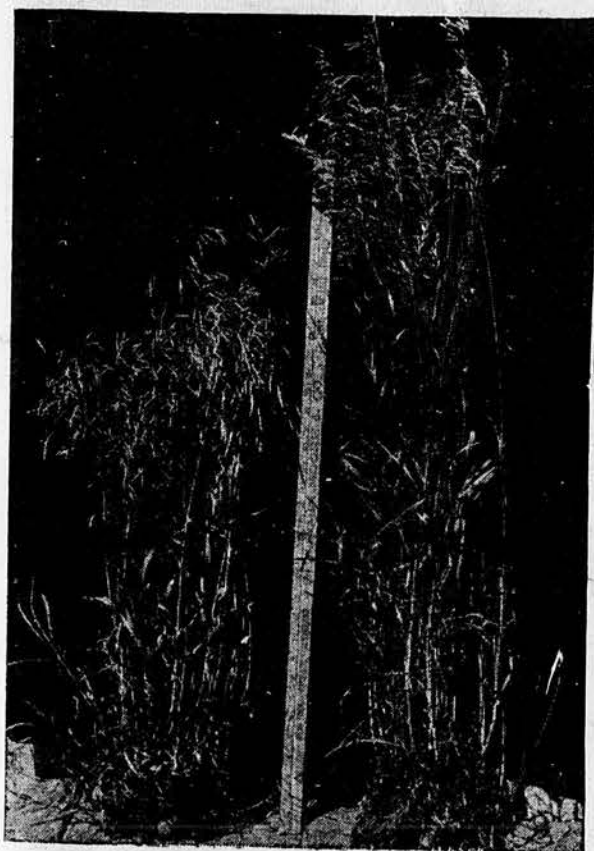


JULY 1, 1944

KANSAS FARMER

CONTINUING MAIL & BREEZE

Mature plants of northern, left, and Kansas brome grass, right. The difference in size is one of the reasons yields of northern brome grass are so much lower than those of adapted strains.



Brome grass heads at maturity. The heavy panicle at left is of the Kansas strain and the open, spread type at right is of northern.

Grass

SEED SHORTAGE

..... Offers Good Market Right at Home!

DEMAND for grass seed in Kansas has for several years exceeded production. As a result there have been large shipments of seed into this state, chiefly from northern states and Canada. Strains of grasses often are quite limited in their regions of adaptability, and therefore, many failures to obtain stands and to establish productive pastures have resulted from use of unadapted strains.

Native grasses provide an excellent example of limited adaptability. They are well suited to local conditions in their region of origin because unadapted types have been eliminated thru countless generations of natural selection. If such strains are moved to new environments they may behave in an entirely different manner, frequently failing to grow and develop normally. Northern strains moved southward more than 100 or 200 miles from their place of origin are smaller than the local types of the same species. The northern ones mature earlier, which shortens the grazing season, and appear to be much more susceptible to the leaf diseases.

If native grasses are planted a few hundred miles north of their original habitat, they tend to be stimulated into greater growth but may not be sufficiently winter hardy to withstand any but the mildest win-

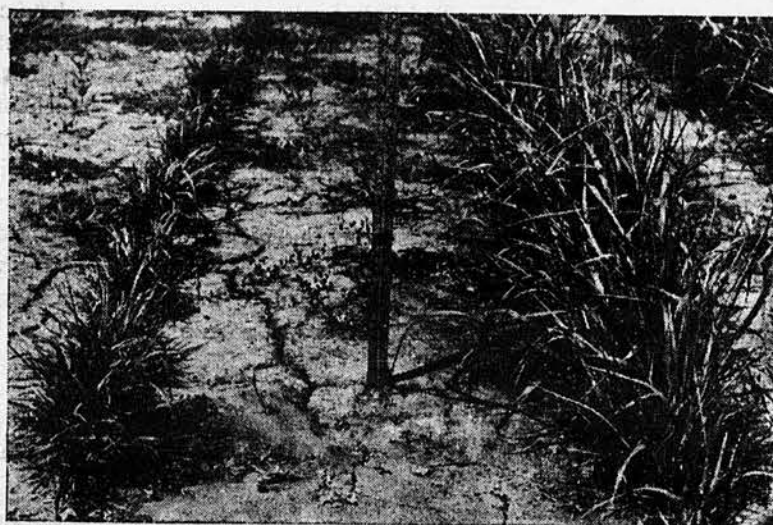
ters. They require a longer growing season than local types and frequently mature so late they fail to produce seed before frost. In purchasing grass seed, therefore, it is extremely important to know its source. Do not buy native grass seed from more than 100, or at most 200, miles north of the area where it is to be planted. If local seed cannot be obtained it is preferable to purchase seed from a southern rather than a northern source. Avoid seed from extreme southern sources, however.

