacher school has always been deficient and inadequate,

It has not. It did very well for a pioneer people when the curriculum was made up largely of the "three R's," but as the country has been settled and civilization has advanced, new subjects have been added, until now in addition to readin', 'ritin' and 'rith-metic, we have 13 subjects for one teacher to teach in the same length of time that she had formerly for the simple "three R" curriculum.

One has only to multiply nine grades by four recitations each and divide the results into 360 minutes which constitute a school day in order to see that barely 10 minutes is all the time the teacher has for a recitation.

Plainly something needs to be done. In the face of the fact that 37 1/2 per cent of the one-teacher schools have 10 or fewer pupils and that a teacher shortage is at hand, it would seem as tho fewer and better schools would be the remedy. In other words consolidation seems to be the only chance for the country boy and girl to have a school equal to those of their city cousins.

Jennie S. Owen.

Lyon Co., Kansas.

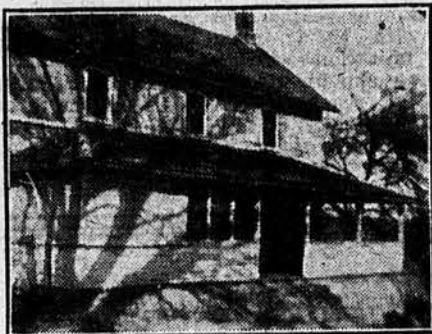
### Made Her Own Drier

It was two years ago that I first used my homemade drier. I had a good garden that year, and canned both fruit and vegetables until my cans ran

out and husband advised against buying more. I had long thought of the advertised evaporators, but had not felt able to afford one. I had seen descriptions of homemade ones and sent for a bulletin from the United States Department of Agriculture, Washington, D. C., but husband was too busy to make one.

With fruit and vegetables going to waste, I grew desperate. I studied the different plans and finally settled upon

a plan of my own, using what I thought the best points of all kinds. Husband then built my drier of scraps at noons and evenings. Cleats across each side of the framework served to hold the shallow trays. These were very light frames with flour sacks stretched across the bottom and tacked fast. The three sides of the



Glenn Home Showing Sleeping Porch.

framework were covered with mosquito bar and the door and top with screen.

Many times when one has a batch of something drying, cloudy or rainy weather sets in, often causing the product to sour before it is sufficiently dry. To avoid such loss husband fastened strong wire to each upper corner of the drier, bringing the wire together at a central point which fastened on a hook in the ceiling above the kitchen stove. In cloudy weather the food is dried there.

I dried apples, pears, grapes, sweet corn, beans, peas, cabbage, and many other products that year. I found that

apples and pears dry much more quickly and thoroly if sliced very thin as for pies. I often found a few peas on the vines that were just right for the table but there was not enough of them for a meal. If I waited until the next planting was large enough for use, the first would be too hard. If dried, they could be put away and more added as I had them, the result being several meals of peas which would otherwise have been wasted. I found that peas dry quickly in the pods, are easily cared for and can be shelled easily after drying.

We planted a great many beans one year and frost came before many of them had matured. We pulled the vines and stored them in the smoke house. Then as we could we picked off the pods, sorting the green from the dry, shelled the green beans and spread them in the drier. Dried and stored away they made many meals that otherwise would have been lost. Drying cabbage was an experiment but the bulletin gave directions which we carefully followed. The cabbage was sliced as for slaw or kraut, then spread thinly on the trays.

Small containers are best for storing these dried materials. I used paste-board boxes and paper sacks. These were stored in lard or cracker cans. If you have a surplus of fruit or vegetables and do not wish to can them all use a drier. Mrs. Levi Gingrich.

Hodgeman Co., Kansas.

### From a Farm in the Hills

One need not be without a fireless cooker of some description. I made one recently from an old water separator that had been around in the way for several years. The inside compartment is an old cooling pail which answers the purpose very well. Packing or insulating material for the lower part was of clean wood ashes to render the cooker fire-proof. Waste paper was used for packing about half way up and the collar was cut from a corrugated grocery box. Full directions for making the fireless cooker from materials at hand may be had by sending to the U. S. Department of Agriculture, Washington, D. C., for bulletin No. 771.

It sometimes happens that the men do not get in on time when you have a meal ready. The fireless cooker will keep the main dishes warm for hours. Another advantage of having a fireless cooker is the facility with which you can prepare breakfast if you have placed your cereal in the cooker the night before. It is ready to serve as soon as you get up.

If the pattern of floor oilcloth wears off in spots and it is too good to throw away, paint over with floor paint and follow with a coat of varnish. Or, the varnish may be omitted if it is polished with floor wax.

Prepared wax in the liquid form is one of the best polishes for automobiles. It not only forms a dustproof coat and protects the surface from rain, but gives longer life to the finish.

Slatted feed coops with roofs that shed the rain are very convenient for chickens in case of sudden thunder storms. The roofs should be slanted and hinged at one side so that feed may be scattered inside. If the little chicks are taught to come at a certain call, it is an easy matter to get them under shelter when one sees a rain coming.

Colored putty to match the wood-work will fill tack holes where the floor has been covered with a carpet for some time and it is desired to use rugs instead.

The mother of the family needs rest on Sunday and she should plan to have it. I once knew a family who tabooed Sunday visiting, but I fear if every-

## Dainty New Venetian Lace

**T**HIS EDGE is especially attractive for library or piano scarfs if made with ecru thread.

Chain (ch) 18, 1 double crochet (d c) —thread over hook once) into 6th ch, \* 1 ch, skip 1 ch, 1 d c in next, repeat from \* until there are seven spaces. Turn, ch 4, d c in 2d d c, \* d c over

join by the 3d of the last 5 picots.

10th row—\* Double treble crochet (d tr c—thread over hook three times) in 1st p, 8 ch, treble crochet (tr c—thread over hook twice) in next p, 8 ch, s c in middle p, 8 ch, tr c in next p, 8 ch, d tr c in next p, 2 ch, repeat from \*.



the 1 ch, d c in next d c, repeat from \* four times, 1 ch, d c in last d c.

4th, 5th, 6th and 7th rows—Turn, 4 ch, d c in 2d d c, 10 d c in next 10 d c, 1 ch, d c in last d c, turn.

8th row—4 ch, 1 d c in 2d d c, 1 ch, skip 1 d c, d c in next, repeat to end of row.

9th row—\* 4 ch, 1 slip stitch (sl st) in 1st ch for picot (p), 2 single crochet (s c) in each of the next 6 spaces (sp), 1 ch, 2 s c in corner sp, 4 ch for p, 2 s c in same corner sp, turn, 9 ch, catch in the 1 ch, turn, 15 s c over the 9 ch, 2 s c in next sp, turn, 1 ch, 1 d c in each of the 15 s c, with 1 ch between each d c, 1 ch, catch in 2d sp from corner, turn, 2 s c in 1st 2 sp, p of 4 ch, 2 s c in each of next 3 sp, 1 p, 2 s c in each of next 3 sp, repeat, putting 2 s c in last 2 sp, 1 s c in same last sp, 2 s c in each of next 4 sp. Repeat from \*. Then work another figure and

11th row—1 d c in the d tr c, \* 2 ch, skip 2 sts, d c in next st. Repeat from \*.

12th row—3 s c in each sp.

13th—Same as 10th row.

14th—Same as 11th row.

15th row—\*\* 3 s c in each of the 1st

2 sp, 1 ch, 3 s c in each of next 2 sp, 1 ch, 3 s c in next sp, 1 ch, 3 s c in next 2 sp, turn, 7 ch, 1 s c in the 1 ch, turn, 13 s c over the 7 ch, 3 s c in next sp, turn, 17 ch, 1 s c in the 1 ch, turn, 21 s c over the 17 ch, 3 s c in next 2 sp, turn, 1 ch, 1 tr c in each s c with 1 ch between each tr c, 1 ch, 1 s c in next ch, turn, \* 2 s c in each of next 2 sp, 1 ch, 2 s c in each of next 2 sp, turn, 5 ch, catch in the 1 ch, turn, and over the 5 ch make 5 s c, 1 p, 5 s c.

Repeat from \* 5 times, 2 s c in each of last 2 sp of scallop, 3 s c in each of next 2 sp, 1 s c in next sp, 1 p and 1 s c in same sp. Repeat from \*\*.



one should take such a stand there would be very little visiting in the country. The housewife can, however, reduce her work on Sunday very considerably by serving more simple meals or doing most of the cooking on Saturday.

When basting long seams try using the presser foot of the machine to hold the goods in place. This relieves one of the stooping occasioned by pinning the work to the knee. The foot may be lifted and the goods slid along as the work progresses.

Here is a way to use onions and eggs that tastes much better than it sounds: Cut several onions into thin slices and fry in meat drippings until tender. Just before removing from the stove, break 5 or 6 eggs into the frying pan, add salt and pepper and scramble all together until the eggs are set, then pour out on a hot platter and serve at once.

Farm papers often are useful for reference for several years but when they are allowed to accumulate in the living rooms they cause much needless picking up. If they are tied in bundles according to their dates, with labels for every bundle and a card index indicating the numbers in which articles of special interest may be found, it is not difficult to turn to any article desired without disturbing the papers in other bundles. An old washstand or an out-of-date bookcase would make a good cabinet for holding files of such papers.

When plain sliced tomatoes lose their charm, try serving them with good salad dressing or oil and vinegar. Sliced cucumbers with salt, pepper and vinegar and a few drops of olive oil often agree with stomachs that balk at plain sliced cucumbers and vinegar.

Mrs. Clara Smith.

Chase Co., Kansas.

#### For Your New Voile Dress

9700—Ladies' and Misses' One-Piece Dress. Very charming in its simplicity is this gown of sheer figured voile, which is ruffled about the neck and shirred over the hips for fullness. Sizes 16 years, 36, 38 and 40 inches bust measure.

9720—Ladies' Dressing Sacque or Blouse. Very cool for summer mornings is a flowered lawn sacque like this. It is a pretty design for the sep-



arate colored blouses, also. The three-piece peplum is joined at the regulation waistline without fullness. Sizes 36, 38, 40, 42 and 44 inches bust measure.

9461—Child's Rompers. The waist of this garment is cut in one with the sleeves, and the bloomers are in two pieces. Sizes 1, 2 and 4 years.

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.

### Women's Service Corner

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

#### Grow Tulips From Bulbs

Will the seed in the tulip seed pods grow? If so, when should they be planted?—Mrs. J. J. H.

It is not desirable to try to raise tulips from seed. It may be done but it usually takes a long time to get fair sized bulbs and it is much cheaper and more satisfactory to buy bulbs.—M. F. Ahearn.

#### Oil or Wax Linoleum

What is the best treatment to give linoleum to make it wear? Is it a good idea to oil or wax it? If so, what kind should be used?—T. C. S.

The pattern of oilcloth linoleum will wear much longer if the linoleum is varnished. This should be done about three times a year. The better grades of linoleum which have solid patterns are preserved if they are waxed, as

this treatment makes the linoleum waterproof. Ordinary floor wax should be used.

#### Readings for Young Folks

Where can I get a reading for a girl of 12 or 15 to give? I would like something humorous.—Young Reader.

The Universal Standard Speaker, published by the Winson Publishing Co., of Philadelphia, Pa., contains pieces for all occasions. I am sure you could find the kind of a reading you desire in it. If you do not care to send to Philadelphia for the book you can get it from the Zercher Book and Stationery Co., 521 Kansas Ave., Topeka, Kan. The price of this book is \$1.50.

#### Ways to Make Pin Money

Can you suggest some way for me to make pin money?—A Farm Girl.

There are many ways that a farm girl can make money. Raising pure-bred chickens always proves profitable, if the chickens are properly cared for and fed. If you have an incubator, sell baby chicks. If not, sell eggs for

### \$1200.00 Baling Profit

"I think you can easily pick up \$1200 to \$2000 baling with the Admiral," says Murry Carpenter of Miss Agricultural College. D. J. Collier, Egerton, Mo., made \$49.00 a day with an

### Admiral Hay Press

T. T. Jones, Hickory, Ga., an Admiral owner says he expects to make \$1000 extra this season. John Marks, St. Marys, Kansas, baled 98 bales in one hour, 30 tons in 10 hours. For 30 years the Admiral has been fastest, simplest, most powerful baler made—many doing fast work after 15 years service.

Free Send name for big hay baling profit book and details of our trial offer—cash or time.

ADMIRAL HAY PRESS COMPANY  
Box 109 Kansas City, Mo.

BUY  
**KEY OVERALLS**  
GUARANTEE  
Cut to Fit Better  
If your Dealer is out of your size, write to  
**The McKey Mfg. Co.**  
Kansas City, Mo.

# The TULSA

## —It Speaks for Itself

There is no angle from which you may look at the TULSA that does not impress you with its beauty of line, staunchness of construction and appearance of expensive quality—rarely found in a car of such moderate price.

But the TULSA'S real value is more than paint deep. You can not fully appreciate its sturdy build, the reliability of its STANDARD units and the way it performs under the most trying conditions, unless you give it a close inspection.

Take a ride in it—drive it—then form your own opinion. The TULSA will speak for itself in beauty, comfort, performance, endurance and economy in operation and upkeep.

Write for the Tulsa Catalog and  
Name of Your Nearest Dealer

**TULSA AUTO MFG. CO., TULSA, OKLA.**

Touring Car.....\$1550  
Roadster.....\$1550  
Oil Field Special.....\$1550  
F. O. B. Factory





## Dance to the music of famous bands and orchestras —on the Victrola

The very latest and most tuneful dance numbers, played by musicians who are past masters in the art of delighting dance lovers. All the dash and sparkle and rhythm that make dance music so entrancing. And always ready on the Victrola!

Hear the newest dance music at any Victor dealer's. Victrolas \$25 to \$1500. Write to us for catalogs and name of nearest Victor dealer.

**Victor Talking Machine Co.**  
Camden, New Jersey



**WE PAY THE FULL MARKET PRICES ALWAYS**  
**HIDES AND FURS**  
Green Salt Cured Hides (all weights) No. 1. .14c  
Green Salt Cured Hides (all weights) No. 2. .13c  
Horse Hides, as to size, No. 1. . . . . \$5.00 to \$7.00  
Horse Hides, as to size, No. 2. . . . . \$4.00 to \$6.00  
**T. J. BROWN, 126 North Kansas Avenue, TOPEKA, KANSAS**

## Presidential Campaign Offer Daily and Sunday Capital

**\$3.00 From Now Until \$3.00**  
**January 1, 1921**

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 January 1, 1921, for only \$3.00.

You will now want to keep advised of the respective merits of the different Presidential Candidates who are asking your support in the November Election. You will get reliable information from the publisher, United States Senator, Arthur Capper, and our Managing Editor, Charles Sessions, who are not only familiar with National Politics, but will keep Kansas Readers informed politically of Kansas affairs both State and County through the columns of the Capital each day till January 1, 1921. Mail your check—Do it NOW.

**DAILY CAPITAL, Dept. 6, Topeka, Kansas.**

Enclosed find \$3.00 for which send me The Daily and Sunday Capital until January 1, 1921.

Name .....

Address .....

hatching. And eggs and chickens for food always find a ready market. An ad run in a local newspaper will bring you all the customers you can supply.

Many farm women make their pin money selling cream, butter and cheese. If you live near a town, this would prove exceptionally profitable. Home-canned fruits and vegetables and preserves, jellies or jams always are in demand. If you are handy with the needle or can crochet or knit, you should be able to make spending money in this way. Get in touch with the president of a women's club in your community or in the town nearest you, and ask her to advertise your products or fancywork to the club. You might give her a sample of your canned goods or a piece of your fancywork to exhibit to the members. Conditions in your community should suggest several ways in which you might make pin money.

### Market for Butterflies

Can you tell me where I might be able to sell butterflies?—A Reader.

If you will write to Prof. George Dean, Kansas State Agricultural College, Manhattan, Kan., he will tell you of a market for butterflies.

### Questions Girls Ask

If a boy asked to take me some place, and I didn't know whether my parents wished me to go, would it be all right for me to tell the boy to ask my parents? What should the conversation be when out riding with a boy? Are girls of 15 and 16 too young to go with the boys?—A Farm Girl.

Ask your parents yourself before promising to go. The conversation shouldn't be any different when out riding than it is at any other time. Talk about things in which you are both interested, your community gatherings, church, books or your pets. Girls of 15 and 16 are too young to go with the boys regularly. It is all right for them to go with a boy to a social gathering in the neighborhood occasionally or to visit some of their friends if they go in a crowd. It is never wise for a girl to go riding with a boy, unless she is well acquainted with him.

### Direct Lights Injure Eyes

The kind of lights we use determines to a large extent the efficiency of our eyes. The efficiency of the eye after 3 hours' work in daylight is about 98 per cent. When an indirect light is used the efficiency is about 97 per cent. But when direct lighting is used this efficiency drops to about 15 per cent. Therefore if you would protect your eyes, select the indirect lighting system when you buy rather than the direct.

The intensity of illumination has little effect when indirect lighting is used, but a very great effect when the source of light is in the field of vision. According to Forrest Knapp of the Colorado Agricultural college, the number of indirect lights does not decrease the efficiency to any noticeable degree but when direct lighting is used the efficiency drops rapidly with an increase in the number of lighting units.

### A Whole Meal on Two Burners

A good big cellar and an oil stove are two of the conveniences I have for lightening summer labor. My oil stove is a three-hole one and I have a one- and a two-hole oven. I find I can put a plain cake on the top shelf of my two-hole oven and on the lower a pan of custard and a pan of apples and bake all with the same fire.

I think if women only knew what a fine thing triplicate cooking pans are on the oil stove, few would be without them.

Mrs. N. A. Van Dyke.

### Learning From Nature

Sometimes my spirit weary grows  
Of tasks that seem unending,  
Of cooking, baking, sewing and  
Of sweeping, dusting, mending.

And then I take a little walk  
Into the great outdoors,  
And watch Dame Nature as she works  
About her daily chores.

I notice everything she does  
Brings its reward in season,  
"Perhaps no human effort's lost,"  
I then begin to reason.

Somehow it rests me just to think  
That I am but a part  
Of God's great plan, and I go back  
With peace inside my heart.

—Velma West Sykes.

Write to the U. S. Department of Agriculture, Washington, D. C., for Farmers' Bulletin 839 "Home Canning by the One-Period Cold-Pack Method."

## Farm Home News

In enumerating the many advantages of having a straw stack nearby, we failed to mention one that, at present, is of most service. Guests who had slept in the open during their drive across country preferred to spread their blankets on the stack rather than spend the night in the house. Harvest men have expressed the same willingness and we have gladly provided strangers with necessary bedding for their straw resting place. So long as mosquitoes do not bother the straw stack will probably serve as a bed during dry weather.

When hay frames are not in use they may be utilized for outdoor sleeping purposes. Half a load of hay may be made the substitute for springs and mattress, or springs and straw ticks may be used. It has never seemed advisable to use much good bedding or to undo beds for such temporary sleeping quarters. A few hours spent in out-of-door air are said to represent as much benefit in rest and rebuilding as more spent in the house. Sleeping porches are very desirable.

Chickens, as a rule, do little damage in a garden until tomatoes or berries begin to ripen. English sparrows and rabbits are more destructive. We have been wondering if a scheme used by our people in the North could not be made effective in preventing damage. Some peas were about ready to use, the date was set for the first meal when the grass nearby was mowed. This evidently had served as a screen for the peas and blackbirds were delighted to find them. They ate peas that would have served for many meals. To prevent further damage, the garden manual was consulted. It recommended the use of reflectors. These were tried with marked success. Mirrors, bright tins, lamp reflectors or other bright objects, dazzling in the sun, could be used.

It may be due to lack of observation but at no time in the past can we remember seeing so many June bugs in the garden soil. When hoeing, we have found them about 2 inches in the ground and in great numbers. The young chickens know their location by some means and form a circle, all picking for the defenseless bug. These June bugs, we have just learned, are one form of the grub worm so destructive to sod in lawn and pasture.

Newspaper accounts of big harvest wages have brought men of all descriptions to help, more or less, with the harvest work. In many instances, there are eight or 10 employed. The help in the kitchen is not so easily obtained. Some families have hunted for days to get help in the house and not always succeeded. Little wonder that many farmers can hire only those who will board themselves. Even under the best conditions, the farm woman has need of good health and good management.

A paper pad hung conveniently in the kitchen with pencil attached is a good place on which to list the things needed. The next trip to town will cause no flurried, hasty efforts to think of wants.

One may sometimes prepare the supper before doing the dinner dishes and wash the dishes used with those of the noon meal. If beef, chicken or veal has been the meat served at dinner and no large pieces are left, it may be broken into small, even sized pieces and made into a loaf or set in gelatin. This, chilled, and sliced is very desirable for supper. Boiled ham may be easily prepared and sliced when cold. It will slice best if it has been cooled under a weight. Large hams in this locality sell for 55 cents a pound. The small picnic ham is about half so much or 29 cents a pound. We cannot see that there is that difference in their value. About the cheapest meat, for general use, is the little 8-pound picnic ham.

Added to the meat prepared after dinner for the evening meal, one may make potato salad, pickle beets, prepare rice or fruit and so have little to do for supper when the time comes. After the meal fewer dishes are in need of washing if the preparations are made directly after dinner.

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



# Health in the Family

BY DR. CHARLES H. LERRIGO

**S**ERVICE 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.

## Remedy for Leprosy

A letter has been sent me from the authorities at Washington about a new treatment for leprosy. The sender doesn't say why he sent it, but I suspect that he desires me to translate it into the Kansas language for the benefit of the readers of this paper.

A few years ago Kansas had one or two lepers and we were greatly disturbed about them. Now we have no lepers at all. But leprosy is not such an unusual disease in the United States. At the last published report Louisiana had 87 lepers, California 39, Texas 33, New York 28 and the total for the United States was 250. In our territories there were very many more, Hawaii having 700 and the Philippine Islands 5,500.

So you see we really are very much interested in leprosy and it is as well to know something about any plan that promises to cure this dreaded malady, which has been regarded as a hopeless and incurable plague since early in the world's history.

Doctors of the United States Public Health Service first began to hope that the disease might be cured, from some favorable results obtained from treatment with Chaulmoogra oil.

In order to carry on the work to best advantage they transferred their experiments to Hawaii, where there are a number of leper colonies. L. E. Dean, president of the College of Hawaii, was interested and enlisted the support of the chemical department of the college. By constant experimentation with the Chaulmoogra oil they produced a preparation that could be given without unpleasant effects, and the lepers came willingly for treatment.

In the course of a year's treatment 48 lepers were so greatly improved that they were paroled from the colony. Eight months have passed since then and they have remained free from disease.

This is splendid news about leprosy. It is also a mighty encouraging thing for medical effort in general. To realize that modern doctors are able to work out a cure for a terrible plague that has existed since Bible days ought to give great encouragement to people who feel that disease is a constant menace to happiness. It encourages the doctors to greater effort and puts to silence the scoffs and sneers of those cheap competitors who are profiting by the discoveries of modern science while jeering at the discoverers.

## Questions and Answers

Is it necessary for a little baby to wear wool in very hot weather? Should her feet be covered with wool socks? MRS. J. B.

In hot weather the only clothing needed for a little baby is a diaper and abdominal band which is preferably of wool. Some very nice half wool undershirts are sold that are very light and soft and still answer every purpose. The value of the wool is for its conducting properties and it is not necessary to have a heavy garment. Socks are not needed by a baby in hot weather.

I have been greatly interested in your health talks in the Kansas Farmer and Mail and Breeze and will be grateful for some advice. We have a little child about 2 years old who is bow-legged and being a heavy child it sometimes seems that he is getting worse. What could be done for him and would it be better to attend to it now or wait until cooler weather comes? R. W.

Even in a heavy baby bow-legs does not often occur unless the bones are defective—in other words, the child has rickets or rachitis. The condition needs treatment at once and a large part of the treatment must be directed to general body building. The child should be examined by a doctor and be given an exact diet prescription, also a prescription for medicine since there are several valuable medicines for rickets. The bowing of the legs may call for

some correcting apparatus or it may be of such a nature that it can be remedied by gymnastics. It will not get better by waiting, but may get worse. So you should lose no time in giving the little one the best treatment available, which may necessitate a visit to an orthopedic specialist. I know of none nearer to you than Kansas City, but consult your family doctor first.

