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KANSAS FARMER

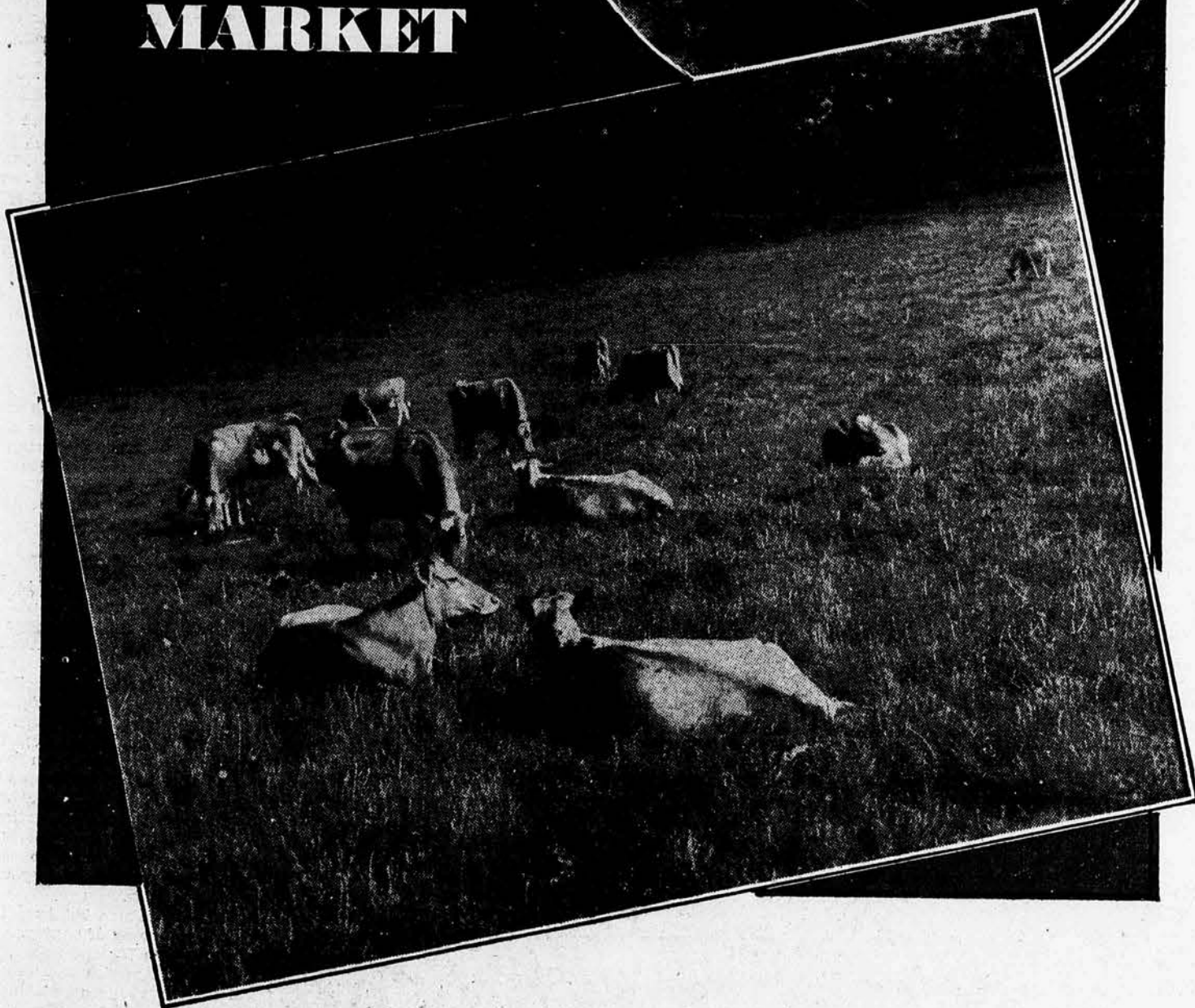
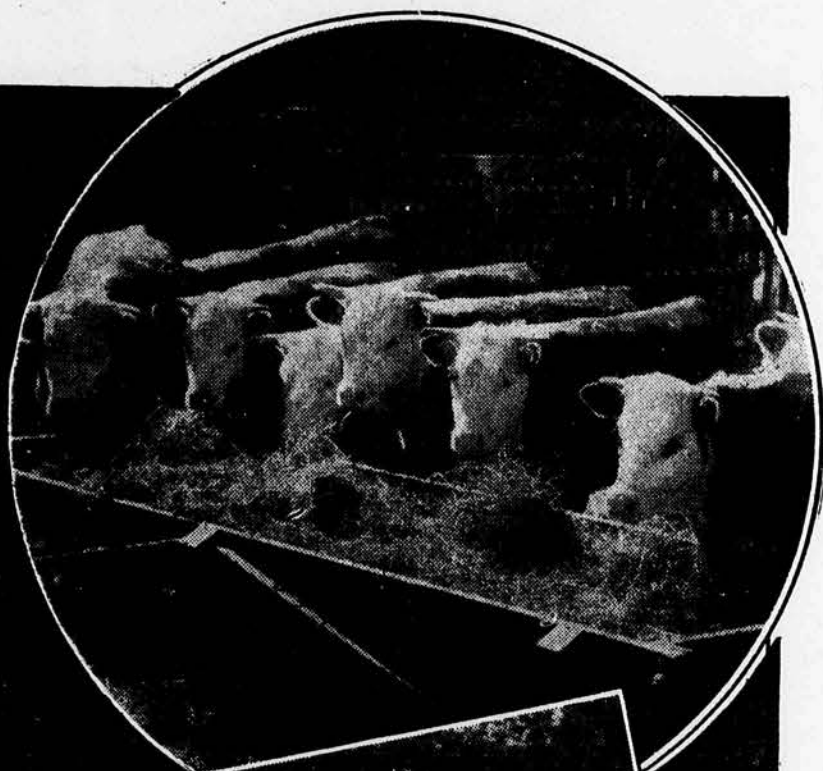
Volume 77, Number 7

MAIL & BREEZE

April 6, 1940



★
KANSAS TURNS TO
FEED CROPS
AND FINDS A
**GROWING
MARKET**



Firestone

GROUND GRIP TIRES

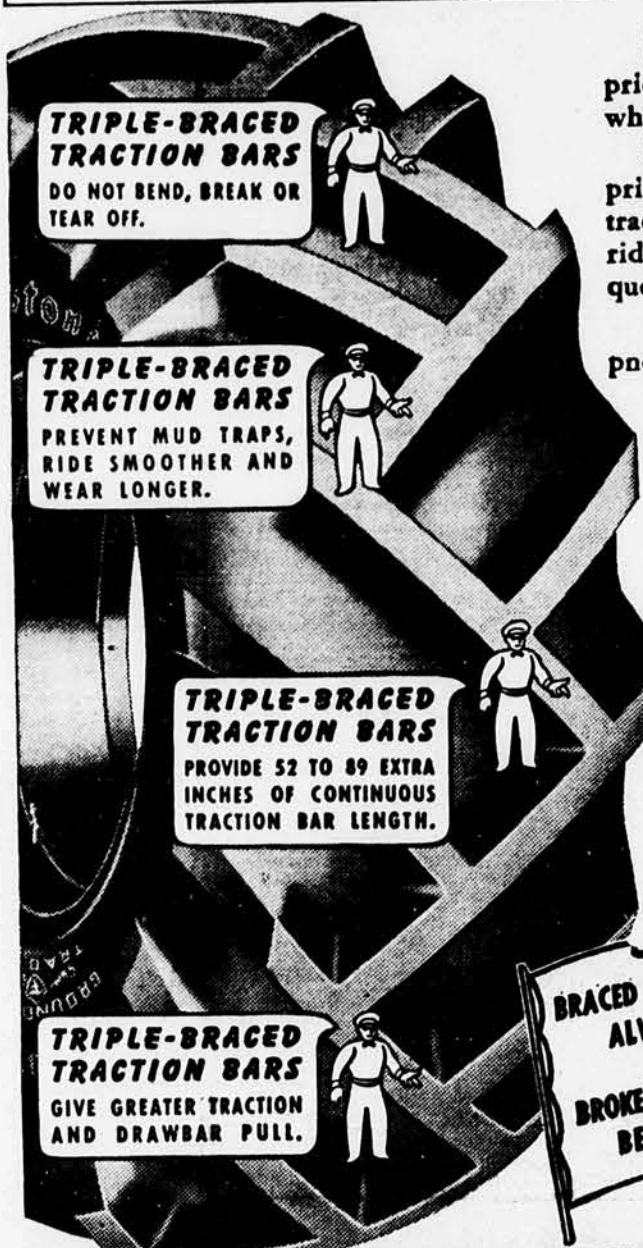
ARE AS DIFFERENT FROM OTHER TRACTOR TIRES AS HYBRID SEED CORN IS FROM ORDINARY CORN



Hybrid seed corn averages 15% higher yields than ordinary seed corn. Heritage is certain, because pollination is controlled. Plants are more vigorous—have greater resistance to drought, disease and insects. Ears are uniform in size and quality. Roots go deeper. Stalks are sturdier. Harvesting costs are lower.



With ordinary seed corn, yields are smaller. Heritage is uncertain because kernels may receive pollen from the poorest neighboring plants. Plants have less resistance to disease, drought and insects. Ears are uneven in size and quality. Root structures are shallow. Stalks are weaker and easily blown down. Harvesting costs are higher.



TRIPLE-BRACED TRACTION BARS
DO NOT BEND, BREAK OR TEAR OFF.

TRIPLE-BRACED TRACTION BARS
PREVENT MUD TRAPS, RIDE SMOOTHER AND WEAR LONGER.

TRIPLE-BRACED TRACTION BARS
PROVIDE 52 TO 89 EXTRA INCHES OF CONTINUOUS TRACTION BAR LENGTH.

TRIPLE-BRACED TRACTION BARS
GIVE GREATER TRACTION AND DRAWBAR PULL.

BRACED TRACTION BARS ALWAYS GRIP!

BROKEN TRACTION BARS BEND AND SLIP!

SUPPOSE hybrid seed corn sold for the same price as ordinary seed corn. There's no question which kind a farmer would buy.

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Without obligation on my part, please send me (check below):
☐ A copy of the new Farm Guide Book.
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Make and model of tractor.....
Please demonstrate on.....(date)
Name.....
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MORE TRACTORS ARE EQUIPPED WITH FIRESTONE GROUND GRIP TIRES THAN ANY OTHER MAKE

Mrs. M. P. M. Writes Back

Dear Editor—I did not expect you to enter my letter in a contest, as you will note I made no claims of a record, merely stated the 11 years. However, had I known you were going to challenge the readers for a long term tenancy, I would have entered John Foy's name. He lived 37 years on the place we now occupy. He raised all of his children here, and the place is still known by his name, tho he never owned it. I have a number of other tenants in mind who have outnumbered us 2 to 1. Perhaps it isn't the number of years that count most, but what you do while there.

What I was really trying to say, there must be co-operation of landowner and tenant. I still have more sympathy for the landowner, as too many tenants are inclined to be careless with the improvements on rented farms. Sometimes a social call is better than to stay until you wear out your welcome.—Mrs. M. P. M., Jewell Co.

Mrs. M. P. M. wrote the original letter which started the inquiry over who had lived on a rented farm the longest. Her letters are appreciated.

Two Long-time Records

Dear Editor—"Who Lived on Farm Longest?" I wonder if many can beat the record of my grandparents, Mr. and Mrs. F. D. York. Both are still living on the place they came to from Washington county, Kan., away back in April of 1881. My daddy was just 3 weeks old then; that makes 59 years for them and my daddy on this one farm. From a little 1-room shack in the middle of the prairie, they have almost completely modernized the farm; and there has never been a mortgage on it either. Grandfather and Grandmother celebrated their 62nd wedding anniversary last week, another fine record. I think they have 2 records to be very, very proud of.—Ruth York, Dunlap, Morris county.

Farm Rented Since 1883

Dear Editor—In 1883 my father rented a 400-acre farm from G. Hartwig in Owl Creek township, Woodson county. A contract for 2 years was signed and put in a bank. Neither of them ever saw the contract again. No written contract has since been made. My brother and I are still renting this farm. We have never yet defaulted in paying the rent. Five granddaughters of Mr. Hartwig inherited this land and still own it. My brother and I have always made this our home and when father retired we carried on the farm. The owners and those who have looked after the farm home have always been fair, honorable, and considerate. And I think they would give us about the same rating. Today the farm is one of the best in Southeast Woodson county. No AAA has invaded this farm.—George Launder, Yates Center.

Disagrees on Agreements

Dear Editor—I note in Kansas Farmer that corn farmers will get a 12 per cent reduction in acreage in 1940 with substantial soil conservation and parity payments.

Fine! If the proposed Reciprocal Trade agreement with Argentine becomes operative, U. S. corn farmers can do no better than accept the very largest crop conservation payments possible. A government crop subsidy invested in cheap Argentine corn would be a safer plan than competing in the open market with the imports of that commodity that seem to flood our markets with demoralizing effect on domestic prices.

I may be obtuse, but I can't see the logic or economy of paying American corn farmers for not raising corn so that South America can have a market for her cheap corn. America for Americans.—G. W. Northrup, Ft. Lupton, Colo.

UNDERWORLD HELPERS

By ROY FREELAND



EVERY farm in Kansas has an active underworld. Hidden in the haunts of our soil, a seething mass of life is working and struggling to strengthen or to destroy all civilization that exists above ground. If we could go on a tour thru these underworld haunts, we would meet some unusual beings.

At the outset, our guide would probably explain that on the average farm, there is about as much life in this underground realm as there is above the surface. Billions of underworld inhabitants exist in every conceivable form and size. Most numerous are the little fellows, so small they cannot be seen with the naked eye. Some are low forms of animal life; others belong to the plant kingdom. Some work hard and long to help the human race, while others cause disease and destruction.

Fortunately, most of the underworld dwellers are friendly and helpful to mankind. Leaders in this group are the bacteria which cause nitrogen fixing nodules to grow on roots of legume plants. These industrious little workers convert nitrogen from an unavailable form to an available form, so it may be used by plants in production of protein feeds. Since all animals and human being are dependent upon a supply of proteins, we owe our existence to the work of these underground helpers.

Making friends with them to learn more of their habits, Dr. P. L. Gainey, soils bacteriologist for the Kansas Experiment Station, has observed some practical facts about the work of nitrogen fixing bacteria. Doctor Gainey points out that if good, strong strains of these workers are not present in your soil, legumes may deplete the soil of its fertility most rapidly of any type of crops that can be grown. This is true because such crops as alfalfa, the clovers, and soybeans are high in protein; since proteins contain nitrogen, it means that legume crops take tremendous amounts of nitrogen from the soil.

But if enough of our active little friends are present, and if they are good workers, they may actually take enough nitrogen from the air to more than replace soil nitrogen removed by the crop. As in the case of "water, water everywhere but not a drop to drink," 6 tons of free

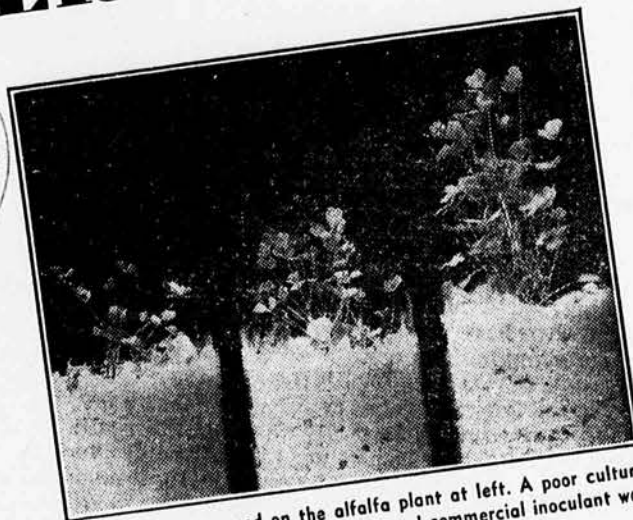
nitrogen is in the air above every square yard of earth surface. But this free nitrogen of the air cannot be used by plants and animals until it is converted into a form that is available to the plant roots.

In performing this service, the hustling little bacteria may eventually sacrifice their own lives. First, they enter a root of the legume plant and this causes a nodule to form at the point of contact. The bacteria live inside this nodule. Air, which is in the soil, seeps thru the porous nodule walls and the bacteria utilize nitrogen contained in that air. Waste materials given off by the living bacteria releases available nitrogen to supply hungry plant roots; more available nitrogen is released by the death and disintegration of nodules and bacteria.

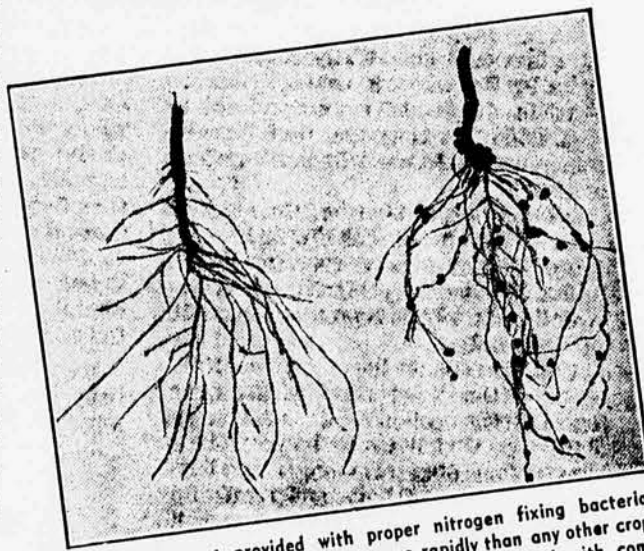
IT IS possible to extract nitrogen from the air by a mechanical process. But to do the job now being done by these tiny soil organisms would require millions upon millions of horsepower. For instance, if all the power at Muscle Shoals was used for fixing nitrogen, it would not produce as much as could be fixed by our underworld helpers working with alfalfa on an area the size of Butler county.

The Muscle Shoals power could produce about 40,000 tons of nitrogen a year. That is about the amount needed for the 4 major crops—corn, oats, wheat and alfalfa—in the 7 Kansas counties of Jewell, Smith, Washington, Sedgwick, Cowley, Barton, and Lyon.

Bringing this matter of nitrogen right down to your own farm situation, about 50 pounds of nitrogen to the acre is used in producing a 30-bushel wheat crop. Many of our Kansas soils have already lost 25 to 40 per cent of their original store of nitrogen. At present, the average cultivated layer of Kansas soil contains about 2,700 pounds of total nitrogen to the acre, but at the time wheat makes its heaviest demands



No inoculant was used on the alfalfa plant at left. A poor culture was used on the center plant, and a good commercial inoculant was used on the plant at right.



If they are not provided with proper nitrogen fixing bacteria, legumes may deplete soil fertility more rapidly than any other crop. Soybean roots at right are from a plant inoculated with commercial culture. Roots at left are from plant not inoculated.

only about 4½ pounds of this supply is in an available form. That is another time when we need overtime work from our little helpers. In addition to taking nitrogen from the air, bacteria take the responsibility of changing soil nitrogen to an available form.

Importance of the help from our soil friends was demonstrated on the E. A. Volmer farm in Harper county. Mr. Volmer "ran out" of inoculant in treating the seed for a field of soybeans, so part of his field was treated and part was untreated. The following [Continued on Page 26]

Good corn, at left, followed a legume crop growing from inoculated seed. Corn at right, followed same legume where seed was not inoculated.



Passing COMMENT

I WAS very much interested when I received the other day the following letter from a subscriber, W. G. Goenner, of Zenda. Mr. Goenner wrote, "I read the article in Kansas Farmer from Dr. Kelly about chinch bugs being still bad in some parts of the state. I wrote to the Doctor some years ago telling him how successful I was in combating the bugs with the Professor Snow method. Some 50 years ago it swept the bugs out of existence like a prairie fire, and we have lost no crops from them since. I have lived on the claim I proved up in 1883 or near it. My son lives on it now. We have a very few chinch bugs each year but they soon die, which probably accounts for our being free. If Dr. Kelly would try to get some of these infested bugs, follow directions, the main thing is dampness, I used a cellar, he would have better success and cheaper, than by the creosote route. Professor Snow claimed he discovered a disease fatal to chinch bugs. This discovery was that the disease could be given to live ones by putting them with dead ones."

Professor Snow was, in his time, the greatest authority on insects and insect life in Kansas, and probably did not have a superior in the United States. He made a perfectly marvelous collection of insects which I presume are still kept at the University.

At that time the chinch bug was one of the worst enemies of the Kansas farmer. Professor Snow, afterward Chancellor of the University, conceived the idea that it would be possible to spread a contagious disease among these bugs by infecting a number of bugs and scattering them about in the fields so the well bugs would become infected. The legislature took enough interest in the Snow theory to make an appropriation, about \$3,000 as I recall, to help Snow. The experiment was hardly a success as a whole, altho quite a number of farmers declared they had found that diseased bugs did spread the infection. It has been many years since I have heard anything about this interesting experiment. I am glad to get this letter because I had a very high opinion of Chancellor Snow. This letter would indicate his experiment with the bugs may have done more good than I had supposed.

Rural Line Problem

I WOULD like to have you publish your opinion on the following problem: We have a mutual telephone company, own the telephone building and also the switchboard. Each party (rural) line is a company of its own and work-

When the Wrens Arrive

BY ED BLAIR
Spring Hill, Kansas

Some morning right soon with the welcome sun's peep

We will hear the sweet song of a bird,
That will gladden our hearts with a joy that is deep

And we'll understand ev'ry word—
This singer will ask us again for his house
That same little house, near the door,
Beneath the porch roof, that he and his spouse
Have rented so often before.

And we will be thrilled when we hear his sweet song

And step out and tell him 'tis ready,
The furniture out, but it won't take them long
Only just a few hours, working steady.
And then she'll get busy with straws interlaced,
Completing by placing each feather,
He praising her skill as each piece is placed
That guarantees warmth in cool weather.

By T. A. McNeal

ing under the general company or central company which controls the switchboard and the city lines. Each stockholder of the party lines also has proportionate share in the switchboard and the central property. Each party line has a constitution and by-laws of its own. On our line, the constitution says that each stockholder shall bear his proportion of expense. The by-laws say that the dues shall be paid quarterly, in advance. The secretaries of the party lines are to pay the general secretary before the 10th of the month starting the quarter. Now, we have few malcontents (a very small minority) on our line, who withhold the payment for 6 to 8 weeks, declaring that the majority cannot do anything about it, and that despite our party line by-laws, that they, the minority, cannot be disconnected from the line and that they, the minority, can continue to use the line whether they are paid up or not. When they don't pay up, can they be disconnected from the line? If not, why not?—Subscriber.

I would suggest that the officers of the company take this up with the Corporations Commission, State House, Topeka, Kan.

Little to Boast About

I AM in receipt of the following letter: "In all peace proposals brought to restore Poland I might suggest that prior to 1918 there was no independent Poland, at least for a period of 150 years. If Poland is to be restored, would it not be reasonable to ask that England should reconstitute the countries she has acquired in that time? What a boon that would be for the map-makers. By what authority does England constitute herself the executor of Almighty God here on earth to take what she wants and as much as she wants of Asia and Africa? She already owns Australia and islands all over the earth and wants to parcel and arrange things in a way that will best serve her own interests."—Henry Reh, Homewood, Kan.

Of course, it has not been 150 years since Poland was an independent government, but, granting all that Mr. Reh says about the past grasping policy of England, that would in no sense of the word justify Hitler in his present treatment of the poor peasantry of Poland. There is not much to be said for any nation when it comes to a history of its past treatment of weaker nations. In fact, even our own beloved United States cannot show entirely clean hands.

On the other hand, I believe that it can be truthfully said that the lands which have been taken over in various parts of the world by Great Britain have been made far better places in which to live than they were before she took them over. And that has been true also of the islands which have become a part of the United States. It also may be said that in the history of the world, without exception, conquering nations have proceeded with the expectation of bettering their own trade conditions and adding to their own power rather than for the benefit of the natives they have conquered.

Who Would Get Land

HUSBAND and wife, A and B, hold a piece of land with a joint deed. If one dies the title is to go to the other. The deed has this clause in it: "To have and to hold the same together with all singular tenements, hereditaments and appurtenances thereunto belonging or in any wise appertaining forever." After the death of B, does

it have to go thru court to give A title to the land?—B. F.

Under this deed A and B are the joint owners of this land. There used to be a law in Kansas that would have given at the death of one to the other the full ownership in this land but that law does not now operate. At the death of either without will, the land would be divided according to our laws of descents and distributions. If B had children at her death and made no will, her undivided half of this land would descend to her surviving husband and her children. That is, half of it would go to her husband if he still survived her and half would go to her children. Or if she had children who had been married and who had died leaving children, the children of such child or children would inherit the share of their parents.

Husband Was Wrong

IN THIS case A and B are husband and wife. B has worked hard, raised a big family, and kept 4 or 5 in school for several years. She was left an estate from her father at the bank. She did not know the estate had been settled and that the money had been left there when A got it and said it was none of her business what he did with it. He has his fine cars and truck but says she must work for her board. The children have to see that she has clothes. Was not that money hers that was left by her father to her?—Subscriber.

The laws of the state of Kansas permit the wife to do business and manage property on exactly the same terms as her husband. Her husband has no right to take her property without her consent.

When it comes to the death of the husband or wife, the survivor, under our statute, inherits one-half of the estate, personal and real, but so long as both are alive the husband and wife each have the right to the care, custody and disposal of their own property with the exception of the homestead and other exempt property which neither has a right to alienate without the consent of the other. Also, neither can give good title real estate without the consent of the other spouse.

In this case the questioner says that B, the wife, inherited an estate, that it was sent to the bank and that B's husband, without her knowledge or consent, appropriated this estate. He had no right to do so and she can bring an action against him to compel him to turn it over to her. If it is an estate that amounts to anything she will need the services of a competent attorney.

THE KANSAS FARMER

Continuing Mail & Breeze

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FARM MATTERS

As I See Them

RETURN of Sumner Welles, Undersecretary of State, from his "information, please" trip to European war capitals fits into a war picture for the United States that is far from encouraging.

Almost simultaneously with Welles' return, the Senate Committee of Military Affairs voted down a resolution to investigate sale of war planes to Britain and France. This action is tantamount to approval of the sale of our latest developed war planes to the Allies.

At the same time, the New York Times announces on page one that, "War Sends Steel Exports to 20-year High as February Shows Gain for Seventh Month."

The combination of events gives good ground for the belief held by many that the Administration is by now so completely committed to a pro-Ally policy that it is just a question of time, if the policy is continued, until once again the United States will be in the position, as Andre Tardieu stated it after the Wilson Administration agreed to allow flotation of Allied loans in this country during the World War:

"From that time on, whether desired or not, the victory of the Allies became necessary to the United States."

Of course, these airplane sales are being justified as a part of our own national defense, but they also might as well be designated as a part of our own preparedness for participation in the European war.

Forceful arguments are made for flashing the green light on sales of war supplies to the Allies. It will encourage and promote airplane production in the United States. It is asserted that our plane production this year will reach 10 times that of last year, as a result. Probably true—as it also seems to me inevitably true that by the end of another year such a policy will bring us to the point where we cannot suffer a reduction in airplane production without facing an economic crisis.

Today we are doing business with the Allies on a cash basis. We are the Allies' munitions arsenal and warplane base of supplies. True, they have quit buying anything else from us. Britain is undercutting our trade with Latin America. The English also are manipulating the pound again to the advantage of her exporters.

But we still are on a cash and carry basis, for the present. What will be the move when the British and French governments say they no longer can pay cash?

I believe the answer will be inevitable, as it was before, if present policies are continued. John Bull will say to Uncle Sam, in effect:

"You have built up your steel industry, your munitions industry, your airplane industry, on your sales of the products of these industries to us. If the sales stop, the industries will collapse, with serious effects on your entire business structure. The sales will stop unless we can buy on credit. What are you going to do about it?"

In other words, it seems to me that the course is being pursued which I predicted when I opposed repeal of the arms embargo.

First, we sell munitions, airplanes, other war supplies, for cash. Then we will be required to advance credits to continue the business. Our international bankers will advance credits for a time—then they will join the Allies in an insistence that Allied loans will have to be floated in this country to protect the credit advances. Once the loans are floated, we will have such a sizable investment in the Allied cause that we will have to go the limit to insure an Allied victory.

Just as Andre Tardieu, wise Frenchman, said of 1915 developments:

"From that time on, whether desired or not, the victory of the Allies became necessary to the United States."

Livestock Men Know

I WISH to congratulate the Kansas Livestock Association on the stand taken at the recent meeting in Wichita, regarding trade treaties.

Among the resolutions adopted is this one:

"In view of the large volume of importation of livestock, livestock products, fats, oils, and other commodities competing with our industry, be it resolved, that adequate tariff protection be accorded our domestic products; also that Congress continue its vigilant guard against importation of livestock and its products from Argentina and other countries infected with disease. We also urge Senate ratification of trade treaties by two-thirds majority."

Now, I don't need to tell you that the Kansas Livestock Association is made up of some of our most substantial and most thoughtful citizens. Nobody can tell me that they don't know their business. No one can tell me these Kansas livestock men don't know what is good for their business, and what is seriously detrimental to it. They leave no doubt in any intelligent mind as to their stand on trading off—or giving away—the American farmer's market for "promised" benefits, which obviously are a long, long time coming.

Under the trade agreements act of 1934, which was extended in 1937, the American market for American farmers has been traded for increased foreign markets for manufactured products. For the life of me I cannot see how my Kansas farm people are going to enjoy increased farm income from this kind of business. I fail to understand how the ledgerdmain of increasing imports of commodities produced by foreign farmers, when exports of our own farm products are at very low ebb, even with the help of government export subsidies, is going to pay interest and taxes for our farmers. Surely the least our own American farmers can expect is that their government will support them in their stand, and my stand, that the American market first of all belongs to them to the utmost of their ability to supply it. Members of the Kansas Livestock Association are not fooled into believing that great good will come to them by taking their home market away from them.

Arthur Capper

Washington, D. C.

From a MARKETING Viewpoint

By George Montgomery, Grain; Franklin L. Parsons, Dairy, Fruits and Vegetables; R. J. Eggert, Livestock; C. Peairs Wilson, Poultry.

(Probable changes in feed and carrying costs have been considered in forming conclusions.)

Wheat crop around here is in poor condition and farther west I guess it is worse, and I see a lot in the papers about the wheat being poor all over. How will this affect wheat prices?—J. M., Pawnee Co.

The wheat crop is in poor condition. Reports, not only from Western Kansas but also from the soft winter wheat territory, point to a small winter wheat crop. This probably will result in irregular rallies in prices but substantially higher prices in the near future are not probable unless Winnipeg and world prices advance. Domestic prices are already near an import basis. During the next year prices may move to somewhat higher levels if domestic and world surpluses are reduced.

I have about 48 head of hogs which

will top at 190 to 200 pounds. Am I justified in holding for 15 days?—J. A. L., Wilson Co.

Yes, available evidence indicates that some temporary seasonal advance in hog prices still can be expected. Much will depend upon how soon the large fall pig crop is ready for market, but the extremely cold weather during January and early February undoubtedly was a factor in retarding the development of this crop. Furthermore, while unfavorable feeding ratios tend to encourage marketing at lighter weights, such a relationship usually tends to discourage "crowding" for an early market. Considering the number of hogs on farms January 1, 1940, and the extremely heavy marketings since then, one is justified in expecting a period of smaller slaughter supplies before a large proportion of the fall pig crop is ready for market.

I have some good-grade steer calves that will weigh about 400 pounds. I plan to carry them on grass and feed next fall. When do you look for good-grade fat cattle prices to be the highest?—E. S., Revere, Mo.

This requires a long-range forecast that is dependent on some important factors that cannot be measured at the present time. However, available information indicates that prices for good-grade fat cattle during October or November of 1940 will approach the high for the year. This assumes that war will continue and that feed crops and range conditions during the fall of

1940 will be normal or above normal. The number of steers on farms January 1, 1940, was only about 100,000 head larger than the number a year earlier and farmers have reported that they intend to market a much larger proportion of the cattle on feed during the first 6 months of the year, compared with marketings during this period last year.

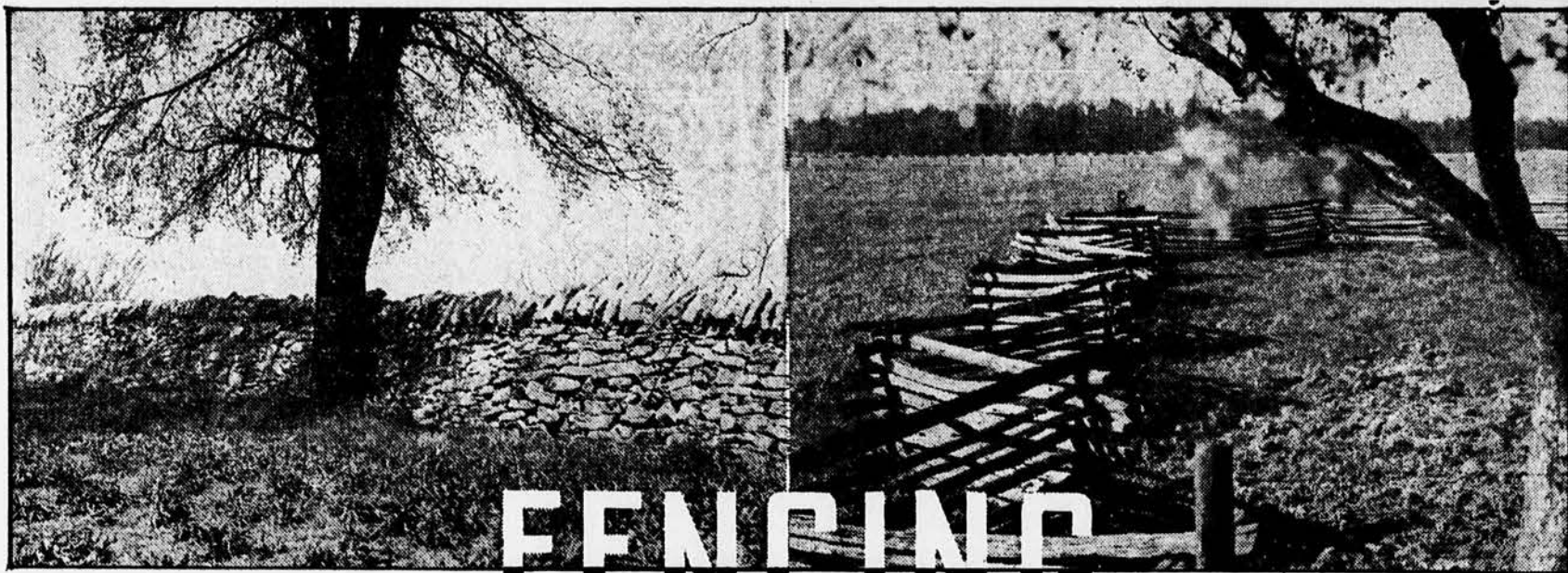
Will butterfat prices decline as much this year from late March thru April as they did last year?—L. L. D., Washington Co.

Probably not. Last year butterfat prices at Kansas local stations declined from 3 to 5 cents a pound from late March to April. This year the price decline probably will be around one cent a pound because butter cold-storage holdings are below average and only about 20 per cent of last year's holdings and, also, business conditions are much better than a year ago. April butterfat prices, compared with March average prices, have declined in 18 of the last 23 years, and the average seasonal decline is between one and 2 cents a pound.

Trend of the Markets

Please remember that prices given here are Kansas City tops for best quality offered:

	Week Ago	Month Ago	Year Ago
Steers, Fed	\$10.75	\$12.25	\$12.25
Hogs	5.25	5.50	7.05
Lambs	11.50	10.25	11.10
Hens, 4 to 5 Lbs. ....	.14	.14	.14
Eggs, Firsts .....	.15	.15	.15 1/4
Butterfat, No. 1 ....	.25	.25	.18
Wheat, No. 2, Hard ..	1.06 1/4	1.03	.74 1/4
Corn, No. 2, Yellow ..	.61 1/4	.59 1/4	.47 1/4
Oats, No. 2, White ..	.43	.44 1/4	.30 1/4
Barley, No. 2 .....	.55	.56	.41
Alfalfa, No. 1	18.00	17.00	15.00
Prairie, No. 1	8.50	8.25	8.50



First the New Englander, later the settlers of the limestone areas of the Middle West, cleared their land by burning the timber and making fences from the stones picked up like this one in Indiana.

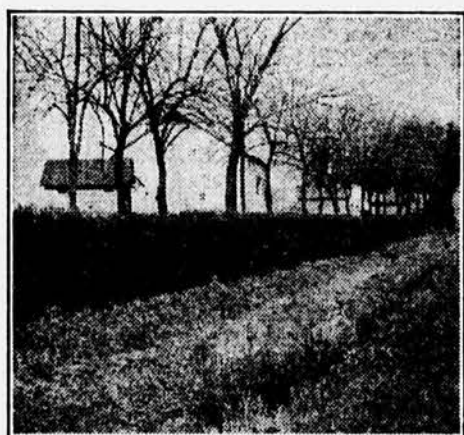
FENCING

From Stone to Steel

BY CORDELL TINDALL

FENCES have grown up with the country. They tell a story of farming progress, and are linked with the transformation of virgin timber and grassed prairies into well-kept farms. Steel rapidly is standardizing fencing, but it was not always so. As our country was developed, fences were made of materials at hand. Stone, wood, hedge, sod, all were adapted native materials, and fences were built to fit in with the scheme of farming. We note with some regret the passing of this picturesque scene but progress demands that these fencing materials, which have served their useful purpose, be replaced by a superior product.

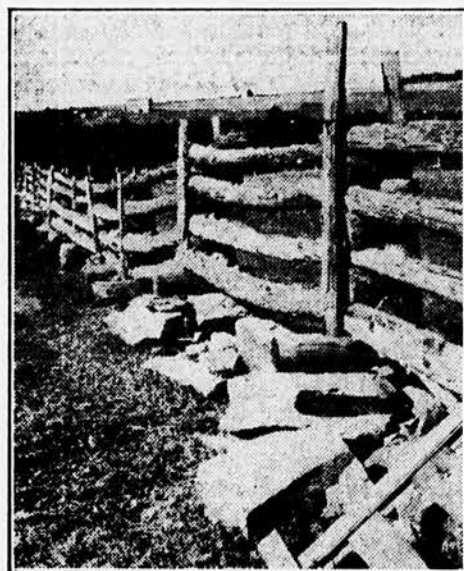
In the timbered land, where the settler had no stones, he split up the trees into rails. A part of the American tradition, only a few now remain. This one is in Virginia.



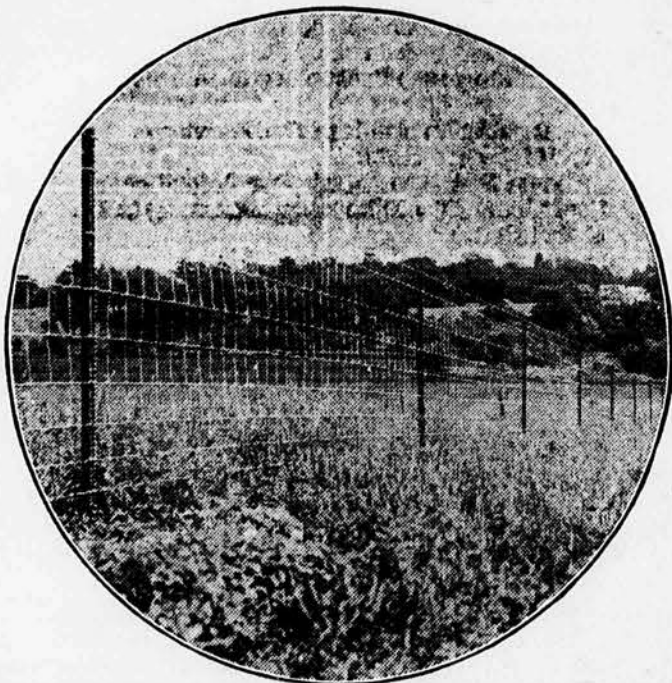
In the prairies, where there was neither stone nor rails to be had, Osage orange hedges were developed, as in this Ohio scene.