New varieties of switch grass and side-oats grama, which recently have been approved

for certification in Kansas, originated from material obtained several years ago in Oklahoma. Tests have shown them to be fully hardy under our conditions, whereas many strains from farther south have failed to survive our winters. The new Hays strain of buffalo grass now is being increased and certified seed should be available within a few seasons. This strain has been developed at the Fort Hays Experiment Station, at Hays, after years of careful breeding and selection. It is highly productive of both seed and forage. In addition, its seed stalks are taller than those of ordinary buffalo grass, aiding greatly in seed harvest.

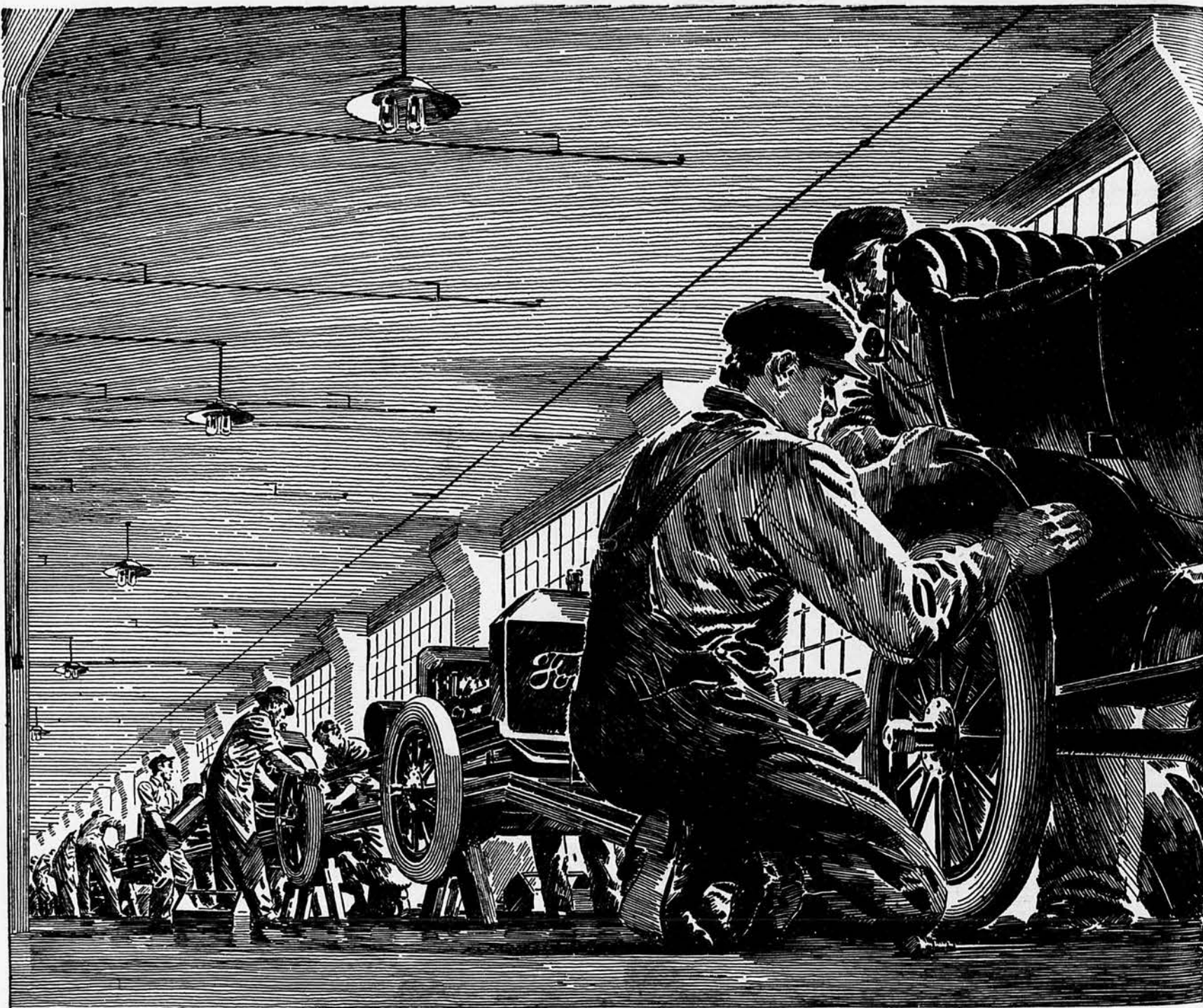
The great need for increased production of native grasses is emphasized by the demand. Seed harvested from native grasslands has commanded high prices and this method of seed production affords a means of increasing the income from pastures. Now that improved strains are being increased, there will be available pure seed of known

[Continued on Page 15]



Lack of adaptation in native grasses. North Dakota switch grass, left, is compared with the new Blackwell strain at right. This photo was taken about 2½ months after planting. Grown in the Uniform Grass Nursery, Kansas Agricultural Experiment Station.





