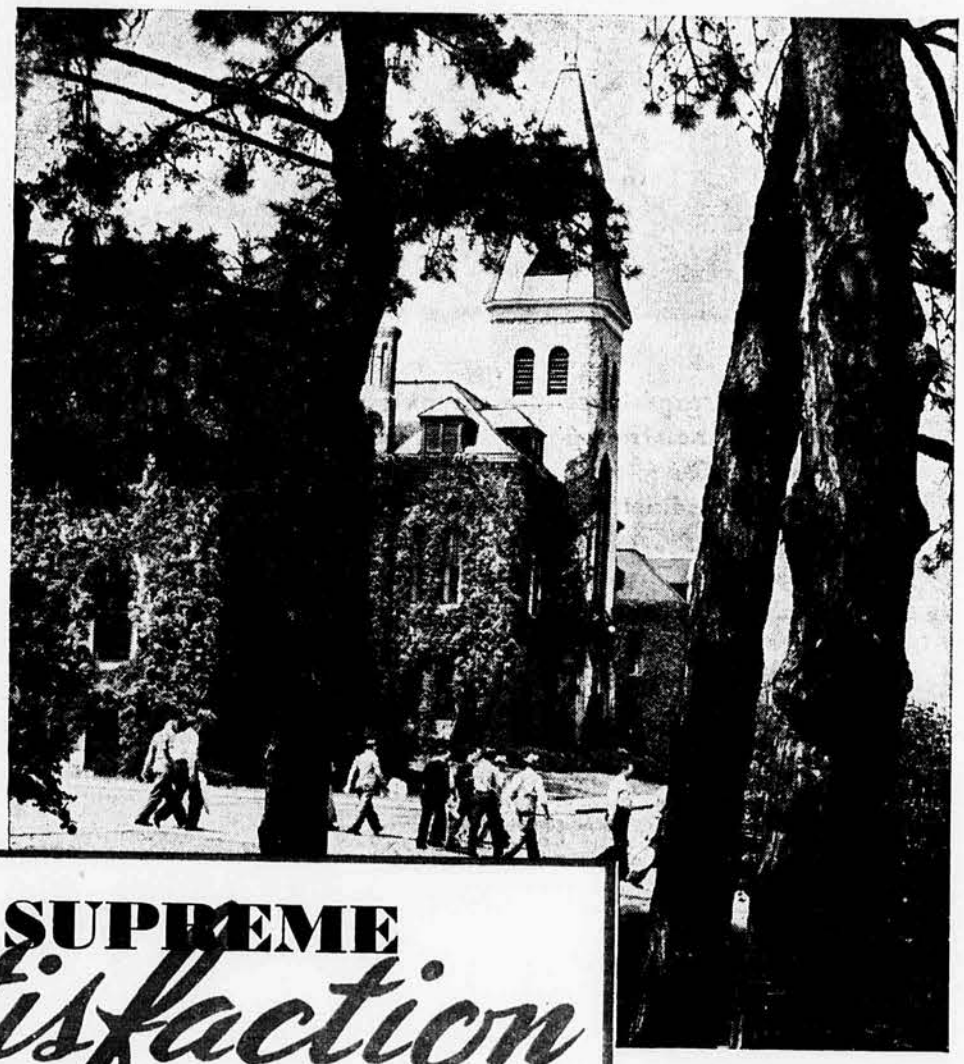
LIBRARY
MAR 3 1945
MANHATTAN
KANSAS STATE COLLEGE OF AGRICULTURE AND APPLIED SCIENCE
Cop 2

MARCH 3, 1945

# KANSAS FARMER

CONTINUING MAIL & BREEZE

Milton S. Eisenhower, president, Kansas State College, called off the 1945 Farm and Home Week because transportation has become one of the real bottlenecks in the war effort. He terms the event one of the most effective educational forces in our state.



A glimpse of familiar Anderson Hall, on the campus at Kansas State College. Here many new friends are made, old friendships renewed, especially during annual Farm and Home Week.

## A SUPREME *Satisfaction*

**By MILTON S. EISENHOWER**

***President, Kansas State College***

KANSANS are supporting the war effort with everything we have. Our crop and livestock production is breaking all records. Last year, for example, Kansas farmers produced nearly 200 million bushels of wheat, despite labor and other shortages. The labor supply was less than half normal, but somehow the work got done.

Kansas is not only producing food. The per capita war production of all types of war material in Kansas—from shells to airplanes and landing craft—is among the highest in America. And, of course, Kansas young people are serving with courage and distinction in every theater of war.

I sometimes think that of all the many things that must be done to win a war, farming gets the least recognition. There are awards for our fighting men—and they are richly deserved. There are awards for high production in our war plants—and they, too, are deserved. There are no awards, in the usual sense, in farming.

I say there are no awards in the usual sense. But there is something else. There is a supreme inner satisfaction in knowing that the work being done on our farms, under enormous handicaps, is producing the food and fiber needed by our fighters, our workers, and our Allies. We know that food is helping win the war. We know, too, that it will be a powerful influence in determining the peace. Farmers are all doing their patriotic duty with the same devotion and the same grim determination as are our men and women in uniform.

Because transportation in this country has become a key war problem, the Office of Defense Transportation in Washington, determined that our Farm and Home Week would have to be canceled. And if transportation is the newest difficulty, we'll help solve that problem, too—we'll help solve it in the same spirit of co-operation and determination Kansans have shown in handling all other war problems. Because Kansans are supporting the war effort with everything we have.

## *'Miniature' Farm and Home Week*

**YOU couldn't go to Farm and Home Week at Kansas State College, Manhattan, in February. Unfortunately, this helpful, interesting annual event, regularly attended by hundreds of Kansas farmers, had to be canceled. It was called off in full co-operation with our war effort.**

**For 77 years this special week has been set aside by Kansas State College for presentation of up-to-the-minute information, based on scientific research and on-the-farm results, regarding crops, livestock, farm problems, and many other phases of rural living.**

**Giving up Farm and Home Week is a real sacrifice on the part of Kansas farmers. Nothing can adequately take its place. However, endeavoring to fill the gap left by absence of this worth-while meeting of farm people, KANSAS FARMER in this issue attempts to bring you a "miniature" Farm and Home Week, by presenting briefly some of the things Kansas State College would have told visitors had Farm and Home Week been held as usual. In dedicating this issue to Farm and Home Week that couldn't be, the editors of Kansas Farmer respectfully acknowledge the indebtedness to the College of Agriculture staff for co-operation in preparing this material.**

# OTHERS IMITATE—

## But There's Only ONE GROUND GRIP TRACTOR TIRE...

# Firestone

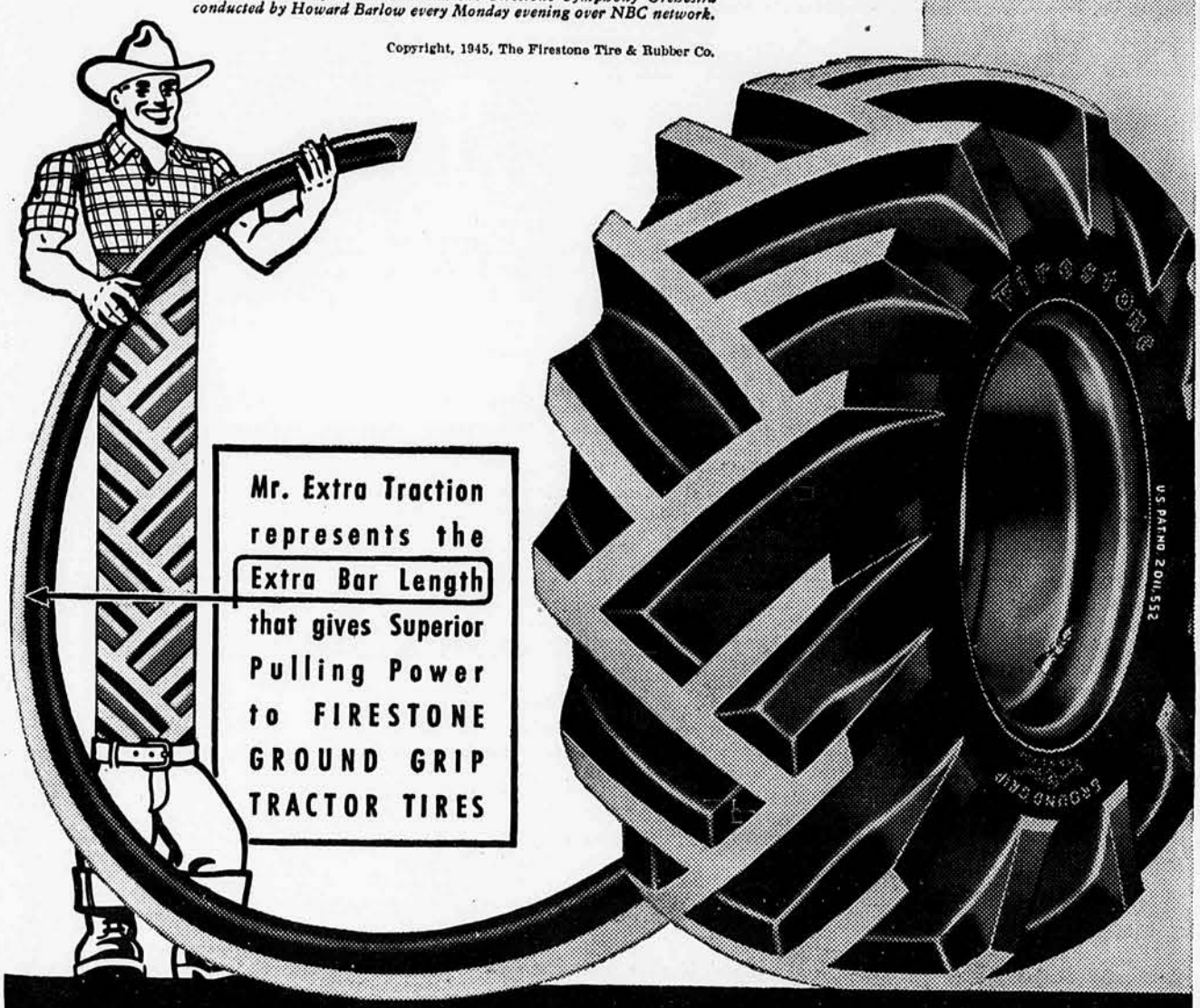
YEARS of time and experience prove that Firestone Ground Grip tractor tires outpull any other tractor tires in any soil condition any time, anywhere. Obviously, others would like to duplicate the Firestone Ground Grip design but they can only imitate it . . . because the Ground Grip design is patented.

Put your tractor on Firestone Ground Grip tires and get up to 16% extra pull at the drawbar. The patented Ground Grip tread has up to 215 extra inches of traction bar length per tractor. No wonder it pulls better. It has no broken center tread bars. That means no traction leaks. It has no trash-catching bar stubs. Of course, it cleans better.

Be sure you get patented Firestone Ground Grip tractor tires. Don't compromise with imitations.

*For the best in music, listen to the "Voice of Firestone" with Richard Crooks and Gladys Swarthout and the Firestone Symphony Orchestra conducted by Howard Barlow every Monday evening over NBC network.*

Copyright, 1945, The Firestone Tire & Rubber Co.




FIRESTONE PUT THE FARM ON RUBBER


## Sweet Spuds Can Pinch-Hit

*By WILLIAM G. AMSTEIN, K. S. C.*

LAST year it was apparent early in the summer that the Kansas Irish potato crop was going to be very poor both in quantity and quality. There still was time to have made greater use of sweet potatoes than was commonly practiced. Plantings made even as late as July 1 will give useful yields most years, and made by June 1 will do even better.

In Eastern Kansas, and as far west as Hutchinson, Nancy Hall and Little Stem Jersey types both can be grown most successfully. In sandy soils in sections west of this area, especially along the rivers, these same varieties do well.

On heavier soils and in western counties, a type known as Red Bermuda is more commonly grown. Red Bermuda is prized principally because of its ability to grow and yield under a wide variety of moisture and soil conditions. In fact, it will grow on soil that is far from a sweet potato type.

Two strains well adapted in Eastern and Central Kansas are the Nancy Gold and the Orange Little Stem.

So farm and town families may obtain plants of these more desirable and newer sweet potatoes, it will be necessary for you to make arrangements for seed stock for bedding of plants fairly early. Some of them are not too plentiful, and if one waits until planting time in May or June, they may be difficult to get. Therefore, why not let your sweet potato plant grower know now what varieties or strains you want so he in turn can locate a supply of seed of these varieties in plenty of time for bedding.

By the way, sweet potatoes most often are considered the same as beans, peas, tomatoes or corn in planning the meal, but should take the place of Irish potatoes.

## High Honor Students

As usual, during Farm and Home Week, outstanding students from each undergraduate and graduate school of the college were to be publicly recognized. Students earning the honors this time include Harold Leroy Hackerott, Alton, School of Agriculture; Ethelinda D. Parrish, Manhattan, School of Arts and Sciences; Thelma Jean Wise, Wichita, School of Engineering and Architecture; Jacob Eugene Mosier, Hoxie, School of Veterinary Medicine; Thomas Radford Thomson, Alameda, Calif., Graduate School; and Mary Alice Doll, Larned, School of Home Economics.

## Pitchfork Cushion

Pitchforks are dangerous if left lying around so we make a pincushion for them by filling a gunny sack with straw and nailing it in a handy place on the barn wall.—L. R. E.

## Senator Capper on Radio

Every Sunday afternoon at 4:45 o'clock Senator Arthur Capper discusses national questions over WIBW radio station.


# KANSAS FARMER

*Continuing Mail & Breeze*

Topeka, Kansas

Vol. 82, No. 5

ARTHUR CAPPER — Publisher
H. S. BLAKE — General Manager

Raymond H. Gilkeson ..... Editor
Dick Mann ..... Associate Editor
Cecil Barger ..... Associate Editor
(On Leave—Army)
Florence McKinney ..... Women's Editor
Dr. C. H. Lerrigo ..... Medical Department
James S. Brazelton ..... Horticulture
Mrs. Henry Farnsworth ..... Poultry
Jesse R. Johnson ..... Livestock Editor
J. M. Parks ..... Protective Service
Roy R. Moore ..... Advertising Manager
R. W. Wohlford ..... Circulation Manager

Member: Audit Bureau of Circulations, Agricultural Publishers Association, National Publishers Association.

Published the first and third Saturdays each month at Eighth and Jackson streets, Topeka, Kan., U. S. A. Entered as second class matter at the post office Topeka, Kan., U. S. A., under Act of Congress of March 3, 1879.

Five years, $1; one year, 25 cents.

STATE COLLEGE LIBRARY MAR 3 1945 MANHATTAN KANSAS

# FARMALL—
## the Key to Farm Production

AMERICA'S FARMERS have been able to astound the world because they are mechanized. They have harnessed machines to carry them through the cycle of the seasons—seed-time to harvest-time—and harvest-time back to seed-time.

Power farming has become an integral part of the nation's mechanized might.

This mechanization of the American farm has long been in the making. Twenty-one years ago International Harvester accelerated the advance with the introduction of the Farmall Tractor . . . the *first* all-purpose tractor adaptable to all kinds of farming. It brought the economy and efficiency of power farming to small farms as well as large. With it came equipment developed from the ground up to do specific jobs. Farmall came to mean a system of farming . . . the Farmall System.

Farmall was FIRST. Farmall IS first today. The vast majority of farmers who farm with power rely on the Farmall System.

PROGRESS is a watchword of the International Harvester dealers and the farmers of the nation. Look to Farmall for leadership in the great power-farming developments to come.

INTERNATIONAL HARVESTER COMPANY, 180 N. Michigan Ave., Chicago 1, Ill.

**INTERNATIONAL HARVESTER**

**Cut and Sell Your Pulpwood and Sawlogs—for War**

BUY MORE WAR BONDS AND KEEP THEM!

RIGHT now—with new machinery almost impossible to get, and a tremendous job still ahead—your truck, tractor and other equipment must have *special* care.

Quaker State HD Oil was specially developed to meet just such vital, heavy-duty needs. *There's an "invisible mechanic" in every quart*—a remarkable cleansing agent that prevents the accumulation of sludge and varnish, thus eliminating the causes of many an expensive, time-wasting breakdown.

Quaker State HD Oil is made only from pure Pennsylvania grade crude oil. Its quality and stability are assured by the most skillful refining methods known to modern science. Money can't buy better oil than Quaker State HD Oil, for no oil *stands up* better—even under the toughest operating conditions.

To keep *your* precious equipment working harder, *longer*, it's worth insisting on Quaker State HD . . . the oil with the "invisible mechanic" in every quart!

**QUAKER STATE**

**HD OILS** FOR YOUR TRUCKS AND TRACTORS

**MOTOR OIL** FOR YOUR AUTOMOBILE

# Seed Certification Increases

*By A. L. CLAPP, K. S. C.*

THE job of maintaining a good supply of pure seed of crop varieties best adapted to Kansas is delegated to The Kansas Crop Improvement Association thru authority given by the 1937 Kansas legislature. This responsibility, carried out thru a system of seed history, and field and seed inspection, is called "Seed Certification."

During 1944, some 798 Kansas farmers living in 96 counties produced certified seed. This is the largest membership the association has had, and is 163 more members than last year. This increase indicates a growing interest in certified seed thruout Kansas.

During the year, 1,445 fields containing 28,075 acres of crops were inspected for certification. This is a larger number of fields and a greater acreage than have been inspected in any previous year.

As certified seed production and use become more of an established practice, growers are making certified seed production a major farm enterprise. These growers do not produce certified seed of only one crop, but certify all grain crops grown on the farm if they can.

J. E. Sowder, of Toronto, is one of this type of producers. We inspected the following acreage for certification on Mr. Sowder's place last year: Fulton oats, 23½ acres; atlas sorgo, 156 acres; blackhull kafir, 53 acres; and Hongkong soybeans, 34 acres. Other large and diversified producers of certified seeds are: F. J. Raleigh, Clyde; F. W. Chamberlin and Son, Carbondale; Harold Staadt, Ottawa; A. F. Schoenig, Walnut; Howard Hanson, Topeka; Claassen Brothers, Whitewater; C. C. Cunningham, El Dorado; Charles Topping, Lawrence; and Brune Brothers, Lawrence.

Acreage of certified hybrid seed corn was increased in 1944, and prospects are for a big increase in production of certified seed of Kansas hybrids in 1945.

Nearly 61,000 Kansas Certification Seed tags were used by growers in 1944. The purchaser of certified seed should insist on the seed being tagged with the certification tag. By attaching this tag to the bag the grower guarantees to the purchaser that the seed is as good as the tag indicates.

Official Kansas Crop Improvement Association metal seals, bearing the initials K. C. I. A., are used to close bags when the seed is handled by a third party if the seed is to retain its certification. Seed going direct from the grower to the planter does not need to be sealed; 26,767 of these seals were used on Kansas certified seed in 1944.

A. L. Clapp

Fifty-five crop varieties are eligible for certification in Kansas. These have all been recommended for growing in some section of the state by the Kansas Agricultural Experiment Station. In 1944, the first fields of Neosho and Osage oats, Pawnee and Comanche wheat and Midland sorghum were certified for growers. In 1945, there will be a good seed supply of these.

The Kansas Crop Improvement Association co-operates with similar certifying agencies in 35 other states, and the Canadian Seed Growers Association in standardizing seed certification methods. This is essential in order to promote free interchange of seed of desirable varieties over North America.

Standards for certified seed are outlined by the officers of the association, who are elected by the members. It is the duty of the members to produce and distribute seed that is as good or better than these standards. It is the duty of the association to help the members learn how to produce and process seed so that it will meet these standards.

# For Accuracy in Seed Testing

*By J. W. ZAHNLEY, K. S. C.*

SEED testing has become almost a universal precaution against crop failure. All 48 states have passed laws pertaining to seed testing and the regulation of sale of seed within their borders. The Federal Seed Act offers further protection against interstate movement of low-quality seed. Information regarding suitable methods of testing seed has been widely disseminated. In Kansas a "Seed Testing Primer," published by the State Board of Agriculture, is a good example of the effort being made to provide simple directions.

Obtaining a representative sample is just as important as testing. A single illustration will serve to emphasize that fact. Not long ago a farmer in Central Kansas had a bin containing 1,200 bushels of oats which he expected to sell for seed. He tested a sample from a handful he obtained from the top of the bin by reaching in the door. The test showed 97 per cent germination. Later, the county agent obtained a sample from several parts of the bin and the test was 28 per cent. This wide discrepancy called for further investigation. Final result showed that germination in the center of the bulk was 0, while that near the top was near 100 per cent, and the average of the entire lot was 6 per cent. The oats had heated in the center of the bulk.

Importance of exercising great care in obtaining a representative sample can scarcely be realized without first considering the extreme smallness of the sample actually tested. The best seed laboratories count at random 4 samples of 100 seeds each from the sample submitted for test. In the case of alfalfa seed, these 400 seeds represent less than 1/500 of a pound. There are, therefore, more than 30,000 such samples in a bushel. Now, let us look at the purity test: The standard-size sample of alfalfa to be tested for purity is 5 grams, which is less than ⅙-ounce. There are 91 such samples in a pound and more than 5,400 such samples in a bushel. It should be evident from these figures that the sample tested must be obtained with great care or the test will be of little value.

In determining presence of weed seed, samples about 20 times as large as the small amount used for determining other impurities are used. In cases of question regarding presence of certain noxious weeds, quantities 100 times as great as the standard working sample are examined. Even then the weed seed might be missed if there are only a very small number to the bushel of the crop seed.

If the seed to be tested is in bags, nothing short of a representative sample from every bag and these samples thoroly mixed could provide a single sample that would be representative of the lot. Since portions of the field differ in the kind and quantity of weeds and quality of the crop, only thoro blending of the the seed from all parts of the field can produce a fair average test.

The State Seed Laboratory does not certify seed. The only seed-certifying agency in Kansas is the Kansas Crop Improvement Association.

STATE BOARD OF AGRICULTURE 8 1945 MANHATTAN KANSAS

# Keeping Up With Crop Varieties

*By R. I. THROCKMORTON, K. S. C.*

THE Kansas Experiment Station, in co-operation with the U. S. Department of Agriculture, has developed 2 new varieties of oats which have been named Osage and Neosho. Both are high yielding, good quality varieties and have combined resistance to the common races of smuts and rusts of this area.

Osage has short, stiff straw, yellow grain, fair test weight, high yielding capacity, and will mature at about the same time as Kanota. In all tests conducted at the Kansas Experiment Station from 1941 to 1944, Osage has produced an average of 54.5 bushels an acre as compared with 39.2 bushels for Kanota. The average test weight has been 30.3 pounds while that of Kanota has been 29.7. This is an increase of 15.3 bushels an acre in yield. Osage stands up sufficiently well to be adapted to combine harvesting. There should be some 7,000 bushels of Osage seed for distribution in 1946.

Neosho has stiff straw, light red grain, good test weight, and good yielding ability. It matures slightly later than Kanota. This variety also will stand up for combine harvesting. Average yield of Neosho has been about 1.5 bushels less to the acre than Osage, but test weight has been 1½ pounds higher than Osage, and the variety is even more resistant to lodging than is Osage. There should be some 20,000 bushels available for planting in 1946.

### Seek Resistance to Lodging

The Early Kalo variety of grain sorghum has high yielding capacity and attractive grain but is highly susceptible to lodging. Farmers have wanted a variety similar to Early Kalo but having resistance to lodging. There also has been need for a combine variety of grain sorghum to fill the gap between the area of best adaptation of Westland on the south and Colby on the north. Midland, a new combine type of grain sorghum, developed by A. F. Swanson, U. S. Department of Agriculture, working at the Hays Experiment Station, shows much promise of meeting these needs. This variety was formerly known as Kalo Selection 617. It is midearly, maturing in 95 to 105 days, ranges from 38 to 45 inches in height, and the heads are elongated and of an attractive color. The variety is high yielding and resistant to milo disease and has considerable resistance to weak-neck, a disease which causes the heads to break over. It has high resistance to lodging and can be harvested with the combine or row binder. The stalks of Midland are somewhat juicy and the standing stover is relished by cattle when grazed following combining. With satisfactory conditions for sorghum production during 1945, ample seed supplies should be available in 1946.

Three new varieties of wheat have been released during the last 2 years. These are: Pawnee, Comanche and Wichita. Pawnee wheat has high yielding capacity, high test weight, short stiff straw, high resistance to loose smut, and moderate resistance to leaf rust, stem rust, bunt and Hessian fly. It has good milling qualities and has proved satisfactory in breadmaking trials. Pawnee has its best adaptation in the eastern half of the state.

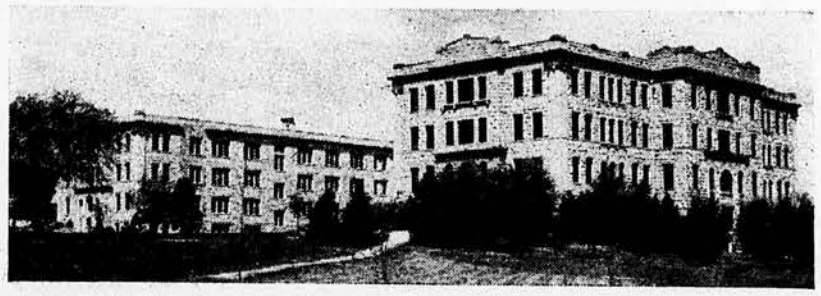
Comanche wheat has high yielding capacity, good test weight, stiff straw, and milling and baking qualities equal to Tenmarq. It has high resistance to many races of stinking smut, and considerable resistance to leaf rust. Comanche is not resistant to stem rust but does have more tolerance to this disease than do the commercial hard-wheat varieties now commonly grown in Kansas. Comanche appears to be best adapted to Southwest Kansas.

Wichita wheat was developed to meet the demand for an early maturing variety of higher producing capacity and better quality than Early Blackhull. It has good yielding capacity, high test weight, good straw and better baking characteristics than Early Blackhull. Wichita does not produce as high yields as Pawnee and Comanche, and will not compete with the varieties maturing at about the normal time. It will have its greatest value on farms where it is desirable to seed a part of the acreage to an early-maturing variety to spread the harvest period. Seed supplies will be limited at least until 1946.

Buffalo alfalfa is a relatively new variety having much more resistance to bacterial wilt than do the varieties commonly grown in Kansas. It has good hay and seed-producing capacity and, because of resistance to bacterial wilt, stands of Buffalo alfalfa can be maintained for a longer time than common varieties. The new variety has wide adaptation thruout Central and Eastern United States. From present indications we may expect Buffalo alfalfa to replace Kansas Common in Kansas and in most other states as soon as seed supplies will permit.

In addition, there are 3 new varieties of native grasses that show much promise and that have been approved by the experiment station.

R. I. Throckmorton



Familiar sight to thousands of Kansas farmers thruout the state are East and West Wings of Waters Hall on the campus at Kansas State College, Manhattan. Here from year to year during Farm and Home Week, hundreds of the state's leading livestock and crop growers gather to hear the latest findings in careful experimental work carried on by scientists at the college.

# It's the Way You Plant Them

*By RALPH L. PARKER, K. S. C.*

WHEN planting an orchard, whether it be apples, plums, pears or cherries, a knowledge of the sterility in the various varieties should be known. In this way, plant arrangements can be adapted to take best advantage of cross-pollination at the time of bearing. Pollination in the spring by honeybees is ineffective for more than 100 to 200 feet from a colony, or one colony to the acre. In the planting arrangement, self-sterile varieties should be planted to avoid large blocks of such groups.

Cultivation of a self-sterile variety or intersterile varieties is decidedly unprofitable and is a disappointment at the time of bearing, unless planted in conjunction with other varieties with which they are cross-fertile. When large blocks of any one variety or intersterile varieties are planted together, small or disappointing crops are the result. Examples in the apple of self-sterile groups are the Winesap, group, which include the Stayman Winesap, Arkansas, Arkansas Black, and the Winesap. Such varieties of apples should be interplanted with other limited self-fertile varieties, such as Jonathan, Grimes, Delicious, Rome, York and Ben Davis. These latter varieties are to some extent self-fertile.

Without a knowledge of the sterility of fruits, selection of varieties for planting and other arrangements in the orchard cannot be satisfactorily practiced. One plan of planting, if Winesaps are to be the main winter apple, is to interplant with Delicious, Jonathan or Ben Davis. The usual plan of planting is to use 3 rows of the main variety, then 3 rows of a pollinating variety, and continue to alternate, or other varieties may be used to build up the commercial orchard with desirable varieties. Good pollinizers among the apples are Jonathan, Delicious, Ben Davis, Grimes and Rome. One difficulty with the Rome variety is its variable time of blooming. For the early apples, the Duchess, Wealthy, and Yellow Transparent are good pollinizers.

All pear orchards should be interplanted with 2 or more varieties. For good cross-pollination, the Bartlett and Seckel pears, being sterile, need a pollinator such as the Bosc.

Most of the peaches are self-fertile and do not need to be interplanted for effective cross-pollination. One exception is the Hale, which is self-sterile and needs to be planted with another variety for cross-pollination.

All sweet cherries are self-sterile and intersterile and need to be interplanted with sour cherries for good cross-pollination. All sour cherries are self-fertile and may be planted in large blocks.

Nearly all varieties of cultivated grapes are self-fertile and may be planted in large blocks, but there is one exception; namely, the Brighton, a white grape which is self-sterile.

With the progressive and thinking orchardist, it has become a necessity for him to use colonies of bees for cross-pollination purposes. The beekeeper, skilled in management and production of strong colonies and also a honey producer, is called upon to supply the necessary colonies of bees.

Colonies in the orchard should be distributed so they will not interfere with orchard operations, at the rate of one colony an acre, or one colony for every 200 feet in a row of trees. These colonies should be placed near the pollinizing variety for most effective action. The colonies should face south or east, with a very slight slope of the hive-colony to the front.

Rufus F. Cox

# When Lambs Gain More

*By RUFUS F. COX, K. S. C.*

WESTERN lambs at Kansas State College are being fed rations arranged to test the effect of physical balance of the ration on its value to the animal. In 8 previous experiments it has been shown that rations for fattening lambs can be too concentrated as well as being too bulky. In other words, lambs gained more and made cheaper gains as the concentration of the ration increased and approached an optimum, but decreased after that point as the ration became more concentrated.

In experiments at Manhattan this year an effort is being made to find the reason for the greater efficiency of rations of medium concentration. Three lots of lambs are being fed rations of 3 degrees of concentration. All lots receive an equal amount of nutrients in corn and cottonseed meal. For bulk or roughage they are being fed paper pulp in varying amounts. Digestion trials will be run on the 3 rations, and a study will be made of bacterial action in the paunch of the lambs, since this is an important aid to digestion in ruminants.

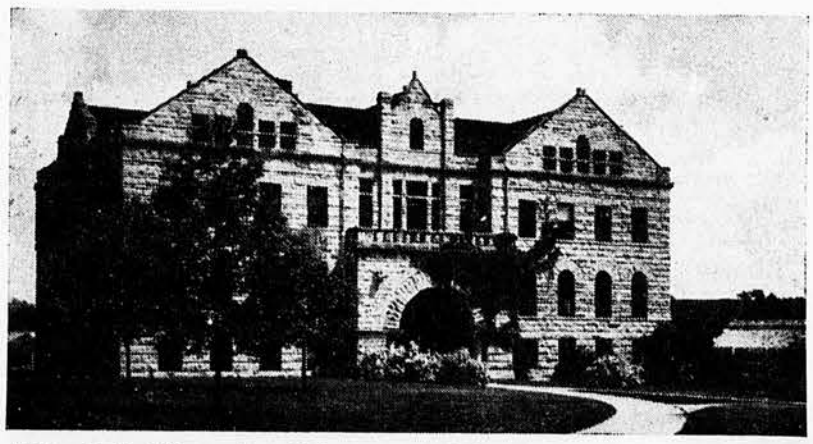
The Animal Husbandry Department and the Garden City Experiment Station are co-operating again this year in feeding 500 lambs experimentally. Tests are being made of various types of sorghum grain and roughage, such as Finney, Westland and Leoti-Atlas cross. Wheat pasture studies for fattening lambs also are in progress at that station for the sixth year, and many interesting facts have been learned.

At Kansas State College, flocks of 5 breeds of purebred sheep are maintained for classroom and experimental purposes.

Kansas farmers are invited to address inquiries to the Animal Husbandry Department for further details concerning the work of the department in sheep investigations.

## Prevents Wasting Seed

When sowing small garden seed, I put the seed in a salt shaker so as not to waste any by sowing too thickly.—Mrs. Wayne Thompson.



Dickens Hall, at Kansas State College, center of all experimental work in horticulture. If you wish to get started with an orchard or small fruit, you can depend on the college for the right kind of information to fit your needs..

# FARM MATTERS
## *As I See Them*

DESPITE the shortage of meats for civilians the coming months, I do not look for the Government to try to increase livestock production this year—unless the European war should surprise everyone by being prolonged into the summer or fall. Present high meat requirements are believed to be a short-time proposition, due to immediate heavy demands for the Army.