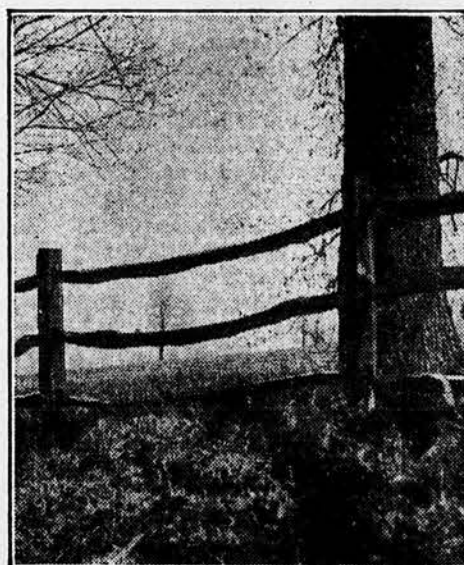
Quick to take advantage of any material at hand, even stumps were used for fencing. This picture was taken in Wisconsin.



In Maine, where there's plenty of timber, we find this type of stake and bunk fence in use.



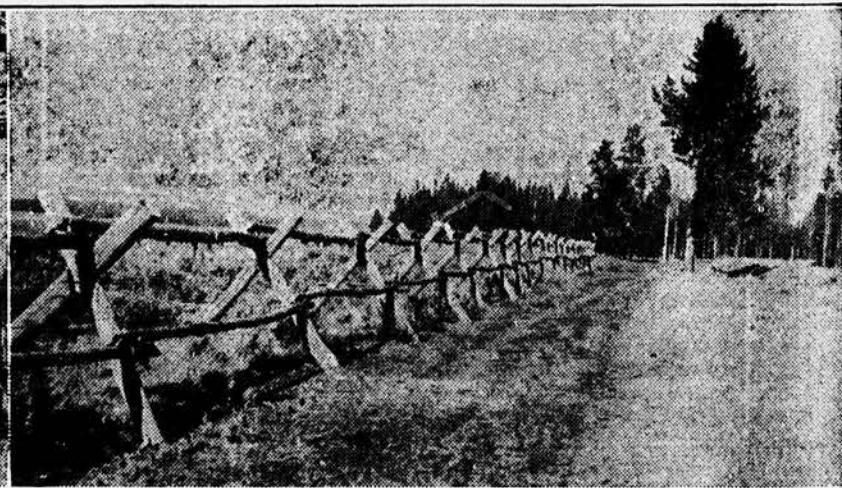
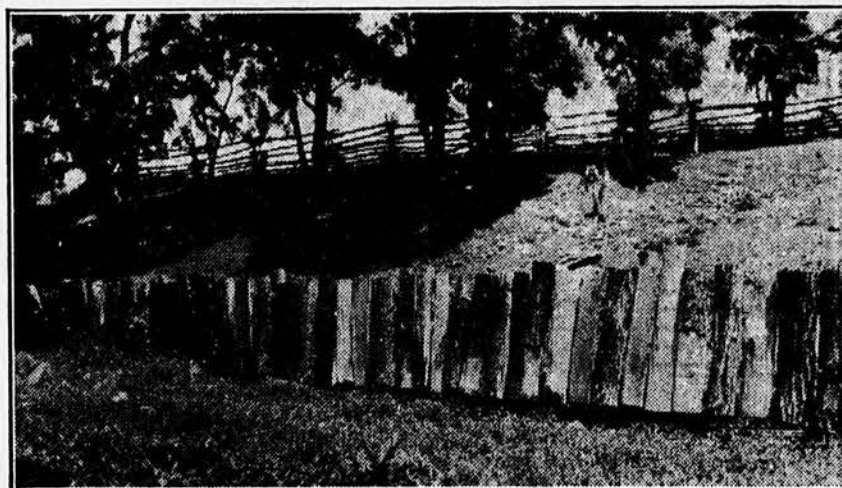
Today the steel fence stands for the progress made in agriculture. Good fencing goes with good farming. This scene can be duplicated on countless farms, in many parts of Kansas.



Altho picturesque, it must be a lot of work to build a mortised post fence, such as this one in Connecticut.

Slabs from a local sawmill form this fence, below, in Pennsylvania.

A stranger to us is this jack pole fence, below, in Idaho.



Family-Operated Farms

With Help of Better Machinery

By HARRY G. DAVIS
Director, Farm Equipment Institute

DESPITE the fact that there are a great many large wheat ranches in the western part of the state, Kansas is a state of family farms, operated mainly by family labor.

In the first week of January 1935, according to the U. S. Census of Agriculture, 150,398 or 88.6 per cent of the 169,763 farms which reported employment data to the Bureau of the Census were being operated solely by family labor, 17,560 by a combination of family and hired labor, and 1,805 entirely by hired help. There were 26,034 persons employed as hired help, or an average of 1.34 per farm employing outside labor. There were 4,826 farms in the state that made no report on employment.

Utilization of family labor to the greatest extent possible in the operation of a farm increases net income by eliminating out-of-pocket expenditures for hired labor. It is made possible, however, only by the use of machinery which increases the capacity of the individual worker and enables him to accomplish more in a given time than would be possible without its use.

It is not so long ago that farming in Kansas was done with the use of little machinery of limited capacity. The 2-horse walking plow, the 5-foot grain binder, the 1-row cultivator and other small tools were in common use on most farms at the beginning of the present century, and it took more than the family labor that was available on the average farm to carry on its ordinary operations.

But now there are about 100,000 tractors on Kansas farms and the extra speed and larger equipment of the present make it possible for most farmers to operate their farms solely with family labor.

These changes are the results of accumulative engineering research that has been going on over a long period of years, the objective of which has been to strengthen the position of the owner of the family-operated farm. There has scarcely been a year since the first farm machine came into the state in which some machine was not improved or some entirely new one introduced. The trend always has been toward the needs of the family-operated farm.

Tractor Illustrates Progress

No case better illustrates the progress that has been made than that of the tractor. When it was first introduced, a little more than 30 years ago, it was a big, powerful machine that was capable of delivering power only from its drawbar and belt pulley, and its chief service was to drag machines behind it or operate them with its belt. Crude as it was, it was admirably adapted to many of the common operations of Kansas farmers, such as plowing, disking, harrowing, seeding, and operating the threshing machine, and it found many friends among them. In 1920, Kansas ranked third among states in the number of tractors on farms, having 17,177 on the 165,286 farms then in the state, or one tractor for every 9.6 farms.

Those 1920 tractors were only the forerunners of the more efficient present day models, as would be seen if a direct comparison could be made. Engines have been redesigned to give greater fuel economy and more dependable operation; the power take-off has been added so that engine power can be used to operate machines drawn behind, or mounted on the tractor, and the power-lift has been installed to utilize engine power to raise and lower machines mounted on the tractor frame.

These are only a few of the more important improvements that have been made in tractors since their first introduction in Kansas. Coupled with them have been many other refinements which make tractors more serviceable to farmers and easier and more comfortable for them to operate. In addition, the quality of materials and workmanship entering into their construction has been so vastly improved that breakdowns now are infrequent and repair bills are surprisingly low.

New Principle Followed

In co-ordinating the tractor with other farm machines, an entirely new principle has been followed in recent years; namely, that of mounting machines on the tractor frame, thus eliminating transport wheels and giving greater flexibility and maneuverability to the machine. These implements are so designed that they may be easily and quickly attached or detached. There is a wide variety of these attachable implements totaling 27 separate machines for one model alone.

For operators of small farms, where the power requirements are low, there are now obtainable small 1-plow tractors which are designed for use on farms as small as 20 acres. These tractors are of the all-purpose type with high clearance to enable them to straddle crop rows when being used for cultivating. In most details, they are replicas of the larger models, being lighter and lower priced, but amply powered for the work for which they are intended. Operators of larger farms are also using them as auxiliary tractors for lighter jobs about the farm.

About 6 years ago, rubber tires first became available as optional equipment for wheel tractors. These met with ready acceptance by farmers and, in 1935, 14 per cent of all wheel tractors manufactured were equipped with rubber tires at the factory. The proportion has increased greatly since. With the use of rubber tires came the stepping-up of the speed of tractors and many of them are now designed to travel more than 10 miles an hour in high gear. This makes tractors adaptable to road work and many farmers are now using them to haul products to market.

Following the trend in tractors, many other machines are being equipped with rubber tires, some of the tires being interchangeable from one machine to another, thus permitting the use of one set for several machines. This reduces investment and gives wider benefit of rubber equipment at low cost. Machines equipped with rubber tires include sprayers, combines, threshers, hay balers, manure spreaders, corn pickers, wagons, and, in fact, almost every kind of farm machine, particularly those which must be transported over public highways.

Another machine which is doing much to make the family-operated farm possible is the new one-man combine designed for the farm with a limited acreage of threshable crops. These machines, much like their big brothers in design, cut and thresh all kinds of small grain, as well as soybeans, clover, alfalfa and many other seed crops. Many of them are operated by the power take-off of the tractor, although an auxiliary engine can be used when desired.

In nearly all items of farm equipment there have been many refinements which increase the life of the machine and improve its serviceability.

Creep-Feeding Cues

Creep-feeding calves is one of the cheapest and best ways to produce finished beef. More and more farmers are turning to this method for making money. A leaflet, prepared by Kansas Farmer, "Creep-Feeding — A Profitable Method of Beef Production," gives the advantages of creep-feeding, essentials of the system, what to feed, how to build the feeder and creep, precautions to take, and where and when it is not desirable to creep-feed. For your copy, send a 3-cent stamp for mailing to Farm Service Editor, Kansas Farmer, Topeka.

Chief among these have been the use of gear enclosures, anti-friction bearings and pressure lubrication, which permit gears to run free from grit and dirt, assuring longer life and quieter operation. Modern design requires fewer moving parts, with smaller power requirements, and with more dependable performance and less wear and tear.

In the last few years, great strides have been made in improving the method of handling fertilizer so that more profitable results can be obtained from its use. Planting equipment is now available which enables a person to place the fertilizer where it will do most good, both with respect to side and depth application in proper relation to the seed. This means economy in the use of fertilizer and increased yields because it is all placed where it can best feed growing plants.

Labor Must Pay

On the family-operated farm, it is essential that every bit of labor be made to pay. In no other operation is this more important than in the matter of seedbed preparation. Heavy duty disk harrows, smoothing harrows, soil pulverizers and other machines are obtainable which will meet every requirement for preparing seedbeds as smooth as a table top and as fine as a garden. If rough, cloddy surfaces are desired to resist water and wind erosion, field and spring-tooth cultivators and harrows are available. These machines can also be used to control Quack grass, thistles, creeping jenny.

Haying time is one of the peak labor seasons of the year and frequently presents a real problem on the family-operated farm where the amount of labor is strictly limited. In many communities, newer ways of making hay are supplanting older methods. Tractor mowers, either attached to the frame of the tractor or pulled behind it, speed up the cutting operation and on rough land more closely follow the contour of the ground. The side-delivery rake has been gaining in popularity because there is less loss of leaves and the feeding quality of the hay is increased when it is cured in the windrow. Windrow hay loaders eliminate the labor required to cock hay, where baling direct from the windrow with the pickup baler is an easy short-cut.

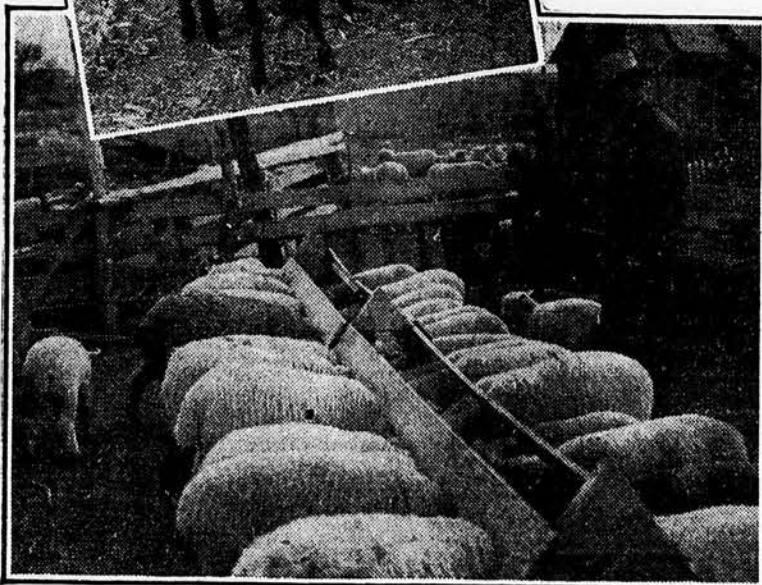
Caring for the dairy herd, milking and handling the dairy products require a great deal of labor. The rapid extension of high-power electric transmission lines in Kansas in the last few years makes it possible to eliminate a great deal of labor about the dairy barn. Milking machines and electric operated cream separators will handle the milk with very little labor, while the milk cooler makes it possible to deliver milk with lower bacteria count.

So completely have the requirements of the family-operated farm been anticipated that it is now possible for farmers, no matter how big or how small their farms may be, to find machines designed to perform in a satisfactory and economical way almost any standard operation.

Feeds Sheep Chopped Hay



Owning "black sheep" doesn't bother John Shaw, of Washington county, when they are as good as these coal-black twin lambs. The mother, a black-face Western ewe, is one of a flock of 100 ewes raising early spring lambs for Mr. Shaw this spring.



John Shaw, one of the leading lamb producers in Washington county, watches a part of his 1940 crop as they take a fill of chopped hay. Mr. Shaw is enthusiastic about this method of preparing alfalfa. He finds that hay in the chopped form is much more convenient to handle, and lambs don't mind having part of their "chewing" already done.

THE LAND OF MUSSOLINI

By ROBERT C. VANCE

Robert C. Vance, traveling Corn Belt farmer, gives some tips—in and on Italy—in this 13th article of his series. His next visit will take you to Genoa, Columbus' old home town.

ON OUR second day in Naples an expedition was formed to visit the Isle of Capri, about 20 miles from Naples, and a launch was chartered for the trip. The main attraction here is the famous Blue Grotto and is well worth the trip.

This cave is entered by boat from the sea, thru a hole in the face of the cliff. The entrance is so low that it can be entered only during low tide. The cavern is 160 by 120 feet and is roofed by an arched dome of natural rock about 60 feet in height. The floor is the blue water of the Mediterranean, so placid that there is not a ripple and as transparent as glass. The light reflected from the water gives the walls and dome a blue tinge. Bubbles, formed by the thrust of an oar, seem to burst with an electric brilliance.

In the cafe where our lunch was served a family orchestra played varied stringed instruments and yowled songs in Italian about the Isle of Capri. Their leader, a bearded old patriarch whom I judged to be the grandfather, kept time by blowing into the mouth of a jug. After a selection he made a round of the tables. If any of the males of our party refused to drop a coin into the jug, he would stand by his chair, raise the jug to his lips and bring forth the most derisive and insulting sound imaginable.

Another nice little racket were the ash trays. Bearing the painted slogan, "Isola della Capri," they made desirable souvenirs, and one of the women of our party slipped one into her handbag. The waiter noted that the ash tray was missing and grinned knowingly. He went to a vacant table and slipped an ash tray under his coat. When the head waiter was not looking he slipped it into place on our table with a wink. He was such a good scout, and so willing to be their partner in crime, that all the girls stole ash trays, and he replaced them from vacant tables.

Trays of the same quality could be bought in the dime stores at home for a nickel, but the ladies decided that a tip of 10 lira (30 cents) each

Canals are used to move goods in Leghorn. Principal industry is working in marble, and skilled workmen turn lathes with foot treadles.



would be about right. After all, his good nature might have cost him his job. Then when the bills were presented to the cashier for payment, each one bore this added item, "1 ash tray 20 lira."

Yet, in spite of all this petty chiseling, real service can be obtained for surprisingly little. Back again in Naples, I hired a guide and interpreter for 5 lira (15 cents) an hour. This chap claimed to have once lived in California. He was intelligent and much more outspoken than the average Italian guide. Best of all, he spoke American, rather than English.

We were standing on the fringe of a crowd that was clustered in front of a small cafe in one of the narrow side streets. Mussolini was speaking at Rome and his speech was coming in on the radio within the cafe. In Rome, Il Duce's thunderous phrases were frequently interrupted by cheering. There were no cheers here. Instead, they stood in a sort of hopeless apathy. They reminded me of a crowd that was waiting in the breadline outside a soup kitchen.

"What do these people think?" I asked my guide.

"They think it's a lot of bunk," he answered. "Times are hard enough now. Another war would mean the end of everything." He was interrupted by half-hearted applause from the crowd, timed with the cheering over the radio. He nudged me and pointed to 2 police who had just joined the crowd. "But we have to go thru the motions. If I could only get back to America."

"It may be bunk but Il Duce seems to be getting away with it," I prompted him.

"He is getting away with it because the people

are not allowed to think any more. Buy a newspaper and let's go some place where we can sit down and I'll show you what I mean."

It cost me a meal, but it gave me the translation of an article that was written by Mussolini and published in every paper in Italy that day. I am quoting a few of the high spots of this article as an example of how a dictator uses the press:

"There exists human races. There are large races and small races. The concept of race is purely biological. The population of Italy is of Aryan origin. Its civilization is Aryan. There has been no movement of people since the invasion of the Germanic tribes to influence the racial chart. The Italian people of today are of pure blood. The typical Italian of today is fair, blond, blue-eyed, and is 5 feet and 11 inches in height."

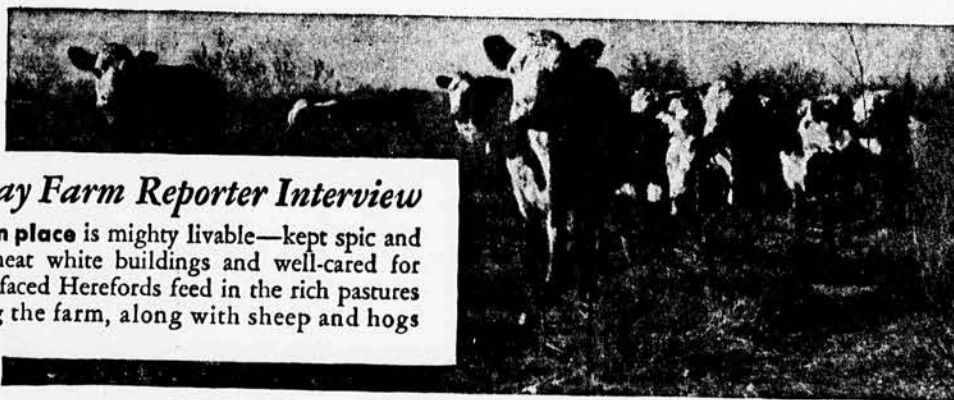
It may be that these Neapolitans are not typical Italians. Water and strong soap might have bleached some of them to "fair" but few could have qualified for the required stature. Neither did I see any blonds, and I have a discriminating eye for blonds.

Farther on in the same article, Mussolini takes a page from Hitler's daybook and a slap at the Jews with, "It is time that the Italian people proclaim themselves as believing in the race theory. Of the Semites, who in the past, set foot upon our sacred soil, no trace remains. The Jews do not belong to the Italian race. The Jews can not be assimilated as they are not a European race. Only European races are compatible."

Later, I met a Jewish doctor who was leaving Italy. This man trans- [Continued on Page 32]



At left, the waterfront at Leghorn. At right, a poor peasant farmer who swallows Mussolini's "wind" because he can't do anything about it.



A Safeway Farm Reporter Interview

The Johnson place is mighty livable—kept spic and span, with neat white buildings and well-cared for land. White-faced Herefords feed in the rich pastures surrounding the farm, along with sheep and hogs



Lizzie Johnson Sayings:

"I used to call myself a farmerette but now I guess I'm just a plain farmer."

"All my life I've thought that a farm was the best place in the world to live."

"We've got a good farm in a state that's hard to beat... this is home and I'm proud of it."

"I believe folks should work together for success and we Johnsons have done that."

"You have to do business with good people who'll pay you a fair and honest price."

Mother and Son Team Makes Good

TO KANSAS FARMERS

We men tend to get the notion that it takes a man to run a farm. But after reading about Mrs. Emel Johnson I think you'll agree with me that "it ain't necessarily so!" Mrs. Johnson (Lizzie Johnson she's mostly called) is rated tops as a farmer in a section where farming is tops. She and her son, Harold, have operated the family's 400-acre diversified crop farm in Franklin County, Kansas, since her husband passed on in 1932. The record shows they've done a grand job of work, getting fine yields and marketing their crops in a smart way. Yes sir, this mother and son team sure turned out to be a winner. When I told the Johnsons I'd like to print their story they were glad to oblige. What they told me is set out here with their full approval.—YOUR SAFEWAY FARM REPORTER



Harold Johnson is 28—a hard-working, experienced farmer with a good head for figures. 190 acres of the 400-acre Johnson place, he told me, are in growing crops, the balance being in pasture and prairie grass for cattle and livestock.

"In an average year," said Harold, "we'll get about 2000 bushels of corn from 65 acres—1650 bushels of wheat from 55 acres—1500 bushels of oats from 30 acres—and 60 tons of alfalfa from 30 acres. Another 10 acres are planted to grain sorghums. Our livestock provides additional cash income. We have about 50 head of Herefords, a half-dozen dairy cows, and we'll sell off about 60 shoats a year.

"What with one thing and another we can generally market the year 'round and that's something my mother has proved she is especially good at"



Meet Mary Johnson. Harold's wife is a fine girl and a good farmer. She and Harold are both active members of the Young Farmers Club, an up-and-coming organization which was started in nearby Ottawa a couple of years ago

"AS a little girl," Lizzie Johnson told me, "I had the principle of 'waste not, want not' drummed into my head, and I contend nothing truer was ever said. We've always tried to follow that idea on our farm—not being wasteful of our land or careless about our work.

"Take this land, for instance. We've terraced nearly every acre to prevent soil erosion. We feed our land with nitrates and phosphates, till it with modern machinery, rotate crops and diversify. These things are a lot of hard work but Harold and I figure they pay out in the yields we get.

"That principle of 'waste not, want not' works out in marketing, too. You can't afford to be wasteful or careless in selling any more than in producing. You have to watch the markets for everything you grow, and sell at the right time.

"Maybe it's because the Safeway people run their business efficiently and without waste—like Harold and I try to run ours—that I enjoy dealing with them. Anyway, I know from experience that the Safeway people are okeh. I've sold things to them and bought groceries from them for a good many years.

"For my eggs, fruit, potatoes and the like Safeway pays at least the market and often better. They are fussy about quality but if your stuff has that they'll always pay a fair price.

"And it seems to me that the direct way Safeway operates is a real help to their store customers as well as to producers. It means a money saving on good quality foods and that's something people are always glad to get."

YOUR SAFEWAY FARM REPORTER



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GRAIN BIN ROBBERS

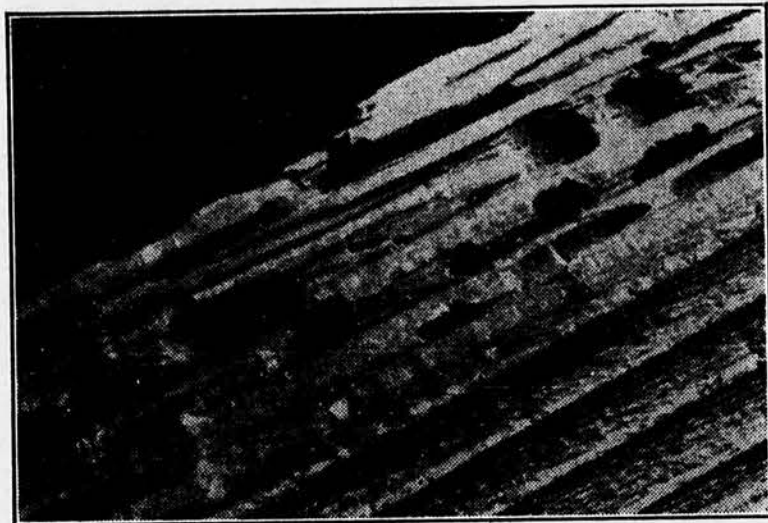
Worse This Year Than Ever Before

By W. J. DALY

WAITING only for the first warm days of spring are the millions of stored grain insects that did so much harm on Kansas farms, in grain warehouses, and elevators last year. They are the survivors of what George A. Dean, head of the Department of Entomology at Kansas State College, described as the worst Kansas infestation of stored grain insects in the last 10 years. Farmers are warned to be on the watch for these pests, and ready to apply control measures, as soon as the first balmy days of spring warm the stored grain to 70 degrees F. While they have hibernated all winter, these insects have been injured but little, and now with the arrival of spring they are active again.

All these pests, including the old familiar grain weevils and moths, the cadelle, and the lesser grain borers, the latter being newcomers to Kansas farm bins last season, must have temperatures above 65 degrees before they become active. In fact, they will not do much until it has warmed up to 75 degrees. Of course, it is the temperature of the grain, and not the climate outside, that determines stored grain insect activity.

Mr. Dean believes the heavy infestation of 1939 was due to wet weather at harvest, especially in South Central and Southeastern Kansas. This raised the moisture content of the stored grain and made conditions ideal for such insects. In fact, these insects that feed on stored grain do not thrive or increase much if the grain is too dry. Entomologists say it was the extreme dry condition of the grain, during most



The cadelle, because of its habit of boring into the wood of the granary, can survive ordinary clean-up methods. But it succumbs to fumes of the carbon disulfide treatment.

of the years from 1933 thru 1938, that made such pests so scarce during that period.

Farmers and grain dealers all agree with the entomologists that last year was a record breaker in the number of stored grain insects. They were an especial headache to officials of the "Ever Normal Granary," but systematic inspection and treatment last fall brought these pests pretty well under control in the government loan farm-stored grain. In fact, according to Roy Wilson, who is in charge of crop loans for Kansas, the last inspection, completed March 1, showed only 18 bins of this wheat damaged by weevil out of 5,930 bins in the state at that time.

However, Mr. Wilson believes that prompt inspection and treatment last fall has kept the government stored wheat in better condition than the average farm storage. He is ready to admit there has been weevil in the "Ever Normal Granary" but cites the results of the inspection to prove that little of the farm stored wheat is going out of condition.

It is estimated by the U. S. Department of Agriculture that the losses caused by stored grain insects amount to 250 million dollars annually for the United States. Kansas producing more wheat than any other state, logically suffers more than its proportion of this loss, and the damage last season was much above average.

Borers Ready

In October last fall out of 709 cars of wheat received in Kansas City, Kan., 219 were graded weevily. In November 206 graded weevily out of 632 cars, in December 91 out of 562, in January 11 out of 344, and in February 14 out of 606. Out of a total of 2,853 cars of wheat, 541 graded weevily.

The lesser grain borers, new as stored grain pests in Kansas and doing serious damage last year, are now ready to continue destruction as soon as warm weather arrives. They came to America in wheat shipments from Australia during the World War. The cadelle, which previous to 1939 had confined its depredations largely to mills, grain warehouses, and elevators, did much damage in farm bins in 1939. It is of especial interest, for it has the vicious habit of boring into the timbers and boards of infested bins. Boards completely honeycombed by this pest have been sent to Kansas State College recently from one county.

Protected from ordinary clean-up methods by the galleries and tunnels it has made, the cadelle will live for a long time. The adults, which are black in color and about 1/8 inch long, can survive for 2 years, and including the life of the larva and pupa their life cycle can be stretched to 3 years. Dur-

ing its life the female cadelle lays from 800 to 1,000 eggs, so reproduction is rapid. As long as they are alive these insects can, in a surprisingly short time, infest any grain put in the bin.

Fortunately, all the stored grain insects, including the wood boring cadelle and the Angoumois grain moth, can be destroyed by the use of carbon disulfide. To be effective, it must be used when the temperature of the grain is above 70 degrees. Bins must be made as airtight as possible, for it is the vapor from the evaporating liquid that kills and this must not be diluted to any extent with air. As this vapor is heavier than air, the liquid should be placed in shallow pans on top of the grain, or poured on burlap sacks partly buried in the top of the grain. One pound of carbon disulfide should be used for each 25 bushels of grain.

Fumigate 36 Hours

The bin should be allowed to fumigate for at least 36 hours, and if the grain is not intended for seed, 48 hours is better. The bins and building must be thoroly aired out before entering. It is also well to remember that both the vapor and carbon disulfide liquid are highly inflammable. All fire must be kept away.

Summing up this discussion of the stored grain insects, we must conclude that there is a prospect of a heavy infestation of such pests in 1940. Their abundance in 1939 puts them in a position to again do much damage this year, especially if damp weather conditions should prevail during harvest.

Fortunately, every farmer can control these pests on his own farm. First and most important, all bins should be thoroly cleaned out before warm weather arrives. Waste grain cleaned from the bins should be fed at once or burned. If the bin was badly infested last year or if the cadelle has done any boring in the floor and sides of the bin, it must be fumigated with carbon disulfide. Five pounds of this liquid will fumigate 1,000 cubic feet of empty bin space. The cadelle does most of its work in the floor and lower sides of the bin, so fumigation in the lower part is especially important.

Prompt threshing of stacked grain will also aid in control, for the rice weevil and Angoumois grain moths go to the fields and lay eggs on the ripened grain. In this way grain may become thoroly infested before it reaches the bin. Anything the farmer can do to keep his grain dry is also a big help in insect control, for these pests cannot increase rapidly or normally pass thru their life cycle without some moisture.

The man who takes all these precautions, and they are simple and not expensive, should suffer no loss from the stored grain insects.

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Mixing Crops for Yields

IOWA: Alfalfa growers can increase their hay yields from $\frac{3}{4}$ to a ton an acre by sowing timothy with their alfalfa, Iowa research agronomists report, following 5 years of experimental work. The alfalfa-timothy mixture yielded 3.22 tons and alfalfa alone 2.27 tons to the acre.

Store Water in Soil

ILLINOIS: To supply the 700 tons of water an acre necessary to grow a 50-bushel crop of corn requires slightly more than 6 inches of rainfall, it has been pointed out by experts. Farmers have been warned that if they are to get maximum yields they must prepare to hold that 700 tons of water in their soil.

Hunt for "Bloom" Factor

IOWA: Five lots of yearling steers now are being fed various linseed meal rations in an experiment at Iowa State College designed to isolate the "fac-

tor" in linseed meal that gives the "bloom" and finish to cattle fattened on this feed. The "bloom" producing factor called vitamin F by some, is believed to be tied up with the fat in linseed meal, but this fact never has been proved.

"Dozen Drumsticks, Please"

OHIO: Selling chickens by the piece is boosting poultry sales in some stores. The birds are dressed, preserved by

quick freezing, and are wrapped so customers can see what they are buying. Buyers get breasts only, drumsticks, giblets, or other parts for which they have the best appetite.

Must Have Iron

FLORIDA: Farm children in Florida, and other regions as well, according to Science Service, are in danger of severe nutritional anemia if they live on home-grown food from poor soil

that is deficient in iron. From Nova Scotia, Massachusetts, North Carolina, South Carolina and Georgia as well as Florida have come reports of deficient soils and mineral deficiency diseases of cattle. Anemia was discovered in from 52 to 96 per cent of rural children in Florida living in regions where the soil was predominantly deficient. There is something to this business of feeding humans as well as livestock better by first feeding the soil.

Producing Squab Chickens

MICHIGAN: The state experiment station, in working out a profitable way of using cockerels, has studied squab chicken production. Workers find that birds weighing 1 to 1 $\frac{1}{4}$ pounds are about the smallest that can be marketed successfully. They recommend serving whole birds instead of half portions. Cooking recommendations include a highly seasoned stuffing; dip skinned birds in egg and crumbs; use melted chicken fat instead of butter in the dressing.

What Other STATES Are Doing



LIKE BLUE RIBBON BEEF CATTLE, STANDARD'S TRACTOR FUELS ARE PRODUCED TO SPECIFICATIONS!

● GRAND CHAMPION beef cattle don't "just happen." They are the result of careful breeding and scientific feeding and are indeed produced to specifications like Standard's fine line of tractor fuels.

Each of these fuels is the result of years of study and research, and they are made today to meet the needs of every tractor owner, no matter what type of engine he owns or what working conditions he faces on his farm.

To suit your particular needs, Standard offers you your choice of

STANDARD TRACTOR FUEL, which has been used for years by thousands of prudent power farmers who have found that this comparatively inexpensive fuel does not knock, smoke, or form excessive carbon and is ideal for all two-fuel tractors...

STANOLIND GASOLINE, which is low in price, insures economical power in two-fuel tractors using gasoline...

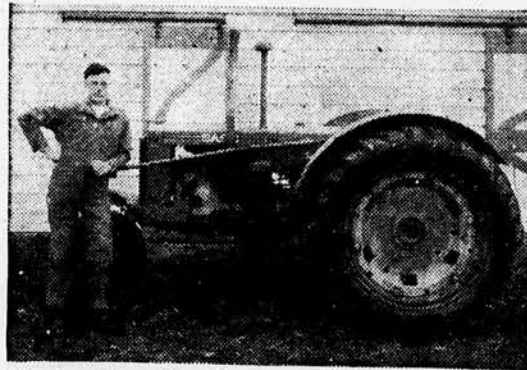
STANDARD RED CROWN GASOLINE, which gives you quick starts, steady power, and "long mileage" when used in tractor, car, or truck and is highly recommended for the newer type of high-compression engines.

Ask your local Standard Oil man to help you pick the fuel to suit your needs.



Diamond Lady 8th, the purebred two-year-old Hereford heifer shown above, is owned by R. D. Ely of Attica, Kan., who is seen with the animal. Mr. Ely is noted for his blooded cattle which he raises on his 1800-acre farm.

A Prominent Cattle Raiser is R. D. Ely of Attica, Kan., shown at left. Mr. Ely has a wide reputation for raising blooded Herefords. In addition, he is a large-scale power farmer and uses Standard's tractor fuels exclusively.



Aberdeen-Angus Breeder. Pictured above with his tractor is Graham S. Bodwell on Fox-Covert Farm, Oxford, Mich., where he breeds fine Aberdeen-Angus cattle. Mr. Bodwell is a booster for Standard Oil products because of their uniformity and economy. Standard Oil supplies him with the best tractor fuels on the market, he declares.

Hear Everett Mitchell, famous farm news commentator, on Standard Oil's Farmers' Fair of the Air, in noon-time broadcasts, Monday through Saturday, on 102 Midwest radio stations.

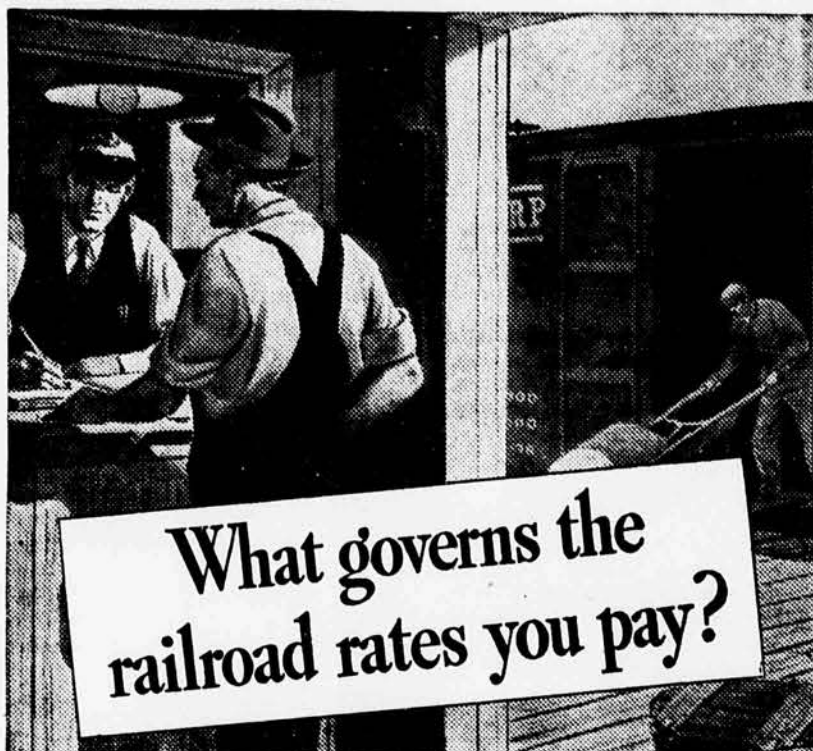


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STANDARD SERVICE

STANDARD OIL COMPANY





MOST people would answer that question by saying, "The Interstate Commerce Commission"—and that answer is right, as far as it goes.

But when you get right down to it, the thing that governs freight rates as a whole is the fact that railroads must take in more money than they pay out. No business can keep on operating unless it does that.

Now tracks have to be kept up and trains have to run—whether they have a big load or a small one. When the total volume is small, therefore, it costs more to haul every ton of freight.

So one thing that governs railroad rates is volume of business—the total amount of freight shipped by rail year after year.

And what interests you as a shipper is this:

Anything that takes freight away from the railroads increases their cost of hauling each

ton they handle and makes it harder for them to keep their rates down to their present low level.

This subject was thoroughly discussed in a recent report by Mr. J. J. Deuel, Director, Law and Utilities Department, California Farm Bureau Federation, and the conclusion Mr. Deuel reached was this:

"The conditions under which the railroads compete for the traffic they require to sustain them, are a matter of utmost concern to farmers. The smaller the proportion of such competitive traffic the railroads attract, the larger the proportion of total cost of sustaining rail service the farmer will be compelled to shoulder."

That's one important reason why farmers have a vital interest in seeing that the railroads get a fair deal in regulation, and a chance to compete for business on equal terms.



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Start from your home town now on a Grand Circle Tour of the United States—east coast, west coast, border to border—go by one route, return by another—liberal stopovers—for \$90 railroad fare in coaches—\$135 in Pullmans (plus \$45 for one or two passengers in a lower berth). Get the full facts from your ticket agent about the greatest travel bargain in history!

ASSOCIATION OF AMERICAN RAILROADS

WASHINGTON, D. C.

Grass Silage a Great Help

Many Reasons Why It Gains Headway

A MILLION tons of grass silage were stored last year in the U. S., mainly for dairy feed, and general satisfaction with results makes it probable that much more silage from legumes, grasses, and small grains will be put up this year and for the next few years. Grass silage is not new to readers of Kansas Farmer, of course. But we still have much to learn about it.

Federal experimenters do not expect that grass silage will displace much corn or sorghum silage as a winter feed in Corn Belt areas, where corn out-yields grass by a wide margin and where haying weather is ordinarily favorable. But it probably will result in more silos being built. In humid areas, where grasses grow well and are more likely to be rained on while being harvested, farmers may come to depend more on grass silage. This method of feeding is still so new that there have been few feeding tests for comparison with corn silage. Ton for ton, grass silage usually does not equal corn because it is usually higher in moisture content. But on a dry matter basis the indications are that there is not much difference.

An outstanding advantage of ensiling grass crops is to prevent weather damage. If the farm equipment includes both mow and silo storage space and equipment for handling both grass silage and hay, a farmer need not try to be a weather prophet. Instead, when the time is right he can cut a crop of alfalfa, soybeans, clover, grass, or of small grain planted for forage, and if the weather is good can make hay. If the weather is bad he can put the crop in the silo. If it costs a little more to make grass silage, the extra expense is not likely to equal the loss in feed value and quality that would otherwise result from the rain on the hay.

Cutting Costs

Some farmers have hesitated to make grass silage because of the expense for the phosphoric acid or the molasses usually recommended to make grass silage keep. Research at the Beltsville Research Center at Beltsville, Md., indicated that the need for these has been over-emphasized, that grass silage will keep well without a preservative if 3 conditions are met. As outlined by T. E. Woodward, dairy husbandman at Beltsville, a grass silage to keep well (1) must not have too high moisture content, (2) must be chopped fine, and (3) must be packed tight to exclude air.

Legumes with a moisture content of more than about 68 per cent are likely to develop objectionable odors unless a preservative is added—either as a chemical acid or as molasses from which acid forms. If immature grass is ensiled without wilting, or if maturer grass is put in while wet with dew or rain, a preservative is needed. Woodward reports that in filling 2 large silos

with alfalfa at Beltsville last summer, a supply of molasses was at hand and was used when needed, but only about 2 barrels were required to add to hay too moist to be safe. But when the grasses and legumes are allowed to lose enough of their water before storing, they will make first-class silage if cut fine and packed tight. Crops dry enough to avoid leakage from the silo do not require the addition of any acid or molasses.