There and then . . . the assembly line was born

EARLY in 1913, Henry Ford had his technicians try a new production idea which had come to him as he observed a watch factory in operation. Instead of a single group of men making the entire assembly on each flywheel magneto, the unit was moved from one worker to another. The result was a 50% saving in time!

"Why not apply this idea to the whole chassis?" Mr. Ford next suggested. "We'll test it during the summer." So now, along elevated greased rails, each chassis was being pushed by hand as workers added the parts in sequence. *There and then, the assembly line was born!*

A chain-driven line was soon after put into operation. Under the new system, the 14 hours

formerly required for a single chassis assembly were cut to 1 hour and 33 minutes.

Before 1913 ended, over 100,000 Ford cars had been built. All records for the mass production of automobiles had been broken.

Remarkable as this achievement was, it meant more than just a saving in production time. It meant more than creating new methods for industry everywhere. To Mr. Ford and his associates, this was another step in their endeavor to make life easier for millions.

From the first, the assembly line technique of production eased working conditions. Along with other modern advances, it helped to increase the life span of workers. At Ford, it soon made

possible the inauguration of the 8-hour day. And with unskilled labor in many places earning as little as \$1 a day, Ford basic pay was raised to \$5.

The assembly line also brought price reductions on Ford cars. This placed the pleasure and convenience of the motor car within the reach of more people than ever. This policy of sharing production savings with the buying public has remained fundamental with Ford.

Today, in the creation of equipment vital to victory, Ford men continue to search for better ways of doing things. What they are learning is bound to be reflected in the improved Ford transportation of tomorrow.

FORD MOTOR COMPANY



Handy Ideas

From Kansas Farms

Strain Those Fats

To make it easy to save fat for Uncle Sam, I made a strainer by putting a cloth in a 10-cent embroidery hoop. This eliminates need of washing a greasy strainer and cloth may be used to kindle a fire.—Mrs. L. D.

Keeps Tools Clean

Garden tools free from rust are easier to work with and, if a small can of tractor oil and an old shaving brush are kept handy, it takes little time to clean and oil the tools after using.—Mrs. R. E. Loftis.

Keeps Whetstone Level

A whetstone does its best work when it is as level as new. When my stones are either worn or slightly gouged, I level them by grinding on a level concrete surface, using some pressure and a circular motion. I use plenty of soft water.—C. D.

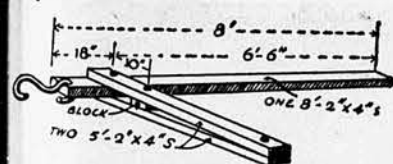
Protect Icebag

If ice cubes are held under warm water for a few seconds, they will have no sharp edges to jab or cut the precious rubber icebag.—Mrs. O. W.

End to Wasps

An old fruit jar makes a good wasp trap for porches and garages. Cut a half-inch hole in the cap, fill jar one fourth full of sugar water and hang it up with string or wire. The wasps enter thru the hole but cannot fly out, and finally fall into the water and drown.—Mrs. C. C.

Hay Frame Lift



A handy device for removing a heavy hay frame from a wagon may be made from 2 oak 2 by 4's, 5 feet long; one 8-foot 2 by 4 for the handle of the jack or lever; three 8-inch bolts and 1 large iron hook. To assemble, bolt the 8-foot 2 by 4 between the two 5-foot lengths, letting one end extend beyond them 18 inches. Put a large iron hook in the end of this extension. Bolt a block of 2 by 4 between posts 10 inches from the top to hold them securely.

together. Bolt the 2 posts together at the bottom. The length of the posts should be governed by the height of the wagon to be used. To lift frame, insert hook under center of frame and pull down on the handle, tilting post in desired direction to remove the frame or put it on the wagon.—C. S. K.

Paper Cleaner

A few drops of household ammonia kneaded into a small amount of bread dough, makes an efficient wallpaper cleaner.—L. H. M.

Stop the Leaks

When flour bin or other kitchen container leaks dry ingredients, I pour melted paraffin or beeswax into the cracks and let it harden.—Mrs. L. H.

Holds the Drills

If it is necessary to carry a number of small drills in your pocket, an old spectacle case comes in handy in which to carry them.—Mrs. R. E. L.

Jar Rubber Useful

My separator works again. I put an old fruit-jar rubber under the worn discs to lift them back to their proper place and now it operates all right.—N. O.