I cannot help but feel that Washington is playing the shortages in every line for all they are worth, in an effort to get some desired legislation thru Congress while keeping the country keenly aware that the "war is on."

• •

In my opinion it would have been a good thing to have closed the night clubs (after midnight) much earlier in the war. And another thing. The Office of Price Administration has served notice that there will be one third less sugar for home canning this year than was used last year. It seems to me it would be more in line with realities, if the allowance of sugar for beverage alcohol was reduced, instead of the allocation for home canning.

At the same time the OPA is cutting down on sugar for home canning, War Food Administration is planning a nation-wide drive for more Victory gardens this year, to meet the withdrawal of more commercially produced vegetables for canning to meet war needs. The acreage for vegetables for canning has been increased by WFA from 2,010,000 acres to 2,155,000 acres.

• •

Some idea of what the people of the United States have taken on may be gained from the announcements that much more food and clothing and other necessities for Italy, France and other liberated areas must be provided from America, or there will be civil wars and revolutions that will necessitate much larger armed forces to keep order in that unhappy continent.

If the need for all this additional food production is as critical as we are being told, the wisdom of the Administration's virtually repealing the Tydings amendment to the Selective Service Act, so as to take into the armed forces all able-bodied farmers from 18 thru 25 years, seems to me more than doubtful. Especially since the increased demands for steel for military purposes threaten to cut farm machinery production considerably below schedules. And the schedules were not adequate to meet farm machinery needs.

• •

I am not at all enthusiastic about the results of the meeting of the "Big Three"—President Roosevelt, Prime Minister Churchill and Marshal Stalin—at Yalta. I very much fear that putting several million Poles under Russian government, and then placing still more Germans under Polish rule, will tend to breed more wars rather than a just and lasting peace for Europe.

If the superstructure built at San Francisco next month on the Dumbarton Oaks foundation simmers down to the United States by treaty contracting to preserve these new boundary lines in Europe, as well as colonial possessions of European nations over the rest of the world, it is going to be a hard job for me to vote to ratify that treaty. I am hoping that the plan for the world security league finally worked out, looks more like a lasting peace than what has come out so far from Moscow, Teheran and Yalta would indicate.

• •

Congress in the next few weeks also will be called upon to increase the statutory debt limit to $300,000,000,000. As Congressman Frank Carlson puts it, that amounts to telling 30 million families in the United States that they have a governmental debt of $10,000 each to carry, in addition to any debts of their own they may have to carry. And right after that, the Senate will be asked to approve the Bretton Woods program for an international bank and an international monetary fund, finances of both to be underwritten largely by the United States.

And sandwiched in between these is legislation to still further devalue the dollar—that is what it amounts to—by lowering Federal Reserve requirements from 40 per cent gold back of its notes and 35 per cent back of member bank deposits, to 25 per cent reserve for each. Taken together with the nearly $100,000,000,000 of backed-up purchasing power, these inflationary forces will in turn call for retaining all sorts of government controls far into the postwar period, if we are not to have a wild inflation and then a disastrous smash.

• •

### An Aid to Progress

I WISH to add my sincere appreciation, in this issue of Kansas Farmer, for Farm and Home Week which is held—except under emergency conditions—every year by Kansas State College on the campus at Manhattan. It is regrettable this important week of farm meetings had to be canceled this winter, because I know it means a great deal to hundreds of farmers who gather there from every county in the state to get the latest information, based on scientific research and practical application of new findings; and, what is just as important, to exchange ideas and experiences with one another. The silver lining in this case is the fact that Farm and Home Week is only a temporary wartime casualty. I sincerely hope it may be resumed in another year; that war will be ended, and we can get ahead with building a better, stronger nation.

It is a satisfying thought to me that Farm and Home Week would have celebrated its 77th session this year. It is symbolic of the stability and security of agriculture itself. It bespeaks sincerity of purpose of those who have dedicated their lives to discovering better, more efficient ways of doing things on the farm; of finding new values in farm living. Without Farm and Home Week I am sure agricultural progress in Kansas would have lacked something. Its value is evinced by its long life and large attendance. I congratulate the college authorities and the many co-operating farmers who have made it so successful.

Now, I want to add right here that this special week is only one of the valuable services Kansas State College renders. The college is there every day in the year to serve farm people. I hope every farmer will feel he can call on this great institution any time for help and information. It is in fact your agricultural college. I like to think that as farmers serve the nation in normal times or in emergency, so Kansas State College and our experiment stations serve farmers of the state.

Kansas State College has had a wonderful past. Its accomplishments are legion. Because of its efforts every crop in the state has been improved. We have better varieties of grain and can grow more bushels to the acre than ever before. We also have learned how to utilize those crops to better advantage. Because of the college, every breed of livestock in the state has been improved. We have better animals and know how to feed them for better results. And the college has turned out trained men who know how to take advantage of improved crops and livestock and go ahead making them still better. The college has graduated fine, cultured farm women who conduct their homes with all the dignity that is the rich heritage of rural life.

The fact is there isn't anyone living in Kansas who hasn't been helped by the outstanding work of Kansas State College.

• •

Grand as this past record stands, I am convinced the future for Kansas State College holds far greater possibilities. It will play an important part in improving rural housing; in utilizing electricity and quick-freezing to best advantage; in the whole scheme of rural living. One of its immediate jobs, however, will be training returning servicemen. This is a tremendously important opportunity, and I am confident our college will live up to it in full measure.

I believe agricultural training will be popular after the war. Especially if the college program is revamped, as I am sure it will be, to meet the needs of returning veterans. I can visualize our college revising and adding shorter courses to train men for specific jobs in the shortest possible time. Aptitude tests might very well provide entrance requirements. A 1-year or 2-year course to train students in agriculture only, might be advisable. Also suggested are courses arranged so returned veterans can operate farms in spring and summer, and attend 60-day short courses in slack winter months. Accustomed to refresher courses in our land and sea forces, some of our returning men might find refresher courses in agriculture highly advantageous. Indeed, our College of Agriculture has a great future of usefulness in the nation's most promising state.

Arthur Capper

Washington, D. C.

# What the "Big Three" Did at Yalta

*By CLIF STRATTON*

*Kansas Farmer's Washington Correspondent*

WASHINGTON, D. C.—Probably by the time this is in print Prime Minister Churchill, thru a speech and the "give and take" of questioning in the House of Commons, will have given Americans as well as Britains more details of what was accomplished at the Crimean, or Yalta, conference of the Big Three in early February. And perhaps by that time President Roosevelt, thru a statement to Congress or another fireside chat, will have given in more detail what was done.

From the official pronouncement following the conference, and some other sources, the conference agreements seem to have amounted to this—on the supposition that no secret agreements or commitments, such as last year at Teheran, were entered into:

President Roosevelt, Prime Minister Churchill and Marshal Stalin agreed, and issued a signed statement to that effect, that the war against Germany will be pursued relentlessly; that Germany's ability to prepare for another war will be destroyed; that Poland will get a big slice of Germany; that Russia, Britain and the United States each will occupy parts of Germany in the immediate postwar period (probably France will be given a slice temporarily, perhaps permanently) with a joint commission at Berlin to supervise the armies of occupation policies; that there will be reparations in kind, including German labor, for reconstruction in some of the countries Germany has occupied; that severe punishments will be meted out to war-guilty Germans.

Russia's program for Poland, the Balkans and the Baltic states was accepted by Mr. Roosevelt and Mr. Churchill, including the partition of prewar Poland between Russia and the Soviet-dominated Polish government set up by Russia. In return, Marshal Stalin agreed that in the future Poland and the Balkan liberated countries will be allowed to establish the kind of democratic government and the governments they desire, by plebiscites; democratic governments are described as "non-Facist, non-Nazi" governments. This had been agreed upon at Teheran, but not formally announced until after Yalta.

The Big Three have agreed upon a voting procedure for the executive council of the new World Security League envisioned in the Dumbarton Oaks proposals. In effect, members of the council will be allowed to discuss matters affecting the major powers—Russia, Britain, the United States, probably France and China. But any punitive measures—use of sanctions or military force—against any of the major powers cannot be taken without the consent of that major power.

The effect of this is, of course, that whatever international police powers

(Continued on Page 17)

MAR 3 1945 MANHATTAN KANSAS STATE COLLEGE LIBRARY



# A Peek in the Hog Barn

*By C. E. AUBEL, K. S. C.*

AFFAIRS we are concentrating on now at the college hog barn are along 2 lines: breeding herd lines and experimental feeding and breeding. We are maintaining 2 breeds, Poland Chinas and Durocs, and are trying to develop and improve our stocks of these along the lines of the accepted modern type. At present each herd consists of about 15 breeding females headed by as good boars as we can purchase. After selecting some of the very best of the offspring each spring and fall for breeding herd replacement, and for use in judging classes for our students, the remainder are placed in lots for experimental feeding and breeding.

In experimental feeding we have 2 projects going on at present. In one we are trying to obtain information on the maximum use of alfalfa hay in protein supplement mixtures for fattening pigs in the dry lot. This experiment involves 6 lots, with 10 pigs in each lot. In lot 1, we are feeding the Kansas standard fattening ration of corn, tankage, and alfalfa hay all self-fed. In lot 2, we are self-feeding corn and a 47 per cent protein supplement made up of meat scraps 20 per cent, fish meal 20 per cent, soybean oil meal 40 per cent, cottonseed meal 10 per cent, and alfalfa leaf meal 10 per cent. In lot 3, we feed the same protein supplement without the alfalfa meal, and are giving the hogs free access to alfalfa hay thus seeing whether the alfalfa hay will replace the meal. In lot 4, we are feeding a protein supplement mixture of 46 per cent protein made up of meat scraps 40 per cent, soybean oil meal 50 per cent, and alfalfa leaf meal 10 per cent. Lot 5, gets the same mixture except no alfalfa meal, but is allowed free access to alfalfa hay. Lot 6, is getting a balanced grain ration of ground corn 75 per cent, 10 per cent soybean oil meal, and 15 per cent of chopped alfalfa.

C. E. Aubel

These experiments should be of considerable value and interest to the commercial feeder, as the rations in use are very practical and should prove very economical.

### Test on Minerals

Another feeding experiment of more interest from a fundamental nutrition standpoint, concerns an attempt to determine the exact minimum requirements of the minerals calcium and phosphorus, and their interrelations in the ration of growing and fattening swine. In this experiment we are feeding 17 pigs individually in 3 different lots or on 3 different levels of calcium and phosphorous.

We are not fitting a show herd this year, but plan to continue with one when circumstances will permit.

We have at the barn also an interesting boar involved in a breeding experiment which is known as Minnesota No. 1. It is one produced by the University of Minnesota, working under the jurisdiction of the Regional Swine Breeding Laboratory of the U. S. D. A. This boar is the result of a cross between the Tamworth, a red bacon-type hog, and the Landrace, a white Danish breed brought to this country a few years ago to use in improving breeds here. The offspring from this cross, after some back-crossing on the original stock, is a red hog, sometimes with black spots. The one we have shows this spotting. These crossbred hogs have been proved quite a superior breed and are highly recommended for crossing on other breeds. We brought this boar here to breed to some of our better Poland Chinas and Durocs, so we might compare the performance of the offspring with our purebred stocks. We expect our first litters in April.

# Yields "Rotate" Upward

*By J. C. HIDE, K. S. C.*

IN A 16-YEAR crop rotation at Manhattan, consisting of 4 years of alfalfa followed by 12 years of corn, wheat, wheat, the average yield of corn has been 27.7 bushels and the average yield of wheat 19.1 bushels. This is 7½ bushels more corn and 4½ bushels more wheat an acre than was received when the crop was grown either continuously or in an unsatisfactory rotation. Corn and wheat yields have been increased about one-third by growing in a good rotation.

This 16-year rotation produces almost the same amount of wheat and corn in 12 years as continuous cropping will produce in 16 years. The good rotation has, in addition, produced 4 crops of alfalfa averaging 2 tons of alfalfa hay an acre a year. If you are looking forward to spending the next 30 years on a farm, you can expect a bonus for using a good rotation of one-half ton of alfalfa hay for each acre each year.

The shorter the period of rotation observation, the lower will be the difference between crops grown in a rotation and those grown continuously. At Columbus, over a 19-year period, the increase for a good rotation over continuous cropping has amounted to about 3 bushels of corn and 2½ bushels of wheat. At Kingman, over an 11-year period, wheat in a rotation including sweet clover has outyielded continuous wheat by between 1 and 2 bushels an acre.

In addition to the effect of crop rotation on crop yield, it also influences the quality of crops. Wheat grown on land following alfalfa had a higher protein content for at least 9 years than did wheat where alfalfa had not been previously grown. There is no reason to assume that other crops are not similarly influenced. Thus, alfalfa not only is an excellent quality feed but favorably influences quality of following crops.

Inclusion of a good legume at frequent intervals is the most essential aspect of a rotation. Many factors are more important than a specific sequence of crops between legumes. One of these would be erosion control. Row crops should be grown at only infrequent intervals on land subject to erosion. Another aspect of a good rotation is flexibility so minor changes can be made to meet particular problems.

Crop rotation necessitates diversity in farming operations and labor requirement is less likely to be excessive at particular seasons.

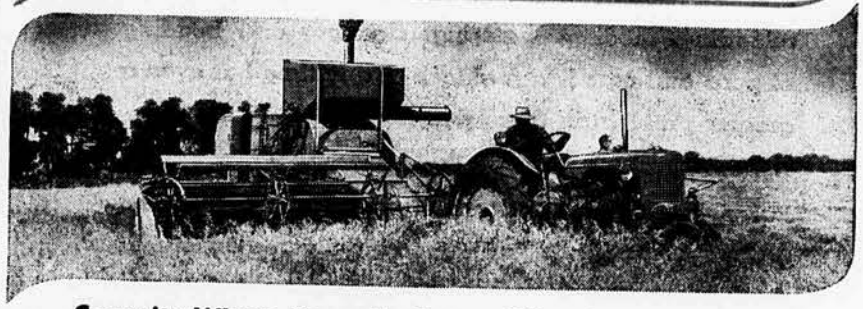
In the 6 Southeastern Kansas counties, only about 6.8 per cent of the land is in strong legumes. If all farmers in the area were practicing a good rotation, about 25 per cent of the area would have to be in these legumes. The figures seem to be reasonably representative for Kansas since 6 counties in the vicinity of Abilene have 6.6 per cent of their land in good legumes.

The farmer deciding whether he should use a rotation is in the position of a man selling a desirable article thru an installment plan under which the object will not be delivered until a number of installments have been paid. Consequently, starting the rotation is too frequently postponed. Continued use of a rotation year after year will obtain the most favorable results.

It's Not the Size of Scoop

That Tells How Much a Man Can Shovel

**More Capacity per Foot of Cut** enables the Case 6-ft. "G" to save and clean the crop at faster rates of travel, handle heavier growths without slowing down. Its rub-bar cylinder and even-spread feeder are proportioned for fast work with full volume of material. Case "air-lift" cleaning takes care of varying yields without fussy adjustments.

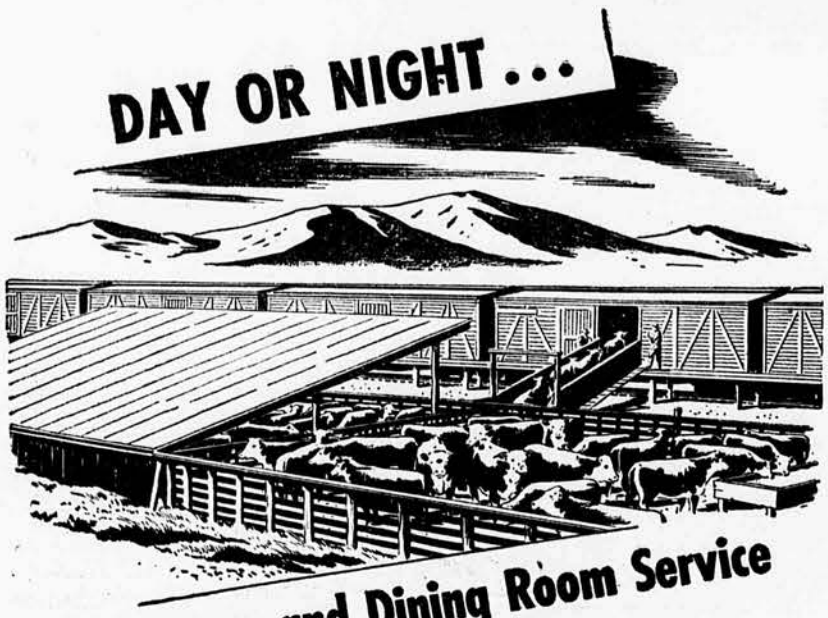


**Capacity Where Capacity Counts.** Like the man with the shovel, it's what's back of the cutterbar that gives Case combines their ability to hustle the harvest and at the same time save the crop. This Model "M" with 9-ft. cut, auger-type header and rub-bar cylinder has proved itself a "go-getter," especially where winter wheat or soybeans are the major crops.

**Faster Travel Gets More Done.** Similar in its main features to the Model "M," this 12-ft. Case "K" was an eye-opener when introduced. Built to work at 3½ or 4 miles an hour, it uses the speed of modern tractors to cover as much acreage as 16-ft. or larger combines pulled by heavier, slower tractors. It is surprisingly easy to handle.

CASE

**YOUR CASE DEALER** can give you good counsel on the size and type of combine that fits your conditions best, because he offers both types of cylinder, two types of header, and four widths of cut. See him now for full information and chances of delivery. Arrange early for service to put your present equipment into good shape. J. I. Case Co., Racine, Wis.




**Bed Room and Dining Room Service at ANY HOUR**

Dependable service and good facilities for feeding, watering and resting livestock during shipping is one of the important matters that every good stockman considers when shipping his animals.

UNION PACIFIC continues to move an increasing volume of livestock. To provide pen room and feed room space for more than 10,000 carloads of animals in one month requires thirty regular feed yards, with other emergency yards available, in thirteen states.

Finding enough hands to do the work of unloading, reloading, feeding, watering, cleaning and bedding of pens and cars is a real task at any time but even a greater problem in these war days.

But livestock must be moved to markets, must be properly cared for enroute and delivered safely at destination.

UNION PACIFIC keeps 'em rolling — ample and well managed feed yards keep 'em in good condition.

• • •

*Tune in radio's different show—"YOUR AMERICA"—broadcast over Mutual Network every Sunday 3-3:30 p.m., C.W.T., 2-2:30 p.m., M.W.T., 1-1:30 p.m., P.W.T. See your newspaper for local time and station.*

EARLE G. REED
General Livestock Agent
Omaha, Nebraska

J. H. PHELPS
Livestock Agent
Salt Lake City, Utah

H. D. ATHON
Livestock Agent
Portland, Oregon

E. W. GIBSON
Livestock Agent
Kansas City, Missouri

C. L. NYE
Livestock Agent
Denver, Colorado

H. W. BROWN
Special Representative
Denver, Colorado

*The Progressive*
**UNION PACIFIC RAILROAD**
The *Strategic* Middle Route


# Beef Work Shows Results

*By A. D. WEBER, K. S. C.*

TWO new herd bulls were acquired by Kansas State College last year. Both came from prominent Kansas herds—a Shorthorn from Tomson Brothers at Wakarusa, and an Aberdeen Angus from J. B. Hollinger at Chapman. Both of these young bulls are of the modern type, being low-set, thick, compact and reasonably smooth with a lot of breed character.

Many visitors to the college will remember the old Hereford bull "College Tone 16th" because of his great depth and exceptional fleshing qualities. He was sold last summer at 10 years old for $1,000 to the Turner Ranch at Sulphur, Okla. College Tone 16th was sired by Lassie's Tone, a bull lent to the college by the late Robert H. Hazlett, of El Dorado.

There now are 21 daughters of College Tone 16th in the Kansas State College Hereford herd, and a son, K.S.C. Tone 25th, has been retained as the chief herd sire.

Because of labor shortage and wartime restrictions, no beef cattle were fitted by the Department of Animal Husbandry solely for exhibition last year. However, a few surplus breeding animals were fitted and sold in various shows and sales sponsored by the state beef breed associations. These animals demonstrated that the quality of the college beef cattle herds is being improved.

### Among the Prize Winners

At the Kansas Shorthorn Breeders' Association Show and Sale at Topeka, the champion bull and first-prize get-of-sire were shown by Kansas State College in 1943 and 1944. Two bulls were entered in the 1944 Futurity Show and Sale sponsored by the Kansas Hereford Breeders' Association. One bull placed first and the other second in competition with cattle from the leading herds in Kansas. Then at the Kansas Aberdeen Angus Breeders' Association Show and Sale, held in Hutchinson on January 6, 1945, Kansas State College showed the champion heifer. Incidentally, this heifer also was the top-selling animal of the entire sale.

Several steer-feeding trials were completed last year. One trial compared grades of beef produced by yearling steers fed different quantities of concentrates. Comparisons were made of the following quantities of grain when fed with silage, cottonseed meal and ground limestone: (1) A full feed of grain; (2) a two-thirds feed of grain; (3) a one-third feed of grain; and (4) no grain. At the end of 180 days, gains were in the order of the quantity of grain consumed. Steers which were full-fed grain had made the largest gain and those fed no grain the smallest gain. It was quite apparent from this test that yearling steers must receive more than a one-third feed of grain for best results, despite a shortage of grain and modifications in feeding and marketing procedures necessitated by wartime requirements. And it was particularly evident that attempting to put yearling steers in slaughter condition without grain is not a sound practice.

A. D. Weber

On the other hand, steers that received a two-thirds feed of grain, plus all the good altas sorgo silage they would eat, a little cottonseed meal and 1/10 pound ground limestone a head daily gave an excellent account of themselves. True, they did not gain quite as well as those full-fed grain; but their dressed yield was exactly the same, 60.7 per cent; they had the same average carcass grade, and sold within 25 cents a hundredweight of the steers that ate all the grain they wanted. Results of this test are a useful guide to cattlemen who wish to obtain maximum efficient use of grain under present conditions.

### Similar Test With Heifers

A similar test is being made now except that heifer calves instead of yearling steers are being fed. Comparisons are being made of various quantities of grain fed with silage, cottonseed meal and ground limestone. It is planned to full-feed all lots beginning about April 1, and market each lot as soon as it attains the desired weight and finish. Results of this test should be available early next summer.

Another test now in progress involves comparisons of prairie hay and silage when fed singly and in combination as roughages for wintering yearling steers. This is the first test of this kind that ever has been conducted by the Kansas agricultural experiment station, and is being followed with considerable interest by cattlemen in the bluestem region who visited the college this winter. Steers in this test will be grazed a full season to determine the influence of ration and gain during the winter on subsequent pasture gains.

# Locate Bees By Airplane

*By R. L. PARKER, K. S. C.*

AS A GENERAL rule, beekeepers select summer apiary sites for honey production thru observation of the predominate surplus nectar-producing plant in the area. In areas where white sweet clover is the principal plant for secretion of nectar for honey production, a beekeeper may make observations of fields of this plant while traveling about on various highways and roads in the vicinity, and in making trips to and from already located apiaries. The limit of vision, however, and the possibility of finding fields of the major honey-producing plant as a means enabling him to produce a crop of honey, are very likely small.

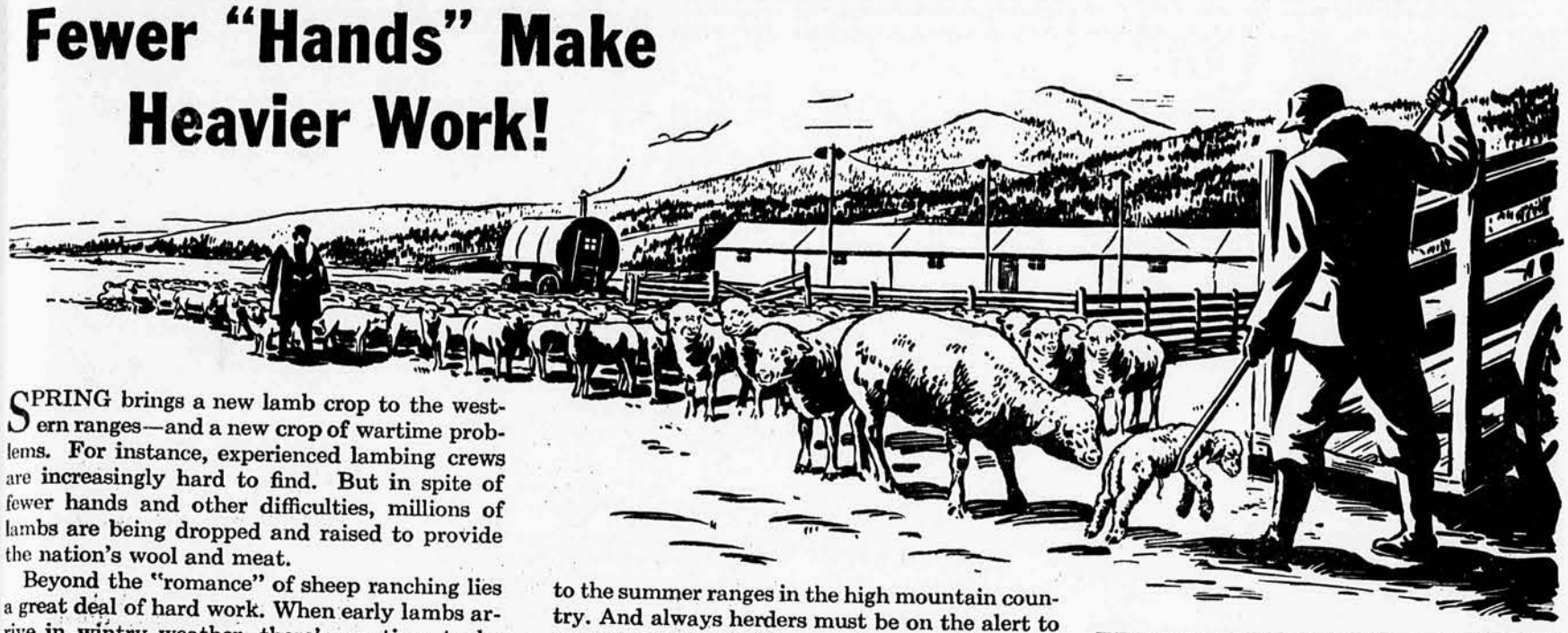
Aerial reconnaissance by geologists, agricultural mappers, and others have shown that such reconnaissance has aided and speeded up certain types of work. If aerial reconnaissance is used by beekeepers, it would enable them to view a large area at the beginning of the bloom of any major honey plant, and thus would enable them to select better locations for any one particular major honey plant. One beekeeper in Kansas, John M. Howell, of Hutchinson, is planning to make such aerial surveys for the location of his many apiaries in South-Central Kansas.

Where the means of locating apiary sites is by observation from an automobile, many times sites might be 10 to 15 miles apart, whereas, thru aerial survey, a comparatively large number of apiaries could be located within a 10-mile radius of a central point of operation.

## Will Save Tires

Trying to use a tire that has a broken "bead" sometimes causes the loss of several dollars worth of inner tubes. When one of my good tires gets a broken bead, I cut a bead from a worn-out tire leaving about 2 inches of rubber on it. I slip this into the rim over the tire where bead is broken. It will hold as well as a new one. The bead should not be cut.—O. O.

# Fewer "Hands" Make Heavier Work!



SPRING brings a new lamb crop to the western ranges—and a new crop of wartime problems. For instance, experienced lambing crews are increasingly hard to find. But in spite of fewer hands and other difficulties, millions of lambs are being dropped and raised to provide the nation's wool and meat.

Beyond the "romance" of sheep ranching lies a great deal of hard work. When early lambs arrive in wintry weather, there's no time to be lost in moving them from the "drop corrals" to the lambing shed. Chilled lambs often must be revived in heated incubators. It's not unusual for a good "night man" to "lamb out" 125 ewes in a night—and that *is* work. There's the feeding and, later on, trimming, docking, bunch herding, shearing, and finally the trailing of the bands to the summer ranges in the high mountain country. And always herders must be on the alert to protect their bands from coyotes and other predatory animals.

Yanks are the best-fed, best-clothed fighting force in the world. They know the comfort of warm wool uniforms. And nutritious lamb has helped prevent meat shortages at home. Sheep ranchers, like other livestock producers of the nation, deserve the thanks of a grateful America.

## $5 FOR YOUR GOOD IDEAS!

Ideas, special tools or gadgets which have helped you in your farm or ranch work can help others. We will pay you $5 for each one you send us which we publish on this page. Address Agricultural Good Idea Editor, Swift & Company, Chicago 9, Illinois. We cannot return unused items—sorry.

BUY WAR BONDS

## *Martha Logan's Recipe for* BARBECUED SPARE RIBS

(Yield: about 6 servings)

| | |
|---|---|
| 3 lbs. spareribs | ¼ cup homemade catsup |
| 1 onion | 1 tsp. dry mustard |
| ¼ cup vinegar | ½ cup water |
| 1 cup tomato juice | 1 tbs. paprika |
| 2 tbs. brown sugar | ¼ tsp. chili powder |
| 1 tsp. salt | ⅛ tsp. cayenne pepper |

Cut spareribs in pieces. Brown lightly about 10 minutes. Dice onion and combine with all other ingredients and simmer 15 minutes. Pour over browned spareribs. Cover. Simmer or bake in a moderate oven (350°F.) 1½ hours. Remove cover. Baste ribs. Cook about 15 minutes uncovered.

## HOW THE DOLLAR IS DIVIDED

There's an old proverb, "One picture is worth a thousand words." So I decided to *draw* this month's column instead of writing it. The picture is below, and it tells this story . . . 75 cents (on the average) out of every Swift sales dollar goes to *agricultural producers* for their cattle, lambs, hogs, etc. And 11c out of every dollar goes to the people who work in Swift plants, preparing those farm and ranch products for market. Transporting meat, etc., an average of 1,100 miles from producer to consumer takes another 2c. But, after all, the picture tells the story better than words of mine. Few businesses operate on such a narrow margin—few return such a large slice of their sales dollar to the suppliers of raw materials.

F. M. Simpson.
*Agricultural Research Dept.*

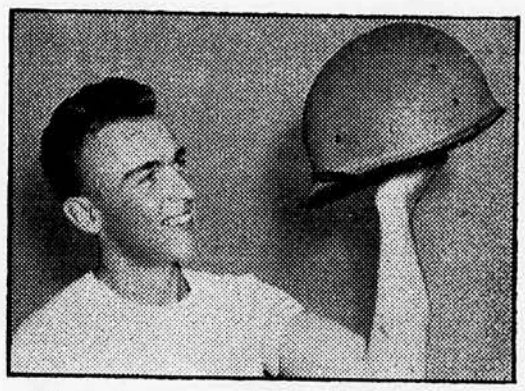
**HERE'S WHERE THE DOLLAR WENT**

| | |
|---|---|
| Livestock & Raw Materials | 75.1c |
| Employes | 11.0c |
| Supplies | 4.5c |
| Taxes | 3.5c |
| Transportation | 2.0c |
| Other Expenses | 2.9c |
| Remaining as Earnings | 1.0c |

## What do you know!

1. Which is the "best-fed, best-clothed" fighting force in the world?
2. What share of the average Swift sales dollar did producers get in '44?
3. How are chilled lambs revived on a modern sheep ranch?

*Answers to these questions may be found in articles on this page.*



## *Utah Sergeant Wins Silver Star*

Sgt. W. L. Stander, rancher from Promontory Point, Utah, admires the helmet that saved his life. He was wounded on the ill-fated USS Chicago by a strafing Jap plane. But he won the Silver Star for sticking to his gun without thought of personal safety.

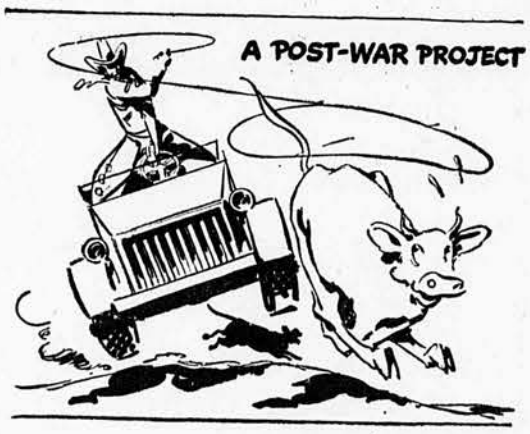
## SODA BILL SEZ:

*It's all right to be a yes-man as long as the boss you "yes" is a know-man.*

***No, the mower didn't run through here.*** J. A. Booher, right, Knox County, Tennessee, unit test demonstrator, stands in rye where 200 pounds of plant food and 1 ton of lime were applied, and points out to Knox County Agent R. M. Murphy an unfertilized check strip.

Many farm experts are advising farmers to order now and lay aside their 1945 requirements of commercial fertilizer. There will be some more potash than last year, but they believe the supply of phosphates will be considerably less and that war munitions demands will materially cut into the nitrates available for civilian use. Get fertilizers when and while you can, is their advice.