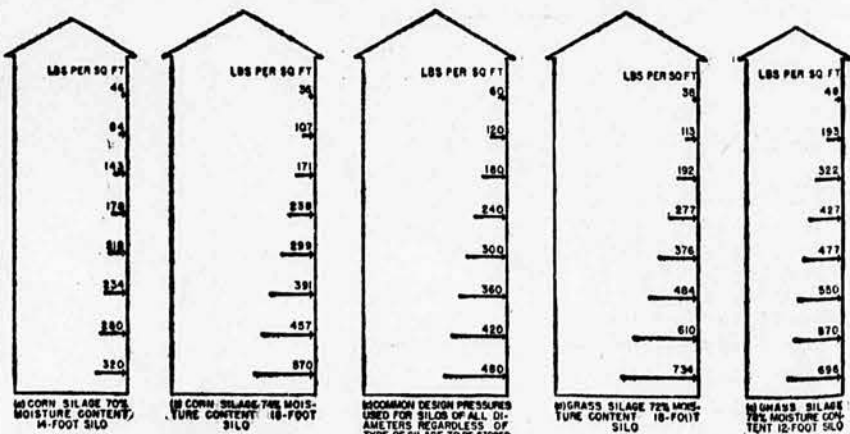
Research workers are trying to devise a practical mechanical device that will indicate directly whether alfalfa and grasses are too wet to pack safely without added acid or molasses, but are not yet ready to recommend any device. When in doubt, most farmers will want to play safe and add preservative. It should be borne in mind that acids and molasses are definitely helpful only with high-moisture crops, says Woodward.

Competes With Corn

Where erosion control is important, grass silage may come to compete with corn even in the Corn Belt, with many farmers growing grass crops on the more sloping lands where erosion is likely to occur and corn on the level ground. Farmers who already have silos and silage cutters may find grass silage—particularly from the first cutting of alfalfa—a valuable supplement to failing summer pastures. Feeding in the summer would empty the silo before corn harvest so that it could be refilled with corn for winter feeding.

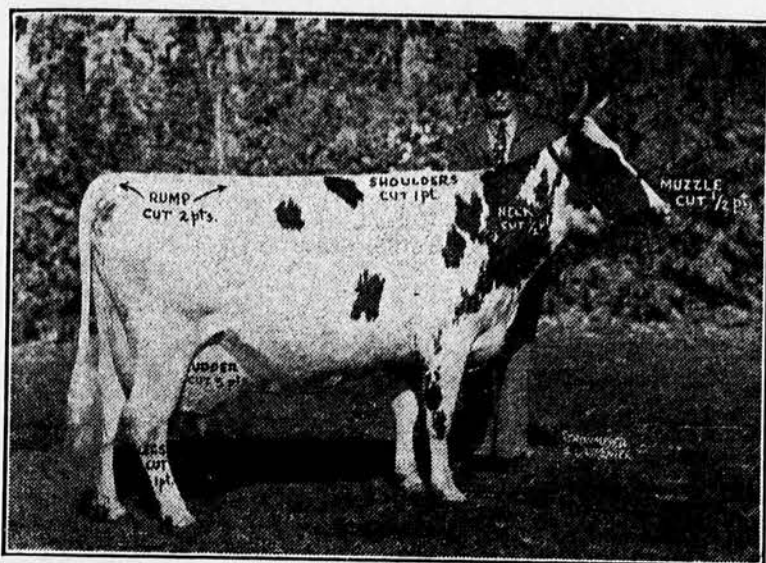
Engineers of the Bureau of Agricultural Chemistry and Engineering, co-operating with the New Jersey Agricultural Experiment Station, have measured pressures in silos filled with grass silage and found them from 1½ to twice as great as with corn silage. Some silos strong enough for corn will have to be reinforced to be safe with the higher moisture silage. The National Association of Silo Manufacturers has accepted the results of this research and has adopted and recommended the changes required in silos for storage of grass silage.

The Bureau of Agricultural Engineering has also co-operated with the New Jersey Station in collecting and analyzing the practical experience of about 50 farmers in New Jersey who have had experience with grass silage. It is pointed out that grass silage is ordinarily most popular on farms with 30 or more cows. Particularly in summer feeding it is necessary to feed down about 3 inches of silage daily to prevent spoilage. In most cases farmers used grass silage as a supplement to corn silage rather than as a substitute, and were able to cut down on the hay required. On the average, the farms using grass silage fed to each hay-consuming animal unit, 1.5 tons of hay, 1.9 tons of grass silage, and 2.06 tons of corn silage. Similar New Jersey



So that every farmer may understand the importance of sufficient reinforcing for both old as well as new silos, the U. S. D. A. conducted an investigation into silage pressures. The diagram shows comparative lateral pressures taken at intervals of 5 feet with varying moisture contents and diameters, with corn and grass silage. The pressures for which silos have been designed in the past are also shown.

Cow Scores 90 Points



Woodhull Tallulah, fourth prize aged Ayrshire cow at the National Dairy Show and a well-known grand champion of previous seasons, owned by A. B. Williams and Sons, Hutchinson, was scored recently by John Cochran, an outstanding authority. She scored 90 points. Deductions are shown on the picture. From shoulders to hips, Mr. Cochran gave this cow a perfect score. The cow is held by G. Fred Williams.

farms with no grass silage fed 2.13 tons of hay and 2.77 tons of corn silage. The grass silage farms fed .63 tons less hay and .71 tons less corn silage but 1.19 tons more total silage than farms without grass silage. Farms with limited pasture could carry more cows by feeding grass silage in summer.

Farms equipped for handling grass silage effectively averaged somewhat more expensive machinery than farms that made hay and stored corn silage, and the analysis showed that putting up grass silage requires about a half hour more man labor and a quarter hour more tractor work than to put up the same amount of material as a ton of hay. Most of the New Jersey farmers used molasses or phosphoric acid.

In Kansas, grass silage is insurance against dry weather, grasshoppers, chinch bugs, and cut worms. It has been found that it has a very definite place in our farming systems and plans. If you wish more information on how grass silage fits Kansas, just drop Kansas Farmer a post card asking for our grass silage bulletins.

—KF—

Feed From Drainageways

Pasture or meadow strips seeded to grass to form drainageways are proving to be among the most valuable acres on the farm. On many farms the grassed drainage strip follows the same general line as an old ditch or gully which had been waste land—or worse. The grassed area has a broad and nearly level cross section with no waste space.

To establish grass that will hold the soil and prevent erosion, it is sometimes necessary to fertilize the drainageway before seeding. Once the sod is well formed, the drainageway will absorb a great deal of moisture. The combination of fertilizer and adequate

moisture makes the drainageway highly productive of feed.

Farmers' Bulletin 1814 offers practical advice as to establishing farm

drainageways. It includes a convenient set of tables and charts to aid farmers in calculating the cross section of drainageways and terrace outlets which will be large enough to care for the probable run-off from areas of from 1 to 300 acres. Kansas Farmer, Topeka, will be glad to send readers a free copy of this bulletin.

—KF—

Breeds Cows Artificially

Artificial insemination is rapidly becoming more popular and more practicable in large dairy herds. During the last year, it has been used successfully in the Kansas State College herd. A total of 120 cows were bred artificially, requiring an average of 1.8 services per conception.

—KF—

First Hereford Hog Sale

First Hereford hog sale in the history of the breed was held last month by John C. Schulte and Sons, Norway, Ia. Forty-nine head were sold at an average of \$71. The top price was \$160 paid for a last spring's gilt. Mr. Schulte is the originator of this breed which is red with white face, breast, legs and tail. His herd is known as the Creation Foundation Herd, and from it all Hereford hogs have come. When 5 herds were established, their owners established a national association.

Calf by Airmail

Birth of a "test tube" dairy calf whose sire and dam were half a continent apart is attracting attention of livestock breeders and scientists throughout the world to the University of Nebraska. An outstanding Holstein cow recently dropped a heifer calf, sired by a DuPont owned bull at Wintertur, Del. It is believed this feat sets a long-distance record for successful artificial insemination of cattle. In any event, it demonstrates the practical possibility of shipping live sperm carrying the inheritance of great sires, to maintain or improve the quality of herds thousands of miles away. Semen from the bull in Delaware was shipped by airmail and it arrived in Lincoln 18 hours later, contained in a specially designed thermos bottle. The cow was then immediately inseminated.

—KF—

Highest Butterfat Record

An average production of 500.9 pounds of butterfat to the cow for 1939 is the record made by a herd of 18 purebred Jerseys owned by C. F. Davis and Sons, of Cowley county. These dairymen have just finished the testing year of the Dairy Farm Record Association serving Cowley, Butler, Marion, and Chase counties with one of the highest production records ever established in Kansas.

"LOOK HOW MUCH MORE CAR I GOT! FOR ONLY A FEW EXTRA DOLLARS!"



Compare Oldsmobile with the lowest priced cars. You'll find only a small difference in cost, but a whale of a big difference in what you get for your money!

You get More Size—the Olds Sixty measures 197 1/4 inches from bumper to bumper. More Style—people everywhere call Olds "the best looking car on

the road." More Power—big 95 H. P. Econo-Master Engine in the Sixty. More Comfort—Olds is the lowest priced car in America with modern coil springs all around. More Quality—everything for dependability—such as 100% full-pressure lubrication. Plus Economy that compares with the best! Drive an Olds and see for yourself!

"60" DE LUXE 2-DR. SEDAN

\$853 Olds prices begin at \$807 for Coupes, \$853 for Sedans, delivered at Lansing, Michigan. Transportation based on rail rates, state and local taxes (if any), optional equipment and accessories—extra. Prices subject to change without notice. A GENERAL MOTORS VALUE

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Emporia Davis-Child Motor Co.
Erie Roy Ewen

Eureka Knisely Motor Co.
Florence Vera Walton
Fort Scott Parks Motor Co.
Fredonia Fredonia Implement Store
Garden City Nolan Auto Co.
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Girard Lashley Motor Co.
Goodland Kappel Motor Co.
Great Bend Davis-Child Motor Co.
Greensburg Swisher Motor Co.
Hays O'Leighlin Motor Sales
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Hiawatha Sterns Auto Co.
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Hugoton Muncy & Sons Motor Co.
Hutchinson Davis-Child Motor Co.
Independence Bud White Motor Co.
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Jewell Elyea Service Station
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Medicine Lodge Lodge Motor Co.
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Parsons West Side Motor Co.
Peabody Beaton Motor Co.
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Burlington, Colo. Penny Brothers
Walsenburg, Colo. New M & O Garage

Parting With Bindweed

Confucius say, "A fool and his bindweed seldom part." Authorities say, now is the time to start that bindweed campaign for the year. Kansas Farmer say, we have a leaflet, "Best Method of Eradicating Bindweed," which outlines in detail the easiest methods of control for varying conditions. Farmers say, "This leaflet has been invaluable aid in ridding our farms of bindweed." For a copy of this bindweed control leaflet, send a 3-cent stamp for mailing to Farm Service Editor, Kansas Farmer, Topeka. Please PRINT name and address.

MAN TRAP

By EVERETT M. WEBBER

Illustrated by Gene Brugman

Farmer—Teacher—Writer

Latest to join Kansas Farmer's parade of farmer-authors is Everett M. Webber, author of this exciting story of how a woman tricks a bandit. He lives on a 200-acre farm. He also teaches school, and he has B. A. and M. A. degrees. He is 30 years old, married, and has a boy, 8, and a girl, 7. Mr. Webber writes in his spare time, as a sort of hobby. Altogether his work has appeared in about 200 publications, he says. His wife helps him in his writing, and she has sold a number of articles of her own.

UNTIL her nephew, Sheriff Lige Anderson, came by on the way home from directing an unsuccessful 3-day man hunt, Grandma Fielding had so nearly forgotten her troubles that she was bubbling inwardly with the quiet glow of certain victory at the county fair next day. But now, as she slipped another pie into the oven in the space just vacated by the one stewing in its own golden juice in the window, a dull, aching misery was in her heart.

"I can hang on here another 2 or 3 months someway before I lose the place," she told Lige, determination in her deeply lined face and tired blue eyes. "I've got enough faith in the good Lord to know He'll see I don't lose the house I was born in and was married in and lived in these 70 years—if I do my part."

Lige ran his long fingers thru his red hair and shifted uncomfortably in his chair. His eyes, red from loss of sleep, never quite met Grandma Fielding's.

"Well—maybe," he agreed slowly. "Now, I hate to keep harping at you, but even if you wasn't going to lose everything—which anybody can see you are—livin' out here alone ain't no job for a woman your age. You lost out 4 years ago when you sold the cattle and mortgaged the place to keep Uncle Pete in the hospital and then to bury him. You—you're gettin' worse off all the time."

"I live," she told him, glancing unconsciously past her smokehouse to the garden she raised alone. "If I could even up my interest and meet my taxes—"

"Well, now—" he paused, clearing his throat so that his huge red adam's apple bobbed in his thin neck, "well, now, like I said the other day, if you'd just deed over the place to us, me and Anna would be glad to have you come into town—"

"I'd die, cooped up in town in another woman's house," she told him. "No, fast or feast, Lige, I'll always hope to die right in this house." In a flash, she knew she could be obligated to him no longer. "If you're needing the money you lent me till I could sell the heifer, why—"

SHE went swiftly into the other room and got the money an old gold buyer had paid her that day for some jewelry and old spectacle frames. Twenty dollars. There was only a little silver left in her huge leather purse, which had been new for her honeymoon 50 years before.

Back in the kitchen, Lige shifted uncomfortably in his chair as he took the money and stowed it in a fat purse. "If it ain't handy to pay it now," he said, when the purse was safely in his pocket, "I could let you have it a mite longer."

"You just don't worry about me, Lige," she told him. "The good Lord has taken care of me for 70 years and I reckon He'll make out to do it a while longer." Then, quickly, she changed the subject. "Quit drooling at that pie. Tomorrow after the ribbons are passed out I'll give you one if you ain't out chasing your bank robber some more. I still feel he's holed up on Lost Mountain somewhere."

Lige shook his head. "Nope. He's a thousand miles from here by now readin' about how we threshed around in the hills all week for him. The Feds will pick him up, tho, on account of him takin' Pete out across the line on his get-away. That's kidnaping. But boy, if I could have landed him! That reward's twice my year's wages."

Presently Lige left and Grandma Fielding

ranged the third pie in the window beside which hung the ribbons she had won in the years past with her apple pies. Her own man she had caught with those pies, and men for her daughters and granddaughters. Leaving the pies to cool she took corn to feed her chickens and went into the yard already deep in the shadow of Lost Mountain shooting up dark and forbidding a mile away across the river.

And, somehow, she was not particularly surprised, and hardly more frightened, when a man stepped from behind the smokehouse, his blood-shot eyes and stubbled, insect welted face as menacing as the gun in his hand. His clothes were wet—like a man's who had swum the river.

"You let out a squeal," he pronounced with deadly calm, "an' it'll be under the daisies for you, old woman. Now turn an' march into that house. I want grub an' plenty of it—fast."

In the kitchen she watched him wolf down cold potatoes and bread and meat, then round

the meal off with an entire pie, his eyes never leaving her as she went about waiting on him.

This was the bank robber. A man with a heavy price on his head.

"God has sent him to me," she told herself, trembling a little now as she realized the importance of the man's coming.

Never would she have to consider deeding her place to anyone if she could snatch up his gun off the table and capture him. Or get her squirrel gun in the closet just in the next room. If she could concoct some excuse to go in there—

"I got to go," the man interrupted her thoughts. "You'll have to be tied. Sit down in that chair."

Grimly silent, anger rising with her, Grandma



Grandma Fielding was not surprised and hardly more frightened when a man stepped from behind the smokehouse. "You let out a squeal," the man pronounced with deadly calm, "an' it'll be under the daisies for you, old woman."

Fielding obeyed. Swiftly, with towel, tea towel, and tablecloth, he bound her to the chair, poured water on the knots.

Then, sweeping up his revolver, he turned at the doorway. "I didn't gag you—but you let out a yelp during the next hour and you'll regret it, old lady."

It was deep night over an hour later when Grandma Fielding finally worked herself loose. When she got to the telephone it was dead. Lighting a lantern, she went into the yard, twisted the ends of the wire together where it had been broken. Then she called the jail.

"Lige?" she spoke softly, her voice glowing with confidence. "Listen, Lige, you come out here in the morning. Say about seven. And bring some handcuffs. I'll have your bank robber for you."

She hung up before he could speak and began undressing. Finally, to silence the ringing of the phone, she stuffed rags around the bell and went to bed.

She was up early, had ham and eggs and cereal and coffee on the stove and her squirrel gun on the floor between it and the wall when the man suddenly appeared in the doorway. He lounged inside, thumbs hooked in his suspenders, arrogance instead of hunted fear in his face after such a good supper and sleep.

"Trot out the grub, old lady," he ordered, casting a glance from the skillet of eggs to the pies in the window. "Maybe I won't tie you this time."

Grandma Fielding's eyes were grim, her heart beating fast as she stooped

as if to look into the oven and came up with the squirrel gun.

"You give a crooked move, young man," she told him sternly, "and I'll make you everlastingly sorry. You put your hands up and turn around."

The desperado licked his lips in indecision, then obeyed swiftly as the hammer clicked back. It was just then that Lige Anderson's car stopped in front. He came onto the front porch, entered at Grandma's invitation.

"What the dickens were you telling me last night?" he demanded, stalking thru the front room. "I—"

"Get his gun and the bank money," Grandma ordered as Lige's voice dwindled away in shocked surprise. "He was here last night. Made me feed him. I wanted you to come after him when he came back this morning."

"That's him!" Lige cried. Like a man in a dream he disarmed the man and pulled a money belt bulging with packets of bills from around his middle.

"We—we'll have to tie him," he decided. "I didn't bring no handcuffs. I was just thinking—"

"Don't do it," Grandma advised him not unkindly. "You might jerk something loose. Take that towel and tie his hands."

The ertswihle bank robber growled some uncontrollable profanity. "How," he demanded bitterly, "how did you know I was coming back?"

Grandma Fielding grunted scornfully. "Sonny," she told him, "I never fed a man apple pie yet but what he came back for more—and I didn't figure to start on you."

Windbreaks Get Better Care

11,000 Miles of Trees Protect 17,000 Farms

DESPITE weather conditions of the Great Plains in 1939, average survival of trees and shrubs planted in field windbreaks under the Prairie States Forestry Project was greater than the average in 1938.

A survival count made on one out of every ten of the 6,732 farms on which field windbreaks were started in the Dakotas, Nebraska, Kansas, Oklahoma, and Texas last year, showed an average of 66 per cent survival of trees and shrubs planted in 1939 as compared to 61 per cent for the 1938 planting. As an average survival this is considered very satisfactory, the Forest Service said. Some comparatively heavy losses were suffered in areas where the drouth was most severe, many of the planted areas receiving little or no rainfall between July 1 and the end of the growing season; and some losses have occurred during the winter since the survival count was made, principally due to rodents. However, replacement plantings of losses will be made whenever it is considered necessary.

The increase in average survival in 1939 over 1938 is attributed primarily to better care by co-operating farmers and to improvement in the technique of production, handling, and planting of the trees.

The new 1939 plantings brought the total mileage planted in the shelterbelts to nearly 11,000 miles of windbreaks on more than 17,000 farms. Plantings in previous years were reported as 4,264 miles in 1938, 1,329 miles in 1937, 1,152 miles in 1936, and 125 miles in 1935, the year in which the project was started, the total of 11,000 miles making provision for protection of nearly 2 million acres of farm land.

In many of the 4- and 5- and even 8-year-old belts, such rapid-growing species as cottonwood, Chinese elm, and black locust, have already reached heights sufficient to function to a marked degree in the protection of soil and crops from destructive winds.

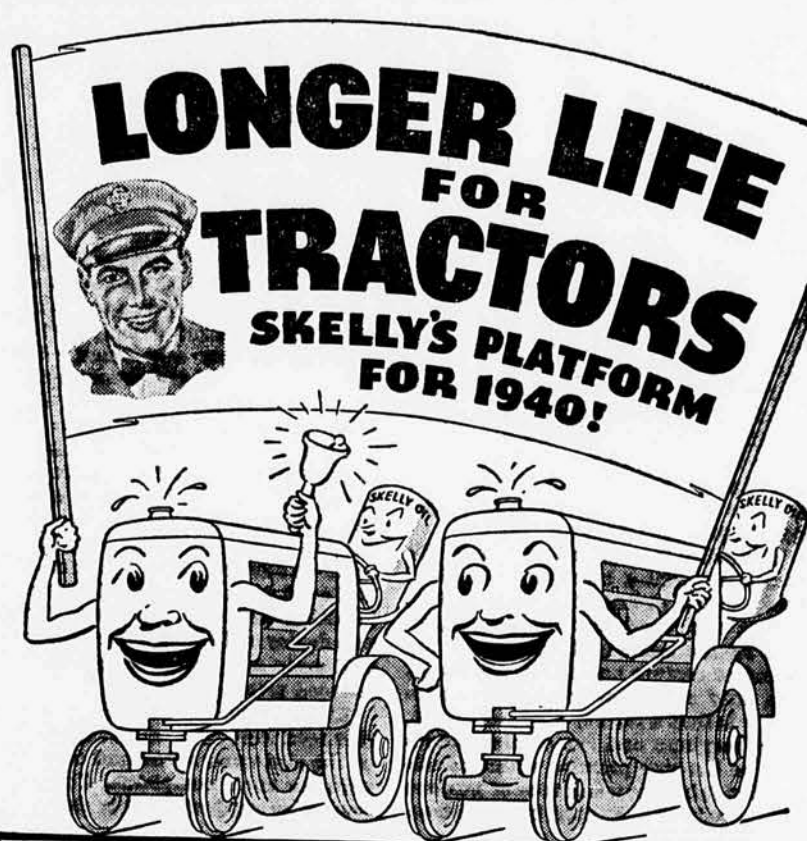
An investigation of the causes of the losses shows that the largest loss or an estimated 9 per cent of the trees were lost as a result of competing weed growth due to insufficient cultivation

or conversely because of damage which resulted from cultivating machinery. No apparent reason except a possible lack of vigor in individual seedlings was given as the cause of death of about 7 per cent of the trees. In about 2½ per cent of the cases, the loss was attributed directly to the drouth. Other causes of death of the trees were insects, chiefly grasshoppers; rodents, primarily rabbits; and wind blasting by sand. Minor losses occurred as the result of unsuitable soils, grazing, hail, and disease.

Altho more than 30 species of trees and shrubs are used by the entire 6-state project, only a few are planted in any one windbreak. Most of the species used are native American species, altho there are a few exotics that have been proved adapted to the severe hazards of the Prairie Plains. The most important exotic species are Chinese elm, Russian olive, Caragana or Siberian pea tree, Ailanthus or Tree of Heaven, and apricot. Of the conifers, Austrian pine appears to be particularly well adapted to planting in the Southern states.

There is considerable variation among the species as to the ease with which they can be established. Some of the species comparatively easily established are Green ash, Honey locust, American elm, mulberry, Chinese elm, Lemonade sumac, soapberry, and buckthorn. The ease with which trees are established, however, does not necessarily indicate the drouth hardiness of the species. Some of the species most difficult to establish prove very drouth hardy once they are established. This is particularly true of the conifers, Eastern Red cedar, Rocky Mountain cedar, Ponderosa pine, and Austrian pine.

One- and 2-year seedlings are used in planting and are graded upward from a minimum size of ¾ inch to ¼ inch at the root collar, or approximately the size of an ordinary lead pencil. It has been found from experience that smaller size seedlings do not survive so well and older seedlings are much more difficult to transplant in addition to being more costly to handle. Kansas can and should grow a great many more trees.



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SEED RACKETEERS

Run Into Serious Trouble

By PAUL IJAMS
Kansas State Board of Agriculture

TO PREVENT spread of noxious weeds and to reduce crop losses occasioned by unadapted and low quality seeds, the legislature passed what is known as the Kansas Seed Law. It requires that all agricultural seeds offered for sale be tested and labeled, and the law makes it a violation to sell seeds unlabeled or falsely labeled, or containing any seeds of field bindweed, or more than one Johnson grass or one dodder seed to 5 grams.

The seller is required to advise the purchaser thru a label as to kind of seed, where grown, the germination, purity, and weed seed percentage, as well as the name and number to the pound of certain noxious weeds seeds. The only exception to these requirements is that a farmer may sell wheat, corn, sorghum and rye of his production on his own premise without testing and labeling, when free of noxious weed seeds. But it must be weed free.

During the time it has been in operation, the seed law has been most effective in accomplishing the purposes for which it was intended. Only last year, a Kansas dealer was found offering Sudan for sale which was contaminated with seeds of field bindweed. A few sales of the lot had been made before the fact was discovered by the fieldmen of the State Board of Agriculture. Immediately all retail dealers handling this seed were contacted so that farmers who had purchased any of this could be advised of the presence of the bindweed and take precautions against infesting their land. The Kansas wholesale dealer had shipped this lot in from California and was able to sell it at a reduced price.

Eight complaints based on sales of this seed were filed in various counties of the state and a fine and costs were paid on each complaint. Complaints were filed against 6 other dealers for



Inspector collecting a sample of seed to be tested for the purpose of checking the label statement as to germination and purity.

selling seed containing field bindweed. The seed law, like criminal laws, cannot prevent a dealer from selling seed containing field bindweed, but it punishes such dealers and in this manner discourages the handling of such contaminated seed.

Almost every kind of seed is at one

time or another the basis of a fraud on the farmer. When hybrid seed corn was being first promoted in Kansas, one so-called producer purchased a quantity of Midland Yellow Dent and attached hybrid seed corn labels and went over the state selling it as a hybrid at \$5 a bushel. When sufficient evidence was obtained a complaint was filed in Washington county and the man was arrested. He finally plead guilty to a charge of obtaining money under false pretenses and was sentenced to the penitentiary.

Some time ago a firm in Chicago flooded the state with advertising and agents selling "a new oat for Kansas," a variety which it was claimed could be planted in the fall and would produce winter pasture and a heavy crop of grain the next year. The literature and salesmen stated the oats were produced in Illinois and had been tested in Kansas and proved successful. These statements were false. Investigation revealed these oats were shipped from Washington and Oregon to Iowa, and from there to Kansas.

The Agricultural Experiment Station at Manhattan, advised they had tested Northern oats experimentally and they would not withstand a Kansas winter. As shipments of these oats were discovered in the hands of Kansas dealers, sale was stopped on the ground that they were mislabeled. These oats were being sold for \$1.50 a bushel when the market price for oats was 50 cents. A number of Kansas dealers, when advised as to the facts, refused to accept shipment of their order, and those who had received and paid for the oats suffered a financial loss, as they would not recommend and sell them to their farmer customers for fall planting. A number of test plots were planted with these oats and all winter-killed. It is impossible to estimate how much was saved Kansas farmers by stopping this fraud before these racketeers sold an

It's Clear Which Car is Biggest, Best-Built!

MAKE THIS EASY "ONE-TWO" COMPARISON OF "ALL THREE" LOW-PRICED CARS

1. SEE THE QUALITY CHART



2. TAKE THE LUXURY RIDE



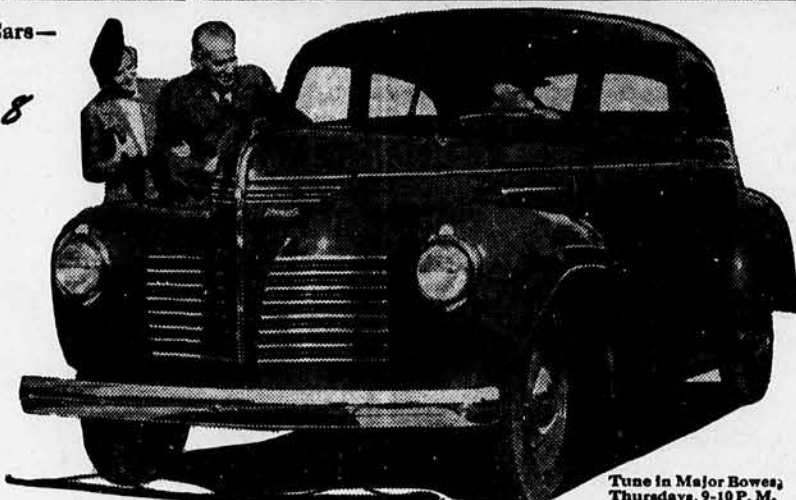
Of 22 Features Found in High-Priced Cars—

*Plymouth has 21...
Car "2" has 11... Car "3" has 8*

TODAY, "All 3" low-priced cars cost about the same—but thousands are switching to Plymouth!

Plymouth is the only one of "All Three" low-priced cars that gives you a majority of the 22 big features found in high-priced cars!

See the 1940 Quality Chart at your Plymouth dealer's. And be sure to take Plymouth's delightful Luxury Ride. PLYMOUTH DIVISION OF CHRYSLER CORPORATION.



Tune in Major Bowes, Thursdays, 9-10 P. M.



See the 1940 Plymouth Commercial Pick-Up and Panel Delivery—outstanding values in the low-price field!

COUPES START AT \$645 | SEDANS START AT \$699

DELIVERED IN DETROIT, MICHIGAN, including standard equipment. Prices include all federal taxes. Transportation and state, local taxes, if any, not included.

PLYMOUTH BUILDS GREAT CARS

A Seed-Testing Primer

Another of the valuable and interesting issues from the Kansas State Board of Agriculture is a Seed-Testing Primer, just off the press. Complete information as to methods of testing different kinds of field seeds is given, by illustrations as well as in the text, as safeguards against two of the most costly risks—bad seed for planting and the spread of dangerous weed seeds obtained in impure crop seed. This Primer affords a complete safeguard to farmers as to the quality of seeds purchased, as well as a certainty that the laws of the state regarding the sale of field seeds have been complied with. A limited number of copies of the primer is available by addressing Secretary J. C. Mohler, Topeka.

appreciable quantity to growers. Not only would the farmers have lost their \$1.50 a bushel but also the expense of preparing the ground and a crop.

Evidence of the sales and shipments, as well as samples, were collected and the cases reported to the United States Department of Agriculture for prosecution under the Federal Seed Act, and to the Federal Trade Commission for action.

One of the worst frauds practiced on the Kansas farmer occurred a few years ago, when, as result of the drouth, seed of the forage sorghums was scarce, and consequently the price of such seeds, particularly Atlas sorgo, rose to as much as 15 cents a pound. Unfortunately, many of the sorghum seeds cannot be identified as to variety by examination of the grain, and this is so with Atlas. The operations of the inspectors of the Control Division under the seed law revealed that a certain man who operated a truck seemed to have an inexhaustible supply of Atlas. This aroused suspicion and his activities were checked closely. He was found purchasing Blackhull kafir from a dealer in Southern Kansas at 3 cents a pound and selling it over the state as Atlas for 12 to 13 cents a pound.

Sufficient evidence was obtained to substantiate a charge of obtaining money under false pretenses, and a warrant issued for his arrest in Marshall county. He was arrested, tried and sentenced to the penitentiary and given a parole. Later this man was found falsifying affidavits as to origin of alfalfa seed, and when the matter was brought to the attention of the judge who passed sentence, the parole was revoked and he was taken to the penitentiary.

This was not the only operator cheating in Atlas sorgo that year. One man was arrested in Marion county for selling Hegari as Atlas, was convicted and sentenced to jail. It developed that he was one member of an organization that was planning on shipping several carloads of Arizona Hegari to Kansas and peddling it out by trucks to Kansas farmers as Atlas. With the arrest of this man, a stop was put to their operations.

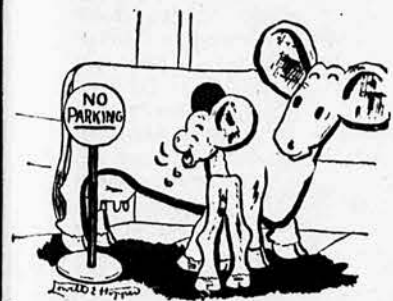
These are only a few of the unlawful activities which have been uncovered in the sale of seeds, but they demonstrate the importance and necessity of such a law, not only in the prevention of the spread of noxious weeds but in preventing crop losses thru misrepresentation.

Again, the punishment of crooks is not the only service the seed law renders. The act provides for a seed laboratory which is maintained at Manhattan, and to which farmers may send their seeds to be tested free of charge, not only for germination but for weed seed content and identification. The seed laboratory tests annually around 14,000 samples of seed, and renders a valuable service in identifying field and pasture weeds, so that proper eradication measures may be employed.

—KF—

Contouring Beats Terraces

Dale Shurtz, Asherville, says, "Contour farming on one field gave better results for me last year than terraces with straight rows on another field." This experiment repeats the evidence that terraces do not take the place of contour farming. When contour farming, or contouring farming combined with strip-cropping fail, then terraces are necessary.



"It's a little idea of mine to keep that man from stoppin' here with his bucket and stool!"

Warming Up to Frozen Food

So that people of the state may become acquainted with all the information available, a conference for freezer locker operators, owners, and patrons is being held at Kansas State College, Manhattan, April 16 and 17. K. F. Warner, meat specialist from the U. S. D. A. and an authority who has visited more plants than anyone else in the United States, will speak the first morning on "Freezer Lockers and the Farmer." Dr. J. A. Berry, from Seattle, Wash., will talk on "Some Principles of Freezing Preservation of Food." He is an authority on the bacteriology of frozen food. Dr. S. T. Warrington, of the Farm Credit Administration, Washington, D. C., will discuss management and operating problems.

Others from the College who will appear on the program are D. L. Mackintosh, department of animal husbandry, Dr. G. A. Flinger, department of horticulture, R. J. Eggert, department of economics and sociology, and Helen Forney and Dr. Gladys Vail, department of food economics and nutrition.

—KF—

Where China Beats Us

China ranks with the United States as one of the biggest producers of agricultural products, a report by the Office of Foreign Agricultural Relations shows. In wheat production, China frequently ranks next to the Soviet Union and ahead of the United States. In total tobacco production, China ranks along with the United

States and India in first place, and in cotton production is in third place, after the United States and India.

The cultivated area of China is 50 to 60 per cent that of the United States; yet China produces sufficient food to feed 3½ times the population of the United States. Chinese farming is intensive because of the large population per unit of land cultivated. Fields are small, and much human labor is used on each acre of crop land.

In China 750 man-hours of labor are required to produce an acre of rice, compared with 25 in the United States. Chinese general farm practice compares with truck farming in the United States, since hand labor performs most of the planting, cultivating, and harvesting, while power (in China, horse or ox) is generally used for plowing.

MORE ACRES per DAY
MORE BUSHELs per ACRE
with a BIG-CAPACITY JOHN DEERE Combine

BIGGER capacity in cutting, threshing, separating, and cleaning units *PLUS* strength, and plenty of it, are the big reasons why John Deere Combines lead the field in harvesting *more acres per day* and in saving *more bushels per acre*.

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Simple... easy to operate, they are quickly adaptable to varying field and crop conditions.

You can get a big-capacity, grain-saving John Deere Combine in the size and type best suited to your acreage and available power. For the small grain grower throughout the Great Plains area, the John Deere No. 9 Twelve-Foot Combine with auger platform, rasp-bar cylinder, and straw-walker separation is an outstanding performer. And for diversified crops and the more severe harvesting conditions, you can get a famous John Deere Three-Wheel-in-Line Combine with canvas-type platform, spike-tooth cylinder, and straw-walker separation in eight-, ten-, twelve-, and sixteen-foot sizes.

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- ☐ No. 17 Twelve- or Sixteen-Foot Combine
- ☐ No. 7 Eight-Foot Combine
- ☐ Small Combines

Name.....
Town.....State.....

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CHOLERA Increasing

Severe Outbreaks Expected; Pigs Should Be Immunized

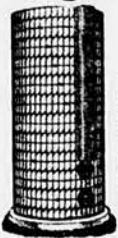
Hog cholera is spreading again;—a 25% increase in number of outbreaks last year, directly following a 30% increase the year before. That means real danger to the hog producer. It means every drove of spring pigs should be vaccinated as early as possible—preferably around weaning time.

Anyone who has been through a bad cholera outbreak knows what this new threat means. No hog is safe unless it has been vaccinated.

But be sure your vaccinating is done by a Veterinarian. With a disease like cholera, it is too much of a risk to gamble with uncertain methods. Your Veterinarian knows when and how to do the job right. His service is real economy—for it means better protection at small cost.

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Made by a new manufacturing process which makes our silo superior. You also have our 27 years of experience to assure you of a better silo. Contract this month for a silo for later delivery. This will give you a large discount and protect you from increase of material prices. Write to

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Both Beef Ideas Work

A leading cattle man of the Argentine, who is also familiar with the beef industry of the United States, points out a striking contrast between the 2 systems. In the United States great numbers of feeder cattle are bred on large properties on the western ranges and are finished for market in relatively small lots on individual farms in the Corn Belt.

In Argentina many of the steers are bred on the smaller farms and are sold for finishing in large lots on the highly specialized large ranches or "estancias" of from 12,000 to 100,000 acres or more. Most Argentine beef is finished on grass, either the best of the native pastures or on planted pastures of alfalfa, or of small grains. Few steers are grain-fed.

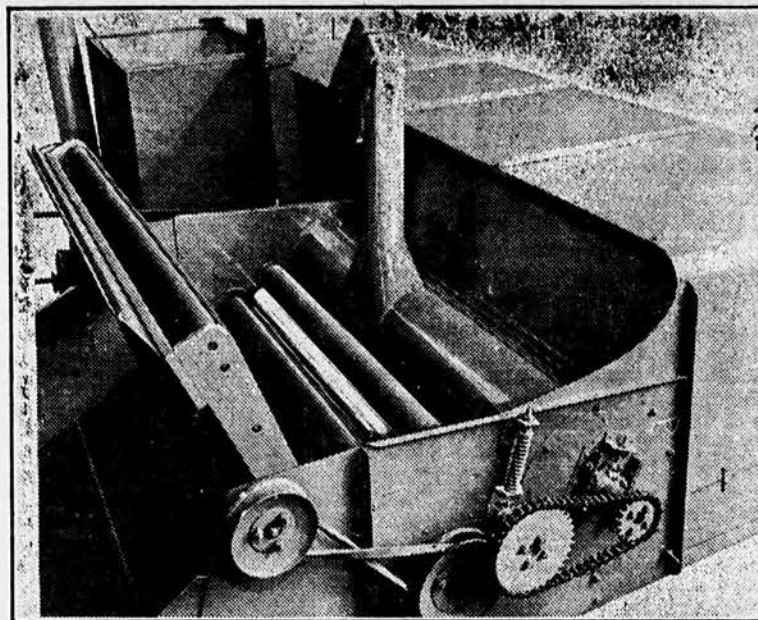
—KF—

Make Home Safe for Living

Fatal accidents in the home are increasing. A recent report indicated that there were 2 per cent more deaths because of home accidents in 1939 than in 1938. There was a total of 32,000 persons killed in homes in 1939, while the automobile claimed 32,400 people.

Falls caused 17,000 deaths in homes. Some of the things causing falls are slippery floors, small rugs that slip on the floor, frayed rugs, and lack of hand rails on stairs. To prevent these falls, floors should not be too highly polished; non-skid material should be placed under rugs; rugs should be mended; and hand rails should be built.

The "Fix It" lesson was taught to home demonstration unit leaders in 11 counties of Kansas by Ellen Lindstrom, Kansas State College extension home management specialist, last year. Money and energy was saved by 924 families as a result of this work—tools were purchased by 532 homemakers to make repairing easier, and 272 families made tool boxes.



Flax harvest is made easier and more efficient with this new attachment for the Allis-Chalmers model "60" All-Crop Harvester. Its rubber and steel rollers performed perfectly in world record flax yields last year in California.

Wring Out the Flax Crop

Easier Harvesting Welcome as Acreage Doubles

KANSAS doubled its flax acreage last year and probably will add to it again this year. Therefore, considerable interest is being aroused in the recent announcement by Allis-Chalmers of the new flax roller attachment for their Model "60" All-Crop Harvester.

Flax, as is well known, is a difficult crop to harvest successfully with ordinary equipment—especially in heavy yields, and due to varying climatic conditions, more so in some territories than others. The bolls in which the seed is contained are not easily broken open, except when dry or brittle. In some territories, a large proportion of the bolls will pass thru the threshing cylinder unbroken, due to the tough, resilient nature of the shell of the boll, which, like a rubber ball, will "give" at the point of pressure, but not always break. This is what makes flax such a difficult crop to thresh.