## Fibroid Tumors

Will you please tell me about fibroid tumors? What causes them? Is it important to have them removed at once, for instance from the womb? Do they ever disappear without an operation? My mother, during change of life, had a large, hard lump on one side of her abdomen which we all thought must be a tumor altho she never would have an examination, but it disappeared as she got over the change. The doctor says I have a fibroid tumor. Would it be possible for it to disappear too? I dread an operation. Would it be possible to control it by dieting? I am 40 years old. L. C. N.

A fibroid tumor is not of the serious nature of a cancer and does not demand such urgent treatment. I have known women with fibroids to get along very well thru many years. After the menopause they may cease to grow and even diminish in size, tho I doubt

if they ever disappear. The chief dangers of a fibroid tumor are the following: 1. They may cause excessive hemorrhage; 2. They may grow so large as to be a source of much discomfort; 3. They may become malignant.

If you are quite sure that none of these things will happen in your case you may delay action until after the change of life in the hope that the annoyance will then cease. Dieting will not control it.

## Cure for Acne

I am a girl 16 years old and am bothered with a skin disease. Large pimples come on my face and neck and then they fester. They are very sore and ugly. Can you tell me the cure and cause? My brother has the same thing, too. Will you please tell me what will cure him? He is 19. A READER.

The disease is Acne. It is merely a coincidence that you and your brother both have it, as it is not contagious. It is due to inflammation of the oil glands of the skin, those known as the sebaceous glands. Blackheads very often come at the same time. When pus forms in the pimples they become quite painful. The disease is quite stubborn in young persons of the ages 16 to 25. Treatment is not so much a matter of taking medicine as of correct habits and diet. Avoid overeating. Limit sweets, starches and fats. Keep the bowels regular. Take a pool bath every morning and rub the skin vigorously after bathing. The best medicinal treatment is the autogenous vaccine.

Write for  
**FREE Booklet**  
and Name of  
Nearest Dealer

You have put hard work and good money into your crop. Don't rob yourself of your right profit by selling when the market is lowest.

## The Security Granary

Will insure you from fire loss and from damage by rats and mice. And it will save you insurance, storage and hauling expense.

The only granary that really ventilates grain. Corrugated sides 29 times stronger than plain. Strongest roof on the market, with separate rafter frame. Dormer manhole. Double doors. Built strong and good for a life time.

## Mail the Coupon

Metal Products Company,  
401 North Ninth St., Salina, Kan.  
Please send me free Booklet and price, and name of nearest dealer.

Name.....

R.F.D..... Town.....

State.....

**CORN HARVESTER** One man, one horse, one row. Best gathering, best to a Corn Binder. Sold direct to Farmers for \$24.95. Only \$10.00 with 10-day trial. Free Catalogue showing pictures of Harvester. **PROCESS CORN HARVESTER CO., Salina, Kans.**

# You Burn Dollars



# When You Burn Straw

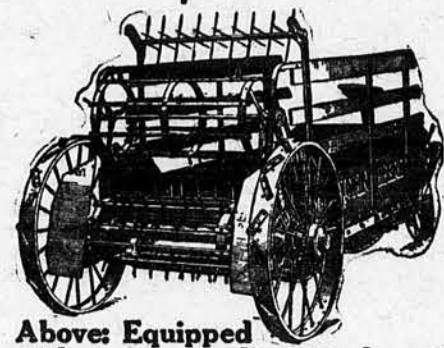
**STRAW** is valuable plant food. Do you know that a ton of straw contains approximately 10 lbs. of nitrogen, 12 to 16 lbs. of potash and from 6 to 7 lbs. of phosphoric acid—equaling in fertilizing value, an average ton of barnyard manure. It will pay you well to spread straw on the land and turn it under. When you burn straw you burn dollars.

There is another profitable way to utilize straw—use it for top-dressing winter wheat, rye, alfalfa, and other crops that are subject to winter killing. It protects the plants' roots; prevents soil-blowing and prevents winter alect and freezing from smothering the plants.

It is neither a hard job nor does it require extra help to spread straw with the

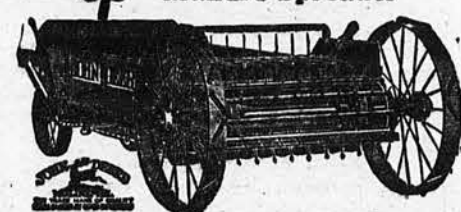
## JOHN DEERE SPREADER

With Straw Spreading Attachment



Above: Equipped with straw spreading attachment

Below: Regular John Deere Manure Spreader



Both manure and straw can be spread perfectly with this machine. One man can put on the straw spreading attachment, load the spreader and spread the straw as heavy or light as desired with no extra help.

The operation is simple—set the feed lever, throw the machine in gear, and drive the horses—no forking required—the feed is automatic. In 30 minutes time one man can take off the attachment preparatory to manure spreading.

Bear this in mind, the John Deere as a manure spreader has advantages you can not get in the

ordinary spreader because the beater is mounted on the axle, a patented feature.

Its box is low down—extremely easy to load, and the drive wheels are high—a distinct advantage. Its beater is on the axle together with the beater drive and main working parts—they can't get out of line to cause binding, heavy draft and breakage.

Another thing, the John Deere is the simplest spreader built—this is one of the important reasons why it gives longer service, costs less to keep in repair, and gives greater satisfaction.

You can't invest in a farm implement that will pay for itself more quickly than a John Deere Spreader with straw spreading attachment. See your John Deere dealer at once about this equipment.

**This Free Booklet will Interest You** It tells all about spreading manure and straw, written by Dr. W. E. Taylor, a practical farmer who has spent years in experimenting. He tells you facts that may be worth many dollars to you. The booklet also fully illustrates and describes the John Deere Manure Spreader and straw spreading attachment. To get this booklet drop a card to John Deere, Moline, Ill., and ask for Booklet 85-511.

# JOHN DEERE

THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS



# Food— the Problem of the Hour

**T**HE need for food has the world in its grip. To produce more food we must depend upon gasoline power on the farm to multiply the efficiency of the man-power available.

The following interesting comparison of man-power vs. machine-power, required per acre is illuminating:

Crop (1 acre)	Man-Hours By Hand	Man-Hours By Machine
Barley . . . . .	64 . . . . .	4.25
Corn . . . . .	39 . . . . .	7.70
Cotton . . . . .	168 . . . . .	79
Hay . . . . .	21 . . . . .	8.45
Oats . . . . .	66 . . . . .	4.25
Potatoes . . . . .	109 . . . . .	38
Rice . . . . .	62 . . . . .	17
Rye . . . . .	63 . . . . .	4.25
Wheat . . . . .	61 . . . . .	4.25

The United States has changed from an agricultural into a semi-industrial nation. Never again will it see the day when 97 percent of its population dwells on farms. Yet the fact remains that the United States must feed itself, and the only way this can be done is through intensive soil cultivation, made possible by automotive machinery.

On the farms of the Middle West the gasoline tractor, truck, and automobile are multiplying the productiveness of man-power, and are doing their part in furnishing an adequate supply of food-stuffs.

Throughout this great section the Standard Oil Company (Indiana) has developed a system of distribution which insures the farmer an adequate supply of gasoline and lubricating oils. This system is based upon huge storage depots, fed from three large modern refineries.

Anticipation of possible difficulties is but one of the many burdens the Standard Oil Company (Indiana) assumes in order that consumers of the Middle West may have their wants supplied.

**Standard Oil Company**  
(Indiana)

910 So. Michigan Avenue, Chicago, Ill.

2104

## For Our Young Readers

### Canning Food and Raising Tomatoes are Real Fun

BY HETTIE PETERS

**I** BEGAN TO TAKE an interest in club work when the Anderson county leader wrote asking our teacher if any of her pupils wished to join in any of the club projects. After receiving my parents' permission I made out my papers and became a member of the tomato club. Later the same leader came to our school to organize the mother-daughter canning club which mamma and I both joined. The next day some of us girls went to a neighboring town to see the first canning demonstration given by Miss Wilson of Manhattan and I have been in the canning club ever since.

I don't remember how many tomatoes I raised that year, but I won fourth place with a prize of \$2. I made

joke on the president of their club that she should send her tomatoes and get the lowest prize of all.

I cleared more than \$113 from my tomatoes this last year and also won a trip to Manhattan. I have held the championship two years. I wish I could try for it again this year but I am too old.

Mamma and I canned 315 quarts of fruits and vegetables last year and 90 quarts of meat. I am raising tomatoes again this year, because I think there is nothing that pays better. I have 24 ribbons—one third, nine seconds and 14 firsts. Part of these were won at our home fair and part at Hutchinson and Topeka.

#### What are the Words?

Can you fill in the missing words, beginning with the second stanza, making the third and sixth lines in each stanza rhyme, and the other lines rhyme with the line following? When you have completed the poem, 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 correct answers.

#### Lilybell's Tea Party.

Out in the shade of an apple tree,  
Lilybell's entertaining at tea.  
Can you guess what she's having for three?  
It's easy as easy can be.

There's marshmallow -----  
Which mother did bake,  
There's ----- and ----- and rice,  
There's a pot of -----,  
And country ham -----  
And a bowl of frozen -----.

There's -----  
And cookies home made  
And chocolate and cocoanut -----  
There's candy and -----  
Oh, my, please, please, please,  
I'm afraid they will surely die,  
Aren't you?



Hettie Peters

up my mind I would do better next time. The county agent and home demonstrator helped me a great deal in my club work. I was chosen a member of the canning team which was to go to Wichita in September. I took part in eight demonstrations before going to Wichita and helped in three there. We gave two demonstrations at the fair in Topeka and one at the high school. We did not win anything, but learned much and had a good time.

The second year two other girls joined the tomato club, but one of them soon dropped out. I worked hard and mamma and papa helped me. I won first place and the other girl won fourth. My net profit was \$24.90. My prize was \$4 and a trip to Manhattan in February.

We had five in our club the next year and had a local leader. We had two meetings at the home of one of the girls and then one at the home of the secretary, where we had ice cream and cake. I had the next meeting at my home and gave the girls all the tomatoes they could eat. My tomatoes were ripe before those of any of the others, the first ones being ready to pick July 14.

Later we had a meeting at the home of the secretary and a picnic at the creek which runs thru our place. I couldn't be present at this meeting because the secretary and I were helping a neighbor cook for threshers. But we came home after dinner and three carloads of us went around to see all the tomato patches. On the last Sunday in August we had another picnic. Some of the boys went to town and brought back a case of pop and some watermelons.

We decided to send some tomatoes to Hutchinson to the fair. Only one of the girls besides myself had tomatoes to send. So I sent tomatoes for the other two and what do you think happened? One of the girls for whom I sent tomatoes won the first prize of \$3 and the other won the second, which was \$2, and the girl who sent her own tomatoes won third and a prize of \$1. I won fourth place and received 50 cents. The girls thought it quite a

Solution June 26 Puzzle—Can you place these correctly? Gobble—turkey, quack—duck, neigh—horse, song—bird, bleat—lamb, whoop—Indian, hum—bee, cry—baby, croak—frog, cackle—hen, rattle—snake, bark—dog. Prize winners are: Lois Greenleaf, Mound City, Kan.; Mabel Smith, Monument, Kan.; Johnnie Schweir, Belvue, Kan.; Glenn Paronto, Morganville, Kan.; Francis Frank, Manhattan, Kan.; Mildred Ploughe, Hutchinson, Kan.

#### Beauty is a Blue Cat

I am 10 years old and will be in the seventh grade this fall. I received the blue ribbon in spelling for the sixth grade last year. I have one brother and two sisters. My brother is 8 years old and his name is Kermit. My two sisters are 14 and 4 years old. Their names are Laurene and Anemone.

Our pets are a little bantam hen, a dog and a cat. The dog's name is Keto and the cat's Beauty. The dog is brown with a white ring around his neck and the cat is blue.

Alta Vista, Kan. Beryl Orton.

Write to the U. S. Department of Agriculture, Washington, D. C., for Farmers' Bulletin 984 "Farm and Home Drying of Fruits and Vegetables."

#### Can You Write Letters?

This department is for our young readers. We're a big family, but your editor likes to hear from you often. We want you to write briefly of your experiences, adventures and interesting happenings in your neighborhood. Or tell of your pets, favorite flowers, what you have noticed about the birds, or an interesting picnic or fishing trip. The most interesting letters will be printed and to the writers of the best ones prizes will be given. Address letters to the Young Folks' Editor, Kansas Farmer and Mail and Breeze, Topeka, Kan.



## Tom McNeal's Answers

### Keeping Up Fences

1. A owns 1 mile of fence which divides his land from a school section which B rents. Should not B buy or build  $\frac{1}{2}$  mile of this and keep that half up? Is B obliged to build fence all around this section, one side of this section abutting on laid out road. Whose duty is it to have fences and gates removed from across such road and can such obstructions be torn down without previous notice to the people who pasture such ground?
2. Are not the railroads obliged to keep or build cattle-guards where the roads go thru?
3. If the county commissioners neglect to clear up obstructions and put the road in a safe and passable condition to whom should the matter be referred? The road was surveyed, laid out and declared open two years ago, and about half put in shape for travel, but nothing except promises have been made in the last year, so I am put to great inconvenience to reach a traveled road.
4. Is a public or private individual permitted to let cattle run loose on such a road?

COLORADO SUBSCRIBER.

I do not happen to have the statutes of Colorado at hand. It is possible that a different rule may apply in Colorado in regard to the building of fences from that which prevails in Kansas. Unless the law is different in Colorado from the law in Kansas, however, B, as a renter, would not be obliged to build the fence.

In regard to the removal of fences which obstruct public roads, there may again be some difference in the statutes of Kansas and Colorado. In Kansas, if the road is a county road, it will be the duty of the county commissioners to order the obstruction removed. If not a county road, it would be the duty of the township highway commissioners to see that the obstructions are removed.

If a proper legal notice is given for the opening of a road, unless there is some statutory provision to the contrary, it would become the duty of the person to immediately remove the obstruction, and if he did not, anyone might remove it without giving him any further notice.

Railroads in Kansas, and I presume in Colorado, are required to put in cattle-guards on crossings.

In this state, cattle are permitted to graze on public highways. The owners of such cattle, however, would be responsible for any damage they might commit by breaking thru fences into privately owned land, and if the cattle themselves are harmed while pasturing on public highways, it would make a difference about the collection of damages.

### About Banks

1. What is the difference between a state bank and a National bank?
2. Are deposits safer in a National bank than a state bank?
3. Are deposits safer in a bank with a larger capital than a small capital?
4. Is a certificate of deposit safer than a savings account?
5. Are deposits guaranteed in all state banks?

P. L. C.

1. State banks are chartered under the state laws and are under control of the state banking department. National banks are established at the present time under the operation of the Federal Reserve Banking act, the management of one is state, while the management of the other is National management.

2. Deposits are not necessarily any safer in National banks than in state banks.

3. The deposits are not necessarily safer in banks of large capital than in ones of smaller capital. The safety of deposits depends upon the integrity and efficient management of the bank, not upon the size of the capital.

4. A certificate of deposit should not be any safer than a savings account and I know of no reason why it is any safer.

5. No. Deposits are not all guaranteed in state banks. Our guaranteed deposits law does not require banks to come under the law. A little more than 60 per cent of the state banks operate under this law and somewhere in the neighborhood of 40 per cent do not.

### Our Best Three Offers

One old subscriber and one new subscriber, if sent together, can get The Kansas Farmer and Mail and Breeze one year for \$1.50. A club of three yearly subscriptions, if sent together, all for \$2; or one three-year subscription \$2.

More farm workshops are needed.

# FAIRBANKS SCALES



## Don't Guess at Your Farm Profits

**MANY A FARMER** is losing money every year without knowing it through "estimating" the weights of his stock and produce, or through accepting the buyer's weights.

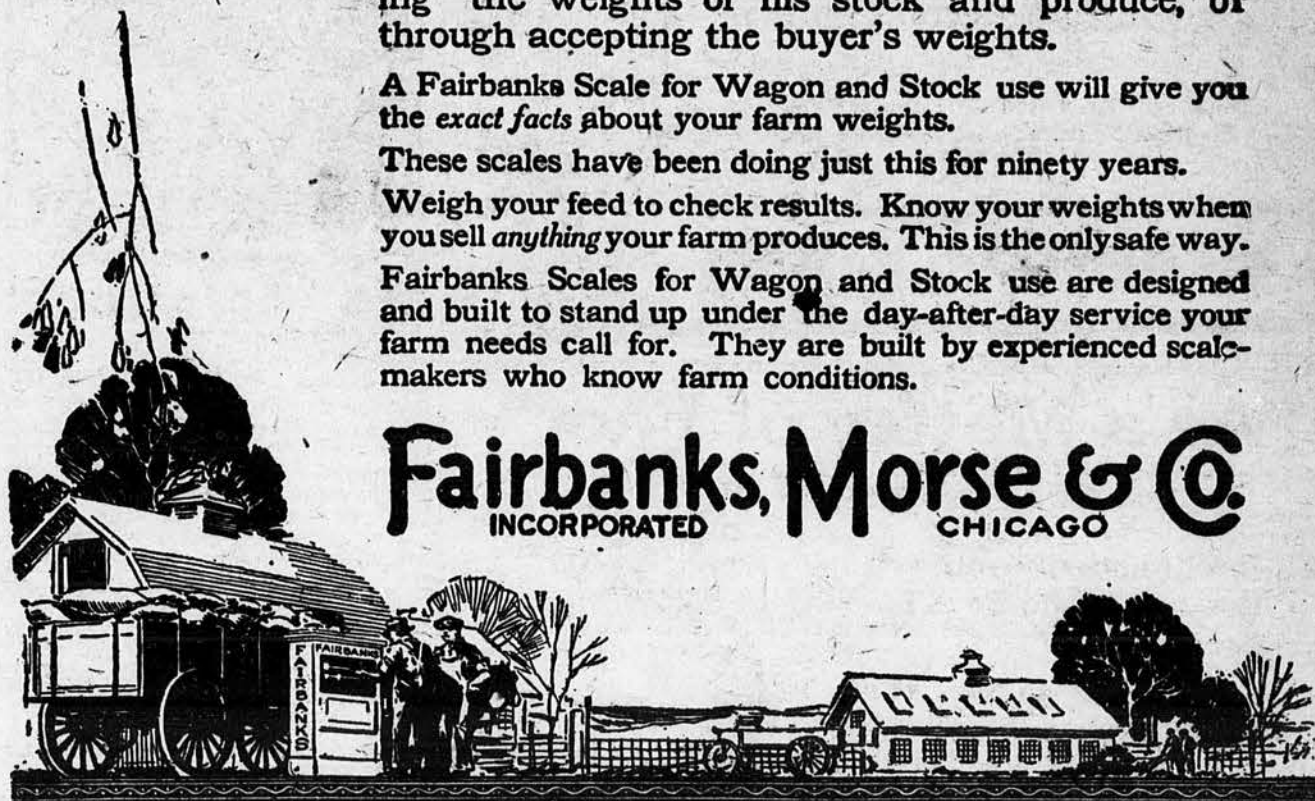
A Fairbanks Scale for Wagon and Stock use will give you the *exact facts* about your farm weights.

These scales have been doing just this for ninety years.

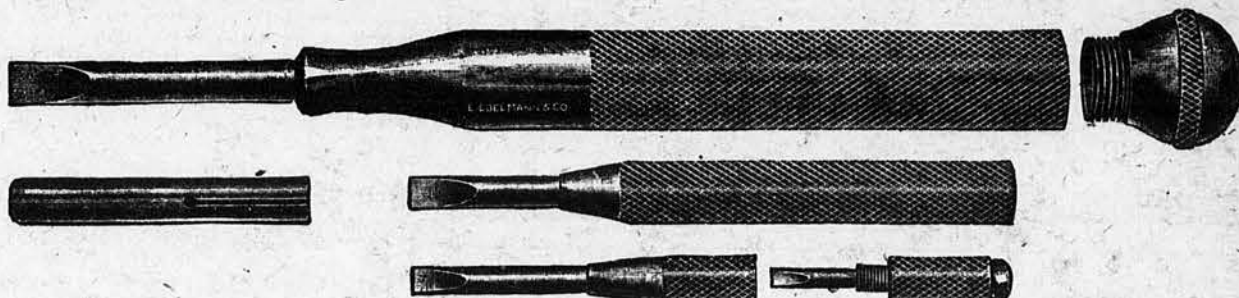
Weigh your feed to check results. Know your weights when you sell *anything* your farm produces. This is the only safe way.

Fairbanks Scales for Wagon and Stock use are designed and built to stand up under the day-after-day service your farm needs call for. They are built by experienced scale-makers who know farm conditions.

**Fairbanks, Morse & Co.**  
INCORPORATED CHICAGO



## The Handy Four-in-One Screw Driver



### A Mighty Handy Tool, Indispensable For Light Machinery and Automobiles

The largest screw driver measures 6 inches in length; three smaller screw drivers fit into the handle. **FOUR COMPLETE SCREW DRIVERS IN ONE.** All blades made of the best grade steel, highly polished and hardened. The entire screw driver is beautifully nickel plated all over. The most complete and practical screw driver ever offered. Nothing more convenient for the office, store or home, and it fits nicely into the automobile tool kit. Every auto owner will want one.

### SPECIAL 10-DAY OFFER

We will send this four-in-one screw driver postpaid with a one-year subscription to Kansas Farmer and Mail and Breeze for only \$1.15 or with a 3-year subscription at \$2.15.

KANSAS FARMER AND MAIL AND BREEZE,  
Topeka, Kansas.

Enclosed find \$..... for which enter my subscription for a term of ..... years and send me the four-in-one screw driver postpaid.

Name.....

Address.....

State whether subscription is new or renewal.





### A New Trail Toward Tire Perfection

Just as the prospectors of '49 blazed a new trail toward fabulous wealth and a country of undreamed of riches, The Overland Tire & Rubber Co. is blazing a new trail toward tire perfection.

The Overland Tire has many extraordinary features. For example, the Ford sizes are so constructed that bead trouble, so common among other makes, is unknown.

Likewise, no bead trouble with the straight side Overland Tire. This is because the Overland bead is of twisted cable instead of single piano wire. A cable of strong small wires is much more endurable than the single wire. Also more flexible.

If your local dealer cannot supply you, write direct to the factory giving us his name and address.

OVERLAND TIRES CERTAINLY DO WEAR  
The Overland Tire & Rubber Company  
Omaha, Nebraska

Dept. J.

**OVERLAND TIRES**  
"PIONEERS OF ENDURANCE"

## "As a Matter of Fact"

says the Good Judge

It will actually cost you less to use the Real Tobacco Chew.

Any man who uses the Real Tobacco Chew will tell you that.

The full, rich taste lasts longer—and a small chew gives more genuine satisfaction.

Put up in two styles

RIGHT CUT is a short-cut tobacco

W-B CUT is a long fine-cut tobacco

Weyman-Bruton Company, 1107 Broadway New York City



## BOVEE FURNACES

Pipeless, Central Heating and Regular Piped

25 Years on the Market

ABSOLUTELY HIGH GRADE  
THE BEST MANUFACTURED

Write for our Catalog and Special Manufacturer's Prices

BOVEE FURNACE WORKS

188 W. Eighth St.

Waterloo, Iowa

## With the Capper Calf Club

A Club Paper is the Latest Thing in Pep

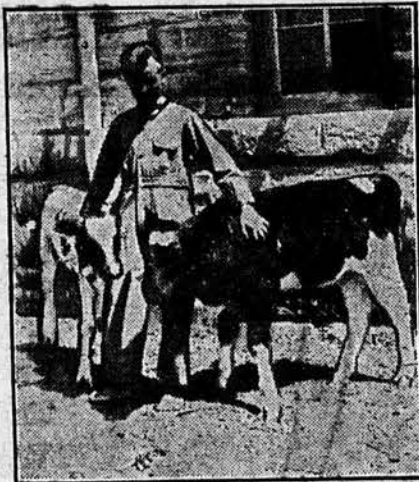
BY EARLE H. WHITMAN  
Club Manager

I HAVE a great deal of admiration for a county club which has pep enough to settle down to work and get out a monthly club paper. As a rule, the county leader has to do more than his or her share of the work but it's for the glory of the club in general and every member should help. The first club paper to be started by a Capper Calf club leader is "The Pep Leader," gotten out by Clarence Utz of Meade county. On this first issue Clarence did all the work, but he plans to have contributions from every club member in Meade county for the next issue. This issue is a mighty neat one, even if it wasn't possible to get a typewriter. "Next month," says the editor, "the paper will be larger, and it will

in from the garden, she said: 'Mother, I don't think your radishes are purebred. I found a red one in a row of white ones.'"