Scraps for Cushions

Instead of a wastebasket in my sewing room, I have a bag hanging on the wall. I put scraps from the weekly mending as well as from making new garments, also clean ravelings, into the bag. The larger pieces should be cut until about 2 inches across, then I use this "waste" to fill cretonne cushions for the living room. It makes an excellent filling and it is surprising how quickly enough scraps are saved to fill a cushion.—Mrs. C. C.

Save the Shine

A bit of wax rubbed on the bottoms of rockers, will prevent them marking even the glossiest of floors.—Mrs. L. H. M.

Keeps Sand Handy

We think by your Handy Idea column you are helping our country very much. We have received many benefits from this column and are sending some hints we have found useful. Because we have a coal oil and gasoline stove in the home, we keep a small bag of fine sand in a handy place nearby. In case of an explosion or fire, the sand can be thrown over the flames which will quickly extinguish them.—W. M. B.

Lambs Pay 21 Years Out of 22

HANDLING feeder lambs is a safe business in Kansas if managed properly, believe Sherman and Lawrence Mertz, Wabaunsee county, who have shown a profit on their lamb-feeding operations 21 out of the last 22 years. The only year they failed to make a profit was in 1929.

The Mertz farm is equipped to handle about 3,500 lambs, the usual number fed, but only about 2,850 are being fed this year. To take care of this large project there is a 500-foot feeding shed in the shape of an L, with a modern grain mill and storage barn

at the open end of the L, forming a U. All alfalfa fed is raised on the farm, baled and placed in the storage barn. From here it is run thru a hammermill and mixed with ground corn and blown into a bin. From this bin it is scooped into a feed carrier that runs on an overhead track the full length of the feeding shed. Feed bunks are located down the center under the rail so that all feed can be dumped with a minimum of labor. Fresh water is available automatically by use of a watering system providing constant flow.

Only Texas wethers are handled on the Mertz farm as the 2 men believe they offer several advantages. Wethers, they claim, are easier to handle and Texas lambs offer several advantages over northern lambs. Texas lambs have an initial cost of from 75 cents to \$1.50 less a hundredweight, utilize cheaper feed, make greater gains in weight, and produce a heavier wool clip.

Manure is a valuable by-product of the lamb project and is responsible for the high productivity of the farm, says Sherman Mertz. He remembers taking out 1,500 tons of manure by weight in a single cleaning of the shed and pens. All of it is utilized on the farm.

The present lambs were purchased last October and have been fed mostly bundle feed, with one half ration of ground alfalfa to start. About the first of April they were given 1½ to 1¾ pounds of ground corn and 2 pounds of ground alfalfa a day as a finish feed. Their estimated average weight on May 17 was 100 pounds.

WHEN YOUR SOIL WILL SAY...



YOUR postwar planning for your farm will have to face the fact of soil depletion. Your patriotic high production of food takes even more of your soil's plant foods than during regular peacetime production.

—and, remember—phosphate, a vital part of your soil, and most difficult for nature to replace, is an element your soil must have in abundance.

YOU CAN GET GENUINE ANACONDA SUPERPHOSPHATE!

Here's How...

Anaconda Phosphate (the one you know!) will be on sale in Kansas for your fall use. Some 45%—plenty of 20%. See your Anaconda dealer NOW and make arrangements for your supply!

Try this:—to conserve the limited (and allotted) supply of 45%—mix 20% Anaconda Superphosphate with 45%. Gives you a 32% mix which will produce fine results using 75 or 80 lbs. per acre! Drills easy! Reduces labor—improves results!



A BOOK TO READ

...and keep...and read again! "Pay Dirt"—a 32 page book that gives you the Facts about your soil and about Postwar Farm Planning. You can have a copy Absolutely Free just by sending a postcard request to us. Nothing to buy. Just write to—

ANACONDA COPPER MINING CO.