The new flax roller attachment is said to have solved this problem for owners of the Model "60" All-Crop Harvester. It consists of 2 large rollers—one covered with rubber, the other made of steel—mounted at the upper end of the header, and extending across the full width of the cylinder.

All flax entering the machine passes from the header, thru the rollers, to the cylinder, concaves and stripper plate. As it does so, the bolls are crushed between the rollers, and the cylinder then

has no difficulty in beating and rubbing the seed from the bolls, with the result that it is then easily separated and cleaned, like wheat or other small grains. The rollers operate much on the order of a clothes wringer, with spring controlled pressure. They are also protection against stones entering the machine.

The new attachment was tested thoroughly in California last year, and performed in world record yielding flax in California's Imperial Valley, to the satisfaction of everyone who witnessed its work. The performance of the All-Crop Harvester, equipped with this device, under the most difficult flax harvesting conditions, was said to have practically equalled that of special flax harvesting machines. And the combine, of course, is the most versatile crop-harvesting machine ever built.

—KF—

More Grass to Graze

By deferring grazing until June 15 each year, the carrying capacity to the acre of Kansas bluestem pasture was increased about 25 per cent, and the animal gains by 33 per cent. In their leafy stages, the bluestem grasses were found to contain adequate crude protein and minerals for nutritional requirements and satisfactory grains.

SAVE 3 WAYS WITH Solvent-Processed PENNZOIL

Here's What You Get When You Sound Your "Z"

If you've never used PennZoil in your car, truck or tractor, look for better performance and lower operating costs when you sound your "Z" for this extra margin of safety oil.

PennZoil is put through 3 extra refining steps that remove sludge-forming impurities. Result: PennZoil keeps tightly fitted valves and piston rings clean—prevents needless breakdowns and repair bills.

DIESEL OPERATORS! Get PennZoil's approved Diesel oils for more hours of trouble-free operation.

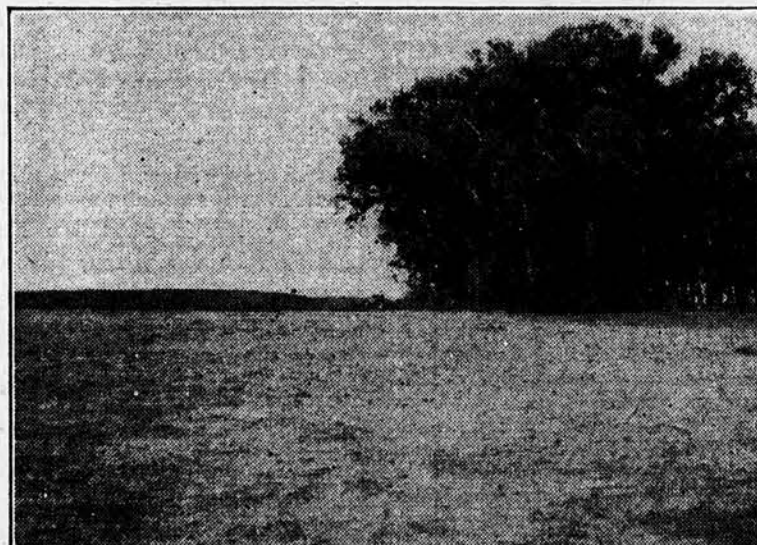
(Right) Pennzoil's new 5-gal. utility can

How PennZoil Keeps Your Motor Clean

Sludge coats valves and piston rings. With PennZoil in your crankcase, sludge is practically out. Your motor runs smoother, easier. See chart below:



Trees Save Wheat Crop



Here is convincing evidence of the value of a shelterbelt. Gates Brothers' cottonwood belt, in Stafford county, was planted 56 years ago with cuttings spaced 4 by 4 feet. Wheat, at left, protected by the trees yielded 15 bushels an acre, while the unprotected field in foreground blew out entirely.

Until DINNER Is Ready

Known Flour: Wheat flour may not be "just" flour in the future. Bread baking demonstrations are being made at meetings, followed by women baking bread in their homes from "known" varieties of wheat. No doubt, flour will be sold in days to come by the variety name of the grain from which it is made.

Orange Silage: When we were youngsters we thought oranges came only in Christmas stockings for good little children. Now they are used in grasshopper bait, and out in California they mix oranges, straw, and molasses for silage.

Concrete Blotter: A new, inexpensive method of hardening concrete surfaces is being developed by U. S. Reclamation Bureau engineers. They use a blotting paper or highly absorbent wall fiber board, unrolling it on the concrete while it is still soft. This gets rid of bubbles and "voids," and the concrete dries more evenly, the fiber remaining moist and protecting the concrete surface.

Oh, Doctor: Apparently hospitals are needed in rural areas. Since the President proposed that 50 small hospitals be built in rural districts, the U. S. Public Health Service has received 438 requests for such hospitals from doctors, health officers, laymen, service groups, and communities.

Big Business: The average hog yields about 32 pounds of lard. Lard production in the U. S. has gone as high as 2 billion pounds in a year. Pork consumed in this country in 1939 would have filled a solid train of refrigerator cars about 2,200 miles long. Our pork supply in 1939 was more than a billion pounds greater than in 1938.

Smaller Hams: Smaller pork cuts are in demand. When the housewife of 40 years ago went to market for a ham, she bought one weighing from 25 to 30 pounds. Today she selects a neatly trimmed ham weighing from 12 to 14 pounds.

Safe Risks: In 4 years, 4-H Club members and vocational agriculture students have borrowed more than 1½ million dollars from their local Production Credit Associations to finance

their projects. Last year 8,000 boys borrowed \$584,000 to finance baby beef, dairy, poultry, corn, and other similar activities. Last year most money was lent at Wichita and St. Louis. Repayment has been good.

Candy Crop: Peppermint is becoming an important crop in the Northwest, says the Farm Chemurgic Council. A carload valued at more than \$100,000 recently was shipped from Oregon.

Light Up: Electricity is coming to more farms. For every 30 seconds that ticked off from the beginning to the end of 1939, one person in a rural community received service for the first time from an REA-financed electric power system. One-fourth of all U. S. farms now have high-line elec-

tric service. Many other farms have their own efficient light and power plants.

Good Customer: Farm products from nearly 2½ million acres went into the manufacture of motor vehicles in 1939.

Giant Flowers: Daffodils with blossoms as large as salad plates, and red tea roses with 5-inch buds were grown in California by watering the plants with a dilute solution of vitamin B1, called thiamin, reports Science News Letter. The solution also makes it possible to transplant flowers and trees at any season, it is reported.

Never Satisfied: Steel for farm implements comes in for steady improvement. The steel industry this year will spend about 10 million dollars for research into methods of making better steel and developing new products. This will keep 2,550 chemists, metallurgists, physicists and other scientists mighty busy all the time, plus 1,300 others who work at it part time.

Chameleon: The "buy low and sell high" philosophy, apparently, has reached the cotton industry in a little different way. The Department of Agriculture has instituted a demonstration program to manufacture "high-quality" paper from "low-grade" cotton.

Booster: Why shouldn't Kansas advertise her products? We all know of the success enjoyed by the Idaho potato, and Florida and California citrus fruits. Nearly a dozen states are using

advertising to boost sales of their agricultural products including potatoes, onions, apples, dairy products, sweet corn, berries, cheese, maple sirup, tomatoes, ducks, and poultry.

More Drinks: Tomato, orange, and grape juice may have plenty of competition. Coming into the picture are the juices from rhubarb, strawberries, raspberries, blackberries, dewberries, cherries, pears, peaches, quinces, plums. Apple juice has been put on the market.

Delicious: Frozen pulp desserts have been developed and have more than an ordinary chance of becoming popular because they preserve the delicate aroma and flavor of fresh fruits.

Income Stays Level: Farm income for 1939 is estimated at \$7,625,000,000, about equal to the 1938 income, and 63 per cent more than the income for 1932.

May Live Longer: Babies born in 1938 have a life expectancy of 62 years. This is 1.1 years more than the expectancy for 1937 babies and nearly 2 years more than in 1931. Doctors point out that the expectancy falls only 8 years short of the Biblical quota, "3 score and 10."

Soybeans Soar: Production of soybeans for last year is estimated at 80 million bushels, with only about half the acreage grown for grain. The Nation did not reach a total production of 10 million bushels of soybeans until 1930 and produced only 58 million bushels in 1938.

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a profit maker that costs little
AND IS EASY TO BUILD

Out of the 216 designs of the 4-Square Farm Building Service, we feature the Summer Shelter for Poultry. Here is a piece of equipment that makes profits. It's an aid to safer roosting. It protects poultry from hot summer sun and predatory animals. It can be covered with canvas to provide shelter until cold weather. It is movable and promotes sanitation by enabling poultry to be raised on clean ground. The summer shelter proves that Better Farm Buildings increase Farm Profits. Blue Prints and Material Lists and ready-to-use 4-Square lumber for building this shelter are available at your 4-Square Dealer. See him today. See his complete 4-Square Farm Building Service which includes various types and sizes of farm buildings. Whether your specialty is dairying, poultry, hogs, beef cattle or crops you'll find a kind and type of building to meet your needs.



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BLUE PRINTS AND
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Farm Homes and buildings for every type of livestock program — buildings for grain storage, milk houses, machinery sheds. Before you build or remodel, see the 4-Square Farm Building Service. You can build better and more economically with the free Blue Prints, Material Lists and Ready-to-use 4-Square lumber. Correctly designed farm structures, built with 4-Square lumber, have far longer life and can be economically remodeled to suit new needs.

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Weyerhaeuser 4-Square Lumber is available in a wide variety of grades and species for every structural purpose. Thoroughly seasoned, smoothly surfaced, it comes in exact lengths and already squared on ends and edges. Because it is ready-to-use, 4-Square lumber reduces building costs.

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"Greater Farm Profits from Better Farm Buildings" describes the 4-Square Farm Building Service and shows how agricultural engineers design better, more economical farm buildings. Write for a copy. It's free.

Fisherman's Delight

Season on many fish has opened, and it's time to get the old fishing tackle into gear! Delight for every fisherman, young or old, whether you fish a lot or just trot down to the creek for a nibble now and then, is the 1940 edition of "Fishing—What Tackle and When." It contains 52 pictures in actual color of many fish, instructions for fly and bait casting, and much other information valuable to an outdoor man or woman. For FREE copies send a post card, printing names of those who want the book, to Farm Service Editor, Kansas Farmer, Topeka.

ITCH LIKE WILDFIRE

A PARENT-TEACHER association member writes me that old-fashioned itch is running like wildfire in her small town, and feeling very much like it, too. She says that she hates to write about such a matter but 40 school children have it right now and what ought to be done.

I suppose the reason folks are so modest about speaking of itch is because it is reputed to be a "filth disease" which nice people do not have. Let me assure you that the itch-mite would just as soon burrow into a nice person as anyone else. But it is a fact that no one needs to tolerate itch if they are industrious enough to drive it away.

The itch-mite is called by doctors "Acarus Scabiei." It burrows into the skin and leaves a raised red track. The track becomes infected and makes pustules and scabs. The marks show chiefly on the covered parts of the body, especially around the waist line, the arm pits and the thighs. On uncovered parts, look for it between the fingers. The itching makes the patient scratch, and scratch-marks and burrows together may make the body very sore. The itching is usually worse at night and interferes with sleep. The child who takes this disease from another has to be in intimate contact. Sleeping in the same bed is sure to induce contagion, but it may also spread by using the same towels, exchanging articles of clothing, wrestling, hugging, or even shaking hands. Merely attending the same schoolroom will not give it, so I am rather surprised that 40 school children should all have it at once.

Sulfur ointment, properly used, kills the itch-mite and ends the trouble. When it fails, the reason may be that the patient has failed to scrub away the scabs and crusts before rubbing in the ointment. The first thing is a hot bath with a good soap and a scrub brush. It is a good thing to use tincture of green soap for its penetrating qualities. It may be bought from any druggist.

Three applications of the sulfur ointment are needed, and one has to be careful to have clean underwear and bedding so as not to be re-infected. It must be remembered that sulfur is rather hard on the skin.

May Hold Positions

If sent to the asylum and pronounced cured, can teachers, doctors, lawyers and stenographers go on in their chosen profession, or are their certificates and diplomas declared void, and in order to take up their professions again do they have to take courses over? For instance, a teacher—would she have to take her high school and college work over in order to teach? Or could she go on as she did before she lost her mind?—T. L. M.

Treatment of mental ailments is much more successful in the last 20 years. Every day patients who have been treated for various types of so-called insanity are sent back to their homes ready to mingle in society. I know personally of a teacher who went thru that experience and is teaching

Handiest Thing on Farm

Handiest thing on the farm, that's what hundreds of farmers are saying who write in for a pocket-size record book which we have free for our readers. Here's what Mrs. L. L. Gibson, Geary county, wrote: "If it isn't asking too much, would like to have another one of your 1940 record books. I received one, but my husband liked it so well he took it." To be sure, Mrs. Gibson will receive another book. Here's all you have to do to get this FREE record book. Print names of those who want the book on a post card and mail to Farm Service Editor, Kansas Farmer, Topeka.

By
CHARLES H.
LERRIGO,
M. D.



Dr. Lerrigo

again. Certainly professional people do not forfeit their professional credentials. There may be conditions that keep them from returning to the same place. But quite often such a patient may be absent for treatment with no one except the family knowing the cause. Such was the case with my teacher friend.

No Such Medicine

I have a medicine that cures cancers. Would you please give me information where to have this medicine tested? And how can I get the right to sell it?—C. S. W.

Evidently you do not know much about the medicine or you would not be asking where it could be tested. I'm rather of the opinion that you do not know much about the very many varieties of cancer and the things necessary for treatment, either. I suggest that you submit the matter to some well informed doctor at your home.

Takes Various Forms

Is "quick consumption" a different disease than tuberculosis, or is it just a late stage of tuberculosis?—W. E. F.

There are different types of tuberculosis as the disease appears in human beings but all come from the same bacillus. The difference lies in the susceptibility and resistance of the

patient. Babies are sometimes said to have "quick consumption" because the germ attacks the nervous system and ends quickly and fatally in tuberculous meningitis. Infants and young people with poor resistance may offer so little resistance that the body is overwhelmed and death comes in a few weeks in miliary tuberculosis. But it is the same bacillus.

Blood Is Not at Fault

I would like to see an article on honey bee stings. Have kept bees for a number of years without trouble but last summer I was stung several times. The parts all swell and turn red like infection. I feel as if my whole body was poisoned. I am a woman 37 years old and in fair health. Do you think my blood would be in poor condition?—S. R. G.

The sting of the honey bee—Apis Mellifica—injects a poison which varies in its effect upon different individuals. Virtually every poison has such variation to some extent but it

*Let's take a
plow's-eye view*

**OF A MODERN
HIGH COMPRESSION
TRACTOR...**

**HIGH COMPRESSION
HERE**

**MEANS MORE
POWER HERE**

seems to be especially true of insect poisons. Apis causes intense swellings in susceptible people and affects serous and mucous membranes so seriously that death may ensue. Once the attack is passed the poison seems to be eliminated and no ill results follow. I do not think your blood is at fault. You just happen to be very susceptible to the poison of Apis Mellifica.

Hundreds of Good Doctors

I have a deformed nose which is also inwardly diseased. Have been advised to have an operation for the removal of some of the tissues. Please give me the names of the best nose doctors.—R. J. B.

There is a possibility that you may get much help from such an operation and I sympathize with your desire to secure the very best nose doctors. But you should realize that it is quite impossible for this column to recommend one doctor of good repute above another. There are hundreds of doctors

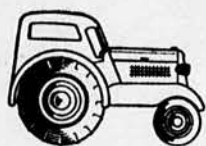
doing such work. Your best source of information as to a specialist is likely to be a home doctor in whom you have confidence. He will give you an honest opinion.

Sometimes Best Method

I want to know if diathermy extirpation treatment for tonsils is as satisfactory as removal by surgery.—L. M. R.

The treatment by diathermy seemed likely to sweep the field a few years ago. It is not so much used now. It is not suited for such general application as surgical tonsillectomy but is of undoubted value in selected cases when done by one expert in its use. Safety lies in allowing the decision to be made by a good specialist who is competent to use either method.

If you wish a medical question answered, enclose a 3-cent stamped, self-addressed envelope with your question to Dr. C. H. Lerrigo, Kansas Farmer, Topeka.



SUPPOSE a plow could talk. Here's what it would tell you about tractors:

"After you've been plowing through seven inches of sticky gumbo for a couple of days you get a pretty good idea of what's important in a tractor and what isn't. You learn that no matter how big and powerful a tractor looks, or how much noise it makes, it's the pull on the drawbar that counts.

"That's why these modern high compression tractors are tops with me.

"Guess I'll never forget the first time I was hitched up to one. I knew something was up when they set me to plow seven inches deep instead of my usual five. It sure looked like we were in for some tough, three-mile-an-hour, second-gear plowing. Imagine my surprise when the high compression tractor hauled me across the farm in high gear at better than four miles an hour.

"We finished the job in just five hours less than our usual time and later I heard my owner say he'd used less fuel than ever before. After that, nothing these high compression tractors do surprises me very much.

"Time and again I've seen what looked to be a two-plow tractor walk away with three plows. I've seen them cut hours and days off drilling and planting time . . . harrow 40 acres in two hours . . . cut oil costs as much as 60 per cent."

That's a plow's-eye view of high compression. No matter how you look at it, there's every reason to be sure your next tractor has high compression.

Because they use the same good gasoline you use in your car and truck, high compression tractors warm up easier, idle better, use less oil than old-fashioned machines and eliminate the nuisance of radiator curtain adjustments. Modern high compression tractors have so much power that frequent gear shifting can be avoided.

For the full story of why high compression tractors bring you better power farming, talk to neighbors who own them, or better still, talk it over with your tractor dealer and arrange for a demonstration. Ethyl Gasoline Corporation, Chrysler Building, New York, N. Y., manufacturer of anti-knock fluids used by oil companies to improve gasoline.

TUNE IN EVERY MONDAY NIGHT—Tony Martin, Andre Kostelanetz and his orchestra, featured on "Tune-Up Time" over coast-to-coast network, Columbia Broadcasting System.

GET MORE HORSEPOWER
AT LESS COST THROUGH
HIGH COMPRESSION

Sows Wheat in Mid-Winter

TALK of planting wheat by the thousands of acres in Southwestern Kansas during the winter is not just hear-say. According to Walter A. Cooke, of Morton county, it is an actual fact. Mr. Cooke should know, too, because he planted more than 1,000 acres on his land, between February 12 and March 1.

Mr. Cooke commented that he had not thought so much about sowing wheat in the winter until he read that the chance for a crop from such planting is about 1 out of 50. "That is good odds for us folks out in the Southwest corner, so I decided to put in about 1,000 acres," he said.

But a typical Westerner's twinkle in his eyes and an upward curve at the

corners of his mouth revealed that Mr. Cooke does not feel just exactly that way about the matter. In a more serious tone of voice he explained why his thousand acres were planted to wheat in mid-winter.

He said the ground was well supplied with moisture to a depth of 3 or 4 feet, and this is enough to bring up a good crop of wheat. He saw fair possibility for a crop of grain.

However, if no grain is produced, the work will not be in vain. More important than getting a wheat crop right now is the job of keeping that soil from blowing. Regardless of whether it produces grain, the wheat is sure to make a good cover—sufficient moisture to do this is available in the soil right now.

"So," Mr. Cooke says, "why not have the necessary cover and at the same time take a long chance at having some wheat."

Mr. Cooke is far from alone in his wheat venture. Many thousands of acres were seeded to wheat during mid-winter in Southwest Kansas, Southeast Colorado, and Northwest Oklahoma.

—KF—

New Pear Is Offered

Hot, humid summers thruout most fruit-producing areas make fire blight a serious problem in growing pears. That is the reason most of the high-quality dessert pears are grown in the Western states where the weather is drier and blight is not so serious.

Fruit tree breeders of the Federal Bureau of Plant Industry have introduced a new pear variety which stands up well under blight. The new pear, known as the Waite, has excellent cooking and canning qualities, and in dessert quality is far ahead of such varieties as Kieffer and Pineapple, a report says.

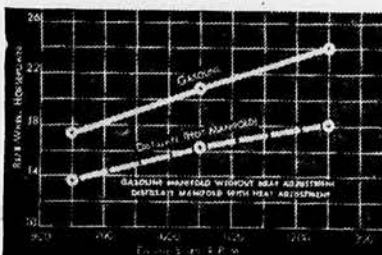
In describing the new pear, the Bureau scientists say that it is nearly as large as the Bartlett and is nearly free of the grit cells which characterize the Kieffer. It is a little more acid than the Bartlett and ripens about the same time as the Kieffer with yields consistently high.

The scientists believe that the new pear will be particularly adapted to areas south of New York and may prove of value as far west as Kansas. Its cold hardiness has not been determined. They do not know whether the Waite will grow well south of the Apple Belt, but experimental plantings have been made in Georgia and Central Mississippi.

The Bureau does not distribute the new pear. Some commercial nurseries are advertising the Waite pear for the first time this year. These nurseries are the only source of planting stock.



CHANGE-OVER FOR EXTRA POWER AND BETTER ECONOMY. Nearly all old-fashioned tractor engines can be easily changed to high compression engines by the installation of high compression or "altitude" pistons or a high compression cylinder head, "cold" spark plugs and by setting the manifold to the "cold" position. Do this when you recondition your tractor this spring and take advantage of this extra power.



30% MORE HORSEPOWER. The above chart shows the increase in horsepower obtained by using high compression and a good grade of regular gasoline in a number of recent tractor tests. Farm tractor manufacturers as well as tractor owners have been quick to recognize the fact that more power gives more productive power farming.



BIG SAVING IN TIME. Smart farming means taking advantage of today's sunshine today. And a tractor that can pull three plows instead of two, or pull two plows faster in a higher gear, work more acres per day, idle without stalling, and eliminate radiator curtain adjustment, will earn its "keep" many times over.



BIG SAVINGS IN OIL. It is generally recognized that tractor engines, when using good gasoline, require fewer oil changes than when using low grade fuels. That's because the use of good gasoline eliminates wasteful crankcase dilution. This saving on oil consumption runs as high as 60%.



THE SWING IS TO HIGH COMPRESSION. Only a few years ago high compression tractors made their first commercial appearance. Today practically all tractor models offered by the leading manufacturers of farm tractors have high compression engines as either standard or optional equipment.

Slip Covers and Gardens

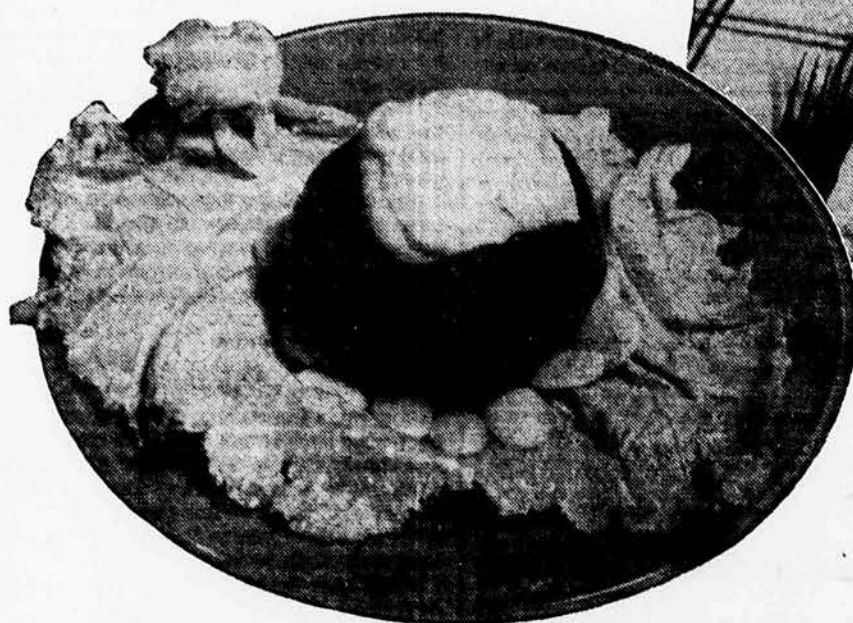
Farm homemakers may like to have some of these U. S. D. A. bulletins for reference this spring, as they contain reliable and helpful information. For a free copy of each of the following, please order by number, and send your post card to Bulletin Service, Kansas Farmer, Topeka. Please print your name and address.

- No. 76—Slip Covers.
- No. 81—Cooking Cured Pork.
- No. 112—Cooking American Varieties of Rice.
- No. 1370—Dahlias for the Home.
- No. 1371—Diseases and Insects of Garden Vegetables.
- No. 1633—Window Curtaining.
- No. 1827—Culture and Diseases of Delphiniums.
- No. 1837—Cotton Shirts for Men and Boys.

LIMA BEANS

So Good
Low in Cost
Rich in Vitamins

By MRS. ZOE NIELSEN



Above—There's nothing quite so satisfying as a dish of steaming hot lima beans. Ready in half an hour when those unexpected guests drop in!

Left—Luscious tomatoes with their surprise stuffing give a lift to commonplace meals. That's a salad with both eye and palate appeal.



FOOD experts have awe-inspiring names for those food elements necessary if we would have our bodies grow strong, keep well and replace worn out tissue. Scientists constantly emphasize the importance of a well-balanced diet. When appetite and economy alone influence food selection, some of these important elements, especially vitamins and body minerals are missing. These essential elements are almost all found in abundance in lima beans. A casserole of creamed limas, a simple salad and a beverage supply a complete well-balanced meal—a good "meat and vegetable" meal at that.

Because, today, we examine our food with an eye to vitamin content, it is good to know limas contain not only vitamin A but are an excellent source of vitamin B. Lima beans are remarkably high in iron, which makes red blood; in calcium, which makes and preserves strong teeth and bones; in sodium, magnesium and potassium, necessary to maintain the faint alkalinity of blood essential to good health.

Flavor? Um-um! And economical, too! Low in cost per pound, a cupful of dried limas makes three cups cooked. There you have the whole story: Healthful, distinctly flavored and economical. Seldom do we find a food so "good for you," so easy to take, and easy on the budget.

So harken, homemakers, if you are one of those on the lookout for short cuts! Cook a pound or two of these delicious concentrated legumes, keep them in the refrigerator and be ready for delicious meals on short notice. They are a boon when those unexpected guests drop in.

Remember, too, that canned limas are available the year 'round. There are so many tempting lima dishes to be made, so as a starter, try some of these:

Baked Limas with Marshmallows

3 cups cooked dried lima beans
1/2 teaspoon salt
2 tablespoons butter
3 tablespoons brown sugar
1/2 cup hot water
3 strips bacon
Marshmallows

Put lima beans in a buttered casserole dish, adding water and stirring in the salt, butter and brown sugar. Bake in moderate oven, 350 degrees for about 20 minutes, or until

thoroughly heated. Then place crisply cooked bacon strips over the top, dot with marshmallows and toast under broiler flame until golden brown.

Mary's Beans

1 1/2 pounds dried lima beans
3 medium sized, tart red apples
1 No. 2 can green beans
1/2 cup thick cream
1/4 teaspoon pepper
2 teaspoons salt
2 tablespoons butter
1/2 cup bread crumbs

Soak lima beans in cold water to cover, over night. Cover and cook gently until tender, about 20 minutes. Cut the green beans in diagonal pieces and cook separately until tender. Core the apples without paring and cut into small dice. Combine the lima beans, green beans, diced apples, pepper and salt. Place in a buttered casserole. Blend the butter and bread crumbs and sprinkle over the dish. Bake in a moderate oven, 350 degrees F., for 1 hour.

Now bring out some of those perfect tomatoes

you so carefully canned for salads. Here's a perfectly delightful treat:

Tomatoes Stuffed With Limas

Remove centers of the tomatoes and fill with cooked, dried lima beans mixed with mayonnaise dressing. If fresh tomatoes are used, peel them before removing the centers and stuffing. Place on crisp lettuce, cover tops with mayonnaise dressing and place a row of cooked lima beans around each tomato.

Lima and Ham Loaf

1 cup cooked, dried lima beans
1/2 cup ground ham
1/4 cup chili sauce or catsup
2 eggs, beaten
1 teaspoon minced onion
1 tablespoon melted butter
1 cup cracker crumbs
1/2 teaspoon salt
1/2 teaspoon pepper

Rub lima beans thru a coarse sieve. Add ham, chili sauce, eggs, pepper, salt, minced onion, butter and cracker crumbs. Shape into a loaf, place in a buttered pan in a moderate oven, 350 degrees and bake for 30 minutes, baste with melted butter. Serve with brown gravy.

Creamed Limas with Asparagus

2 cups cooked, dried lima beans
1 1/2 cups medium white sauce
2 cups canned asparagus tips
1/2 cup grated cheese

Prepare the white sauce in a double boiler. When cooked, add the lima beans, asparagus tips and cheese. Serve over toast.

Lima Bean Croquettes

2 cups cooked, dried lima beans
1/2 cup cream
1/4 teaspoon poultry seasoning
1 egg, slightly beaten
1/2 teaspoon salt
1 tablespoon tomato catsup
1/4 teaspoon powdered sage
1 cup bread crumbs
1/2 teaspoon pepper

Rub lima beans thru a coarse sieve. Add the crumbs, cream, salt, pepper, sage and egg. Shape in croquettes or small cylinders. Roll in crumbs, dip in egg beaten with 2 tablespoons of cold water. Roll again in crumbs. Fry in deep hot fat until golden brown.

Lima Bean Chowder

2 cups cooked lima beans
2 cups diced potatoes
2 slices fat salt pork
1 small onion, sliced
1 cup boiling water
4 tablespoons butter
4 tablespoons flour
3 cups hot milk
1 teaspoon salt
1/2 teaspoon pepper

Cut the salt pork into dice, cook 5 minutes; add the onion and cook until just beginning to turn yellow, then add the potatoes and boiling water. Cook until potatoes are tender, then add lima beans. Melt the butter, add the flour, and stir until smooth. Add hot milk, stirring constantly until thickened, add lima bean mixture.

Handy Vitamin Chart

Does the vitamin alphabet confuse you? It won't, once you've learned the ABC's of it. Nice, too, to know the rich-in-vitamin foods. As a guide, here's a convenient chart to cut out and hang up in your kitchen where you can see it often:

Vitamin A

Milk and other dairy products; apricots, prunes, bananas, and peaches; liver; fish liver oils and salmon; asparagus, broccoli, cabbage, carrots, kale, peas, spinach, squash, string beans, sweet potatoes, tomatoes.

Vitamin B

Whole grain and vitamin-enriched cereals; brown rice; lean beef and pork, chicken, kidney and beef liver; whole wheat and bran bread; nuts; peanut butter; kidney beans, lentils, potatoes, green beans, beet greens, dandelion greens.

Vitamin C

Raw fruits, especially citrus (lemons, oranges, grapefruits); berries, rhubarb, pineapples; cabbage, tomatoes, and nearly all other fresh vegetables.

Vitamin D

Butter, eggs, fish liver oils.

Vitamin G

Dairy products; dried apricots and prunes, beef, chicken, liver, and veal; peanuts; peas, broccoli, lima beans, and leafy green vegetables.

Had Your Vitamins Today?

By RUTH GOODALL

AS SURELY as spring follows winter, most folks get those lazy listless symptoms. Our grandparents called it "spring fever" for lack of a better name, and proceeded to prescribe a generous dose of sulfur and molasses, or herb tea and sassafras bark.

Happily, those days have passed. The bitter spring tonic is as antiquated as the medicine-man show. Not that the old-fashioned remedies had no merit, for they did. But, today, thanks to the ever-growing science of nutrition, we know how much our health depends upon the food we eat, and that a wholesome, well-rounded diet will supply all the necessary-to-health vitamins in far better form than drug store pills.

Doubtless you're saying to yourself, "But my family gets plenty to eat." True enough—most farm families do. But proper nutrition cannot be assured merely by eating what one likes or enough to satisfy the appetite. Unless your meals provide generous amounts of all vital food factors, the chances are you won't enjoy the vigorous good health that makes life so worthwhile living, and vitamins and minerals are essential to that.

"You've never seen, or tasted a vitamin," you say, "just what are vitamins, anyway?" Without getting technical, they are substances present in foods in very small quantities—but highly important to health. If your family isn't getting enough vitamin A you may find them more susceptible to colds. If vitamin B is lacking, poor appetite, bad digestion, loss of weight, and even nervous troubles may result. An insufficient supply of vitamin C or G will pull down your physical tone, while a lack of vitamin D may start you worrying about your teeth.

Luckily for farm folks, a cow and a

flock of hens are a wonderful starter when it comes to vitamins. Milk, and all dairy products, such as butter and cheese, are rich in vitamins A and G; and are also a fine source of calcium.

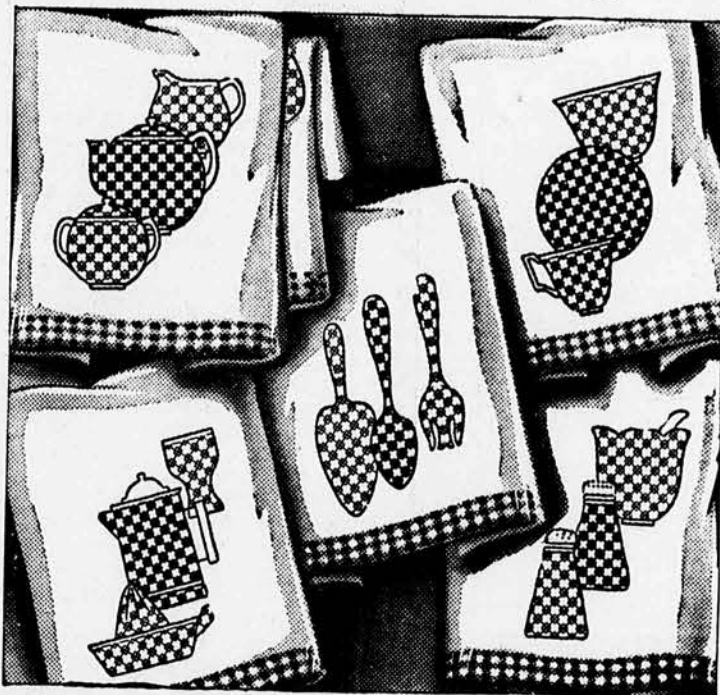
Eggs supply vitamins A, B, and G, plus iron.

But milk and eggs aren't enough. Your family needs fruit and vegetables if "spring fever" is to be conquered. We're all luckier than our grandparents on that score, for even the smallest village stores these days have access to fresh produce. If and whenever your budget permits, sup-

plement the fruit and vegetables you canned last summer with fresh oranges and grapefruit for vitamin C; and fresh lettuce, cabbage, string beans, carrots, and other yellow vegetables for vitamins A and G. For good measure, sandwich in a bottle of cod-liver oil—that's one spring tonic that's never been improved upon, especially for youngsters who need the vitamin D in cod-liver oil to make their bones grow strong and straight.

Farm women had no vitamin B problem years ago when flour was ground at the mill, for it contained the bran and the wheat germ itself, both rich in this vitamin. Doctors nowadays are recommending that we go back to the whole grain flours, since many digestive troubles can often be traced to vitamin B deficiency. An easy way to supply this lack is to serve whole wheat bread at least once a day and to make all-bran muffins a staple on the family menu. Cultivate the cereal-for-breakfast habit, too, but be sure you serve whole grain cereals, or prepared cereals that have been enriched with vitamins B and D.

Cross-Stitched Like Gingham



Easy enough for a child to do—smart in three shades of one color or three harmonizing colors. These cross stitch motifs, completed by a simple bit of outline embroidery, look for all the world like patches of gingham applique—and how appropriate they are for kitchen towels. Pattern 2467 contains a transfer pattern of 6 motifs averaging 6 3/4 by 8 inches; suggests color schemes, gives materials required and illustrations of stitches. The pattern is 10 cents and may be ordered from Needlework Service, Kansas Farmer, Topeka, Kan.

Sure Sign

Redbirds may call,
"Have cheer! Have cheer!"
But wrens at work
Prove spring is here.
—Hazel Jean Schroeder.

April Fooled the "Doc"

By MAMMA MARGARET

Twins run in both our families. And in 1890, I believe, a great aunt of mine presented an astonished husband with triplets. So when the doctor told us confidently we had better provide plenty of extra three-cornered pants, we wouldn't have been surprised if we'd started some competition for the Dionnes!

Right on schedule—April 1—I went to the hospital. And April fooled the doc by having one little blue-eyed boy. He's sweet enough for two, tho, so we didn't mind that April fooling!

Know Your A B C's?

By PARTY LOVER

If you do, you will know they offer interesting possibilities in making clever place cards. Go to your grocer and invest in a package of alphabet letters—the leftover ones are grand for soup. Next, you will need some dainty, tinted cards to fit in with your color scheme. These may be cut out in shamrocks, eggs, storks or any shape to suit the season or occasion. Glue the alphabet letters in place to form the guests' names. The creamy white letters stand out in high relief on the dainty cards and are most attractive.

How Like a Mother!

By MISS FIFTEEN

Last year there was a spring coat in the catalog I wanted so badly. But Mother said she just couldn't afford it, so I picked out a cheaper coat and we made out the order.

When I came home from school that night, she hadn't mailed it, giving some excuse, and the next day she forgot—so the order went out just right to make the coat arrive on April 1. I thought there was a peculiar little twinkle in Mother's eye as she watched me open the package. Inside was the lovely coat I had really wanted!

Yes, Mother planned it all, sacrificing the egg money she'd been saving to buy a linoleum for the kitchen floor. It was the best April fooling I ever had. But I felt so ashamed, because I knew how much Mother wanted that rug. It seemed all I could do was help raise the baby chicks—and in the fall we had extra money to buy the linoleum, too!

The ABC's of Slip Cover Making



A REAL spring beauty! That's what a pretty slip cover makes of your dingy chair or sofa—and it's a simple matter to run one up.

The gay, ruffled cover shown here is of chintz in a "calico" pattern. Tiny flowers in many colors are sprinkled on a French blue ground—and seams are trimly bound in a flower color.

Checked gingham makes up into such effective slip covers, but for wear and tear it is hard to beat denim, an inexpensive fabric available in a range of pretty colors.

But, whatever fabric you choose, you make your slip cover the pin-on way in 3 simple steps.

1. Pin and Cut. Smooth fabric over back and seat, leaving a 4-inch tuck-in between them. Have fabric right side out for bound seams. Now pin along the lines of the upholstery and cut 1 1/2 inches outside pins for seams. Similarly, pin and cut pieces for arms, sides, back, front.

2. Baste and Try On. Remove the pinned cover, baste along the lines of the pins. Then fit carefully to get that custom-made look.

3. Stitch and Finish. When making bound seams, trim the edges neatly, have the binding cover the stitches. The perkily gathered flounce you add last of all—and now you have a slip cover to grace any room!

Step-by-step directions and diagrams for the pin-on method are given in our 40-page booklet, "Making Slip Covers Successfully." It explains fully how to estimate material, fit and finish slip covers for every type of chair and sofa. Has decorators' suggestions on materials, trimming. This booklet with all its professional tips is only 15 cents, and may be obtained from Home Institute, Kansas Farmer, Topeka.

"Honor Thy Mother"

How are you going to honor your mother on the second Sunday in May? Mother-Daughter banquets and afternoon teas are nice ways to observe this day, but to find something different to do is not so easy. Why not ask Ruth Goodall for her leaflet of new suggestions for clever decorations for a banquet table, what to serve and how to decorate for an afternoon tea? Then, if you are making a speech, several pages of mother quotations, poems, and the history of Mother's Day will help you. For good measure there's a short Mother's Day play for six girls, and a new Mother's Day game. Write for your copy of this leaflet, enclosing a 3-cent stamp for mailing, and address your letter: Ruth Goodall, Kansas Farmer, Topeka.