"If we are going to make any showing in our club work this year we will have to get to work, and work hard. There is no use saying that we can't do anything, because we can. Of course, if we don't do anything, and just put off trying until the last month or so, there isn't any use trying. You will probably say, 'What can we do?' Well, here are several things: 1. Come to all our meetings. Tell everybody about the meetings and try to get them to come. After we get them there, let's get them so interested in our club work that they will be eager to come to all the rest of our meetings. 2. Send in all your reports on time. 3. Help all you can to make our programs interesting. 4. Help all you can in the work of getting up our club paper. 5. Think up new club yells, and then help yell them. 6. Try to get new members. 7. Think up new ideas to help out. 8. Help to make our business meetings snappy. If other folks can win, why can't we?"

I have another club paper on my desk—the "Calf Club Special" issue of the regular Linn county Capper clubs paper, "Pinfeathers, Hog Bristles, Hoof and Horn." The issue is one of the best-appearing club papers I have seen. Like the Butler county paper, it is typewritten. The editor is Mrs. C. T. Horton, a member of the mothers' division of the poultry club. I promised the editor I'd hold down this calf club story, or I'd quote some of the many good things from the Linn county paper.



Kenneth Graham, Russell County.

be typewritten if a machine can be procured. This month's paper is free, but future issues will be 5 cents a copy."

Under the heading, "Who Will Win the Pep Trophy?" this hustling editor writes: "Clubmates, we are going after that cup full force. We assure you that all competition for all prizes will be clean on our part, and we feel that you are doing the same for us. Let us all do our best to win a prize, but if we are unlucky let's take it in the right way and congratulate the winner." Clarence certainly deserves the complete co-operation of every Meade county boy and girl, and I hope to see the paper become the success it deserves to be.

### Butler's Awake, Too

Down in Butler county a new club paper has put in an appearance, and it's something of which not only the members in that county but in the entire state may be proud. "The Barnyard Magazine" is a monthly published by the Capper Calf and Poultry club members of Butler county. The editor is Myrtle Dirks, poultry club leader, and the ability this girl shows is much above the ordinary. The first issue is in magazine shape, with home-illustrated cover, and typewritten as neatly as many a highly-paid stenographer could have made it. The following are items of interest to calf club members, and I want you to read the last one, with especial care:

"The poultry and calf club members have decided to hold joint meetings, and have just one set of officers for the two clubs. The officers elected at the last meeting are Eva Leatherman, president, and Dorothy Dirks, secretary."

"John Dirks has just returned from Manhattan, where he has been attending the Kansas State Agricultural college. He seemed glad to get home, but we think he was more eager to see his calves than his folks."

"Eva Leatherman has lost one of her contest calves, but it was not the purebred one. Her calf is such a fine one that she can't find a name that is good enough for it, so she just calls it 'My Calf.'"

"Little Jennie Dirks has been hearing so much about purebred stock and chickens that one day when she came

### Want a Paper in Your County?

Now, you counties that aren't showing any special life, what do you think of the work being done by Meade, Butler and Linn? As Myrtle Dirks says, "If other folks can win, why can't you?" I shall be very glad indeed to give any county leader or club member advice and assistance in starting a club paper. I know of no better way to arouse interest in the club work among boys and girls who aren't members now. The Capper Calf club has many advantages over the other Capper clubs, for it can profit by the many ideas thought up by the older clubs.

Do you know, the club manager is tempted to open the contest for the pep trophy to all calf club members, no matter whether there is more than one in a county. Last year, over in Missouri, the pig club pep trophy cup was awarded to a boy who had no teammates because the club manager felt he most deserved the honor. I can safely say that if some Capper Calf club boy or girl shows an unlimited amount of pep and makes the number of points necessary, that member will be fully considered when the trophy is awarded. So look up the club story which gave the list of points, and keep account of your score.

We have with us this time another fine-looking club member and his calves. This chap is Kenneth Graham of Russell county, and he's the only club member in that county who hasn't Angus calves. Kenneth and his Holsteins are showing pep, tho, and it will hurry his teammates to keep up. And by the way, girls, aren't the boys getting ahead of you in the picture line? I'm sure we've shown more boys than girls in the club story.

### Cattle Values in South Africa

A summary of the sales lists of the various purebred cattle consignment sales held in South Africa during 1919, gives the following averages and top prices:

	Average	Highest price
Holstein bulls.....	\$800	\$17,000
Holstein females.....	765	2,100
Ayrshire bulls.....	120	350
Ayrshire females.....	225	700
Shorthorn bulls.....	505	4,750
Shorthorn females.....	815	3,125
Aberdeen Angus bulls.....	508	1,550
Aberdeen Angus females....	540	2,000



# Feed Sorghums With Care

Cattle are Sometimes Killed by Forage Poisoning

BY R. L. HENSEL

**C**ONDITIONS under which sorghums are poisonous are not fully understood and for this reason it is not possible to make a definite statement about the matter. However, the fact that sorghums produce an active poison is known. This poison is Prussic acid which is also correctly called hydrocyanic acid. The amount actually produced in the plant varies greatly and it is this factor of great variation that makes the use of preventive measure so difficult. We never can state definitely that a field contains the acid unless we make actual tests and often we cannot find any traces of it when under other similar circumstances there was plenty of it. We cannot say either that one variety contains a greater amount than another. Recent tests made by the Florida Experiment station showed that some varieties were entirely free while others contained as high as 37 ten thousandths of 1 per cent of the poison. The Nebraska Experiment station made several analyses which showed that some plants may contain as high as 14 one thousandths of 1 per cent. These figures are so small that they do not mean much without some explanation. It takes about 9-10 of a grain—about one four-hundred and fiftieth of an ounce—of pure Prussic acid to kill a man while 1-50 of an ounce is enough to kill a steer. As a result of the extremely violent nature of the poison it will be seen why only a small per cent in the plant may produce such havoc with livestock.

## Amount is Often Small

Under ordinary circumstances there is not enough poison present to be injurious. It is in only very rare and extreme cases that enough is produced to kill stock. Very often peculiar things occur in connection with sorghums that contain the acid. For example in 1919 the Kansas Experiment station at Manhattan analyzed some Sudan grass which was grown on the college farm. It contained a fairly large amount of Prussic acid but all efforts to kill stock by feeding the grass to them failed. The animals not only liked it but got fat on it.

The outstanding points in connection with sorghum poisoning are first, that the production of poison is greatest in those plants that have been stunted thru lack of rainfall and second, that the danger from poisoning is considerably less in the cured hay.

Since the amount of poison is greatest in stunted plants it never is advisable to pasture or to cut a field in this condition. Practically all of the poisonings that occur take place under just these circumstances. When it is noted that all or part of a stand is stunted there is but one safe thing to do and that is to keep the stock off until by a trial with some inferior or worthless animal you are able to determine definitely that the plants are not poisonous. If the plants do show by their effect on the trial animal that they contain enough poison to be injurious the field should be permitted to mature or nearly so and should then be cut for hay. The curing should be done slowly as by this means most of the poison is passed off.

## What Experiments Show

Experimental data has shown that certain carbohydrates, the sugars and starches, when mixed in with the green material hold back or prevent the liberation of the Prussic acid. Since concentrated feeds such as the grains, contain these carbohydrates it was decided to try feeding them before turning stock into fields that were known to be poisonous. The results were so gratifying that it is now recommended that on suspected fields, the animals be given a grain ration immediately before being turned in. The partially digested grain seems to act as an antidote. That this was true was pretty well proved by the Nebraska Experiment station by feeding doses of Prussic acid and glucose sirup to some stock. The doses were all large enough to prove fatal but in all cases the animals recovered. This has led that station to recommend the use of glucose

sirup as an antidote in cases of poisoning thru feeding sorghum forage.

The amount of actual poisoning that takes place is so small that it is foolish to waste any time in debating whether it is safe to plant the crop. Only one case was called to the attention of the Kansas Experiment station in 1919. This was on a field of Sudan grass. An examination made very shortly after the poisoning showed that there were two distinct growths in the field. One was perfectly normal and the other was decidedly stunted. Both kinds were analyzed and it was found that the stunted grass ran so high in Prussic acid that the feed was indeed dangerous. In fact it was so fatal that two cows from a lot of seven cows that were put into the inclosure died in a very short while. Other animals were stricken but they recovered.

On the other hand more than 100 inquiries were sent out by the college in the winter of 1919 to men who were using Sudan grass asking them if they had had any losses occur from the use of it as pasture. They were also asked if they fed cattle in any particular way before turning them in. In all cases

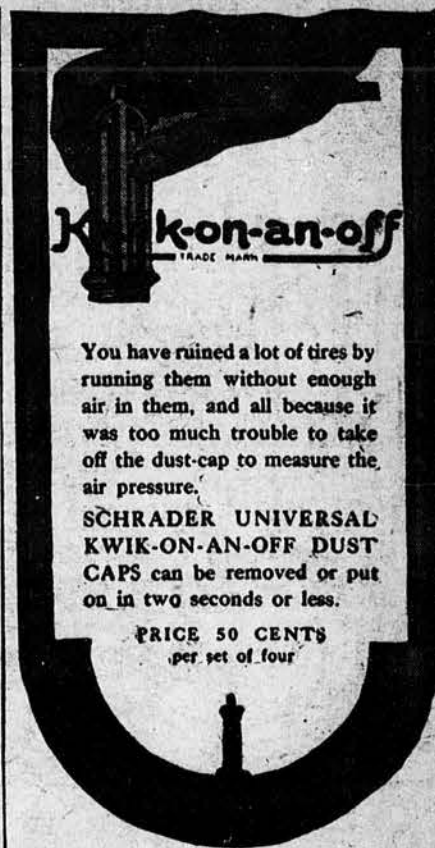
the replies stated that neither poisoning nor bloating occurred and that stock were turned in in just the same manner that stock were turned into other pasture. It might be well to state here, however, that it is a good plan to leave stock in Sudan pasture for only a short while the first day or two in order to overcome any possible danger of bloating.

There is no way in which the presence of Prussic acid can be detected easily in the field. A laboratory analysis is necessary to determine this but there is said to be a very bitter taste to the leaves of those plants which are high in acid content. This test can be used as a rough guide. There is scarcely any danger that poisoning would occur to man if a small amount of even badly affected sorghum were tasted.

There is a mistaken notion prevalent that by mowing the first crop, danger of poisoning in the subsequent growths is removed. Second growth sorghums have been found to contain large quantities of the poison. Frosted plants are also unsafe and should not be used.

Perhaps the best way to test out a suspected field is to put in a worthless or less valuable animal, watching it closely for a few hours. If no signs of poisoning are noted it may be considered fairly safe for other stock. Just as soon as signs of distress are noted in the test animal it should be removed

(Continued on Page 27.)

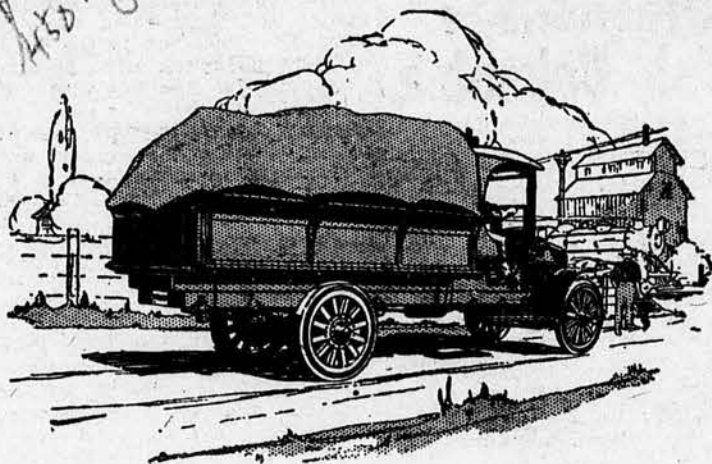


**Kwik-on-an-off**  
TRADE MARK

You have ruined a lot of tires by running them without enough air in them, and all because it was too much trouble to take off the dust-cap to measure the air pressure.

**SCHRADER UNIVERSAL KWIK-ON-AN-OFF DUST CAPS** can be removed or put on in two seconds or less.

PRICE 50 CENTS per set of four



## Diamond T Farm Special

Built to meet actual farm conditions. Because of its unusual power and endurance; economy; freedom from the need for repairs; long life; low final cost; progressive farmers call it, "The greatest thing that ever took the place of horses".

You owe it to yourself to learn more about high-grade motor trucks, for every cent they save from your cost of production and distribution is added directly to your profits. Write for the 32-page book that describes the Diamond T Farm Special—almost 100 interesting illustrations and clear explanations of features every farmer should know. Your name on a postcard will bring it—free.

**DIAMOND T MOTOR CAR CO.**

4552 West 26th Street



Chicago, Ill.



# KILLS DROVES OF DEADLY FLIES AT ONE SHOT

Mosquitoes and Many Other Vicious Insects Are Destroyed By Hofstra Gun

Kill a hundred flies with a Hofstra gun, with no more energy than it takes to "swat" three of the filthy things.

Flies carry death and disease wherever they go. Kill them by wholesale. Poisons are dangerous to children and grown-ups. Sticky flypaper "messes." And flies can escape these methods. But they can't escape Hofstra.

## How Gun Works

This yellow, round gun works like a bellows. A slight pressure of the thumb sprays Hofstra powder into the air. It floats everywhere. Flies breathe it into their bodies through



The Non-Poisonous Insecticide

the pores of their skins. That kills them. They can't fly high enough in a room to get away from it.

## Ford Plant Big User

Hofstra is absolutely harmless to humans and other lung-breathing creatures. Used in the big Ford plant at Detroit, National Moose Home, Mooseheart, Ill. Tuberculosis Sanatorium, Mt. Vernon, Mo., and many other institutions. Kills mosquitoes, ants, bed bugs, chicken mites and lice, garden pests and many others.

Buy the loaded gun at grocer or druggist for 15 cents. Cheaply refilled with package Hofstra in 25c, 50c and \$1 sizes. If dealer can't supply you, send 15 cents to us and we'll mail direct. HOFSTRA MFG. CO., 204 N. Cheyenne, Tulsa, Okla.



# Deafness



Perfect hearing is now being restored in every condition of deafness or defective hearing from causes such as Catarrhal Deafness, Relaxed or Sunken Drums, Thickened Drums, Roaring and Hissing Sounds, Perforated, Wholly or Partially Destroyed Drums, Discharge from Ears, etc.

**Wilson Common-Sense Ear Drums**  
"Little Wireless Phones for the Ears" require no medicine but effectively replace what is lacking or defective in the natural ear drums. They are simple devices, which the wearer easily fits into the ears where they are invisible. Soft, safe and comfortable. Write today for our 168 page FREE book on DEAFNESS, giving you full particulars and testimonials.

WILSON EAR DRUM CO., Incorporated  
974 Inter-Southern Bldg. LOUISVILLE, KY.

## Get this Book!

Send today for this FREE Book! Tells you "How to Feed Hogs for Bigger Profits." Thousands of farmers have profited by the facts in this book and are getting quicker fat, earlier marketing and bigger profits from hogs at a remarkable savings in feed costs. Saves you cost of high priced grains.

## Semi-Solid Buttermilk

"The Best Hog and Poultry Feed on Earth."

Pure, rich Buttermilk, fresh from the churn. Not "Modified" Buttermilk. Water only is taken out; nothing added. No other feed approaches it in feeding value for Poultry and Hogs. Endorsed by State Experimental Stations. Write at once. Consolidated Products Co. Dept. 511, 4 Lincoln, Nebr. John F. Moore, Dwight Bldg. Dept. 511, Kansas City, Mo.



# The Wonderful Attractions of British Columbia

Few countries possess all the conditions for happy, prosperous living as does British Columbia. The varieties of climate and soil offer inducements for almost every branch of agriculture. Whether in the warm interior valleys, the rich grazing table lands or the fruitful lowlands of the coast or Vancouver Island, the advantages offered for

## Dairying, Fruit Growing and Stock Raising

are such as must appeal to those who wish to improve their circumstances and at the same time live in a country of delightful climate, magnificent scenery, varied resources, progressive people and abundance of opportunity for development. British Columbia—the playground of America—is already famous for the production of its orchards, fields and dairies. Now is the time to learn about this wonderful Province and share in its possibilities. Its industrial life—mining, lumbering, fishing, manufacturing, transportation—assures a ready market at good prices for all the farmer can produce. Schools, churches, railways, roads, telephones, all the conveniences of an old land await you in this new Province of Opportunity and Success. For illustrated literature, maps, etc., write Department of Immigration, Ottawa, Can., or

F. H. HEWITT,  
2012 Main St., Kansas City, Mo.

Canadian Government Agent.

# Ground Limestone

For Agricultural Purposes

Write for price and FREE sample.

DOLESE BROS. COMPANY  
12 S. La Salle St., Chicago, Illinois  
Plant Eldorado, Kansas



## A Good Razor Given

With Your Order For Kansas Farmer and Mail and Breeze

We guarantee this razor because we know they have the material and workmanship that will please every man. Only the immense quantities we use enable us to make this liberal offer. The blade is of the finest razor steel, 5/8-inch wide, highly tempered and polished, hollow ground and sharpened ready for use. Handle is of the ever-serviceable white hard rubber. A superior razor in every respect.

## 10-Day Offer

We will send this razor with a one-year new or renewal subscription to Kansas Farmer and Mail and Breeze for only \$1.50 or with a three-year subscription at \$2.50.

Kansas Farmer and Mail and Breeze, Topeka, Kansas.

Enclosed find \$..... for which send me your paper for the term of ..... years and the razor prepaid as per your special offer.

Name.....

Address.....

# Capper Pig Club News

Should a Boy With Nine Pigs be Discouraged?

BY EARLE H. WHITMAN  
Club Manager

THE contest for the pep trophy, and the fine fellowship and teamwork that result, constitute an exceedingly important part of Capper club work. There is no greater honor to be won by club members than the beautiful pep trophy and the accompanying knowledge that you and your county have distanced every other county in the state. After all, tho, training boys to become better livestock men and thereby improving the farming industry of the state is just as important as anything else, and club members must not lose sight of this.

"I guess I will drop out of the Capper Pig club because there are only two in the club, counting myself. If any more go into the club next year I will join again." How many pigs do you suppose the boy who wrote that has? Nine! Now, what do you think of that? This boy has lost sight of the many cash prizes that may be won, and the experience to be gained from club work, no matter whether he has any teammates. "I wish there were some more boys in the club in this county," writes another boy, "but as there aren't I'll just work that much harder and show them what they're missing." This boy is the kind that will win, no matter what he takes up. You can't let someone else do your work, and any boy who has nine pigs, or any other number for that matter, and decides to drop contest work, is beginning the formation of a mighty bad habit. Stick to the game, fellows. "You win even if you lose," is the motto of many club members.

## A Prize for Poland Boosters

Talking about prizes, here's one that should make Poland boosters sit up and take notice. Fred B. Caldwell, Topeka, Kan., Route 8, writes the club manager that there's a \$50 Poland China gilt for Capper Pig club boys to compete for. Mr. Caldwell states that this gilt will be given either by himself or by the Kansas Poland China Swine Breeders' association. Isn't that welcome news? The club owes Mr. Caldwell a sincere vote of thanks. This prize is for competition by all Capper Pig club members who have Poland entered in the contest, and will be awarded to the boy having the highest grade at the end of the club year, December 15. And don't forget, you Duroc and Hampshire enthusiasts, that D. O. Bancroft of Osborne, Kan., will give a \$50 Duroc gilt, and that the Kansas Hampshire Swine Breeders' association has offered a Hampshire gilt of the same value. Now let's have prize offers from the Chester Whites and Spotted Polands.

"Making monthly reports is a little

extra trouble, but it's worth it," comments a club member. I believe every boy will agree with him. Next December we're going to have the highest percentage of members turning in complete contest records that the Capper Pig club ever has known. The monthly report system is eliminating the small errors that may easily creep in unless a monthly check-up is made. And let me tell you, fellows, the reports cause the club manager much extra work, too, but it's all worth while. New feeds and their values afford numerous problems, and I think it will be well for all members to know of such rulings. For instance, there is no contest price for cornchop. After talking this over with an experienced hogman, I've decided that members should count cornchop at the same rate given for shelled corn, \$2.75 a hundred pounds. Then, there are the rabbits that some boys are giving their hogs. Let's count them at 5 cents apiece, and they're easily worth that, for they take the place of tankage to some extent. Be careful about feeding rabbits, tho, for they must be fresh and should be given as regularly as possible. Another thing, if you're buying feeds in hundred-pound lots it isn't necessary to weigh every feed in order to be able to tell at the end of the month the exact quantity fed during the preceding 30 days. Simply estimate as accurately as possible, being careful to see that your estimates total up right; that is, if you estimate that 35 pounds have been fed at the end of the month from a hundred-pound sack of shorts, be sure to count only 65 pounds on the following month's report.

As I write this, letters are pouring in on every mail, ordering stationery, voting for breed club officers, requesting pedigree blanks, thanking me for the club buttons, telling about sows and pigs, and in fact containing mention of everything club members are doing. What an interesting thing it is to be in such close touch with a fine lot of chaps such as we have in the Capper Pig club, and what a busy time it is for everyone! Club members are doing men's work on the farm, but they're not permitting themselves to neglect their club work. At the end of the year they'll be glad they stayed with the game. And there's still time for county meetings.

"We held our meeting the 19th," writes County Leader Carl Dews of Osage. "We had a fair attendance, even if the weather did look bad and it was a busy time. The dinner was served in cafeteria style and we ate under a large elm tree. About 4 o'clock it began to rain. We plan to have our



James Grimes of Coffey County, With His Poland China Entry. This Chap Learned How to Raise Hogs by Caring for Runty Pigs.



next meeting with the Shawnee county club if it can be arranged."

This report comes from Gilbert Shuff, Reno county leader: "Our last meeting certainly was a fine one. We had more grunts than cackles present, as there were five pig club members and two poultry club girls. And, say, I certainly liked the pig club button, and will wear it where everybody can see it."

Other club members are proud of their buttons, too, and I'm sure that no member will appear at a meeting this month without a button. All over the country, also, will appear the breed club cards. If you didn't get a button or card, write the club manager about it.

Some hogs I'm showing you this time aren't they? Some boy, too, for James Grimes is making the finest kind of showing, both with his hogs and in the big fight Coffey county is putting up for the pep trophy. I'll wager you can't guess this chap's nickname. Give it up? Well, it's "Pivot, Jr.," and he gets it from his older brother who was called "Pivot" when he played football.

### Feed Sorghums With Care

(Continued from Page 25.)

and given a dose of corn sirup at once.

The usual symptoms of poisoning may be divided into three stages about as follows: First, the animal appears to be bewildered, the breathing is difficult and the pulse is slow. In the second stage the pupils dilate, vomiting occurs and the animal may utter loud cries. There may be spasmodic and involuntary discharge of urine and feces. The animal may fall unconscious and have convulsions. The last stage is characterized by complete collapse, spasms, general paralysis and death. The poison acts very rapidly and any treatment contemplated must be given in the early stages.

The following precautions in the use of sorghums may be of value:

Don't pasture sorghums that have become stunted thru lack of rainfall without first testing the field out by putting in a less valuable animal and watching it closely for a few hours. If no signs of distress are noted the field may be considered safe. If, however, you wish to play doubly safe, give the animals a grain ration immediately before turning them into the pasture.