Phosphate Division
Anaconda, Montana • Box 41



KANSAS FARMER

Continuing Mail & Breeze

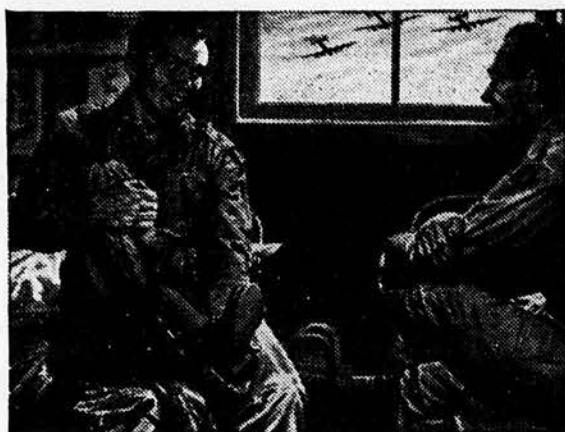
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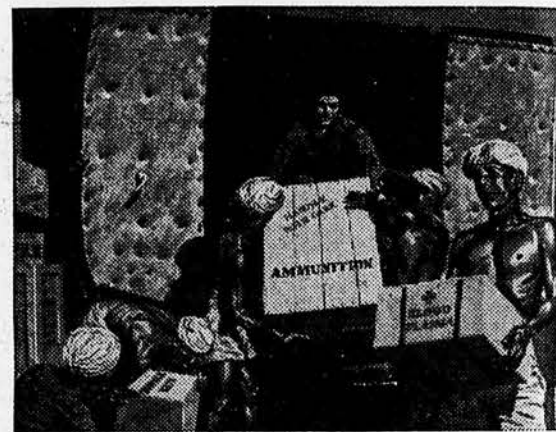
4 days out—4 days back— and the weather be damned!



1. This **Liberator Express** pilot has just brought his ship in—the end of a round-trip run on the longest air-freight haul in the world. From India, 14,000 miles away, to Patterson Field, outside Dayton, Ohio...for the Air Service Command.



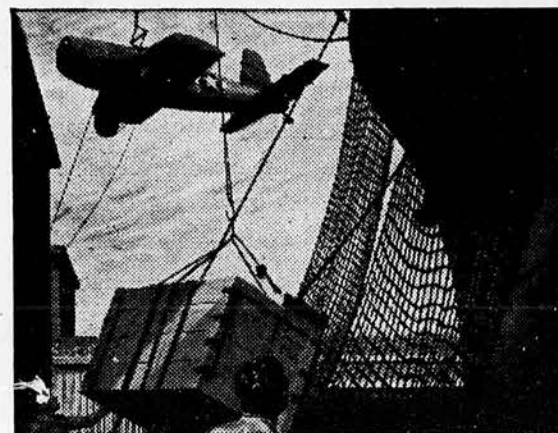
2. Day in, day out, the huge **Liberator Express** transport planes make the flight to the very fringe of Jap-held Burma and back. The boys who fly this shuttle run—in all kinds of weather—call it the 8-day "Pony Express,"—4 days out, 4 days back.



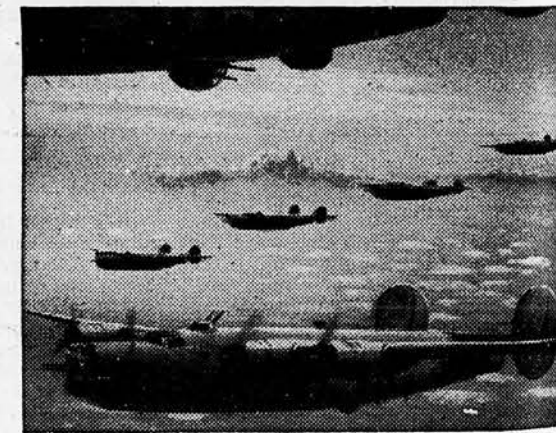
3. Each **Liberator Express** carries many tons of aircraft parts and supplies urgently needed by American airmen based halfway around the world. Magnetos, fuel pumps, jungle kits, propellers, starters, aircraft engines, radios, and other vital accessories.



4. The **India run** is only one of the ways in which we're solving the problem of supply the world over. The furious tempo of Allied aerial warfare calls for miracles of transportation, not only by air, but over highway, by rail, and on the sea.



5. Supplies, brought by truck and train, are lowered into the holds of waiting ships. Often, part of the cargo consists of fighter planes which have been flown from factory to dock. Our transoceanic shipping is truly a bridge of supply to Victory.



6. As in war, the plane, the train, the truck, and the ship must also team up together to help rebuild the peacetime world. But the plane will also have a second role to fulfill: it can well become our most effective means of ensuring a lasting peace.

No spot on earth is more than 60 hours' flying time from your local airport

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CONSOLIDATED VULTEE AIRCRAFT

FROM "FLYING JEEPS" TO LEVIATHANS OF THE AIR



LIBERATOR
... 4-engine bomber



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... transport



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... patrol bomber



CATALINA
... patrol bomber



VENGEANCE
... dive bomber



VALIANT
... basic trainer



RELIANT
... navigational trainer



SENTINEL
... "Flying Jeep"



I WAS considerably impressed by one of the statements made by Charles Holman, representing the National Dairy Co-operatives, in his appearance before the subcommittee of the resolutions committee at the Republican National Convention in Chicago last Saturday.

In closing his arguments on the era of surpluses expected to follow the war, protective tariffs on farm commodities, as well as support prices until supply and demand can be brought into some sort of stability, he pointed to this situation.