**Swift & Company**
CHICAGO 9, ILLINOIS




★ ★ ★ ★ ★ NUTRITION IS OUR BUSINESS—AND YOURS ★ ★ ★ ★ ★

***Right Eating Adds Life to Your Years, and Years to Your Life***

## What About Price Trends?

*By A. G. PICKETT, K. S. C.*

THE producer who does a top job, using the best breeding, feeding and management practices, often finds he is going to market when the normal price trend is at or near its peak. The simple fact that he is doing a better-than-average job puts his livestock in market condition well ahead of the general run. This is particularly true in the case of slaughter animals.

Price trends and production practices should be considered together before setting up a livestock program on any farm. Putting a product on the market that the consumer wants when he wants it, as well as getting cheap, efficient gains, are essential to success.

In some livestock programs the most important factor making for success is cheap gains, and price trends are a secondary matter, while in others, price trends, both from a purchasing and selling standpoint, are all-important and should receive at least equal consideration in planning a program. Plans are important since once a program is under way it is quite often impossible or impractical to change. Too much emphasis cannot be placed on the importance of doing the right thing at the right time.

The Kansas deferred feeding program offers one of the best examples of how these factors make for success of a program in operation. Choice feeder calves are purchased in the fall when the price of these calves is normally in the low position for the year, and are sold a year later in November or December as good to choice slaughter steers when the slaughter steer price is at or near the peak in its annual swing.

Over an 18-year period (1922-1939) at the Kansas City market the average price of these feeder calves during October and November was about $8.60 and choice slaughter steers brought an average of $12.20 during November and December for a price spread of $3.60. In comparing this deferred system to winter feeding and selling in April, May or June, we find this price advantage for the same period of years to average $2.25 or $1.35 less with the cost of gains relatively higher.

Creep-feeding calves while on the cow emphasizes cheap gains, a rapid turnover and does head for market well ahead of the low-price period. Buying replacement cattle in the spring for grazing and selling off grass is a good example of a program that depends entirely on a cheap gain for profit since cattle are purchased at the peak and sold at the bottom of the price trend.

The swine production enterprise and the Kansas milk-fat lamb program provide 2 examples where following recommended production practices pays off at the market. Spring pigs that reach market in early September hit the seasonal market high as do early creep-fed lambs marketed before June 1.

### Trend Will Be Followed

It should be remembered that in any one year the seasonal high may not come at the same time as the average over a long period of years and occasionally may even miss this point by months. Generally, however, the trend will be followed. For example, during the 18-year period (1922-1939) the seasonal high for choice butcher hogs at the Kansas City market occurred the first 10 days of September. The price declined 17 of the 18 years from September to October, and declined 14 of the 18 years from October to November. The producer who heads for these seasonal trends over a period of years will receive a higher price for his livestock.

During these war years price trends have become somewhat less important. Some normal trends have been leveled out to a certain extent or distorted some from their normal positions due to controls and other causes. For this reason we find producers disregarding or losing sight of normal price patterns. A study of the markets will show that most all normal price trends are still in evidence altho modified in many cases. It is important that following the war we keep these price patterns in mind as well as recommended production practices. Some shifts may occur due to changes in consumer demand and changes in methods of processing and merchandising meat, but the fundamental trends will undoubtedly be present.


# HERE'S WHY

**You Get More for Your Money When You Buy**

# SKELLY *Fortified* TAGOLENE OIL

## It's Like Hybrid Corn

Hybridizing seed corn, inbreeding and cross-breeding to suit various types of soil, moisture and local hazards of disease or insects, assures better yield . . . you get more for your money!

"Fortifying" Skelly Tagolene Motor Oils to provide greater heat resistance and protection against harmful deposits of sludge, varnish and carbon, assures better engine performance and protection... you get more for your money! Call your Skelly Tank Station Salesman... he can help you make sure you get more for your money in the many Skelly products essential to modern farming.

**GET THE "ALL-SKELLY" HABIT!**

**OIL**
*Fortified to clean as it lubricates.*

**SPARK PLUGS**
*Guaranteed* SKELCO *spark plugs for cars, trucks, tractors.*

**TIRES**
*The famous* HOOD *tires for greater safety, longer mileage.*

**GREASE**
*Specially Fortified to meet every farm equipment need.*

**PAINT**
*Complete line of* SKELCO *paints, for interior and exterior, in all colors.*

**BATTERIES**
*Guaranteed* SKELCO *batteries for dependability, long life.*

## Cleans Brush

To soften a paintbrush that has been allowed to dry without cleaning, soak the brush overnight in a solution of 2 teaspoons washing soda dissolved in 2 cups of warm water. The next day wash the brush with warm water and soap.—M. E. L.

## Need More Fats

In an urgent message to Kansas women, Vera Ellithorpe, K. S. C., states:

"Housewives are charged with the responsibility of selling to our Government every drop of used fats they can possibly save in kitchens in 1945. The War Food Administration has set as a goal for the nation 250 million pounds of used household fats. This is an increase of 80 million pounds over that salvaged by American women in 1944.

"You cannot and are not expected to supply all the inedible fats required for vital war manufacturing. But you can meet the quota set by WFA. Grocers and butchers will pay 4 cents a pound for used fats, and for each pound saved, 2 red meat points will be paid. Please start saving now!"

LIBRARY MAR 3 1945 MANHATTAN KANSAS

# Sweet Potatoes Yield More

*By O. H. ELMER, K. S. C.*

IMPROVEMENT of sweet-potato varieties has received a good deal of attention by your agricultural experiment station. As a result we now have new varieties that yield more, are more attractive, and are greatly superior for human food because they taste better and have greater food value.

Two new sweet potatoes have been developed at Kansas State. One, Nancy Gold, is a mutant from Nancy Hall. Nancy Gold is a yam-type potato; that is, it is moist when cooked. Flesh of Nancy Gold has a deep-orange color, is very rich in vitamin A, contains more total sugars than any other variety grown in Kansas and the flesh is without stringiness. Nancy Gold is a high-yielding variety, and is highly desirable for home storage because it keeps well if bruising is avoided and if kept from becoming chilled.

The other new variety, Orange Little Stem, is a mutant from the Common Little Stem Jersey. This sweet potato is not so moist when cooked as is Nancy Gold. Like Nancy Gold, it has a deep-orange flesh color when cooked. It has nearly 10 times more vitamin A content than the Common Little Stem. Orange Little Stem grows well in loose or sandy soils but should not be planted in heavy soils. It has a rich, reddish-brown skin color, and keeps well in storage.

### Easier to Prevent Disease

Another sweet-potato problem that has received much attention is disease prevention. As a result we can now prevent diseases more easily and more effectively than formerly.

Three operations now are known to be effective for controlling stem rot so that none or only slight losses need result from this disease. First of these is to select at digging time seed from only stem rot-free plants. Potatoes saved for seed should be selected only from high-yielding, good-type plants which have no brown- or black-colored stem tissues.

Second operation for preventing stem rot and other diseases is to select only seed that is free of external rots or diseased spots, and to treat the seed by momentarily dipping it in a solution of 2 ounces wettable Spergon to each gallon of water. This treated seed should then be bedded in hotbed soil that is known to be free from sweet-potato diseases.

Third operation is to dip the sprouts at planting time in a solution of 2 ounces wettable Spergon to each gallon of water just before the sprouts are planted in the field. This is particularly useful where the stem rot organism is present in the field soil. The Spergon coating on the broken end of the sprout prevents stem-rot fungus from gaining entrance thru the wound until it has healed.

Black rot and scurf are 2 other diseases that must be prevented from infecting sweet-potato plants in the hotbed. Selected ones should be dipped in a solution of 2 ounces wettable Spergon to the gallon of water, and these treated roots should be planted in hotbed soil that is free from these diseases. Field infections with black rot and scurf cannot be prevented by dipping the sprouts in Spergon, and to avoid such field infections sweet potatoes should not be planted for at least 3 years in fields where black rot or scurf were prevalent on the last crop. Black rot and scurf will die out within 3 years when no sweet potatoes are grown, but the stem-rot fungus will persist in the soil for many years.

### Will Remain for Many Years

Another very serious disease of sweet potatoes is soil pox. It causes pits, constrictions and other malformations which always are accompanied by a dry, scurfy, dark-colored lesion. Once the soil-pox organism becomes established in a field it will remain there for many years and no method to combat it has been found. Fields known to be seriously infested with soil-pox organism should not be used for sweet potatoes because the chances of failure are too great.

Soft-rot disease, which can cause a sweet potato to melt away to a soft mass in only a few days, causes a great deal of loss to growers, shippers and retailers.

Soft rot always begins where a sweet potato was wounded. Rough handling and improper storage, particularly chilling, are the greatest causes. Many people don't know that sweet potatoes must be stored in a warm room and not in the cold root cellar. They should not be allowed to stand at temperatures below 50 degrees F. Temperatures above 60 degrees F. should be avoided because excessive shrinkage and sprouting will occur. The best way to avoid soft rot is to handle sweet potatoes carefully as they are harvested and to have the skins thoroly dry before placing them in storage. The most practical way for home gardeners to store sweet potatoes is in bushel baskets.

*Bulletin No. 278, entitled "Sweet Potatoes in Kansas" has been published by the Kansas Agricultural Experiment Station and deals with the various phases of growing, harvesting and storing sweet potatoes. If you want a copy of this bulletin write to Kansas State College.*

# What Poultry Feeding Tests Show

*By A. E. SCHUMACHER, K. S. C.*

MANY problems have arisen in poultry feeding due to a shortage of ingredients. With the supply of fish meal exhausted and meat scraps almost as difficult to obtain, soybean oil meal was used to a large extent. Considerable information had been obtained on use of soybeans in poultry rations, but this experiment was planned so we could study the feeding value of soybean oil meal alone, and in combination with varying amounts of meat scraps. Both the mash-and-grain and the free-choice-concentrate (32 per cent protein)-and-grain systems of feeding were used.

One pen was included to test the possibility of feeding birds the "all-farm ration" consisting of a free choice of wheat and corn as grain, alfalfa hay, limestone and liquid skim milk. No water was provided and the birds remained confined.

Other lots got the K. S. A. C. all-purpose ration, 3 rations with decreasing amounts of meat scraps and increasing amounts of soybean oil meal as protein supplement, and 3 similar pens a 32 per cent concentrate mixture which was fed along with grain ad lib.

The experiments covered 11 months. Single Comb White Leghorn pullets were used. Livability, per cent production, body weight, feed consumption, and hatchability were essential factors studied.

Some interesting and striking results were obtained. Livability results showed that most all lots had about the same percentage of mortality, with the exception of the lots receiving soybean oil meal and only a small amount of meat scraps. These pens averaged about the same number of eggs to the hen so egg production was not seriously affected.

When considering percentage of production, most pens averaged about 50 per cent with the exception of the K. S. A. C. all-purpose lot (control) which averaged 56.8 per cent, and the all-farm ration, which averaged 56.4 per cent for the 11 months.

Body weight was not affected in either system of feeding or by the feeds used except in the all-farm ration. This lot averaged slightly heavier at the finish of the experiment.

In studying feed consumption, it was noted that the birds fed a concentrate (32 per cent protein mash mixture) did not consume as much total feed as did those receiving the regular 18 per cent protein mash mixture. This same condition was experienced the previous year so there may be some relationship between method of feeding and feed consumed.

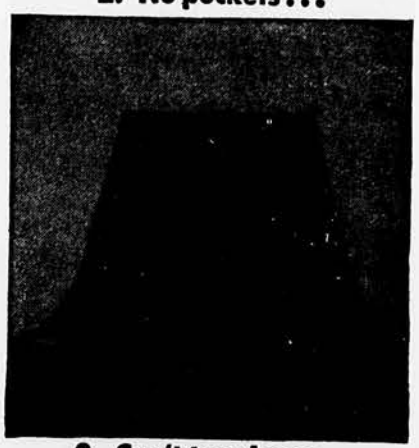
Hatchability results showed that birds receiving the all-farm ration and the ones receiving the concentrate gave the highest hatchability. It can, therefore, be said that these systems of feeding do not injure hatchability.

A considerable number of flies were present around the milk pail in the lot receiving liquid skim milk. It has always been thought that tapeworms were associated with flies so at the close of the experiment all birds in the control lot (K. S. A. C. all-purpose) and those on the all-farm ration were killed and examined for tapeworms. The results showed that the pen receiving the liquid milk had many more tapeworms; however, other results, production, body weight, showed this pen produced well regardless of the worm infestation.

One other observation was that birds receiving the all-farm ration produced eggs with thinner shells. This problem of thin-shelled eggs, however, was not serious enough that any great loss was encountered.

1. In pairs...

2. No pockets...



3. Can't tear loose...

4. Full Traction...

5. Free...

# Free book for tractor owners tells about tire traction

HERE'S a new book crammed with useful information for every tractor owner. It contains 68 pages of pictures and facts on such subjects as care of farm machinery, use of liquid weights in tractor tires, getting more power out of wartime gasoline, etc.

It explains how B. F. Goodrich studied the farmers' problems, trying out hundreds of different tire tread designs to learn more about traction.

*How Cleats Work*

The B. F. Goodrich tire has an open center — no mud-catching pockets. The tread is self-cleaning. Because of this open design, the tire tread is flexible. It gives as it rolls. Mud drops out. Cleats, in pairs, give a continuous, overlapping grip on the soil. You get continuous traction, a steady pull. Work is done faster.

Height of the cleats is determined to the hundredth of an inch. If cleats are too high they are apt to bend, reduce traction. They may chip, break off, or wear down quickly. Low cleats provide less traction. And each cleat in a BFG tire is shaped like a pyramid, reinforced at the base so it won't tear loose.

With B. F. Goodrich tires you get *extra* traction—added bite, grip, and pull to handle the hardest jobs. And you get long life, too. For any tractor or implement tire need, see the B. F. Goodrich man next time you are in town.

*Write for the Farmer's Handbook*

Some of the other subjects included in the Handbook are: farm measures and reckoning; winter care of tractors; handyman hints; how to use concrete on the farm; principles of farm drainage; the miracle of synthetic rubber; knots and splices; driving tips; tire buyers' guide; facts on silos and silage; painting methods; plumbing repairs; costs of rubber tires; and much other useful, money-saving information.

*Write your name and address on a postcard, or in the margin below, tear off and send to Dept. 184. The B. F. Goodrich Co., Akron, Ohio.*

**B.F. Goodrich**

FIRST IN RUBBER

# Kansas Farm Women Hold Their Line

*By GEORGIANA H. SMURTHWAITE, K. S. C.*

RURAL women of Kansas have done so much to help win the war! Your handicaps have been many, but you have produced and preserved tons of food for your families and helped your husbands in the fields; found time to do this in addition to the regular housework, by good management. Methods of laundering, washing dishes and house cleaning that would reduce time spent in taking care of these regular household tasks were studied and personal adjustments made in these activities.

Such things as elimination of unnecessary ironing of most household linens and selection of clothing that required a minimum of ironing, were seriously considered in the time-consuming job of laundering.

One-dish meals that reduced dishwashing and meal preparation to a minimum became popular.

You have clothed your families attractively by being ingenious with the needle. Rural women made suits and street dresses, as well as house dresses, both from new fabrics and from suits and dresses that needed restyling.

More than 1,670 women made work clothes that were comfortable, easily laundered, and safe for the jobs they were to do.

Probably your greatest satisfactions have come from community activities. Thru good planning, rural families have been well fed and clothed; homes have been made comfortable and attractive; farm accounts have been kept, and much business has been handled; farm chores have not been neglected, hours have been spent in the field, and still there has been time for rural women to assist with Bond drives, scrap drives and Red Cross work. Many have given blood to the blood bank.

### Accounts Help Tax Time

More than 8,000 farm families kept accounts and with these at hand, found making out the income tax was more satisfactory. They have found these accounts of great value in making plans for farm and home management.

Incomplete reports show that as many as 11,000 rural women helped with Red Cross work, and about 12,000 not only have been contributing to scrap drives, but are continuing to gather scrap. Fifty-nine women are regular donors at blood banks.

Rural women have found time to make thousands of cookies to send to their sons and daughters in service. They have written letters to their neighbor's boys and girls in the service, as well as to their own. Many have found time to provide recreation and fun for the family both in the home and in the community.

Selection of the most desirable books for the children, and choice of those easily read aloud for the enjoyment of all the family, seem of utmost importance just now. Home-constructed toys and play equipment have assured the children fun and proper development.

Refinishing furniture and rearrangement of the family living-room for comfort and beauty, seem to have taken on renewed importance. Families also have found time for spiritual development and community affairs.

Even with these additional activities, you have had time and interest to attend meetings to learn more about health and nutrition, cancer control, first aid, sanitation, and home care of the sick.

You have attended meetings to consider the local school situation and how to provide adequate educational facilities for improvement of rural life.

Last year 360,000 women attended home demonstration meetings and demonstrations in Kansas. A total of 385 home demonstration units will receive recognition for achieving the standard of excellence this year.

Never before have your responsibilities as citizens seemed so great. Rural women have been going to the polls. You have become articulate in issues pertaining to government, and to governmental relationship, far beyond the local boundaries of the state and nation. Women are studying as never before. Librarians tell us women are reading books about economic and social problems. Such national interests as the Dumbarton Oaks plan, the Atlantic Charter, and Lend-Lease, all come in for their share of study and scrutiny.

Georgiana H. Smurthwaite

Your tremendous expenditure of precious time and human energy has not been limited to the immediate wartime demands, but is helping your rural families to be prepared for the years following the war. Rural families are buying Bonds, clearing debts, and planning for better housing conditions in the years ahead. Rural women of Kansas are showing unbounded faith and hope for peaceful years ahead.

# Home "Freezers" in Demand

*By GEORGE A. FILINGER, K. S. C.*

THERE are about 260 frozen-food locker plants in Kansas with about 90,000 lockers. Assuming that 5 people get part of their food from a locker plant, it would mean 450,000 people have improved their diets by this method of handling food. About 60 million pounds of food are stored in lockers each year.

Men who have studied the frozen-food locker industry tell me that within a short time after the war the home frozen-food cabinet will be very common in this state, and that about 25,000 such units will be sold in Kansas within 2 years. Since these lockers will be in homes where they will be much more convenient to use than the locker plants, the turnover of food in them should be even greater than in the lockers. Units probably will be much larger than present lockers. That would mean about 25 million pounds of food will be stored in home cabinets.

There are many advantages of preserving food in this way: Frozen home-produced foods are more palatable than those preserved in other ways. Preserving by freezing involves less work, there is less spoilage, food need not be overcooked, it makes possible an improved diet since this method preserves the fresh taste and vitamin content of foods. It permits more latitude in selecting the time to slaughter animals or dress poultry, hence, meat can be killed and cooled any time of year. Meat preserved in locker plants usually results in better utilization of the carcass.

The home unit will have still further advantages: Home cabinets are more convenient than frozen-food lockers. The patron need not enter a cold room to store food or to get food from the locker. Leftovers can be saved by storing them in the freezing cabinet.

There also are some disadvantages connected with this method of preserving food: The cost may be greater than preserving food in other ways. There is the necessity of consuming the products soon after they are removed from the locker. There may be drying out of the food if not properly packed. It sometimes is difficult to find the products desired because they are at the bottom of the locker or home cabinet.

Now to get to the actual preserving of the food by freezing. For best results food products must be of the best quality, at the peak of condition, and handled rapidly. A good way with fruits and vegetables is to harvest, process, pack, seal and freeze the foods the same day. Containers for packing fruits and vegetables should be reasonably airtight and moisture-vaporproof.

Heavily paraffined or waxed cartons, either cylindrically or tub-shaped, are satisfactory if the lids fit tightly. Cartons with cellophane-lined or waxed tops may be sealed readily with a flat-iron or a curling iron. Pint- and quart-size cartons are preferred for ordinary freezing. Use of containers holding more than 5 pounds is not recommended because it takes too long to freeze the contents, also because a large amount is too much for quick consumption when it is removed from the cabinet. It is not good to refreeze the foods. Fruit and vegetable juices can be stored in the same type of containers as fruits and vegetables. Remember, liquids expand considerably when frozen, and enough space should be allowed for expansion.

### Variety Is Important

Different kinds and varieties of fruits and vegetables vary in their desirability for freezing. However, degree of maturity, condition of foods and vegetables and method of handling are more important than variety. As a rule, sugar or sirup should be used with all fruits. This seems to preserve flavor, color and texture. I realize sugar is difficult to get. Such materials as honey or corn sirup may be used as part of the sweetening, but some sugar always should be added.

All vegetables have to be blanched or scalded before being placed in containers for freezing. If not properly scalded they will change in color and flavor and may actually become inedible. To blanch vegetables place in a wire basket or a cheesecloth bag and submerge in boiling water long enough to heat the material thru but not long enough to soften the products. The volume of boiling water should be 10 or 12 times the volume of the products being blanched so the boiling temperature may be maintained. A quart or 2 pounds is about the maximum amount of most vegetables that should be blanched at one time.

## If in Doubt—Test

If you own a rayon dress or blouse and the ironing directions are a mystery to you, test by using a drop of fingernail polish remover on an inside seam. If the material is acetate rayon, the polish remover will dissolve it and leave a hole. And if you have acetate rayon, and most likely you do if it is a late war purchase, a hot iron is its worst enemy. It may melt the goods or give it a permanent shine. Use a warm iron and press on the wrong side. Before the war a large per cent of the rayons were viscose type.

# Fabrics We Will Buy

*By ALPHA LATZKE, K. S. C.*

TEXTILES are news these days. New fibers, new finishes, shortages, promises of lowered prices—any one of these angles from which the textile story may be viewed is of importance to the farm homemaker.

It has been said a great number of significant developments have come about in the textiles field during the last 15 years, a greater number than in any other similar length of time. In fact, there are some 300 patented fibers known in the world today, each country having its own.

What are some of the best known fibers that man has made? Rayon should be named first. Altho rayon has been important commercially for some time, it is only recently that certain major developments have come about.

High tenacity rayons promise much for the future. It is claimed this fiber is ideal for hosiery, able to withstand much strain and abrasion. Those who know of its qualities claim it will take over part of the fields now claimed by nylon.

Fiber D, still another new development from rayon, is intended for rug making. Rugs made from the fiber are said to wear well and to resemble both in feel and appearance those made of carpet wool.

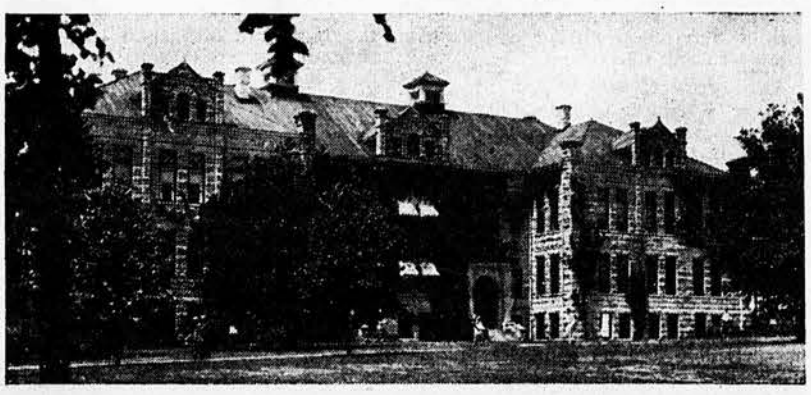
Nylon is not available for civilian use at present, except as the armed forces reject fabrics made from it. Nylon holds its place in the textile world because it is stronger, more durable, more uniformly dependable altho less soft, than silk.

Aralac, the fiber made from skim milk, is another fiber that is met up with frequently, both in yard goods and in ready-made apparel. Its wool-like texture makes aralac difficult to distinguish from wool.

Fibers made from soybeans, peanut fiber, cornmeal fiber and seaweed are among the newcomers promised us after the war. There are still other fibers made of plastics that will have special qualities. Vinyon and Velon are names we will come to know. Fiberglass is another textile with a future. Made into drapery fabrics, it does not lose color, and sheds dust readily.

There are many new finishes for fabrics. Some now are being used; others are promised as an after-the-war development. Among those used at present are finishes that render a fabric showerproof, repel moths, prevent growth of mildew, or that render fabric flame-retarding. One important finish prevents crushing and wrinkling; another closely related to it enables fabric to hold a sharp crease. It is predicted that resin fabric-coatings may crowd rubberized fabrics out of the postwar textile market altogether.

What fabrics will we be wearing after the war? Experts predict our fabrics will be tailor-made, and will be vastly improved in functional properties. We will not buy cotton or wool material as such, but will buy "warmth," "coolth," "moisture repellency," "resistance to moths," and so on. When this comes about, the lifelong dream of the textile man will be a reality—when he can produce fabrics to possess qualities desired by consumers.



Calvin Hall, the seat of home economics at Kansas State College, where farm women gather for part of their Farm and Home Week meetings.

# Changed Our Minds About Grass

*By KLING L. ANDERSON, K. S. C.*

Kling L. Anderson

EARLY development of our Midwest ranges was based on exploitation. Free range offered opportunities to "get rich quick" to anyone who could get to the grazing lands first with the largest number of livestock. This was destructive.

The change in our attitude toward grass began as soon as we had plowed all the land suitable for tillage, and when productivity of native grasslands had begun to decrease. The crisis for us in the Midwest came with the drouth of the 1930's. We than fully realized for the first time that grass would have to be managed as carefully as any other crop to remain productive.

Important steps are being taken to revegetate land by individuals and, where large areas are involved, by the Government. More than 100,000 acres in Morton county, Kan., now are being treated by the Federal Government to restore its grass by reseeding and by carefully regulated grazing.

Grass draws heavily on soil nitrogen and is not able to manufacture it as do the legumes with the aid of nodule-forming bacteria. Nevertheless, there occurs over long periods, a gradual accumulation of nitrogen in permanent grassland soils accompanying a general increase in organic matter content. Much of the crop is returned to the soil in the form of decaying plant parts and from the manure of grazing animals. The organic matter thus incorporated into the soil becomes humus which greatly improves the physical condition of the soil rendering it easier to cultivate, better able to take in water, and less likely to bake or puddle, or to erode.

Some farmers use perennial pastures in crop rotation. Pastures not only improve the soil and increase the efficiency of livestock production, but they also reduce the labor requirements of farming. This, too, has become an important factor in our changing agriculture.

Pasture is required for the economical production of livestock. The average farmer cannot afford to grow domestic livestock without pasture. In general, it may be said that the greater the use of pasture, the greater the margin of profit. This does not imply that harvested feeds can be dispensed with, but the amounts needed can be reduced by proper pasture practices.

The first reason why livestock can be produced more economically with pasture is the reduced labor requirements of feeding, harvesting, storing and processing. These things are taken care of by the grazing animal.

Second, pastures reduce feed production costs by distributing the cost of planting over several seasons, by eliminating the need for cultivation, and other operations required in handling cash crops.

Third, pastures produce healthier animals and encourage highest productivity in livestock. Grass is the natural food for grazing animals, supplying the vitamins, protein and minerals, so the need for supplements is reduced and often eliminated when pasture is available.

### How to Meet Challenge

We do not know what changes will occur in the future, but whatever they may be, there will be a premium on efficient production of livestock. One method of meeting this challenge is the wise use of grass in the farm plan and in the livestock program.

If the greatest benefits are to be derived from pasture it must not only be managed so as to give maximum yields but must also be utilized efficiently. Careful planning can give us year-around grazing except, of course, during periods when fields are covered with snow or are too muddy to be grazed. Kansas is fortunate to have such adapted supplementary pasture crops as wheat, rye and barley, sweet clover, lespedeza, Sudan grass, and the tame perennial grasses like brome. A planned sequence using as many of these as necessary should be the basis for all pasture operations. With them the goal of year-around grazing can be achieved and, what is more, use of temporary pastures enables us to manage the permanent grasslands to obtain maximum yields of forage from them; that is, it permits protection at critical periods after which grazing may be heavy to make full use of the increased yields.

The key to improvement, to maintenance of yields, and to efficient utilization of our permanent pastures is management and planning. This makes necessary a thoro knowledge of the pasture crops, their growth habits, their soil requirements and their place in the farm plan. The pasture operator must be able to recognize signs of depletion due to incorrect stocking as well as the signs of recovery due to conservative grazing. He must know the forage species and the weedy ones. He must know the growth requirements of both so as to adjust grazing practices to them. On the basis of this knowledge, together with his knowledge of animal breeding and feeding, he can produce livestock economically and efficiently to meet whatever situation may arise in our changing grassland agriculture.

## Bulletin Board

General information for the family can be posted on a bulletin board made from a piece of wallboard which costs only a few cents. Placed near the telephone, messages, notes, reminders, clippings, cartoons and any other items will be easily seen.—Mrs. C. D.


MEAT CURED EASILY QUICKLY Given Old Time Wood Smoke Flavor

Cure in brine made from Wright's Ham Pickle and salt. After curing, let dry 10 days, then apply two coats Wright's Condensed Smoke. That's all. Wright's Ham Pickle cures meat thoroughly. Wright's Smoke, made from choice hardwoods, gives finest flavor for smoking, barbecuing. Dealers everywhere.

FREE 36-page booklet butchering and meat curing information, recipes, etc. Free at dealers or write direct—today.

E. H. WRIGHT CO., Ltd., 2435 McGee Dept. K Kansas City 8, Mo.

WRIGHT'S HAM PICKLE ★ for Sugar Curing ★

WRIGHT'S Condensed SMOKE for Smoking and Barbecuing



SWEETEST MELON I KNOW OF...

NEW EASY-TO-GROW SUGAR LUMP

FREE! Big pkt. SUGAR LUMP MELON also Catalog & 1 Yr. Subscription to my magazine "Seed Sense"

Grows almost anywhere. It's a dandy...finer; tastier. Try it, and see. Ripe very early. Icebox size. 3 kinds—red, white, yellow. I like yellow best...sweetest. But you find your favorite. Mix all 3 kinds, free. Clip and mail this ad. Write your name plainly. Enclose stamp, please. Henry Field, "Midwest's Leading Seedsman."

HENRY FIELD SEED & NURSERY CO. 1628 Elm St. Shenandoah, Iowa



TOMATO FREE FOR TRIAL

Our 1944 Trials-33 varieties Tomatoes proved Victory Tomato earliest of ALL. Ripe Tomatoes red, thick, solid, in 48 days from plants. We are introducing it in every State. Try it.

40 SEEDS Free for Trial

Send Address on Post Card Now

1945 SEED BOOK Free Vegetable & Flower Seeds

See Page 2 - New Flower Free Trial

Our 58th YEAR

MILLS SEED HOUSE Box A, ROSE HILL, N.Y.



# More FLAXSEED Required for War

OUR government is requesting an increased acreage of flaxseed this year to meet the war requirements. A goal of 218,000 acres has been set for Kansas which is reasonable considering the much larger acreage seeded in some recent years.

This goal will be broken down into county and farm goals under the AAA program and announcement has been officially made that incentive payments will be made of $5.00 per acre for each acre of flaxseed planted up to the goal set for each farm.

Also provision is being made to offer insurance for the 1945 flaxseed crop not in excess of 75% of the recorded or appraised average yield of flaxseed for a representative period of years.

According to reports of the State Board of Agriculture, flaxseed, over a period of years has been more profitable in Eastern Kansas than wheat, corn or oats, and the incentive payment this year of $5.00 per acre should insure the attainment of the Kansas goal. Also the insurance program will further reduce the risk.

Indications are that the demand for good seed flax will exceed the supply. Farmers in Eastern Kansas who plan to sow flaxseed should arrange for their seed requirements early, and see their AAA County Committee for details of the incentive payment and insurance programs.

ARCHER-DANIELS-MIDLAND COMPANY
Fredonia, Kansas



HINTS FOR HOME BAKERS

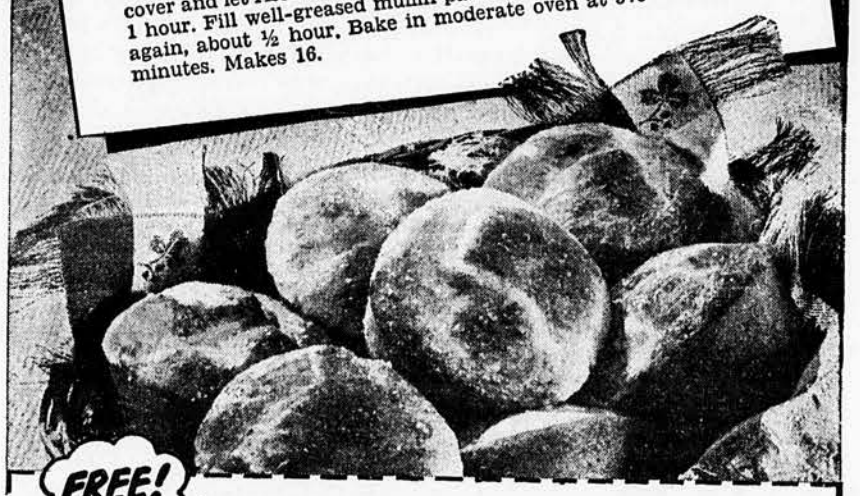
Yeast Raised Muffins Are Extra Tender!