Don't cure suspected sorghums that are cut for hay too rapidly. The slower the curing is done the greater will be the amount of poison that is removed.

Don't pasture frost bitten sorghums.

Last and most important, don't be afraid to plant sorghums because they sometimes poison stock. The value of sorghums on Kansas farms is so great while the danger is so small, that a much larger acreage should be planted. We never have stopped smoking because tobacco contains an active poison and we never have stopped feeding forage to animals because every now and then some animals die from "forage poisoning." It would be just as logical to be afraid to plant sorghums on account of the occasional cases of poisoning as it would be to stop raising cattle because every once in a while one is killed by lightning.

### KANSAS MAP TO READERS

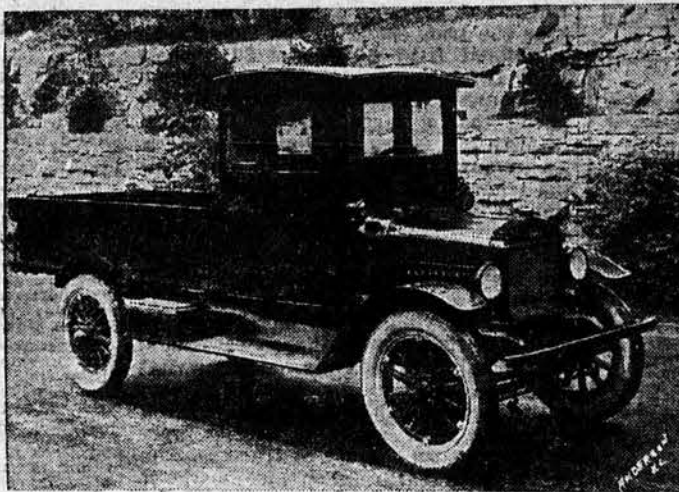
We have arranged to furnish readers of Kansas Farmer and Mail and Breeze with a big three sheet Wall Map of Kansas. This large map gives you the area in square miles, and the population of each county; also name of the county seat of each county; it shows the location of all the towns, cities, railroads, 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 \$1.25 to pay for a one-year new or renewal subscription to Kansas Farmer and Mail and Breeze. Or given with a 3-year subscription at \$2.25. Every citizen of Kansas should have one of these instructive wall maps. Address Kansas Farmer and Mail and Breeze, Topeka, Kan.—Advertisement.

Many thousands of small farm orchards will be set next year, if the letters being received by the Capper Farm Press are any indication.

It pays to keep the farm buildings well painted, even if the prices of paints are high.

# Stewart

## MOTOR TRUCKS



### Ready to Go!

This Stewart one-ton truck is specially equipped to get your wheat to market at the lowest possible cost: Electric lights, electric starter, magneto ignition, pneumatic tires and a three-in-one farm body.

Do you know it costs you 29 cents per ton per mile to haul your wheat in the old farm wagon and only 14 cents per ton per mile in a motor truck?

Can you afford not to own a motor truck?

See the Stewart dealer in your territory or write us direct.

### The Following Are Authorized Stewart Dealers in Kansas:

Harding Wheel Co., Topeka  
E. G. Bolz & Son, Wichita  
Johnson Sales Co., Ft. Scott  
C. A. Leonard, Eldorado  
F. A. Louis, Colby

Heck Bros., Beloit  
Agnew Auto & Tractor Co., Salina  
Graber Supply Co., Hutchinson  
T. E. Robertson, Smith Center  
Chestnut & Chestnut, Clay Center

## R. W. WILSON MOTOR COMPANY

Western Missouri  
Kansas  
Oklahoma

Distributor

Stewart Motor Trucks

1414 McGee Street  
Kansas City, Mo.

## 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.

**SAVES  
TIME  
TROUBLE  
AND  
EXPENSE**

Kansas Farmer and Mail and Breeze  
Topeka, Kansas

Enclosed find ..... for which please enter the following subscriptions

to Kansas Farmer and Mail and Breeze for the term of .....year.....

Name ..... R. F. D..... Box.....

Postoffice ..... State.....

Name ..... R. F. D..... Box.....

Postoffice ..... State.....

Name ..... R. F. D..... Box.....

Postoffice ..... State.....

One  
Year  
\$1.00  
Three  
Years  
\$2.00



## Bickmore's Gall Cure



### Keep Your Horse at Work!

Don't lay him up for sore shoulders, saddle galls, etc. Use Bickmore's—cure him while he works! Your money back if it fails. At all dealers. Also ask for Bickmore's Horse Liniment. For yourself, always keep handy Bickmore's XYZ Skin Ointment and Bickmore's XYZ Family Liniment. Ask your dealer for them.

## Cash for Bags

Don't throw them away. Save them and ship to us. We'll pay you HIGHEST MARKET PRICE. Get your neighbor to ship his bags with yours. 50 years in business.

FULTON BAG & COTTON MILLS  
580 S. Seventh St. St. Louis, Mo.

## IOWA AUCTION SCHOOL

### GREATEST AUCTION SCHOOL ON EARTH

Learn to be an auctioneer. We teach practical auctioneering. Next term begins Monday, September 6th, and comprises four weeks. In our school you learn to sell by actual practice on real live stock in a \$20,000 sale pavilion. We guarantee to teach you the profession or refund your money. Write for catalog at once, and plan to prepare yourself to earn from \$50 to \$150 and up per day. Enroll early as possible. Address

LOUIS A. WILSON  
National Live Stock Auctioneer Logan, Iowa

### PLAN—PLANT—SAVE Your Feed Crop

We guarantee Climax Tile silos. They last forever. Steel reinforcing at every mortar-joint. Lowest freight rates on curved tile to majority Kansas-Oklahoma points.

"Permanent as Time, Itself."  
Write for full information.  
CLIMAX TILE & SILO CO.  
1850 CHERRY STREET 850 SECURITY BLDG.  
COFFEYVILLE, MO. OKLAHOMA CITY

## Tire Agent

We want one exclusive representative in each locality to use and sell the new Mullinger Extra-Fly hand made tires. Guarantee Bond for \$5000. (No second). Shipped prepaid on approval. Sample sections furnished free. Write quick for dealer-agent offer and prices.

MULLINGER TIRE & RUBBER CO.  
927 OAK STREET KANSAS CITY, MO.



Free Catalog in colors explains how you can save money on Farm Truck or Road Wagons, also steel or wood wheels to fit any running gear. Send for it today.

Electric Wheel Co.  
30 Elm St., Quincy, Ill.

## Apron Pattern Free



This pretty new one piece house apron is one of the most practical that can be worn. It is simple, attractive and comfortable. The apron is a one-piece model, buttoning on shoulders. The pattern is cut in three sizes—small, medium and large.

Special 20 Day Offer. To quickly introduce The Household, a big story and family magazine, we make this liberal offer good only 20 days: Send 25 cents for a one-year subscription and we will send you this Apron Pattern Free. Be sure to give size and say you want pattern number 9008. Address

THE HOUSEHOLD  
Dress Dept. 56, Topeka, Kan.

## Read

the classified advertising columns. They may save you many dollars.

# Big Wheat Yield Assured

## Farmers Will Store Grain on Their Farms

BY JOHN W. WILKINSON

WHEAT prospects in Kansas still continue bright, and it is possible that the yield may exceed the estimate of 110 million bushels made by the Kansas state board of agriculture. Altho the acreage is about a third less than for last year the yields are much larger and the grain is of better quality as a rule. Wherever wheat has been cut farmers are elated over the tests made in the fields. An occasional field will show 30 bushels or a little more, but of course such fields are exceptional. It is now believed that a large part of Southern Kansas will average 18 bushels an acre. An average of 14 bushels an acre over the whole state would mean a production of 135 million bushels. In view of this fact it would seem that the estimate of 110 million bushels made by the state board of agriculture would be an extremely conservative one.

The best yields that have been reported on the new wheat crop were made on ground that was plowed somewhat deep and early in the plowing season with tractors. This early deep plowing with horses or mules is not so practicable as thru the use of tractors. The shortage of farm labor also made it necessary to speed up the work and the tractors seemed to offer the only solution.

### Storing Grain in Bins

No shortage or feeling of tight money is being felt in the harvest situation. Most Kansas bankers are eager to lend farmers considerable money in holding for better shipping conditions and prices. They are urging the farmers not to worry over car and locomotive shortages, but to build bins. Many are purchasing metal bins which are rat-proof and weatherproof and really such an investment is small in consideration with the value of the wheat itself. Many are also stacking their grain and will not thresh until late in the year when it is hoped that the car situation will have improved to some extent.

The mill and elevator situation is congested, to say the least. Some mills are so full of grain and flour and so unable to move their product, that the mill men are refusing wheat. Many country elevators are choked with wheat, some of it even said to be last year's crop. And in a rare case, here and there, are found farmers who are holding to their 1919 crop themselves.

### General Crop Conditions

General crop conditions in Kansas are considered satisfactory. The Kansas state board of agriculture in its report for the week ending July 3 says: "The past week has been characterized by conditions very favorable for growing crops. Good rains have fallen in Eastern and Central Kansas, with local showers elsewhere. Reports on the condition of wheat are almost uniformly high. Harvest is well along toward completion in Southern Kansas and is well begun in Northern Kansas. Early threshing is reported in Southern Kansas. While the presence of grasshoppers, Hessian fly and chinch bugs is mentioned, little apprehension appears to be felt except from grasshoppers. The damage actually resulting from this cause is not large as yet.

"The week has been especially favorable for corn. Good progress is reported for the crop from almost every county. In spite of heavy rains in some localities cultivation on the whole has progressed normally and the fields are being handled well.

"The potato crop has more than maintained its earlier fair condition. In Eastern Kansas favored with considerable rain a marked improvement has taken place. Digging has begun in the Kaw Valley.

"The condition of the grass in the grazing sections in Southeast Kansas has been much improved by the rains during the week and cattle on pasture are generally reported as making encouraging gains. The grass in Western Kansas would be benefited by more moisture."

Local conditions of crops and farm work are shown in the following county reports:

Barber—Weather is very hot. The mercury

registered 106 in the shade July 1. Harvest is progressing. Wheat will make from 12 to 15 bushels an acre. Spring crops need rain. Corn is laid by. Kafir and cane are doing well. Very little livestock is being marketed. Cattle are fattening and pastures are good. No sales are being advertised.—Homer Hastings, July 3.

Barton—Wheat harvest is progressing fast. Harvester combines have begun their work. Wheat will average from 20 to 25 bushels. We have plenty of harvest help. Corn and kafir are in good condition. Oats are cut and barley is ripe. Weather has been hot and dry the past week.—E. J. Bird, July 3.

Chase—The most welcome rain we ever have had fell June 29. Farmers were hauling water to cattle in pastures. Some pastures were good yet. Wheat is cut and the yield will be good. The second cutting of alfalfa will be poor. Most all garden truck is dead. Oats are in poor condition.—F. D. Pracht, June 30.

Cherokee—June was dry but we are having good showers now and crops look well. Harvest was excellent and the weather was cool and dry. Wheat and oats are in the shock. Livestock is doing well, but there is a stock shortage here. Cattle are thin but some are going to market. Butter sells for 50c; butterfat, 62c; milk that tests 5, 30c a gallon; eggs, 28c; young chickens, 30c.—L. Smyres, July 3.

Cheyenne—Local showers fall occasionally that provide plenty of moisture. Wheat is filling well. Some damage from the fly has been reported in the south part of county but the average yield will be better than last year. Harvest will begin about July 10 or 15. Pastures are in excellent condition and stock is doing well. The wheat car situation is much improved. Wheat, \$2.35; butterfat, 50c; eggs, 28c.—F. M. Hurlock, July 2.

Clay—Farmers are thru cutting wheat and oats, and have begun threshing. The yields in the valleys and north half of county will be good, but the crops in the south part will not be so large. The quality of wheat is excellent, and should grade No. 1. It probably will average 17 bushels an acre. The yield of oats will be unsatisfactory. Four inches of rain fell in the north part of county on June 29, but the south part is very dry and the temperature registers 100 to 105 in the shade. Wheat is selling for \$2.50; new wheat, \$2.42 to \$2.55; corn, \$1.75; hogs, \$15; hides, 9c.—P. R. Forslund, July 3.

Coffey—Weather is hot. We had a good rain recently which was needed for corn and kafir but it put the wheat down a little. Farmers are harvesting. Wheat and oats ripened at the same time. The potato crop was cut short by dry weather. Livestock is doing well and grass is good. Prairie hay is being baled.—A. T. Stewart, July 3.

Dickinson—Harvest is almost over. Wheat is good but oats was damaged by the dry weather. We had a 3-inch rain June 29 which delayed cutting a day and a half, and made the work difficult on account of the soft ground. Corn is growing fast, and the fields are clean. Pastures were getting dry but are becoming green since the rain.—F. M. Lorson, July 3.

Doniphan—We had a good rain June 27 which was needed very much. Corn is in good condition but is late for this time of year. A great deal of hay has been put up. Farmers are beginning to cut wheat. Pastures were drying up before the rain. Hogs, \$15.80; corn, \$1.70; oats, \$1.05; potatoes, \$4; cream, 48c.—B. B. Ellis, June 28.

Elk—Crops are in good condition and we have had plenty of moisture. Wheat and oats are in the shock and farmers have begun to thresh today. Wheat will yield exceptionally well, and the oats crop will be satisfactory. The potato crop was good. Cattle are healthy, and hogs are scarce. Cream is worth 48c; prairie hay, \$12.—C. C. Jones, June 28.

Franklin—We have had two heavy rains in the past week which hindered wheat and oats cutting. Oats is falling badly, but wheat is not so ripe. Much hay is being put up, also some prairie hay. Corn looks well.—E. D. Gillette, July 2.

Gove—The last week of June was warm and very little wind blew. Wheat and barley ripened fast. Wheat will make an average crop. All other crops are growing well. Cattle are healthy. Grasshoppers are getting thick and doing some damage. Farmers seem to have plenty of help. Cream, 52c; eggs, 28c; sugar, 30c; new potatoes, \$3 to \$3.40; spring chickens, 30c.—Newell S. Boss, July 2.

Haskell—Wheat, oats and barley harvesting is on. The quality of wheat is good. The oats yield will be light but barley will yield satisfactorily. A number of combines have been sold. We have plenty of help. Good rains have fallen and feed crops and corn are in excellent condition and are growing well.—H. E. Tegarden, July 3.

Linn—Harvest has been delayed a day or two on account of rain on June 30, but the moisture was of much benefit to other crops. A few fields were damaged by hail. Corn is clean and is growing very fast. Oil prospects are good here. Stock is doing well and fat hogs are scarce. Hogs sell for \$14; corn, \$1.70; potatoes, 5c a pound; eggs, 32c.—J. W. Cline, July 3.

Lyon—Wheat is in very good condition and will average about 25 bushels an acre. Oats also is in good condition. A good rain fell June 30 which was beneficial to crops as the ground was dry. Corn is satisfactory, but is short. It will grow better since the rain. We have plenty of pasture and livestock is healthy. We will not have much fruit but gardens are good.—E. R. Griffith, July 1.

Nemaha—A heavy rain which fell last night was very welcome but it was accompanied by high wind and hail that did much damage. Stones fell that measured 4 inches. Corn and gardens were badly damaged but wheat is still standing and will all be harvested this week.—A. M. C., July 2.

Neosho—We had a good rain June 29. Corn and kafir are growing fast and prairie grass is in good condition. The four weeks of hot and dry weather played havoc with wheat on prairie land. It will yield only chicken feed. Oats will make a satisfactory crop. Pastures are good. Eggs sell for 32c.

**NATIONAL Hollow TILE Last FOREVER SILOS**  
Cheap to Install. Free from Trouble.  
Buy Now. No Blowing in. No Blowing Down. No Freezing.  
Steel Reinforcement every course of Tile.  
Write today for prices. Good territory open for live agents.  
**NATIONAL TILE SILO CO.**  
305A R. A. Long Bldg., KANSAS CITY, MO.

**TIRES FREE**  
You can easily get your own tires free and make from \$10 to \$15 a day selling our hand made tires to neighbors and friends on good commission basis. New, tough, wear-resisting, fresh tires, guaranteed 6,000 miles. Prices low. Shipped prepaid on approval. Sample sections free. Your name on a card brings free book.  
**BILLINGS RUBBER CO., 1640 Chestnut, Kansas City, Mo.**

**DAISY FLY KILLER PLACED ANYWHERE ATTRACTS AND KILLS ALL FLIES.** Neat, clean, ornamental, convenient, cheap. Lasts all season. Made of metal, can't spill or tip over; will not soil or injure anything. Guaranteed effective. Sold by dealers, or 5 by EXPRESS, prepaid, \$1.25.  
**HAROLD SUMERS, 150 De Kalb Ave., Brooklyn, N. Y.**

**I NEED BRANCH MANAGERS.**  
Will pay big money to men with autos. Install Rideezee, the BETTER THAN AIR INNER TIRE. Cheaper than tubes, a light resilient substance guaranteed ten years. Equip your car at agent's price. Sell to friends. The business of the future.  
**RIDEEZEE CO., ST. PAUL, MINN.**

**RENEWS TIRES**  
Makes 'em go 8,000 miles farther. Inner Tyres prevent punctures and blowouts. Easily applied between casing and tube. Cost little. Agents wanted. Big profits. Easy to sell. Illustrated circular free. Write today.  
**A. J. Stephens Rubber Co., 112 Stephens Bldg., Kansas City, Mo.**

## Capper's Weekly Presidential Campaign Offer 50c



### United States Senator Arthur Capper, Publisher

The regular subscription price of Capper's Weekly is \$1.00 a year. On account of the coming Presidential Election we will send the paper from now until February 10, 1921, for only 50 cents. United States Senator Arthur Capper, the publisher, is in Washington and gets the news of the Nation's Capital first hand. The 1920 Presidential Campaign, no doubt, will be a lively one. Capper's Weekly is keeping its readers advised in all the news of the day.

### A New Story

A new serial will begin at an early date and is the liveliest and most thrilling story the Weekly has ever published. This story in book form would cost you \$1.75. You can read this story in Capper's Weekly by sending only 50 cents which will pay your subscription from now until February 10, 1921. Mail the order blank today.

### Capper's Weekly, Topeka, Kan.

Enclosed find 50 cents for which please send me Capper's Weekly from now until February 10, 1921, as per your special offer. M.B.

Name .....

Address .....



baled hay, \$10; bale ties, \$2.75 and \$3; grass fat cattle, \$7.50.—A. Anderson, July 2.

Phillips—We are starting to harvest one of the best wheat crops I ever have seen. The weather has been very favorable for ripening the grain. Several light showers fell that made corn grow. It is coming down in price, and sells now for \$1.40. Some fat cattle are being shipped to market when fat can be obtained. A few farmers still are planting feed crops.—J. M. Jensen, July 1.

Riley—We have not had any rains here and the ground is getting very dry. Wheat harvest is almost finished. Wheat ripened very uneven. The grain is good, but some fields are thin. Oats are short and the quality is not very good. Corn is growing slow but fields are clean. Pastures are getting dry. The second crop of alfalfa is poor. Eggs sell for 34c; cream, 45c; corn, \$1.95.—P. O. Hawkinson, July 2.

Saline—Wheat and oats are nearly all cut. Some farmers stacked the grain. The quality, generally, is good. A cool rain fell last week. Pastures are good and garden truck is growing fast. The heat is severe and flies are bad. The second crop of alfalfa is ready to harvest.—J. P. Nelson, July 3.

Sherman—Local showers have fallen. Rye is ripe and being cut. All grain will be ready to cut in a week unless a general rain falls. Forage crops and corn are in good condition. Grass is drying and hay should be cut. A satisfactory crop of alfalfa was harvested.—J. B. Moore, July 3.

Sumner—A 2-inch rain fell July 1. Corn and sorghums look well, and pastures will be better. Wheat and oats are nearly all harvested. The quality of wheat is good and it will yield between 18 and 16 bushels an acre. Machines have begun to thresh. Straw is short. Wheat sells for \$2.35, new and old; corn, \$1.85; oats, \$1.10; eggs, 25c; butter, 55c; butterfat, 55c; potatoes, 8c a pound; apples, 5c.—E. L. Stocking, July 2.

Trego—Weather is warm. Harvest is progressing and the wheat is of good quality. Some black rust and smut have been reported in fields. Oats and barley are in good condition, also corn, cane and kafir. Alfalfa is almost ready for the second cutting. Meadows and pastures are satisfactory.—C. C. Cross, July 1.

Washington—No rain has fallen here. Hot, dry winds blow, and the people and livestock suffer much from the intense heat. Harvest is progressing. Wheat is good, but the oats yield will not be so heavy on account of the dry weather. Corn is beginning to show the need of moisture and is not laid by. Eggs are worth 28c; butterfat, 50c; corn, \$1.80; cherries, 18c a pound.—Ralph B. Cole, July 2.

### Co-operative Farm Marketing

BY GEORGE A. MONTGOMERY

That farmers of the Mississippi Valley are ready to undertake co-operative marketing of all the grain raised in their section of the country was shown at a meeting of the State Farm Bureaus of 12 Middle Western states held at Ames, Iowa, June 22-23. A meeting of representatives of all the co-operative marketing organizations of this section was called to meet in the near future to consider the advisability of undertaking such a project.

If the plan is reported favorably the first step will be to organize farmers' elevators in each community in the grain belt. This will be undertaken by the State Farm Bureaus of the different states, which will send men from their organizations into every community to help in getting together enough farmers to establish an elevator large enough and strongly enough financed to handle the entire grain crop of the community.

#### A Systematic Plan

The Farm Bureaus will go about the organization of these in a methodical manner. Meetings of Farm Bureau officials, state and county, bankers and directors of existing farmers' elevators will be held in every Congressional district to work out plans for organization in the district. General plans for financing the new institutions also will be worked out at these district meetings.

When enough of these farmers' elevators are organized to make it practicable, it is planned to organize a co-operative marketing association for the entire section thru which the grain handled by these elevators could be sold. This would eliminate the boards of trade of this section if the farmers' elevators became powerful enough to handle all the grain grown in the Middle West.

#### Cost of Selling Grain

Representatives at the meeting estimated that the cost of selling grain thru the various boards of trade was between 30 million dollars and 40 million dollars a year in commissions alone, aside from the large amounts received by speculators. The actual cost of selling the grain is only a small part of that amount, it was said, and the balance represented the profits of commissions firms. The farmers believe they can make a substantial saving by marketing co-operatively, and can at the same time do away with the speculators who buy up the bulk of all the grain and then advance the price to a point which is unfair to the consumer.

Canada for a number of years has marketed her grain thru co-operative elevators and a co-operative marketing association, and has saved her farmers several millions of dollars each year. The Canadian farmers own their elevators, terminals and docks, and handle the grain until it reaches the mills. The Canadian system will be studied by a committee appointed to take a trip with the Commissioner of Agriculture of Canada to investigate the different phases of the Canadian plan.

#### The Illinois Way

The plan is that of the executive committee of the Illinois Agricultural association, and was presented at the Ames meeting by William G. Eckhardt, director of grain marketing for the Illinois Association.

The recommendations of the committee relative to the farmers' elevators are:

1. Elevators should be strongly enough financed to handle all the business of the community.
2. Elevators should be in a position to carry their proportion of grain from the period of marketing to the period of consumption, eliminating the need of speculative capital.
3. Shipments should be made by the shortest and least expensive route from the

point of production to the point of consumption excluding all except the essential handling.

4. All new plants should be installed with equipment for drying grain so that waste from spoiling and the hauling of water in grain shipments could be eliminated.

5. All plants should be large enough to carry their proportion of grain from a very favorable year when excess production occurs to a year when less favorable seasons require the carry over.

6. These elevators should be joined together to own the required terminals, coal mines, saw mills or other business that may be essential to develop the greatest efficiency.

Ralph Snyder of Oskaloosa, president of the Kansas State Farm Bureau; P. W. Enns of Newton, treasurer; O. O. Wolf of Ottawa; Charles R. Weeks of Manhattan, general secretary; and R. W. Graham of Manhattan, were those attending the conference from Kansas. Chester H. Gray of the Missouri State Farm Bureau acted as secretary of the conference.