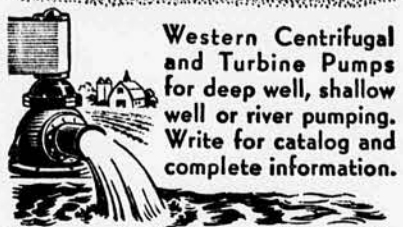
Our Farm Sale Dinners

By MRS. N. P. DAVIS

Our club depends on farm sales for most of its income, as we serve at every sale in the neighborhood. Trying to make these meals as attractive as possible, we decided the most unattractive thing about the ordinary farm sale dinner was the jumbled appearance presented by the food, by allowing it all to run together on the plate.

We avoided this by buying small paper ice cream dishes. One of these dishes is placed on each plate, and in this is put the stew, noodles, gravy or whatever may be included in the menu, that is in a semi-liquid form. This allows all other food to remain intact, appetizing in appearance and taste.

IRRIGATION PUMPS



Western Land Roller Co., Box 16, Hastings, Nebr.

Western Centrifugal and Turbine Pumps for deep well, shallow well or river pumping. Write for catalog and complete information.

Silver Tea and Antique Show

By RUTH GOODALL

WHEN Wakarusa Farm Bureau women decided to combine an antique show with a silver tea to raise funds for their Unit, instead of staging a play as has been the custom previous springs, they had no idea their little community could produce such rich old treasure, nor the good time in store for them and their guests.

Out of buffets and china cupboards came choice pieces of old glass. Desks yielded old papers, letters, and books dating back to the early 1800s. Bureau drawers produced old jewelry and keepsakes. Down from top pantry shelves and closet and cellar hideouts came forgotten bullet and candle molds, a bootjack, a churn, a handmade butter mold, rolling pin and potato masher—the wood battered from hard usage. Judging from the assortment of old clothing, quilts, coverlets, and shawls, every attic within miles must have its full quota of old chests and trunks. And even one of the trunks was on exhibit. According to its owner, Mrs. N. J. Foltz, it is of 1849 vintage, made a trip down the Mississippi river, thru the Gulf of Mexico, and around the Cape to California in gold rush days.

Mrs. Henri Schurr's collection of old things showed a wide diversity of interests: A fine old rosewood case Waterbury clock; her grandmother's beaded cape and black lace knit mitts; her grandfather's spectacles dating back to 1809, crudely fashioned and about a fourth the size of modern eye glasses; an old Swedish snuff box with mirror much like the modern girl's compact; the dress her husband wore for "best" in his little boy days—a be-ruffled red creation beautifully and intricately hand-embroidered; and her own collection of antique buttons.

An old music box with large round steel perforated records dated 1885, played soft, tinkling tunes. It belongs to Mrs. W. G. DeBaun, who also had on display a collection of fine old pattern glass. Her prize piece is a small cranberry inverted thumb print pitcher brought to Kansas in a covered wagon by her husband's grandmother.

Mrs. W. W. Widaw had on display a small walnut table from which she had removed several layers of molasses-like varnish and sanded ready for refinishing, following the instructions received thru a Farm Bureau project. A real heirloom, the table is more than 100 years old, and was made by an ancestor from a great walnut tree that grew in the family's backyard.

A child's Bible dated 1834 belongs to Mrs. C. H. McQueen. Mrs. Roland Nelson showed, among other old letters and papers, a copy of the Topeka Daily Capital dated Wednesday morning, March 12, 1884, and one of the Weekly Capital, the predecessor of Capper's Weekly, dated June 3, 1886. The latter carried the marriage announcement of Mr. Nelson's parents, Anna Hibbard and Lyman T. Nelson. Mrs. Nelson also had on display 2 beautiful Paisley shawls.

Four handmade candlewick bedspreads and 3 quilts are the property of Mrs. Esther Johnson. A fine old blue and white woven coverlet, 125 years old, which came from West Virginia and was made by her mother's great, great grandmother, is one of Mrs. C. D. Boley's prize possessions.

A 3-legged black iron kettle, known to be 100 years old, was shown by Mrs. John M. Foltz, while Mrs. George Henry's contribution to the show was an oversize cowbell her grandfather had used on his team of oxen in 1861. A made-by-hand gun, 96 years ago, which belongs to the I. E. Patterson family, created a great deal of interest. There were Civil War papers dated 1862 giving army orders; and '0-, 25-, and 50-cent paper bills of post-Civil War date, as well as coins of almost every description, denomination, and date.

Not only did the women enjoy seeing some of the other members' prize possessions, but they laughingly admitted they had been able to do considerable of their spring house cleaning while digging out the booty. A keen sense of appreciation for what they had permeated the visiting over tea cups—and then there was the silver offering to bolster the treasury.

Mrs. M. M. Osborn is president of the unit and other members include:

Mrs. Carter Baxter, Mrs. Lloyd Johnson, Mrs. Henri Schurr, Mrs. Horace Bulkley, Mrs. Dwight Robb, Mrs. Philip Cazier, Mrs. John Thompson, Mrs. George Henry, Mrs. Oscar Waler, Mrs. Charles Chitty, Mrs. Guy McQueen, Mrs. Roland Nelson, Mrs. George Gerisch, Mrs. Garrett DeBaun, Mrs. Floyd Fisher, Mrs. Charles Everetts, Mrs. June Foltz, Mrs. N. M. Foltz, Mrs. Karl Porter, all of Wakarusa; Mrs. Charles Boley and Mrs. Walter Widaw, of Carbondale.

Guests who called during the afternoon were: Mrs. Bill Drummond, Mrs. Phil Finley, Mrs. Cye Jordan, Mrs. Floyd Hinshaw, Mrs. Perry Fisher, Mrs. C. B. Ramsey, Mrs. Frank Daniel, Mrs. Mary Ziegler, Mrs. John Allison, Mrs. A. L. Sharp, Mrs. David Lutz, Mrs. Ralph Leonard, Mrs. Will Coultis, Mrs. Mary Petro, Mrs. Gladys Buckman, Mrs. Clifford Foyer, Mrs. Margaret Gilkeson, Mrs. E. T. Heckart, Mrs. Ernest Myers, Mrs. W. B. Perry, Mrs. Arlie Myers, Mrs. G. S. Dole, Mrs. J. F. Corbin, Miss Doris Cazier, Miss Helene Cazier, Mrs. Walta Hinshaw, Don Coffman, Jr., Dean Cazier.

Slim, Smart, Youthful

FRONT-PANELED STYLE



Pattern 4382—Today it's just as important to look smart as to look young for your age! Both qualities are gracefully combined in this pattern... a charming printed crepe frock to take you everywhere this spring. The eye follows the V-shaped neck in a flattering vertical line down the center seam of the double front panels. The pointed yokes are not only becoming, but they serve to hold in the soft fullness below, too. That perky bow, shown with dainty lace edging, may be in fresh contrast. Or, for a vivid and striking touch, make panels, yokes, and pointed sleeve bands all in contrast. Do use the clearly illustrated Sewing Instructor! The amateur seamstress particularly will find it a joy to use. Sizes 34, 36, 38, 40, 42, 44, 46, and 48. Size 36 takes 3½ yards 39-inch fabric.

Pattern 15 cents. Address: Fashion Service, Kansas Farmer, Topeka.

Phone Balks.. Wife Can't Talk.. Farmer Clears the Trouble



A farm telephone is like a chain — it's no better than its weakest link. Quite often one "weak link" keeps farmers from getting good telephone service.

If you own your line and get service from a town served by the Southwestern Bell Telephone Company, ask for your free copy of the book "How to Build and Repair Your Farm Telephone Line." It gives simple directions for strengthening "weak links" ... and it's yours for the asking.

SOUTHWESTERN BELL TELEPHONE COMPANY

Rich in Important VITAMIN "E"



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You can get a fine 1-gallon Chick Fount, Chick Pellet Hopper or Chick Mash Hopper FREE—when you buy VICTOR CHICK PELLETS. Ask your VICTOR dealer about this offer!



Vitamin E is important to the development of hens with a high production of hatchable eggs. That is why VICTOR CHICK PELLETS are rich in Vitamin E, as well as Vitamins A, B, D and G. They also contain proteins, carbohydrates, fats and minerals essential for chick health, growth and vitality—in scientifically balanced amounts. Plan ahead for record poultry profits in 1940—feed VICTOR CHICK PELLETS.

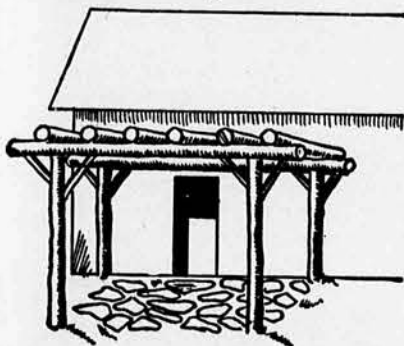
WRITE TODAY... FOR FREE POULTRY BOOKLET

THE CRETE MILLS CRETE, NEBRASKA

Handy IDEAS

by FarmFolks

Outdoor Living Room



We are building an outdoor living room with long poles, which will be a delightful place for summer evenings. I shall plant vines to run on the poles, and flat rocks will form the floor.—Mrs. Roy Beil.

Stoves Shine

While the cook stove is still warm, wipe the cooking top with wax paper and it will shine like new.—Mrs. Clyde Summa.

Keeps Weeds From Hives

During the time bees are bringing honey to the hives, weeds and grass should be kept down for a foot or 2 around the entrances. Obstructions cause loss of time and wear out the bees' wings. I find that a strip of discarded linoleum placed in front of each hive does the job most effectively.—Benj. Nielsen, Hamilton Co., Nebr.

Furniture Polish

To make an excellent furniture polish, mix 2 parts boiled linseed oil and 1 part turpentine.—Linda Harrison, Pottawatomie Co.

Durable Engine Muffler

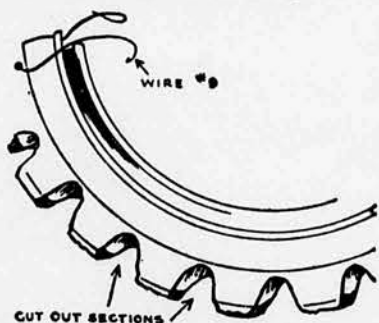
The nerve wracking bark of a shop engine or light plant engine can be muffled under ground. First get an old steel barrel of 30 to 50 gallon size. Bury it outside the engine house, digging the hole large enough so that the barrel can be surrounded by 4 inches of concrete. When the barrel rusts away from dampness you will still have a

durable concrete muffler. Place from 4 to 6 inches of concrete over the top, too. Fit from 4 to 6 small pipes into the top of the barrel, and on upper end of each screw on an elbow. This keeps out rain. The exhaust can be piped thru the center bung hole.—R. W. Taylor, Chautauqua Co.

Snaps Buttons to Dresses

It is a good idea to cut off large buttons on dresses and sew one-half of a large snap fastener to the dress and the other half to the button, running the thread thru the eyes of the button and holes of snap. When the garments are washed just unsnap the buttons. Wash day will seem easier, and there will be no broken buttons.—Mrs. Roy Brixey.

Chains From Old Tire



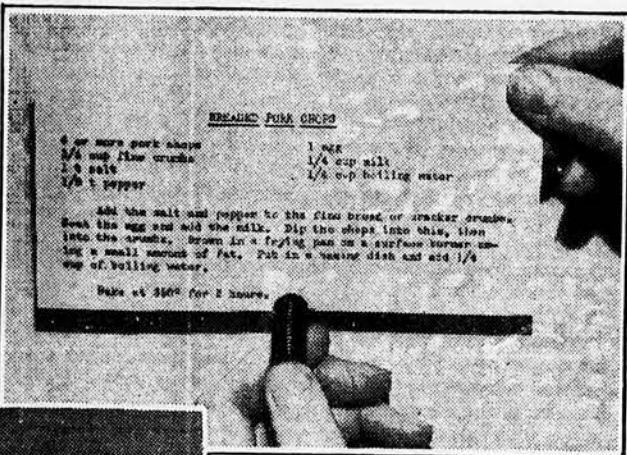
When a trip has to be made over a muddy road and no tire chains are at hand, I find that I can make a good substitute from a pair of old discarded tires. Cut the tires in two at one place and near the end drill holes thru the side wall for a piece of No. 9 wire. Every 2 inches cut out a section across the tread. Put this tire right over the car or truck tire and fasten with heavy wire.—R. W. Taylor, Douglas Co.

Family Bulletin Board

A bulletin board of general information for the family can be made from a piece of wallboard for only a few cents. When placed near the telephone, it can be used for posting telephone numbers, messages, notes, reminders, apt cartoons, clippings, and other material of interest.—A. R. H.

Spring Holds Recipe Cards

A length of door spring screwed to the wall or woodwork at a convenient height above the work table provides a holder to keep the recipe cards handy, yet free from soil. One end of a 1½-inch piece of spring is pinched together to fit a screw head, as shown below.



A screw driver inserted thru the opposite end is used to turn the screw, fastening it securely to the wall. A slight downward pressure spreads the coil so the card may be inserted, as shown above.—Benj. Nielsen, Hamilton Co., Neb.

Carries Ax on Plow

I have found that carrying an ax on my plow while plowing ground which has many stumps and roots in it, will save me time later. The roots are cut off below the plow depth and will not bother next time.—J. E. Brosseau, Jefferson Co.

Ice Pick for Hot Potatoes

Among my most handy kitchen tools is an ice pick. With this I lift potatoes out of boiling water; tell when they are done; turn sausage cakes and use it as I would a split spoon. It is so convenient in cooking that I always keep it on my kitchen range ready for use.—Mrs. Ben Grant, Coffey Co.

ADVISES YOUNG GIRLS ENTERING WOMANHOOD

Thousands of young girls entering womanhood have found a "real friend" in Lydia E. Pinkham's Vegetable Compound to help them go "smiling thru" restless, moody, nervous spells, and relieve cramps, headache, backache and embarrassing fainting spells due to female functional irregularities. Famous for over 60 years in helping "women's" functional complaints. Try it!

Note: Pinkham's Compound comes in either liquid or handy to carry tablet form (similar formula).

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Spend Less!

JOIN THE THRIFTY THOUSANDS WHO SAVE A DIME A POUND ON A&P'S FINE, FRESH COFFEE!

Investigate! See if you don't like A&P Coffee better and, at the same time, save money on it! It's the pick of the plantations, chosen by A&P's resident South American experts—tested, blended, roasted in our modern U. S. plants—then ground fresh to your order in A&P Stores.

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Buy it in the bean: A&P Coffee is sold in the bean and ground fresh to your order at the moment of purchase. In this way you get a fresher, fuller-flavored cup of coffee.



3 LB. BAG 39¢



Largest selling coffee in America is Eight O'Clock. Thousands save up to 10 cents a pound on this mild, mellow coffee. It's the pick of the crop, ground fresh to your order, exactly right for your coffee pot.

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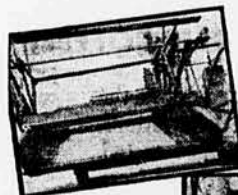
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OF ENTHUSIASTIC OWNERS
RECOMMEND THE



● Owner after owner tells the same satisfied story: Massey-Harris 3-point construction is the logical, common-sense combine design. New structural refinements make the 1940 Clipper better than ever—increased production cuts the cost. Now priced as low as any six-foot combine, but outperforming all in value! Widely copied, yes, but you can't duplicate the experience and patented features of the Clipper.

A REAL 3-POINT COMBINE



1—FULL SIX-FOOT CUT. Big 60-inch, six-bat reel, power driven. Full floating platform.

2—FIVE-FOOT RASP-BAR CYLINDER and adjustable concave. Rubs out grain the natural, easy way.



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Please send all the free information on the Clipper.

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SODIUM CHLORATE

Made for American farmers by American workmen in a Company established nearly fifty years ago.

See your County Agent regarding the use of Sodium Chlorate for use in weed control.

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OLDBURY ELECTRO-CHEMICAL CO.
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Send today for FREE CATALOG

Underworld Helpers

(Continued from Page 3)

year, that entire acreage was planted to wheat. On the part where soybeans had been inoculated, the wheat yielded 30 bushels an acre; where no inoculation was practiced wheat yielded 17 bushels an acre.

Mr. Volmer's experience tells of the one sure way to have these friendly little hustlers among the inhabitants of your own farm underworld—you can get them in good commercial inoculation materials. If you want to make sure your underground helpers will be willing, tireless workers, the only safe plan is to inoculate every time you plant for a legume crop.

Like some humans, many strains of the bacteria are lazy and worthless so far as soil improvement is concerned. Others are willing to do only a small amount of work. Some of the laziest strains are housed in an abundance of husky nodules, just as the good workers are. So you cannot tell by looking at the plant roots whether active bacteria live in your soil. For assurance that you are obtaining the kind that will work, you can obtain commercial cultures containing bacteria that have been "put to the test." County agricultural agents throughout the state are prepared to give the names of dependable cultures of this type.

Legumes Are Hosts

For practical purposes, leguminous crops are the only hosts to nodules containing these welcome soil helpers. But different strains of bacteria are found on the various kinds of legumes. Of the whole group, none attract a better class of workers than those found with alfalfa and Sweet clover. How much good they can do depends partly on fertility of the soil. If soil is rich in available nitrogen, the plants do just as the average human would do—they use what is there rather than bother to hustle much nitrogen from the air. But if soil is low in available nitrogen, legumes may take as much as 80 per cent of what they need from the air. So poor soils benefit most.

Soil benefits from growing legumes also depend on how the crop is used. Under average conditions an acre of alfalfa will produce about 100 pounds of nitrogen. But each ton of hay removed takes away about 50 pounds. At that rate, removing 2 tons of hay to the acre should leave you right at the starting point, even if our helpful friends are at work. If they are not there the soil will lose fertility. However, if the bacteria are present, most

Kansas soils can be improved by legumes, even if the crops are removed as hay.

Sweet clover may bring more rapid improvement because it is seldom harvested for hay. Plowing this crop under as green manure is probably the most rapid way to improve soil with legumes. But a more economical method of boosting the fertility with Sweet clover is to provide living workers both above and below the soil surface. Henry Duwe, of Harper county, has done this for 12 years by grazing his high-producing Brown Swiss cattle on Sweet clover pasture.

Nitrogen From Air

Under this system, life below the ground takes nitrogen from the air to raise a bountiful supply of nitrogenous feed. Above ground the cattle eat this feed while manufacturing human food. As pointed out by Dr. H. E. Myers, practical Kansas State College soils specialist, this method serves 2 purposes at the same time. While soil produces a return in this valuable protein feed, fertility is built up at a rapid rate because most of the nitrogen returns to the soil in form of manure. This, he says, is more economical than the practice of plowing Sweet clover under for green manure in improving soil fertility.

As practiced by H. E. Davis, of Kingman county, and A. A. Stallbaumer, of Nemaha county, Mr. Myers suggests that Sweet clover utilized for pasture may be plowed in July of the second year. This leaves a period of 2 months for the soil to absorb moisture before it is planted to wheat that fall. Those who follow this plan advise that a topgrowth of 6 to 8 inches be allowed to develop before the Sweet clover is turned under.

Summing it all up, we find that these helpers of the farm underworld enrich soil fertility for all crops and they boost home production of protein feeds. Assurance of their services can be had for about 25 cents an acre, the average cost of inoculation. At present prices each pound of nitrogen purchased in supplemental protein feeds costs about 28 cents, so, to pay for itself, inoculation must produce only one extra pound of nitrogen in the form of feed.

Likewise, at present prices of nitrogen fertilizer, only slightly more than a pound of soil nitrogen must be produced to pay, in form of fertilizer, the cost of inoculation for an acre. The

soil workers can be expected to multiply this return a hundred fold. That is why it pays to inoculate for every legume crop seeded—so that helpful workers can inhabit the underworld of your farm.

—KF—

Beef Show Dates Set

With the spring season comes a series of spring beef cattle shows to be held thruout important beef production areas in Kansas. Sponsored by the county and state extension services, co-operating with local breeders, these shows will bring together some of the finest beef cattle in Kansas.

J. J. Moxley, extension beef specialist, announces many of the places and dates have already been decided upon as follows: Hodgeman county, April 3, at Jetmore; Lincoln county, April 9, at Ash Grove; Dickinson county, April 10, at Abilene; Morris county, April 11, at Council Grove; Butler county, April 12, at El Dorado; and Chase county, April 13, at Cottonwood Falls.

No Job too Tough For HORSEHIDE HANDS!

THEY'RE TOUGH AS NAILS BUT SOFT AS KID

IT'S hard to believe work gloves can actually be soft as kid—even dry soft after soaking—and still outwear others. It's true of Horsehide Hands because of a secret tanning process—the same used for Wolverine Shell Horsehide Work Shoes.



DRY SOFT STAYSOFT!

If your dealer can't supply you, send his name and 75c for a pair—postpaid. Ask for style No. 569. **WOLVERINE SHOE & TANNING CORP.**, Dept. D-410 Rockford, Mich.

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WOLVERINE HORSEHIDE WORK GLOVES

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RECLAIMO SALES CO., Elgin, Neb.

You Could Do No Finer Thing!

The Copper Foundation for Crippled Children is maintained by voluntary contributions. Ministers unceasingly and sympathetically to restore unfortunately handicapped boys and girls to health and happiness. It needs your help. Address:
COPPER FOUNDATION FOR CRIPPLED CHILDREN
20-B Copper Building, Topeka, Kansas

Join Pasture Program

AGAIN this year Kansas Farmer Mail & Breeze is offering \$200 in prizes to encourage the development of better pastures in the Western part of the state. This Pasture Improvement Program is open to Kansas farmers west of the east borders of Republic, Cloud, Ottawa, Saline, McPherson, Harvey, Sedgwick, and Sumner counties.

Pastures will be classified into "range" and "diversified" divisions. The range classification is for those whose pasture is principally native

grasses, while the diversified division is for farmers whose pasture systems center mainly around temporary pastures.

Prizes in the 1940 Kansas Farmer pasture contest will be awarded in both the range and diversified divisions as follows: First \$50, second \$25, third \$15, fourth \$10. In addition, all entrants will be invited to a big steak feed and pasture meeting.

For complete information and entry blanks, send in the coupon below by April 15.

Pasture Program Manager
Kansas Farmer
Topeka, Kansas

Please send me rules and entry blanks for the Pasture Improvement Program being sponsored by Kansas Farmer, for farmers in Central and Western Kansas.

Name..... Address.....

County..... Date.....

Valuable After Useful Life



Old trees are finding their way to the woodpile and are being replaced by the shelter-belt planted in 1937, at left, on the Charles Symms farm, of Stafford county. Even after trees have served a life of usefulness as shade, windbreak, and habitat for wild-life, they are valuable for wood and fence posts.

Crop of a Thousand Uses

AN EXHIBIT showing more than 100 products made from one farm crop suggests a good method of avoiding over-production. Such an exhibit was seen by farmers and others who visited the soybean display shown in St. Joseph, Mo., last week.

Prepared by the Agricultural Department of the Pennsylvania Railroad, and shown with co-operation of the Danner Milling Company, even the panels used in this exhibit were made from plywood glued together with soybean glue. All the paints and varnishes going into the preparation of the exhibit contained soybean oil. Printer's ink, foods, feed, candies, washable wall-paper, linoleum, synthetic wool, and machine cores were among the many industrial uses displayed.

Those in charge of the exhibit told of the rapid rise of popularity for this crop. Fifteen years ago, soybeans were only a substitute crop in America. Last year, with a harvest of approximately 89 million bushels, soybeans ranked as one of the nation's major crops.

In 1939 more than a million tons of soybean oilmeal was produced, and most of this was used for commercial feeds. At present, more than 250 brands of dog food are made with soybeans. To test the quality of soybean commercial products, the Federal government established a soybean laboratory at Urbana, Ill., in co-operation with the states of the Corn Belt. After testing more than 250 paint and varnish for-

mulas containing soybean oil, it appears as if the protective coating containing soybean oil will stand up under the most severe weather conditions.

At present, about 80 per cent of the soybean oil is used for human consumption. We eat it largely in the form of salad oils and cooking oils, altho there are dozens of other soybean food products. However, oil from the soybean is rapidly going into the industrial field, where it is used in production of duco finishing for automobiles, water-proofing materials in oilcloth and linoleums, printer's ink, foundry core-binders, pharmaceuticals, rubber tires, glycerine, and soaps.

The exhibit showed rubber substitutes, which, when mixed with ordinary rubber, go into the manufacture of automobile tires, hot-water bottles, and other rubber goods where heat resistance is a factor. A new edible variety of soybean was also shown in the exhibit. It is said to offer a new field for both the grower and the canning industry.

—KF—

Beauty in the Pig Pen

Proving genuine beauty can be found in a hog pen, a most unusual picture was shown to 75 or 80 vocational agriculture students at Topeka last week. The movie, featuring natural color film, was prepared recently by the United Duroc Record Association, and was shown by John Beckett, associate editor of The Duroc News. Combining colorful sunsets and other picturesque farm scenes with practical production guidance, the film was both entertaining and informative.

Arrangements for having the film shown in Topeka were made by H. A. Stewart, vocational agriculture instructor at the Washburn Rural High School. The boys of this department have organized a Duroc breeders' association, which will operate on a production record basis.

—KF—

Pork Producers Plan

In an enthusiastic move to get something done about the pork and lard situation, farm notables from the Corn Belt states met in a 2-day conference at Chicago, March 21 and 22. The occasion was a preliminary planning conference called by American Pork Producers, Associated, to get ideas, suggestions, and helps from experienced leaders in molding the policy of this new association.

Organizations represented included: Stock yards companies, commission men, agricultural colleges, the National Live Stock and Meat Board, national

and state associations of swine growers, railroad companies, farm organizations, and many others. Leaders from 10 states were there to lend their views in getting something done about the hog situation.

Among the speakers were R. C. Pollock, manager of the National Live Stock and Meat Board; P. O. Wilson, of the National Live Stock Marketing Association; Earl A. Smith, of the Illinois Agricultural Association; and others from most of the organizations represented.

—KF—

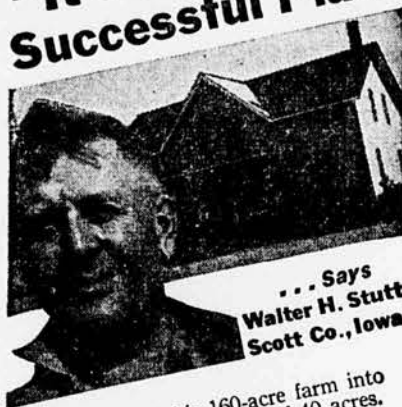
Shelter Plantings Progress

U. S. Forest Service has estimated it will add 40 million trees to its Great Plains shelterbelt this year. Plans for the spring season call for planting of 3,500 miles of windbreaks, of which about 400 will be in Texas, 500 in Oklahoma, 600 in Kansas, 800 in Nebraska, 700 in South Dakota, and 500 in North Dakota.

The work will be carried on with Works Projects allotments, \$2,200,000 having been made available for the purpose this fiscal year. Congress declined to make a specific appropriation for the shelterbelt and no funds have been provided to carry on the work next fiscal year. Cost of trees planted, the Forest Service estimated recently, is a little less than 5 cents each.

Windbreaks already planted have increased the number of birds and small fur bearing animals on the farms, officials said. A "bird census" taken recently by the government indicated that in 55 field windbreaks in Kansas there were in excess of 10,000 brown thrashers, orioles, swallows, wrens, bluejays, and field sparrows. Owners of farms said such a concentration was greater than they had known. Other wildlife has become more numerous, too.

"It's a Successful Plan"



... Says
Walter H. Stutt
Scott Co., Iowa

He has divided his 160-acre farm into six 20-acre fields and one of 40 acres. Now, all these fields are enclosed hog-tight with woven wire—making possible a consistent rotation plan, with livestock and legume pasture... the direct result of steadily adding to his fences during the past 12 years. "This plan has been very successful," Mr. Stutt declares. "It has increased my yields and helped me get the most out of the farm."

You can establish a successful plan, too, by putting good RED BRAND woven wire around your fields. Be sure you get this dependable "Galvannealed", copper-bearing, Time-Tested fence. It lasts longer—costs less per rod per year.

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Wonderful, low priced, smaller capacity quality separators. Ideal for small herd owner. Will give same service for which all De Laval Separators are famous. Five sizes, with or without stand. **\$21.25 AND UP**

New De Laval Magnetic Speedway Milker

This new De Laval Milker is unequalled for fast, clean milking; for its exclusive, uniform, rhythmic action; for convenience and ease of handling and complete sanitation. Has many new and improved features. See your De Laval Dealer or mail coupon to nearest office.



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The best De Laval Separators ever made—skim cleaner, run easier, last longer. Increased capacities enable them to separate more milk in less time. Can be cleaned in five minutes. Made in four sizes; hand or electric drives.

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TURN EASIEST - LAST LONGEST
COST LESS PER YEAR OF USE
A SIZE AND STYLE
FOR EVERY NEED AND PURSE

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Soybean Production

Soybeans grow under about the same general conditions as corn. No other grain crop in Kansas will produce so much protein to the acre as the soybean. Bulletin No. 282—Soybean Production in Kansas, discusses seedbed preparation, inoculation, varieties, cultivation, harvesting and threshing. Soybean hay production is also discussed. You may also be interested in other Kansas Agricultural Experiment Station bulletins: No. 172—Growing Tomatoes; No. 194—Roadside Marketing of Horticultural Products; and No. 279—Smuts of Cereal and Forage Crops in Kansas and Their Control. For a free copy of each of these, please order by number, print your name and address, and mail post card to Bulletin Service, Kansas Farmer, Topeka.

Look at the Latest in 12-Ft. CAPACITY



Look at the Latest in ECONOMY, TOO

Model K owner reports harvest of 220 acres on 130 gallons of fuel for BOTH combine and Case tractor. That's little more than 1/2 gallon TOTAL per acre. Get a "K" and save fuel as well as time and grain.

HARVEST Savings

Send for this Book!

Shows varied sizes and types of harvest machines with secrets of savings. Sent free on postal request to J. I. Case Co., Dept. D-59, Racine, Wis.

"My Model K Case 12-footer has lots of capacity," writes Fred B. Schmidt. "On one job I averaged 59 acres a day, and one day did 70 acres. Another time I took half of a big field, a 16-footer the other half. Hour for hour I did as much as the big machine, until we came to the muddy part of the field and he had to quit. I went in and finished his half."

After harvesting about 2500 acres Mr. Schmidt finds his Case "K" very economical to operate, with surprisingly little upkeep required. He says the floating header means a lot to him, also the Motor-Lift which makes it a practical one-man combine. In every threshable crop he has found that his Model K does a splendid job, including cleaning that "always brings praise from customers and grain buyers."

Let your Case dealer show you the secrets of the Model K—the feeder that really feeds, so vital to good threshing . . . how the machine stays level regardless of cutting height . . . balance that makes it easy to hook onto . . . its heavy-duty, lightweight construction throughout.

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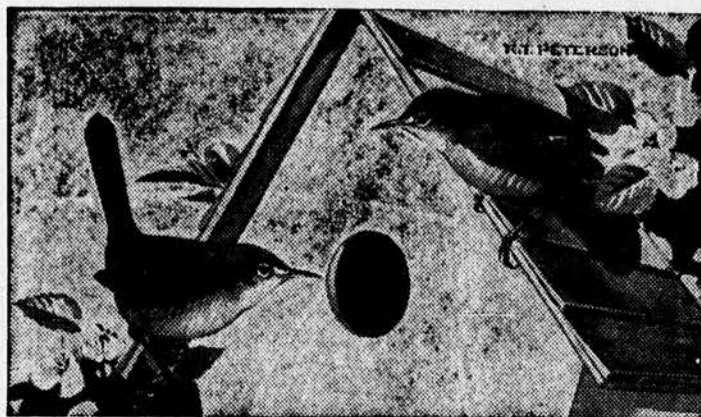
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CAPPER PUBLICATIONS, INC., TOPEKA, KANSAS

Wren-ting a House



JENNY and Johnny Wren will soon be looking for a place to set up housekeeping, as will many other of our bird friends who are returning to brighten our summer hours with their songs. Their worth cannot be estimated by the thousands of dollars they save in destroying insect pests that molest our gardens and fields. Let's repay them in a measure by helping them find a safe place to nest. Our leaflet "Homes for Birds," has several fine suggestions for building houses for birds common to this section of the country. Send your request for the leaflet, with a 3-cent stamp to cover mailing costs, to Lella Lee, Kansas Farmer, Topeka.

Dollar for a Spring Poem

By LEILA LEE

SPRING does something to folks. Makes us feel light-hearted and light-headed. Makes a young man's fancy lightly turn to thoughts of love. Sometimes it "gibs us a code in the head." Spring starts the buds—and poets—to budding.

Just for fun, let's have a spring poetry contest. Maybe you are a poet and don't know it. And spring is just the time to bring forth your hidden talent. So while the soft breeze is wafting to your nostrils the fresh, sweet scent of spring, and the birds are caroling madly from the trees in the old apple orchard, seize a pencil and a piece of paper and write a poem for our contest.

Rules are simple. Please make your poem as simple as the rules. The funniest original poem about spring wins the \$1 prize. The poem must not be more than 8 lines long. Be sure to state your name, address, and age. All entries must be in our hands by April 20. Winner's name and prize-winning poem will be printed in the May 4 issue of Kansas Farmer. Send entry to Lella Lee, Kansas Farmer, Topeka.

likes it so well that this year as part of his junior leadership work he plans to help other club members with records.

Glen was the boy winner in the state farm accident prevention contest for 1939. He received a gold watch presented by Senator Arthur Capper thru Kansas Farmer.

Bits About Wildlife

During a quick getaway from danger, polar bear cubs have been observed "hitchhiking" by grabbing hold of their mother's tail.

Robin redbreast is not a robin, but a thrush.

There are still wild buffalo in parts of Canada.

No ostrich ever buries its head in the sand. If it did, it would suffocate.

Members of the catfish family can live for months, buried in the mud.

A bear cub is born while its mother is sound asleep in mid-winter—and it is smaller than a new-born kitten.

Old trappers agree that one of the hardest animals to outsmart is a common house-rat.

More Interest in Poultry

Poultry work among Kansas 4-H Club members is making excellent progress. Considerably more interest has been noted in judging and demonstration work, and many outstanding judging teams and poultry demonstrations have been developed. During last year, 5,722 4-H Club members were enrolled in the poultry project in Kansas. This was an increase in enrollment of 47 per cent over the previous year. Of these members, 4,869 completed their projects, producing 243,895 birds and showing a total profit of \$51,980.

Real Record Keeper

At the end of the 4-H Club year, Glen Davis, of Oakley, will have no trouble with his project records. Glen keeps his records and reference literature on each project in a separate 9- by 12-inch manila envelope, with a colorful magazine picture decorating the outside indicating the project.

Last year Glen carried beef, dairy, poultry, and garden projects. When he bought feed or gathered some garden vegetables, he slipped a note into the envelope for that project. Then in his spare time he tabulated the information from the notes. In this way he keeps all records and materials separate by projects and knows just where to look for what he wants.

It is a simple filing system, and Glen

Twins Follow Mother



In 1924, Lois Tilton was state clothing champion, as a member of the Pleasant View 4-H Club in Mitchell county. Now, she is Mrs. Lyle Lukens, and her twin daughters, Christine and Charlene, belong to the same club. Mrs. Lukens, who is shown with the daughters, has always been a booster for 4-H Club work and her daughters are following the example.

Kansas Farmer for April 6, 1940

DUCKS AND GEESE

Easy to Raise

THERE isn't any prettier sight on the farm than a large flock of baby ducklings or goslings. There are few large flocks of mature geese and ducks on general farms, but there are many farm women that do raise a small number of waterfowl. A few hatcheries cater to the hatching of ducklings in the Midwestern states, tho there are many duck hatcheries in the East. Now and then it is possible to buy baby goslings.

Different breeds of ducks and geese are not as commonly known as are the different breeds of chickens. There are 11 breeds of ducks and many varieties, so that if one is interested in duck raising it is possible to select one that suits the liking in regard to color and type.

In the duck family the Muscovy, a South American native, is the largest. It also has peculiar habits. They like to make their nests in hollow trees or in the hay loft, some place where they will not be disturbed. They are hardy. Another peculiarity is the length of time required to hatch the eggs. Five weeks are required. There are 2 varieties, the colored and the white. This variety has been listed as next to Indian Runner ducks as egg producers, and it is claimed by some that their meat qualities are unsurpassed.

Most of the other different breeds of ducks originated from the Mallard or wild ducks. These breeds have originated in different countries. The Rouen breed came originally from Normandy, France, taking its name from the town of Rouen. This breed is one of the most beautiful ones, its color markings being most artistic. It is the same size as the Pekin. The Aylesbury ducks are also in the same class as the Rouen and Pekin. They originated in Aylesbury, England. The Pekin is from China. Indian Runners, it is generally agreed, came from Netherlands.

Pekin Ducks Lead

Of the different breeds, the Pekin leads in this country in commercial duck raising. Along the Eastern coast and in some of the Eastern states they are raised in flocks of thousands. They are rapid growers, they lay reasonably well. There are good markets in the East for green ducks, and some sections of the country are devoted entirely to duck raising.

Indian Runners are the best layers of the duck family. They are to ducks what Leghorns are to poultry raisers. They are not so large, stand upright, and lay beautiful white eggs. There are 3 varieties of Indian Runners, the fawn and white, the penciled and white, and the pure white.

Before embarking in duck raising on a large scale, investigate market demands. Foreign populations are the largest consumers of ducks and geese.

Geese are an old fowl, having been mentioned as far back in history as 13 centuries B. C. The outline of geese on Egyptian hieroglyphics and tablets long before even these ancient dates, show geese to have been important.

Keeps Chicks Warm

If you are considering a home-made electric chick brooder, Kansas Farmer can get you plans and drawings which are complete in detail, yet easy to follow. Or, you may be interested in making electric poultry water warmers, ultra-violet reflectors for the poultry house, electric pig brooder, or stock tank water heater. For a free copy of any one or two of these plans, please write to Farm Service Editor, Kansas Farmer, Topeka.

By
MRS. HENRY
FARNSWORTH



Mrs. Farnsworth

In the American Standard of Perfection there are 6 distinct breeds, Gray Toulouse, White Embden, Gray African, Chinese (brown and white varieties), Gray, Canadian, and Colored Egyptian.

On most farms the Toulouse is the general favorite, possibly on account of its large size. Young geese weigh from 16 to 20 pounds, while old ones may attain weight of 20 to 26 pounds. Much depends on the stock and the breeding whether or not they attain these weights. These geese originally came from Toulouse, France.

Emden geese are the second most widely raised in this country. They originated in Hanover, Germany. Being pure white in plumage they receive preference from those who make feather selling a strong point. The Chinese and African breed are distinctly different in type. They are racy with long slender necks and horny knobs on their heads. The color of the plumage of the African is something like the Toulouse; the head is black.

Little Protection Needed

Few farms have any special housing for waterfowl, and little protection is needed. There are 3 weather conditions from which they should be protected, very deep snows, extremely hard winds, and extreme heat from the sun. A rude shelter is all that is necessary. Green pasture is one of the first requirements for young or old geese. Mash and ground grains should be fed to young goslings as an addition to their green diet, instead of vice versa.

Water in small containers should be given to young goslings, but not in quantities that they can stand in. Chilling must be avoided when first hatched. Avoid overfeeding either young or old stock. Greens are the natural food. Corn is not necessary excepting in addition to greens in getting them ready for market.

Contagious diseases are not common among flocks of geese. Lameness may be caused by overfeeding, on fattening foods, or an insufficient amount of green feed in the diet. Rheumatism may be caused by sleeping on damp floors. Lice are sometimes the cause of losses of goslings when brooded with chicken hens. Be sure the hen is free from lice before putting the goslings in her care. Little trouble is experienced from intestinal worms. Losses many times occur on streams and ponds from turtles.

—KF—

Cockroach Hitchhikes North

A new member of the cockroach family has found its way to kitchens in northern states, according to Dr. E. A. Back of the Bureau of Entomology and Plant Quarantine.

Cockroaches qualify as great world travelers. They reach the far corners of the earth as stowaways and hitchhikers on ships, trains, automobiles, and even airplanes.

Already familiar in kitchens all over the United States are the American, Australian, Oriental, and German cockroaches. Recently, a new member of the family has been migrating north. This is the small tropical cockroach, so cosmopolitan that it is known in most of the hot, damp cities of the world. It has long been a pest in the Gulf Coast region. Lately, it has been reported in homes as far north as Nebraska and Illinois. This roach is only $\frac{3}{8}$ to $\frac{1}{2}$ inch long and has 2 crossbands of light yellow on the back.