Make them with Fleischmann's yellow label Yeast—the only yeast with those EXTRA vitamins

RAISED MUFFINS

1 cup milk
2 tablespoons sugar
1 teaspoon salt
2 tablespoons shortening
1 cake Fleischmann's Yeast
¼ cup lukewarm water
2 eggs, well beaten
2½ cups sifted flour

Scald milk, add sugar, salt and shortening. Cool to lukewarm. Dissolve yeast in lukewarm water and add to lukewarm milk. Add eggs and flour to make a moderately stiff batter. Beat until smooth, cover and let rise in warm place, free from draft, until light, about 1 hour. Fill well-greased muffin pans half full. Cover and let rise again, about ½ hour. Bake in moderate oven at 375°F. about 30 minutes. Makes 16.



FREE!

FLEISCHMANN'S FAMOUS RECIPE BOOK NEWLY REVISED FOR WARTIME!

Clip and paste on a penny post card for your free copy of Fleischmann's newly revised "The Bread Basket." Dozens of easy recipes for breads, rolls, desserts. Address Standard Brands Incorporated, Grand Central Annex, Box 477, New York 17, N. Y.

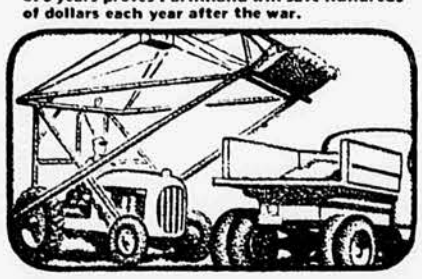
Name_____
Address_____
_____
_____ Zone No.____

## IF FARM PRICES FALL AFTER THE WAR

You won't worry, IF your costs fall at the same time. WRITE us today for illustrated folder that shows how Northwest farmers are saving $20 to $25 a day on haying, harvesting, manure loading, dam building and 22 other heavy jobs.

THE HYDRAULIC FARMHAND will enable you to handle these jobs with one hand; you can do as much work as 4 to 6 men, 2 to 3 teams alone. Cash in on every break in the weather ... . prevent crops spoiling in the field.

Your local tractor dealer will have only a few FARMHANDS in 1945, but plan now to lower farm costs when the war is won. Experience of 5 years proves Farmhand will save hundreds of dollars each year after the war.



THE HYDRAULIC FARMHAND
Mfd. by SUPERIOR SEPARATOR CO.
1174 15th Avenue S. E., Minneapolis 14, Minn.

**Buy War Bonds!**


# Wheat Will Be Better

*By L. P. REITZ, K. S. C.*

IMPROVEMENT in wheat is a continuous process. New machinery, new methods of tilling the soil and maintaining fertility, use of pure seed, and control of diseases, insects and weeds, as well as breeding new varieties, all have their place in wheat improvement. If we are to look ahead then we must keep abreast of the developments in all of these fields. I wish to discuss what the plant breeders in Kansas have in mind for the future.

Release to farmers of Pawnee, Comanche, and Wichita wheats marks a large advance over other varieties now being grown on farms. While these varieties are high yielders and produce high-quality flour, they are not perfect.

The plant breeder's goals are important and should be clearly defined because goals must be set 10 to 15 years, or even longer, ahead of the time practical results are expected. Varieties which may be released during the next 10 years probably are in plant-breeding nurseries at present. Goals set up by workers at the Kansas Agricultural Experiment Station and by the U. S. Department of Agriculture for new wheat varieties of tomorrow are as follows:

1. To breed varieties that resist, tolerate or escape environmental hazards and thereby reduce risks involved in wheat production and help stabilize agriculture.
2. To develop higher yielding, more easily handled varieties with improved value for pasture and thereby increase efficiency of production.
3. To select strains with more uniform and more suitable characteristics for marketing.
4. To accomplish the foregoing objectives by breeding for:
   - A. Disease resistance, especially against stem rust, leaf rust, bunt or stinking smut, loose smut, root rot and several minor diseases.
   - B. Insect resistance, especially Hessian fly.
   - C. Heat and cold resistance.
   - D. Stronger straw, shorter plants, non-shattering habit, early maturity.
   - E. Higher yield thru more and larger seeds.
   - F. Grain with higher test weight to the bushel, tolerance to weather damage.
   - G. Suitable flour-making properties.
   - H. Suitable flour qualities for use in making more nutritious bread and other wheat products.

Until all of these objectives have been reached there will continue to be a need for new varieties, and as new strains are developed which more nearly approach the ideal than older varieties being grown, they will be released to farmers.

I wish to mention a few hybrids specifically so you will know how much better our wheat might be. Work in development of a variety resistant to the Hessian fly has progressed far enough to show what we are getting. In tests last season at Manhattan, we had plots of fly-resistant and fly-susceptible varieties growing side by side. The fly infestation was only moderate yet the resistant hybrids yielded over 8 bushels more an acre than the susceptible varieties. Furthermore, the fly-free hybrids stood up. No doubt you have heard that Pawnee is more resistant to the fly than Tenmarq and that is true, but these new hybrids have even more resistance than Pawnee. In tests conducted by one of my co-operators in the Department of Entomology it was learned that when Tenmarq was infested 77 per cent, Pawnee was 42 per cent infested or about one half. These new hybrids in the same test ranged from zero to 8 per cent, so little infestation that it is doubtful whether the fly could exist at all on them under farm conditions. These hybrids are being tested extensively now to see how many other good qualities they have. They promise to whip the fly. If they are equal to our standard varieties in other respects they will be worth many extra millions of dollars to the wheat industry.

We had another test last year where stem rust was serious. We graded the rust on some at 75 per cent and that is about all a variety can have, altho it came so late the grain was pretty well developed. Even so, we had some new hybrids which scarcely showed a bit of rust. Several of these averaged together yielded 7.6 bushels an acre more and 3 pounds heavier in test weight than an equal number of susceptible varieties heading out at the same time. We have selections which combine this kind of rust resistance with high resistance to Hessian fly. It will take some more work to perfect these selections.

### Have Many Defects

The threshed grain of Red Chief and Chiefkan usually win top honors for appearance and test weight. Unfortunately, these fine-appearing wheats have many defects as both farmers and millers have testified. Plant breeders have been using these varieties in hybrids and it now appears that the high test weight and glossy dark-red color of the grain can be combined with good flour quality, disease and insect resistance and other good factors from other wheats.

We are looking for many of the same fine qualities in new varieties of soft wheat for Southeast Kansas. We have several being tested now for cake, cookie and biscuit-making quality. The results of these tests will determine how soon a new soft wheat can be developed for Southeast Kansas.

Until these new super-wheats are available there is plenty of wheat improvement to be done with the varieties available. Wider use of good varieties, better tillage, more attention to soil fertility and other approved practices would aid greatly. We need not look to the future for these things. We can begin now.

THOUSANDS of farmers have placed their orders and are awaiting delivery of John Deere two-cylinder tractors because they know they're "well worth waiting for". They have kept their eyes on John Deere tractors, watched their performance during this wartime period, when ofttimes two days' work was crowded into one.

They found this: John Deere two-cylinder tractors stay on the job longer; the cost of operation and maintenance is surprisingly lower; the few adjustments required because of simple two-cylinder engine design are easier to make, out on the farm—takes less time and less expense to keep the John Deere in fighting trim.

Ease of handling—perfect vision, operator's platform, hand clutch, plus the hydraulic lift and self-starter—has made it possible and easy for farm boys and womenfolk to do a man-sized job and do it well during this emergency.

With seven power sizes and twenty models, plus a complete line of tractor-mounted row-crop equipment to match, there is a size and type of John Deere power outfit for every farm and crop.

The production of John Deere tractors is being stepped up as rapidly as restrictions are lifted and manpower is available, but there are still not enough to go around. Get along with your present tractor as long as you can, but if you must have a new one, talk with your John Deere dealer now.

JOHN DEERE, *Moline, Illinois*


# Picking a Queen Bee

*By R. L. PARKER, K. S. C.*

SOME characteristics beekeepers are beginning to recognize as desirable in queens are wide, long abdomens which indicate large egg capacity and vitality, the abdomen closely connected or coupled to the thorax, or very little space between the thorax and abdomen. These characteristics appear to be correlated. In general, a good queen should be large in over-all size. Such queens usually are quiet on the comb and do not show uneasiness when a comb is removed from the hive and exposed to strong light. They will continue their work of egg laying and resting, and will not try to run under masses of bees to hide or try to dodge around the bottom or ends of the comb. The progeny of such queens are not nervous or uneasy and, as a general rule, do not have a propensity to sting.

In commercial honey production, a beekeeper requeens colonies at least every 2 years to maintain strong colonies. Young queens are more vigorous and lay more eggs, thus will have a tendency to maintain a strong colony better than an old queen. If the beekeeper has had a strain deteriorate—a tendency toward propensity to sting, and with low honey yields—such queens should be replaced with young ones from known strains of little stinging propensity and for building good, strong colonies. Old queens are replaced from a known good stock or strain. A beekeeper should replace poor queens at any time during the production season.

Replacement of a poor queen or the loss of a queen, can take place any time during the production season, providing the beekeeper has queen reservoirs. Queen reservoirs are 2- or 3-frame nuclei in which queens are maintained for immediate replacement. Other times of requeening of colonies would be in the early spring, at least 10 weeks before the major honey flow. Queens obtained at such a time, April 1 to April 15, will cost more than during the summer or fall. Another time of requeening is on the declining major honey flow. As a rule, this should be completed on or about August 1. This will allow a colony sufficient time to be built up to adequate worker strength for going into winter. Some commercial beekeepers have used the time of requeening of a strong colony during the latter part of September or the first part of October, or at about the time brood rearing has ceased.

Principal methods of queen introduction to colonies, or the replacement of queens, are by: (1) The queen mailing cage method, (2) use of a push-in cage, and (3) nucleus method. Necessary steps when using the queen mailing cage method are: (1) Remove all of the accompanying workers before introduction, (2) pull off the thick paper-strip protection to the queen cage candy which is at one end of the cage, and (3) be sure the wire screen face of the cage is ⅜-inch from the comb in order to allow bees access to the wire screen to enable feeding the queen.

A push-in cage is one made of wire screening in which the queen is released. It is pushed into the comb under which there is emerging brood. After a week this cage is removed, thus releasing the queen. The nucleus, or small-colony method of introduction, is usually the safest or most certain. Since there is a relatively small number of worker bees present, there isn't the danger of killing the queen thru antagonism. The queen mailing cage method, with a 2- or 3-frame nucleus, may be used in introduction with good success. After the queen is accepted by the nucleus, the nucleus or small colony can be united by the newspaper method to the colony to be requeened. In all cases, before queen introduction is possible, it is necessary that the colony go thru the treatment of being dequeened. A colony being requeened should not be disturbed for at least 7 days following queen introduction.

LIBRARY
3 1945
MANHATTAN
KANSAS

# Meet the Men

## WHO USE YOUR BATTERIES!

The Navy and Merchant Marine send rapid ship-to-ship messages by battery-powered flasher signal lights when radio communication might give a ship's position to the enemy.

It's difficult to locate men drifting in the sea! Water-tight battery lights on buoyant lifesaver suits have meant the difference between life and death for many Merchant seamen.

For emergency communication by voice, the Merchant Marine uses a portable megaphone to broadcast orders and instructions. Dry batteries give necessary power to the megaphone.

Two men and a bazooka make a winning team! But it takes large quantities of ammunition and dry battery power to keep these portable, hard-hitting weapons firing at the enemy.

Deadly flamethrowers are blazing the road to Victory! Dry batteries help to create the spark that sends these efficient weapons into instant, flaming action against the enemy.

The Signal Corps man with a Walkie-Talkie has freedom of speech as long as he has plenty of dry batteries! Handie-Talkies use thousands of war batteries to power vital communications.

*When they come Home* — **Burgess Batteries will be back again, too ... powering flashlights, radios, telephones, instruments and controls for millions of homes, farms and industries throughout America.**

ARMY E NAVY

# BURGESS BATTERIES

*IN THE NATION'S SERVICE*

**BURGESS BATTERY COMPANY, FREEPORT, ILLINOIS**

CUT SMUT LOSSES
TREAT SEED OATS
with
NEW IMPROVED
CERESAN
REG. U. S. PAT. OFF.

Reaches smut spores under oat hulls as well as those on outside. Also generally controls certain seed-borne smuts and diseases of barley, sorghums, flax and wheat. Get *New Improved* CERESAN from your dealer or ask your seed cleaner and treater to use it. Free seed treating chart. DU PONT SEMESAN CO. (Inc.), Wilmington 98, Delaware.

DU PONT
SEED DISINFECTANTS
A Treatment for Every Major Crop

BUY U. S. WAR BONDS!

# More Milk Will Result

*By R. L. STOVER, K. S. C.*

GROW plenty of high-quality roughage. No other one thing so influences production and profit of the dairy herd as the amount and quality of roughage. It is entirely possible to get considerably more milk than the average Kansas cow gives just by feeding plenty of high-quality roughage. One of the big reasons the Kansas cow averages only about 1¾ gallons of milk a day is because of the amount and quality of her feed.

The dairy department has completed some experimental work on relative value of good-quality green silage and brown silage. The work showed that brown silage not only was less digestible, causing the animal to get less food nutrients out of a pound, but was less palatable and the animals ate less of it. Chemical analysis has shown little difference between the samples, but the cows have shown a marked difference in quality between the 2 samples.

Chemical analysis alone gave a poor index of the value of lespedeza. Early-cut lespedeza gave good results in growing dairy heifers, while late-cut hay was not satisfactory. The reason is lignin, a highly indigestible substance which develops in lespedeza as it matures, and actually locks up some of the other food elements in the hay.

C. F. Huffman, Michigan Agricultural College, reports "The low value of mature roughages for milk production is not due to calories (energy content). Addition of starch or sugar to all alfalfa ration did not increase milk production. When an equal amount of corn or wheat replaced the starch or sugar, milk production increased against the declining tide of advanced lactation. It appears there is an unknown factor in young grass and in grains which is needed for milk production. As a matter of fact, the first reason for feeding grain as a supplement to roughage during the barn feeding period is to supply this unknown factor."

Quality in grass or pasture also is important. Providing a succession of pastures so there always is grass available during the pasture season that is young, succulent and rapidly growing is one of the best ways of obtaining maximum production and lowest costs.

One of the most expensive practices one can use on a dairy farm is to underfeed the cows. First thing a cow does when she is underfed is to take some of the milk out of the pail. If she is a good cow she also will take some of the flesh off her back, which doesn't help much for it takes feed to put it back later.

R. L. Stover

If you have only so much pasture and so much hay you will get much more milk out of it by keeping only the number of cows that you can feed adequately, rather than spreading this out and attempting to keep many more cows. Just take, for example, 20 tons of alfalfa hay with reasonably good cows — producing 300 pounds of butterfat a year. There is sufficient energy and protein in that 20 tons of hay to maintain 7 cows and let them produce a total of 31,262 pounds of milk in 6 months. If, however, one tries to keep 10 cows on that same 20 tons of hay they will get enough energy only to maintain themselves and produce a total of 19,042 pounds of milk. Then if one should try to keep 14 cows on the same amount of hay, milk production would be only 456 pounds.

### Only Way to Be Sure

Production records are the only means of accurately culling the low producers out of a herd. Progress in improving the herd is greatest when replacements are taken only from the better cows and the poorer cows are culled. Good cows will produce more milk from a given amount of feed than will poor cows. By feeding cows according to production, which, of course, requires production records, it is possible to make the same amount of feed produce more milk than if fed the same to all cows.

Disease control has significance both from the health standpoint and production standpoint. Mastitis milk is of value to no one. Cows with Brucellosis definitely produce less milk than cows free of the disease. Dairymen who have gone thru an outbreak of Bang's disease have records to show that production drops off at least a third when Bang's hits.

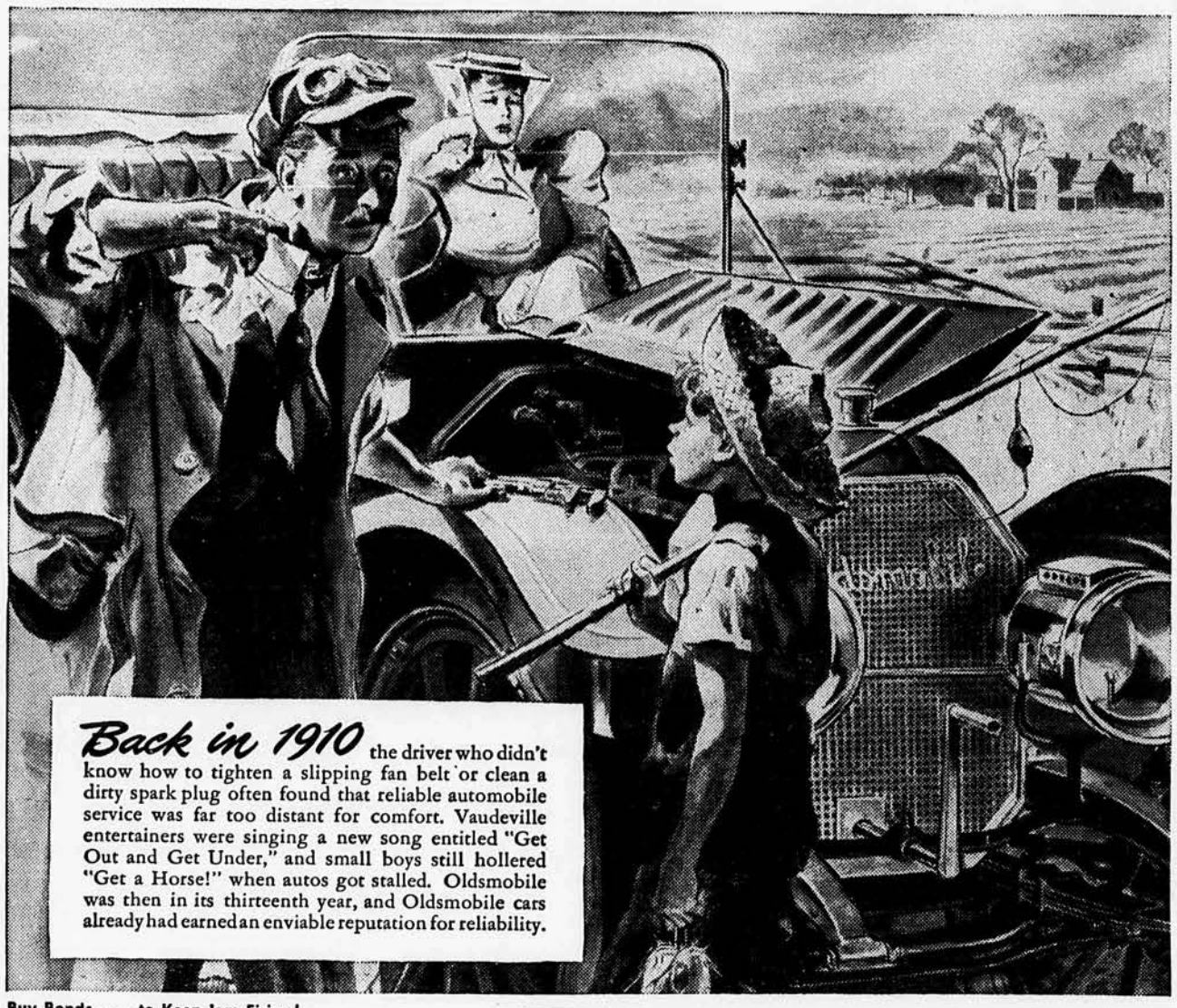
Breeding difficulties following Bang's often lengthen the lactation period and reduce the production. There are some dairymen and farmers in Kansas who oppose enforcement of ordinances or state rulings that prevent sale of milk from cows infected with Brucellosis, yet they have their cows tested so they know from which cows it is safe to keep milk for their own use.

There is no cure-all that some folks are hunting, for all or even any one of these diseases. Sanitation, segregation, and correct management will materially reduce the amount. Control methods thru vaccination, use of veterinary preparations and new medicines show some promise and are getting results in many herds. A good sanitary program on the farm, coupled with co-operation with a good veterinarian, will materially reduce losses caused by disease.

Use of milking machines is helping solve the labor problem on many farms, but many more could use a machine profitably. Planning of chore routes to eliminate unnecessary steps, use of small gates beside larger ones, feed bins that are conveniently located, and feed carts to haul all the grain at once, all eliminate effort.

Kansas cows average only 169 pounds of butterfat a year or 1¾ gallons of milk a day. Nearly three fourths of these cows are bred to beef bulls. That means most men who milk cows have or are following no constructive breeding program.

"Know where I can find a mechanic, sonny?"




Buy Bonds . . . to Keep 'em Firing!

Today— WHEREVER YOU ARE, JUST LOOK FOR THIS SIGN AND KNOW THAT YOU'RE GETTING THE BEST IN WARTIME "KEEP 'EM ROLLING" SERVICE

It's no trick for the Oldsmobile owner of today to locate a skilled mechanic. Wherever he travels, the familiar, circular Oldsmobile service sign is his guide to "transportation headquarters." There he finds a staff of mechanics who are factory-trained specialists in their various fields. There he finds authorized replacement parts, and a range of modern accessories. There, too, he finds the latest in service equipment—all the tools and "gadgets" and specialized machines needed for everything from lubrication to wheel alignment, from a minor tune-up to a major overhaul . . . If your wartime car needs attention, why not find out about *Oldsmobile Service* for yourself!

OLDSMOBILE DIVISION OF GENERAL MOTORS
AMERICA'S OLDEST MOTOR CAR MANUFACTURER

STATE SCHOOL MANHATTAN KANSAS


## For Joyful Cough Relief, Try This Home Mixture

Saves Big Dollars. No Cooking.

This splendid recipe is used by millions every year, because it makes such a dependable, effective medicine for coughs due to colds. It's so easy to mix—a child could do it.

From any druggist get 2½ ounces of Pinex, a special compound of proven ingredients, in concentrated form, well-known for its soothing effect on throat and bronchial membranes.

Then make a syrup by stirring two cups of granulated sugar and one cup of water a few moments, until dissolved. It's no trouble at all. No cooking needed. Or you can use corn syrup or liquid honey, instead of sugar syrup.

Put the Pinex into a pint bottle and add your syrup. This makes a full pint of cough medicine, very effective and quick-acting, and you get about four times as much for your money. It never spoils, and is very pleasant in taste.

You'll be amazed by the way it takes hold of coughs, giving you quick relief. It loosens the phlegm, soothes the irritated membranes, and helps clear the air passages. Money refunded if it doesn't please you in every way.

WOMEN in your '40's

Do these symptoms betray your age?

Often many women between the ages of 38 and 52—are shocked to realize they are in the class commonly known as "middle-age" with its annoying symptoms which so often betray their age.

So if *you* suffer from hot flashes, feel weak, tired, nervous, restless, a bit blue at times — all due to the functional "middle-age" period peculiar to women —try Lydia E. Pinkham's Vegetable Compound to relieve such symptoms.

**This Great Medicine HELPS NATURE**

For almost a century—Pinkham's Compound has been famous to help great numbers of women go "smiling thru" such middle-age distress. Thousands have reported remarkable benefits!

Many wise women take Pinkham's Compound *regularly* to help build *up resistance* against such symptoms. This great medicine *helps nature* and *that's* the kind you should try.

*INEXPENSIVE*: Pinkham's Compound costs very little compared to some other methods but this doesn't detract from its effectiveness. Follow label directions.

Lydia E. Pinkham's VEGETABLE COMPOUND



RUN DOWN?

If You "Tire Easily", have low resistance to minor ills—due to lack of the Vital Elements—*natural* A and D Vitamins—try taking good-tasting Scott's Emulsion *daily!* National survey shows many *doctors* recommend this valuable tonic to help build up resistance, bring back energy and stamina! Buy Scott's today—at your nearest druggist!

IT'S GOOD-TASTING

Try SCOTT'S EMULSION

Great Year-Round Tonic


# What the "Big Three" Did at Yalta

(Continued from Page 6)

are provided, they cannot be used against Russia, Britain, United States, France or China.

In effect, this means that the international organization to keep the secure and lasting peace will function by force of necessity against any smaller nations that threaten world peace; will function by agreement where the Big Three, the Big Four, or the Big Five are concerned.

A full dress conference of all the United Nations has been called to meet in San Francisco, April 25, to agree upon the Dumbarton Oaks proposals as finally whipped into shape, and prepare the "charter" for submission to the governments for ratification. Top-flight diplomats—United States headed by Secretary of State Stettinius, godfathered by former Secretary of State Hull—will represent the Nation at San Francisco. The White House has asked three Republicans to sit in the U. S. delegation: former Governor of Minnesota, Harold Stassen; Senator Vandenberg, of Michigan; Representative Eaton, of New Jersey. Commander Stassen's henchman, Sen. Joseph Ball, bolted Dewey last fall to support President Roosevelt. The Administration has hopes of winning all-out support of its international programs by Senator Vandenberg, thru making him a party to the negotiations; Canadian-born Congressman Eaton has supported the Roosevelt foreign policies ever since the Chicago speech in 1937.

Sidelight on the Yalta conference. Marshal Stalin insisted that the conference be held on Russian soil. It was. General de Gaulle, of France, was not invited, felt slighted. De Gaulle invited President Roosevelt to call on him at Paris. President Roosevelt declined. President Roosevelt invited General de Gaulle to call on him at Algiers. De Gaulle refused. The Frenchman apparently has decided to hitch his wagon to the Stalin star. He previously had declined to enter into a 20-year compact with Britain, after having made one with Stalin.

Lend-Lease requirements for other Nations—altho the name may be shifted to rehabilitation assistance—promise to be heavy for several years to come. According to Senator Taft, of Ohio, the Soviet has suggested 10 billion dollars in the next phase of World War II; England's needs are still heavy; France prefers Lend-Lease for reconstruction rather than use up her dollar exchange accumulated in the last few years.

Pattern of the farm price support promised for 2 years after war ends probably is established in WFA's latest statement on price support for dried peas—if it works out all right. Statement says:

"The WFA has limited government price supports on the 1945 crop of dry edible peas to the actual production of the goal acreage. The Government will purchase only the amount produced on the goal acreage less the amount sold for seed and civilian consumption. This action is taken to encourage other uses of part of the increased acreage used for peas in recent years and to prevent the accumulation of excessively large stocks (surpluses to you) of peas."

If this is applied to all commodities after the war for the 2-year period, it means that Government will set acreage goals for each commodity, and the promised support (90 per cent of parity generally) price will be maintained only on that production, which will be based on estimated market demands.

A possible extension of this program could be to guarantee price supports only where the grower had not exceeded his acreage allotment under the national goal. Those who exceeded the allotments could sell at the best price obtainable. Might not be so simple to operate as it sounds, but it gives the general idea how price supports can be used to control acreage and production.

In the case of the 1945 pea crop, the CCC is to purchase the peas produced on allotted acreage. Making the sale to the CCC, "Each processor or dealer must certify that: (1) the peas included in the sale are eligible for price support; (2) all the peas purchased by him, whether sold or held for later sale on the civilian market, are eligible for price support; (3) all the peas purchased by him which are not eligible for price support have been or will be sold for use as feed for poultry or livestock; (4) for all peas offered to CCC he has paid not less than the support price less the agreed dealer's margin."

Rep. Clifford Hope, of Kansas, ranking Republican member of the House Committee on Agriculture, says it is time more attention was paid to the International Wheat Agreement, and its implications. Congressman Hope says, in this connection:

"This is an agreement entered into among the governments of Argentina, Australia, Canada, the United States (exporting countries) and the United Kingdom (importing country). Entered into June 27, 1942, its terms are to extend 2 years beyond the end of the war. It has not been submitted to the Senate, and is not intended to be—as an ad interim war agreement, it is contended ratification by the Senate is not necessary. It is my understanding the State Department holds that a permanent agreement would have to be submitted to the Senate as a treaty.

"The principal criticism I have heard is based on the division of the world market. The basic quotas for the 4 exporting countries are: Canada 40 per cent, Argentina 25 per cent, Australia 19 per cent, United States 16 per cent. Based upon world trade during prewar years, the percentage given this country would mean exports of from 70 to 80 million bushels a year; this is more than average exports of wheat and flour for the last 10 years, but considerably less than the average of the 10 years preceding.

(Continued on Page 18)


FARMERS Say-

IT PAYS BIG TO INOCULATE WITH

● Farmers report that inoculation with NITRAGIN makes bigger yields and surer crops. NITRAGIN is good crop insurance for every planting of clovers, alfalfa, lespedeza, soybeans, other legumes. It costs a few cents an acre, takes only a few minutes to mix with the seed. It's the oldest, most widely used inoculant. Produced by trained scientists in a modern laboratory. Get it, in the yellow can, from your seed dealer.

FREE booklets tell how to grow better cash, feed, and soil building crops. Write today.

Below: Experiment Station test plots showed this improvement in alfalfa.

THE NITRAGIN CO., 3710 N. BOOTH, MILWAUKEE 12, WIS.


Buy More U. S. War Bonds!

COLUMBIAN FARM EQUIPMENT

Red Bottom Stock Tanks
Red Top Grain Bins
Red End Well Casing
Red End Hog Troughs
"Automat" Hog Feeders
Dipping Tanks
Tank Heaters
Feed Cookers

War-time restrictions serve to further emphasize the rugged, built-in quality and long-lasting features of Columbian Farm Equipment.

On thousands of farms throughout the middle west these top grade steel products continually are on the job every day—making farm work easier and faster—helping to get livestock in better marketing condition quicker—helping farmers and livestock raisers produce more essential war-winning food, *and make greater profits.*

Look for your nearest Columbian dealer when you need Columbian Farm Products.

(44-F)

COLUMBIAN STEEL TANK COMPANY TANKS FOR THE WORLD KANSAS CITY, MO. U.S.A.

COLUMBIAN STEEL TANK CO.
Kansas City, Missouri

# This 1919 Farm Kitchen Started a Trend That 1,340,000 Followed!

WHEN Fairbanks-Morse first installed a fully automatic electric home water system, the way was pointed to today's 1,340,000 farm homes enjoying that greatest of all conveniences —running water.

But many could not afford the early, hand-built systems. So Fairbanks-Morse pioneered again . . . became the first to build home water systems by modern production line methods.

That is a typical example of a basic Fairbanks-Morse policy . . . devise products to meet vital farm needs, perfect them by thorough field testing, then manufacture them in such volume that the cost is low, so that most farm families can share the benefits.

As the result of that policy, the name Fairbanks-Morse is worth remembering for dependable, honest-value farm equipment of the types listed below . . . machines for which replacement parts will always be available. Fairbanks, Morse & Co., Chicago 5, Illinois.

*Another Name Worth Remembering*

**YOUR NEAR-BY FAIRBANKS-MORSE DEALER**

He is ready to provide you with Fairbanks-Morse *performance-proved* farm equipment. He is anxious to serve you well, to deserve your future patronage.

DODGE CITY.....Schroeder Implement Co.
ELKHART.....Western Auto Associate Store
DOWNS.....Voss & Verhage
LAWRENCE.....Green Bros.
PLAINS.....The Home Lumber & Supply Co.
SMITH CENTER.....Attwoot Implement Co.
SYRACUSE.....Syracuse Hardware & Plumbing Co.
ULYSSES.....Phifer Motor Co.

*Buy and Hold More War Bonds*

**Fairbanks-Morse**

*A name worth remembering*

Water Systems • Sump Pumps • "Z" Engines • Light Plants
Windmills • Pump Jacks • Corn Shellers • Hammer Mills


## Marketing Viewpoint

**By George Montgomery, Feed Grains, Poultry and Eggs, and Dairy; Merton L. Otto, Livestock.**

*I still have my last year's wheat crop. Should I renew the loan and hold it another year, deliver it to the government on May 1, or sell it now?—M. R.*

The price of wheat next year probably will not be above the current level, so it does not appear advisable to renew the loan. Altho wheat prices in terminal markets are at ceiling limits, prices at many local shipping points are less than the loan plus the 7 cents storage allowance. Unless you have a good quality milling wheat for which you can get a premium, you probably can realize more by delivering the wheat to the government on May 1.

*I have some grain sorghum that is too high in moisture to hold until warm weather. What should I do with it?—G. J.*

If your local elevator can get cars to ship it, you better sell your grain sorghum in the near future. Terminal prices for grain of high moisture content probably will weaken if the car situation improves. If you can't ship it now, feeding to your livestock or selling to a neighboring feeder are the other alternatives. If you have equipment you might be able to dry it if you can get forced ventilation into the bins.

*What is the ceiling price that can be paid for live cattle in Kansas? I see $17.40 quoted but I also see $17.65 quoted for the Kansas City market. Which of these prices is correct?—C. W.*

Both quotations are correct. The ceiling price that can be paid for any live cattle sold in Kansas is $17.40, except in Kansas City where the ceiling price is $17.65. Exceptions to this order are: (1) Cattle sold for breeding or dairy purposes. (2) Cattle sold by members of 4-H Clubs, Future Farmers, or other recognized youth organizations. Permits must be obtained for such sales, and if such sales are to be exempt from price regulations they must be made at the place and time of a fair, show or exhibition. (3) Animals sold for export which are subject to regulations governing such sales.