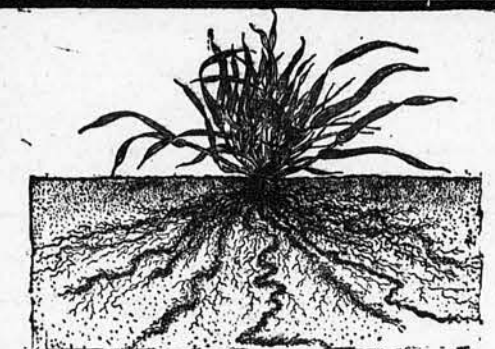
Other items of business brought before the conference were, the pooling and sale of wool, the freight car shortage, a report relative to establishing grades of hogs with one grade as the market standard, and the creation of co-operative commission houses for handling livestock at terminal markets.

# Fertilizer Saves the Wheat



## Fertilized Wheat

Makes heavy top growth which holds snow and prevents frequent freezing and thawing



## Fertilized Wheat

Makes strong roots which resist heaving and "pick-up" quickly in the spring

WHEAT should go into the winter strong and vigorous. It must have heavy top growth to hold the snow and prevent too frequent freezing and thawing. It must have heavy root growth to "pick up" and go ahead vigorously when spring comes.

Fertilizer applied at seeding time enables you to defer seeding in order that the wheat may avoid the Hessian Fly and still develop enough top growth to protect it through the winter. Fertilizer supplies the plantfood needed to produce strong, vigorous plants, well-rooted and well-tillered.

Send for our booklets, "Fertilizer Saves Farm Labor" and "What Fertilizer Shall I Use on Wheat?". Also ask for one of our Automatic Formula Finders which helps to select the right fertilizer for every crop on the farm. Both are free for the asking.

### "High Analysis" Fertilizers for Wheat

One of these will fit the conditions on your farm. The figures represent percentages of ammonia, available phosphoric acid and potash, in the order given:

Where manure or legumes have not been used and the soil is deficient in Ammonia. For all late seeding.

2-10-4  
2-12-2  
2-12-0

Where manure or legumes have been used and the soil contains sufficient Ammonia to assure rapid growth.

Sandy Soil 0-12-4  
Loam Soil 0-12-2  
Clay Soil 0-16-0

Be sure to send for our free Automatic Formula Finder

### SOIL IMPROVEMENT COMMITTEE

of the National Fertilizer Association

CHICAGO

BALTIMORE

1766 Lumber Exchange Bldg.

1066 Stock Exchange Bldg.

**MAKE GAS IN ANY STOVE**

**Cook in a Cool Kitchen**

**THE INSTANT-GAS OIL BURNER** Makes summer cooking a pleasure. Gives you gas anywhere, everywhere, in any stove or range. Everybody knows gas means cleaner, cheaper cooking and a cooler kitchen. Saves hours of time and loads of dirt. Start your stove with a turn of the wrist, turn high or low to suit and stop with another turn of the wrist. **FITS ANY COAL** Different models for different stoves. Just set it in the firebox. **OR WOOD STOVE** Put in or taken out in ten minutes. No damage to stove. Simple, safe, odorless, lasts a lifetime. Money-back guarantee. **SAVES MONEY** The Instant-gas Oil Burner makes its own gas from coal oil (kerosene) at one sixth the cost of city gas. Much cheaper than coal or wood. Because of perfect regulation the Instant-gas Oil Burner Cooks and Bakes Better than coal or wood in the same stove. No coal or wood to carry, no ashes, no chopping, shoveling or starting of fires. Greatest woman-saver in the world. Write for 30 day trial offer and free literature telling how Uncle Sam burns oil.

**AGENTS WANTED** INTERNATIONAL HEATING CO.  
3848 Laclede Av.  
St. Louis, Mo.



# 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			

## RELIABLE ADVERTISING

We believe that every advertisement in this department is reliable and exercise the utmost care in accepting classified advertising. However, as practically everything advertised in this department has no fixed market value, and opinions as to worth vary, we cannot guarantee satisfaction. We cannot guarantee eggs to reach the buyer unbroken or to hatch, or that fowls or baby chicks will reach the destination alive. We will use our offices in attempting to adjust honest disputes between buyers and sellers, but will not attempt to settle minor disputes or bickerings in which the parties have vitiated each other before appealing to us.

**Special Notice** All advertising copy discontinuances 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

**WANTED—MAN AND WIFE. WORK ON Farm.** J. H. Taylor & Sons, Chapman, Kan.

**MASON SOLD 18 SPRAYERS AND AUTO washers one Saturday.** Profits, \$2.50 each. Square deal. Particulars free. Rusler Co., Johnston, O.

**WANTED—MARRIED MAN FOR ELEVATOR work.** State experience and wages expected. The Pearl Town and Merc. Co., Pearl, Kan.

**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

**HOTEL AND STORE FOR SALE OR trade.** Write B. F. Lucas, Charleston, Kan.

**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, 302** Topeka Ave., Topeka, Kan.

**AUCTIONEERS MAKE BIG MONEY; 67** pages annual free. Mo. Auction School, Kansas City, Mo.

**PATENTS, BOOKLET AND ADVICE** free. Watson E. Coleman, Patent Lawyer, Pacific Building, Washington, D. C.

**KODAK FINISHING BY MAIL. FILMS** developed free. Prints 3 to 6 cents. W. W. White, Box 326, Birmingham, Ala.

**TOBACCO OR SNUFF HABIT CURED OR** no pay. \$1 if cured. Remedy sent on trial. Superba Co., Sy. Baltimore, Md.

**VEIL MATERNITY HOSPITAL FOR** young women before and during confinement; private; terms to suit; babies adopted free. Mrs. C. M. Janes, 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.

**THE THRESHERMEN'S MUTUAL INSURANCE** association will write your threshing machine insurance for less than half what you can get it for in any other company in the state. Write Tim Payne, Secretary, Oskaloosa, Kan., for particulars.

**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.

**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.

## EDUCATIONAL

**GOVERNMENT WANTS RAILWAY MAIL** clerks. \$150 month. Experience unnecessary. Particulars free. Write Modern Civil Service Inst., 102, Denver.

**WANTED—RAILWAY MAIL CLERKS.** \$133-\$195 month. Vacancy list free. Franklin Institute, Dept. A-15, Rochester, N. Y.

**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.

## FOR SALE

**WRITE FOR DELIVERED PRICES ON** cedar posts. Pay after unloading. J. B. Overton, Sagie, Idaho.

**FOR SALE—CATALPA POSTS, CARLOTS.** H. W. Porth & Co., Winfield, Kan.

## MACHINERY.

**EVERY SELF-LIFT 40-BOTTOM PLOW.** Shidler Bros., Lake City, Kan.

**STEAM THRESHING RIG FOR SALE.** Robert P. Campbell, Attica, Kan.

**FOR SALE—25-50 AVERY 10 DISC PLOW.** Practically new. C. A. Moore, Pratt, Kan.

**STEEL FRAME, 34-56 SEPARATOR, ALL** attachments, \$475. S. B. Vaughan, Newton, Kan.

**FOR SALE—AULTMAN AND TAYLOR** outfit, 25-50 engine, 30-inch separator, good as new. Horn Bros., Garnett, Kan.

**16-26 WALLIS CUB; 3 BOTTOM CASE** plow. Flowed 40 acres. Priced for quick sale or trade for cattle. Homer Davis, Longford, Kan.

**ONE REEVES THRESHING RIG. RE-** paired and in first class shape. 20 horse power compound steam engine; one 33-56 inch separator. Dan Makinster, Longford, Kan.

**WE SPICE RUBBER BELTS LIKE FAC-** tory job, make light thirty-foot extension feeders, rebore cylinders and turn pistons. Call for Supply Catalog. Richardson Machine Shop, Cawker City, Kan.

**18 H. P. COMPOUND ADVANCE STEAM** engine; 22 H. P. Garr Scott simple; 22 H. P. Dempster gas or kerosene engine mounted on steel trucks; 15 H. P. Olds gasoline stationary or traction attachment. Will Duncan, Hill City, Kan.

**ONE 20 H. P. DOUBLE REEVES TRAC-** tor; one 36-60 Reeves separator; New Garden City Feeder; all first class. One 16 H. P. Case Engine, one 32-52 Case Separator, used two seasons. New Ruth Feeders, Campbell Motor Co., Miltonvale, Kan.

**ONE 25 H. P. REEVES STEAM TRACTION** engine, ready to work—a bargain; Two 35 Horse Power Advance Steam Traction engines, very reasonably priced; One 40-60 Holt Caterpillar Gasoline Tractor. Price exceptionally reasonable. H. C. Darnell & Co., Kansas City, Mo., 15th and Elmwood.

**FOR SALE—ONE 20 H. P. DOUBLE CYL-** inder Reeves steam engine, simple. One 25 H. P. Double cylinder Reeves steam engine, simple. One 25 H. P. Reeves Cross Compound Steam Engine. One 32-inch Advance Separator. One 8-bottom Steam Engine Plow. All in fine shape. Wakefield Motor Co., Wakefield, Kan.

**TRACTORS, THRESHERS, TRUCKS, ALIS** Chalmers tractors; 18-20, a real four-plow tractor sold at a thirty-plow price, and 6-12 general purpose cultivating tractor. Cape thresher; 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, 1 1/2 and 2 1/2 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

**CLOSING OUT SALE. NEW AND USED** Fordson Tractors at bargain prices. Chas. H. Daenzer, Sterling, Kan.

**FOR SALE—20-35 AVERY TRACTOR** with 5-bottom plow, good condition, \$900. Geo. Tapp, Lyons, Kan.

**FOR SALE OR TRADE—BIG BULL IN** good condition; Case Gang Plows. Frank Mikesell, Republic, Kan.

**FOR SALE OR TRADE—AVERY 12-25,** \$460. Emerson 14 disc plow, \$250. Frank Silvester, Little River, Kan.

**FOR SALE—TWO NEW MOLINE UNI-** versal tractors at bargain. Latest model. W. D. Gunsaulus, Redfield, Kan.

**30-60 AULTMAN-TAYLOR TRACTOR AND** 36-56 Aultman-Taylor Separator. All complete; \$2,600 cash buys the outfit. J. B. Melrowsky, Florence, Kan.

**ONE 25-50 WALLIS TRACTOR AND** four bottom plow, bought late last fall. Priced to sell at \$2,300. C. P. Graber, Pretty Prairie, Kan.

**GUARANTEED RE-NEWED TRACTORS.** We have a number of new and rebuilt tractors listed for sale. Included are, I. H. C.; Avery, Flour City, Lawson, Fitch, and Parrett. Every Tractor thoroughly overhauled and guaranteed as represented, and against defective material and workmanship. You can save from three hundred to one thousand dollars. Write for particulars, stating size and make desired. H. A. Kaufmann Co., 2045 Main St., Kansas City, Mo.

## AGENTS.

**BIG MONEY AND FAST SALES. EVERY** owner buys Gold Initials for his Auto. You charge \$1.50, make \$1.35. Ten orders daily easy. Write for particulars and free samples. American Monogram Co., Dept. 110, Glen Ridge, N. J.

## WANTED

**WANTED—28 INCH SEPARATOR. CLAUDE** L. Kerr, Ingalls, Kan.

**WANTED—WHEELS FOR OUR LIGHT 28** ft. Extension Feeders. Pay \$3 each for old Deering Corn Binder grain wheels. E. D. Richardson, Threshers and Supplies, Cawker City, Kan.

## SALESMEN.

**SALESMEN—SERVICE RUBBER COM-** pany is establishing chain retail stores in cities and small towns selling Service Airless tubes—can't puncture; can't blowout; ride like air and double tire mileage. Sold on money back guarantee. A fast money maker. Be manager of our store in your town. We teach you free. An opportunity to make money. Our chief demonstrator now enroute through Kansas. May see you if you write now to E. F. Cooper, 2615 Grand, Kansas City, Mo.

## SEEDS

**KANRED SEED WHEAT, J. H. TAYLOR** and Sons, Chapman, Kan.

**GUARANTEED HIGH GERMINATING** alfalfa, \$12 bushel; Sweet Clover, \$15.50; Red Clover, \$27. Sacks free. Rye, \$2.50. Liberty bonds accepted at par. Meier Seed Co., Russell, Kan.

**ORANGE CANE, \$2.50 CWT. BLACK AM-** ber, \$2.25; Red and White kafir, Milo Maize, and Feterita, \$3.20; Darsio, \$3.20 cwt.; millet, \$5 cwt. All recycled. Union Mill and Elevator Co., Severy, Kan.

## FOR THE TABLE.

**"THEBESTO" 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.

**QUEEN'S TASTE COFFEE, A HIGH GRADE** 60c coffee direct to you by prepaid parcel post. Ground or berry. Trial pound, 49c; three pounds, \$1.45; 10 pounds, \$1.60. Queen's Taste Coffee Co., 606 Kansas Ave., Topeka, Kan.

## 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.

**SELLING OUT CHEAP, PEDIGREED** registered utility Rufus Red Belgians, New Zealand, Flemish Giants, heavy weights. Write for free descriptive price list. Satisfaction, safe delivery, guaranteed money back. Grandview Rabbit Farm, 3114 Hamilton, El Paso, Texas.

## STRAY NOTICE.

**TAKEN UP BY W. E. WIPPEL, WHO RE-** sides in Walnut township, Marshall county, Kansas, and whose postoffice address is Hanover, Kansas, on the 6th day of June, 1920, 5 head of two-year-old heifers, 3 speckled face, 1 red, and 1 spotted. A. J. Harvey, county clerk.

**TAKEN UP BY C. R. SLONDUCH WHOSE** residence is E 1/2 of N. E. 1/4 Sec. 10 Twp. 34, R9 Blaine Township, Harper County, on the 20th day of June, 1920, one Bay gelding, with white stripe in face, with mark on left front and hind foot, weight 850 pounds, age 10 years, appraised value \$25. C. E. Kennedy, County Clerk.

**TAKEN UP BY CHRIST BARTLES, WHO** resides in Herkimer township, Marshall county, Kansas, and whose postoffice address is Herkimer, Kan., on the 24th day of May, 1920, one male hog, about two years old, black with all four legs white up to knees, ring in nose. Cash value of stray at time taken up, \$40. Ownership must be proven and pay for care and expense. A. J. Harvey, county clerk.

## POULTRY

### BABY CHICKS

**40,000 PURE BRED CHICKS, JULY, AU-** gust, September delivery. White, Buff, Brown Leghorns, 14c. Large breeds, 16c, prepaid. Live delivery. Young's Hatchery, Wakefield, Kan.

**SPRING FRIES FOR THANKSGIVING,** Christmas and New Years. You can make a big profit selling spring chickens in the fall and winter. A baby chick costs you 28c. It costs 18c more in feed to put 2 pounds of weight on it. At Thanksgiving you can sell fries for 70c a pound, which means a big profit. I make the following prices for September delivery: 25 chicks, \$7.50; 50 chicks, \$14.50; 100 chicks, \$28; 500 chicks, \$130; 1,000 chicks, \$250. Order from this ad. Full live delivery guaranteed. I ship by parcel post, special delivery and guarantee live delivery of every chick. Eggs for my hatcheries are taken only from flocks I know personally and have inspected. Only the finest strains of Rhode Island Reds, White Leghorns, Barred Plymouth Rocks, Black Minorcas, White Wyandottes, Buff Orpingtons and Anconas. Every egg comes from a flock of prize winners. Like begats like, and you cannot help but get big, healthy, fast growing chicks from my hatcheries. Order now for September delivery. Send 25 per cent cash with order, and balance few days before shipment. You can make big profits selling spring fries for Thanksgiving, Christmas and New Years. Dean Harr, Box F 502, Wichita, Kan.

### MINORCAS.

**SINGLE COMB BLACK MINORCA COCK-** erels, 8 to 10 weeks old. \$1 each if taken soon. Claude Hamilton, Garnett, Kan.

## LEGHORNS

**SINGLE COMB WHITE LEGHORN HENS,** \$18 doz. Pullets, \$16.50. H. Vinzant, McPherson, Kan.

**S. C. WHITE LEGHORN COCKERELS 4** months old, dandies. Best egg strains, \$1.25. W. F. Abels, Clay Center, Kan.

**100 PURE S. C. B. LEGHORN TWO YEAR** old hens, \$2 each. Cockerels, \$1; Barred Rock pullets, \$1. Mrs. Jefferis, Route 1, Kincaid, Kan.

**PURE BRED S. C. W. LEGHORN CHICKS,** 7 weeks old, healthy, well feathered (Young Strain). Vira Bailey, Kinsley, Kan.

## PLYMOUTH ROCKS

**WHITE PLYMOUTH ROCKS, EGGS \$10** hundred. Peter Desmarreau, Damar, Kansas.

**BARRED ROCKS "ARISTOCRAT" SIRE** (direct) one setting \$1.50; two \$2.50 postpaid. Mrs. Lester Benbow, La Crosse, Kan.

## POULTRY SUPPLIES

**CHICKS WILL GROW TWICE AS FAST** if you will keep Brooks Meat Mash before them at all times in hoppers, as it contains meat scraps, dried milk, and grain meals necessary for quick growth that are not found in grain feeds. Hundreds of poultry raisers claim to have two and one-half to three-pound chicks in 8 to 10 weeks time by using Brooks Meat Mash as a growing feed. If your dealer won't supply you, we will ship in 100-lb sacks only on cars here, 100 lbs. \$4.50 or 500 lbs. \$21.25. The Brooks Co., Mfgs., Ft. Scott, Kan.

**THE BEST PRODUCTION FOR CHICKENS,** cows and hogs in the world is La-Mo-Pep. Box 122, Kansas City, Mo.

## POULTRY WANTED.

**PREMIUM PAID FOR NON-FERTILE** eggs and fancy broilers. Quotations, coops and cages on request. 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.

## Make Horses Comfortable

Hot weather is especially trying on horses while at work, but there are a number of things that we can do to make them more comfortable and better able to meet the demands made upon them. The Boston Work Horse Relief association of 15 Beacon Street, Boston, Mass., makes the following suggestions:

1. Load lightly, and drive slowly.
2. Stop in the shade if possible.
3. A sponge on top of the head, or even a cloth, is good if kept wet. If dry it is worse than nothing.
4. Water your horse as often as possible. So long as a horse is working, water in small quantities will not hurt him. But let him drink only a few swallows if he is going to stand still.
5. When he comes in after work, sponge off the harness marks and sweat, his eyes, his nose and mouth, and the dock. Wash his feet but not his legs.
6. If the thermometer is 75 degrees or higher, wipe him all over with a damp sponge, using vinegar water if possible. Do not wash the horse at night.
7. Saturday night, give a bran mash, lukewarm; and add a tablespoonful of salt-petre.
8. Watch your horse. If he stops sweating suddenly, or if he breathes short and quick, or if his ears droop, or if he stands with his legs braced sideways, he is in danger of a heat or sun stroke and needs attention at once.
9. If the horse is overcome by heat, get him into the shade, remove harness and bridle, wash out his mouth, sponge him all over, shower his legs, and give him 2 ounces of aromatic spirits of ammonia, or 2 ounces of sweet spirits of nitre, in a pint of water; or give him a pint of coffee warm. Cool his head at once, using cold water, or, if necessary, chopped ice, wrapped in a cloth.
10. If the horse is off his feed, try him with 2 quarts of oats mixed with bran, and a little water, and add a little salt or sugar. Or give him oatmeal gruel or barley water to drink.
11. Clean your horse at night, so that he can rest well, and clean him thoroughly. The salt dandruff drying on his skin makes him uncomfortable, and often produces sores under the harness.
12. Do not fail to water him at night after he has eaten his hay. If you don't he will be thirsty all night.
13. If it is so hot that the horse sweats in the stable at night, tie him outside, with bedding under him. Unless he cools off during the night, he cannot well stand the next day's heat.

## Simple but Effective

Our bathroom and equipment are not modern but serve our needs. We secured a large second-hand wooden bathtub lined with enamel several years ago for \$2, and utilized a large pantry which opened off the kitchen for a bathroom. A small opening was made thru the outside wall of the pantry for the pipe from the bathtub. This carries off the water. The tub is filled from the cistern in the kitchen.

Mrs. Walter Scott.  
Coffey Co., Kansas.



## Real Estate Market Place

Real estate advertisements on this page (in the small type, set solid and classified by states) cost 55 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 must be in the hands of the Real Estate Department of this office by 10 o'clock Saturday morning, one week in advance of publication.

### KANSAS

WHEAT, corn and alfalfa farms, all sizes. Theo. Voeste, Olpe, Kansas.

SMOOTH, mexhaustible underflow irrigation land. Carl Erbe, Garden City, Kansas.

160 A. IMP., 65 a. Many alfalfa farms for sale. M. T. Spong, Fredonia, Kan.

BEST FARM BARGAINS for sale in S. E. Kan., by Meyer & McCabe, Fredonia, Kan.

IF YOU WANT to buy, sell or exchange your farm, write W. T. Porter of the Kansas Land Company, Ottawa, Kansas.

BARGAIN—320 a. pasture land, eight miles of Spearville, \$20.00 acre. Other bargains. E. W. Moore, Spearville, Kansas.

EASTERN KANSAS FARMS Large list Lyon and Coffey Co., for sale by Ed. F. Milner, Hartford, Kansas.

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.

FOR SALE—160 acre farm in Rush County. Price \$11,500 if bought now. Address Mr. John Gerlach, 110 8th West, Hutchinson, Kan.

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.

200 ACRES, 3 miles to Council Grove. Well improved, county road. \$75.00 per acre. Send for list. S. L. Karr, Council Grove, 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.

BARGAINS. Bargains in wheat farms and stock ranches. Write for list. W. R. McAdams, Brewster, Kansas.

BARGAINS In Western Kansas wheat and alfalfa lands. THE BROOKE LAND & LOAN COMPANY, Winona, Kansas.

200 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.

BIG BARGAIN New improved 160, all smooth land, possession at once. Price \$10,400. Parsons & Stewart, Fredonia, Kansas.

FOR SALE—120 a. imp. farm, well located, rich limestone land, lays fine. Bargain at \$85.00 per acre. Terms. Write E. H. Bideau, Chanute, Kansas.

20 CHOICE QUARTERS, unimproved level grass land, in Wichita county, Kansas. Priced to sell. Write Jas. H. Little, The Land Man, La Crosse, Kansas.

QUARTER SECTION, \$4,000. 3 miles from town. 60 acres in crop. All level fine land. Easy terms. Griffith & Baughman, Liberal, Kansas.

A COMBINATION RANCH of 800 acres of wheat, alfalfa and grazing land joining the town of Pierceville, Kan. Price \$15 per a. Write F. M. Wallace, Pierceville, Kansas.

FOR SALE—320 acres improved, 160 in crop, all goes; 7 miles from Bird City, Kan., \$60.00 per acre. Terms. John Glasco, Bird City, Kan.

240 ACRES, 3 miles town, 35 acres alfalfa, all fine land, well improved, \$24,000.00. Mortgage only \$6,000. Equity for general store. Box 38, Thayer, Kansas.

160 ACRES WELL IMPROVED Only 4 miles from town, 25 in alfalfa, 60 pasture, balance corn and wheat, two-fifths crop goes if sold soon, \$15,000. T. B. Godsey, Emporia, Kansas.

SOUTHEASTERN KANSAS. Farms, all sizes; lowest prices. Terms \$1,000 up. Send for booklet. ALLEN COUNTY INVESTMENT CO., Iola, Kansas.

260 ACRES, Graham Co., Kan., 400 cultivation, big house, barn, etc. All fenced and cross fenced. On R. F. D., phone, 1/4 mile school. \$50 acre. Many others. Clyde Thuma, Lenora, Kansas.

OWN A HOME IN EASTERN KANSAS Wheat, corn, clover, alfalfa land. Ottawa, the County seat, Franklin Co., 10,000 population. University, excellent schools, manufacturing interests, mill, creamery and condenser. Fine location. Buy now. Write for Free Booklet and new list No. 457. Farms and City Property for sale. Mansfield Land & Loan Company, Ottawa, Kan.