Right now, and this has come to pass almost without its being realized, 20 per cent of the income of dairy farmers the country over is in the form of subsidies from the Federal treasury. With the end of the war he says there will be a flood of imports of dairy products from South America, Australia and New Zealand; also of vegetable fats and oils from the Orient.

Unless the domestic producers' prices are protected against these floods of imports, Mr. Holman said, the only alternative Government can use will be permanent subsidies for milk producers and other foodstuff producers.

"An American agriculture dependent upon permanent Government subsidies will be a tragedy indeed," declared Mr. Holman, and I agree thoroly with that statement.

That is one of the reasons I have been raising my voice and bending my best efforts against these administration consumer food subsidies. A majority of the members of Congress, both in the Senate and the House, have consistently taken the same position. But every attempt by Congress to prohibit the payment of these subsidies, and to compel fair prices in the market for farm commodities and products, has been met with a White House veto. And in Congress we have not been able to get the two thirds majority needed to override a veto.

Right at the moment this may not seem important to most people. Farmers are getting, on the whole, better prices for their production—but they include the subsidy payments. The consumers are led to believe food costs have not gone up as much as they actually have. And in the patriotic urge to win the war, this continual borrowing of money to deceive producers and consumers as to food costs has not aroused any effective public protests.

But how is the Government going to meet the situation when the war is over and the years of payment start? If consumers are entitled to aid from the Federal treasury in paying their grocery bills while national income is at present high levels, what are they going to say when subsidies cease and food prices must take up the slack by rising to meet production costs? What are farmers going to do if the subsidies are removed and income drops accordingly?

The pressure for continuing the subsidies is going to be strong from both producers and consumers. And that is going to be a very bad situation; I am much disturbed over the prospect.

I cannot share in the complacent feeling in Washington that the farm labor situation is solved

—just how no one undertakes to say. My mail, and the conversations I have with men and women from the farming areas all over the country, indicate to me that the farm labor shortage is going to become acute before the summer is over. And the farm machinery production is farther behind schedule, so far as deliveries to farmers are concerned, than the WPB percentage figures would indicate.

When Marvin Jones, War Food Administrator, issued that order upon the insistence of WPB nearly 2 months ago prohibiting sales of corn in 125 counties in the Corn Belt, except to the Commodity Credit Corporation and except by permits from WFA officials, I am confident he did not know that WPB intended to turn the distilleries loose for a full month to make whiskey. He had been informed the corn was needed for making articles needed by the army. As soon as the announcement was made that whiskey making would be resumed in August, Jones very properly rescinded the "corn freeze" order.

The Farm Price Truth

IT LOOKS like a good crop year in Kansas. It also apparently will be a good income year. I am happy over both prospects, of course. No group deserves adequate returns for their labors more than farmers. That is true because no other great industry has been called upon to do a bigger job under so many handicaps. Agriculture can be proud of its achievements.

But I should like to emphasize again, as I have in the past, that all of us interested in agriculture must translate farm income figures so clearly that other groups, even certain Government bureaus, will be able to see the difference between total farm income and the prices farmers receive for their products and labor and investments.

The general public reads that farm income is a great deal higher now than it was during World War I. The Bureau of Agricultural Economics shows that net income of farmers in 1943, after deducting all expenses, was at the all-time high of \$12,500,000,000. I would question that part of the statement which says "after deducting all expenses," and would suggest "after deducting certain overhead expenses" instead. Folks also currently are reading official state-federal reports that the Kansas cash farm income for the first 3 months of 1944 was 12 per cent greater than for the same period last year, when farm income reached its highest level in history. Income from Kansas crops, livestock and livestock products for

the first quarter of this year was \$146,969,000. The 1943 total for the entire year was \$732,913,000, which was 18 per cent higher than the record set in 1942.

How easy it would be for certain other groups to use those figures as half truths in proving farmers are rolling in wealth; that they are the cause of higher living costs and inflation threats; use them as a lever in prying out wage increases! The whole truth

is that farm income now is highest in history only because farmers have produced more than they ever did before as a patriotic answer to the request from their country. Volume of production and volume alone is the reason for higher farm income now. Farmers have willingly shouldered the risks of price collapse after the war, to do the pressing job at hand of pouring food into all Allied fighting fronts and home fronts.

Prices received by farmers during this war are considerably lower on the average than prices they received during World War I. During the other war, for example, Kansas farmers received from \$1.96 to \$2.66 a bushel for wheat; during this war they have received from 93 cents to \$1.48 a bushel. Corn prices during the other war ranged from \$1.30 to \$1.90 a bushel; during this war from 65 cents to \$1.12 a bushel. Hog prices during the other war ranged from \$14.70 to \$18.40 a hundred pounds; during this war from \$10.40 to \$14.50. Now, these are wartime prices and do not take into consideration any boom prices following World War I.