## "Big Three" at Yalta

(Continued from Page 17)

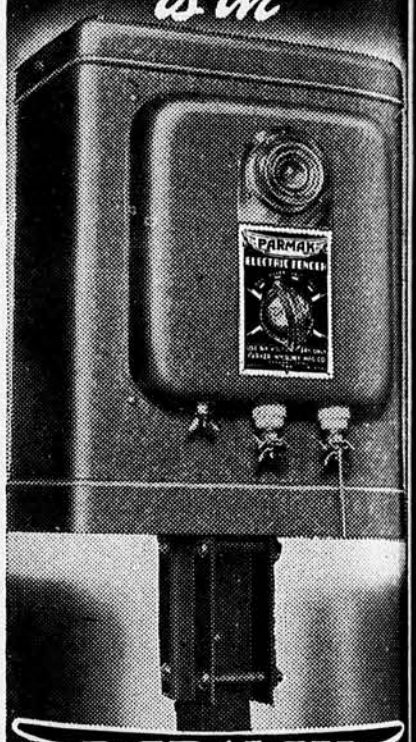
"By the terms of the agreement, all of the exporting countries agreed to put into effect a production-control program, to prevent accumulation of surpluses. The agreement has not been put into effect; probably will not be attempted until after the war ends. No price structure was included, but the formula agreed upon says the price shall be such as to (1) return reasonably remunerative prices to producers in exporting countries, (2) be fair to consumers in importing countries, (3) be in reasonable relationship to prices of other commodities (parity concept), (4) make appropriate allowances for exchange rates and transportation costs.

"I find that wheat producers, and even the millers, have little knowledge of our information about this agreement. It was given no publicity at the time it was entered into, and so far as I can ascertain, members of Congress from the wheat-producing states were not consulted.

"Irrespective of whether the agreement is good or bad for this country, I think the representatives of the United States who entered into the agreement made a very great mistake in not throwing the matter open for discussion and consideration by our wheat producers and their representatives in Congress. If an effort is made to enter into a permanent agreement I hope that a different procedure will be followed."

Congressman Hope, of Kansas, seems to be rather old-fashioned, to hold that the people interested should be consulted by government officials making agreements affecting those people. That concept of government has grown dimmer and dimmer for the last 12 years, and is planned to disappear almost entirely in the next 4 years, judging from the trends of official thinking.


*Every Feature* essential to effective fencing, regardless of price... *is in*



PARMAK PRECISION

*World's Largest Selling*

**ELECTRIC FENCER**

The result of years of experience in the manufacture of precision electrical equipment, PARMAK offers you more advantages—maximum safety, efficiency, economy and proven performance on more farms!

**Only $16.90** AT YOUR DEALERS

PARKER-McCRORY MFG. CO.
KANSAS CITY, MO.

**Pull the Trigger on Lazy "Innards"**

**WHEN CONSTIPATION** makes you feel punk as the dickens, brings on stomach upset, sour taste, gassy discomfort, take Dr. Caldwell's famous medicine to quickly pull the trigger on lazy "innards" and help you feel bright and chipper again.

**DR. CALDWELL'S** is the wonderful senna laxative contained in good old Syrup Pepsin to make it so easy to take.

**MANY DOCTORS** use pepsin preparations in prescriptions to make the medicine more palatable and agreeable to take. So be sure your laxative is contained in Syrup Pepsin.

**INSIST ON DR. CALDWELL'S**—the favorite of millions for 50 years, and feel that wholesome relief from constipation. Even finicky children love it.

**CAUTION:** Use only as directed.

**DR. CALDWELL'S SENNA LAXATIVE**

CONTAINED IN **SYRUP PEPSIN**

**Buy More U. S. War Bonds!**

STATE SCIENCE MANHATTAN KANSAS



# What's Ahead for Eggs

*By KARL G. SHOEMAKER, K. S. C.*

DON'T base poultry plans for 1945 on 1944 operations. Most of us remember very clearly the headaches involved in the egg business in 1944. In my opinion, these same conditions will not prevail and I would like to stress the differences in the situation now and those that existed a year ago as far as eggs are concerned.

We must keep in mind that we have 10 per cent fewer hens on farms now than we had a year ago.

Karl G. Shoemaker

One of our biggest headaches last year was finding storage space for eggs, because of the huge supplies of beef, pork, butter, cheese, eggs, and other commodities that were in storage. In fact, last April we had 100 cars of eggs on track ready to move to storage in the Dallas region without one carload of storage space available to move these eggs into. Now as we look at our storage holding, we find that our record pork slaughter of last winter has been used up with storage stock even below normal. That means we can find a home for those eggs which normally go into storage during the spring, and which must go into storage if we are going to have enough eggs to meet the consumer demand thru the winter.

There will be much less meat available for our civilian population in 1945 than there was in 1944. At least 15 per cent less. With less meat available our civilian consumers probably will eat more eggs, especially since there is a scarcity of dairy products which might be the other good substitute. I am anticipating that our civilian consumption in 1945 might easily exceed the 347 eggs consumed to the person in 1944. This year if we will do a better job of taking care of eggs, and if we can move them into storage promptly, they should be of higher quality, which would encourage the consumer to eat more of them.

### May Set a Record

There is increased need of Allied countries for eggs. In December we saw reports which indicated there would be a greater need for dried eggs in 1945. Checking accuracy on these reports, I find that Russia, England, France and other Allied countries increased their demand for dried eggs materially when they found their meat allotments were going to be down. Therefore, it looks as if 1945 might be a record year from the standpoint of production of dried eggs.

Now with 10 per cent fewer hens we might expect 10 per cent fewer eggs in 1945, and 10 per cent fewer eggs in 1945 will barely meet the demands of our civilian population and of our Allies. Our Allies sent in 2 figures this year, one stating the minimum number of dried eggs they must have in 1945 and another reporting the number of dried eggs they could use if available. This last figure is large enough that our production this year, in all probability, will not be big enough to meet demands.

Since we have a law in Kansas stating that all eggs must be candled, it would seem probable that egg prices would not get below 27 cents and would be supported at that level in case the price did drop below the ceiling on the lower quality eggs. I would like to emphasize that in case the price does drop below the ceiling it will be more noticeable in the lower quality eggs than in the high quality eggs.

## Protects Machinery

I keep a can of old crankcase oil in the field with every piece of machinery and each night I coat the moldboards, disks and other exposed places with oil. Then if it rains during the night the machines are always ready for work the next morning.—O. O. C.


Armour and Company

## What's a Steer Worth?

SOME people say a steer is worth what it costs to produce, plus a profit — but every business man, whether he be a farmer or a merchant, knows that anything is worth only what somebody will pay for it and its cost is a minor factor.

Do the producers of steers, hogs and sheep get the full value of their animals when they sell them at the nation's market places? The answer to that question depends on these factors:

(1) How much the consuming public is willing to pay for the products which are made from the meat animal.

(2) What portion of the consumer's dollar goes back to the producer?

(3) Is the work of converting live animals into meat and by-products performed efficiently?

(4) How much profit does the packer get?

Approximately 75% of what packers receive for meat and by-products goes back to the producers of livestock.

The efficiency of the packing industry is generally recognized and few industries are able to maintain themselves on as small a portion of their total income as is the packing industry.

Packers' profits over a long period of years have averaged less than two cents per dollar of sales and less than 6% on capital invested in plants, equipment, etc.

The smallness of packers' profits and the large portion of the total revenue which goes back to the producers are positive evidence that natural laws of competition and good business management are operating to make a steer net its producer all that the public says it is worth.

ARMOUR AND COMPANY



BUILD YOUR OWN! FAST-FREEZER

It's Easy and Fun

Every amateur will be proud to build this modern household necessity. It just takes a few hours of your spare time to build, and operates electrically on any voltage. There's fun in building and profit in using this handy freezer. Saves up to 75%.

NO EXPERT KNOWLEDGE NEEDED

Our plans are simple and easy to follow and these 8 to 40 cubic foot sizes can be built of new or used parts. Special offer for short time only: Our 50c Build Your Own Milk Cooler Plan will be included without cost. Mail $1 bill, check or money order for complete plans and catalog.

LEJAY MFG., 431 LeJay Bldg., Minneapolis 8, Minn.

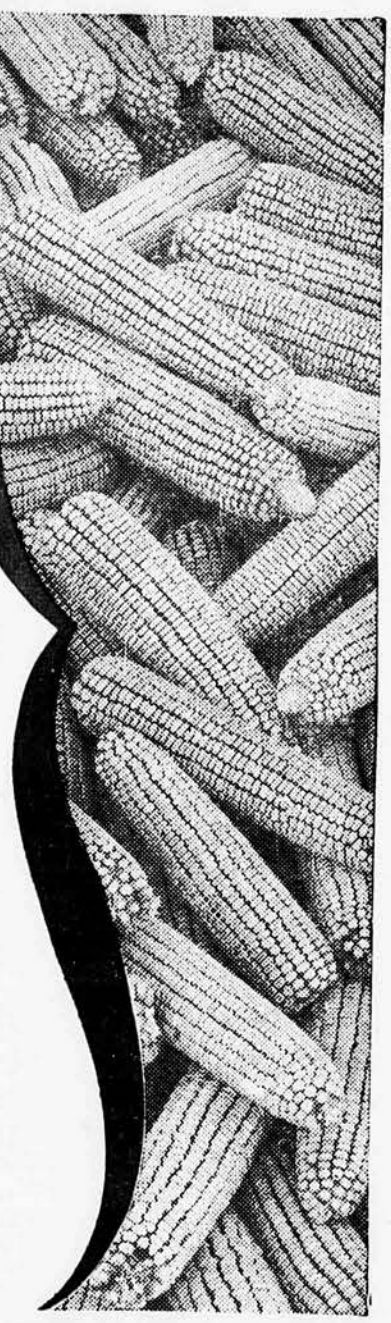


STAMMER? GET THIS FREE BOOK!

This new 128-page book, "Stammering, Its Cause and Correction," describes the Bogue Unit Method for scientific correction of stammering and stuttering—successful for 44 years. Benj. N. Bogue, Dept. 3714, Circle Tower, Indianapolis 4, Ind.



Order Your PIONEER Hybrid Seed Corn for 1946 Planting NOW



Bad weather may reduce yield of seed fields.

Continued tire and gas rationing may prevent salesman from calling on you as early as he would like next fall.

It is for *your protection.* A reservation placed now is subject to your confirmation next fall.

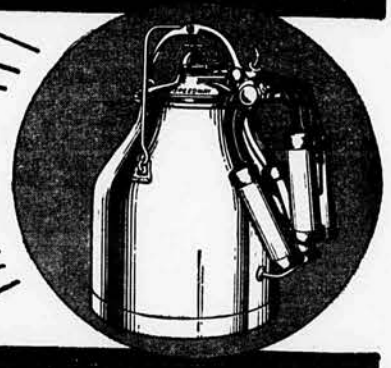
GARST & THOMAS
Hybrid Corn Company
Coon Rapids, Iowa



*Both* ARE NECESSARY FOR BEST RESULTS

FAST MILKING

UNIFORM MILKING



...AND *Both* CAN BE HAD ONLY IN THE DE LAVAL MAGNETIC *SPEEDWAY* MILKER

Fast milking *plus* uniform milking . . . form the unbeatable combination that provides best milking results. Both are necessary for the kind of fast, clean, profitable milking that every dairyman wants.

*Fast milking* is a built-in quality of the De Laval Magnetic Speedway Milker . . . and with the De Laval Speedway Method of Fast Milking users are obtaining the top brand of fast, clean milking.

*Uniform milking* is also a built-in feature of the De Laval Magnetic Speedway. Pulsations for all units in use are controlled from one central point by magnetic force. Hence . . . all units milk with exactly the same speed and action at all times . . . delivering perfect uniformity of milking.

Fast *and* uniform milking means best results . . . and that's what you want for *your* herd.

DE LAVAL STERLING MILKER

The De Laval Sterling Milker is particularly adapted for those to whom lower price is an important consideration. The Sterling Pulsator has only two moving parts, gives positive milking speed and action that pleases the cow. De Laval Sterling single or double units may also be used on any other make of single pipe line installation.

DE LAVAL SEPARATORS

De Laval Cream Separators skim cleaner, last longer, cost less per year of use and earn more. They produce highest quality cream and may easily be washed in a few minutes' time under ordinary farm conditions. Made in a wide variety of sizes and styles and at prices to meet every need and purse. Hand or motor drive.

THE DE LAVAL SEPARATOR COMPANY

NEW YORK 6, 165 BROADWAY · CHICAGO 6, 427 RANDOLPH ST · SAN FRANCISCO 19, 61 BEALE ST

*New* and *different* disinfectant spray . . . Has a PLEASANT ODOR . . . *Kills* common *poultry disease germs** on contact, spore bearing organisms excluded. Used as directed, *won't harm chicks.*

*Germs destroyed include pullorum, cholera, typhoid, fowl pox, laryngo. Use Par-O-San for laying houses, too. *Economical;* quart dilutes in 25 gal. water. *Stainless.* Used by leading hatcheries, poultry raisers. Good chicks repay good care, so disinfect *early.* Don't risk needless loss. Get *genuine Dr. Salsbury's* Par-O-San *now,* at hatcheries, drug, feed, other stores. Dr. Salsbury's Laboratories, Charles City, Iowa.

GET THE GENUINE
Dr. SALSBURY'S
PAR-O-SAN
POWERFUL *Pleasant* DISINFECTANT


# Goals in Poultry Breeding

*By D. C. WARREN, K. S. C.*

GOALS of the poultry breeder include improvement of egg number, egg size, adult mortality and broiler feathering. Choice of breed may either solve or complicate the problem. To a lesser degree the same statement applies to choice of strains within the breed or variety. When one chooses the White Leghorn he virtually solves the problem of acquiring good broiler feathering, but he has meat qualities not sought by the poultry packer.

Egg production is the one trait upon which the specialty poultry breeder has placed greatest emphasis and considerable improvement has been accomplished in this direction. Egg size is another trait upon which much effort has been expended. Perhaps one of the most serious present-day problems in poultry production is loss due to mortality in the laying house. This is partially a management problem, but even under ideal management conditions losses are sometimes high, and evidence has been obtained to indicate that this also is a breeding problem.

Most of the breeding improvement work must be left to specialists. The average poultryman can expect by selection methods to hold the stock to the approximate levels at which he found it. Chief problem of the average farmer is to make a wise choice of the breeding stock available to him. Obtain stock from a breeder who keeps records measuring qualities such as egg production, egg size, livability of the stock.

Dr. D. C. Warren

In establishing goals for the poultryman, first thing we think of is number of eggs produced. A bird that lays 200 or more eggs a year usually is considered a very good individual from the viewpoint of egg number. For a flock to average 200 eggs the percentage production must average 55 per cent thruout 12 months. Constant and rigid culling will improve the average production but greatly reduce the flock size by the end of the year. The amount of laying house mortality experienced also will depend upon the culling system followed. Perhaps the so-called henhouse average is the most enlightening figure since it gives an average based upon the number of pullets starting the year. This takes into consideration rate of laying, culling and death losses.

The standard of 24 ounces a dozen is generally recognized as a satisfactory egg size. If this is attained by January 1, the flock should be considered quite satisfactory.

### Eliminate Poor Feathering

One generally recognized weakness of most large breeds is poor broiler feathering among the males. This may be easily improved by most any poultryman in a few years. Some of the better poultry breeders are incorporating early broiler feathering tendencies into their stock. Early-feathering male chicks may be purchased, and they can be recognized by having well-developed tails and feathering like a Leghorn at 10 days old. If such males are mated with any flock of females the daughters produced will all be early feathering. If these early-feathering pullets are then mated with early-feathering males, they will produce all early-feathering offspring which will breed true for the early-feathering trait. Sons of the original cross will not be early feathering.

## Financing Turkey Project

By DR. W. E. GRIMES, K. S. C.

Financing of turkey production presents no problems different from those of financing any other type of agricultural production.

These well-established principles should be followed: Funds should be available as needed and not in excess of needs; should be obtained on the most favorable terms possible. This applies to cost of the loan and time of borrowing and repayment; conditions of loan should not hamper producer in following good production and marketing methods; the loan should be adequately secured from the standpoint of the lender at all times; terms should not dictate methods of production, the feeds or other supplies to be used, or time, place, or method of marketing.

The borrower should have part of the needed funds, supply his own labor and at least part of the feed. Raising turkeys entirely on borrowed capital is a doubtful practice. Turkeys should be insured as the grower owes it to the lender, and should also keep lender informed at all times concerning progress of the turkeys.

In many parts of our America, the land, the fertile fields, the pastures and the waste lands—all are covered with snow. In many places, the snow covers the sins of man to his land—but only for a while. When spring comes, many formerly fertile fields will show the marks of erosion by water, by frost, and by the winds. Many good tillable acres, however, will be revealed and many with telltale marks of attention *needed*. Action will be needed if that land is to remain fertile and free from erosion.

Farmers of America have the means—the modern methods and modern machines—to keep up the producing power of all our land. Now is the time for you to order the repair parts needed and to put all your machinery in tip-top condition, and NOW is the time to talk to your MM dealer about necessary overhauling jobs on your tractor and implements. If you need *new* machinery or are going to need it within a year, now is the time to place orders. MM Machines are quality built to do the work for which they are intended.

MINNEAPOLIS-MOLINE
POWER IMPLEMENT COMPANY
MINNEAPOLIS 1, MINNESOTA



"GOOD FENCES Sure Pay!"

Mark and Don Alexander, Owatonna, Minn.

"It may seem like quite an expense to fence off an entire farm of 600 acres into 40-acre fields with woven wire, but we've found it pays. For with our 2600 head of hogs and 170 head of dairy cattle, along with rotated legume pasture, we've increased our crop yields 50% during the past 10 years. Corn now yields about 70 bushels per acre—before only 40. This fact speaks for itself.

"RED BRAND is most durable"

"Without exception, Red Brand is the most durable fence we've found. That's why more than 75% of our farm is now fenced with Red Brand."

*Present Keystone Fence, though not trade-marked "Red Brand", is TOPS in quality.*

KEYSTONE STEEL & WIRE CO.
PEORIA 7, ILLINOIS
RED BRAND FENCE
—RED TOP STEEL POSTS—



FREE

New 1945 Book on Chick Raising

Tells how you may grow the finest pullets you've ever raised. Shows how to save up to 50% on feed cost, at the same time raise big healthy pullets with stamina to lay several years. Gives full information on the rearing plan which has produced many World's Record egg-laying champions in the National Contests. A gold mine of valuable information on how to cash in on the profit opportunity for poultrymen in 1945. For your FREE copy write to THE QUAKER OATS CO., Dept. C-26, Chicago 4, Ill.



CHIK-SAVER ELECTRIC BROODER

World's Biggest Brooder Value! Sets up in 15 minutes. Six 24" Feeders FREE. Send $1.00 and pay postman balance or write today for folder.

200 Chicks 40" x 40" Size 500 Watt Heater Thermostat Control $7.95

THE NATIONAL IDEAL CO. 904 S.E. SUMMIT ST., TOLEDO



Happy Interlude
LUNCHEON
DINNER
SUPPER
THE
DRUM ROOM
HOTEL President
KANSAS CITY, MO.
FRANK J. DEAN, MANAGING DIRECTOR



New OTTAWA WOOD SAW

For Tractors

—Makes wood sawing fast and easy. Can cut enough wood to pay for itself quickly. Easily moved while attached. Big heavy blade. FREE details.

LOW PRICE

OTTAWA MFG. CO.
W311 Oak Ave., Ottawa, Kans.

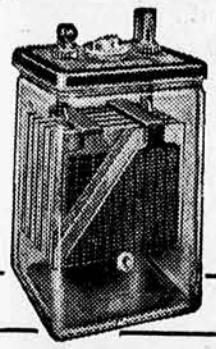


"CAPON"

"ELECTRIC" DRY CELLS, batteries or light socket do it. No cutting, tearing, or twisting of delicate parts. Press button, the rooster becomes a CAPON. Profit and pleasure are yours, illustrated bulletin explains. A post card with your name and address brings it to you. Without cost or obligation.

Geo. Beuoy, No. 48, Cedar Vale, Kans.

NO NEED to RATION LIGHT and POWER with DELCO LIGHT BATTERIES



GUARANTEED
for not less than
700 USEFUL WORK CYCLES

The Delco Light Battery guarantee assures you of lowest cost day-in-and-day-out useful power and light—as compared with most battery guarantees based only on rationed use over a term of years.

Get the whole story of these famous batteries from your authorized Kansas dealers listed below.

COLBY.....W. E. Buford
COLDWATER.....Rural Gas & Electric
DIGHTON.....Farmers Co-op Oil & Supply
DODGE CITY.....Lippoldt Appliance Co.
EUREKA....Paul Jones Machine & Welding
GARDEN CITY.....A. J. Ingram
GREAT BEND.....Home Appliance Co.
GREENSBURG....H. J. Partridge Plumbing
HARPER.....Jess Hamilton
HERINGTON.....Zeckser Brothers
HOWARD.....Ralph J. Perkins
HUTCHINSON.....Rounkle Radio
JOHNSON.....Cecil Cave
La CROSSE.....H. E. Glantz
LEOTI.....Western Hardware & Supply
MANHATTAN.....C. A. Powell & Son
MEADE.....Brown Furniture Co.
MEDICINE LODGE..Dickey Appliance Co.
MILTONVALE.....C. L. Williams Sales
OSAGE CITY.....J. C. Lundholm
PHILLIPSBURG.....Elliott Hardware
PRATT.....Link Electric
QUINTER.....Schneider Electric
RUSSELL.....Farm Electric & Supply Co.
SALINA.....Ralph Ward Electric
SCOTT CITY.....Hoover Electric
SMITH CENTER....Atwood Implement Co.
STERLING.....Walton Electric Co.

*New Light Plants, Water Pumps and Wind Plants now available and in stock*

Everything electrical for the farm, 110-A. C. and 32-Volt

*Factory Distributors*

General Products
122 S. St. Francis, Wichita 2, Kan.

Buy More Bonds!

Sleeping sickness (encephalomyelitis) carried by mosquitoes can rob you of valuable horses and mules. The high number of cases last October shows that this disease is still present in infected areas.

or effective protection, vaccinate several eks before the mosquito season begins d choose a potent, tested vaccine with a able record of dependability. Lederle's ephalomyelitis Vaccine is safe, effective d dependable. It is made by laboratories pioneered in this field and produced the vaccine of this type.

or treating sleeping sickness in its early ges, use Lederle's Anti-encephalomyelitis um. Vaccination the reliable Lederle way, wever, is your best insurance against loss.

DERLE LABORATORIES INC.
ANIMAL INDUSTRY DIVISION
Unit of American Cyanamid Co.
ROCKEFELLER PLAZA, N. Y. 20, N. Y.

Lederle

## New Fruit Farm

*By W. F. PICKETT, K. S. C.*

WHEN the new Horticultural Farm was purchased in July, 1942, provision was made for studies pertaining to fruit growing, vegetable crops, nut trees and windbreaks. Fruit-growing projects include studies of apple, cherry, peach, plum, and one or two miscellaneous items such as the

William F. Pickett

Jujube or Chinese date. Apple studies pertain primarily to testing new and promising varieties, and studies on rootstocks for apple trees as they affect size, production and hardiness of the trees. We have 2 separate plantings of peach trees, one in which 30 varieties are under test, and the second planting of older varieties where studies on spraying, soil management, and fruit thinning will be conducted. Sour cherry plantings are principally Early Richmond and Montmorency, with a few newer varieties. One important fruit project is study of the grape. Most of the new vineyard is composed of standard varieties, but in addition we will have 15 or 20 new and promising varieties.

Comparatively few fruit plants were set out last spring. Practically all of the fruit trees had been planted in the spring of 1943, and the good growing seasons of 1943 and 1944 resulted in exceptionally good growth on all kinds and varieties of fruit trees and grapevines. Trellises have been built on the new vineyard and prospects are that we will have a good crop of grapes on the 1943 planting, altho we will not permit these vines to produce as much fruit in 1945 as we will in 1946.

### Plan to Irrigate

Of particular interest is our proposed plan for installing irrigation equipment near the northeast corner of the farm; an electrically driven pump that will deliver 200 gallons of water a minute. Irrigation water will be used for vegetable crops and strawberry plantings. A test well has been put down on this site and there is evidence we will have a fair supply of water.

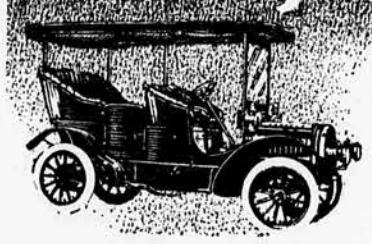
Visitors who have been out to the orchard during the past fall and early winter have been greatly impressed by the general appearance of our cover crop of winter vetch. The vetch is growing in all the orchards and is self-seeded or volunteer from the planting which was originally made in the fall of 1942. Visitors are always welcome.

## Where Profit Begins

Since the feed cost of a cow is only about one half the total cost of her milk production, it is necessary to double the average annual feed cost of a herd to determine the quantity of milk needed at market price to meet the milk cost in that particular herd. It is only the production above this level that makes a profit possible, according to some dairy specialists.

When a mature cow, after receiving ample feed and good care, is unable to produce 275 to 300 pounds of butterfat annually, it is better to cull her from the herd. A herd average of at least 300 pounds of butterfat is recommended as the goal of every commercial dairyman.

Nourse Oil KEEPS PACE ...through the Years—



There were few service stations when Granddad courted Grandma in the Rambler "Surrey Top" horseless carriage pictured above. But Nourse Oils and Greases in pails and drums occupied a prominent place in Granddad's shed or barn. Yes, the NOURSE OIL COMPANY was a pioneer in better lubricants! Then, as now, the NOURSE TRADE MARK meant the best in quality oils and greases.

*You Can Depend On*
NOURSE QUALITY

Yes—Granddad placed his confidence in Nourse Oils and Greases as far back as 1908. Ever since cars, tractors and trucks came into general use on farms, the Nourse Oil Company has constantly improved its products to give better lubrication for constantly improving internal combustion engines.

Today, NOURSE FRICTION PROOF MOTOR AND TRACTOR OILS are Homogenized to reinforce the natural high quality base oils used, with an added petroleum product. The result is an oil that has greater oiliness, heat resistance and film strength.

But that's not all . . . NOURSE FRICTION PROOF OIL helps keep your engines clean. By actual laboratory and service tests, NOURSE FRICTION PROOF OIL has been found to reduce sludge and carbon deposits in the motor by keeping them in suspension so they drain out when the oil is changed. For cleaner, cooler motors, plus better lubrication, use NOURSE FRICTION PROOF MOTOR AND TRACTOR OIL.

*See your Nourse Dealer Today.* Ask him about these other Quality Nourse Products: NOURSE POWER-PLUS • NOURSITE SUPER H.M.P. PRESSURE GUN GREASE • NOURSE SUPERIOR ALL PURPOSE DIESEL ENGINE OIL.

NOURSE Friction-Proof Motor & Tractor OILS
"Business is Good"

*If you're short of HELP—*
Let your truck supply the POWER
Make *Dump* IT do the WORK!

St. Paul's *New* *Dump* IT HOIST is specially designed for FARM USE

It's good-bye to hand shoveling or forking loads off your truck once you've installed a *Dump* IT Farm Hoist! *Dumping* saves time, labor, money—and you let the truck engine do the work. Gravel, manure, corn, beets, pea vines, logs, and silage are just a few of the many loads that you can handle quicker and more profitably when *dumped* with the St. Paul *Dump* IT Hoist.

Let us PROVE it's *cheaper to dump it.* Fill in and mail the coupon below. We'll refer it to our Dealer in your neighborhood. No obligation, of course.

ST. PAUL HYDRAULIC HOIST COMPANY
2207 UNIVERSITY AVE. S. E. MINNEAPOLIS 14, MINNESOTA

IT'S QUICKER, EASIER CHEAPER WHEN YOU USE THE

St. Paul Hydraulic Hoist Co., Minneapolis 14, Minn. KFI
Cheaper to *dump it?* You'll have to prove that one!
Please print. Use CAPITALS.
My truck is a_____
(year) (make) (model)
Wheel base____ Length of platform____ Maximum load (appr.)____
Name____
Street or RFD____
City____ State____

ELECTRIFY with ALLIED!

New 1945 Models for Prompt Delivery

ELECTRIC POWER FOR EVERY NEED

Refrigerator
Washing Machine
Cream Separator
Pump Jacks
Milking Machines
Pressure System
Countless others

FARMERS RANCHERS

Don't wait any longer!

Order a new Allied Plant now. Start using the free wind to electrify your farm. The Allied Wind Electric plant represents the best in construction, performance and dependability. Variable control, 8 pole generator, removable armature and extra large propeller which means more electricity per month to take care of all post-war appliances.

WRITE FOR FREE LITERATURE

BOOST PROFITS WITH ALLIED

Electricity opens new horizons in rural living . . . brings more leisure time . . . cuts man-hours at work . . . makes farmers more efficient producers. Enjoy city living on farm and ranch with Allied. Farmers and ranchers find that electrifying with Allied results in increased output and greater profits.

★ ★ ★

*Enjoy the comforts of Light and Power in Home and Barn.* At low cost you can have lights in every room and power to operate machines of all kinds.

DEALER TERRITORY NOW OPEN

If you are now in business and interested in this line—WRITE

ALLIED ELECTRIC Products Company
SPENCER IOWA

GET 'EM SET and READY TO GO with DANNEN CHICK STARTER

Ask For DANNEN FEEDS AT YOUR LOCAL FEED DEALER'S

Get In Your Order For Your Innes Windrow Pick-Up Now

By getting your order in right away you'll save yourself a lot of worry in the busy harvest season.

If like more and more up-to-date farmers, you windrow grain, seed, beans, rice, or any other crop, you'll find the INNES WINDROW PICK-UP the cleanest, most efficient pick-up you ever saw.

INNES PATENTED "PISTON ACTION" picks up the entire windrow, regardless of tangled undergrowth or other difficulties. Handles the crop smoothly and gently from underneath, as clean and thorough as if by hand.

NO WRAPPING OR CLOGGING because fingers automatically strip themselves of weeds and vines. Trash cannot get into the rotor. No work stoppages or time loss.

30% to 40% LIGHTER, the Innes Windrow Pick-Up can be attached by one man in a few minutes. No need to remove sickle guards.

INNES COMPANY
BETTENDORF - IOWA

INNES WINDROW PICK-UPS AND FEEDERS


## The Horse Situation

By DR. C. W. McCAMPBELL, K. S. C.

I might summarize horse and mule trends as follows:

Total horse numbers increased steadily until 1915; maintained about the same level until 1920; then declined at a rate of 500,000 head annually until 1934, and at the rate of 250,000 since that date.

The tremendous decline since 1920, about 60 per cent, consisted largely of draft and driving horses. In recent years saddle horse numbers have increased materially, but the total number of saddle horses represents only a small percentage of total horse numbers.

There has been a marked increase in the number of running horses during the last 25 years, but they, too, represent only a small percentage of the total. Saddle horse and running horse production are highly specialized jobs.

Mules, which increased in number to 1925, gradually have been decreasing since for a total decrease of about 36 per cent. Price decline for mules has been less than for horses and today the better grades of mules sell for about twice as much as the better grades of horses. It takes an exceptionally good horse to bring $100, whereas a good to choice mule will bring $200 or more.

Draft horses no longer are a satisfactory cash farm crop. Mules may be.

## Five Fruit Points

By R. J. BARNETT, K. S. C.

1. All deciduous tree fruits require seed production as a prerequisite for the formation of edible fruits. Formation of seed depends on the fertilization of the ovule by the germ cell of the pollen grain.

2. Fertilization of deciduous tree fruit blossoms may be prevented by many environmental factors; deficient nutrients, deficiency or excess of water, ill-advised pruning, untoward weather at blooming time, too meager visits of insects and winterkilling of buds.

3. Fertilization may fail because of innate characters of the flowers. These are complex and not fully understood, but are related principally to the quantity and quality of the pollen produced.

4. Provision for cross-pollination is most urgent among varieties of apple, pear, sweet cherry and plum. Varieties of other kinds of fruit grown in Kansas are commonly self-fruitful.

5. Such interplanting of varieties as will assure cross-fertilization is the practical answer to the problem of low yields of fruit due to self- or cross-unfruitfulness.

## Milk Gulping Trouble

Taking his Farm and Home Week listeners on an imaginary tour of the alimentary canal of the calf, Doctor George H. Wise, of K. S. C., planned to point out that most digestive troubles in calves fed by the milk-pail method occur because milk is taken into the calf's digestive tract in such large quantities, and at such speed it is not properly mixed with saliva in the mouth or with digestive juices in the stomach.

Milk from the cow, when calves are suckling, goes direct to the fourth stomach, but when fed from pails some of it gets into the rumen, where it putrefies, further complicating digestive processes.

As the calf develops and its diet changes, the relative size of various sections of the stomach change. Roughage consumption increases the rate of development of the first 2 compartments of the stomach, particularly the paunch.