### WHEAT LAND

25,000 Acres At a Bargain. For information write KANSAS INVESTMENT CO., Ness City, Kansas

### KANSAS

80 ACRES highly improved, \$80 acre, best of terms. W. J. Poiré, Westphalia, Kan.

WE DON'T OWN THE WORLD, we sell it. Write for farm list and pictures. Kansas Land Company, Ottawa, Kansas.

FOR SALE—Good farms from \$80 to \$125 per acre. Call on, or address, O. C. Paxson, Meriden, Kansas.

FOR SALE—Well improved farms in Franklin Co., Kan. Good farm lands in West Kan., \$20 to \$40 per acre. Ask J. M. Stewart, Hutchinson, Kan.

160 ACRES, 4 miles from town. Good 7-room house, new barn, other outbuildings; 90 acres in cultivation, balance grass. Price \$85 per acre; terms. Le Roy Realty Co., Le Roy, Kansas.

WHEAT LAND! 320-acres Scott County, Kansas, 7 miles town, all smooth, 90 cultivation, balance grass, no improvements. Priced for quick sale at \$25.00 per acre. Write for list and Map. Mansfield Investment & Realty Company, Healy, 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.

310 ACRES, 6 miles of Ottawa, Kansas, on state highway, has good sets of improvements, fine location. Real bargain for \$110 per acre. Good terms. Write for booklet. CASIDA, CLARK & SPANGLER, Ottawa, Kansas.

A SNAP—560 a. farm, 4 miles from market, 7 miles from County seat, 2 good sets of improvements, 400 acres in cultivation, creek bottom land. Price cut to \$65,000 to settle estate. Terms. Write for other bargains. Pagett, Moore & Cooke, Beloit, Kan.

FINE CREEK BOTTOM FARM 240 acres, 3 miles out, school 1 mile. Good 6 r. house, large barn, other bldgs. Half lit. and 2nd bottom land all in cult., no overflow, possession Sept. 1. Price \$24,000. Easy terms. Ed F. Milner, Hartford, Kansas.

240 ACRES, 6 miles from Jamestown, Kan., 140 acres under cultivation, 100 acres grass, ideal stock or dairy farm, 10-room modern house and good barn, a snap at \$20,000.00. Good terms. Write for particulars. B. R. Carlile, Jamestown, Kansas.

RANCH BARGAIN One thousand acres, well located and well improved, timber, water and bottom alfalfa land. Price thirty-five dollars per acre, good terms. Crops are fine. Write for land list. Justin T. Avery, Traer, Decatur County, Kan.

400 ACRES, unimproved, mile market, Norton County, Kan. 240 acres fine wheat, one-third of which goes with land, \$45 acre. 280 acre improved farm, 220 acres corn and wheat, all choice smooth farm land, share crop to purchaser, \$55 acre. Easy terms. McAuley & Eldred, Logan, Kansas.

EXTRA FINE FARM 200 acres, Eastern Kansas, 90 mi. K. C., right by good town and High School find large modern improvements, soil is fine; nonoverflow creek bottom, very best of grain and alfalfa land; this farm can't be beat and only \$160 per acre; for full description and pictures write E. B. MILLER, Admire, Kansas.

DAIRY FARM, Lawrence, 3 miles depot. 160 acres. 20 alfalfa, 15 wheat, 80 blue grass pasture, 6 timber, 60 valley. Orchard, water piped to buildings. House, 9 rooms; horse barn 32x40; cow barn 50x60; chicken house; stock shed; fences good. Price \$28,000, mortgage \$7,000. 6% due 1923. Possession 30 days. Hosford Investment & Mortgage Co., Lawrence, Kansas.

FOR SALE—A real farm in the oil and gas fields of Franklin county. 160 acres 5 miles of Wellsville. Highly improved. 8 room modern house, basement and gas for heat and lights. School on farm. 2 producing gas wells, all that have ever been drilled. Price \$175 per acre. Will carry \$15,500 for 4 years at 6%. Write for lists and pictures. J. T. Printy, Ottawa, Kansas.

640 ACRES WICHITA COUNTY KANSAS. All smooth; all joining; 3 1/2 miles from county seat; 5 miles from railroad shipping point. Fenced; abundance of sheet water; small frame house; stabling and other outbuildings. Splendid proposition. Can give possession at once. For price and terms address D. F. CARTER, Leoti, Wichita Co., Kansas.

EASTERN KANSAS FARMS, Dairy District, Rock Roads, Borden Condensery, fine schools, factories, five railroads, 240 acres tillable, eight room house, good barn, windmill, two miles good town, \$18,000. 158 acres, mile Fort Scott, 90 crops, 30 meadow, 30 blue grass pasture, fair small improvements, underlaid with coal, high power line past farm, mining coal adjoining farm, only \$110 per acre. Farm list. Depue & Slaughter, Fort Scott, Kansas.

### A Real Bargain

160 acres 3 miles of Waverly, 2 1/2 of Agriculture, 40 acres wheat, 50 acres oats, 10 acres alfalfa, 35 acres timothy and clover, balance prairie and blue grass pasture, well watered, lays smooth, best of limestone soil, 1 mile of school. Good house of 6 rooms, new barn 36x44 ft., smoke house, hen house, etc., all in good repair, telephone and rural mail. Price \$110 per acre with best of terms. GEO. M. REYNOLDS, WAVERLY, KANSAS.

### KANSAS

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.

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.

### OKLAHOMA

\$80 TO \$60 PER ACRE. Fine wheat, oats, alfalfa, corn and cotton lands. Write for free illustrated folder. E. G. Eby, Wagoner, Okla.

ASK FOR illustrated list of good homes. Wheat, corn and alfalfa land in the best part of Oklahoma. Also free map. De Ford & Cronkhite, Watonga, Oklahoma.

FOR SALE—Land in East Central Oklahoma at from \$40 to \$60 per a. that will raise as much corn, wheat or oats per a. as will the same class of land in Eastern Kansas. For particulars write. Southern Realty Co., McAlester, Oklahoma.

320 ACRES 2 miles Oakwood, 140 cultivated, balance pasture, 80 acres under woven wire, 4 room house, stable, granary, orchard, on State Road, 1/4 mile school. Price \$8,500. terms on half. L. Pennington, Oakwood, Okla.

EASTERN OKLAHOMA Unusual bargains in low priced farms with comfortable buildings for \$15 to \$65 per acre on good terms. Send at once for copy of our farm bulletin with complete descriptions of farm bargains. Stuart Land Co., Heavener, Oklahoma.

270 A. RANCH PLACE in Delaware Co. for sale. 160 timber outside range, 110 prairie, 80 a. in crops. Off of R. R. in the midst of the good outside range. Town adjacent to land. Property has mercantile store bldg., a small residence, 2 small barns and 110 a. under fence. An exceedingly good proposition for buying and raising cattle and feed. Terms \$6,500, part cash and bal. 10%. C. L. Pratt, Jr., Bank of Fisher, Fisher, Okla.

### MISSOURI

VALLEY FARMS—Fruit and berry farms. Write. Chambliss & Son, Anderson, Mo.

LISTEN! Well improved 60 acres, nice house, \$2,500, \$600 down. McGrath, Mtn. View, Mo.

FREE—All about the Ozark country, map and list of cheap lands. Durnell Land Company, Cabool, Mo.

THE HOMESEKERS GUIDE FREE. Describes 100 south Missouri farms. Blankenship & Son, Buffalo, Missouri.

IF YOU WANT a large or small prairie or timber farm, pure spring water, no crop failures, write J. E. Loy, Flemington, Mo.

MISSOURI—\$5 down and \$5 monthly buys 40 acres truck and poultry land near town Southern Mo. Price \$240. Send for bargain list. Box 169, Mt. Vernon, Ill.

FINE MISSOURI FARM 290 acres, highly improved, in high state of cultivation, fine water, located in Polk County, Mo. Price \$65.00 per acre; to exchange for grazing land in Western Okla. R. L. Presson, Bolivar, Mo.

ATTENTION FARMERS 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.

FARM HOMES In bluegrass, wheat, alfalfa and corn districts, Missouri and Kansas. Convenient to Kansas City, Missouri. Get our complete lists, maps, etc. Mansfield Land & Loan Company, Bonfils Bldg., Kansas City, Mo.

FARMS WEST CENTRAL MISSOURI Well improved, forty, eighty or larger tracts, \$50 to \$150. Terms. 80 acres, 3 miles R. R. town, 2,000 population. Good house; large new barn; fifteen acres timber; balance black limestone cultivating land; price \$115. Weaver Land & Loan Company, Clinton, Mo.

### ARKANSAS

WRITE TOM TETER, SHERIDAN, ARK., for bargains in good farms.

WRITE TOM BLODGETT LAND CO., Pine Bluff, Ark., for real bargains in farm lands.

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.

### TEXAS

ONE cabbage crop often pays for the land in Lower Rio Grande Valley. Save \$100.00 per acre by dealing with owner. L. W. Heagy, La Feria, Texas.

LIFETIME OPPORTUNITY, get your money working. Panhandle bargains. Bumper crops, and recent oil possibilities are all great. Write today. J. N. Johnson Land Co., Dalhart, Texas.

WE HAVE BLACK LANDS for cotton and grain; loam lands for diversified farming, sandy loams for sweet potatoes and peanuts; grazing lands for live stock; and lands suitable for special crops, fruits or vegetables, either improved or unimproved in small or large tracts. Write us just what you want, and give us a chance to furnish it. Railroad Farm Bureau, San Antonio, Texas.

### COLORADO

FOR SALE—My 320 acre improved farm. A bargain. Vera Garver, Kutch, Colorado.

EASTERN COLORADO. Irrigated farms. Any size, ranches and upland farms. Write for list. O. A. Quimby, Granada, Colorado.

20 IMPROVED eastern Colorado farms for sale at bargain prices; terms; information and literature on request. Frank Sutton, Akron, Colo.

EASTERN COLO. LANDS OUR SPECIALTY Large lists, personally owned, selected lands. Live agents wanted. Wolf Land Company, Yuma, Colo.

MONTEZUMA VALLEY FARMS. Both irrigated and dry ranches. Large list. Information and literature on request. The Montezuma Finance & Land Co., Cortez, Colo.

### STOCK RANCH

Best stock ranch on western slope, 800 a., 100 in hay, 200 grain land, best water right for irrigation, joint range and forest reserve. 500 a. pastured, partly fenced. Write for full description, terms and price. Am 71 and must sell. Possession this fall. R. M. St. John, Owner, Emma, Colorado.

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 Schwitter Bldg., Wichita, Kansas.

### Best Lands

I own 7,000 acres of the best farm land in East Colorado. Corn, wheat, kafir, etc. See our crops for yourself. This land was bought right and you may have it right. Write for facts—now. E. T. Cline, Owner, Brandon, Colorado.

## IRRIGATED FARM LAND SOUTH CENTRAL COLORADO

On easy terms, with good permanent water right. Close to schools and market in settled going community where farmers raise alfalfa, field-peas, small grains, potatoes, abundant vegetables and raise and feed hogs and sheep. A large tract just opening for settlement. Write for information and literature to

Costilla Estates Development Company, 529-35 First National Bank Bldg., Denver, Colorado.

### MISSISSIPPI

WRITE for free Mississippi map and land list. Land Market, Box 843, Meridian, Miss.

### MASSACHUSETTS

GOLDEN NEW ENGLAND farms with stock and tools. Send for a copy of "The Earth" today. D. B. Cornell Company, Great Barrington, Mass.

### NEW YORK

IF YOU ARE LOOKING for a good farm of any size and for any purpose, near good markets, in the state of New York, especially in the Mohawk Valley, write to LEO J. FELD, 307 State Street, Schenectady, N. Y.

### FLORIDA

FREE FLORIDA SUGAR FARMS—25 cents per acre monthly, gets any size farm. Profit Sharing Certificates guaranteeing money back, from profits of our farms with every payment. No interest. Owing to demand for sugar lands prices will advance \$1 per acre each month after June first. Buy now and make the profit. Free booklet. Ideal American Corporation, Johnstown, Pa.

### NEBRASKA

80 ACRES of the best irrigated land, two and a fourth miles from Culbertson. \$300 per acre. A. B. Smith, Owner, Culbertson, Nebraska.

PIERCE COUNTY, NEBRASKA, FARM for sale. 160 a. 7 ml. from Pierce. 40 a. corn, 40 a. oats, 25 a. rye, bal. pasture. Good imp. Good water. \$125 a. Good terms. Good soil. Pierce Investment Co., Pierce, Neb.

### MINNESOTA

PRODUCTIVE LANDS—Crop payment of easy terms. Along the Northern Pacific Ry. in Minnesota, North Dakota, Montana, Idaho, Washington and Oregon. Free literature. Say what state interests you. H. W. Ryerly, 81 Northern Pacific Bldg., St. Paul, Minn.

### CALIFORNIA

300,000,000 ACRES free government land in U. S. Send for free descriptive circular of our 100-page book "The Homeseeker," which tells you how to acquire this land, or send \$2 for book direct. THE HOMESEKER, Department 104, Los Angeles, Calif.



# The Grain Market Report

BY SANDERS SOSLAND

NEW crop readjustments have not carried alfalfa and prairie prices down as sharply as in recent years. While there is some question as to whether the readjustment process has been completed, the action of the market thus far on the new crop movement indicates underlying strength, with a strong probability of a higher level of market prices than has prevailed in recent months. Bullishness on hay at the threshold of a new crop season is quite unusual, the trade generally operating with extreme cautiousness at this time, owing to pressure of new hay from the country and reduced demand caused by utilization of pastures.

## Alfalfa Supply Limited

The supply of alfalfa in the Southwest is not as abundant as a year ago. The first cutting in Kansas, and in surrounding states, while of good quality on the whole, was not up to the average tonnage, and many complaints have been heard of damage to the second crop by dry weather. In the Western states, however, including Colorado, the crop prospects are excellent, and yields thus far are fairly large. So far as the actual supply on markets is concerned, much depends on weather conditions the remainder of the season. If pastures continue as at present, a greater surplus will be available for commercial channels. Unlike previous years, Southwestern states are not drawing on the surplus of Kansas, Oklahoma, Missouri and nearby territory, excellent pasture conditions in Texas holding hay purchases at a minimum.

Choice grades of alfalfa hay are holding around a top of \$32 a ton, with the cheapest grades down to \$14 a ton in Kansas City, compared with an extreme range of \$11 to \$31 a year ago. Prairie sales are largely between \$13 to \$19. Timothy and clover mixed, which only recently began their downward readjustment to a new crop basis, are selling at a range of \$17 to \$29 a ton. Timothy is expected to recede \$4 to \$5 a ton before it reaches a settled level, and with the increasing supply of new crop tame hay, it is probable that a top around \$25 will be reached before the close of July. In the event of a downturn of about \$5 in tame hay, all forage would be on a normal parity, a condition which has not prevailed in many months.

The slowly declining tendency of the

## SALE OR EXCHANGE

WANT TO HEAR from party having farm for sale. Give particulars and lowest price. John J. Black, Copper St., Chippewa Falls, Wis.

## 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

I HAVE CASH BUYERS for salable farms. Will deal with owners only. Give description and cash price. Morris M. Perkins, Box 378, Columbia, Mo.

## MISCELLANEOUS

SELL YOUR PROPERTY quickly for cash, no matter where located, particulars free. Real Estate Salesman Co., 515 Brownell, Lincoln, Nebraska.

LANDS ON PAYMENTS, nice smooth level lands, good deep soil, some of these quarters now in crops. Near the new railroad running from Shattuck, Okla., to Spearman, Texas. \$25 to \$30 per acre, one-sixth cash, balance yearly payments and interest. Write for literature. John Ferriter, Wichita, Kansas.

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 quarter readers. Sample copy free for the asking. Only 8c a word each week. Send in a trial ad now while you are thinking about it. Capper's Weekly, Topeka, Kan.

## Farm & Ranch Loans

Kansas and Oklahoma  
Lowest Current Rate  
Quick Service. Liberal Option.  
Interest Annual or Semi-Annual.  
THE PIONEER MORTGAGE CO.,  
TOPEKA, KANSAS.

wheat market, which has been in progress for some weeks, has been partially checked, and some observers hold to the belief that the downward tendency has been halted for some weeks to come. A very firm tone is evident in the trade, which is particularly encouraging on the threshold of a new crop movement.

The first car of 1920 crop year reached the Kansas City market July 1, grading No. 2 mixed, 60 per cent soft and 40 per cent hard, with a test weight of 59 pounds a bushel. The car sold at \$2.79 a bushel, the highest price in history for an initial arrival of new wheat. The market averaged 2 to 5 cents a bushel higher, with hard wheat at a top of \$2.87 and red wheat around \$2.76. Increased supplies of cars are promised to move wheat, but prospects are not encouraging for a heavy movement.

Freer arrivals than the trade has anticipated and a temporary absence of demand from feeders have brought about a further recession in corn. The carlot market has reached the lowest point in more than two months, the best grades of white corn being available around \$1.72 a bushel in Kansas City, with choice mixed feeding corn at \$1.65. For the feeder who must soon enter the market for July, August and even September requirements, purchases at the present time seem advisable. The carlot movement will soon diminish owing to a diversion of cars to the wheat belt. Advances in the hog market also are aiding the position of corn. Excellent crop prospects are having a depressing influence on the speculative market, declines of 2 to 5 cents having occurred on the July and September, while December gained 4 cents. Carlots declined 5 to 15 cents a bushel.

Erratic price movements, such as occurred the past week, have seldom been witnessed in the oats market. In a single day carlot prices receded about 10 cents a bushel following earlier losses, but the market has since regained the entire declines. White oats are selling at a top of \$1.14 a bushel. The speculative market showed unimportant changes. New oats are moving very slowly, no important quantities expected until early August.

Evidence of bullishness in the market for cottonseed feed is contained in the action of cake and meal operators. Feeders are buying more freely, demand having been stimulated by the improved position of choice fat cattle. Still, feeding demand is not heavy, fertilizer interests and mixers buying the bulk of meal available. Stocks of prime grades of cake and meal have dwindled sharply, and slight advances in prices may occur as the summer demand broadens. Cake and meal of 43 per cent protein content is bringing around \$62 a ton, basis Texas points, and about \$64 in Oklahoma. New crop cake for September shipment sold as high as \$64 a ton in Texas the past week, the largely at a range of \$60 to \$62.

## Dairy Judging Contest

Seventy-two men competed in the annual dairy cattle judging contest staged by the dairy department students of the Kansas State Agricultural college recently. The prizes were offered by the Students' Dairy club, the different breed associations of the state, The Blue Valley Creamery company and several farm papers.

Eight classes of stock of the four dairy breeds were placed, four of cows and four of heifers and reasons given on each of the cow classes.

The first prize winner was A. D. Webber of Norton, Kan., who was awarded the gold medal offered by the dairy club. Webber was also first in judging Holsteins, but as no contestant could receive more than one prize, the Holstein silver medal offered by the Holstein-Friesian association of Kansas went to E. W. Winkler of Rozell, Kansas, who was the second highest man on Holsteins.

Second place was won by W. A. Atchison of Topeka, Kan., who received a silver medal offered by the dairy club

and a year's subscription to Hoard's Dairyman. Third place was won by George Drumm of Winfield, Kan., the prize being a bronze medal offered by the dairy club and a year's subscription to Hoard's Dairyman.

The silver medal offered by the Kansas Jersey Cattle club for the first prize winner in judging Jerseys went to J. M. Moore of Stockton, Kan., and the Ayrshire silver medal, offered by the Kansas Ayrshire Breeders' association, went to T. R. Baumgardner of Manhattan, Kan.

P. W. Houston of Twin Falls, Idaho, stood highest of the freshmen competing and was awarded \$5, offered by the dairy club. A loving cup offered by the Blue Valley Creamery company to the students' agricultural organization making the highest score was won by the Students' Dairy club, whose five highest men outranked the score made by any similar group.

The classes judged were officially placed by W. E. Petersen, extension specialist in dairying at the Kansas State Agricultural college.

## A Great Holstein to Kansas

At the national Holstein-Friesian sale in June, one of the greatest bulls sold was bought for Kansas. Mott &



Branch of Herington and David Coleman & Sons of Denison were the buyers. The bull is King Watson Segis Star, a son of the King Segis Pontiac Count. The dam is a 28-pound cow with a 1,000-pound yearly record. She is the highest yearly record daughter of Sir Johanna Fayne and a grand-

## "NOT ENOUGH TO FILL ORDERS"

Kansas Farmer and Mail and Breeze—Please discontinue my livestock ad for July. I have so many inquiries already that I expect not to have enough helpers to fill orders. Should I not sell out, I will continue the ad during August. Very respectfully, A. M. Davis, Breeder of Holstein Cattle, July 1, 1920, Hutchinson, Kan.

daughter of Sir Fayne Concordia, full brother to Grace Fayne 2d's Homestead, whose record was 35.55 pounds of butter in seven days.

The sire of King Watson Segis Star has shown himself to be one of the greatest sires of the breed. His daughters have broken more than 100 world's records. He comes from world record-breaking breeding. His dam broke the world's milk record in the 365-day division of the junior 4-year-old class. His sire's dam, the first 37-pound cow, was also the first cow to produce 1,270 pounds of butter in a year.

This bull, 5 years old, never has been defeated in the show ring. He has great length of body, unusual length of hip, very straight top line, great capacity and was pronounced by the Kansas delegation who attended the sale as a remarkable individual and a very valuable asset to the Holstein industry of this state. More money was paid for him than for any other Holstein bull that has ever come to the state and it was said by judges of values that had he sold in the second day of the sale instead of the first that he would have brought more than double what was paid for him.

More good community centers are needed in Kansas. They are helpful in providing a brighter social life, and thus stopping the drift from the farms to the city.

Many of the shale and sandstone soils of Southeastern Kansas would be helped greatly by applications of ground limestone.

## Why The Livestock Service of the Kansas Farmer and Mail and Breeze as well as of the other members of the Capper Farm Press Is Represented In Iowa



This picture pretty well answers the question of why the Livestock Service of the Capper Farm Press has two representatives in Iowa. Kansas, Nebraska, Missouri and Oklahoma readers of the Capper farm papers have reason to look upon Iowa as the greatest outside source of improving blood for the herds and flocks of their respective states. Iowa rightly holds that rank for the United States, and few western breeders who aspire to produce the best, fail to visit (personally or by proxy) the leading Iowa herds in their particular lines.

Right now most sections of the states named, are relatively lower than for several years, in breeding animals. The need of getting the best while replenishing their herds, is greater than ever before and Iowa affords the nearest and biggest surplus of good-purebred livestock in the world. A survey of announcements of public sales to be held in the six months following March 1, 1920, showed 365 sales for Iowa as against a total of 439 for Nebraska, Missouri, Kansas and Oklahoma. The Iowa money invested in herds and equipment for the production of a high class surplus, is even greater, relatively, in comparison with the same states. Our picture, showing the typical improvements, and a little of the farm of J. A. Witte of Osage City, Ia., who specializes in Duroc Jersey hogs, illustrates the point.

Breeders of the Southwest will do well to recognize this situation, for the opportunities to the North and East to buy improving blood worth the money probably will appear with increasing frequency during this and ensuing years. Nebraska, Missouri, Kansas, Oklahoma, Colorado and Texas are in the natural trade territory of Iowa breeders, and our readers in these states are invited to apply to this department for any information on Iowa herds, and (in the case of sales advertised in this paper) to send buying orders if they wish, to our representatives who travel in Iowa, George L. Borgeson and Glen Putman, in care of the parties holding the public sales. In order to make best use of this service (which is free) our readers should secure catalogs of the sales being advertised, mentioning this paper in writing for the same.