Whether this tropical roach will

thrive in the North and become a serious pest depends on how it stands the climate. Already it has been found not only near food, but collected in furniture, in corners of warm rooms, and in lockers.

Doctor Back suggests this cockroach is probably a hitchhiker, traveling north in the luggage of motorists who winter in the South.

—KF—

More Turkeys This Year

Turkey producers in the United States apparently are planning to raise 4 to 5 per cent more birds in 1940 than were raised last year. At least this is the trend indicated by 4,550 raisers in their recent report to the Agricultural Marketing service.

The raisers report more turkey hens on hand and they indicate a marked increase in home hatching. The intended increase in all poult is 11 per cent in both the East North Central and South Central states. Increases of 6 per cent in the North Atlantic states and 5 per cent in the West North Central group are expected. South Atlantic states will be about the same, while production in far Western states will be decreased about 3 per cent.

—KF—

Cheerful Interior Helps

Whitewashing the interior of poultry houses is an old practice but it does brighten up dark corners and has some disinfecting qualities besides. When applying whitewash, if the surface is clean and slightly damp and the weather is clear and dry and it doesn't dry too fast it will stay on much better than if applied on a dry surface.

A recipe for whitewash: Dissolve 15 pounds of common salt in 7 or 8 gallons water. To this add 50 pounds hydrated lime. Mix thoroughly until a thick paste forms. Strain thru a screen. This may be thinned to right consistency to use. Adding one ounce alum to each gallon whitewash will help it to adhere to the surface. Adding a 1-pound bar of soap dissolved in 1 gallon water and added to each 5 gallons of whitewash gives a nice gloss.

Remarkable Success

Raising Baby Chicks

"Dear Sir: I see reports of so many losing their little chicks, so thought I would tell my experience. I used to lose a great many of the little downy fellows from bowel troubles, tried many remedies and was about discouraged. As a last resort I tried Walko Tablets. I used two 50c boxes, raised 300 White Wyandottes and never lost one or had one sick after using the Tablets and my chickens were larger and healthier than ever before."—Mrs. C. M. Bradshaw, Diagonal, Iowa.

You Run No Risk

Buy a package of Walko Tablets today at your druggist or poultry supply dealer. Give them in all drinking water from the time chicks are out of the shell. Satisfy yourself as have thousands of others who depend on Walko Tablets year after year in raising their little chicks. You buy Walko Tablets entirely at our risk. We guarantee to refund your money promptly if you don't find them the greatest little chick saver you ever used. The Waterloo Savings Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee. Sent direct postpaid if your dealer can not supply you. Price 50c and \$1.00.

Walker Remedy Company
Dept. 20, Waterloo, Iowa

Field to Thresher

Quickly with an EPOC Sweep Rake!



Write for catalog and prices on our new Steel Tractor Sweep Rakes made for nearly all makes of Tractors.—just the thing for sweeping grain shocks or any kind of hay; also Wood and Steel Stackers and Horse-drawn Sweep Rakes.

WESTERN LAND ROLLER CO. Box 64 Hastings, Nebraska

SLEEPING SICKNESS

Encephalomyelitis IN HORSES

New chick vaccine. Government licensed. Complete (2-dose) treatment only 80c on orders 5 or more treatments. Literature free. Also abortion and other vaccines.

FARMERS VACCINE & SUPPLY CO.

Dept. P, Kansas City, Mo.

J. H. Oesterhaus, B.Sc., D.V.S., Pres.

STALEY FEEDS

for POULTRY, CATTLE and HOGS

A Crisp, New
ONE DOLLAR BILL
If You Don't Find

4 BELLS 18% STARTER and DEVELOPER

the BEST YOU EVER USED

Buy a sack of FOUR BELLS Starter & Developer from your local Staley Feed Dealer or Hatchery at once. If you do not find it to be the finest quality feed of its kind you have ever used, return the empty 100-lb. bag, together with the analysis tag, to the Staley Milling Co., and a CRISP, NEW ONE DOLLAR BILL will be sent you by registered mail.

STALEY MILLING COMPANY, Kansas City, Missouri

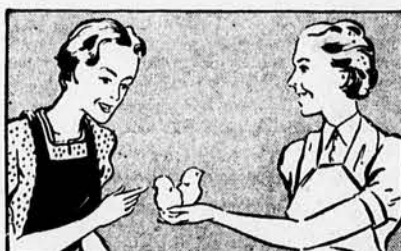
FOUR BELLS Starter & Developer is an extra strong, scientifically balanced 18% Protein feed, containing 29 different ingredients and 8 vitamins to insure finest results. Full of wholesome nourishment and made to fit the needs of baby chicks. Available in Mash or Vita-Sealed Pellets. Buy from your local Staley Feed Dealer or Hatchery now.

What the "Farm Chemists" Find

KEEPING up with the "farm chemists" we find a new plant in Northern Sweden will distill 3,000 metric tons of pine oil annually to be used in the manufacture of soap... the juice of milkweed has been found helpful in tenderizing meat... new products developed by du Pont are giving employment to 19,000 people... war cut off the German and Swedish supplies of peat moss to the U. S. so a thriving new industry has been started in Washington county, Maine, where 10,000 bales of peat moss were cut during 1939, and plans are made to cut 100,000 bales this year... 24 per cent of Armstrong Cork's sales are from new products developed within the last 7 years... a new product made from corn, called Sweetose, twice as sweet as corn sirup, now in use in the confectionery field,

has possibilities in the dairy, preserve, canning and quick-freezing fields... an industrial research chemist has produced 24 by-products from potatoes including floor tiles, imitation stone, wall board, plaster... wheat bran has found a new use in tanning leather... wheat flour now is being used as a sizing material in the manufacture of cloth... 250 different products now are made from soybeans including glue, synthetic rubber, foods, printers ink, floor covering, paints, wool, explosives... the dairy industry supplies 15 million pounds of casein a year to be used in casein paint; this comes from 1½ billion pounds of skim milk... interesting is the fact that grape stems yield dye... pecan shells are being turned into charcoal... walnut shell flour is said to be a good carrier of insecticides and fungicides. All of these things, reported by the National Farm Chemurgic Council, shows that new fields are being opened for raw materials from the farm. This will mean more profit from farm products.

I REFUSE TO TAKE CHANCES WITH MY CHICKS!



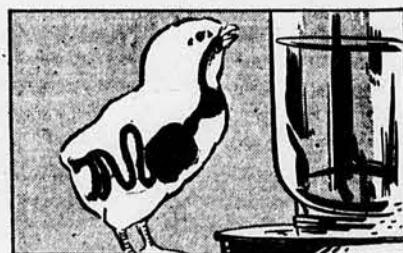
SARAH: Ella, why is it your chicks always seem so much better than mine?
ELLA: That's hard to say, Sarah. But a lot depends on how you start your chicks out. You see, I've learned not to take unnecessary chances with my chicks.



SARAH: What do you mean by that?
ELLA: Well, I buy good chicks, give them good feed, and always keep the brooder house clean, warm and dry. As an extra precaution, I put Dr. Salsbury's Phen-O-Sal tablets in their drinking water often.



SARAH: Why do you use Phen-O-Sal?
ELLA: Because hatcherymen, feed dealers and druggists recommend it. They say Dr. Salsbury's Phen-O-Sal is a wise precaution against chick bowel troubles, and helps the chicks get started right. And I agree.



A DOUBLE-DUTY MEDICINE
Dr. Salsbury's Phen-O-Sal acts in TWO important ways: (1) checks germ growth in the drinking water, and (2) medicates the chicks' digestive system. Efficient!

THOUSANDS PREFER THIS DOUBLE-DUTY DRINKING WATER MEDICINE FOR CHICKS

If you want a dependably high quality medicine to put in the drinking water of your chicks, get a package of Dr. Salsbury's Phen-O-Sal Tablets. Equally good for your laying flock.

Phen-O-Sal is a balanced blend of drugs that are well known for their antiseptic and astringent properties. Every tablet uniform in quality. Dissolves quickly so chicks get its benefits whenever they drink. Maintains its full strength when used as directed.

Because chicks deserve good care, give yours Dr. Salsbury's Phen-O-Sal Tablets in their drinking water. Get a package today. See your Dr. Salsbury Dealer, who may be a hatcheryman, druggist, feed or produce dealer.

Chicks often need a tonic and supportive treatment in feed. Use Dr. Salsbury's Avi-Tabs from the start.
DR. SALSBUURY'S LABORATORIES, Charles City, Iowa

Dr. Salsbury's PHEN-O-SAL TABLETS

THE "DOUBLE-DUTY" DRINKING WATER MEDICINE for POULTRY



PRICES: 50 Tablets—50c;
125 — \$1.00; 300 — \$2.00;
500 — \$3.00
Always insist on genuine Dr. Salsbury's Phen-O-Sal Tablets. Don't accept substitutes. To be sure you get the genuine, see your local Dr. Salsbury dealer.

APPLE FETES

Planned for St. Joseph and Troy

By JAMES SENTER BRAZELTON

PLANS are rapidly getting under way for the two forthcoming apple blossom fetes to be held in this apple producing district this spring. The first of these is the 3-day Apple Blossom Festival at St. Joseph, Mo., on May 2, 3, and 4, sponsored by the Missouri River Apple Growers and the St. Joseph Chamber of Commerce.

Thirteen counties in Northeast Kansas, Northwest Missouri, and Southeast Nebraska participate in this celebration in which the Missouri Valley pauses to observe its virtual fairyland of blossoms and herald the delicious fruit which is to follow. Each of these counties will enter a candidate in the contest for selecting an apple lossom queen. The queen will be crowned at a colorful ceremony at the Coronation Ball in the auditorium on the night of May 2.

A galaxy of 12 beautiful girls, ladies in waiting to the queen, will grace the gorgeous queen's float, the outstanding feature of the parade on May 3. Efforts are being made to have at least 40 floats in this big parade, which is a highlight of the festival. First, second, and third prizes will be awarded for the best floats. A new classification of entries is provided this year so that floats representing the various communities will not have to compete directly with St. Joseph floats.

Bands Will Compete

Arrangements for the band contest May 3 at the Civic Center are being made by the band committee. All school bands in St. Joseph's trade area have been invited to compete. A change has been made this year in the method of conducting the contest. The bands will be divided into classes according to size instead of all competing in one large group.

Entirely apart from the 3-state, 3-day Missouri River Valley Festival, Troy stages a queen-crowning event all her own which is to take place this year on some afternoon yet to be announced. At the time this is written detailed plans for the program to be followed have not yet been made.

It is understood that the various high schools in Doniphan county have been asked to send candidates for the queen in an effort to make this event a county-wide affair. An invitation has been sent out, it is said, from the office of the county superintendent asking each grade and rural school in the county to send a flower girl to Troy for this occasion. The parents, friends, and neighbors of these children and the high school girls should help to swell the crowd of interested spectators.

Commercial apple growers have many reasons to look forward toward the coming season with brighter prospects. Every indication points to a shorter apple crop in the United States this year than normal. Statistics show that more money is made from apples in a short crop year than in years of large yields. Cold damage to the southern citrus crop is a factor favorable to the apple industry. Damage to both buds and 3- and 4-year-old wood of citrus trees probably will be felt over a period of 2 or 3 years, according to reports. Such a condition ought to help the apple situation materially. Likewise, shorter crops of strawberries and probably no peaches in the Middlewest also should help the apple market, as should an increase in purchasing power.

More Blush to Fruit

What the science of chemistry is able to do in bringing about a changed order of things in the plant world is nothing short of miraculous. One of the outstanding pieces of research work along this line, done this past year, is the discovery of a thiocyanate spray for coloring apples. The sprays are applied during the growing season to the foliage and the trees just as other fruit sprays are used. The increase in color does not come suddenly, but over a period of weeks. Not only does it enhance the coloring of red varieties, such as Stayman, Rome, Delicious, McIntosh, and Jonathan, but it is said to bring out a slight blush to such varieties as Golden Delicious and Grimes Golden which normally carry little or no red color.

The discovery, which it is believed may appreciably affect the sale of apples, was made by Dr. R. B. Dustman, professor of agricultural chemistry, and Dr. I. J. Duncan, assistant chemist, at the West Virginia Agricultural Experiment Station.

Now that it has been determined with certainty that we will have but few, if any, peaches here this summer, growers should take this opportunity to dehorn their bearing trees. To do this they should be cut back severely to stubs of not more than 6 inches. Trees with proper vigor will put out an abundant growth this summer and sturdier, stockier trees will result.

Peach trees should be sprayed with a dormant fungicidal spray to prevent peach leaf curl, but it would not be necessary to spray them any more during the summer. They should be fertilized this spring with about a pound of nitrate of soda to the tree. The orchard should be cultivated during the fore part of the summer.

Windbreak Protects Peaches



A row of tamarix has been flanked by a row of peaches down in Harper county, and both are doing well without irrigation. J. C. Neal, of Duquoin, planted this shelterbelt in 1937. The U. S. Forest Service, with T. Russell Reitz as state director, is doing everything to aid planting of trees and shelterbelts in Kansas.

Try Kentucky Coffee Tree

By CHARLES A. SCOTT

THE Kentucky Coffee tree is a native from Ontario to Tennessee and westward to the Dakotas and south to Oklahoma. It grows naturally in deep, rich soil bordering streams in mixture with other broad-leaved species. It attains a height 75 to 100 feet with a clear trunk one-half or two-thirds its height, with diameters up to 3 feet or more.



Charles A. Scott

The wood of the Kentucky Coffee tree is heavy, hard, coarse, and brittle, very durable in exposure. It makes very serviceable fence posts and excellent fuel.

It derived its common name, Kentucky Coffee tree, from the fact that early settlers in Kentucky used the seeds as a substitute for coffee before and during the Revolutionary war. It is a tree that is found growing in limited numbers thruout the eastern third of the state in mixture with other broad-leaved species. It also is found under natural distribution growing along the tributaries of the Medicine Lodge river in Barber, Pratt, and Kiowa counties. Isolated trees in farmstead plantings occur over a wide range of Central Kansas. I have records of the location of trees of this species in Stafford, St. John, McPherson, Rice, Barton, and Ellis counties. These isolated plantings have proved the hardiness and adaptability of this species to our soils and our climatic conditions.

The Kentucky Coffee tree is entirely free from insect attacks, which is something that can be said of very few trees. The leaves of this tree are twice-pinnate from 1½ to 3 feet in length. The leaflets from 1 to 3 inches in length. The juice from the green leaves contain a poisonous element that is deadly to flies. When green leaves are cut into small bits and soaked in a dish of milk, the juice stains the milk a pale green. Flies that feed upon it often topple over and die before leaving the dish. I have never heard of any other portion possessing any poisonous ingredient. The fact that the seeds were used for a substitute for coffee is proof that they contain no ingredient poisonous to humans. Cattle eat the sweet, fleshy seed pods readily before they become too dry to chew without injurious effects. Inasmuch as this tree is entirely hardy to Kansas conditions, and grows readily in a wide range of soil types, it should be used more generally in all farm plantings.

It is propagated from seeds that are borne in large pods that cling to the branches of the trees thruout the winter, falling in early spring. The seeds are dark in color, nearly a half inch in length, quite thick and heavy. The seed coat is hard and flinty, nearly impossible to cut or break with a hammer when dry. The seed pods may be gathered and shelled any time during the winter. The seeds may be stored dry until planting season in April. The dry seeds are given a 2-hour bath in commercial sulfuric acid, washed in fresh water and planted immediately, or they may

be stratified and kept moist until date of planting. The seed coats are so hard and impervious to the effects of moisture that only a small percentage of the stratified seeds germinate the first year and the remaining seeds keep coming up in the seedbeds later.

The seedlings attain a height of 12 to 15 inches the first season and may then be transplanted to nursery rows or planted directly to their permanent location in the yards or shelterbelts.

Mr. Scott will gladly answer general questions about planting and growing trees thru Kansas Farmer. Questions that ask a personal reply from Mr. Scott should be accompanied by a 3-cent stamp for return postage. Address all questions, please, to Kansas Farmer, Topeka.

Soil-Saving Trees

I have several gullies washing in my pasture. I would like you to suggest trees I might plant to stop the wash and hold the dirt. I have planted cottonwood the last 3 years, 15 trees each year, but have only 3 that grew.
—Olive Neiman, Whitewater, Kan.

The best trees to plant to hold the soil along the gullies in your pasture are Osage Orange and Honey Locust. But

even these will not grow in competition with weeds and native grasses and the trampling and abuse of livestock.

Before planting the trees, the ground must be prepared by either plowing a strip or spading up planting sites 8 feet in diameter. After planting, keep the tree areas free from weeds and keep the top soil loose to prevent drying out and baking in the sun. Also, protect the trees from abuse by livestock until they are large enough to resist abuse.—Charles A. Scott.

Tree-Planting Payments

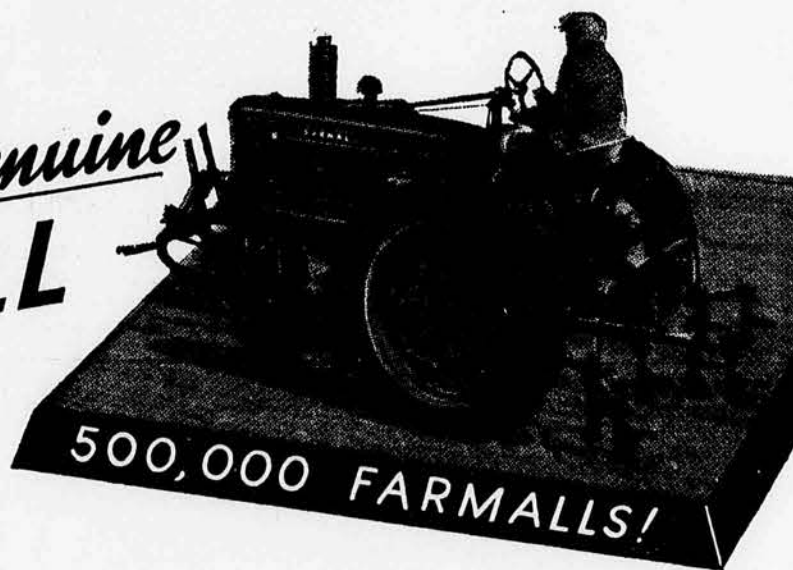
Soil building allowances under which farmers can earn benefit payments for tree planting includes the care and protection of shelterbelts and woodlots that were planted between July 1, 1936, and July 1, 1940, at the rate of \$3 an acre a year.

Farmers having woodlots of aged trees on their farms may also earn \$3 an acre for improvement work. This type of work includes the removal of dead and down trees and the cutting out of undesirable species.

Farmers desiring shelterbelts and woodlots may earn \$7.50 an acre for planting a specified number of trees an acre, and \$3 an acre a year for their care and cultivation.—C. A. S.

Play Safe.
Choose a Genuine
FARMALL

Nearly 500,000 FARMALLS delivered to farmers—that's the solid foundation on which we've built today's great new line of FARMALLS. At right: the 2-plow FARMALL-H with Hi-Speed Cultivator. This model has 5-speed transmission—up to 16 miles an hour on rubber.



Any Ten Free

Need any of the following bulletins? They are timely U. S. Department of Agriculture Bulletins which contain helpful and reliable suggestions.

- No. 660—Weeds: How to Control Them.
- No. 750—Roses for the Home.
- No. 864—Irrigation for Beginners.
- No. 837—Raspberry Culture.
- No. 999—Sweet Potato Growing.
- No. 1064—Production of Late or Main Crop Potatoes.
- No. 1088—Selecting a Farm.
- No. 1390—Vegetable Seeds for Home and Market Garden.
- No. 1405—The Windbreak as a Farm Asset.
- No. 1406—Garden Irises.
- No. 1409—Turkey Raising.
- No. 1437—Swine Production.
- No. 1470—Care and Management of Dairy Cows.
- No. 1472—Preventing Damage by Termites or White Ants.
- No. 1538—Incubation and Brooding of Chicks.
- No. 1592—Beef Production on the Farm.
- No. 1606—Farm Drainage.
- No. 1677—Planting and Care of Lawns.
- No. 1723—Feeding, Care, and Management of Young Dairy Stock.
- No. 1753—Livestock for Small Farms.

We shall be glad to send any 10 of above bulletins free to our readers. Please order by number, print your name and address, and mail post card to Bulletin Service, Kansas Farmer, Topeka, Kansas.

NEW comfort, new speed, new power, new beauty, and new economy are all yours when you choose a new FARMALL. These zippy beauties are genuine FARMALLS, through and through, built on a solid foundation of success earned in 17 years of all-purpose tractor pioneering. During those 17 years the whole tractor farming system was transformed. FARMALL design did it. It led the way, and it leads the parade today. You get all the advantages of genuine Farmall design in any of the four new FARMALLS.

A new tractor is a lot of fun; and it's the life-blood of your farm. Choose the right tractor partner to help you win. Be sure you get the benefits of FARMALL experience.

In this busy season, each day proves the value of FARMALL balanced power and equipment. Visit the International Harvester dealer and ask him about the four new FARMALL sizes and the efficient machines that work with them. Pick power and machine to fit your farm. Insist on FARMALL quality, comfort, and economy. Remember, the farmer's proudest boast, "I OWN A FARMALL."

INTERNATIONAL HARVESTER COMPANY

(INCORPORATED)
180 North Michigan Avenue Chicago, Illinois



THE McCORMICK-DEERING



Ask the dealer for a demonstration.

"Culti-Vision"
"Lift-All"
AND

Don't Suffer GAS PAINS

Mrs. Ruby Lee Jones writes, "I suffered so from indigestion that at times the gas pressure would almost draw me double. I took Dr. Pierce's Golden Medical Discovery for a time and was relieved of this distressing condition."

FOR over 70 years, countless thousands who suffered from bloating, gas pains and similar indigestion distress have taken Dr. Pierce's Golden Medical Discovery over a period of time—and have been amazed at the relief it brought.

For this great medicine, formulated by a practicing physician, acts on the true basic principle to relieve such indigestion—by stimulating the flow of gastric juices. This assists you to digest your food better; more thoroughly. And when food digestion is complete there is no cause for gas pains, or the misery of indigestion.

So successful has Dr. Pierce's Golden Medical Discovery been that over 30,000,000 bottles have already been sold. Proof of its amazing benefits. Get Dr. Pierce's Golden Medical Discovery from your druggist today, or write Dr. Pierce, Dept. 128, Buffalo, N. Y., for generous free sample. Don't suffer one unnecessary moment from gas pains, or similar indigestion distress.

HAY CHOPPING

With a BEAR CAT get the job done as fast as two men can pitch: three to six ton per hour; feeder is 74 in. long, 42 in. wide with 26-inch cutter. Absolutely feeds itself and blows in barn and no monkey business about it! Also, wonderful Hammer Grinder and Ensilage Cutter and has real capacity with 15-30 Farm Tractor. Write for catalog.



WESTERN LAND ROLLER CO.
BOX 85, HASTINGS, NEBR.

BABY CHICKS
NEED *5¢* VAMPIRE KILLS LICE AND MITES
10¢
ALLAIRE WOODWARD & CO., PEORIA, ILL.

The Land of Mussolini

(Continued from Page 8)

lated an article in an Italian medical journal that ridiculed the Wassermann test. He claimed that this was done because Wassermann was a Jew and that every theory of medical science with which a Jew was credited was similarly ridiculed and discredited.

He told me that every physician was assigned a certain area by the government in which he was allowed to practice. If anyone living within this area wished to consult another doctor, he must first obtain permission from the resident doctor. He claimed that he had been unable to get any assigned territory, because he was a Jew, and was forced to leave the country because he was denied the opportunity to make a living.

It was this doctor who told me something of Italy's tax system. Property taxes are low, but the income tax catches everyone from the laborer who earns on an average of 12 cents an hour on up to the higher brackets. According to the doctor, this income tax averages about one-third of the income.

In addition, there is a series of privilege taxes. If a family has a piano, it pays a special tax. If a maid is employed the tax for the privilege of hiring her amounts to almost as much as her wages. Matches are a government monopoly and if anyone owns a cigarette lighter he must pay 75 cents a year for the privilege. The doctor told me he had been paying 32 of these special taxes in addition to his property and income tax.

Leghorn was the next port of call. We landed there in a drizzling rain and 4 of us hired a car to take us to Pisa to see the Leaning Tower. By the time we had reached Pisa the rain had become a downpour that spoiled all at-

tempts to take pictures of this strange structure.

The Leaning Tower of Pisa is a round marble tower, 180 feet high. This is a considerable height even for a building that stands straight and this one leans from the perpendicular 13 feet. This tower is 700 years old, and it is not known if it was built as it is purposely or whether it sank because of imperfect foundation. There are 8 outside galleries and the slender, tall columns on the outer edge of the galleries give the whole structure a rather fragile appearance. It is too delicate looking for comfort.

We climbed the stairway that circled the inner wall. Standing at the top, on the lower side, I was unable to lean far enough out to see the base of the tower. Somehow I had the feeling that it had stood thru 7 centuries, just waiting for me to climb to the top before letting go all holds. I could almost see tourists, coming to Pisa and pointing to a jumbled pile of marble and saying, "That's where that American got killed. The fool climbed to the top of a leaning tower with enough Italian small change in his pocket to buy a meal and it upset."

Our driver and guide then took us to the ruins of some old monastery that was said to be older than the tower. He insisted that we get out in the driving rain, and stand amid the ruins

Getting Better Stands

Treating seed with disinfectants not only prevents many diseases, but produces stronger sprouts. Besides increased yields because of control of smut, molds, and blights, treating seed may mean the difference between a stand and no stand. Folders giving information on treating small grains, corn, potatoes, vegetables, and flowers are available free. One folder gives a blueprint and instructions for making a seed treater. For the 6 folders, send a post card to Farm Service Editor, Kansas Farmer, Topeka.

and shout. He guaranteed that we would hear an echo. We all knew what that echo would say. We had been hearing it all thru Italy. It would shout back at us, "Gimme 'Merican cigarette." Our sales resistance was too strong for him, so he then drove us to an old cemetery where we mused away some time.

This cemetery had been in use during the Crusades. Owing to the peculiar religious fervor of the times, many shiploads of soil had been brought to this cemetery from Palestine so that the deceased might be buried in Holy Ground.

Steals Turkeys and Car

By J. M. PARKS, Manager
Kansas Farmer Protective Service

HAD not Wilbur C. Pardum, Medicine Lodge, taken prompt action, it is uncertain just how far the epidemic of stealing in his community would have gone. When turkeys were stolen from his premises, Pardum reported his suspicions to the sheriff, who attempted to gather more definite clues. In the meantime, one of the thieves tried something bigger. He stole a car, was captured, questioned, and then admitted that he took the turkeys and also took the car for temporary use. Punishment was a 60-day jail sentence. Kansas Farmer distributed a \$25 reward among Service Member Pardum and the 2 officers who made the arrest, Leo Frederick and T. J. Willard.

Spends Too Much Money

Muddy tracks found on the floor in the home of Charles C. Hutchinson, South Haven, led to the belief that the home had been robbed by a boy. Mr. Hutchinson then inquired about town whether any boy had been spending money freely. He found that a certain boy had appeared to be rather full-handed, but there was not sufficient evidence to justify an arrest. Mr. Hutchinson waited another month, the home was robbed again under the same circumstances. He then called the sheriff, the suspect was questioned and confessed to the 2 crimes. He was given a reformatory sentence. Since the sheriff made no claim for any part of the reward, Kansas Farmer sent a check for \$25 to Mr. Hutchinson. Kansas Farmer is glad to do this to further stamp out thievery on Kansas farms.

Counts His Chickens

"I had a habit of counting my chickens often," said B. B. Houdek, R. 2, Cuba, when he gave an account of a recent chicken theft. The chicken counting habit enabled Mr. Houdek to discover the theft at once. The first chickens that were stolen, tho, were not marked for identification and Houdek could not prove ownership. He determined to do something about this. He marked the remaining birds on his



farm and then continued to count them often. Shortly some more of them disappeared. With more confidence this time, Mr. Houdek went to a local market, found the chickens, and positively identified them by his mark. He obtained from the dealer the name of the person who sold the chickens. In a short time the thief was arrested, convicted, and given a jail sentence.

Houdek did 2 things the Kansas Farmer advises all of its readers to do. He marked his property for identification; then he checked up often to see whether any was missing. Because he carried out this plan so successfully, Kansas Farmer was glad to send him a \$25 reward check.

Free Ride Costs Thief

It used to be said that "talk is cheap." The old saying did not hold true, tho, with the 2 dishonest persons who took a car belonging to Noble Bacon, R. 2, South Haven. The clue that led to their conviction was a statement one of them had made shortly before the crime was committed. He remarked they had 15 miles to go and did not expect to walk. The disappearance of the car soon after this led to their suspicion and finally to a conviction. Since Service Member Bacon was the chief actor in effecting the arrest and conviction, all the \$25 reward paid by Kansas Farmer went to him. He was well paid for keeping his ears "open."

To date, Kansas Farmer has paid a total of \$30,362.50 in cash rewards for the conviction of 1,279 thieves who have stolen from the posted premises of members.

Look What I GAINED IN ONLY SIX WEEKS ON GOOCH'S BEST STARTING FEED!

Get Big, Healthy Chicks Fast at Low Feeding Cost!

Such fine growth is equaled and even surpassed each year by thousands of chicks fed GOOCH'S BEST STARTING FEED. And the feed costs less than 1½¢ per week to grow a husky one-pound chick at 6 weeks. That's because GOOCH'S BEST gives chicks the nourishment they need right from the start. Fourteen ingredients, including rich vitamins, proteins and minerals, start chicks growing into big, vigorous birds from the very first feeding. Energy is quickly supplied because GOOCH'S BEST is easily digestible.

MASH OR PELLETS



Packed in Stylish, Usable Fabrics

In addition to protecting your brood and speeding up chick growth, you get the following fine quality fabrics in bags of GOOCH'S BEST STARTING FEED: Woolflock Cloth, Hollywood Cloth, Rajah Cloth and Mayfair Stripes. All make up into fashionable, long-wearing garments and household articles.

GOOCH FEED MILL CO.
LINCOLN, NEBRASKA SALINA, KANSAS



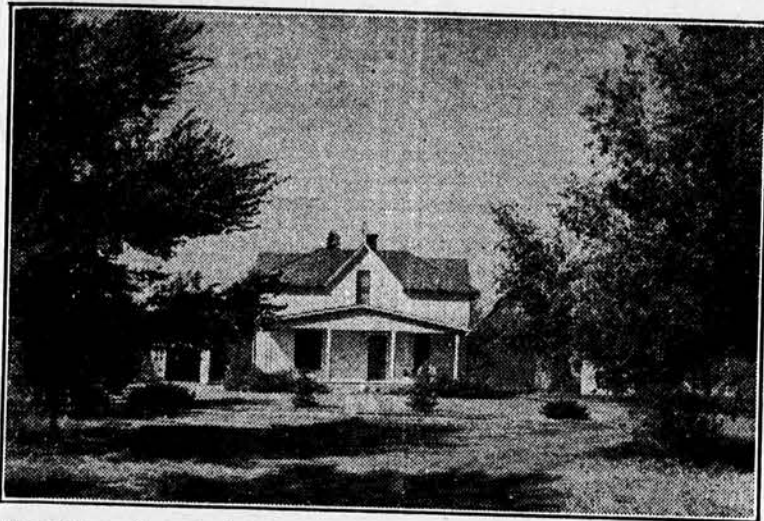
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Brooder Thermometer

For simply trying out GOOCH'S BEST LAYING MASH your GOOCH FEED DEALER will give you with first purchase an accurate brooder thermometer. Get this extra value now, while our supply lasts.

40-3

Making Home More Beautiful



Trees add greatly to the beauty of the farm home. Here, Chinese elm trees make a pleasing approach to a home 3 miles northwest of Hoisington, in Barton county. A recent survey showed that two-thirds of Kansas farmsteads did not have any windbreak protection and almost 90 per cent of rural schools were without trees of any kind.

Dairy Judging Contest Again

IF YOU have a neighbor or brother-in-law who thinks he can judge dairy animals better than you, here's a chance to put him to the test. Again this year, Kansas Farmer is offering \$200 in cash prizes for a state-wide dairy cattle judging contest.

Enter the competition and chances are you will have a big time and "pick up" some new ideas. The contest is managed in co-operation with the spring dairy shows sponsored by the dairy extension department at Kansas State College. Last year, 29 of these shows were held in Kansas. A total of 554 exhibitors showed 1,622 of the state's finest dairy animals. More than 16,000 persons attended and nearly 3,000 took part in the dairy judging contests.

This year the spring shows will begin April 22, and you can select the one which suits you best for breed and location. Each man or woman may judge only 1 breed. It does not necessarily need to be the breed you raise but should be one in which you are interested. Any adult farm man or woman in Kansas may enter the spring show nearest his residence.

Winners at these spring shows will be eligible to compete for the prize money which will be awarded in the final round of competition during the Kansas State Fair, at Hutchinson, this fall. This event is alternated between the 2 state fairs from year to year.

J. W. Linn and L. O. Gilmore, extension dairy specialists, announce that dates for most of the spring shows have already been decided. Those that have been set, thus far, are:

District	Date	Location
South Central	April 23	Caldwell
Central	April 24	Hutchinson
Midwest	April 25	Abilene

Hogdom's Glamour Girl



A debutante in the swine world is Society Sue, owned by Quigley Hampshire Farms of Williamstown. "Sue" was recently named the "All-American" Hampshire junior sow pig. Selection was made by 20 judges, representing colleges, packers, breeders, and the breed association. "Sue" was first in her class at the 1939 American Royal.

Kansas Farmer for April 6, 1940

GUERNSEY			
Central	April 29	Salina	
Republican-Blue	April 30	Marysville	
Northeast	May 1	Horton	
Southeast	May 2	Girard	
BROWN SWISS			
Eastern	May 20	El Dorado	
South Central	May 21	Attica	
Western	May 22	Arlington	
HOLSTEIN			
Arkansas Valley	April 22	Newton	
West Central	April 23	Sterling	
South Central	April 24	Harper	
Southeast	April 27	Erle	
Capitol	April 29	St. Marys	
Midwest	May 1	Herlington	
Northeast	May 2	Sabetha	
East Central	May 3	Lawrence	
North Central	May 7	Washington	
JERSEY			
Northeast	May 11	Holton	
Sekan	May 13	Oswego	
East Central	May 14	Eureka	
South Central	May 15	Augusta	
Central	May 16	Ellinwood	
Northwest	May 17	Phillipsburg	
North Central	May 18	Abilene	

—KF—

Books for Your Library

By JANET McNEISH

The Way Out of War—By Cesar Saerchinger. The People's Library, Macmillan, 60 cents. Do you ask why this war, and do we have a place in this present war in Europe? "The Way Out of War" answers honestly and satisfactorily these questions uppermost in all our minds today.

The House Party Murders—By Edgar Allen Poe, Jr. Lippincott, \$2. A week-end house party is the setting for the brutal slaying of two. Inspector Grimes solves the mysteries.

Grandfather Was Queer, Wags and Eccentrics in Early America—By Richardson Wright. Lippincott, \$3. History of early American ways, such as the "General Store," "Taverns," "Scientific Hoaxers," "Convenient Visions," and "Vociferous Revivalists," with 23 illustrations. Interesting reading about our country's early days.

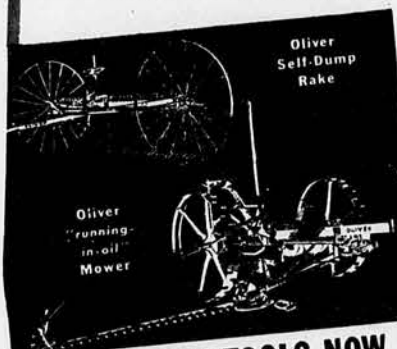
The Unwilling Journey—By C. P. Lee. Macmillan, \$2.50. The background for this story is Arkansas, but the characters portrayed become living people with problems and dreams living in your own community. The plot deals with a mother's desires and ambitions for her child. Worthwhile story to read.

Moses, Man of the Mountain—By Zora Neale Hurston. Lippincott, \$3. This story of the Bible character, Moses, is brilliantly written and well worth your time reading. The book opens with the birth of Moses and follows closely the Biblical Moses. It is one of the favorite review books of the year.



KEEP YOUR EYES ON THE GRAIN MASTER!

If your crop is short, you need to save every kernel; if your crop is heavy, you want to make the most of it. Either way, your combine must be able to meet varying crop conditions. That's why wise grain farmers like to own the sturdy Oliver Grain Master. The Oliver Grain Master has rubberized weatherproof drapers and a tried and tested threshing method that includes the Oliver Big Cylinder, controlled straight-in-line threshing and extraordinary grain and straw-saving ability adaptable to all crop conditions. YOU'LL be ready to make the most of your crop, when you buy a sturdy Oliver Grain Master. You'll find they're priced right, too. Ask your Oliver dealer about them or send the coupon.



KEEP YOUR EYES ON THE '70' ONLY

\$727 AND UP
F. O. B. Charles City

ORDER HAY TOOLS NOW — BEFORE YOU WISH YOU HAD!

Don't wait until too late to order your mower, rake or loader this year. Check up now. See the Oliver line of sturdy modern hay tools. You get easier draft, easier operation in every mower, side delivery rake, self-dump rake or loader through Oliver's improved design, high quality materials and careful manufacture. For details about modern Oliver hay tools and over 80 other Oliver implements and machines, send for the 1940 Oliver Line Book. Just use the coupon.

You can buy these tools on the Oliver Easy Payment Plan

Every day more Oliver "70's" are delivered to grain farmers who've learned of the economy in using two or more of these swift, versatile, 6-cylinder, high-compression tractors in place of one big tractor. They've found that this allows them to shift their farming plans in a hurry to meet extraordinary weather or crop conditions and to get more work done per day. You can use the versatile "70" for your plowing and harrowing, for drilling grain or planting crops, for cultivating and harvesting. With a "70" your power is as flexible as your needs! And there is a complete line of field-tested tools for the Oliver "70". Each helps you do your work faster, cheaper and better. See the "70" at your Oliver dealer's. Find out why it's fun to farm with a "70"—and mighty profitable, too.

FOR FREE DEMONSTRATION—SEND THIS COUPON!

OLIVER FARM EQUIPMENT SALES COMPANY
227 S. Wichita St., Wichita, Kan.; 1329 W. 13th St., Kansas City, Mo.; 349 S. W. Ninth St., Oklahoma City, Okla. (address nearest branch)
I farm _____ acres. I want a free demonstration of the Oliver Row Crop "70" on my farm. Please send me full information about the following: (check which)
☐ Grain Masters—6 ☐ 8 ☐ 10 ☐ or 12-foot cut
☐ Tractor Mounted Tools ☐ Hay Tools ☐ Raydex.
Please send my copy of the 1940 Oliver Line Book
Name _____
R.F.D. _____ City _____ State _____

Sturdy
IS THE WORD FOR

OLIVER

TABLE OF RATES					
Words	One time	Four times	Words	One time	Four times
10.....	\$.80	\$2.40	10.....	\$1.44	\$4.32
11.....	.88	2.64	11.....	1.52	4.56
12.....	.96	2.88	12.....	1.60	4.80
13.....	1.04	3.12	13.....	1.68	5.04
14.....	1.12	3.36	14.....	1.76	5.28
15.....	1.20	3.60	15.....	1.84	5.52
16.....	1.28	3.84	16.....	1.92	5.76
17.....	1.36	4.08	17.....	2.00	6.00

You will save time and correspondence by quoting selling prices in your classified advertisements.

FARMERS MARKET

RATES: 5 cents a word each insertion if ordered for 4 or more consecutive insertions, 8 cents a word each insertion on shorter order, or if copy does not appear in consecutive issue; 10 word minimum. Count abbreviations and initials as words and your name and address as part of the advertisement. When display headings and white space are used, charges will be based on 50 cents an agate line, or \$7 per column inch; 5 line minimum; 2 columns by 168 lines maximum. No discount for repeated insertion. Headings and signature limited to 24 point openface type. No cuts allowed. Copy must reach Topeka by Saturday preceding date of issue.