## Feed Vegetable Tops

Dried vegetable wastes appeared to be a good source of high-quality vitamin supplement for broiler mashes in tests made at the University of Delaware, using dried pea vines, lima bean vines, turnip tops, broccoli, and carrot tops for 8 per cent alfalfa leaf meal in a practical all-mash broiler ration.

Broilers fed broccoli and turnip tops used their feed more efficiently than those fed alfalfa leaf meal, while those fed lima bean vines and carrot tops required about the same amount of feed a pound of gain as those on alfalfa.

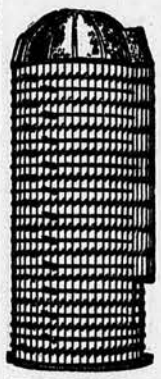

TIRED OF FENCE THAT FOLDS UP?

Only Continental fence has the PIONEER KNOT to keep it standing straight . . . to give it extra strength . . . to help it withstand the crowding of livestock without hinging, folding or buckling of the stay wires. Continental is quality fence through and through. Copper-steel wire and a uniform, galvanized coating guard it from rust. See your Continental dealer for fence, steel roofing, barbed wire. *Write for Continental's new Improvement Guide.*

CONTINENTAL STEEL CORP., KOKOMO, IND.

CONTINENTAL STEEL CORPORATION
83 STEEL PRODUCTS





INTER-LOCK WHITE TOP SILO

Built to Last a Lifetime

More people in the Southwest use Inter-Lock White Top Silos. Why?

Place your order early, as our quota is limited. Free folder upon request.

INTERLOCKING STAVE SILO COMPANY
720 N. Santa Fe, Wichita, Kan.
Topeka, Kan.; Boonville, Mo. Enid, Okla.



SILO Now AVAILABLE

The New K-M Silo First in every feature you want. Beauty, Strength, Durability, Vibrated Curved Staves, Waterproof Cement, Triple Coat of Plaster. Ten-year guarantee. 20 years' experience building silos.

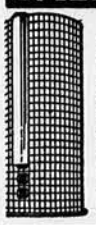
WE HAVE NO SALESMEN

Write, Phone or Wire us direct; or, better still, come and see us. Place your order now for early 1945 erection.

KANSAS-MISSOURI SILO CO.
Topeka, Kansas
Kansas' fastest-growing Silo Company—There is a reason.



SALINA CONCRETE STAVE SILOS



IF IT'S CONCRETE WE MAKE IT

Let us tell you about the Silo that is built to last a lifetime. The very latest in design and construction.

See the new large free-swinging doors and many other exclusive features.

The Salina Silo has been giving farmers perfect service for 30 years.

Get the Facts — Write TODAY.

The Salina Concrete Products Co.
Box K Salina, Kansas

Send for Catalog STOCKMEN'S SUPPLIES

Saddles, Harness, Bridles, Belts, Chaps, Hats, Boots

FRED MUELLER INC
401 MUELLER BUILDING
DENVER 2, COLORADO

PAGE Portable Milker

Fast, safe, proven. More milk, more profit — less work. Simple, easy to clean. Write for catalog.

Pioneer Mfg. Co.
Dept MD-35, West Allis, Wis


Buy War Bonds!!

## Remarkable Results

**Raising Baby Chicks**

"Gentlemen: I have been using Walko Tablets for 35 years with splendid results. I would not think of trying to raise Baby Chicks without them. I also use them for my grown birds with the same satisfaction." Mrs. C. M. Bradshaw, Diagonal, Iowa.

**You Run No Risk**

Buy a package of Walko Tablets today at your druggist or poultry supply dealer. Use them in the drinking water to aid in preventing the spread of disease through contaminated water. Satisfy yourself as have thousands of others who depend upon Walko Tablets year after year in raising their baby chicks. You buy Walko Tablets at our risk. We guarantee to refund your money promptly if you are not entirely satisfied with results. The Waterloo Savings Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee. Sent direct postpaid if your dealer cannot supply you. Price 50c, $1.00, $2.50 and $4.00.

**Walker Remedy Company**
**Dept. 20, Waterloo, Iowa**

***The Story of***
**THE CAPPER FOUNDATION**

tells of crippled children made whole! Of sad parents made happy! Of more and more handicapped children to be made "like other boys and girls." It tells how you may do something worthy of the best there is in you by helping in this ever widening mission of healing! Get your free copy of this story. Write today to

**The CAPPER FOUNDATION for CRIPPLED CHILDREN**
**Capper Bldg., Topeka, Kan.**



## Don't let winter mud bog down food production!

**Pave your barnyard *now* with CONCRETE**

**Now is the time to get ready for winter and spring by building a concrete pavement in your barnyard or feed lot. Such work cannot be done when the ground is deep in mud. Planned and built now, it will begin at once to help you save feed and manure, reduce labor, increase beef, pork and dairy production.**

**No reinforcing steel needed. Just some cement, sand, and gravel or crushed stone. If you need help, get in touch with your concrete contractor or building material dealer.**

**As part of its wartime service to farmers, this Association will gladly send free instructions on how to build concrete farm pavements without the use of reinforcing steel. Just paste coupon on penny postcard.**

**PORTLAND CEMENT ASSOCIATION**
**Dept. G3A-2, Gloyd Bldg., Kansas City 6, Mo.**

I am interested in paving my feed lot or barnyard before winter. Please send free instructions for building concrete pavement without reinforcing steel.

*Name*_____

*Street or R. R. No.*_____

*City*_____ *State*_____


# Eliminate Tomato Mistakes

*By WILLIAM G. AMSTEIN*

WE STILL have many of the old tomato varieties, and too many folks continue to use them. There has been a big shift to the use of wilt-resistant varieties in Eastern Kansas including, where possible, certified seed. In counties traversed by U. S. Highway No. 81 and east of them, there is a general need for using wilt-resistant varieties. In some sections west of this area there exists a need for the same varieties. In Eastern Kansas, not all need wilt-resistant varieties but they are good insurance.

A suitable variety for this section that is wilt-resistant is the Rutgers. Pritchard, originally introduced under the name of Scarlet Topper, is another wilt-resistant variety that matures in 76 days, or about 10 days earlier than Rutgers. Two other varieties that have been available longer but are more variable in their results are Marglobe and Break O'Day. Break O'Day is the earliest maturing one of the list of wilt-resistant varieties, nearly as early as Earliana. One possible objection to Break O'Day is its lack of foliage, allowing sunburning when the plant is loaded with fruit and is opened up, thus exposing the fruit. Another wilt-resistant variety not as commonly available is the Early Baltimore. This is nearly as early as Break O'Day.

### First Choice Is Firesteel

For Central and Western Kansas to guarantee a tomato crop in more difficult years, a smaller vine-type plant is needed that will still possess ability to set fruit. My first choice in this group of varieties is the Firesteel that matures in 62 days. While it has a small vine, the fruits are average size and are smooth as well as useful. Even in Eastern Kansas, Firesteel is a desirable variety for a part of the planting. Other small-vined varieties are Bounty, Danmark, Allstate, Allred and Porter. The original variety in this group was the Bison. However, these other varieties have smoother and better quality fruit and deserve to replace the Bison in Central and Western Kansas counties.

Two new tomato varieties, known as Sioux and Red Cloud, were tested last year with generally satisfactory results. In fact, the Sioux did well in all sections of the state. Red Cloud probably belongs principally in Central and Western Kansas.

For part of your main or canning crop supply of tomatoes, it is practical to start the seed directly in the ground where you want the plants to develop. This can be done by placing 4 or 5 seeds one-half inch in the ground at each hill at desired intervals for them at distances of 3 to 4 feet. After the plants have made a good start you can thin out or transplant all but one in each hill.

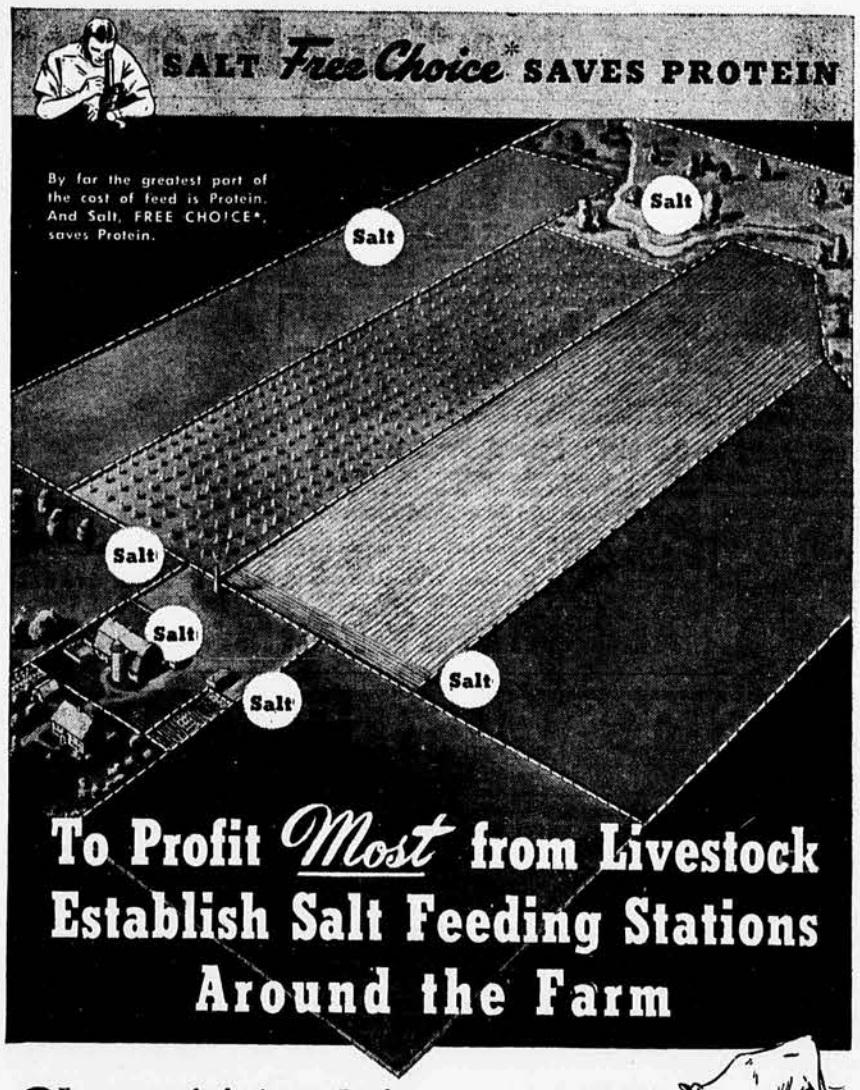
### Pruning May Increase Sunburn

With Central and Western Kansas varieties, no pruning is practical but some supporting or staking may be useful. Non-determinate varieties often will benefit by staking and the amount of pruning desired will vary considerably. Pruning as much as down to one stem may increase the amount of sunburned fruit and certainly increases the work. A system of leaving at least 3 stems, or pruning only enough to permit ease in tying the plants, works very well.

Failure of many tomato plantings and varieties to set and produce is due to the hot, dry winds that injure the flowers causing them to drop off. You may recall seeing many of these tomato flowers on the ground.

A location near a creek protected on the south and west by timber is nearly ideal. Utilizing the protection of tall row crops such as sorghums or corn works very well. Trees, shrubs, snowfence, vines, buildings, row crops, and many other arrangements can be used with good success.

Avoid a location that is too rich or too high in nitrogen. This will grow excellent vines that are often too rank and vines that fail to set fruit. In many sections this can be partly overcome by use of phosphate to provide the needed balance in the soil. Most Eastern Kansas tomato plantings would certainly benefit by greater use of phosphate.


**To Profit *Most* from Livestock Establish Salt Feeding Stations Around the Farm**

OF course you feed salt now. But do you feed enough? Animals differ in their salt requirements. Some need more than others, in many cases, as much as 100% more.

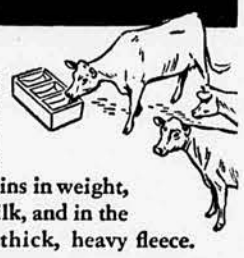
That is why it is so important to establish FREE CHOICE* salt stations all around your farm, not only in the barnyard, but also in the pasture, in the fields, in the woods, along the creek, wherever livestock gather.

Keeping salt, FREE CHOICE* before your animals all the time is the only way to be perfectly sure they are getting all they want and need at the time they're eating and digesting their feed.

**Salt—the Most Essential of all Minerals**

Salt does more than stimulate the appetite. It aids digestion, increases feed assimilation, cuts feeding costs. Very specifically, salt is needed to digest protein, the most expensive part of the ration, and to a great extent, the most important.

On a dry matter basis, roughly one-third of the weight of the animal body is protein. The same is true of milk. Wool, hair, feathers, are practically pure protein. And unless your animals are assimilating the protein you feed them, they can't convert it into profitable gains in weight, production of milk, and in the case of sheep, thick, heavy fleece.



**Salt, FREE CHOICE, Saves Protein**

How your animals utilize this essential protein depends largely upon the amount of salt you feed them. Salt supplies the chloride for the hydrochloric acid without which proteins are not digested, but *wasted*. You want to be sure they get enough. Let livestock decide for themselves by feeding salt FREE CHOICE*.

Salt also supplies the sodium needed in bile for the digestion of fats. It is important to the blood, to nerves and muscles. It has a stimulating effect on the reproductive functions. In other words, there is hardly a single vital process that is not in some way dependent upon salt.

So to save protein, to cut your feeding costs, to have healthier, thriftier animals, to increase your profits from livestock production, establish salt stations around your farm and feed Morton's Salt FREE CHOICE*.

**FREE Valuable Book on Feeding Salt**

**It will pay you to have a copy of this authoritative 32-page book, the most complete ever published on feeding salt to all livestock. Explains the importance of salt in the animal diet . . . how best to feed salt . . . gives plans for making salt boxes for FREE CHOICE* feeding. Mail your request to Morton Salt Company, 310 S. Michigan Avenue, Chicago 4, Illinois.**

# Classified Advertising Department


## COLONIAL

**WORLD'S LARGEST CHICK PRODUCER**
***Announces* NEW CUT-PRICE OFFER**

U.S. Approved
HATCHES DAILY

Do you want BETTER CHICKS for LESS money? Do you want LAYERS? More people buy Colonial Chicks than any other kind. The reason — EGG PROFITS from COLONIAL breeding. Over 150,000 Wing-Banded R.O.P. males used last 17 years (dam's R.O.P. records 200-351 eggs). Great numbers of Official Egg Laying Contest Pens—FIVE U.S. Grand Champion Pens in Five Breeds added in one year alone. The result—Colonial's Best Egg Grade Chicks are 50% (some nearly 100%) blood out of R.O.P. Hens.

**Fine Blood in Colonial's Lowest Price Chicks!**

Customer after customer with flock averages over 200 eggs per bird has resulted from Colonial's Best Egg Program.

Sex-Guaranteed PULLETS Low As $10.90 PER 100

**Do You Want to Save Real Money?**
Write for Colonial's CUT-PRICE OFFER—good no matter where you live. 8 big hatcheries located for quick delivery to any state. Popular varieties. SEXED, if desired. HYBRIDS also. Easy terms of $1.00 down. Send letter or card today for BIG FREE CHICK ALMANAC.

**FREE** Big Almanac Illustrated with **115 PICTURES** 33 ARTICLES

**COLONIAL POULTRY FARMS, Wichita, Kans.**

## BERRY'S AUSTRA-WHITES

POULTRY BREEDERS SINCE 1895 — TOMORROW'S CHICKEN..TODAY

**Rugged As A Mule . . . Year Around Layers**
**GIVES YOU THESE FINE QUALITIES**

1. Grow Extra Fast
2. High Livability
3. Disease Resistant
4. Conserve Feed
5. Wonderful Layers
6. Plump, Heavy Broilers
7. Tame . . . Not Flighty
8. Sensational Money Makers

**WANTED**
A chicken raiser in every community to PROVE that Berry's AUSTRA-WHITES will make BIG PROFITS!

**Many Customers Report Big Profits**
Mr. Shipley, Okla. says, "Our Austra-White Pullets are the most profitable we have ever had." E. A. Keeton, Texas, says, "I can raise Austra-Whites 10c to 15c per head cheaper than other fowl. The cockerels are ready for market at 7 to 8 weeks." THOUSANDS OF BERRY'S CHICKS HATCHING EVERY WEEK OF THE YEAR—AT LOW FARM PRICES.

**FREE BOOK** Tells amazing secrets of why BERRY'S AUSTRA-WHITE HYBRIDS can make you EXTRA PROFITS! It will pay you to investigate NOW!

**20 Other Popular Purebreds and Hybrids Hatching Now!**
**As Hatched..PULLETS..COCKERELS..STARTED PULLETS**
**WRITE TODAY—To Originators and Pioneer Breeders**
**ERNEST BERRY, Box 335, NEWTON, KANSAS**
**GEORGE BERRY, Box 335, QUINCY, ILLINOIS**

**Raise Chicks on Berry's Profit Sharing Plan!**

## BUSH'S Ozark Quality SEX-ED CHICKS

BUSH offers over 20 popular, money-making breeds at **money-saving prices.** Husky, separately hatched, Blood-tested, free-range OZARK-QUALITY flocks. **40 Years** in poultry business. **150,000 Customers** in 48 states. One of world's largest hatcheries and brooderies. **Millions shipped** yearly. COCKERELS, $4.95 up. Day Old Pullets (up to 300 egg strain), $12.95 up. Hand-picked big English White Leghorn 3-4 Week Old Started Pullets, $26.95 up. All flocks culled by experts personally supervised by BUSH. Order now for future delivery.

$4.95 up per 100 C.O.D. F.O.B.

Husky 3-4 Wk. White Leghorn Started Pullets $26.95 up per 100 C.O.D. F.O.B.

**SAVE MONEY—TIME—WORK—FEED**
BUSH'S 3 to 4 week old White Leghorn started pullets are really "hand-picked beauties." They'll be laying when eggs are in big demand. You'll really be thrilled with these big, vigorous, **STARTED PULLETS.** Produced in one of world's finest and largest 3 story brooderies. Save feed, time, work, worry and first few weeks' danger of loss by letting us **START** your pullets. Cheap in long run—we start millions successfully yearly. Big, strong, well developed.

**FREE** 1945 attractive **Egg Record and Calendar Catalog**—gives terms, sex guarantees, prices, etc. Mail penny postcard today. It's FREE. BUSH Chicks are Bargains.

**BUSH Farms & Hatchery, Box 433-I3, Clinton, Missouri**

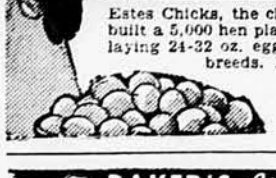
## The Kansas Poultry Improvement Ass'n.

**Manhattan, Kansas**

Insist on QUALITY this year—Buy U. S. Approved, U. S. Certified or U. S. R. O. P. Chicks. The "U. S." is your assurance of quality.

## ESTES Chicks

The Result of 23 Years of 300 to 351 EGG SIRES!



Estes Chicks, the choice of commercial egg farms for 23 years. One bought 12 years—built a 5,000 hen plant. Another reports 348-egg hen, laying 32 oz. eggs. Another 75-85% laying 24-32 oz. eggs. U. S. Approved-Pullorum Tested Chicks. Prompt shipment. Egg breeds. Heavy breeds, also Broadbreast Bronze Turkey Poults.

**FREE!** Big descriptive broadside and interesting picture of 50-Building Poultry Farm. Write today.

**CHAS. M. ESTES, Dept. K, SPRINGFIELD, MO**

## BAKER'S *World Famous* BABY CHICKS

STRAIGHT RUN AS LOW AS $5.90 Per 100 PREPAID

**FAMOUS SINCE 1898!** . . . Winners of Three World's Championships! Famous prize winning egg strains. Powered for production! "Balanced breeding" for both meat and eggs. Pullets that lay big eggs and lots of them with low pullet mortality. Cockerels that grow fast into quick market-profit birds.
**15 DIFFERENT VARIETIES** . . . Pure breeds, odd breeds, hybrids, all bloodtested by nationally known poultry expert. Prompt shipment. Liberal guarantee. Write for FREE Illustrated Literature. Get our low prices before you order chicks.

**BAKER CHICKS, Box F, Abilene, Kan.**

## DeForest Better Chicks

Buy and **Raise Chicks**, backed by 19 years of progressive poultry breeding. **Over 700 R.O.P.** Leg-banded Males used in **DeForest** supervised flocks.
We Offer: **Straight Run—Pullets—Cockerels, in all leading breeds and crossbreeds.**
**Broadbreasted Bronze Poults** in season. "Tube Tested" under U. S. Plan.
Write for prices today.

**DeForest Hatcheries, Peabody, Kansas** — Branches at Marion and Cottonwood Falls


### KANSAS FARMER
**WORD RATE**

| Words | One Issue | Four Issues | Words | One Issue | Four Issues |
|---|---|---|---|---|---|
| 10 | $1.00 | $3.20 | 18 | $1.80 | $5.76 |
| 11 | 1.10 | 3.52 | 19 | 1.90 | 6.08 |
| 12 | 1.20 | 3.84 | 20 | 2.00 | 6.40 |
| 13 | 1.30 | 4.16 | 21 | 2.10 | 6.72 |
| 14 | 1.40 | 4.48 | 22 | 2.20 | 7.04 |
| 15 | 1.50 | 4.80 | 23 | 2.30 | 7.36 |
| 16 | 1.60 | 5.12 | 24 | 2.40 | 7.68 |
| 17 | 1.70 | 5.44 | 25 | 2.50 | 8.00 |

**DISPLAY RATE**

| Column Inches | One Issue | Four Issues | Column Inches | One Issue | Four Issues |
|---|---|---|---|---|---|
| ½ | $4.90 | $16.80 | 2 | $19.60 | $ 67.20 |
| 1 | 9.80 | 33.60 | 3 | 29.40 | 100.80 |

**Livestock Ads Not Sold on Word Basis**

Write for special requirements on Display Classified Ads.

### ● BABY CHICKS

**Absolutely Free to Chick Raisers.** Friends: Discover for yourself that K. I. Miller Hatcheries, Pioneer Hatcheries of the Middle West, established 1902, with five million chick capacity can supply you with Vigorous, Bloodtested, Guaranteed Chicks, Bred from R. O. P. Stock for Egg Production, at surprisingly low prices for such high quality. Send for beautiful 36-page catalog plus calendar Free. Actual photographs taken on K. I. Miller breeding farms. Full of common sense facts you can use. Act Now. Tells easy way to get 5-gallon water fountain. Earn special price discounts. Explains how we back all guarantees 100 per cent. We have grown big because we treat our customers right. Best chicks are always cheapest. K. I. Miller wants you to have the best. Typical bargain. White Plymouth Rocks, White Leghorns, or Austra Lorp-White Leghorn cross, bred for size and egg production, straight run only $9.50 per 100; $28 for 300. If in a hurry, order from this ad. But be sure to write for catalog and facts on free fountain today. Write K. I. Miller Hatcheries, Dept. KF5, Lancaster, Mo., and Omaha, Nebr.

**Coombs U. S. ROP Leghorns,** Big-Type. This year, get your chicks from Coombs trapnest-pedigree breeding farm. All chicks 250-322 egg sired. Backed by 25 years 250-355 egg sires. Bred for high livability, progeny test method. U. S. Pullorum Controlled (which is much stricter than U. S. Pullorum Tested) for extra chick-health protection. Largest ROP breeding farm in Kansas and 16 surrounding states. Sexed chicks. Reasonable farmer chick prices. Write for 32-page catalog. One of finest in field. Every poultry raiser should have it. It's free. J. O. Coombs & Son, Box 6, Sedgwick, Kansas.

**Buy Roscoe Hill Chicks** for greater profits. Their fine breeding will help produce the top-grade eggs and meat always in demand on today's markets. Improved breeding stock, hundreds of pedigreed males from 200 to 311 egg trapnest hens in our Leghorn and White Rock flocks have established profit-making ability. 10 leading breeds—sexed chicks. Get our special brooder loan offer. Write today for prices—early order discount—Free catalog. Roscoe Hill Hatchery, 908 R St., Lincoln, Nebraska.

**"Blue-Blood"** super-charged, power-linked hybrid chicks from crosses or top-notch, U. S. Certified Pullorum Controlled purebreeds. Austra-Whites; Minorca-Leghorns; Wyn-Rox; Leg-rocks; Legreds. Also best purebreds. Phenomenal health, growth, and egg production. Livability guaranteed 95% for three weeks. Discounts for early orders. Write for customer proof and low prices on quality chicks. Ross Poultry Farm, Box 35, Junction City, Kansas.

**Tom Barron** strain White Leghorns AAA grade pedigree sired. Large lopped comb. Great producers; chicks $8.90, pullets $15.90, cockerels $2.95. Also mammoth White Rocks AAA grade. Bred for size, meat and egg production. Chicks $8.90, pullets $12.90, cockerels $8.90. Also started 4 week old White Leghorn pullets AAA grade $24.95 per 100. Catalog free. Allen Hatchery, Box K, Windsor, Mo.

**28 Varieties** Macon "Money-Maker" Chicks. All the most popular breeds. All bloodtested. Egg-bred. Also Anconas, Black Australorps, White, Buff and Black Minorcas, Light Brahmas, New Hampshires, Silver Laced Wyandottes, Rhode Island Whites, White Langshans and 3 outstanding hybrids. Write for illustrated literature, prices. Macon County Hatchery, Macon, 35, Missouri.

**Baby Chicks, 24 Breeds.** Free catalog, gives best matings, prices, terms, FOB, guarantees. Bloodtested breeders, White Buff Brown Leghorns, $7.95. Pullets $12.95. 4 Weeks Started White Leghorn Pullets, $24.95. Rocks, Reds, Orpingtons, Wyandottes, $8.95. Pullets, $11.95. Heavy Assorted, $6.95. Surplus cockerels, $4.95. Thompson Hatchery, Springfield, Mo.

**Limited Time**—FOB, Husky, vigorous, bloodtested flocks, excellent layers. White, Buff, Brown Leghorns, $9.90. Pullets, $12.90. 4 Weeks Started White Leghorn Pullets, $24.95. Rocks, Reds, Orpingtons, Wyandottes, $9.90. Pullets, $11.90. Heavy assorted, $6.95. Surplus Cockerels, $4.95. Free Calendar Catalog, terms, guarantees. Bush Hatchery, Clinton, Mo.

**Krehbiel Chicks** from Missouri's Great Poultry Belt offered in ten top-profit breeds, produced from very best egg record pedigree sires. White, Buff and Brown Leghorns, Rocks, Wyandottes, Reds, Giants. Bloodtested. Fully Guaranteed. Priced right. Krehbiel's Trenton Hatchery, Box 1, Trenton, Missouri.

**AAA White Rocks,** White Leghorns, New Hampshire Reds, Rhode Island Reds, Guaranteed bloodtested. Supervised Flocks. Unsexed $9.90. Pullets $14.90. Leghorn cockerels $2.95. Heavy cockerels $7.90. Order from ad. Postpaid if cash with order. East Hatchery, Box 208-K, Clinton, Missouri.

**Schlichtman's US** Approved, Pullorum Tested Chicks. Per 100 prepaid, Leghorns, Rocks, Reds, Orpingtons, Wyandottes, Minorcas $9.40; Assorted, $7.45. Pedigree sired and sexed chicks. Free catalog explaining 2-week Replacement Guarantee. Schlichtman Hatchery, Appleton City, Missouri.

**Griffith Chicks** bred 25 years. Make extra profitable layers. Quick maturing broilers. Immediate delivery. Per 100 prepaid. Big-type White Leghorns $8.95. Barred, White Rocks, Reds, Wyandottes, Orpingtons, Leg-Rox $8.95. Free catalog. Griffith's Hatchery, Box 512-E, Fulton, Missouri.

**Tindell's U. S. Approved,** pullorum controlled chicks. Leading purebreds. Hybrids in Austra-Whites, Legorcas, Legrocks, Redrocks. Cockerels. Pullets. Started Capons. Special offers. Get our catalog before buying chicks anywhere. Tindell's Hatchery, Box K, Burlingame, Kan.

**Macon "Money-Maker"** chicks. 28 Varieties! 250-320 egg pedigree foundation pure breeds, odd breeds, hybrids. 100% Bloodtested. Thousands weekly. As low as $2.45 per 100. Write for illustrated literature and Our Low Prices. Macon County Hatchery, Macon, 30, Missouri.

**Bloodtested Chicks**—Leghorns, Minorcas, Rocks, Reds, New Hampshires, R. I. Whites, Austra-Whites, Leg-Rocks, Leg-Reds, Leg-Orcas. Also sexed chicks. Bozarth's Ideal Hatchery, Eskridge, Kan.

**Johnson's Triple Test** chicks. 27 years of constant flock improvement. Purebreeds. Hybrids. Straight run or sexed. Write for price list. Johnson's Hatchery, 218 W. 1st, Topeka, Kansas.

**Chicks on Share Plan.** You do not pay for chicks. You give us small per cent of growing cockerels. Your choice pure breeds, Austra-Whites. Write today for Share Plan. Berry's Sunflower Hatchery, Box 614, Newton, Kansas.

### ● BABY CHICKS


**SEE GAMBLE'S FOR BONDED BABY CHICKS**

Bred from pullorum tested flocks in U. S. approved, state supervised hatcheries. Selected from flocks of superior egg laying history. Certified health label. Absolute guarantee covering live delivery, livability, sex accuracy and correct breed. Special "get acquainted" deal—assorted Heavy Breeds, $9.90 per hundred, postpaid. No letter writing necessary. Give your nearest Gamble Store delivery date and quantity wanted. Gamble's also have Brooders, Feeders and Fountains for large or small flocks.

It's time now to place your order for—
**Rupf's Dependable Chicks**
The kind that has 40 years of Production Breeding backing them.
Send for circular and prices today.
**Rupf Poultry Farm & Hatchery**
**Box 150-B Ottawa, Kansas**

**WHITE LEGHORNS**
UNSEXED $8.95—95% PULLETS $15.45
Barred Rocks, Wh. Rocks
White Wyandts., S. C. Reds
Heavy Assorted, $6.95.
Surplus Cockerels, $3.95
FREE CATALOG. 25 Breed
$8.95 F.O.B. 100% Alive Guarantee
Bloodtested—Egg Bred—High Livability. Big saving on early orders. Started Pullets. Write today.
**Thompson Hatchery, Box 133-I3, Springfield, Mo.**

**Kansas Approved** Pullorum Tested High Production
Replacement guarantee. Prepaid in 100 lots.

| | AAA Grade | St. Run | Pullets | Ckls. |
|---|---|---|---|---|
| Large type Wh. legh., bf. Min. | $10.90 | $21.90 | $2.90 | |
| Wh. & bd. rocks, S.C.R.I. Reds | 10.90 | 17.90 | 9.00 | |
| Wh. Wy., bf. orp., N. H. Reds | 10.90 | 17.90 | 9.00 | |
| Austra-Whites | 11.90 | 21.90 | 6.90 | |

Assorted Heavies $9.50 per 100.
Free Folder.
**MOLINE HATCHERY MOLINE, KANSAS**

**Austra White Hybrids**
Our famous Monie-Maker strain Top Quality—AAA Grade Order direct or write for Free Catalog
$13.90 Per 100 Prepaid
**SUNFLOWER HATCHERY, Ft. Scott, Kan.**

U. S. APPROVED PULLORUM TESTED **CHICKS**
Sexed Pullets as low as... $9.75 per 100
Cockerels as low as... $2.45 per 100
Write for FREE CATALOG Listing All Breeds
**THE WHITE CHICKERY, SCHELL CITY, MO.**


**Sparrow Trap** that does the work. A customer writes, "A few weeks ago I sent for your sparrow trap plans, made one and it works fine." They are easy to build. Send 10c for plans. Sparrowman, 1715A Lane, Topeka, Kansas.

**Chicks** on a 30 days trial guarantee. All varieties. Missouri approved. Blood tested. Easy buying plan. Low prices. Chick Manual free. Missouri State Hatchery, Box 371, Butler, Missouri.

**Brood-Stock 250-350 Egg-Sired** large White Leghorns $8.25; "AAA" Pullets $14.95; Cockerels $2.45. White Rocks $8.75. Started Pullets. Catalog. Moss Hatchery, Windsor, Mo.

**Booth's Chicks**—Early, vigorous. Hatched to live. Excellent layers. Leading breeds. Sexed. Started. Attractive prices. Free Catalog. Booth Farms, Box 808, Clinton, Mo.

**Penny** post card today saves you Dollars tomorrow. Healthy chicks. Twelve Breeds. Low Prices. Write Salmon's Hatchery, 32 E, Paola, Kansas.

**Austra Whites,** White Rocks, Hampshire Reds $11.50 hundred. Leghorns, Anconas $10.50. Jenkins Hatchery, Mankato, Kansas.