The addresses of Mr. Putman, Mr. Borgeson, as well as our territory managers for Kansas, Nebraska, Missouri and Oklahoma, appear below. John W. Johnson, Northern Kansas, 320 Lincoln St., Topeka, Kan. J. T. Hunter, Southern Kan. and W. Okla., 427 Pattie Ave., Wichita, Kan. J. Cook Lamb, Nebraska, 3417 T St., Lincoln Neb. Stuart T. Morse, Okla. and S. W. Mo., 7 1/2 So. Robinson St., Oklahoma City. O. Wayne Devine, Western Mo., 300 Graphic Arts Bldg., Kansas City, Mo. Harry R. Lease, Eastern Mo., and So. Ill., Centralia, Mo. George L. Borgeson, N. E. Neb. and W. Ia., 1816 Wirt St., Omaha, Neb. Glen Putman, Iowa, 2308 Kingman Blvd., Des Moines, Ia.

E. S. Humphrey, Office Manager, Topeka, Kan.  
T. W. MORSE, DIRECTOR AND LIVESTOCK EDITOR.  
Livestock Service Capper Farm Press, Topeka, Kan.



# The Livestock Markets

BY SAMUEL SOSLAND

**K**ANSAS feeders need be in no hurry to acquire stocker and feeder cattle for feeding purposes. While it is true that the movement of grass cattle out of which stocker and feeder supplies are obtained is daily increasing, stocker and feeder buyers have not yet given any indication of a rush to make purchases. Of course, feeders do not like to stock up before they are confident of a good corn crop. This is a factor in the present quiet stocker and feeder trade. Even more influential, however, is the influence being exerted by country bankers to restrict buying and the desire of feeders to pursue a cautious policy in order to avoid a repetition of the disastrous feeding operations of the past year.

## Factors That Influence Buying

Corn crop prospects are bright. If there is no deterioration, then the supply of corn will offer every incentive to purchase cattle for feeding. However, no matter how well the corn crop fares, it is probable that stocker and feeder cattle, particularly feeders, will be available at prices lower than the current quotations. At this time a year ago lower prices were in prospect.

## No Rush for Stock Cattle

Buyers will have the advantage in the stocker and feeder cattle market this season. Prices are already lower than a year ago, but further recessions are probable as the grass cattle marketing season progresses. Present indications point to the lowest prices the latter half of the season.

on account of a serious drought in the Northwest. No portion of any extent in the West or Southwest has unfavorable pasture conditions which promise to force premature marketing of cattle. But calling of loans is going to enlarge receipts. Packers are already more discriminating in buying grassers, taking only those which are well finished. They will probably be in a position to continue their discrimination, and this should result in leaving more feeder grades of steers to buyers from Kansas and other states.

Grass cattle will move, according to present indications, fully as early as last year. It is probable, however, owing to the widening of the margin between fat and thin grassers, that the latter part of the range cattle moving season will be the lowest so far as prices are concerned on stockers and feeders. In the event of some deterioration in corn and a period of dry weather in some range areas, the chances for lower prices later in the season will multiply.

## Five Year Shipping Record

In beginning to look forward to the stocker and feeder outlook in the 1920 season, every feeder must bear in mind the months which usually witness the largest supplies. October stands out as the month of largest cattle receipts and the period of the heaviest shipments of stockers and feeders.

The following table shows the shipment of stockers and feeders from Kansas City between July and December the past five years:

Month	1919	1918	1917	1916	1915
July	40,905	60,284	63,385	41,685	28,615
Aug.	32,663	119,933	93,900	112,980	56,381
Sept.	126,632	159,074	131,752	123,150	133,684
Oct.	167,439	174,692	130,670	178,372	185,096
Nov.	121,125	140,025	142,706	100,774	161,401

## Best Time to Buy

It is not always that the months of the largest stocker and feeder shipments bring out the lowest prices. In order to decide as to the time for making purchases, it is also well to consider the trend of receipts at the principal markets. The following table, giving the combined monthly receipts of cattle at Kansas City, Chicago, Omaha, St. Louis, and St. Joseph the past five years, in thousands of head, should give the prospective stocker and

feeder buyer an idea of when he can count on the largest selections:

Month	1919	1918	1917	1916	1915
July	790	922	738	518	443
Aug.	873	898	790	791	609
Sept.	1,080	1,187	1,020	852	730
Oct.	1,806	1,301	1,299	1,136	831
Nov.	1,122	1,174	1,132	903	795

A comparison of prices on the top sales of stockers in the principal months of the past five is also interesting to the prospective buyer. The figures for last year show that September and October were the low months. Comparisons for Kansas City the past five years, giving the tops on stockers between July and December, follow:

Month	1919	1918	1917	1916	1915
July	\$12.50	\$13.50	\$10.35	\$8.50	\$8.50
Aug.	13.50	13.00	10.75	8.25	8.35
Sept.	11.00	13.80	10.35	8.05	8.25
Oct.	11.00	13.50	11.25	8.50	8.50
Nov.	12.25	13.35	12.10	7.80	8.50

Feeding plans often determine to a large extent the time for making stocker and feeder purchases. Where buying can be postponed, it appears a desirable move. Prices are now \$1 or more lower than a year ago. While Kansas City will play a bigger part in the trade this season than last year, when drought shipments from the Northwest reduced competition on that market, buyers are going to have the advantage. Stocker and feeder prices declined 25 to 50 cents last week, and it would not be a difficult matter to take off \$1 or \$2 more between now and October.

Naturally, those who have stockers and feeders to sell will profit most, according to present indications, by making early shipments. If cattle of the feeder class can be held and fattened well enough for packers however, that should be done.

## Quotations on Stockers

Quotations on stockers and feeders at Kansas City are between \$8.50 and \$13.50 on the latter and \$5.75 to \$11.25 on the former. Stock cows and heifers are between \$4.50 and \$8.50. Stock calves are available at \$6 to \$10. Compared with recent years, these are low prices, but the market is not yet cheap by any means.

Fat cattle receded 25 cents to \$1.50 last week, with choice cornfeds losing 25 to 50 cents and medium grades declining 50 cents to \$1.50. The green grassers were the weakest offerings. The top sale, \$16.80, compared with \$17.25 the preceding week. Straight Kansas grassers were quoted at \$10 to \$12, while Kansas wintered grassers ranged between \$12.50 and \$15.50. Canner cows, which fell as much as \$1, sold as low as \$3. What a change from the \$7 and \$8 market on canners during the war! The bulk of cows went to packers at \$6 to \$9. South Texas continued a heavy shipper of grass-fat steers, sending in one lot of 5-year-old Shorthorns, averaging 1,431 pounds, which sold at \$13.75 on the quarantine division, a record price. These were straight grassers. South Texas, owing to exceptional grass, is selling more cattle with far more flesh than a year ago and will continue shipping thru July. The Kansas movement is increasing, too. The entire West has such good grass that it will make more beef than expected. Calves were 50 cents to \$1 lower, with a top of \$12.50.

## Hogs Show Bullish Tone

Erratic action marked hogs, but a bullish undertone prevailed, and higher prices are expected. A top of \$16.15, a new high for the year, was paid, but the net gain was only about 25 to 40 cents. Prices at Kansas City were higher than at Chicago. Grass hogs and big sows were at a discount of \$1 to \$2 under the general market last week.

Depression continues in sheep and lambs. Ridiculously low prices prevail on plain lambs and sheep. Plain lambs are as low as \$4 to \$5 and medium ewes at \$2 to \$3. The top on choice lambs closed at \$14 on natives. Demoralization continued in wool last week, and New Zealand imports of mutton were again felt.

Power farming has done much to increase the man production of the farmers of the Middle West.

## "BOWLES WAY" SERVICE

### Your Cattle Are Now Unloaded

Our man is at the chutes waiting for them, no matter when they arrive, day or night, Sunday or other days, they are promptly cared for. They are driven to our pens with the utmost care. Our men are not armed with clubs and do not abuse stock as we positively will not allow it.

### Bowles Live Stock Com. Co.

Chicago, Omaha

KANSAS CITY, MO.

**FREE** Our market letters will tell you of the best organized concern at these yards. Write for it.

## CHESTER WHITE HOGS.

### Chester Whites

From the two most popular blood lines for sale. Wildwood Prince Jr. and Wm. A. Miss Lenora 4th. strains. Good big early bears and gilts bred for September farrow. All immune. E. M. RECKARDS, 817 LINCOLN STREET, TOPEKA, KANSAS.

### Hume Herd Chester White Hogs

For sale. 4 fall bears, 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 skin. Write at once. CLAUDE B. THOMPSON, HUME, MO.

### Chester Whites For Sale

Anything you want in purebred Chesters from aged hogs down to June pigs. Write for prices, breeding and full description. We register free and guarantee satisfaction. Please mention this paper when writing. P. B. SMITH & SONS, HEALY, KANSAS.

### Kansas Herd Chester Whites

18 fall gilts sired by and out of Kansas state-fair prize winners. Bred to Ben Big Joe. Descriptions and prices by return mail. Arthur Mosse & Daughter, Leavenworth, Kan.

### Chester Whites

Gilts sired by the grand champion Prince Tip Top and bred to Tonganoxie Chief for September pigs; \$65 each. A few more fall bears; also March and April bear pigs, \$25 to \$40. HENRY MURK, TONGANOXIE, KANSAS.

### O. I. C. REGISTERED PIGS

for sale; Nat. prize-winning show blood. Price \$15 each at weaning time. Earl Anderson, Elwood, Mo.

### Registered Chester White Pigs

Six weeks old; either sex; \$18.50 each. Double treated. EARL F. SCOTT, BELVIDERE, KAN.

### A Few Choice Purebred Chester White

pigs for sale. Gust Claussen, Russell, Kan.

### O. I. C. PIGS

Either sex; priced to sell. E. S. ROBERTSON, REPUBLIC, MISSOURI.

CHESTER WHITES—Fall and spring gilts, spring bears. Chickasaw Kossuth and Chief Keokuk strains. Satisfaction guaranteed. E. E. Smiley, Perth, Kan.

BIG CHESTER WHITE GILTS AND SOWS for Sept. farrow. \$50 and \$60 each for quick sale. W. K. MUELLER, St. John, Kansas.

### LIVESTOCK AUCTIONEERS AND SALE MANAGERS.

Boil M. 3121 Res. W. 5089

**P.M. GROSS**

Auctioneer

1033 BROADWAY

Kansas City, Mo.

### W.B. Carpenter Real Estate Auctioneer

President of largest auction school in world. Special four weeks term opens soon. Auctioneers are making big money everywhere. Write today for 67-page annual. It's free. Address 818 Walnut Street, Kansas City, Missouri.

### JOHN D. SNYDER HUTCHINSON, KANSAS

Experienced auctioneer. Pedigreed livestock and big sales of all kinds.

### WILL MYERS, Beloit, Kan. AUCTIONEER

Claim your 1920-21 dates with me early.

### Homer Rule, Ottawa, Kan. Specializing in purebred sales.

Secure your date early. Address as above.

### FRED L. PERDUE, DENVER, COLO. REAL ESTATE AUCTIONEER

OFFICE: 320 DENHAM BUILDING, DENVER, COLO.

### Jas. T. McCulloch, Clay Center, Kan.

My reputation is built upon the service you receive. Write, phone or wire.

### FRANK GETTLE, Livestock Auctioneer

1083 Broadway, Kansas City, Mo. Efficiency First. For open dates address as above.

## SPOTTED POLAND CHINA HOGS.

### Henry Field's Spotted Poland Chinas

The old-fashioned, big, long, big-boned, prolific hogs of our grandfathers' day. The most profitable, beautiful, and popular breed in existence. We have stock of all ages for sale, from weanling pigs to tried sows. Write for prices, photographs, and full information. Everything thoroughbred, registered, vaccinated, and insured, and guaranteed satisfactory or no trade. You can either buy by mail or come to our big sale.

HENRY FIELD SEED CO., SHENANDOAH, IOWA

## POLAND CHINA HOGS

### Poland Chinas from our Prize Winning Herd

Breeding stock of all ages for sale at all times.

### Plainview Hog and Seed Farm

Frank J. Rist, Prop. Humboldt Nebraska

### BIG TYPE POLAND CHINA HERD

Herd improving 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

### Poland China Hogs

Large Type, full blood Gilts and Bears, right age for breeding. They will give you satisfaction. Priced to sell. Call on or address Stony Point Stock & Dairy Farm, Carlyle, Kan.

### Gilts Bred For Sept. Farrow

Spring pigs immunized and ready to ship. Satisfaction guaranteed. THE DEMING RANCH, OSWEGO, KANSAS H. C. Sheldon, Supt. Swine Dept.

### 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 bear pig at three months old. Chas. Hoffhine, R. 4, Washington, Kansas

### Ross & Vincent's Poland Chinas

Gilts and bears, 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 & 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.

### Big Type Polands—Big Wonder Blood

A few fall gilts and 2 bears; good individuals and well marked; priced right. C. KAYSER, BUSHONG, KANSAS.

### SPRING PIGS, BOTH SEX

Priced to sell. Wonder and Price breeding. Satisfaction. E. J. THOMAS, Edna, Kan.

POLANDS—DISHER'S GIANT BREEDING March 1919 boar by Morton's Giant by Disher's Giant; 38 in. high; 90 in. long; 9 in. bone; exceptional boar; proven breeder. Spring pigs both sex. Dam: Big Bob, Col. Wonder, Big Orphan, and Orphan Grand Master. Immuned. Satisfaction. Phone Wichita 588. GSELL & WEBB, WICHITA, KANSAS

## HAMPSHIRE HOGS.

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.

### 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 bears, one or a load. Buy by mail. "Silver guarantee" back of every hog. Drop postal card today for price list. Wickfield Farms, Box 55, Cantril, Iowa F. F. Silver, Prop.

### PUREBRED HAMPSHIRE WEANLINGS

satisfaction guaranteed. Wilson Counts, Baldwin, Kan.

## SHEEP AND GOATS

### SHROPSHIRE RAMS

Yearling rams, mostly Bibby breeding. Nice ones. Satisfaction guaranteed. O. A. HOMAS & Sons, Peabody, Kansas.

### Eight Shropshire Rams For Sale

Eligible to reg. L. E. Beaman, Latham, Kan.

### 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.

### 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.

### 50 SPOTTED POLAND WEANLING PIGS,

good litters; some fall boars and gilts. Wm. Meyer, Farlington, Kansas.

When writing advertisers mention this paper.



## DUROC JERSEY HOGS

## DUROC JERSEY HOGS



# MORE PORK IN LESS TIME

Duroc-Jersey hogs have a tendency to put on great amounts of pork at an early age. They are easy-feeding animals, and raise large families. These hogs were introduced less than 50 years ago, and yet in 1918, 51% of all the hogs marketed in the country were "Duroc-Jerseys." They are uniformly red in color. Increase your profits by raising Duroc-Jersey hogs.

Write for "DUROC-JERSEY HOGS ARE PROLIFIC AND PROFITABLE"—sent free to hog-raisers by the largest swine record association in the world. Over 12,000 members. The National Duroc-Jersey Record Association. Dept. 240 Peoria, Ill.

## 70 Spring Durocs, 9 Sows and a Herd Boar

My herd of Durocs is too large for me to care for and attend to other necessary work. Will sell just as low priced as possible: Sows by King Sensation, a son of Great Wonder 1 Am and her 8 pigs by a son of Pathfinder; A Golden Model bred sow out of a Kan. grand champion; 8 sows out of the Golden Model sow and by a son of Potentate, a Defender bred boar. Excepting 3 sows by a son of King Sensation, all spring pigs are out of these sows and by the herd boar, a son of King Orion Jr., winner at Neb., Iowa and Cal. state fairs and National. These Durocs are good individuals in first class condition. Priced to move quickly. Write today.

MRS. MATTIE HAZELL, 404 N. MONROE ST., HUTCHINSON, KAN.

## We Have the Blood Lines and Quality

We offer spring pigs of both sexes by Educator Orion, Mc's Big Bone Giant, Sensation Climax, Lawndale Disturber, Jack's Pal Orion, and Great Pathfinder. Write your wants in good Durocs.

Pfander & McClelland, Clarinda, Iowa.

## Big Type Durocs

Full gilts by Great Wonder Model bred to Pathfinder. Mar. Sensation by Pathfinder Jr. dams bred to Shepherd's Orion Sensation. Senior yearlings by Pathfinder Jr. dams bred to Shepherd's Orion Sensation. All sows bred for Sept. farrow. Big yearling boars by Pathfinder Jr., spring boars by Shepherd's Orion Sensation, Orion's Amplifier, etc. All priced to sell.

G. M. SHEPHERD, LYONS, KANSAS

## WOOD'S DUROCS

Spring pigs, both sexes. Great Wonder strain; registered; immunized; double treatment; satisfaction guaranteed.

W. A. WOOD, ELMDALE, KANSAS

## Wooddell's Durocs

15 top quality 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

Full 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 456, 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 preparing 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.

ZENE STOCK FARMS, TURON, KANSAS.

## VALLEY SPRING DUROCS

Pathfinder, Sensation, Orion, Col. and other big type early March boars. Registered and immunized; \$30.00 up; April pigs \$25.00. Satisfaction guaranteed.

E. J. BLISS, BLOOMINGTON, KANSAS.

## MUELLER'S DUROCS

A top quality 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 immunized \$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. W. FULKS, TURON, KANSAS.

## High Sensation Jr.

will be shown this fall and is called a winner by those who see him. 12 April, May and June gilts bred to him and Fogo's invincible for Sept. farrow. Prices and descriptions by return mail.

W. L. Fogo, Burr Oak, Kan., Jewell County.

## Sensation-Pathfinder-Orion Durocs

Sows by son of Great Sensation and out of sows by son of Pathfinder. Most of them bred to son of Great Orion to farrow July and Aug. Spring pigs both sex same breeding. Immunized satisfaction.

B. C. SMITH, SEDGWICK, KANSAS.

## Now Listen to This!

These fall boars—1 by Joe King Orion, 1 by Great Orion Sensation, 1 by Golden Wonder. You can't beat this breeding and the individuals are good.

F. J. MOSER, SABBETHA, 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.

## National Champion Boars

Three August boars by Great Orion Sensation. Splendid individuals. A great Pathfinder 2-year-old boar for sale. 12 or 15 spring yearling and fall gilts. Intense Pathfinder and Orion breeding.

Gwin Bros., Morrowville, Kan., (Washington County)

## Choice September Gilts

Bred for September farrow, \$65; March pigs, pairs and trios not akin, \$27. All stock immunized. D. O. RANCROFT, Osborne, Kan.

## SEARLE Durocs. Leaders since 1883.

Immunized. Circular free. Searle & Searle, Route 15, Tecumseh, Kan.

## PARK PLACE DUROCS

Spring pigs farrowed April 20-25; out of big mature sows and my boar Perfection by Orion King. Strictly good, practical pigs at farmer's prices. Gilts \$25, boars \$30. 1 year record fee. Satisfaction guaranteed.

O. L. TOADVINE, DIGHTON, KANSAS

## Duroc Pigs, Express Prepaid

Ten gilts farrowed 32 pigs March litter. Sell at weaning. Col. Wonder, etc. Immunized, guaranteed, express prepaid. Write today.

OVERSTAKE BROS., ATLANTA, KAN.

## DUROCS

Defenders! Largest herd of intensely bred Colonels in the West. Breeding stock of all ages for sale.

DAYTON CASTLEMAN, BUNCETON, MO.

## BRED FOR SEPTEMBER FARROW

Tried sows and fall gilts bred to Pathfinder Sensation, Col. Sensation and Western Orion. They are by Highland Cherry King and Pathfinder Sensation.

Ralph F. Wells, Formosa, Kan.

## PUREBRED DUROC PIGS for Sale—Well

grown, good color, immunized, 3 months old. Either sex at \$20 each. Write your wants.

GEO. S. BARKER, R. 4, Junction City, Kan.

## HEREFORD CATTLE

## Discriminating Hereford Buyers We Offer NOW

12 coming yearling bulls, Columbus, Anxiety strains. Bred character and proper conformation. Unimpaired but in better than pasture condition. 7 registered, 5 unregistered, but equally well bred. All high class farm bulls. If you want one or more of the 12 yearling bulls write now to W. C. Cummings, Houston, Kan.

## 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, (Wabaunsee County), KANSAS.

## ANXIETY BRED HEREFORD COWS

4 cows and one herd bull at \$250 each. 3 cows have calves at foot; other will calve soon. Am retaining the calves. For further particulars address

E. O. MUNSSELL, RUSSELL, KANSAS.

## 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, La Fontaine, 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.

## FOR SHORTHORN BULLS

All ages. Address

HUNT BROS., BLUE RAPIDS, KAN.

## POLLED SHORTHORNS.

## 10 POLLED SHORTHORN BULLS

Big husky reds and roans 12 to 20 mos. old. Priced to sell. Can spare a few females.

O. M. HOWARD, HAMMOND, KANSAS.

## Clean Up the Stable Fly

Have you ever tried to sleep on a hot summer night when just one mosquito had crept thru the window screen? Imagine your state of mind if that single mosquito were multiplied by 100 and you had your hands tied!

That sensation, according to the Bureau of Entomology, United States Department of Agriculture, is something comparable with what a horse, mule, or cow endures when the stable fly is present in great numbers.

The stable fly greatly resembles the ordinary house fly but for the lance with which he is armed. It is known that he carries disease from infected animals to healthy ones, and there is some ground for belief that the insect aids the spread of spinal meningitis among human beings.

The eggs of the fly are laid in loose, warm straw heaps and piles of horse manure or stable refuse. A plague of flies always starts from these sources, and the control of the pest is best managed by scattering the refuse early in the spring before the beginning of warm weather and plowing it under, or by burning it when the former method can not be applied.

Stable refuse should be scattered at regular intervals of one week or less throughout the season, starting with early spring. In this way the first generation of the pest is destroyed and a plague averted. A recent publication of the United States Department of Agriculture, Farmers' Bulletin 1097, gives in detail the life history of the stable fly, methods for its control, and some facts concerning the amount of damage done by the insect.

## More Sheep for Kansas

BY A. M. PATERSON

The sheep population in this country must be increased if the people are to be supplied with food and clothing.

It is estimated that we now have about 25 per cent fewer sheep on the farms and ranges in the United States than we had 10 years ago. If this condition continues to prevail more shoddy will be used in the manufacture of clothing, which will result in an inferior grade of cloth; and if the producer still has to continue in competition with the ragpicker our sheep population will continue to decrease, which means less food and less clothing material of the highest quality.

The people are beginning to realize the value of lamb and mutton as a food; as it is the most healthful, most nutritious and many people think it the most delicious of meats.

There is a place for a great many more sheep on the farms of this country and this increase in number could be maintained with very little extra feed and labor on the average farm.

Many farmers feel that sheep are difficult to care for. This is a mistake, as sheep are as easy to care for as any other class of livestock. With the prevailing conditions and by proper feed and management a flock of sheep will pay good returns on the investment.

The person who is planning to raise sheep should first take an inventory of himself and determine what he knows about flock management. He should then get some literature pertaining to the subject and learn something about the feeding and care of sheep. There are several phases of sheep husbandry which can be practiced on the average farm.

## Western Ewes

The buying of aged Western ewes that have good mouths, breeding them to good mutton rams, shearing them in the spring and fattening them for market after the lambs are weaned is an excellent way to make good returns on the investment and at the same time get some experience in handling sheep with this rugged class of animals.

In the selecting of these animals care should be taken to get the ewes uniform in conformation, free from gummers and spoiled udders. Care should also be taken in the selection to get good fleeces. After these matters have been given due consideration the success will depend on the feed and care the ewes receive.

The farm flock consists of a few ewes that are maintained to keep the farm in a neat condition, to supply fresh meat for family use and to con-

sume feeds that are usually wasted. These flocks are generally made up of native ewes and are a distinct unit in the system of farm management.

The production of purebred sheep for breeding purposes is a specialized industry and in order to be successful along this line the animals should have special management as to breeding, feeding and care.

A mistake often is made by the beginner buying inferior foundation stock. This, with the lack of experience, turns the adventure into a failure and consequently this person gives the sheep industry a black eye.

The beginner who is going to raise purebred sheep for breeding purposes should first have some experience, next he should select a breed that is popular in the section where he is going to dispose of his surplus. He should select good animals for the foundation of the flock. He should use the best rams possible in order to improve the offspring. He should properly develop the lambs. Most of his business will be mail orders, therefore all of his dealings should be honest.