When this price picture is really understood it proves that farm prices are not out of line. In fact, they have not increased nearly as rapidly nor as large a percentage as overhead farm expenses, wages paid in other industries or costs of certain things farmers buy. I want these facts to be remembered when future barrages against inflation are opened up. I don't want anyone pointing an accusing finger at higher farm income and saying, "There is the whole trouble, the cause of inflation, the reason for higher living costs."

Farmers are as dead set against inflation as anyone could be. Goodness knows they have reason to be. They took the toughest financial licking of any group after the years so aptly named by someone the "boom and bust" period. When the inflation balloon was punctured those 20 odd years ago, farm prices collapsed. And they have remained below parity all of those 20 odd years. I seriously question whether farm prices are now or ever have been since the first World War, at true parity; whether the farm dollar has been worth as much as industry's dollar. I am not hinting now that agriculture should have no price ceilings. I am contending that agricultural prices and income are not too high in comparison with other prices and incomes.

Arthur Capper

Uncertainties on Home Front Will Increase

By CLIF STRATTON

Kansas Farmer's Washington Correspondent

WASHINGTON, D. C.—Having taken Winston Churchill's word for it that Italy was the end of the beginning, Washington now is feeling comfortably that Normandy is the beginning of the end of the war in Europe.

Donald Nelson's orders putting tanks back in full production is an illustration of the uncertainties that will beset the future.

Government wants to reconvert to civilian production, but dares not make the shift for many plants, or announce the shifts are anywhere near due. For one thing, the vicissitudes of war might require increased production of war goods from the plants reconverted. Another thing, when reconversion really gets started, there will be a rush of workers to get away from the war industries and into plants which are to engage in production of civilian

goods. This is one reason for the War Manpower Commission's order freezing workers where they are.

The next few months promise many quick changes affecting particularly communities with war industries. There will be cut-backs in orders for war materials here. Another place will get sudden orders for increased production of certain kind of war material.

There should be a steadily increasing certainty as to military victory.

But the uncertainties on the home front will increase. News of cut-backs and cancellations probably will get more play in the news than the expansion of war orders. Chances are that total of war production during the

third quarter of the year will not drop. But the picture the country will get will be of decreased production for war, not accompanied by any noticeable increase in civilian production. Increased idleness, layoffs and unemployment may be expected in many communities before the summer is over—and there will be wonderment why the WMC has to insist on its labor freeze order in view of mounting unemployment.

Best information—or speculation based on information—is that war production may really start tapering off in October, possibly in September.

Administration will be under heavy labor and political pressure to keep many of the war plants going, whether

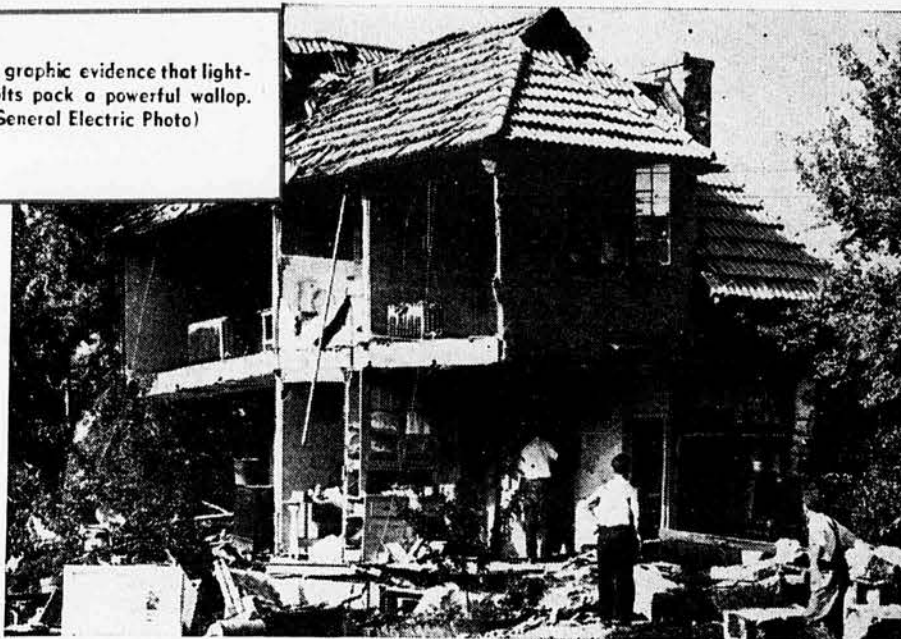
needed or not, thru October at least.