### ● HYBRIDS

**Macon "Money-Makers"** . . . three top-profit hybrids. Austra-Whites, Leg-Rocks, Leg-Giants. Bloodtested, vigorous chicks. High livability. Fast growth. Egg-bred. Write for Descriptive Literature, and Our Low Prices. Macon County Hatchery, Macon, 34, Missouri.

### ● AUSTRALORPS

**Johnson's Triple Test** Black Australorps. Famed for heavy egg production. Non-sitters. Straight run or sexed. Write for price list. Johnson's Hatchery, 218 W. 1st, Topeka, Kansas.

**Black Australorps** my specialty. Day-old started chicks. Fike's, Council Grove, Kansas.

### ● BRAHMAS

**Big Type Exhibition** and Laying Contest Brahmas. Pioneer breeders. Heavy early layers. Quick maturing type. Cockerels or pullets. Low farm prices. Raise chicks on Berry's Profit Sharing Plan. Catalog free. Write today. Berry Brothers Farms, Box 3315, Atchison, Kansas.

### ● JERSEY GIANTS

**Superfine Chicks**—White Giants, Black Giants, Buff Minorcas. Other breeds. Literature. The Thomas Farms, Pleasanton, Kan.

### ● MINORCAS

**Superfine Chicks**—Golden Buff Minorcas since 1924. Also Jersey Giants and other breeds. Literature. The Thomas Farms, Pleasanton, Kan.

### ● NEW HAMPSHIRES

**Macon "Money-Maker"** New Hamps. They live. They lay. They make top-notch market profits. If you want New Hamps, you want Macon "Money-Makers." Write for Illustrated Literature and Our Low Prices. Macon County Hatchery, Macon, 33, Missouri.

**Superfine Chicks**—Best quality New Hampshires. Also White-Barred and Buff Rocks, Silver Laced and White Wyandottes, Anconas, Buff Orpingtons. Literature. The Thomas Farms, Pleasanton, Kan.

**World Champion New Hampshires.** Records to 342 eggs per year mean bigger egg baskets. High livability—Large egg size—Free literature. Bockenstette's, Hiawatha, Kan.

### ● POULTRY—MISCELLANEOUS

**For Sale:** Two Buckeye Incubators No. 10,000 egg capacity. Mrs. Claud Hanna, Jamestown, Kansas.

● BABY CHICKS

**Wonderful POULTRY BOOK FREE** LOW PRICES 48 varieties SEX-LINKED and PUREBREDS; BABY CHICKS, Pullets or Cockerels, also STARTED CHICKS, BABY TURKEYS, Mature Fowls and Hatching Eggs. ALL FLOCKS BLOOD TESTED FOR BWD. Write quick for this fine free book. GREAT WESTERN HATCHERY, Box 34, Salina, Kans.

● AUSTRA-WHITES

**COLONIAL Austra-Whites**

Best grade rich in 200-300 egg R.O.P. blood. Double tested for pullorum. As hatched or sexed. Vigorous, rapid growth, excellent broilers. Customers report over 200 eggs per hen. Big Catalog free. COLONIAL POULTRY FARMS, Wichita, Kansas.

**Big Profit AUSTRA-WHITES**

Sensational MONEY MAKING HYBRID. Customers report broilers 8 weeks, laying 4 1-2 mos. Disease resistant. Hardy Layers. 50,000 chicks weekly. Started pullets. Profit Sharing Plan. FREE Book. Write today. BERRY BROS. FARMS, Box 502, ATCHISON, KANS.

**4-week-old Austra-White Pullets.** Save Feed! Practically Feed and Raise Themselves! Berrys Breeding Farm Headquarters. 55,000 Super De Luxe Leghorn Hens mated with Record Australorp Males. 200 eggs yearly per hen average. Lay 4½ months. Develop faster, healthier, high livability. Cockerels weigh 2¼ pounds eight weeks, Hens 6½ pounds. Write for Illustrated Catalogue. Low prices. Berry's Sunflower Poultry Farm, Box 613, Newton, Kan.

**Super Austra-Whites.** America's Greatest Hybrid Strain, scientifically mated by Bartlett Farms. Pedigree record breeding produces unusual quality. Quickest maturing for meat and eggs. Sexed and non-sexed. Reasonable prices. Free literature. Bartlett Farms, 1705 So. Hillside, Dept. B, Wichita, Kan.

**Champion Austra X Whites.** Records up to 301 eggs per year mean more eggs—High livability—Large egg size—Free literature. Bockenstette's, R. 1, Hiawatha, Kan.

**Johnson's Triple Test** Austra-Whites. Production bred for greater profits. Straight run or sexed. Write for price list. Johnson's Hatchery, 218 W. 1st, Topeka, Kan.

● LEGHORNS

**BIG ENGLISH LEGHORNS**

We really have them. Famous large bodied layers of lots of big white eggs. Direct importers Barron's best bloodlines (up to 305 egg breeding). 24th year continuous flock improvement by a real breeding farm. Thousands of satisfied customers in 36 states say "best money making strain." We can please you, too. Sexed or nonsexed, reasonable prices, bank references. Write for "The Proof" free. Bartlett Poultry Farm, 1704 So. Hillside, Dept. B, Wichita, Kan.

**WHITE LEGHORNS**

We Specialize in 4 Week Old Pullets

| Baby Pullets | Straight Run | Broilers |
|---|---|---|
| $18.00 per 100 | $10.00 per 100 | $2.95 per 100 |

RICE LEGHORN FARM
Box 419 Sedalia, Missouri

**WHITE LEGHORN PULLETS**

| SELECT PULLETS—CHOICE GRADE | AAA | AAAA | AAAAA Key Flock |
|---|---|---|---|
| 2 to 3 weeks old — Per 100 | 19.98 | 21.98 | 23.98 25.98 |
| 3 to 4 weeks old " | 28.95 | 29.95 | 30.95 31.95 |
| 4 to 5 weeks old " | 29.95 | 30.95 | 31.95 32.95 |
| 4½ to 6 wk. open range " | 30.95 | 31.95 | 34.95 37.95 |

100% delivery. Give express office; send M.O. Cat. Free
BUSH White Leghorns, Box433-ID, Clinton, Mo.

**Best Production Bloodlines.** Brown Leghorns a specialty. Result of 25 years' breed improvement. Best possible livability. Real rustlers and real hustlers at the nest. Bloodtested. Prompt shipment, 100% safe arrival assured. Thousands Weekly. Illustrated broadside Free, low prices. Krehbiel Hatchery, Box 4, Trenton, Missouri.

**250-350 Pedigreed Sired** big Floppy Comb type egg-bred "AAA" English White Leghorn pullets $16.00. Unsexed $8.75. Cockerels $2.00. Four weeks old "AAA" Pullets $26.00. 95% sex guaranteed. Catalog. Marti Leghorn Farm, Box G, Windsor, Missouri.

**Krehbiel's Can't Be Beat!** Big-bodied, lop-combed Hanson "World's Record Strain" White Leghorns. Top-notch layers of large, chalk-white eggs. Pedigree sired. Bloodtested. Guaranteed. Priced right. Krehbiel's Trenton Hatchery, Box 2, Trenton, Missouri.

**Macon "Money-Maker"** large English-type, lop-combed White Leghorns. Roselawn, Barron, Cochran bloodlines. Vigorous big birds that lay large chalk-white eggs. Bloodtested for livability. Thousands weekly. Write for illustrated Literature and Our Low Prices. Macon County Hatchery, Macon, 31, Missouri.

**Johnson's Triple Test** White Leghorns. Pedigree sired 300 to 352 egg records. Straight run or sexed. Write for price list. Johnson's Hatchery, 218 W. 1st, Topeka, Kansas.

**Champion White Leghorn Stock.** Records to 358 eggs per year mean bigger egg baskets—High livability—Large egg size—Free literature. Bockenstette's, R. 1, Hiawatha, Kan.

● WHITE ROCKS

**Macon "Money-Maker"** White Rocks. Really rapid feathering, growing Rocks, egg-bred, dual profit-makers. 100% Bloodtested. Fully guaranteed. Prompt shipment. Write for Illustrated Literature and Our Low Prices. Macon County Hatchery, Macon, 32, Missouri.

**None Finer** for both meat and eggs. Best bloodlines. Pedigree egg sires. Fast growing strains, from Missouri's Great Poultry Belt. Bloodtested. Guaranteed. Write for our low prices. Krehbiel's Trenton Hatchery, Box 3, Trenton, Missouri.

● TURKEYS

**Raise Turkey** the New Way. Write for free information explaining how to make up to $3,000.00 in your own back yard. Address National Turkey Institute, Dept. 28, Columbus, Kansas.

**Pure Broad Breast** Bronze poults and pure and hybrid baby chicks. Order early. Circular free. Stefnhoff Hatchery and Turkey Farms, Osage City, Kansas.

**Broad Breasted Bronze Toms**—Wagon Wheel strain, $15.00. Elsie Wolfe, LaCygne, Kan.

**Best Bronze Hatching Eggs.** Tube tested. Yotz Farm, Shawnee, Kansas.

● DOGS—HUNTING—TRAPPING

**English Shepherd: Puppies.** Breeder for 22 years. Shipped on approval. 10c for pictures and description. H. W. Chestnut, Chanute, Kan.

**For Sale**—Collie Puppies from registered stock. Paul Probasco, Abilene, Kansas.

**Shepherds, Collies, Heelers, Watch Dogs.** E. N. Zimmerman, Flanagan, Illinois.

● MACHINERY AND PARTS

**OIL FILTERS**

**Filtered Crankcase Oil Is Never Clean Oil**

But, 10 years' constant service prove **Reclaimo** the **Heated Oil Filter-Refiner's** superiority over all oil filters, its sole ability to maintain **Clean** oil in tractor-car engines indefinitely, resulting in utmost economy-efficiency. Demand is tremendous; order now, avoid possible delay. Reclaimo comes complete for any installation. Reclaimo filtering material is superior for any filter. See your dealer or write
**RECLAIMO SALES CO., ELGIN, NEBR.**

**NEW AND USED TRACTOR PARTS**

Write for big, free 1945 catalogue; tremendous savings. Satisfaction guaranteed. **Central Tractor Wrecking Co., Des Moines, 3, Iowa (formerly Boone, Iowa).**

**Rotary Scrapers**—Universal 3½-ft., $120; 4-ft., $125; 5-ft., $130; 5½-ft., $135. Can supply approximately 5 weekly. Guaranteed all steel. Construction orders filed as received. Voss & Verhage, Missouri-Kansas Distributors, Downs, Kansas.

**Free 1945 catalog.** New, used Tractor repairs for most all models. Quality guaranteed. Dependable service. Big values. Low prices. Acme Tractor Salvage Company, Lincoln, Nebraska.

**For Sale**—6-ft. No. 6 John Deere Power take-off Combine on New Rubber, A-1 Condition. Priced to sell. Alvin Penner, R-2, Hillsboro, Kansas.

**For Sale or Trade** for Row-Crop tractor, 1937 IHC-WK 40-6 cylinder. Pete Trausch, Juniata, Nebraska.

**V-Belt your Model K-Case** now. Write for design sheets and prices. Farrar Machine Shop, Norwich, Kansas.

● ELECTRICAL EQUIPMENT

**DELCO LIGHT**

Large Stock Genuine Parts for all models.
Plants—Pumps—Batteries—Wind Plants
Modern Shop. Repair any Delco Equipment
Factory Distributors
General Products, Wichita, Kansas

**110 Volt Converter**—Use your present six volt battery Fence Controller on highline. No remodeling. Simple to install. Wisconsin approved for safety. Less than 5 cents per month to operate. For low price write Walsh Mfg. Co., Charles City, Iowa.

**For Sale**—800 Watt 32 volt Delco Light plant with batteries. Plant only been used few months and factory overhauled, considerable wiring with plant. Box 1919, Wichita, Kansas.

● FARM EQUIPMENT

**Milking Machines**—Farm, Farm Home and Dairy Equipment—wholesale and retail—most complete line in the Middle West. Many hard-to-get items. World's finest milkers in portable and pipe line models. Prompt delivery guaranteed. Phone or write for full details before you buy. Other items in stock—single and 3-phase electric motors from ¼ H.P. to 30 H.P., gas engines from 1 H.P. to 6 H.P., stock tank water heaters for electricity—oil or coal, poultry brooders and supplies, lamp-heated water bowls, electric soldering irons, cream separators—110 and 32 volt electric and hand powered, shallow and deep well water systems—electric or gas powered, plumbing fixtures including bath tubs, pipe and fittings. Electric wire and devices, strainers, milk pails. In fact, most everything you have had trouble getting for many months. Midwest Dairy Supply Company, Factory Distributors, 224 West 4th St., Grand Island, Nebraska.

**Write us** for our Latest List of new and used farm equipment, potato machinery, cement mixers, grinders, engines, saw frames, windmills and towers, chicken houses, brooders and feeders. Green Bros., Lawrence, Kansas.

**Kill Weeds with Fire.** Aeroil torches destroy parasites, split rocks, has 99 uses. Burns kerosene. Medium size $20, giant $24.75, express collect. Sine Equipment, KFA, Quakertown, Pa.

**Canvases** for New Holland Balers. Belts for Case and Ann Arbor. Catalog free. Hudson Machinery Company, Decatur, Illinois.

● AUTOMOTIVE

**Having Car Trouble?** Used, Guaranteed auto, truck parts save money. Transmission specialists. Describe needs. Immediate reply. Victory, 2439AO Gunnison, Chicago, 25.

● MACHINERY WANTED

**Wanted**—Late model Graham Hoeme plow and Krause one-way disk. State size, condition and price in reply. Arnold G. Harder, Hillsboro, Kansas.

**Want to Buy a** John Deere Grain Schock sweep. Elmo J. Mahoney, Dorrance, Kansas.

● LIVESTOCK ITEMS

**For More Farm Profits,** raise Milking Shorthorns! Indisputable records—on farm and contest—prove they're best all-around breed. Thrive under average farm conditions. Daul-purpose—they produce profitably 4% milk and have greatest salvage value of all milk breeds. Get Free facts. Or subscribe to Milking Shorthorn Journal. Trial subscription, six months, 50c; one year, $1.00. Milking Shorthorn Society, Dept. KF-5, 809 W. Exchange Ave., U. S. Yards, Chicago 9, Illinois.

**How to Break and Train Horses**—A book every farmer and horseman should have. It is free; no obligation. Simply address Beery School of Horsemanship, Dept. 433, Pleasant Hill, Ohio.

**Abortion Vaccine**—government licensed strain 19—saves calves, builds clean herds. Free literature. Kansas City Vaccine Co., Dept. P, Kansas City, 15, Mo.

● BUSINESS OPPORTUNITIES

**Dealers** — Hardware Store, Implement Store, Farm Store dealers interested in the sales of high quality lines of milking machines, cream separators, gas engines, and a general line of light farm equipment. Contact us at once for complete information. Midwest Dairy Supply Co., Factory Distributors, 224 West Fourth St., Grand Island, Nebraska.

**Fords portable hammermill "Barnyard"** feed grinding service in big demand everywhere. Fords operators making steady, satisfactory year-round profits. Many valuable territories open. Nominal investment required; balance monthly. Start your own profitable business. Write today. Myers-Sherman Co., 1210 12th, Streator, Illinois.

**Wanted:** Men or women to operate cream and produce station in eastern Kansas or western Missouri. Equipment and check book for cream furnished. Also man to help you start a business for yourself. Write P. O. Box 4026, Kansas City, 7, Mo.

**Sod to Break**—Greeley County; Kansas' finest wheat land. 5 year lease, $2 acre breaking 320 to 960 acre units. Aaron Sell, Stafford, Kansas.

● PRODUCE WANTED

**Ship your cream direct. Premium prices for premium grade. Satisfaction guaranteed on every shipment. Riverside Creamery, Kansas City, Mo.**

**We want broilers, springs.** Coops loaned free. The Copes, Topeka.

● FILMS AND PRINTS

**Two 5x7 Enlargements** made from your negatives only 25c. Order as many as you need. Photo copied and two 5x7's made 50c. Kodak reprints 2c each. Summers Studio, Unionville, Mo.

**Rolls** developed, enlarged. Prints 25c. Send us those negatives for 3½x5 reprints 5c each. Sky-Line Photo, Box 450-KF, St. Louis 3, Mo.

● REMEDIES AND TREATMENTS

**Lame Feet Made Well.** Radical new treatments discovered by foot experts. Explained in new book $1.00. Weldex, 11161 Kling St., North Hollywood, Calif.

**Liver,** Gall Bladder, Constipation, Acid-Rheumatic Sufferers try marvelous medicine. Sample free! Write Hepatigene, New Paris 1, Indiana.

**Free Book**—Piles, Fistula, Colon-Stomach, associated conditions. Latest methods. Thornton & Minor Clinic, Suite C306, Kansas City, Mo.

● AUCTION SCHOOLS

**Learn Auctioneering.** Free catalog. Write, Reisch Auction School, Austin, Minn.

● AGENTS AND SALESMEN

**Make 50% Selling Seeds.** Order twenty 5c packets today. Pay when sold. Daniel Seed Farms, Grantsburg, Wis.

● WANTED TO BUY

**Cane Seed,** Milo Maze, Sorgo Millet Seed, etc. Hayes Seed House, 1004 N. Kansas Ave., Topeka, Kan.

**Popcorn.** Hayes Seed House, 1004 N. Kansas Ave., Topeka, Kansas.

● OF INTEREST TO WOMEN

**Eastside Maternity**—Seclusion Hospital for unmarried girls. State licensed. Working reduces expenses. 4911 E. 27th, Kansas City, Mo.

**Quilt Pieces**—Splendid variety; fast colors. 100-25c; 500-$1.00; 1,000-$2.00 postpaid. Southern Quilting Co., Box 4151, Houston, Texas.

● FEATHERS WANTED

**Uncle Sam Urgently Needs Feathers** for Army Hospital pillows, sleeping bags, etc. Top ceiling prices. White and colored Goose—$1.37½ per lb. White and Colored Duck—$1.10 per lb. Also goose and duck quills (wing and tail feathers). Send samples of used feathers for quotation. All shipments accepted. Remittance same day feathers arrive. Midwest Feather Company, 1650 W. Ogden Ave., Chicago 12.

**New and used** Goose and Duck Feathers wanted. Best prices paid, payment day received. Send for latest prices and shipping labels. Established 1917. Northern Feather Works, 1523 Kingsbury St., Chicago, 22, Ill.

● FARMS—KANSAS

**800 Acres:** 450 under cultivation. Balance good pasture land. All fenced. Six room dwelling, 2 barns. Good water. Prospect for oil under good lease. Located in Sheridan County, Kansas, 9 miles north of Hoxie. This farm is offered for sale to close an estate. James R. Wilson, Executor, 515 St. Paul Street, Denver 6, Colorado.

**Fine Stock Farm**—320 acres on good road, 2 miles town, highly improved. 50 alfalfa, 200 good bluestem pasture, electricity, $50 per acre. T. B. Godsey, Emporia, Kan.

**Improved 120 Acres**—Alfalfa, grain, pasture. Priced right. 5 miles Quenemo. Oscar Giesel, R. 2, Quenemo, Kan.

● FARMS—MISCELLANEOUS

**New** Spring catalog, selected farm bargains, 7 Midwest states, sent to you free! Many equipped. Many illustrated with picture. Special service to those stating general location desired, and payment plan. Write today! United Farm Agency, KF-428 BMA Bldg., Kansas City 8, Mo.

● PLANTS—NURSERY STOCK

**Certified Thornless BOYSENBERRIES**

14 yearling $2.10, 10 two-year or 6 three-year plants $2.00. 10% packing and postage.
**R. H. DIXON, R. 1, HUTCHINSON, KAN.**

**Frostproof Cabbage and Onion Plants**—Large, stalky, well rooted, hand selected. Cabbage—Jersey Wakefield, Charleston Wakefield, Flat Dutch, Copenhagen Market. 200-75c; 300-$1.00; 500-$1.25; 1,000-$2.25. Onions—Crystal Wax, Yellow Bermuda, Sweet Spanish, 300-75c; 500-$1.00; 1,000-$1.75; 2,000-$3.00. All postpaid. Prompt shipment. Satisfaction guaranteed. Culver Plant Farms, Mt. Pleasant, Texas.

**Free—1945 Garden Catalog,** illustrated in colors, of hardy field-grown vegetable plants that produce crops three weeks earlier than home grown plants. Tells how to spray, plant and cultivate cabbage, onion, lettuce, beet, broccoli, tomato, potato, eggplant and pepper plants. Get your Catalog now before the supply is exhausted. P. D. Fulwood Co., Tifton, Ga.

**Certified Plants,** Crystal Wax and Yellow Bermuda Onion plants, 300-75c. 500-$1.00. 1,000-$1.50. 2,000-$2.75. Postpaid. Not Prepaid, 1,000-$1.00. 6,000-$3.50. Frostproof cabbage plants, 200-75c, 50-$1.25, Postpaid. Not Prepaid, $1.50 per 1,000. J. H. Sayle Plant Co., Carrizo Springs, Texas.

**100 Blakemore** strawberry plants $1.00, 25 Boysenberry $1.25, 25 Black Raspberry $1.25, 25 Early Harvest Blackberry $1.25, 12 Victoria (Red) Rhubarb $1.00, 8 Gooseberry $1.00, 6 Wilder Currant $1.00, 25 thornless Boysenberry $1.50. All plants postpaid. V. P. Basham, Mountainburg, Ark.

**200,000,000 State Certified** cabbage, onion, pepper, potato, tomato, eggplant, lettuce, celery, cauliflower, beet, dill, asparagus, broccoli, brussells sprouts, rose bushes, flower plants and garden seed. Free catalog, actual pictures. Special prices. North Texas Plant Farm, Franklin, Texas.

**Strawberry Plants**—Hardy northern grown Dunlap, Aroma, Blakemore, Premier, 200-$2.00; 500-$5.00; 1,000-$10.00. Gem or Mastodon everbearing 100-$2.75; 200-$5.00. 15 Mammoth Rhubarb $1.00. Fresh plants. Prompt shipment. Iowa Nursery, Farmington, Iowa.

**Victory Gardens** essential to food supply. Our early vegetable plants yield more vegetables, two weeks earlier. Free: 1945 Color Catalog of hardy, fieldgrown Cabbage, Onion, Lettuce, Beet, Broccoli, Tomato, Potato, Eggplant, Pepper Plants. Piedmont Plant Co., Box 921, Albany, Ga.

● SEED

**For Good Yield** and Feeding value plant Feigley's Iowa Goldmine seed corn. $2.50 bushel. Dwarf white kafir, 4c. Free samples. L. C. Feigley, Enterprise, Kansas.

**Alfalfa, Red Clover,** Sweet Clover, Lespedeza, also a complete line of field and grass seeds. Write for free catalog and price list. Standard Seed Company, 19 East 5th St., Kansas City, Missouri.

**Watermelon Seed,** Rush Spring's Black Diamond. Rush Springs, Oklahoma, the home of the Black Diamond watermelon, pound $3.00. C. C. Swinney, Rush Springs, Oklahoma.

● KANSAS CERTIFIED SEED

**Kansas Certified Seed**

Field Inspected and Laboratory Tested
Be Safe—Plant Certified Seed

**Forage Sorghums:** Atlas, Norkan, Kansas Orange, Early Sumac, Leoti Red.
**Grain Sorghums:** Blackhull, Western Blackhull, Pink, Club, and Red Kafirs, Colby, Early Kalo, Westland, Wheatland, Midland (Kalo 617).
**Sudan Grass:** Wheeler.
**Popcorn:** Supergold.
**Corn: Hybrid:** U. S. 13, U. S. 35, K. I. H. 38, Ill. 200, K 1585 and K 1583. **Open Pollinated:** Midland, Reid, Pride of Saline, Hays Golden, Kansas Sunflower, Colby Yellow Cap.
**Soybeans:** Hongkong and Dunfield.
**Oats:** Kanota and Fulton.
**Barley:** Flynn and Beecher.
**Flax:** Linota. **Alfalfa:** Ladak.
**Sweet Clover:** White Biennial.
**Red Clover:** Kansas Strain.
Write for list of growers.

The Kansas Crop Improvement Association
Manhattan, Kansas

**Kansas Hybrid Seed Corn**

State Certified and Kansas Grown. U. S. 13 Hybrid Corn, grown and processed on our own farm.
Flat Kernels — $8.50 per bushel
Round Kernels—$6.50 per bushel
Certified Black Hull Kafir—6c pound
BRUNE BROS, R. 1, LAWRENCE, KAN.

**KANSAS HYBRIDS BRED FOR KANSAS**

Kansas 1583, Ill. 200, U. S. 13.
Flats $8.00. Rounds $6.00 and $7.00.
Carl Billman, Holton, Kan.

**Kansas Certified Hybrid Seed Corn.** Know the pedigree of the hybrid you plant. K1583, Ill. 200. Order now. Herbert Roepke, R-3 Manhattan, Kansas.

**Pure, certified seed** of Norkan, Early Kalo, Pink Kafir and Midland (the new early combine grain sorghum). Fort Hays Experiment Station, Hays, Kansas.

**Kansas Certified Hybrid** K2234 sold out. Still available certified K1583. Also US 13 not certified. Wilfred M. Johnson, Cleburne, Kansas.

**Certified Hybrids** — US 13 and Kansas 1583, Prompt shipment. Harold Staadt Seed Farm, Ottawa, Kansas.

**Certified Kansas** 1583, a late maturing hybrid; U. S. 13, an early Hybrid. Jake Lehman, Horton, Kan.

**Kansas Certified Hybrids**—U. S. 35, K1585. Order now. Ernest Bauer, Broughton, Kansas.

**State Certified** Black Hull Kafir, $5.00 hundred. James Shaffer, Elk City, Kansas.

**State Certified** Atlas Sorgo $5.00 hundred. Rolland Klaassen, Whitewater, Kansas.

**Certified Hybrids**—U. S. 13 and K1583 ready to ship. O. O. Strahm, Sabetha, Kansas.

**Certified Hybrids**—K2234, U. S. 13, U. S. 35. Henry Bunck, Everest, Kan.

● SEED

**Growing Potatoes This Year?**

**The Seed You Plant Is Important**

**MINNESOTA CERTIFIED SEED POTATOES**

are always reliable. They are grown under exacting requirements in co-operation with this department and are dependable, vigorous and disease-free. Write for free list of certified seed producers.

State of Minnesota
Department of Agriculture
Seed Potato Certification Dept. H.
University Farm, St. Paul, Minn.

**JEWETT HYBRIDS**

Now Hold State Record in Northeast Kansas
Four-Year Average 1941-42-43-44

| | | | |
|---|---|---|---|
| Jewett 12 | 65.3 | U. S. 35 | 59.6 |
| Kansas 1585 | 62.7 | KIH 38 | 59.6 |
| Kansas 2234 | 62.3 | Midland A | 57.9 |
| Funk's G 94 | 60.2 | Pioneer 300 | 57.8 |
| U. S. 13 | 59.8 | Pride of Saline | 57.5 |

For highest yields and good palatability buy Kansas Grown Jewett. We pay freight on all mail orders.
Sewell Hybrid Corn Co., Sabetha, Kansas

**KANSAS-GROWN SEEDS**

**Alfalfa—Lot Crest,** per bushel ..... $19.80
**Brome Grass,** per bushel ..... 3.15
**Popcorn** (yellow) 10 pounds ..... 1.60
We carry a full line of Field and Garden Seeds. Write for Samples.
The Salina Seed Co., Salina, Kansas

**For Better Hybrids** order McCurdy's Hybrids. Highest yielding, high-quality hybrids adapted anywhere in the Cornbelt. Write for free folder and prices. Dealers wanted. McCurdy's Hybrids, Box KF, Fremont, Iowa.

**Hybrid Watermelon Seed.** Modern melon miracle. Sand unnecessary. Seed from 50 to 100 pounds watermelons. Two luscious cantaloupes. Free booklet or $1.00 for 700 seeds. Airline Farms, Clay Center, Kansas.

**Fish Bait**—Over 20 recipes and suggestions only 10c. Many favorable reports received. Fisherman, 1715 Lane, Topeka, Kan.

**Dairy CATTLE**

**Buy yourself a BETTER BULL**

**OWN an AYRSHIRE**

and raise big, strong, deep-bodied red and white cows that produce the most 4% milk at the least feed cost—cows that are hardy, rugged, good grazers, and that carry perfect type udders. High carcass value.

*Ayrshire Bulls are scientifically bred for heavy and economical production under average farm conditions.*

Write for literature or names of breeders with stock for sale

AYRSHIRE BREEDERS ASS'N., 260 CENTER ST. BRANDON, VT.

**WHY NOT?**

**Serviceable Age Ayrshire Bull**

15 Months old. Preferred pedigree. Sire—Woodhull Sunny Jim approved. Dam has 3-year-old record of 11,627 pounds milk, 462 pounds fat.

Also have bull calves ranging from 1 to 6 months. Prices reasonable.

D. E. KARNES, STUDLEY, KANSAS

**"OF OZ"**

—the four little letters of the alphabet which mean so much to Jersey breeders the nation over! It means ROTHERWOOD, the Kansas Farm to which and from which flows the richest blood of the breed!

ROTHERWOOD JERSEYS, Hutchinson, Kan.
A. Lewis Oswald John Craig Oswald

**Registered Jersey Bulls**

One calved Jan. 12, 1944. His 3 nearest dams average 619 lbs. fat in 329 days, actual production. Their average classification is Very Good. Price $150. Some younger ones priced at $75.00. Our help is all gone, so we might sell some registered cows.

CHESTER JOHNSTON, R. 3, Ft. Scott, Kan.

**'High Production Bred' Guernsey Bull**

For sale—Registered Guernsey Bull Calf from the highest-producing Guernsey cow in Kansas. She is Beachy Farm Rosamond with a 365-day lactation record of 16,883 pounds of milk, 801.9 pounds butterfat in C. T. A. This bull calf is sired by Beachy Farm Heartbreaker, a son of the proven sire Meadow Lodge Heartbreaker. M. M. Beachy, R. 2, Hutchinson, Kan.

REGISTERED GUERNSEYS

State Champion Records. Lily's Goldy (12.-105.9 M. 536.3 F.—FHI). Surprise's Alma (10.-293.1 M. 517 F.—GHI) King of the Meads, Rex's Laddie and Foremost breeding. Young bulls for sale. J. L. NELSON, Cedar Drive Farm, R. 7, Wichita, Kansas.

**BULL CALVES FOR SALE**

We bred and developed the first and only Holstein cow in Kansas to produce 1,000 pounds of fat in 365 consecutive days. Young bulls with high-production dams or granddams.

H. A. DRESSLER, LEBO, KAN.

**CHOICE JERSEY BULLS**

—ready for service. Excellent breeding. Priced reasonable.

BROOKSIDE STOCK FARM, SYLVIA, KAN.


## Public Sales of Livestock

**Angus Cattle**

March 9—Heart of America Breeders' Assn., Kansas City, Mo. James E. Nugent, Sale Mgr., 1701 Bryant Bldg., Kansas City, Mo.
May 5—Wheatland Farms, Chapman, Kan.

**Aberdeen Angus Cattle**

April 19—Penney and James, Hamilton, Mo.
May 4—Krotz and Swartz, Horton, Kan. M. J. Krotz, Sale Mgr., Odell, Nebr.

**Dairy Cattle**

March 15—Blake Wilson, El Dorado, Kan.

**Guernsey Cattle**

April 5—Gerald M. Jenkins, R. 2, Wichita, Kan.

**Hereford Cattle**

March 19—Richard H. Ziegler, Junction City, Kan. Sale at Manhattan, Kan.
April 3—Lull and Diehl, Smith Center, Kan.
April 7—Waite Bros., Winfield, Kan.
April 9—Jansonius Bros., Prairie View, Kan.
April 10—Northwest Kansas Hereford Breeders. H. A. Rogers, Atwood, Kan., Sale Manager.

**Shorthorn Cattle**

April 3—North Central Kansas Shorthorn Breeders, Beloit, Kan. Edwin Hedstrom, Secretary, Riley, Kan.

**Duroc Hogs**

March 2—Postponed sale of W. H. and H. O. Waldo, DeWitt, Nebr.
March 3—Wreath Farm and Germann, Manhattan, Kan. Sale at Wreath Farm, Manhattan, Kan.
March 20—Harry Givens, Manhattan, Kan.

**Shropshire Sheep**

May 1—Herman H. Schrag, Pretty Prairie, Kan.

## Prevent Stiff Boots

To keep leather boots from becoming stiff and hard, rub them well with castor oil. This will soften and restore their original texture.—E. L.

## Make Walls Smooth

Rough lime and sand walls may be smoothed for papering by coating with plastic paint containing gypsum.—E. M.

## Use Third Tree

In orchards where trees must be top-worked to provide cross-pollination, or where a highly desirable variety is planted, says R. J. Barnett, K. S. C., the third tree in each third row will answer. When 3 or more desirable varieties are available, blocks of 2 and 4 rows make an economical arrangement. Other advantages from using a number of varieties in blocks of 2 rows or more are as follows: More rapid and better timed spraying, cheaper picking and hauling and better balanced income.