The fattening of Western lambs, like other feeding operations, is more or less of a gamble. However, if the lambs are properly bought, fed and managed they offer opportunities for the small farmer to utilize his unmarketable feed at a profit, give him labor during the winter months and maintain the fertility of his land.

## Public Sales of Livestock

### Hereford Cattle

Sept. 6—J. O. Southard, Comiskey, Kan., at Emporia, Kan.  
Sept. 8—Ed Nickelson, Leonardville, Kan.  
Sept. 9—Northern Kansas Hereford Breeders Assn., Blue Rapids, Kan., C. G. Steele, secretary and sale manager, Barnes, Kan.  
Sept. 17—Morris County Consignors sale at Council Grove, Kan. W. A. Howard, Mgr., Comiskey, Kan.  
Sept. 27—John J. Phillips, Goodland, Kan.  
Sept. 28—Foster Farms, Rexford, Kan., at Colby, Kan.  
Oct. 6—J. O. Southard, Comiskey, Kan.

### Angus Cattle

Oct. 16—Boys' Calf Club, Effingham, Kan. Frank Andrews, Mgr., Muscotah, Kan.

### Shorthorn Cattle

Oct. 7—A. L. & D. Harris, Osage City, Kan.  
Oct. 13—Northern Kan. Shorthorn Assn., at Smith Center, T. M. Willson, sale manager, Lebanon, Kan.  
Oct. 13—East Kansas Shorthorn Assn., at Ottawa, Kan. F. Joe Robbins, Sec'y.  
Oct. 14—Linn Co. Shorthorn Breeders' Assn. Sale, Pleasanton, Kan. E. C. Smith, Sec'y.  
Oct. 16—Boys' Calf Club, Effingham, Kan., Robt. Russell, Muscotah, Kan., Mgr.  
Nov. 9—Shorthorn Assn. sale. O. A. Hoffman, Mgr., Peabody, Kan.  
Nov. 4—J. L. Early, Oronogo, Mo.  
Nov. 9—R. W. Dole, Almena, Kan.  
Nov. 10—Northwest Kansas Shorthorn Breeders Assn., Concordia, Kan., E. A. Cary, Talmo, Kan., sale manager.  
Nov. 11—E. F. Flannagan, Chapman, Kan.  
Nov. 15—Irvin Evans, Columbus, Kan.

### Holstein Cattle

July 17—Robinson & Shultz, Independence, Kan. W. H. Mott, Sales Mgr., Herington, Kan.  
Oct. 18—Consignment Sale, Hutchinson, Kan. W. H. Mott, sale manager, Herington, Kan.  
Nov. 29—Holstein-Friesian Assn. of Kansas, Wichita, Kan., W. H. Mott, manager, Herington, Kan.

### Poland China Hogs

Aug. 7—Moore Farms, Butler, Mo. Sale at Gardner, Kan.  
Aug. 16—L. E. Hubbard, Kincaid, Kan.  
Aug. 25—The Deming Ranch, Oswego, Kan. H. O. Sheldon, Supt. Swine Dept.  
Oct. 1—Stafford County Breeders' Assn., Stafford, Kan.  
Oct. 1—Peter J. Tisserat, York, Neb.  
Oct. 14—W. H. Hill, Milo, Kan., at Beloit, Kan.  
Oct. 19—Morton & Wenrich, Oxford, Kan.  
Oct. 20—Fred G. Laptad, Lawrence, Kan.  
Nov. 3—E. E. Hall, Bayard, Kan.  
Dec. 1—David Coleman & Sons, Dennison, Kan., at Topeka, W. H. Mott, sale manager, Herington, Kan.  
Jan. 14—Barnes & Harvey, Grenola, Kan.  
Jan. 15—Mitchell Bros., Longton, Kan.

### Spotted Poland Chinas

August 24—Henry Field, Shenandoah, Ia.  
September 17—Henry Field, Shenandoah, Ia.  
October 9—Henry Field, Shenandoah, Ia.  
Nov. 5—Henry Field, Shenandoah, Ia.

### Duroc Jersey Hogs

July 15—Shawnee County Breeders' Assn. sale, Topeka, Kan. Ralph Searle, Sec'y, Tecumseh, Kan.  
Aug. 5—W. W. Otey, Winfield, Kan.  
Aug. 6—W. D. McComas, Wichita, Kan.  
Aug. 12—W. T. McBride, Parker, Kan.  
Oct. 1—Stafford County Breeders' Assn., Stafford, Kan.  
Oct. 7—L. C. Kirk, Vandalia, Mo.  
Oct. 11—A. A. Russell, Geneva, Neb.  
Oct. 15—Jno. C. Simon, Humboldt, Neb.  
Oct. 16—Rule & Woodleaf, Ottawa, Kan.  
Oct. 18—Robt B. Steele, Falls City, Neb.  
Oct. 20—Fred G. Laptad, Lawrence, Kan.  
Oct. 21—Theo. Foss, Sterling, Neb.  
Oct. 23—Boren & Nye, Pawnee City, Neb.  
Oct. 27—Proett Bros., Alexandria, Neb.  
Nov. 4—Shawnee County Breeders' Assn. sale, Topeka, Kan.  
Nov. 5—Kempin Bros., Corning, Kan.  
Nov. 6—A. C. Brockman, Centralia, Mo.  
Nov. 6—Mather & Hurdette, Centralia, Kan.  
Jan. 15—Mitchell Bros., Longton, Kan.  
Jan. 19—Will Fogo, Burr Oak, Kan.  
Jan. 26—Lyon County Duroc Jersey Breeders' Assn. sale at Emporia, Kan. John Loomis, Sec'y, Emporia, Kan.  
Jan. 27—Shawnee County Breeders' Assn. sale, Topeka, Kan.  
Feb. 8—J. C. Theobald, Ottawa, Neb.  
Feb. 4—W. G. Real, Grafton, Neb.  
Feb. 5—U. G. Higgins, Fairmont, Neb.  
Feb. 9—John Loomis, Emporia, Kan.



July 10, 1920.

b. 14—Night Sale. Boren & Nye, Pawnee City, Neb.  
 b. 15—Lyden Brothers, Hildreth, Neb.  
 b. 16—E. H. Dimick & Son, Linwood, Kan., at Tonganoxie, Kan.  
 b. 17—Gordon & Hamilton, Horton, Kan.  
 b. 18—Earl Babcock, Fairbury, Neb.  
 b. 19—Geo. H. Burdette, Auburn, Neb.  
 b. 20—M. R. Peterson, Troy, Kan. Sale at Bendena, Kan.  
 b. 21—Jno. C. Simon, Humboldt, Neb.  
 b. 22—Robt. E. Steele, Falls City, Neb.  
 b. 23—Kempin Bros., Corning, Kan.  
 b. 24—Wm. Hilbert, Corning, Kan. (Night sale.)  
 b. 25—Guy Zimmerman, Morrowville, Kan.  
 b. 26—C. H. Black, Neosho Falls, Kan., in Emporia, Kan.  
**Chester White Hogs.**  
 b. 27—Arthur Mosse & Daughter, Leavenworth, Kan.

## Sale Reports

## Good Sale.

Females averaged. . . . . \$342.50  
 Bulls averaged. . . . . 282.80  
 Head averaged. . . . . 336.77  
 F. M. King's Holstein sale on June 23 at Grandview, Missouri, was a great success. Large crowd of anxious buyers came from several states. The sale was well advertised and a large crowd was in attendance. The females brought good prices but there seems to be demand for bulls. Several cows sold with calves at foot and sold as one lot. Nothing sold high, yet the averages were very fair and low enough to permit of liberal investment by farmers and breeders. Following is a list of representative sales:  
 Maple Grove Pontiac, Johanna, 3 years, W. H. Mott, Herington, Kan. . . . . \$510  
 Princess Pontiac Premier Lyons and calf, J. H. Murphy, Vinita, Okla. . . . . 530  
 Mercedes Soldene Pontiac, 2 years, Ed Frazier, Drexel, Mo. . . . . 350  
 Sunny Mercedes Pontiac, 2 years, A. J. King, Kansas City, Mo. . . . . 330  
 Daisy Bonheur Galsche, 3 years, S. R. Widner, Pittsburg, Kan. . . . . 280  
 Imperial, Sadie Cornucopia, 2 years, Pickering Farms, Kansas City, Mo. . . . . 370  
 Windsor Hill Lamb, 2 years, D. B. Wells, Stroud, Okla. . . . . 350  
 Mountain View Johanna De Kol, 3 years, F. L. Harsh, Olathe, Kan. . . . . 260  
 McKinley Segis Pontiac Korndyke, 2 years, A. J. King. . . . . 1,100  
 Galsche Korndyke and calf, 2 years, A. Kerzello, Grandview, Mo. . . . . 605  
 Calamity Beauty Pontiac, Maid, 3 years, H. Corcord, Kansas City, Mo. . . . . 305  
 Mary Burke De Kol Girl, 4 years, W. R. Galleth, Grandview, Mo. . . . . 380  
 Maggie Hielo Pontiac Maid, 5 years, Dr. Smith, Kansas City, Mo. . . . . 355  
 Violet Colantha Sarcasite, three years, C. V. Hurt, Drexel, Mo. . . . . 430

## Field Notes

BY J. W. JOHNSON

R. P. Wells, Formoso, Kan., Jewell county, changes his advertisement to bred sows and all gilts. Mr. Wells is a well known Jewell county Duroc Jersey breeder that has bred the good ones. The breeding is Pathfinder and Orion crosses of the very best. The sows and gilts are by Highland Cherry King. Splendid breeding son of old Orion Cherry King. They are bred for September farrow good sons of Pathfinder and Sensation. Write for descriptions and prices. You will be treated right if you deal with Ralph Wells. Look up his advertisement in this issue.—Advertisement.

## Last Call for Great Holstein Sale

Kansas breeders of Holstein-Friesians are especially urged to consider the importance of the Robinson & Shultz dispersion sale at Independence, Kan., next Saturday, July 17. Albechar Holstein Farm, joining the city in the east, has been in the public eye for good many years because of the great show herd there and because of the great sales made in prominent sales that went to the farm. The owners of this great herd have not been content to rest on laurels but have been at all times alert for opportunities to better the herd. The result is it is one of the great herds of the west at least. In this issue of the Kansas Farmer and Mail and Breeze will be found their display advertisement that is full of real facts about the offering and the opportunity in this sale. Because of the active part that this firm has taken in behalf of the Holstein industry in Kansas I want to urge every Kansas breeder to attend whether they want to buy cattle or not. If you want to sell cattle you can see the importance of attending the sale. Mid-summer sales are sure to be full of real bargains. The recent decision to disperse the herd and close up the partnership has made the sale at this time necessary. Their loss will be your gain. The advertisement on another page gives you all the information. The catalog is ready to mail and you can have it by addressing sale manager, W. H. Mott, Herington, Kan., or the firm at Independence, Kan. But if you delay writing for the catalog just go to the sale anyway and you will get the catalog there. Remember the sale is next Saturday, July 17. There are good hotels in Independence and the sale will be held in comfortable quarters. Read the information contained in the advertisement in this issue on another page and write at once for the catalog to W. H. Mott, Herington, Kan.—Advertisement.

BY J. T. HUNTER

## Two Holstein Bulls For Sale

Axtell & Hershey, Newton, Kan., have for sale two Holstein bulls. One of them is a yearling that is ready for service. He is by King Pontiac Johanna who is one of the best sons of King of the Pontiacs. King of the Pontiacs is the only bull of the breed who has over 250 A.R.O. daughters. The dam of the bull for sale is a granddaughter of King of the Pontiacs. She has a 22 pound day record as a junior two year old. The other bull for sale is a spring calf by King of the Pontiac Hillsdale, a grandson of King of the Pontiacs and out of an 18 pound two year old Alcarta cow. The yearling bull will make some one a good herd leader and the bull calf is an especially good animal that has all the appearances of becoming a wonderfully fine herd leader. Write Axtell & Hershey, Newton, Kan., at once if you want one or both of these Holstein bulls. Please mention the Kansas Farmer and Mail and Breeze when you write.—Advertisement.

Homan & Sons Have Shropshire Rams  
 Sheep men of Kansas and the Southwest know that O. A. Homan & Sons of Peabody,

Kan., have an exceptionally good herd of Shropshires and that Mr. Homan and his sons have the habit of winning a very large percentage of the prizes at livestock shows and fairs with sheep selected from their herd. Quite a number of farmers over the country have started their herds or increased their herds with sheep from the Homan farm. At the present time Homan & Sons offer some twenty or more good yearling rams of Senator Bibby and Bibby Champion breeding. These two great sires who are half brothers have sired more prize winning Shropshires than any other two sires of the breed. Senator Bibby, 17th, a son of Senator Bibby heads the Homan herd and he is a fine individual. This ram has never been defeated where shown. He has won at shows at Wichita, Hutchinson, and Topeka and will be shown at the same places this year. His get this season is the best that he has ever sired. Homan & Sons will be pleased to meet at the state fairs and at the Wichita Stock show those who are interested in good Shropshires on the farm. With the increased interest in sheep that is developing these good rams will be taken very soon and we suggest that if you want a good ram now is the time to write. Do it today. Address O. A. Homan & Sons, Peabody, Kan. Please mention the Kansas Farmer and Mail and Breeze.—Advertisement.

BY J. COOK LAMB

## Foss Sells Durocs Oct. 21.

The Foss herd is headed by one of the Durocs' best breeding boars, Disturber of Sterling, a boar that sires type and size. Mr. Foss has about the usual number of spring pigs. Also a fine lot of fall gilts which are largely by this boar. They are a good quality bunch and will be a fine lot in making up his sale which will be held on October 21. Mr. Foss has several outstanding litters that are by Critterion, the boar he recently sold to head the Art Moore herd of Bartley, Nebraska. The sow herd represents some very high class individuals and are of such blood lines as Pathfinder, A Top Pathfinder, Disturber of Sterling, King Orion Jr., and Giant Col.—Advertisement.

## One of Iowa's Best Herds.

Pfander & McClelland Duroc herds, Clarinda, Iowa, are driving out an unusually good type of pigs this spring. Educator's Orion by King of Orion's Cherry, the old herd boar, looks better to these boys every day. He is siring a class of stuff when grown out that are hard to equal. A yearling son of this boar is going to show some strong competition in the 1920 shows. This boar is assisted by Mc's Big Bone Giant, he is one of the good sons of the noted breeding boar Big Bone Giant and his dam is King's Queen. This firm is offering sows bred to Mc's Big Bone Giant, spring pigs bred to Educator's Orion, Mc's Big Giant, Sensation Climax, Lawndale Disturber, Jack's Pal Orion, and Great Pathfinder and also a few Big Bone Giant gilts. The sow herd represents Pathfinder, Urbanside Golden, High Orion, King Sensation, Smooth Giant and other popular blood lines. Look up their card ad in the four Capper Farm papers as they have many different lines to offer you.—Advertisement.

BY G. L. BORGESON

Sawhill & Son, of Clarinda, Iowa, will drive a boar out at the shows this fall that will cause some comment in Giant Orion. He is by Educator's Orion and the Pfander and McClelland herd boar. This boar is 40 1/2 inches high, 81 1/2 inches long and carries a 9 1/2 inch bone.—Advertisement.



## Robinson & Shultz's Sale of 70 Purebred Holsteins at Independence, Kan., in the New Sale Pavilion Saturday, July 17

The last call for the greatest dispersal of outstanding individuality and rich blood lines ever offered in one Holstein herd in the southwest. The catalog is now ready for distribution. Every page in it recites achievements in milk and butter records of many of the great animals of the breed. Write today for a catalog and make arrangements to attend this sale.

W. H. Mott, Sales Manager, Herington, Kansas



At left: Johanna Lily who is a show cow and has produced 63,000 lbs. milk in 4 years; several times grand champion at different state fairs; the dam of the Kansas Free Fair junior champion in 1918; she and her three daughters are in the sale. At right: Princess Pieterette Haven De Kol has 3 times made over 28 1/2 lbs. butter in a week; milked over 100 lbs. in a day; last record 28.67 lbs. butter; 78 1/2 lbs. milk; 3.056 lbs. milk in 30 days; milked 13,500 lbs. first six months of period; highest producing cow in Southwest for both 7 and 30 days; weighs over 1900 lbs.; bred to freshen in September to King Korndyke Daisy Sadie Vale.

## ABERDEEN ANGUS CATTLE



## 12 Bulls

Eighteen to twenty months; big strong fellows. Priced to sell.  
 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.

## 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.

## RED POLLED BULLS

Some extra fine registered bulls for sale. Write for prices and descriptions, or better come and see them. Herd 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 Malton Greenmiller.  
 GEORGE HAAS, LYONS, KANSAS.

Pleasant View Stock Farm  
 Registered Red Polled cattle. For sale, a few choice young bulls, cows and heifers.  
 Halloran & Gambrell, Ottawa, Kansas

RED POLLS. Choice young bulls and heifers. Write for prices and descriptions.  
 Chas. Morrison & Son, Phillipsburg, Kan.

## AYRSHIRE CATTLE

Ayrshire Cattle For Sale  
 ROBERT P. CAMPBELL, Attica, Kansas.

## JERSEY CATTLE

Hillcroft Farms Jerseys headed by Queens' Fairy Boy, pronounced the best bred Jersey bull in Missouri, a Register of Meritson of Raleigh's Fairy Bull, the greatest bull ever imported; 54 tested daughters; 86 tested granddaughters and 34 producing sons. Choice calves for sale. Reference Bradstreet.  
 MR. L. GOLLADAY, PROPR., HOLDEN, MO.

FOR SALE 1 registered Jersey bull five years old. Gentle and good breeder.  
 A. E. SIEGERT, R. 1, BASEHOR, KANSAS

10 JERSEY COWS FOR SALE  
 9 of them from 2 to 6 years old. The best of my herd.  
 E. H. KNEPPER, (1 mi. N. W. of town) Broughton, Kan.

## HOLSTEIN CATTLE

## HOLSTEINS FOR SALE

Three yearling Holstein heifers, high grades, and one purebred Holstein bull, six months old, not related to heifers. You may have the bunch for \$300.00; any one for \$85.00 or two for \$160.00. Write  
 GEO. F. VOGT, TROY, KANSAS

## YEARLING HOLSTEIN BULL, \$135

Grandson of King Pieter 60771, that sired 42 A. R. O. cows. A bargain.  
 W. H. WILLIAMSON, RAYMOND, KAN.

## 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

## Facts in BLACK & WHITE

### Purebred Holstein Cows Yield Five Times More

In the opinion of Supt. Smith of the Geneva Experiment Station, the average production of butterfat per year per cow in New York State is about 100 lbs. The State College at Ithaca has a cow descended from common stock on one side and from a line of pure bred Holstein sires on the other. This cow has produced 479 lbs. of fat in a year. Not a startling record as several purebred Holsteins have records of more than twice as much, but it is interesting as proof that intelligent improvement of a herd of grades can multiply the butter yield by four and five.

Send for Free Illustrated Booklets. They contain valuable information for every Dairyman.

## The Holstein-Friesian Association

292 Hudson Street  
 Brattleboro, Vermont

## 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.

## 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

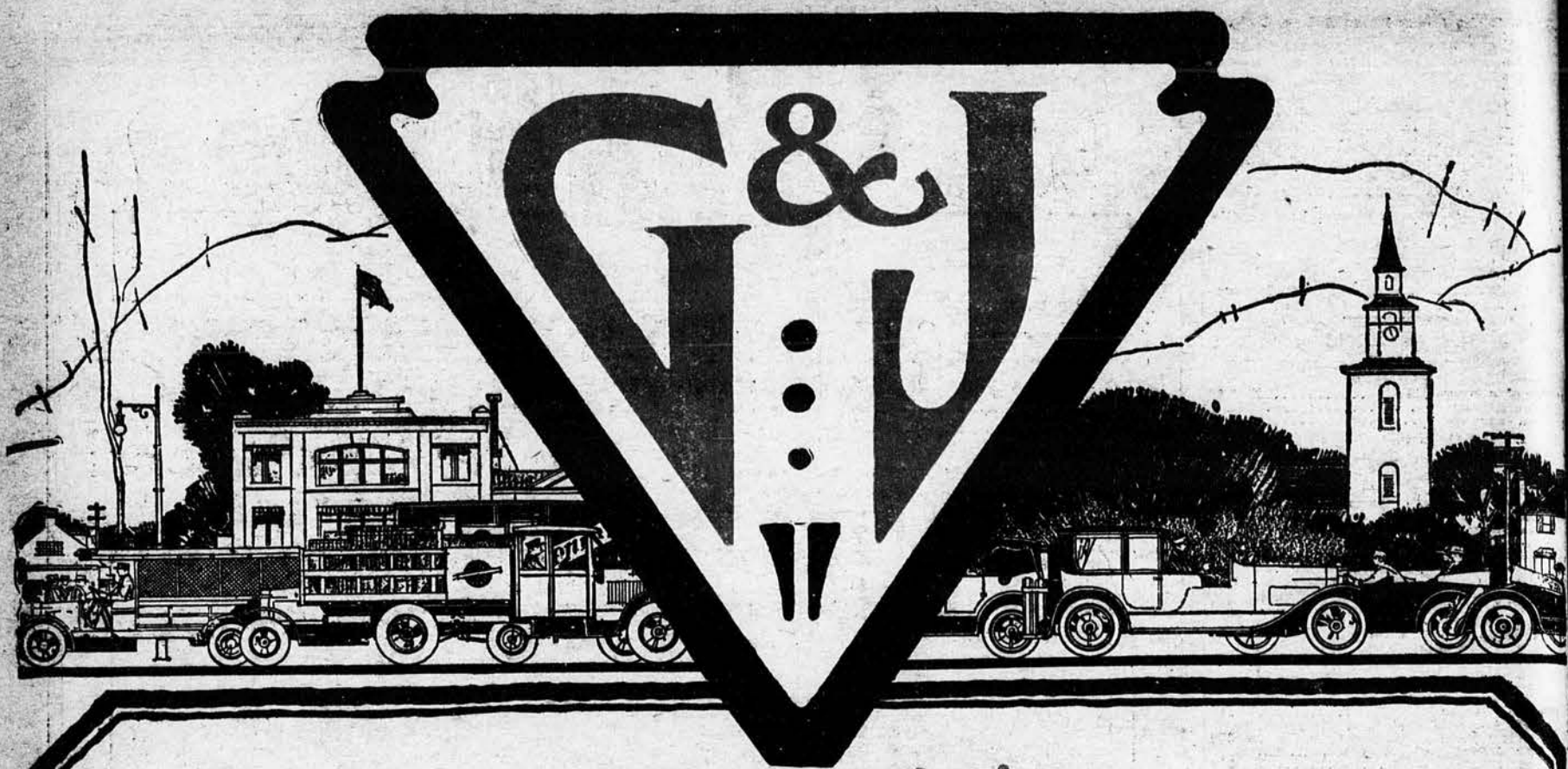
## HOLSTEIN OR GUERNSEY CALVES

either sex, 6 to 8 weeks old, \$30 each; express paid by us. Write for particulars. Spreading Oak Farm, R. 1, Whitewater, Wis.

## FOR HIGHLY BRED HOLSTEIN CALVES

Heifers and bulls, 6 to 8 weeks old, beautifully marked, from heavy producing dams, \$25 each. Safe delivery guaranteed. Write Fernwood Farms, Wauwatosa, Wis.





## TIRES

**T**WENTY-SEVEN years is a long time to be making tires. But not any too long to find out the physical elements that make *quality*—and to give them to the tire-user.

The makers of G & J Automobile Tires were building pneumatics before any of us had ever seen a motor-car.

Laying down correct principles of tire performance and contributing continually to those pneumatic tire develop-

ments which are standard today.

The strongly established position of the G & J Tire Company has more to show by way of result than even good tires.

It has the *square-dealing human touch with car owners* through a selected national group of hardware merchants and dealers in auto supplies.

A contact with the public represented by retailers who are fitted to be tire men according to the G & J idea that *reputation obligates a service*.

---

**G & J TIRE COMPANY, 1794 Broadway, NEW YORK**

---

CORD STALWART TREAD "G" TREAD PLAIN TREAD