REMITTANCE MUST ACCOMPANY YOUR ORDER

RELIABLE ADVERTISING

We believe that all classified advertisements in this paper are reliable and we exercise the utmost care in accepting such advertising. However, as practically everything advertised has no fixed market value, we cannot guarantee satisfaction. In cases of honest dispute we will endeavor to bring about satisfactory adjustment, but our responsibility ends with such action.

PUBLICATION DATES: Every other Saturday. Forms close 10 days in advance.

BABY CHICKS

Schlichtman Square Deal Chicks, U. S. Approved, Pullorum tested, Prepaid per 100, Leghorns, Anconas, \$5.90; Rocks, Reds, Orpingtons, Wyandottes, Minorcas, \$6.40; Giants, Brahmas, \$7.90; Heavy assorted \$5.65; Leftovers \$4.90. Also sexed chicks. Free catalog explaining 2-week replacement guarantee. Schlichtman Hatchery, Appleton City, Mo.

Olanders U. S. Approved Chicks, Pullorum Tested for 9 years, 21 years of flock improvement. When better chicks are hatched we will hatch them. \$3.75-100 up. Prepaid. Order direct from this ad or send for our price list. Buy U. S. Approved Kansas Hatched Chicks and be safe. The Olander Hatcheries, Topeka, Kansas.

Covault's AAA Chicks—Bloodtested. Accredited. Reds, Rocks, Wyandottes, Orpingtons, Rhode Island Whites, Austra-Whites, Leghorns, Buff Minorcas \$7.00; 500-\$33.75. Large English White Leghorns or Assorted Heavyweights, \$6.75; 500-\$32.50. Prepaid. Covault's Hatchery, 1950 Parker, Wichita, Kansas.

Johnson's Triple Test Chicks, 15 leading purebred varieties, hybrids, and sexed chicks, 22 years constant flock improvements. Rigidly culled and bloodtested. Buy Johnson's chicks for satisfaction and economy. Free folder. Johnson's Hatchery, 218 West First, Topeka, Kan.

Coombs ROP Leghorns. Reduced chick prices. You can buy our chicks on easy payments. Your own signature only. Raise topnotchers this year. 250-330 egg sired. Free bulletin describing Coombs' breeding methods. Sexed chicks. Coombs & Son, Box 6, Sedwick, Kan.

Quality Chicks: Inspected bloodtested flocks. Big type White Leghorns \$5.70. AA Pullets \$10.95. Rocks, Reds, Orpingtons, Wyandottes, \$5.90. AA Pullets \$8.40. Postpaid. Live delivery. Catalog free. Burnham Hatchery, Clinton, Mo.

Booth's Famous Chicks. Strong, healthy, quick growing. Excellent layers. From one of America's greatest breeding institutions. 10 varieties. Also sexed chicks. Reduced prices. Free catalog. Booth Farms, Box 308, Clinton, Mo.

Special Sale — "Money-Maker" chicks, Reds, Rocks, Wyandottes, Orpingtons, White Leghorns, \$5.95. New Hampshire, \$7.45. Purebred. Bloodtested. 100% live delivery. Prepaid. Empire Hatcheries, Webb City, Mo.

Chicks and Poults. Chicks sexed and as hatched. All popular breeds. Pure and hybrids. Flocks bloodtested. Prepaid. Light cockerels \$3.90 per hundred. Circular free. Steinhoff Hatchery, Oskage City, Kansas.

Started Chicks—out of danger, healthy and strong. Modern brooding plant saves you worry, work and money. We take the loss. Low prices. Catalog free. Berry Brothers, Box K19, Atchison, Kan.

Bloodtested Chicks—Rocks, Reds, Wyandottes, Orpingtons, Leghorns, Austra-Whites, alive arrival guaranteed. Owens Hatchery, 618 North Ash, Wichita, Kan., where your \$35 crow and cackle.

Weidner's Chicks hatched to live and bred to lay. AAA—White Leghorns, Austra-Whites, Buff Minorcas our specialty. Sexed, started. Write for prices. Ellsworth Hatchery, Ellsworth, Kans.

Quality Chicks, Bloodtested Flocks, Heavy breeds \$5.75, Minorcas and Leghorns \$5.40. Hybrid Pullets \$9.25, Cockerels \$4.75. Assorted \$4.50. Postpaid. Ivyvine Hatchery, Eskridge, Kan.

Healthy Sexed Pullets or cockerels. Accurate guaranteed work. Pure breeds or hybrids. Insured livability. Catalog free. Berry Brothers, Box K20, Atchison, Kan.

Chicks: Bloodtested. Rocks, Reds, Wyandottes, Orpingtons, Minorcas \$5.90. Leghorns \$5.60. Postpaid. Catalog free. Fortner's Hatchery, Butler, Missouri.

Baby Chicks, Purebreds, Hybrids, Sexed chicks. Guaranteed 90% pullets and cockerels. Bloodtested. Discounts. Circular. Tudor Hatcheries, Topeka, Kan.

Kansas Approved Pullorum tested. Purebred and Hybrid chicks. Price list free. Bozarth's Ideal Hatchery, Eskridge, Kansas.

Sexed, Triple Guaranteed, Hanson-Barron strains Leghorns, Pullets \$6.95 up. Catalog. Ortner Farms, Clinton, Mo.

Chicks \$5.50, \$6.00, \$6.50 and \$7.00 per 100. Not sexed. Circular free. Jenkins Hatchery, Jewell, Kan.

Kansas Approved Bloodtested Chicks, Purebreds, Hybrids and sexed. Young's Hatchery, Wakefield, Kan.

Before Ordering Chicks Write for Low Prices. Thomas Farms, Pleasanton, Kan.

WHITE LEGHORNS

200-315 Pedigreed, Sired Pullets

Baby Pullets	2 weeks old	4 weeks old	Cockerels
\$9.00	\$13.00	\$15.00	\$2.00
per 100	per 100	per 100	per 100

SPECIAL PRICES ON R.O.P. Sired Pullets

RICE LEGHORN FARM, GREEN RIDGE, MISSOURI

WH. LEGHORN chicks from large type matings up to 289 eggs. Bloodtested. Prices reasonable for high quality. Prepaid. Live delivery guaranteed. ECK HATCHERY, MOUNDRIE, KAN.

Famous Imported Barron's trapped, pedigree, winterlay English strain; purebred ROP sired, bloodtested, state inspected, Missouri approved White Leghorns; guaranteed to lay two eggs to common chicken's one or money refunded; triple A chicks anybody can raise. 84c. prepaid. Insured. Catalog. Dr. Cantrell, Snow-white Eggfarm, Carthage, Mo.

Big Barron English White Leghorns — AAA chicks, \$6.90; pullets, \$13.95; cockerels, \$2.50; postpaid. Two weeks old. \$18.00 collect. Pedigree sired. Money-back guarantee. Heiman's Hatchery, Montrose, Mo.

White Leghorn Chicks—Coombs strain. State Brooding Champions—1939 contest. From U. S. Certified. Pullorum tested flock. Johnson Hatchery, Herington, Kans.

Big English Type—AAA Grade, Kansas Approved. Pullorum tested. Five years flock improvement. \$6.00-100. Write Tolls Hatchery, Yates Center, Kan.

English Leghorns—Large type, carrying bloodlines up to 300 eggs. Also all heavy breeds. Chicks. Ruble's Hatchery, Great Bend, Kans.

BABY CHICKS



The Kansas Poultry Improvement Ass'n
Manhattan, Kansas

Chicks That Deliver

—Outstanding Wherever They Go. Inquiries carefully answered by Personal Letter. Reliable Hatchery, Duke D. Brown, Prop., Council Grove, Kan.



Quality Chicks

At Reasonable Prices

Wh. Br. & Buff Leghorns	Per 100
All Heavies	\$7.12
Assorted Chicks	8.08
Leg. & Hybrid Cockerels	5.50
Leg. & Hybrid Pullets	3.00
Heavy Pullets	12.12

Douglas County Hatchery
Lawrence, Kansas

WHEN DISCOURAGED TRY OUR S. C. ANCONA CHICKS

from U. S. Approved, pullorum tested farm flocks: \$7.00-100. Delivered promptly. Also Buff Minorcas, Austra-Whites, White Rocks and others. BAKER'S HATCHERY, Downs, Kansas

Leghorns—Hollywood Strain

Big husky chicks—Pedigree Sired, 16 years flock improvement and bloodtesting. All R.O.P. Sired Breeders both male and female. Chicks \$7.40 Prepaid. Write for Special Breeding Prices. UPHAM LEGHORN FARM, Junction City, Kan.

AUSTRA-WHITES

Austra-White chicks for profit. More demand in community where introduced. More vigorous and fast growing. Prices reasonable for high quality. Prepaid. ECK HATCHERY, MOUNDRIE, KAN.

Austra-Whites sensational money makers. Healthier, quicker maturing, higher livability, better layers. Be sure to investigate "Wonder-Lay" Strain. Bloodtested control stock. 30-day livability guaranteed. Low prices. Colored Catalog FREE. Write today. Ajax Hatchery, Box K11, Quincy, Illinois.

Customers Report Raising 95% Austra-White chicks. 2 lb. broilers at seven weeks, laying pullets 4 1/2 months, healthiest, disease resistant, and make big profits. Investigate these sensational money makers today. Insured livability chicks. Catalog free. Berry Brothers, Box K1, Atchison, Kan.

45,000 Controlled Breeders. 98% of all my customers re-order Austra-Whites. Why? Because pullets lay in 4 1/2 months. Leads all breeds in egg production. Average 5 1/2 pounds. Customers raise 95% of chicks to maturity. Males make plump 2-pound broilers in 7 weeks. Investigate. Write for my catalog. Sunflower Hatchery, Box 881, Newton, Kan.

AAA Austra-Whites—The fastest-selling hybrid. Better layers than Leghorns. Cockerels make fancy 2-lb. broilers in 8 weeks. Customers report raising 98% per cent. Pullorum Tested. Postpaid. Chicks as hatched, \$6.95 per 100; Pullets, \$12.95; Cockerels, \$5.95. Order early. Taylor Hatcheries, Box D, Iola, Kansas.

Super Austra-Whites. Giant type Australorps mated to Big English Leghorns. Produces marvelous meat and egg fowl, quick maturing, early laying. Sexed and non-sexed, reasonable prices. Interesting literature. Bartlett Farms, R. 5, Box B5, Wichita, Kansas.

Austra-Whites—From ROP Sired Leghorn females. Bloodtested. Satisfaction guaranteed. Let us tell you about our chicks. Upham Sunny-slope Hatchery, Junction City, Kan.

DeForest Kansas Approved Austra-Whites. Best for Middlewest. All leading Breeds and Cross breeds. Guaranteed Livability. DeForest Hatcheries, Peabody, Kan.

BRAHMAS

Big Type, heavy laying, exhibition quality "Wonder-Lay" strain Brahmas. 3,000 hatching weekly. Bloodtested control flocks. 30 day livability guarantee. Low prices. Colored catalog free. Write today. Ajax Hatchery, Box KF19, Quincy, Ill.

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Heavy Dark Cornish, 18 eggs \$1.00; 50-\$2.50; 100-\$3.50. Hybrid Banties, 18-50c. Dark Cornish Banties, 18 eggs \$1.00. Prepaid. Sadie Melia, Bucklin, Kan.

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Mammoth White Giant and Black Giant specialists. "Wonder-Lay" strain laying Contest Winners. 7,500 Giants weekly. Bloodtested control flocks. 30 day livability guarantee. Low prices. Colored catalog free. Write today. Ajax Hatchery, Box KF17, Quincy, Ill.

Superior Chicks, White Giants, Black Giants, Buff Minorcas. Literature. The Thomas Farms, Pleasanton, Kan.

White Giant Baby Chicks. Priced reasonable. Gamble's Hatchery, Altoona, Kan.

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These terms mean quality.

Buy U. S. Grades of Chicks

Insist on Quality and realize greater profits. Production supervised by



Chicks That Deliver

—Outstanding Wherever They Go. Inquiries carefully answered by Personal Letter. Reliable Hatchery, Duke D. Brown, Prop., Council Grove, Kan.

BUFF ROCKS Try these large Golden Buff Chicks U. S. Approved, U. S. Pullorum tested. Strong vitality. Prices reasonable. Write today. MAYFIELD HATCHERY, HOISINGTON, KAN.

ENGEL'S U. S. APPROVED

R. O. P. Sired, Pullorum (Double) Tested. Emulsion (Milk) and green grass fed. Leading broods. Hybrids, started chicks on hand. Come any day. Free folder. ENGEL ELECTRIC HATCHERY, HAYS, KAN.

AUSTRA WHITE HYBRIDS

4,000 Weekly. 9 leading Breeds. Bourbon Red, Bronze and Hybrid Turkey Poults. Folder on request. WELLS HATCHERY, LYONS, KAN.

Baby Capons Also U.S. Approved Sexed Purebreds and Hybrids, incl. Legorcas and Austra Whites. Pullorum tested. Early order discount. Free feeder. Catalog. Tindell's Hatchery, Box K.F., Burlington, Kan.

MINORCAS

Large Type White or Buff Minorcas. From finest breeders. Extra hardy, resistant stock. Heavy layers of big white eggs. Insured livability chicks. Catalog free. Berry Brothers, Box K18, Atchison, Kan.

Large Premium White Eggs produced by Pope Mammoth Minorcas (non-setters) insure steady cash income. Literature free. Globe Minorca Farm, Berne, Indiana.

NEW HAMPSHIRE REDS

Famous Purebred, Bloodtested, State inspected, Missouri approved New Hampshire; guaranteed winter layers or money refunded. Feather quick as Leghorns, grow faster, and start laying as young—around 4 months. Circular free. New Hampshire Ranch, Carthage, Mo.

DeForest United States Approved New Hampshire, Reds, Buff Orpingtons, White Rocks, White Leghorns, White Wyandottes. Guaranteed Livability. DeForest Hatcheries, Peabody, Kansas.

Genuine Big Type, quick maturing, fast feathering, heavy laying type. Big money makers. High vitality. Insured Livability chicks. Catalog free. Berry Brothers, Box K16, Atchison, Kan.

BUFF ORPINGTONS

Famous Buff Orpingtons. Fine foundation stock. Lay in 4 1/2 months. Insured livability chicks. Catalog free. Berry Brothers, Box K15, Atchison, Kan.

BAREED ROCKS

Dark Barred Rocks—Bishop Matings. U. S. Approved, Pullorum Tested. High in vigor and vitality. Good egg producers. Johnson Hatchery, Herington, Kansas.

WHITE ROCKS

WHITE ROCK chicks from blue ribbon winners. Heavy egg producers, thrifty and fast growing. Prices reasonable for high quality. Prepaid. ECK HATCHERY, MOUNDRIE, KAN.

Helm's Husky White Rocks are from Pullorum-tested flocks; give splendid satisfaction for egg production. Write for prices and 2 weeks replacement guarantee. Helm's Hatchery, Box 327, Lamar, Missouri.

35 Years of Continued Breeding for egg production, vigor and vitality bring results. I was the largest White Rock exhibitor from Kansas at the World's Poultry Congress. Write for prices. Carrie Rupp, Ottawa, Kan.

PHEASANTS

Raise Pheasants; profit, pleasure. Send 5c for pamphlet, price list. Rainbow Farms Pheasantry, Barrington, Ill.

POULTRY—MISCELLANEOUS

Peafowl, Swan, Pheasants, Bantams, Guineaes, Pigeons, Ducks, Geese. John Hass, Bettendorf, Iowa.

POULTRY PRODUCTS WANTED

Eggs, Broilers, Hens Wanted. Coops loaned free. The Copes, Topeka.

TURKEYS

TURKEYS THAT THRIVE

McLeod mammoth bronze blood-tested Turkeys bring premium prices at all ages... the big "heavy type" bronze are No. 1 grade. Also chicks famed for livability. Free catalog.

McLeod Hatchery, Shawnee, Kan.

Mammoth Bronze Poults: From broad-breasted breeding stock. 5000 Bronze poults hatching weekly. April poults \$38.00 per 100. May poults \$35.00 per 100. Bourbon Red poults from Pleasant Valley stock 2000 each week. April poults \$40.00 per 100. May poults \$38.00 per 100. All poults shipped by prepaid express 100% live delivery guaranteed. Miller Turkey Farms, Box M, Lancaster, Mo.

Turkey Eggs—Broadbreasted, meattype Bronze. Bourbon Red, Narragansett—April, May 15c; June 10c; July 5c each. Pearl Guinea Eggs 20-\$1.00. Prepaid. Sadie Melia, Bucklin, Kan.

\$4.00 Bloodtested Bronze Toms; 18c eggs, fertility 80%; 34c Vigorous Poults 100%. Haug Bros. Turkey Farm, Baileyville, Kans.

Reduced Prices — Broad breasted meat type Bronze turkeys. Scheetz Poultry Farm, Route 6, Topeka, Kan.

Poults—Eggs \$10.00; Ducklings. Eggs \$6.00. Yotz Farm, Shawnee, Kansas.

Mammoth Bronze, Bloodtested Toms — Eggs. Elsie Wolfe, LaCygne, Kan.

RHODE ISLAND REDS

AAA Grade Reds—Single Comb. Reds that are really red from the surface to the skin. Good production of extra large eggs. 233- to 279-egg breeding. Pullorum Tested. Postpaid. Replacement guarantee. Chicks, \$6.95 per 100. Taylor Hatcheries, Box D, Iola, Kansas.

S. C. RED chicks from early feathering, trapnest matings. Bloodtested. Prepaid. Prices reasonable for high quality. ECK HATCHERY, MOUNDRIE, KAN.

WHITE WYANDOTTES

White Wyandottes—U. S. Approved. Pullorum tested. Twenty years improvement breeding. Guaranteed all rose combs. \$6.95 up. Shumate Hatchery, Paola, Kan.

STARTED CHICKS

Three Week Old chicks your cheapest investment. We take the loss, worry and work. You get strong, healthy, select chicks from our modern brooding plant. 20 varieties purebred and hybrids. Low prices. Colored catalog free. Write today. Ajax Hatchery, Box KF21, Quincy, Ill.

CROSS-BREEDS

High Vitality, sex-linked hybrids. Six successful crosses. Healthier, quicker maturing, better money makers. Insured livability chicks. Catalog free. Berry Brothers, Box K7, Atchison, Kan.

PHOTO FINISHING

Roll Filmachine Developed and your choice (1) 8 Finerotos and 2 professional bromide enlargements; or (2) 16 guaranteed Finerotos; or (3) 8 Finerotos and one beautiful oil colored enlargement, 25c. Order by number. Prompt service. Finerotos, Box N-888, Minneapolis, Minn.

Prompt Service—Guaranteed work. Two beautiful Portrait Type Doubleweight enlargements, eight neverside gloss prints, each roll 25c. Dubuque Film Service, Dubuque, Iowa.

At Last! All Your Snapshots in natural color! Roll developed, 8 natural color prints, only 25c. Reprints, 3c. Amazingly beautiful. Natural Color Photo, Janesville, Wis.

Sparkling Snapshots. Any size roll developed, 8 sparkling prints, 2 beautiful enlargements, 25c. Reprints 2c each. Ace Photo Service, Box 265-R, Minneapolis, Minn.

Prompt Service—Quality work; 2 beautiful doubleweight gloss enlargements, 8 guaranteed neverside prints each roll, 25c. Excel Photos, Dubuque, Iowa.

Rolls Developed—Two beautiful double weight professional enlargements, 8 Neverside prints, 25c. Century Photo Service, LaCrosse, Wisconsin.

Two Beautiful Prints from each picture on roll 25c. Twenty years of satisfied customers. Quick service. Lens Photos, Dept. J-1, Janesville, Wis.

Rolls Developed, two prints each and two free enlargement coupons, 25c; reprints, 2c each; 100 or more, 1c. Summers Studio, Unionville, Mo.

Rolls Developed—Two sets prints plus enlargement coupon 25c; 20 reprints 25c. One day service. Hasty Finishing, Hutchinson, Kans.

Lifephoto Finishing Lasts a life time. Roll developed, 16 prints, two enlargements 25c. Prints 1 1/2c. Life Photos, Hutchinson, Kan.

Enlargement Free, eight brilliant border prints and your roll developed, 25c. Camera Company, Oklahoma City, Oklahoma.

Roll Developed, 8 prints, painted enlargements. 25c. Reprints, 3c. Fast service. Janesville Film Service, Janesville, Wisconsin.

Look! Sixteen prints per roll and coupon for 3-4x6, 2-5x7, or 1-8x10 enlargement, 25c. Modern Studios, LaCrosse, Wis.

Guaranteed Roll Developed, 16 prints, two en-largements 25c. 20 prints 25c. Quality Co., Hutchinson, Kan.

Click-Tik Finishing, 16 prints individually processed. New way. 25c roll. Click-Tik, Sioux Falls, So. Dak.

Beautiful Enlargement from each picture on roll 25c. Cut Rate Photos, Dept. A-4, Janesville, Wis.

FISH BAIT

Fish Bait—Over 20 recipes and suggestions—10c. Fisherman, 1715 Lane, Topeka, Kan.

AUTO SUPPLIES

Thousands of Orders Wanted. World's greatest retread automobile tire sale. These tires retread by experts with new long life rubber for long service. Wholesale price sets of four (4) size 600-16, total only \$14.85. Chicago freight. Send draft or money order direct to Fred F. Kopke Brokerage Company, Hutchinson, Kan.

EDUCATIONAL

No school advertising under this heading has any connection with the government.
Auto Mechanics, Diesel, body, fender repairing welding. Low rates. Stevenson's. 2008-1 Main Kansas City, Missouri.

AUCTION SCHOOLS

\$100 Day Auctioneering. Term soon, free catalog. Reich Auction School, Austin, Minn.
Learn Auctioneering—Get catalog. McKelvie School. Box 189-C, Council Bluffs, Iowa.

TOBACCO

Kentucky's Special—Guaranteed best mild Smoking or red chewing, 12 pounds \$1.00. Recipe. Smoking, box plugs free. Valley Farms, Murray, Kentucky.

QUILT PIECES

Velveteen Mill Ends, assorted colors, packages 25¢ or 5 for \$1.00. Wayne Fox, Pleasantville, N. J.

SILK HOSIERY

Superfine Hosiery, 5 pairs, \$1.00. Three full-fashioned, \$1.25. Dixie, R1346W, Broad, Savannah, Ga.

MISCELLANEOUS

Combined Bull Haler and Controller. Makes any bull safe. Turn him out with complete safety. Stops fence jumpers. Money-back guarantee. Write for circular. Russell & Company, Dept. 31, Plattville, Wisc.

Build Your Stanchions Automatic Release, one or all, each cow locks herself. Complete plans 50¢. Eli McCullough, Solomon, Kan.

Prevent Stock Losses—Use Al-Wuz-On ear tags. Free sample. Write Intermountain Stamp Works, Salt Lake City, Utah.

For Guaranteed Relief of Eczema, ringworm, athlete's foot or fungus poison, write McK. Edwards, Valley, Wash.

For Sale: Highly Improved 450 Acre stock and dairy farm; four miles from Coffeyville, Kansas; fenced and cross fenced hog tight; free gas, electricity available. Write for description and plat. Jessie Eichen, Owner, 505 Spruce Street, Coffeyville, Kan.

LAND—MISCELLANEOUS

More New Farm Land, Washington, Minnesota, Idaho, western Montana, Oregon. Dependable crops, favorable climate. Write for impartial advice, literature and list of typical bargains. Specify state. J. W. Haw, 81, Northern Pacific Ry., St. Paul, Minn.

Western Canada Farm Lands can now be purchased in proven districts at greatly reduced prices—long easy terms. Canadian Pacific Railway, 327 Union Depot, St. Paul, Minn.

4½-5½% Money—Improved Missouri-Kansas farms, ranches. West Mortgage, 1002 Walnut, Kansas City, Mo.

LAND—COLORADO

For Sale in Colorado, 15 quarter sections, smooth virgin farming land, all within five miles of R. R. Town, School, Church and Elevator. Will sell one or all. Needing Money. Ira L. Pennington, Box 47, Walsh, Colo.

REAL ESTATE SERVICE

Sell Your Property quickly for cash, no matter where located. Particulars free. Real Estate Salesmen Co. Dept. 510 Lincoln Neb.

Wanted to Hear From Owner of farm or unimproved land for sale. Wm. Hawley, Baldwin, Wis.

300 Farms, income and business. Free bulletins. Peterman's Exchange, Wichita, Kan.

Kansas Farm Calendar

April 16-17—Conference for Frozen Food Locker Owners, Operators, and Patrons, Kansas State College, Manhattan.

April 17-19—Annual Tractor Show of Northwest Tractor and Implement Club, Colby.

April 27—Hays Experiment Station Roundup, Hays.

May 2-4—Apple Blossom Festival, St. Joseph, Mo.

May 16-17—Fourth Annual Kansas Lamb and Wool School, Kansas City, Mo.

June 12-19—National 4-H Club Camp, Washington, D. C.

September 8-14—Kansas Free Fair, Topeka.

September 14-21—Kansas State Fair, Hutchinson.

September 30-October 6—Dairy Cattle Congress, and National Belgian Horse Show, Waterloo, Ia.

October 1-5—St. Joseph Inter-State Baby Beef and Pig Club Show, St. Joseph, Mo.

Field Machinery Meetings:

May 6—McPherson county.
May 7—Rice county.
May 8—Harvey county.
May 9—Marion county.
May 10—Saline county.
May 11—Dickinson county.
May 13—Clay county.

Farm Credit Battle Rages

By CLIF STRATTON

Kansas Farmer's Washington Correspondent

WASHINGTON, D. C.—The real issue in the growing battle in Congressional circles over whether the Farm Credit Administration shall be administered by the Department of Agriculture or as an independent agency goes deeper than control of governmental farm lending policies.

The question is whether government or private enterprise shall finance the farm mortgage business. It probably would be going a step too far to suggest that the issue is whether the government shall subsidize farmers only thru low interest rate and easier refinancing of existing farm mortgage indebtedness, or shall also subsidize private investors in the bonds of the Federal Land Bank System.

There are, at the present time, some \$1,750,000,000 of bonds of Federal Land Banks outstanding. They pay an average of 4 per cent interest. Farm mortgages held by the Federal Land Banks are paying 3½ per cent interest. Carrying charges are about 1 per cent. The Federal Treasury pays out about \$30,000,000 a year to holders of the Federal Land Bank bonds to make up the difference between the 5 and 5½ per cent interest rate the mortgages are supposed to pay, and the 3½ per cent they are paying.

Two Programs Before Congress

There are 2 farm mortgage programs now before Congress.

First, there is the Gillette bill, which would take the Federal Land Bank system out from under the Secretary of Agriculture, and return it to an independent status, "self-sustaining and managed on sound business principles."

Second, there is the Wheeler-Jones bill, which would retire the Federal Land Bank bonds by 1946; provide a permanent 3 per cent interest rate on Federal Land Bank bonds; provide for refinancing of mortgages based on "future productive value of the land" mortgaged.

The Gillette bill has the backing of the Grange, leaders of the American Farm Bureau Federation, the National Co-operative Council, and, naturally, holders of the Federal Land Bank bonds.

Wheeler-Jones bill has the backing of the Farmers Union and of Secretary of Agriculture Henry A. Wallace—the Wallace's support is qualified by certain modifications in the Wheeler-Jones bill as drawn. Wallace is not certain but what the interest rate ought to be 3½ per cent instead of 3 per cent, for example.

On the stand before the House Committee on Agriculture last week, Secretary Wallace admitted that the Committee should consider the effect of the Wheeler-Jones measure on private investors, including insurance companies, in the business of farm financing. He practically admitted that a 3 per cent interest rate would result finally in the government having the farm mortgage field largely to itself.

Some See Danger

Opponents of Department control of FCA and of the Wheeler-Jones bill charge, in addition to the fact that it will make the government almost the exclusive farm lending agency, that it will put the mortgaged farmers at the mercy of the Department of Agriculture.

What they mean is that the FCA, under Department control, will, or at least could, be used to compel borrowers to comply with whatever national farm program was being administered by the Department. They also see grave danger of the entire farm financing set-up being used for political purposes by a politically minded Secretary of Agriculture.

A. S. Goss, recently replaced by Dr. Roy M. Green as Land Bank Commissioner, who administers the second mortgage or distress loans made by the FCA, probably made the best formal statement so far against the Wheeler-Jones bill, and against keeping the FCA a bureau within the Department of Agriculture.

Goss traced the history of the government in the farm lending business since the original Farm Loan Act was passed in 1916. This act provided, in brief:

Farmers deciding to borrow would form local farm loan associations, which were co-operative institutions. The associations would select the borrowers, determine the amount, and handle the mortgage business of the members. Borrowers would "buy" stock to the amount of 5 per cent of the face of their mortgages. The land banks would pool the resources of these loan associations, supervise lending and collecting, issue bonds upon the mortgages, and create a market for these bonds. The federal government subscribed stock for the land banks. It did not actually guarantee the bonds, but in practice has done so by federal subsidies to replace bond interest losses occasioned by statutory reductions in interest rates.

"Note carefully these 4 important points which were preserved in the act, for they are the very heart of any successful co-operative credit institution," Goss told the House Committee, "first, individual responsibility; second, joint responsibility; third, selection of members or risks; fourth, sharing of profits or losses which resulted from their mutual efforts."

That the local farm loan associations, especially in the supposedly lush period following the World War, had not always functioned Goss readily admitted. The land banks, he said, in many instances had just used them as business getters. But of late years, he said, more of the loan associations had taken their responsibilities seriously, and were returning the system to a really co-operative one. He maintained that the 5 per cent stock gives the borrower an interest as an investor in his

association—that to destroy this feature would wreck the entire system.

Here the institution which Goss maintains the present set-up, Department control, if supplemented by the "soft credit" policies of the Wheeler-Jones bill—purposes of this measure were outlined 2 weeks ago for the Kansas Farmer thru testimony of Governor A. G. Black of the Farm Credit Administration.

Purposes of Measure

First, while it has served directly less than 40 per cent of the farm mortgage borrowers of America, it has acted as a yardstick which has reduced interest rates for all farm borrowers from 25 to possibly 50 per cent of what was paid formerly.

Second, where formerly loans were made for 3 or 5 years, and many never paid off, it has made common the use of the amortized loan.

Third, where loans were made largely on sales value, it has led the way, and others have followed, in making loans at the normal agricultural value of the land.

Fourth, where delinquency, unless promptly cured, usually led to foreclosure, it has led the way in a practical and humane collection policy which has been largely followed by most large institutional lenders.

Fifth, it has a record of delinquency fairly comparable to most institutional lenders and a record of foreclosure of approximately one-half that of other farm mortgage lenders.

Sixth, it has 650,000 stockholder members, with 3,700 farm loan associations officered by approximately 24,000 directors and officers, working to make this co-operative-credit system a success.

"Constructed after 4 years of study and research, perfected during 23 years of operations, having successfully weathered the dangers of both great inflation and deflation, I feel great caution should be used before the essential framework of this structure should be drastically changed or tampered with," Goss told the committee.

Nominate Your Neighbor

CANDIDATES for the honor of Master Farmer of Kansas must be nominated by their friends or neighbors. So, why not do your neighbor a good turn and nominate him for this outstanding distinction?

If your neighbor should receive the title, you would get immeasurable satisfaction in knowing you were responsible. In addition, it would bring prominence to your community.

Look about you at surrounding farms and homes. Who is the leading farmer, best community organizer, most respected family provider? Send his name to Kansas Farmer.

Each year Kansas Farmer Mail & Breeze chooses 5 of the most outstanding farmers it can find in the state to represent the state's high type agriculture.

Kansas Farmer does not say these men selected are the best farmers of the state. It says they are good farmers, good community leaders, and, therefore, worthy of distinction and public recognition.

Master Farmers are not selected on the amount of money they make or the amount which they have in the bank. Rather, it selects men who have accomplished much with what they have had to work, and men who have struggled onward even against odds. If you know a man who would be representative of the best in Kansas farming, you would be doing your neighbor, your community, and Kansas Farmer a good turn by submitting the following nomination blank. Send your nomination before May 1.

MASTER FARMER NOMINATION BLANK

I wish to nominate
(Name of candidate)

.....
(Address of Candidate)

.....
(Name and address of person making nomination)

All nominations must be mailed to Kansas Farmer, Topeka, by May 1.

A Good Picture of Agriculture

A FEATURE of the thirty-first biennial report of the Kansas State Board of Agriculture, just off the press, is a symposium on "Winning Farm Methods." It contains the experiences of successful farmers from among the hundreds available, with special attention to methods pursued in protecting against drouth and depression.

In order that a cross-section of the state might be had in both directions, the counties of Brown, Russell, Rawlins, Finney, Stevens, Stafford, Chase and Labette are represented in the article, with a picture of his home accompanying the report of each interrogated farmer. It shows pretty clearly that success is not a matter of geography or location but rather of good management and intelligent application, and that what these men have done can be duplicated in greater or less degree by thousands of other Kansas farmers.

"The point is made," as stated in the summary, "that the Kansas farmer who farms the Kansas way, based on livestock with a balanced crop program, can challenge the weather and defy depression. Good farming is not only a safeguard in times of adversity, but is a basis of bank accounts at all times."

The symposium is a cheering note in contrast to the gloomy picture so commonly drawn of agriculture nowadays. In addition to other articles of interest, the volume contains a complete report of the statistics of crop and livestock production for the biennium, and is available to interested Kansans by addressing Secretary J. C. Mohler at Topeka.

Animal Breeding Inside Facts

No. 9. Prepotency—What It Is and How to Obtain It

ANIMALS are said to be prepotent when they possess the ability to consistently transmit certain characteristics to their offspring. For example, a sire that sires calves which are all short-legged is called a prepotent sire for that characteristic. The lack of prepotency gives rise to varied offspring—some good, some average, and some poor.

To be prepotent for a given characteristic, an animal must be relatively pure (homozygous) for that character. It cannot alone possess the desired character, but it must also have, in an almost pure form, those certain hereditary units (genes) which are responsible for the expression of that character. Thus, the evidence of prepotency rests on the kind of inheritance passed on to the offspring, rather than on individual performance or conformation. The prepotent animal approaches the point of consistency in passing on either the desirable or the undesirable set of genes. Obviously, livestock breeders have been interested in finding and in making liberal use of the animals that are prepotent for transmitting the desirable inheritance.

Progeny performance records, such as the dam and daughter comparisons used in sire proving, have opened up the field for testing prepotency. In the show ring, the "get of sire" and the "produce of dam" classes have given evidence of a sire's or of a dam's prepotency. Consistency in improving certain characteristics as well as the degree to which they are changed are important considerations in judging prepotency.

Consider Type Rating

It is also desirable to know how much selection of the progeny has taken place before judgment is rendered. For example, a get-of-sire group of 4 animals selected from 100 offspring of a bull would give little evidence of the average excellence of his offspring or of his prepotency. On the other hand, direct evidence on both of these points would be available if 100 daughters of a dairy bull were tested and all of their records were compared to those of their respective dams. Such information would make available all of the individual results as well as the average of the entire group.

Likewise, the type rating of these 100 daughters and their dams into groups as excellent, very good, good plus, fair, would give worthwhile information as to the prepotency of the sire in improving or in harming the type of the herd.

An increase in the purity of a herd results in an increase in its prepotency. Selecting animals that possess the desired characteristics and culling those that do not have them helps to increase the purity of a herd. It helps still more in this direction to use as a basis of selection all available evidence relative to the ability of the bulls and of the cows in passing on the good inheritance.

A mild form of inbreeding combined with rigid selection, if conducted by the rare "master" breeder, is probably the surest and most effective method of increasing prepotency. Inbreeding when practiced by the amateur may result in a herd prepotent for many undesirable characteristics, as well as for a few desirable ones. Inbreeding in itself tends to fix the undesirable as well as the desirable, and only by intelligent matings and rigid culling can the best results be secured with this practice.



"It's bedtime now—guess I'll have to hang up."

Ready Help for Readers

THIS big issue of Kansas Farmer is full to overflowing with material to help you farm. In the advertising columns, too, are displayed many items, some of which you are considering buying within a short time.

These ads, however, contain merely a skeleton of material available for you to consider before making a purchase. Complete information on any of the following is contained in leaflet or booklet form to be sent you upon request.

Listed below are the concerns with such material listed in their advertisements. Send a penny postal or a letter to the address given on the ad before you forget.

Before buying new tires for your equipment, consult the Firestone ad on page 2 and send for the literature offered there.

That new water system or for additions to the old one, send for the Flint and Walling literature mentioned on page 10.

Are you well acquainted with the lubrication needs of your machinery? Send for the Skelly Truck and Tractor book by mailing the coupon as directed on page 15.

Look ahead to harvest of all types of crops and send for descriptive material on Deere combines. Use the handy coupon on page 17.

You don't want to pass up the opportunity of obtaining the Weyerhaeuser book, "Greater Farm Profits from Better Farm Buildings," that will be sent upon receipt of the coupon on page 19.

Be sure to write for the Victor Poultry Booklet that is advertised on page 24 and additional details of the big offer mentioned.

It's time to think about putting up that silo and 2 companies have mighty interesting information for you on page 26.

Have you seen the Massey-Harris Clipper Combine ad on page 26? You can get more information by mailing the coupon at the bottom.

If you work with horses, you will want the Mueller catalog advertised on page 26.

A practical book of facts and information about the soil, its formation and development and how it can

be maintained is the one available from Keystone Steel and Wire Company. Write for "Hidden Treasures in Your Soil." See page 27.

Any dairy-minded individual will be interested in the information on De Laval Separators. Use the coupon on page 27.

"Harvest Savings" is the title of the Case book which will be sent to you free upon request. See the ad on page 28.

Write to the Western Land Roller Co. for the varieties of Sweep Rakes and Stackers which they manufacture. The ad is on page 29.

Complete treatment and diagnosis of many types of poultry diseases are contained in 2 books offered by Dr. Salsbury's Laboratories. "First Aid to Poultry" and "Turkey Talks on Health and Disease" are the titles. See the ad on page 30.

Be sure you see the free sample offer in the Dr. Pierce ad on page 32.

And for hay chopping this spring and from now on, check on the Bear Cat line. Send for the catalog offered on page 32.

Be sure you have all information available on the Oliver line of farm tools. There is a coupon at the bottom of the ad on page 33 which will bring the data.

If you have a handy idea for the farm, it may be worth money. Read the Conoco ad on page 40 and learn of this offer.

Of course, when you write to advertisers be sure to mention Kansas Farmer.

—KF—

Will Hold Spring Show

Final plans have been made for the fifth annual Dickinson County Spring Hereford Show to be held in Abilene, Wednesday, April 10. The sifting committee, consisting of Jesse Riffel, T. L. Welsh, and Roy Lockard visited 14 registered herds, selecting animals to be shown in the 4 special 2-year-old and aged cow and bull classes. Included will be 4 state champions and 1 national champion. Breeders will have some animals at the show for private sale.

Prime Hereford beef will be furnished by the county association for the dinner at noon. F. W. Bell, of Kansas State College, will be the official judge. Fred Allison, Abilene vocational agriculture teacher, in charge of the junior judging contest, expects 250 boys in to judge.

—KF—

Two Bucks to Bring You Joy

Come on folks, on the run,
Write a last line, and join the fun.
It's easy as pie and yes, oh boy!
There's a \$2 prize to bring you joy.

Here's the simple rules: 1. Look thru the ads in this issue. 2. Write a last line for the jingle below. 3. Name the ad from which you got the idea. 4. Enter as many lines as you wish, and the whole family may mail their entries in one envelope to save postage. 5. Free for everybody! 6. Prize is \$2 for the cleverest line.

Winner of the March 9 contest is Ezra Lorenz, Durham. Our check for \$2 is on its way. His winning line: "You'll get it to purr-r if you'll pour Conoco." Next outstanding entries were made by Mrs. Delmar Mehl, Bushton; Dolores Maikie, Alma; Mrs. Harry Marcy, Ransom; Marilyn Eversole, Narka. Congratulations, folks!

List some last lines on a post card and send today!

You may order any of the bulletins and leaflets offered in this issue in your letter. Address Jolly Jingleer Club, Kansas Farmer, Topeka.