To use a 3-variety illustration in which one half the trees were to be Winesap, one side could start with 2 rows of Gano, then would come 4 rows of Winesap, then 2 of Jonathan flanked by 4 of Winesap, and repeat thruout the planting.

Pears and plums may be arranged in a similar manner.

Practical cross-pollination by hand, using stored pollen, is done in some irrigated orchards.

## Try "Interest Finder"

What are farm men and women interested in learning? Harold Daily, county agent in Dickinson county, has worked out a good method of answering this question. At Farm Bureau meetings he passes out "Interest Finders" in the form of sheets listing 25 or 30 subjects farm men and women are asked to check according to their interest.

He has found that farm men in his county primarily are interested in grub control, seed exchange, mowing pasture demonstrations, and a school for repair of electrical equipment. The women are most interested in clothing renovation and in learning to make slip covers.

Why not try an "Interest Finder" at your next farm group meeting? The subjects checked might help work out a farm program for the next year or two.

## Vets Inspect the Food

With the old horse cavalry almost a thing of the past, you might think those veterinarians in the armed forces are a bunch of square pegs in round holes. But they are in fact doing a valuable job for Uncle Sam and the boys in service.

At the Topeka Army Air Field veterinarians inspect all meat, dairy products and vegetables served to the field personnel. Army vets inspect sources of meat supply—at points where the livestock is sold to the packing houses—and after the slaughtering. The vets are responsible for seeing that army men eat meat and dairy products that meet army standards, Without their stamp of approval, such products are not accepted at the various bases.

Vets also serve the trained war dogs used as sentries at army and other installations, and are classified as veterinarian technicians in the Army Medical Corps.

## Best in Rotation

A common question asked Kansas State College agronomists by Eastern Kansas farmers is "Which is best in crop rotation, red clover, alfalfa or sweet clover?"

When this question was asked L. E. Willoughby, Kansas State College Extension agronomist, at a recent farm meeting, he replied that sweet clover will grow on thin soil where lime is available and will build up soil fertility. After fertility is achieved red clover is a good crop to hold it. Alfalfa, where it can be grown, is better than either of the clovers if grown for the same length of time and then plowed under. Too often, he said, farmers leave alfalfa stands too long and get a surplus of nitrogen in the soil that has a tendency to burn the first crop following it in rotation.

Red clover makes a better hay crop than sweet clover and also a better seed crop, in his opinion. Some good rotations with red clover are corn-corn-oats-wheat-red clover; or corn-corn-oats-red clover-corn.

Alfalfa is better than red clover even in a short rotation, but works best in a long rotation and generally should be allowed to grow 4 years in the rotation, says Mr. Willoughby.

## Be Prepared

"A Garden Guide for Farm and Town," Kansas State College Extension Circular No. 101, and "Turkey Handbook," Extension Circular M45, will be found of much help to those who are now planning for garden and turkey production.

Some of the features of the garden bulletin are soil preparation, fertilizers, cultivation, irrigation and insect and disease control. In the turkey handbook you will find reliable information on breeding stock, housing, equipment, feed and marketing. Kansas Farmer's Bulletin Service, Topeka, will be glad to receive your order which will have prompt attention. These bulletins are free. Please order by number.

## All "Hook-ups" Alike

Recent standardization of tractor drawbars and power take-off shafts, as recommended by the American Society of Agricultural Engineers, will relieve farmers from obtaining proper equipment for attaching tractors to power take-off driven machines, such as corn pickers, combines, and other power-driven equipment.

All new equipment, including both tractors and implements, will now have standardized power take-off shafts, shields, and drawbar hitch points and can be coupled without special equipment.

Principal changes to conform with A. S. A. E. standards are: Power shaft diameter increased where necessary to 1⅜ or 1¾ inches; lateral dimension between end of power shaft and hitch point is 14 inches; vertical dimension is 12 to 15 inches from ground level to tractor drawbar hitch point; vertical dimension is 6 to 15 inches from centerline of power shaft to drawbar.

Farmers having old tractors or power-driven implements may learn how to make conversion to meet standard dimensions by obtaining A. S. A. E. Bulletin No. 44 at implement dealers.

## To Lay Off Contours

A simple, homemade device for laying out contour lines on field slopes can be made with a carpenter's level, a clamp type of clothespin and a small mirror or piece of broken looking-glass, states R. O. Cole, extension soil conservationist at Purdue University, Indiana.

The clothespin may be tacked or screwed on the side of the level in such a position it extends above the top in front of the bubble. Place the mirror in the clothespin and adjust to such an angle that the bubble is reflected when the level is held up to the eye in position for sighting.

In laying out the contour lines it is best to have a second person to carry a target rod or pole. First, the pair should stand close together so that by sighting over the level it may be determined what mark on the target will be at the same height as the level. Then the target carrier can move forward 50 or more feet at a time as the lines are staked out.

## Can't Replace Them

When your old clock fails to run or keep good time, take out the inside works of the case and let them soak in kerosene overnight. Then put a few drops of machine oil on the works and the clock will run like new. — Annie Cockrum, Ozark Co.

## 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 | $16.60 | $16.50 | $16.25 |
| Hogs | 14.50 | 14.50 | 13.60 |
| Lambs | 16.50 | 16.00 | 16.50 |
| Hens, 4 to 5 Lbs. | .24 | .24 | .23 |
| Eggs, Standards | .33 | .34 | .33 |
| Butterfat, No. 1 | .46 | .46 | .47 |
| Wheat, No. 2, Hard | 1.76 | 1.69 | 1.70 |
| Corn, No. 2, Yellow | 1.13¾ | 1.13¾ | 1.13¾ |
| Oats, No. 2, White | .82 | .81 | .87 |
| Barley, No. 2 | 1.18½ | 1.15 | 1.16½ |
| Alfalfa, No. 1 | 31.00 | 31.00 | 34.50 |
| Prairie, No. 1 | 18.50 | 18.00 | 17.00 |


**Beef CATTLE**

**ZIEGLER'S HEREFORD PRODUCTION SALE**

**Monday, March 19**

Cedarberg's Sale Barn

**Manhattan, Kansas**

13 BULLS from 8 to 24 months old (10 of them polled).

15 FEMALES, all sired by or bred to the Lewis bred bull, Victor Domino 157th, many of them with calves at foot or near calving sale day. (70% of them polled.)

Selling in ordinary breeding condition. Herd recently Bang's tested with no reactors. We are now using our third John Lewis herd bull. For catalog write

RICHARD H. ZIEGLER
Route 2 Junction City, Kan.

Auctioneer—Jas. T. McCulloch
Jesse R. Johnson with Kansas Farmer

**Registered HEREFORDS**

Serviceable Bulls of Prince Domino and Prince Domino Mixer bloodlines. Priced to sell.

Arthur Attwood, Silver Lake, Kan.

**Polled Hereford Bulls**

We are offering for sale at this time two bulls coming 2 years old, five bulls coming 3 years old. These are excellent individuals, good conformation and color. They were produced and developed with the practical stockman in mind, well fed but not pampered. Come and see them or write.

GOERNANDT BROS., AURORA, KAN.

**REGISTERED POLLED HEREFORD BULLS**

—for sale, 8 to 22 months old, good type and quality. Sired by Worthmore Domino.

HARRY R. RIFFEL, HOPE, KAN.

**POLLED HEREFORDS**

REGISTERED BULLS, 8 months to serviceable ages. Extra good bone, type, quality and breeding.

JESSE RIFFEL, ENTERPRISE, KAN.

OFFERING

**POLLED HEREFORD BULLS**

A few choice Polled Hereford Bulls and 1 horned Bull, all of good quality and breeding. Priced for quick sale.

JOSEPH C. MAES, Bushton, Kan.

**Registered Angus**

**BULLS AND FEMALES FOR SALE**

A choice lot of registered Angus bulls and females ranging from calves to mature animals. Bulls up to two years old. One or a car load. Choicely bred of Earl Marshall and Prizemere breeding.

L. E. LAFLIN, Crab Orchard, Nebr.

**Shorthorn Bulls and Heifers**

10 to 18 months of age, nice colors, best of type and breeding. Also few cows with calves.

E. C. and GLENN E. LACY & SON
Miltonvale, Kan.

**Fair Lawn Shorthorns**

Quality with breeding to match. A few selected bulls, good quality and colors. Sired by Fair Douglas. Would spare a few females, including cows with calves. Will deliver 100 miles.

FRANK E. LESLIE, Sterling, Kan. Phone 1804

**STUDEBOY SHORTHORNS**

Eight bulls, 6 to 14 months old, dark-red, blocky type, sired by Golden Oak Romanian. Dams high in Browndale breeding. Price $150 for choice. PHILIP K. STUDER, 3 Miles Southeast of Atwood, Kansas.

**Banburys' Hornless Shorthorns**

We have 10 weaned bulls and up to 800 lbs. on our sale list. BANBURY & SONS, Plevna (Reno County), Kansas Telephone 2807

**Polled Shorthorn Bulls**

REDS AND ROANS, 11 to 18 MONTHS OLD

W. G. DAVIS, HAGGARD (Gray Co.), KAN.

**Polled Shorthorn Bulls and Females**

Choice young bulls, from calves to serviceable age. Also cows and heifers. Everything Bang's tested. HARRY BIRD, ALBERT, KAN.

★ **AUCTIONEERS** ★

**Buyers Pay the Auctioneer**

If he is capable, understands his audience and knows values. His fee is reflected in increased profit to the seller.

HAROLD TONN
Haven (Reno Co.), Kan.

**BERT POWELL**

AUCTIONEER

LIVESTOCK AND REAL ESTATE

1531 Plass Avenue Topeka, Kan.

HOGS

GET THE FACTS ABOUT

BERKSHIRES

Grand Champions in the carlot at America's No. 1 Market Show in Chicago six years straight. Champions before the war. Champions during the war. Market toppers after the war. Now is the time to get the facts about Berkshires—to lay your future hog raising operations on Berkshire more efficient production, and highest market value. Write the AMERICAN BERKSHIRE ASSOCIATION, Springfield, Illinois

GET STARTED in BERKSHIRES

The Champion Market Hog. Bred Sows and Gilts to farrow March and April. Guaranteed, registered, immuned.
Shadowlawn Berkshire Farm, Holton, Kan.

Fancy Serviceable Duroc Boars
8 to 14 mos. old, quick maturing, low built, thick, deep, heavy hammed, cherry red. Fall and spring gilts bred for February, March, April farrowing. Immuned. Reg., priced right. Herd sires, Ace's Parade, Proud Cherry Orion, Builder's Victory Ace are tops in quality and breeding. Come or write describing your wants. Phone 25F3, Lyons. G. M. Shepherd, Lyons, Kan.

Duroc Sows and Gilts
—of the breed's best bloodlines. Bred to Improved Ace, a top grandson of Proud Wave Ace. Also fall pigs by Improved Ace.
B. M. HOOK & SON, SILVER LAKE, KAN.

SPOTTED POLAND CHINA HOGS
We offer boars, gilts and weanling pigs. We placed 17 times at state fair. Get your orders in quick. DALE KONKEL, HAVILAND, KANSAS

ROEDIGER OFFERS CHOICE POLANDS
Offering some fall pigs that are sired by Wonder Boy and Royal Model. Dams by four prominent boars. Immuned. Also 2 bred gilts.
Roy Roediger, Longford, Kansas

SPOTTED POLAND CHINA
Fall Boar and Sow Pigs. Uerelated pairs. Three outstanding Boar Pigs from grand champion of Hutchinson, 1944. Double immuned. Registered.
Earl & Everett Fieser, Norwich, Kan.

SCHEEL'S BETTER-TYPE HAMPSHIRES
Gilts bred for March and April to outstanding herd sires. Also fall pigs, either sex. Visit us.
DALE SCHEEL, EMPORIA, KAN.

Registered Chester White Hogs
Serviceable age and baby boars of good quality and breeding. Priced reasonable. Mrs. Maude Hollingsworth, R. 4, Junction City, Kan.

Registered Hereford Hogs
High-winning herd National Show. Home of Fashion Corrector. Boars, Pigs, Bred Gilts. Circular. YALEHURST FARM, PEORIA, ILL.

Dual-Purpose CATTLE

Wyncrest Farm Milking Shorthorns

Herd sire—Maid's Duke. 7 nearest dams average 518 lbs. fat. Bull calves up to 6 months. If it's the good ones you want, see us.
H. H. COTTON
St. John Kansas

MILKING SHORTHORN HERD SIRE
For sale—My herd bull, Crawford Robin, calved June, 1941. Dark-red color. Sire, Red Prince Charlie, by Neralcam Prince Charlie. Dam, Crawford Daisy R. M. cow that gave over 500 lbs. butterfat in last milk period. He is gentle and a good breeder. Keeping his daughters, so must sell him.
J. W. SKOLAUT, OLMITZ (Barton Co.), KAN.

REGISTERED MILKING SHORTHORN CATTLE — Private Dispersal
Imported Canadian herd bull (4 years old).
3 Cows—3 Heifers (all bred).
2 Young Bulls, ready for service. Good quality, colors and R. M. ancestors.
Pasture shortage makes sale necessary.
J. P. Malone, 116 North Douglas, Lyons, Kan.

Milking-Bred Shorthorn Bulls
Registered and of good quality. From two to twelve months old, sired by College Judge and out of heavy milking dams.
ROY HUBBARD, JUNCTION CITY, KAN.

Reg. Milking Shorthorns
Have for sale bull calves, 6 to 8 months old. Neralcam and Kingsdale breeding. Priced right.
CLARENCE DICKY, MEADE, KAN.

Registered Milking Shorthorn Bulls
Red and white, 19 months; roan, 7 months. Several good grade Shorthorn heifers.
EARL C. CORY, LITTLE RIVER, KANSAS

Registered MILKING SHORTHORNS
Choice bull calves to near serviceable age. Popular breeding and good milking inheritance.
ROY ROCK, ENTERPRISE, KAN.


# IN THE FIELD

Jesse R. Johnson
Livestock Editor
Topeka, Kansas


The Kansas Holstein-Friesian Association recently presented a scroll in tribute of achievement to Sister Xavier, of the St. Joseph Orphanage in Abilene, who for the last 30 years has had charge of the orphanage dairy. Sister Xavier was honored at the annual state meeting of the association in Manhattan.

Altho she had no particular training for her role, Sister Xavier improved the orphanage's herd of dairy cattle until today it not only has provided milk for the orphanage but has paid for modern buildings and equipment on the farm.

At the state meeting in Manhattan, Kansas Holstein breeders considered plans for the 1945 program of work and heard the visiting national secretary, H. W. Norton, Jr., Brattleboro, Vt.; Raymond Appleman, Linn, regional fieldman of the Holstein-Friesian Association of America, and state officers. The group is headed by Hobart McVay, Nickerson.

**POLAND CHINA** breeders and commercial swine growers of Kansas will be glad to know that **PAUL DAVIDSON,** of Simpson, recently discharged from the service where he has been for nearly 3 years, will continue to carry on the herd established more than 40 years ago by his father who died while Paul was away. He has a half dozen sows for spring farrow, tractors are being put in order and the big farm of several hundred acres already is taking on a spirit of activity.

A crowd of about 350 farmers and breeders attended the **NEBRASKA DUROC BREEDERS' ASSOCIATION** sale held at Lincoln, February 3. Thirty-eight bred sows were sold for an average price of $113.33, with a top of $185 on a gilt bred by Harvey Deets, of Kearney, and purchased by Art Arens, of Hartington, Neb. The low price was $75 with only one selling below $80 and only 11 below $100. Six fall boars averaged $65.83. The local demand was good and the offering presented in very good condition, according to sale manager, W. H. Waldo.

Altho located in the center of one of the leading beef cattle sections of the state, **J. T. MORGAN** writes that he is going along nicely with his Milking Shorthorns. When he moved to Norton county several years ago little was known about dual-purpose cattle. At that time he took with him some big, intensely bred, deep-red Bates cattle. Sometime later he added some Glenside breeding and by this cross bred into his cattle more smoothness and increased milk production. Mr. Morgan, who is getting along in years, writes that his son and family have joined him in the business and by this the labor situation has been improved a lot.

The average sale price, the type and the quality all were a decided improvement over previous sales, in the **SOUTH AND WEST HEREFORD HOG** sale held at Kansas City on February 14. When the top of the sale is $200 and the average on bred sows and bred gilts is $128, it indicates that values were consistent thruout the sale. In the show preceding the sale Roy Schultis, Fairbury, Nebr., had the champion gilt and she sold for $185 to Forest Alley and Son, Blue Springs, Mo. The reserve champion of the show was from the Charles Boos herd of Portis, and was purchased at $155 by G. W. Sams and Sons, Excelsior Springs, Mo. Kenneth Kaser, Osborne, consigned the top-selling gilt which was bred to Step Ahead and sold for $200 to D. J. Tyson, Lonejack, Mo. Bert Powell and Roy Schultis were the auctioneers.

**BAUER BROTHERS,** Poland China breeders who live at Gladstone, Neb., just over the line from Kansas, held their annual bred sow sale at Fairbury, February 17. Much of the territory that supplied buyers was covered with snow and ice, but a big crowd braved the cold and felt justified in making the venture. Sixty head of bred gilts sold for an average of $125. Thirty-three head went to Nebraska and Kansas buyers. The 17 head purchased by Kansas farmers and breeders averaged $120. The top animal went to Minnesota at $215. N. F. Farmer, of Platte City, Mo., took the next top at $200. Both of these gilts were bred to Midwest. Buyers were present or represented by mail bids from Illinois, Iowa, California and Minnesota. Paul Davidson, of Simpson, took one at $175; H. F. Riner, of Inman, got one at $150; Richard Welter, of Westmoreland, 2 or 3 head; Roy Roediger, Longford, 1 at $175. Other Kansas buyers were Lee Bolton, Smith Center; Carl Reece, Scandia. Gus Huber, of Nebraska, bought 1 at $200. Bert Powell did the selling.

With the threat of after-war inflation hovering over us, almost everyone is watching for signs that point to the approach of this calamity. Even livestock sales and sale reports are studied in much the same fashion as investors do who trade in bonds and stocks. And in some instances it must be admitted there is ground for such fears, even in the buying and selling of registered livestock.

But to substantiate such fears, sale reports must be carefully analyzed. I have before me a complete report of the **CLARENCE MILLER** Duroc sale, held at Alma early in February. First impression is that an average price of $198.50 was too high on 50 bred gilts. But looking further it is learned that only one sow sold as high as $450, and the next high was $400. One reached $380 and only 8 head, including those already mentioned, sold above $300. Thirty-two head sold at $200 or less, and 18 head, practically one third of the offering, sold at $150 or less a head. They went to 50 different breeders in 7 states. The buyers were men of experience and judgment, and the offering was one of the best ever to go thru a Kansas sale ring, from the standpoint of the type now most in favor thruout the Corn Belt.

The **OSBORNE COUNTY HEREFORD HOG BREEDERS'** bred-sow sale held at Osborne, February 19, was a milestone for the breed so far as public sales of this rapidly growing breed is concerned. The offering made up of top animals from members of the association came into the ring in perfect form, not overfitted and with excellent coats, they handled like pets and were fully appreciated by buyers from Kansas, Minnesota, Iowa, Ohio, Nebraska, Missouri and Oklahoma. The top gilt in pig to the grand champion Duration Model went to Wilbert K. Rhea, of Hopkins, Mo., at $240. Second top to R. E. Faber, Mitchell, S. D., at $215. Mr. Miller, of Maryville, Mo., bought one at $200. Kansas buyers took something like a fourth of the offering at figures slightly lower, but only one stayed in the vicinity of Osborne. Don Davidson, of Simpson, took 3 head at $100 or more average. Among other Kansas buyers were O. Andrews, St. John; Glen Jackson, Hill City; D. H. Kaser, Osborne; R. Paff, Wichita; H. McLead, Glasco. The 40 head sold for an average of $133. Roy Schultis was the auctioneer.

The **MORRIS COUNTY HEREFORD BREEDERS'** annual sale, held at Council Grove, February 12, brought out a good crowd of interested spectators and buyers. There were no far-away buyers, but the cattle selling in rather better condition than in previous sales were very well appreciated, with the exception of some bulls rather at an age to sell well where there were no range buyers. The entire offering of 48 lots sold for a general average of $187, the 19 females averaging $190, and the 29 bulls $186. The highest-priced bull went to Louis Kleinsmith, of Hope. Second top to Mrs. Alice Morgan, of Alta Vista. The high female sold for $375; Mr. Kleinsmith also was the buyer of this animal. Among other buyers were Harry Stuckey, Cassoday; Fred Shaw, Quincy; E. N. Monkers, Osage City; Harry Artz, Lyndon; F. L. Aspline and S. E. Longhoffer, Abilene; Dr. W. G. Rhinehart, Pittsburg; Dale Fechner, Alta Vista; Pierce Powers, Junction City; H. C. Anderson, Americus; Otto Roseler, Junction City; C. A. Piper, Hope; Miles True, Dwight; P. N. Slough, Quincy; R. R. Sanders, Miller; Merle Rogers, Garnett; Sam Miller, Milford; K. Keifer and Son, Herington. Every animal stayed in Kansas. The sale was preceded by interesting talks by Prof. A. D. Webber, Jerry Moxley and Bruce Taylor, the men having judged the cattle in the forenoon. Fred Reppert was the auctioneer, assisted by Leslie Lowe.

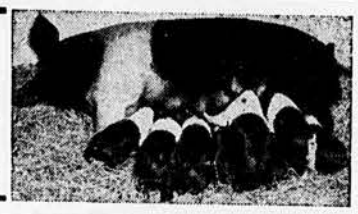
Walnut Valley Hereford Ranch
Auction Sale of 40 Head
1 p.m., April 7
20 Bulls — 12 Bred Heifers — 8 Open Heifers
Featuring the get and service of WHR Worthy Domino 41st and WHR Contender Domino 1st.
NOTE THIS—Sale will be held at Winfield Fairgrounds.
FOR SALE CATALOG WRITE TO WAITE BROS., WINFIELD, KANSAS
Auctioneer—A. W. Thompson

Dispersal Sale March 15
20 Cows in Milk
Jersey, Guernsey, Holstein. Registered Holstein cows with records up to 492 pounds fat.
27 Heifers
3 Registered Bull Calves
Including a grandson of Triune. Two-year-old Herd Sire selling, a grandson of Montvic Chieftain. His 3 nearest dams average 633 pounds fat.
All heifers under 1 year Bang's vaccinated. Herd Tb. and Bang's free.
BLAKE WILSON, EL DORADO, KAN.
Auctioneer—Boyd Newcom

DUROC GILTS BRED TO FARROW WHEN THE SUN SHINES

Farm 2 Miles West on Highway 24
Manhattan, Kan., Mar. 20
40 HEAD 35 Gilts bred to sires and from dams that carry close up the blood of such noted sires as Red Orion, Red Model, Golden Fancy, Royal Ace.
Attractions — 4 granddaughters of Golden Fancy, with a Thickset and Cheyenne backing. 7 by Red Model (the Deets boar). 11 head bred to a good son of Golden Fancy. They are the big, smooth, broody sort. Bred for last week in March and early April. Immuned and recorded pedigrees to be delivered with each sow sale day. 5 Choice Fall Gilts of good quality and bloodlines.
Write for catalog to owner
Auctioneer—Bert Powell
Jesse R. Johnson with Kansas Farmer
HARRY GIVENS, MANHATTAN, KAN.

O'Bryan Ranch Hampshires
We now have for sale a few late Spring Boars, $50 and up; Bred Gilts, $100; Weanling Pigs, $35; Unrelated Trios, $100.
O'BRYAN RANCH, HIATTVILLE, KANSAS



Dual-Purpose CATTLE

Reg. Milking Shorthorns
McPherson County Breeders offer bulls, cows and heifers. Write for list and prices.
McPherson County Milking Shorthorn Assn.
Inman, Kansas

Eldora Milking Shorthorn Farm
When thinking of MILKING SHORTHORNS, think of us. We have what you want or will help you locate it. Bulls from calves to breeding age, sired by Hollandale Keystone.
Gary C. Brown & Sons, R. 3, Great Bend, Kan.

Duallyn Milking Shorthorns
Bull calves, including one of serviceable age, for sale. Bulls from Duallyn now head some of most noted Eastern herds. Home of two National Champion cows—each the product of several generations of Duallyn breeding.
JOHN B. GAGE, EUDORA, KAN.

JENSEN'S MILKING SHORTHORNS
Choice young bulls, nice reds. 12 and 14 months old. Sired by Given's Red General, son of Walgrove Lewis.
H. P. Jensen, Hunter, Kansas

HORSES--JACKS

4 GOOD, BIG, YOUNG JACKS

Extra good, weight 1,200 lbs. and as good as grow. Three blacks with white points; one sorrel; all sound. Prompt servers, either mare or jennet. Sure breeders.
A. J. Wempe, Frankfort, Kan.

March 17
Will Be Our Next Issue
Ads for the Classified and Livestock Section must be in our hands by
Saturday, March 10

BUY UNITED STATES WAR SAVINGS BONDS

AGRICULTURAL LIBRARY
MANHATTAN KANSAS

# The Tank Truck

News from Your Conoco Agent about Lubricants, Farm Fuels, and Service

Erwin Einspahr farms 800 acres of fertile Colorado soil with only one tractor—and still finds time for custom work!

No test of an oil could be more severe than in the fleet of trucks seen here—yet Conoco products have met the test for B. J. Dauman for more than five years!

Conoco Agent A. L. Kitchens passes the time of day with Julius Jeker on the latter's 670-acre farm near Boise, Idaho.

Rollen Upton gets instructions from Commission Representative O. J. McKee in the use of a Conoco Tractor Lubrication Chart.

# CORN . . . MILK . . . CATTLE . . . HOGS . . .

## 4 products—4 men AND 1 MOTOR OIL!

IN ALMOST every type of farming you'll meet some men who are successfully applying principles learned from some altogether different crop than the one they're growing. And you'll meet other men who swear that what goes for one will never do for another—that the principles of different types of farming just can't be switched. Now actually, a lot of the progress in methods of planting and cultivation of the past twenty-five years goes to prove that some one principle will often apply to quite a few different things.

That reasoning extends to other things than crops, too—for example, motor oil. And right here on this page are demonstrations of how wrong it is to say, "Well, that's all right for raising thingumabobs, but it'll never do in *my* kind of farming! For here are statements from four men who specialize in four different kinds of farm products—and all of them find Conoco lubrication ideal for their varied conditions!

### CORN—500,000 Bushels!

A real corn grower is Erwin Einspahr, who farms 800 acres near Holyoke, Colorado. He has used Conoco products for fifteen years, and writes, "Since using this oil my expenses on my equipment have been cut to a minimum. Last spring, I bought a new tractor and turned in my 1937 John Deere tractor on which I hadn't spent one cent for repairs to the engine for the past five years and the dealer sold it without having to do any work on it. I have a M & M corn sheller with a Buick Master motor which I have had for three years and during that three years I have shelled 500,000 bushels of corn and so far I haven't spent anything on it for repairs."

### MILK—and 11 Trucks!

B. J. Dauman is building himself a really sizeable business. His creamery at Red Wing, Minnesota, employs a fleet of eleven trucks which travel most of the day in even the most severe weather. He has used Conoco products exclusively for the past five years. Here's what he thinks: "Since using Conoco products," he writes, "our cost of operations has decreased considerably, that is, oil consumption has lessened and repairs to our equipment is greatly prolonged. We are well satisfied with the results obtained. . . ."

### BEEF—for Uncle Sam!

"Our farm," writes Julius Jeker, "is located fourteen miles northeast of Boise. . . . My son and I farm 670 acres of irrigated and pasture land. . . . Most of our crops are fed to the several hundred white-faced beef cattle we raise to help supply beefsteak for Uncle Sam's fighting forces. We operate a D2—Caterpillar Diesel tractor, a Farmall tractor, a Dodge and International Trucks, and a passenger car, all of which have used Conoco products exclusively since the Spring of 1938. We used competitive products prior to six years ago, but have found your entire line of petroleum products to be superior in quality and uniform at all times. Your Conoco N*th* and HD oils have given us longer hours between drains and very little repair cost in the past six years."

### PORK—from tall Iowa Corn!

Rollen R. Upton is proud of having lived his entire life on a farm in the rich Mississippi bottom lands near Burlington, Iowa. He's been on the same 160-acre farm for better than twenty-two years—and he and his sixteen-year-old son farm 100 acres, raise around a hundred head of hogs a year, and milk a small herd of cows. Mr. Upton writes about Conoco products as follows:

"For the last twelve years I have bought Conoco products for my . . . two John Deere tractors, combine, cornpicker and other equipment. . . . I think your Conoco N*th* oil and Conoco pressure-gun grease are a pair that cannot be beat. I am confident that I not only get the best oil in Conoco N*th* oil . . . but I get clean and well marked packages and the best of service. . . . I think the two tractor charts . . . recently installed in my machine shed are a great help in lubricating my tractors. . . ."

### Secret of N*th* Oil's Success—OIL-PLATING!

Now it's a cinch those fellows whose letters are quoted here haven't written those things about Conoco products just for pastime. And maybe you're wondering how it happens that Conoco products give such uniformly good results, even under widely different conditions.

You take Conoco N*th* motor oil, now. The reason why N*th* oil does its job so well is that it contains a very special ingredient, developed by relentless research to OIL-PLATE your engines! With almost magnet-like energy, N*th* oil fastens and holds *extra* lubricant on fine-finished surfaces inside your engine—and that OIL-PLATING teams up with liquid oil all the while your engine runs, giving its working parts *extra* protection from frictional wear! Then, when your engine is idle, and liquid oil mostly drains right back down to the crankcase, OIL-PLATING remains on guard! Its presence helps to shield engine parts from corrosive acids of combustion, and it gives vital lubrication when you start your engine up cold! So you can see that your N*th* oil is fighting wear *all the time*—and you can imagine what that means in maintaining gasoline and oil economy, in preserving battery life, and in preventing premature breakdown of working parts!

When you buy other Conoco products, too, you can be sure you're getting products that are as *modern* as research can make them! Don't delay in getting the protection of Conoco lubricants—the economy of Conoco fuels—and excellent Conoco service! Call Your Conoco Agent today, so he can arrange to stop in the next time he's out your way. He carries a full line of all the Conoco lubricants your equipment needs—and he's got your FREE Conoco Tractor Lubrication Chart, made up specially for your own make and model tractor. Call him—there's no obligation! Continental Oil Company

### AT YOUR SERVICE WITH:

Conoco Nth motor oil—Conoco HD oil
Conoco transmission oils—Conoco pressure lubricant
Conoco Pumplube, Racelube and Coglube
Conoco Sujind grease, cup grease and axle grease
Conoco Bronz-z-z gasoline—Conoco tractor fuel
Conoco diesel fuel—Conoco kerosene and distillates

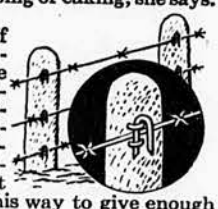
CONOCO

*Your Conoco Agent*

### $ DOLLAR-AN-IDEA $

Ideas that help to make work easier on the farm front are worth a dollar in any man's money! Send your original ideas to *The Tank Truck* in care of this paper—win $1.00 for each of your ideas printed!

To keep bread from drying out, Mrs. C. Pendland of Oneida, Kansas, stores her brown sugar in the bread box. Also keeps the sugar from lumping or caking, she says.



Don K. Dunham of New Haven, Wyoming, sent in the suggestion illustrated here for making a let-down section in a barbed-wire fence. He suggests fixing about four or five posts this way to give enough slack for wires to touch the ground.

Ever have the problem of drilling a hole in a small round rod or bar? Edgar E. Lewis of Lavina, Montana, solved it by stapling the rod to a grooved board, making a center-punch mark, and proceeding as on a flat surface.

### HERE'S HOW!

**To Conserve Wire Rope:**

If you have wire rope or strand on any of your equipment, you can help it last longer by seeing that it is properly lubricated. Almost any fairly heavy oil will do—and you can apply the oil either by dipping or by brushing on. The important thing is to see that oil works *into* the rope, between the individual wires, for that's where lubrication is needed. Another good idea is to switch ends on wire rope that's flexed over pulleys—that is, turn the rope end-for-end two or three times a year, so that wear is more evenly distributed. Proper fastenings are important in getting the most out of wire rope. Your local supplier can advise you best on just what types of fastenings your wire ropes require.

### At the Wheel of the Tank Truck

The development of penicillin, which is produced by a common mold, has stimulated research on micro-organisms found in ordinary soil. Some experts predict early practical results which may have far-reaching effects in changing our methods of cultivation, irrigation and fertilization of soil.

Predictions in the field of electronics have a way of sounding pretty far-fetched to most ears. But one forecast that sounds practical relates to the use of ultra-high-frequency radio waves to destroy grubs of many common pests in the ground. The idea seems to be that the high-frequency radiation will literally "cook" the grubs to death!

Construction of terraces to prevent direct flow of rain water down cultivated hillsides is recognized as one of the best basic methods for checking soil erosion. Now, some farmers are constructing their terraces and overflows to lead water into storage areas created by erecting earth dams—getting double benefits from terracing improvements!