A poor little tractor was our Nellie,
She had pains down in her—stomach!
But then came along
The oil man with a song,

HEREFORD CATTLE

Northwest Kansas Hereford Sale

Atwood, Kan.,
Monday, April 22

35 BULLS . . . 25 FEMALES

Consignors

Thad J. Doughit, St. Francis
Foster Farms, Rexford
Janonius Bros., Prairie View
Geo. N. Hawkins, Atwood
H. G. Reuber, Atwood
H. A. Rogers, Atwood
Sutor & Son, Zurich
J. M. Williams & Son, Jennings
Henry J. Wicke, Ludell
R. E. Frisbe, Beardsley
H. A. Jennings, Blakeman

Best of Anxiety breeding. Offering includes two good Polled Bulls. Write for catalog to

H. A. Rogers, Atwood, Kan.
Fred Reppert, Auct.

Reg. Herefords, Percherons

One good 15-month-old Bull. Also the 4-year-old Bull **GOOD DOMINO** 2432153 (keeping help) and can't use him longer to advantage. Also one choice yearling stud. All-weather road 12 miles north of St. Marys, Highway K63. **IDEONS PLEASANT VIEW STOCK FARM** Emmett, Kansas

HEREFORD BULLS HAZLETT BREEDING

For sale: Registered Hereford Bulls sired by **PICCOLA'S TONE** of the Hazlett herd. Four 30 months and six 12 months old. C. T. WRIGHT, Jr., Geuda Springs (Sumner County), Kan.

Gill's Modern Herefords

For sale: Selected registered Hereford Bulls 10 to 11 months old. Inspection invited. W. SCOTT GILL, HARPER, KAN.

3 Yearling Hereford Bulls

Sired by Beauty's Bocaldo 34th (bred by Hazlett). MRS. JOHN POOLE, MANHATTAN, KAN.

HEREFORD BULLS

For sale: Thick, heavy quartered sons of **PUEBLO'S DOMINO** 2nd. Out of selected dams. RAY E. HANNA, CLAY CENTER, KANSAS

REGISTERED BULL

Registered Hereford Bull, Hazlett breeding. Outstanding animal 2½ years old. **BARTLETT FARMS**, 1700 South Hillside Ave., Wichita, Kan.

ABERDEEN ANGUS CATTLE

LAFIN'S ANGUS CATTLE
40 Bulls, calves to 2-year-olds. 50 Cows, bred and open heifers and heifer calves. A large per cent by College Ironmire Pride. L. E. Lafin, Crab Orchard, Nebr. (Just over the line in Nebraska)

YEARLING ANGUS BULLS

For sale: Several well grown, registered, good type, good disposition, serviceable age Bulls. They are 70 and 80 lbs. and from the breed's leading families. Visit our herd and see them or write to Hal T. Hooker, Maryville (Nodaway Co.), Mo.

Evans Offers Angus Bulls

Your selection from 25 Registered Bulls, age 10 to 20 months. We are sure we can sell you the kind of bull you want. (Farm on 71, six miles south of town.) Visit us or write to Bol M. Evans, Maryville (Nodaway Co.), Mo.

Registered Angus Cattle

20 Bulls from 12 to 24 months. 50 two-year-old and Yearling Heifers. Good individuals, select breeding. Inquire of **CALDWELL & CALHOUN** Tarkio (Atchison Co.), Mo.

Oakleaf Aberdeen-Angus Farm

20 Registered Aberdeen-Angus Bulls, 8 to 11 months old. Earl Marshall breeding. Latzke Stock Farm, Junction City, Kan.

Dalebanks Aberdeen Angus Farm

Bulls and Heifers of choice breeding and type. From a herd whose culls consistently top best markets. E. L. BARRIER, EUREKA, KAN.

AUCTIONEERS AND SALES MANAGERS

BERT POWELL

AUCTIONEER
LIVESTOCK AND REAL ESTATE
715 Lincoln St. Topeka, Kan.

Jas. T. McCulloch, Auctioneer

Ability and experience count when buyers have the right to make their own prices. CLAY CENTER, KAN.

DUROC JERSEY HOGS

70 Durocs, Sows and Gilts of Royal breeding. Fit for 4-H work, farmers and breeders. Bred to Thicket, Pioneer, Monarch, Gold Digger. 50 choice Boars, all sizes, 33 yrs., a breeder of original heavy bodied, short legged, easy feeding, fancy medium type. Immured, shipped on approval. Reg. Catalog, come or write. W. R. Huston, Americus, Kan.

MILLER'S DUDOCs

Reg. and Immured Fall Boars shipped on approval. The short-legged, heavy-bodied, quick-fattening kind. Photos furnished. **CLARENCE MILLER, ALMA, KAN.**

PERCHERON HORSES

Percheron Stallions and Mares

Joe Synod, 4 years old, black, broke to work, weighs a ton. Carlos, yearling black stallion. Pair 8-year-old Grey Mares. Two 3 and 4-year-old black mares. **CHARLES BROS., REPUBLIC, KAN.**

Tudor Charles Dies

Tudor Charles, Republic, and for 5 years associate editor of Kansas Farmer Mail & Breeze, died on April 2 in a hospital near his home. Mr. Charles resigned from his editorship



Tudor Charles

last spring and returned to his family farm near Republic, where he was becoming known as an outstanding livestock breeder. He was well known thruout Kansas for his work with the Kansas State Corn Husking Contest, Kansas Master Farmers, and the Kansas Farmer Pasture Improvement Contest. He graduated from Kansas State College and has served with the state extension service.

—KF—

Seneca Wins Judging Honors

Livestock judges representing the Seneca high school vocational agriculture department claimed top honors in the 13th annual livestock judging contest held at Frankfort, March 30. Sponsored by the Frankfort F. F. A. Chapter, the contest featured entry of 240 boys from 29 schools.

Other high scoring teams following Seneca were: Alma, Washington, Abilene, Marysville, Waterville, Linn, Havensville, Onaga, and Blue Rapids. Leading individual was Robert Bock, Seneca. Following him closely were Francis Hecht, also of Seneca; Lawrence Lindquist, Waterville; Albert Thesl, Alma; Carl Woods, Abilene; Leo Koppes, Marysville; Omar Kuhn, Abilene; Everett Kovanda, Blue Rapids; L. Oestreich, Linn; and Lyle Wymore, Seneca. Official placings were made by Prof. R. B. Cathcart and Prof. G. H. Beck, of Kansas State College.

—KF—

Boys Learn Hog Marketing

Anyone who feeds and markets hogs should know what kind and weight are wanted by buyers at the central markets. This is the opinion of some 100 vocational agriculture students from Kansas and Missouri who marketed 255 hogs at the Vocational Agriculture Market Day, in Kansas City, March 29.

Sponsored by the Kansas City Stock Yards Company, co-operating with the Missouri State Department of Vocational Education, the affair was arranged to emphasize the importance of marketing high-quality hogs. The hogs were graded into 3 groups and designated with colored chalk marks. Choice animals were marked with a blue chalk, and all in this group were

sold at 25 cents a hundred above the top market price.

Hogs graded as good were marked with red chalk, and all in this group sold at top market price for their weight. Medium quality hogs were marked with orange chalk, and they sold at regular market worth, according to that day's market. Grading was done by packer buyers and experienced vocational instructors, but the boys were right there to see how and why their hogs graded as they did.

Of the 255 hogs marketed, more than 200 graded as good or choice. But that was just the first round of the event. Packers co-operating in the enterprise agreed to provide for inspection of the carcasses after slaughter. Bruises or other indications of faulty handling counted as marks against the owners' records. All hogs sold in the Market Day event were owned and fitted by whole or part time vocational agriculture students as a part of their regular projects.

Prizes offered included the following: Plaque presented by the State Vocational Agriculture Department of Missouri for the school with the most outstanding consignment; a trophy presented by the Home Insurance Company for the school consigning hogs with the least bruises.

—KF—

Ayrshire Breeders Elect

W. H. Hardy, Ayrshire breeder east of Arkansas City, was elected president of the South Central Ayrshire Breeders Association at their annual meeting held recently at Wellington. W. S. Robinson, Nashville, was elected vice-president and Bill Dusenbury, Anthony, is the secretary. Members present chose April 23 as the date for the spring show, which is to be held at Caldwell, in Sumner county.

IN THE FIELD

Jesse R. Johnson
Topeka, Kansas



A home show of Milking Shorthorns will be held at the **HARRY REEVES FARM**, near Hutchinson, at 10 a. m., Saturday, April 13. W. J. Hardy will judge all classes; following this, Mr. Reeves will price every animal on the farm without reserve.

A well-known Missouri Jersey herd has recently been moved to a new location. This is the **ERNEST MOECK HERD**, of St. Joseph. Recently, a farm was purchased adjoining Savannah on the southwest, and his herd of high-class registered Jerseys have been moved there.

C. D. LOBER, of Weston, Mo., will disperse his entire Jersey herd on May 1, according to information just received from the sales manager, Ivan N. Gates, of West Liberty, Ia. Those interested should write at once to the sales manager for catalog.

SNIA-BAR FARMS, Shorthorn breeding establishment for many years, is claiming May 15 for their annual spring sale of Shorthorns. The sale will be held at the farms headquarters which is Grain Valley, Mo., and 40 head will be sold.

It is hardly necessary to describe the kind of Duroc fall boars **CLARENCE MILLER**, of Alma, has retained for his old and new customers. The Miller kind is well known by most readers of Kansas Farmer. Farmers and breeders desiring to shorten the legs and thicken the hog's body will be interested in visiting the Clarence Miller farm, near Alma, or writing for photos.

WM. M. ROGERS, wide-awake young Duroc breeder of Junction City, reports more than 60 spring pigs to date on the farm. The sows have farrowed unusually big and even litters. A good per cent of the pigs were sired by his boar, Iowa Master. They prove the wisdom of the purchase of this outstanding sire. He is one of the thick sort, and mated with sows with lots of scale seems to have made about the best possible.

A group of Kansas Hereford breeders recently made a shipment of Hereford calves, consisting of 46 bulls and 20 heifers, to improve the herds in the vicinity of Waynesville, N. C. Breeders making up the sale were **ED WASHINGTON**, Manhattan, J. J. **MOXLEY**, Council Grove, **JOHN LEWIS AND SON**, Larned, and T. L. **WELSH**, Abilene. J. J. Moxley recently sold a truck load of 14 heifers to a Kentucky breeder.

CHARLEY AND GROVER WHITE, Shorthorn breeders located at Arlington, Kansas, report good demand for breeding stock. Among recent sales were 12 choice heifers to Alvin T. Warrington, of Leoti. The heifers were just ready to breed and by now have been bred to Mr. Warrington's great breeding bull, Gallant Minstrel, a great son of Thorndale Minstrel, and bred by Duncan Campbell, of Moffat, Ontario, Canada.

J. C. **BANBURY AND SONS**, breeders of Polled Shorthorns and regular advertisers in Kansas Farmer, write as follows: "Check enclosed, thanks. Cattle business good, sold 8 head since the storm cleared."

MILKING SHORTHORN CATTLE

MILKING SHORTHORN COW BREAKS WORLD'S RECORD—Produces 41,644½ lbs. of Milk in ONE Year!

Cherry, an 8-year-old Milking Shorthorn, is now official holder of new world's record for milk yield for all breeds—41,644½ lbs. in one year! World's record for butterfat production, 1,614 lbs. in one year, also held by a Milking Shorthorn! For details of record-smashing successes order a trial subscription of **Milking Shorthorn Journal**, 6 Mos. 25c. Or 24 months for \$1.00 in advance. FREE Poster-calendar picturing types of all ages. **Milking Shorthorn Society**, 7 Dexter Park Avenue, Chicago, Ill.

Milking Shorthorns

For sale: Dual Purpose Cattle. They fill the farmer's need, beef as well as milk. Write me for list of stock for sale by members of **NEBRASKA MILKING SHORTHORN BREEDERS ASSOCIATION**. **ARTHUR SELL, Sec., MILFORD, NEBR.**

Entire Herd Offered

for PRIVATE SALE of the animals that you choose from each age class; at our **HOME SHOW**, 10:00 a. m., Saturday, April 13. Don't write—**COME!** W. J. Hardy will judge classes as offered. "You Buy The Best—We Keep The Rest." **HARRY H. REEVES** No. 17 N. E. of Hutchinson

Morgan's Polled Milking Shorthorns

Young Bulls, up to serviceable age. Young Bred Cows, Bred and Open Heifers. Good quality and heavy production. Best of Bates and Glenside breeding. **J. T. MORGAN** Densmore (Norton County), Kansas

Milking Shorthorn Bulls

PARKER FARM, STANLEY, KAN., has for sale Bulls from 2 to 10 months old, out of Record of Merit dams and sired by outstanding herd bulls. These bulls will mature into outstanding herd sires. **CARL PARKER, Owner.**

Emrick's Milking Shorthorns

For sale: Registered Milking Shorthorns. Cows and Bulls, including herd bull, **Red Defender**. **A. E. EMRICK, Pritchett (Baca Co.), Colorado**

POLLED SHORTHORN CATTLE

POLLED (HORNLESS) SHORTHORNS
Interested in Polled Shorthorns? Write **Banbury & Sons, Pievna, Kan.** 22 Miles West, 6 Miles South of Hutchinson, Kan. 20 Young Bulls. Females not related.

Rosenberger's Polled Shorthorns

Bulls, calves to serviceable ages, sired by a bull formerly heading the **Albert Hultine** herd. Also choice females. **W. A. ROSENBERGER, Greensburg, Kan.**

Hanson Offers Polled Shorthorns

For sale: One choice roan 14-month-old Polled Shorthorn Bull. Priced reasonable. **ROBT. H. HANSON, JAMESTOWN, KAN.**

SHORTHORN CATTLE

Lacy's Shorthorn Bulls

For sale: Registered Shorthorn Bulls, 8 to 12 mos. of age, sired by Gregg Farm Victorious. Reds and Roms and the kind you will like. Write or come see them. **E. C. LACY & SON, MILTONVALE, KAN.**

AYRSHIRE CATTLE

For Hardy Grazers

Ayrshires make most 4% milk from an acre of grass
Write for literature and list of breeders near you with stock for sale
Ayrshire Breeders' Association 260 Center St., Brandon, Vt.
RAISE AYRSHIRES

GUERNSEY CATTLE

Conklin's Guernsey Farm

offers a choice selection of young Registered Guernsey Bulls. Calves to serviceable ages. Best of Langwater breeding, out of cows with butterfat records up to 550 pounds. Bred and Th. tested. Priced for quick sale. **DR. T. R. CONKLIN, ABILENE, KAN.**

GUERNSEY CALVES

Four choice unregistered month-old Guernsey Heifer Calves and purebred Bull (half same age, not related). The 5, price \$115 delivered. C. O. D. **Lookout Farm, Lake Geneva, Wisconsin**



Well Advertised Livestock

sell faster and for more money. Advertising costs are absorbed in the higher prices paid. The purchaser really pays for the advertising and not the seller. Surveys indicate that 90% of all purebred livestock sold for breeding purposes stay in Kansas. Beginners founding herds and commercial growers buy 80%. Kansas Farmer goes into the homes of more than 115,000 farmers and breeders. A low advertising rate and free livestock information provides a service available to readers of the paper.

Address

KANSAS FARMER
Livestock Advertising Dept.
Topeka, Kan.

W. R. HUSTON, well-known Duroc breeder of Americus, informs us he has more than 200 spring pigs and they are coming fine. Leading bloodlines, plus the knowledge of a man who has spent a good share of his lifetime studying proper mating. Just about assure you of a good Duroc at Huston Farm. Mr. Huston says, "Business was a little slow during the extreme cold weather and blocked roads, but right now we are selling a good number of Durocs and inquiry as to breeding stock is coming every day."

Eleven good Hereford breeders furnish the consignments to the NORTHWEST KANSAS ANNUAL BREEDERS' sale to be held in Atwood, Monday, April 22. Thirty selected bulls and 25 good heifers will sell. This section of the state has for years been recognized as headquarters for good Herefords. Cattle that go in the Northwestern Association sale are bred and handled under ideal conditions from the standpoint of ruggedness. Write for catalog of this sale to H. A. Rogers, secretary, at Atwood.

On their 1200-acre ranch, located along the Rattlesnake River in Southern Stafford county, FRED W. LAMB AND SON raise registered and high grade Polled Hereford cattle. The cow herd numbers about 75, with about 40 of them registered cows, headed by Mischief Domino 4th, one of the best bulls ever raised on the Jesse Riffel farm. The cows are largely of Bullion breeding. About 50 per cent of the bulls from registered cows, are kept to sell for breeders and only the top heifers are retained for breeders.

Careful inspection by the writer is convincing as to the merit of the Herefords that sell in the CLINTON L. SCOTT dispersal to be held on the Scott farm, adjoining Eskridge, Friday, May 3. The offering includes the great herd bull, Prince Domino 38th, grandson of Prince Domino 7th. A good share of the cattle selling are his get and the cows will be bred to him. I have not seen a finer lot of spring calves so far this year. Everything will be offered in excellent breeding form without excessive fitting.

J. T. MORGAN, Polled Milking Shorthorn breeder, of Denmore, in Norton county, says his cattle have gone thru the winter well. The herd now numbers about 25 head. He is highly pleased with the Glenside females purchased a couple of years ago and mated to his big red Bates Polled bulls, Thornfield and Thornwood. One heifer from this cross is now giving 32 pounds of milk daily, and she will not be 2 years old until June 5. Mr. Morgan has stock for sale now.

Recently I saw a photo of the dam of the noted Jersey sire, Gribbis Farms Eagle. No wonder his daughters by their almost unequalled production records and unusual uniform perfection type brought fame to this sire sufficient to give him the rank of Superior sire. The fame of this great sire and his daughters march on as his sons go to head many of the best herds in this and other states. A. LEWIS OSWALD, Hutchinson, in whose herd he became world famous, has 25 bulls heading Kansas herds, most of them sons of "Old Eagle."

Five years ago the WASHINGTON COUNTY CREAMERY, the oldest co-operative creamery in Kansas, borrowed \$39,000 from the Wichita Bank for Co-operatives. The last payment was recently made on this loan, and now the creamery is owned by the patrons. At the annual meeting to be held in Linn, where the creamery is located, there will be a celebration, consisting of a big dinner, speaking, and burning of the mortgage, which was retired 2 years before it was due. The date of the annual meeting and celebration is Wednesday, April 10.

D. F. Isaacson, Kansas Farmer subscriber of Elizabeth, Colo., attended the F. B. WEMPE ESTATE JERSEY SALE, held at Frankfort recently, and topped the sale, paying \$250 for the choice young cow, White Way Dandy Tess. A. C. Loftus, of Plainview, Tex., bought the second top at \$225, taking a full sister to the herd bull, White Way Xenia Prince, purchased in the sale by Lawrence Morgan, of Phillipsburg, Kan. Other good buyers were C. A. Sterling, of Topeka, Lester Davis, Logan, and Chris Stauffer, Frankfort. The females averaged a trifle under \$100 a head. Bulls, mostly calves, averaged \$47.80. James T. McCulloch was the auctioneer.

JAMES T. McCULLOCH, who has inspected the 40 head of purebred unregistered Jerseys that go in the STRYKER AND SON SALE at Blue Rapids, April 17, says he has known the herd for many years and directs attention to the fact that these cattle come from a dairy that has been in operation for 25 years, and only the profitable heifers and older cows have been kept. The further fact that nothing but registered bulls have been used for years and that they have always been selected from leading herds guarantees the high production and good type of the offering.

PAUL FARNEY, located at Abbeville, is one of the younger members of the Milking Shorthorn fraternity of the state. His 2,200-pound roan herd sire is a line bred Otis Chieftain, and one of the better sires of the entire state. He calls him Royal Rastus. A lot of the females in the herd are his daughters. For service on his daughters, Mr. Farney has purchased a son of the Kansas grand champion, Fairacres Judge. On his dam's side the young bull has the blood of Otis Chieftain, Pine Valley Viscount, Lord Baltimore and White Goods, said to have sired more Register of Merit cows than any other Scotch bull that has preceded him.

E. P. MILLER ESTATE owns one of the finest equipped dairy farms to be found in the state. Had Mr. Miller lived this great herd would, of course, not be sold. No breeder was ever more careful and considerate of the health of the cattle he loved. He knew what sanitation meant and how to maintain it. Now that he is gone the herd must be dispersed and others are to share in what he accomplished during the best days of his life. This is as "Ed," as he

KANSAS FARMER LIVESTOCK DEPARTMENT would like to hear from farmers and breeders of registered cattle who have owned and used registered bulls 50 years or longer. Address: Jesse R. Johnson, Livestock Department, Kansas Farmer, Topeka.

was familiarly known, would have wanted it. The date of the sale is Thursday, April 25, and it will be held on the dairy farm in the south-east part of Junction City.

RAYMOND O'HARA owns a nice stock farm, near Sylvia in Reno county. He has named it EMERALD MEADOWS and has stocked it with Aberdeen Angus cattle and Poland China hogs. About 30 pigs have been farrowed to date. A recent purchase from an Iowa breeder was a fine young boar sired by the great prize-winning sire, Goldenrod. Both cattle and hogs have come thru the winter in good shape and show they have had good care.

WALTER ONEILL, located 11 miles south-east of Manhattan, established a herd of registered Hereford cattle almost 35 years ago. His first purchase was a double granddaughter of old Beau Brummel; the purchase was made at the Kansas agricultural college. The Oneill herd now numbers 100 head, old enough to breed. More than 90 per cent of them descended from the original cow. On this foundation outstanding bulls have been used, such as sons of Beau President I Am, and other sires of note. A new herd bull has been selected and purchased from the Mousel Brothers herd. His name is Bright Domino and he is a son of Mischief Lamplighter.

JOE A. FOX lives six miles south and a little east of St. John, and he is rapidly improving what will be one of the finest farms in his section of the state. He grows wheat and other crops, but his chief interest centers around the good herd of registered Milking Shorthorns which he began to establish a short time ago. Cows were purchased from such breeders as John B. Gage, Hunter Bros., Hollendale Farms in Iowa, Lawrence Strickler. Now he has heading the herd and sire of calves now coming the great white sire, Duallyn Imperial, a son of the 10,000-pound milk cow, Duallyn Jubiter. The bull was shown and placed well at the Chicago International, also at the San Francisco exposition. Mr. Fox invites inspection of his herd.

GEORGE E. SCHURLE, owner and operator of this farm, has had the herd on DHIA for many years. Everything is TB and Bang's tested. For more than 30 years the late THOS. D. MARSHALL bred registered Jersey cattle on his half section farm, near Sylvia in Reno county. During the year he raised a family of 6 boys and 5 girls. During this time he sold hundreds of cattle to his own and adjoining states. The 3 youngest sons are continuing with the herd, which numbers about 75 head. During his lifetime Mr. Marshall owned several good bulls, among them 2 St. Mawes and Raleighs. The females are largely of this ancestry. The Junior herd bull now in service is Raleigh's Masterpiece and the junior sire, Primate Volunteer, both of Longview breeding. The Brothers are now milking about 25 cows; an average of 20 are milked the year around. Sweet cream is sold on the market and milk fed to calves and hogs.

When the bridge across the Missouri River was recently completed at Rulo, Neb., it brought the corner of 4 states closer together than they have ever been before. This is especially true as it applies to Northeast Kansas and Northwest Missouri, when we consider the possibilities of the exchange of good livestock. The Northwest part of Missouri is probably the best known part of the state so far as registered Angus cattle are concerned, and the NODAWAY COUNTY ANGUS BREEDERS' ASSOCIATION with headquarters at Maryville is composed of some 50 breeders and farmers interested in this breed. Some of these men have been breeding them for almost 50 years. Among the strong herds of this breed in that part of the state are the Caldwell and Calhoun herds of Tarkio, the Hal T. Hooker and the Rol M. Evans herds, both of Maryville.

JAMES B. HOLLINGER, one of the best known Aberdeen Angus breeders and exhibitors in America, announces his second annual sale to be held on WHEATLAND FARM, near Chapman, June 3. Complete information regarding this great offering will appear in this paper later, but so that prospective buyers may begin looking forward to this outstanding event and be in a better position to complete buying arrangements, we call attention to the sale in a general way. About 60 head of home-grown cattle will be sold, 45 females and 15 bulls of different ages and comprising at least a part of the show herd. The offering will be selected carefully from the herd of several hundred head, and every effort will be made to have ages and various divisions to take care of the needs of all buyers. File application anytime for catalog and mention Kansas Farmer.

SAM TITTEL, of Bazine, topped the SOUTHERN KANSAS SHORTHORN BREEDERS sale held at Wichita, March 27, paying \$182.50 for the Regier bull, A. L. Defender. This bull was made champion bull of the show by Dr. C. W. McCambell. The highest priced female went to C. E. Reid, of Deer Creek, Okla. W. J. Brookover, of Eureka, paid \$165 for the bull, Supreme Collynnie, consigned by Theda Stunkel, of Peck. The heifer going to the Reid herd was consigned by Walter Hunt, of Arkansas City. The entire offering was well dispersed to different sections of Kansas and many went into Northern Oklahoma. The 44 bulls, many of them young and not too well conditioned, sold for \$4,300, an average of \$98. The 11 females averaged \$78 per head. A total of \$5,152.50 was collected for the entire offering. Hans Regier did his usual good job as sale manager, and Boyd Newcom, assisted by C. W. Cole, did the selling.

H. H. COTTON and family have been breeding registered Milking Shorthorns on their farm, near St. John in Stafford county, for more than 20

Dispersal E. P. Miller Estate Holsteins



Dispersal of 100 head of Registered and Grade Holstein-Friesian cattle, property of the E. P. Miller Estate, to be held at the Acme Holstein Dairy Farm on U. S. Highways No. 40 and 77, adjoining

Junction City, Kan.,
Thursday, April 25, 1940

45 Cows, many of them fresh or heavy springers with C. T. A. records from 350 lbs. to 400 lbs. fat.
19 two-year-old Springing Heifers.
21 Yearling Heifers, not bred.
20 Heifer Calves.

33 daughters of K. S. A. C. Quantico Iconoclast. This bull has for his dam a 1062.4-lb. butter record with an average fat test of 4.6%. His sire, a son of the World's Record Life Time producer, LaVertex Quantity of U. Neb. in 10 successive lactations, produced 227,831.8 lbs. milk and 8,455.3 lbs. fat.

35 daughters of Senator Longfield Corrector, a son of U. Neb. Corrector, whose dam was a 792-lb. fat, 3-year-old daughter of King Piebe Pontiac Segis, he a son of the 890-lb. fat 3-year-old daughter of King Segis Pontiac Count. His six nearest dams averaged 788 lbs. fat. The dam of the Senator bull has in 305 days, 892.4 lbs. fat and her dam 466.9 lbs. fat in 292 days with a 3.9 test.

About 15 head of choice grade cows and some good grade heifers. An unusual offering of heifer calves, yearling heifers for calf clubs. Every animal in the sale bred at the Miller farm. Entire herd free from disease, both as to TB and Bang's

Sale Begins at 10:30 o'clock

For Catalog Write to W. H. MOTT, Sale Manager, Herington, Kan.

Auctioneers: Newcom, McCulloch and Cole Jesse R. Johnson with Kansas Farmer
Owner: E. P. Miller Estate, Junction City, Kan.

Jersey Cattle Dispersion Sale



on farm 1 mile west and 1/4 mile north of
Blue Rapids, Kansas

Wednesday, April 17

40 HEAD pure bred but not eligible to register. 16 Cows in milk or near calving. 7 Bred Heifers. 10 Open Heifers. 5 Heifer Calves, and Herd Bull registered (bred by Chas. Copeland). Nothing but registered bulls used in herd for years (from KSAC, Wheelock and Copeland herds). 25 years running dairy, now selling out because of other business. Everything TB and Bang's tested. Will also sell milking machine and other dairy equipment.

Alva Stryker & Son, Blue Rapids, Kansas

Jas. T. McCulloch, Auctioneer

Jesse R. Johnson with Kansas Farmer

JERSEY CATTLE

Eagle's Senator of Oz

That promising young son of "Old Eagle," and of Kathryn Eleanor of Oz, a grand champion matron of the vintage of 1938, is now proudly owned by Mr. J. E. Jones, Route No. 4, Wellington, Kansas. Take a look at this youngster yourself if you are down that way!

A. LEWIS OSWALD, Rotherwood Jerseys
Hutchinson, Kansas

Reg. and Grade Jerseys

Cows fresh or heavy springers. Also registered Bulls and Heifers, high-producing ancestors. TB and Bang's tested.

GEO. E. SCHURLE, R. 1, MANHATTAN, KAN.

Brookside Jersey Stock Farm

Best of St. Mawes and Raleigh breeding. 6 Reg. Bulls for sale, also Cows, Fresh and Springers. Bred and open Heifers. TB and Bang's free. Marshall Brothers, Sylvia (Reno Co.), Kan.

years. Perhaps no Kansas firm has been selecting breeding stock from distant points longer. At first the results were discouraging. No nearby neighbors to encourage him, poor crops, low prices and abortion would have discouraged most men. But he persisted and now success seems to have crowned his efforts. His fine herd of females are practically all daughters of the red sire, Alana Roan Bird Bates, one of the best sires ever brought west. His dam had a record of 12,400 lbs. of milk in 344 days. Mr. Cotton drove 1,000 miles searching over several states for a bull to use on the above bull's daughters and finally selected Hollandale Headlight, a double great grandson of General Clay 4th. His dam has a 2-year-old record of 8,395.9 lbs. milk and 334.22 fat. The Cotton herd is on DHIA test and regularly tested for TB and Bang's.

—KF—

Public Sales of Livestock

Hereford Cattle

April 22—Northwest Kansas Hereford Breeders Association. H. A. Rogers, secretary-manager. Atwood.

May 3—Scott Hereford Farm, Eskridge. Clinton L. Scott, Topeka, owner.

Guernsey Cattle

April 9—Jo-Mar Farm Annual Sale, Salina.

Holstein Cattle

April 25—E. P. Miller Estate, Junction City. W. H. Mott, Herington, Sale manager.

Jersey Cattle

April 17—Alva Stryker and Son, Blue Rapids. May 1—C. D. Lober, Weston, Mo. Sales Manager. Ivan N. Gates, West Liberty, Ia.

June 1—Clifford Farmer, Willard, Mo.

Shorthorn Cattle

May 15—Enl-A-Bar Farms, Grain Valley, Mo.

Aberdeen Angus Cattle

June 3—James B. Hollinger, Chapman.

HOLSTEIN CATTLE

Bulls for Sale or Lease

Our bulls win for others in the show ring.

While we do not show any of our Holsteins at fairs for fear of getting disease in the herd, our Holsteins have made a creditable account of themselves in the show ring for others. The bull Mr. John Stuckey secured from us won 1st at Beatrice, Neb., and 2nd at Colorado State Fair last year.

SECURITY BENEFIT DAIRY, Topeka, Kan.

DRESSLER'S RECORD HOLSTEINS

Cows in herd are daughters and granddaughters of the state's highest butterfat record cow, Carmen Pearl Veeman, 1,018 lbs. fat. Bulls for sale.

H. A. Dressler, Lebo, Kan.

DAIRY CATTLE

FANCY DAIRY HEIFERS

\$8.00, \$10.00 and \$15.00. Registered Bull \$25.00. Shawnee Dairy Cattle Co., San Antonio and Dallas. Write Box 5313, Dallas, Texas

DAIRY COWS 60 strictly choice high grades to be fresh in 10 to 60 days, 3 to 7 yrs. old. All sound. Mostly Jerseys, a few other breeds. Also 50 close springers Jersey & Guernsey Heifers. TB and abortion tested and all priced to sell. Ph. 8204JL. Claude Thornton & Sons, R. 2, Springfield, Mo.

Livestock Advertising Copy

Should Be Addressed to

Kansas Farmer
Livestock Advertising Dept.,
Topeka, Kansas

Kansas Farmer is published every other week on Saturday and copy must be mailed to reach the Kansas Farmer office not later than one week in advance of publication date.

Because we maintain a livestock advertising department and because of our very low livestock advertising rate we do not carry livestock advertising on our Farmers' Market page.

If you have purebred livestock for sale write us for our special low livestock advertising rate. If you are planning a public sale write us immediately for our

SPECIAL PUBLIC SALE SERVICE

KANSAS FARMER
Topeka, Kansas

Jesse R. Johnson, Manager,
Livestock Advertising Department

KANSAS FARMER Publication Dates, 1940

April	6-20
May	4-18
June	1-15-29
July	13-27
August	10-24
September	7-21
October	5-19
November	2-16-30
December	14-28

Advertising

To insure being run in any issue, copy should be in our office one week in advance of any date given above.

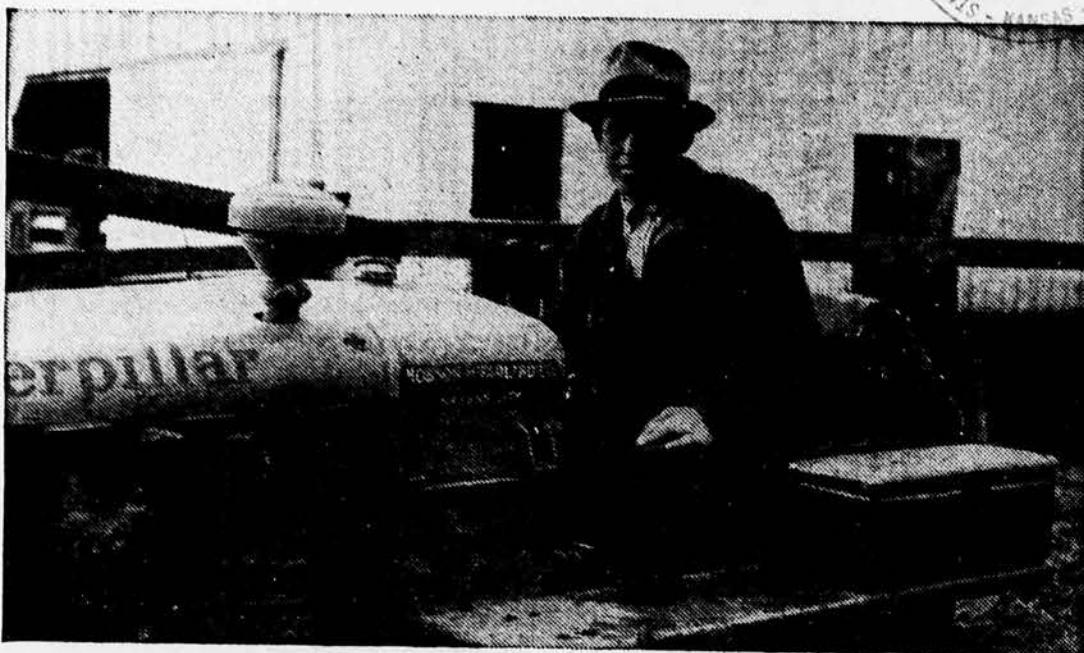
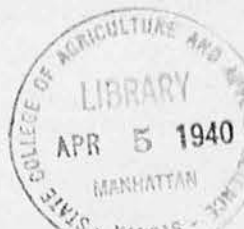


The Tank Truck

News from your Conoco Agent about Farm Fuels and Lubricants



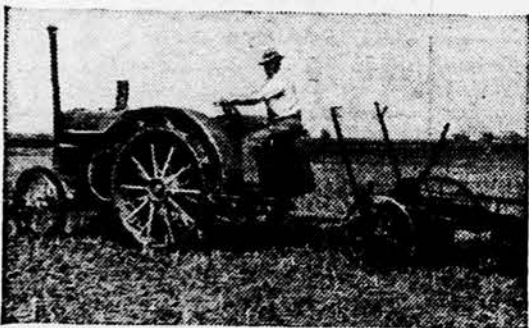
Start Right...and Save All Season!



Now when Spring is softening the furrows, H. S. Mann has 9 pieces of equipment ready to help farm his 500-acre Missouri tract... each one with its engine OIL-PLATED by Conoco Germ Processed motor oil. Three years ago he switched to Conoco products exclusively. Today, he reports that a lot of his friends and relatives are Conoco users on his recommendation.

SPRING thaws are a signal to shake the Winter screams out of muscles and machines... and there's no better way to get off on the right foot than by filling the crankcase with Conoco Germ Processed oil, to give your engine the extra protection of OIL-PLATING.

The difference OIL-PLATING makes, in both oil and operating costs, shows up in facts and figures you can put your finger on. For instance, H. S. Mann of Courtney, Mo., switched to Conoco Germ Processed oil a little over three years ago, and he reports, "By using Germ Processed oil I have averaged better than 50% longer use than with other products... have had easier starting and much better perform-



Thrifter operation is the reason Marvin Ray (above) keeps using Conoco Germ Processed oil. Like other farmers of long experience, he finds that OIL-PLATING keeps moving parts lubricated before any oil circulates... prevents bone-dry starts. And that helps the engine "keep fit", so it stays more economical on oil and fuel, too.

THAT'S AN IDEA

Do you know some handier way of doing things around a farm? Write your ideas to The Tank Truck, care of this paper. We will pay \$1.00 for each idea we publish.

To mend small holes in pails, etc., enlarge hole enough to insert knobbed end of common dress snap, then rivet it down... a quick, easy and lasting repair. Mrs. Grover Thompson, Dawson, Minn.

Nails will drive more easily into hard wood if they are first dipped in lubricating or machine oil. Mr. J. W. Duke, Jr., Lufkin, Texas.

Keep a small brush and oil cup in your tool shed. When you have used a plow or tool, brush a little oil on and it will be bright the next time you need it. Arvil Brown, Ozark, Ark.

ance. During three years of operating a Deere tractor, and two years with a 'Caterpillar', I have not spent one cent for repairs, and both are in good operating condition and do not use excessive oil even though they are operated on sandy soils."

That's a record you can take your hat off to—even if you're only going to scratch your head in amazement!

Of course, there's a reason—one reason that stands out above all others, and here it is: Patented Conoco Germ Processed oil gives the working parts of your engine a wondrous OIL-PLATING which can't go draining down—not even overnight or any of the time you're using Germ Processed oil. That means that your OIL-PLATED engine is never all unlubricated, in danger of damage or wear from starting up dry. The OIL-PLATING won't drain down when the engine stops; in fact, it can hardly be scraped off, and won't fly right off. It stays ready to lubricate whether your engine has been idle for weeks, or running all day.

Marvin Ray, another Conoco fact-finder who recently moved from the dust bowl proper to Lamar, Colorado, says, "Since overhauling my Deere tractor three years ago, I have used Conoco Germ Processed oil and have experienced the best service ever since. I have far less dilution while grinding hay during

which time I start and stop many times... I find that I can safely run 20% longer than with other oils... and tractor is very easy to turn over with the crank regardless of how long it has stood idle."

And so it goes. One farmer after another starts using Conoco Germ Processed oil... then as equipment rolls smoothly along into Summer, they all reap the profits of this engine-saving change. The OIL-PLATING that working parts get from Germ Processed oil has to stay up throughout the engine—united to inner engine surfaces—because the extra man-made substance in Germ Processed oil makes lubricant PLATE to metal as closely as tin is plated to your milk pail.

Thus, OIL-PLATING helps your engine resist a lot of the most destructive wear... not merely after the engine starts, but the split second anything moves!

Get in touch with your Conoco Agent for Germ Processed oil in barrels, 5-gallon buckets, or 5-quart and 1-quart dustproof cans. He can also supply you with Conoco Bronz-z-z gasoline, Conoco tractor fuels and Conoco greases.



Here are the Freestones of Vernal, Utah, greeting Tank Truck Salesman King with sort of a family turnout. Mr. Freestone says, "We have used Conoco Germ Processed oil exclusively for the past four years and have never experienced any difficulty due to faulty lubrication or engine trouble. It means a lot to know that the oil we use is reliable and safe under all conditions of hard work, long hours, and unfavorable weather." P.S. That's a 10-months prize steer that daughter Deon has roped.

The Grease Master Says:

A lot of wives may be wonderin' why all this talk about OIL-PLATING tractors and trucks. It's a sight more important, they say, to keep sewing machines, fans and things at home running nice and smooth. "Fine," says I, "just OIL-PLATE them with Conoco Germ Processed Home Oil. It comes in a handy little can, and just a squirt or two will do the trick. Keep them OIL-PLATED and you'll never have to worry about parts going dry because they stand idle. That's the secret of making 'em last!" So tie a string on your husband's finger and keep it there until he gets you a can of Conoco Home Oil.

ALWAYS AT YOUR SERVICE

Your Conoco Agent

CONOCO MOTOR FUELS
CONOCO MOTOR OILS
CONOCO GREASES