Army view is better let the plants lie idle, or even keep men on payrolls doing little odds and ends, than shift to civilian production with the risk that events abroad might take an unfavorable turn that would require plants back in war production for a while. Military figures civilians can stand it better than the armed forces can risk not having the needed supplies and equipment.

Materials for Civilians

If the European front develops as now expected and the Japanese situation follows suit—may even be more rapid than looked possible a few months ago—there ought to be oodles of materials available by next spring for civilian production—as much steel as was available for all uses in 1938; (Continued on Page 13)

Here is graphic evidence that lightning bolts pack a powerful wallop.
(General Electric Photo)



Flashes

ON THE FARM FRONT

BY MELVEN L. HAYES

OLD JOVE, who, according to the ancients, fires the special "weapon of the gods," really is a "trouble shooter." Every summer he causes immense damage on the farm front as he shoots his powerful fiery bolts of lightning between clouds and earth. At the incomprehensible speed of 20,000 miles a second, he darts his fiery brand, which often is more than a million times as strong as the ordinary house current. With brilliant, spectacular display he gashes and tears the skies, while on earth he kindles mammoth fires from man's prized possessions.

Each year in the United States, this villain kills more than 400 people and wounds more than a thousand. Property damages usually range between \$12,000,000 and \$20,000,000 annually, in addition to the loss of thousands of cattle in the field. The farmer may be partially protected by insurance; however, many losses are irreplaceable, and those that can be replaced require much time and labor. Every loss by lightning is a direct setback to the Allied cause.

There probably is no other force known, however, which invokes so much fear in relation to its damage as does lightning and its partner, thunder. Many people can be helped in this respect by knowledge of what lightning is and how it behaves—or misbehaves.

For instance, there is no danger in having a monkey-wrench or a pair of scissors in one's hand during an electrical storm. These mighty bolts aren't detoured that easily; neither are they "blown" into a room by a draft.

Many people contend that milking during a thunderstorm will cause the milk to sour, but this idea has been refuted. Souring is a chemical change due to the presence and growth of bacteria. If the milk is sufficiently chilled after milking, it will remain sweet.

Lightning is a gigantic spark which jumps between negative and positive charges of electricity

that are built up in the clouds or in the earth. There are a hundred times as many flashes between the clouds as between the clouds and the earth.

The first phase of the lightning stroke is called the leader stroke; it is a tortoise compared with the giant spark which goes back up this blazed trail "as quick as a flash"—more than a million miles an hour. Then there is a steady exchange of electricity between the cloud and earth until the charges are neutralized. The fact that a stroke lasts one-one-thousandth instead of one-one-hundred-thousandth of a second, may mean the difference between a building in flames and one with just a few boards ripped off. When lengthy strokes hit green trees, the sap often turns to steam and the trees actually explode!

As the shaft of lightning gashes thru the sky, the air is heated to an intense degree. The waves bound out and reach us in the form of thunder.

This old "sky demon" is interesting to learn about but it is difficult to reform, for it is "set in its ways." Fortunately, there are many precautions that can be taken in combating this force which causes 15 per cent of our fire losses.

The first and most important rule pertaining to farm buildings is to have them equipped with good lightning conductors properly installed. Lightning rods tend, in a small manner, to give off a silent discharge of electricity from the earth and prevent sparks jumping from the sky; however, this action is so small in relation to great thunderstorms, that it can be considered entirely ineffective. Since a lightning stroke searches for the easiest path to the ground, it will hit any high object, it being a better conductor than the air. Lightning rods or air terminals, being high and of a good conducting material, serve to grab strokes that might land in a given area and conduct them safely into the earth.

Completely metal or metal frame buildings with



A remarkable photograph of a brilliant electrical display near Topeka, after a hot summer day, showing forked lightning flashes. (Paul's Photos)

good grounds and with air terminals on non-metallic projections such as chimneys, are safest; those having metal roofs are safe only when there is metal on the sides which is in electrical connection with the roof and with grounds extending well into the earth. Buildings having sides of non-conducting material such as wood, stone, brick and stucco, must have lightning conductors.

Rods should be placed on high and projecting parts of the building and extend at least 10 inches—but never more than 60—above the highest points on the roof. There should be at least 2 paths or down-conductors that the lightning stroke may follow and these should be grounded on opposite sides of the building if possible. Air terminals (rods) should

[Continued on Page 17]



This home probably would not have been damaged by the lightning bolt if it had been protected by a properly installed lightning-conductor system. (General Electric Photo)



These sheep are a portion of 504 that were killed by lightning in Utah. Every summer farmers suffer great losses of stock killed in pastures and fields. (General Electric Photo)

Uncle Sam Says . . .

Tires Still Short

Tractors now operating on steel wheels will have to stay on steel, says WFA. All additional big tire production facilities are needed to make tires for military vehicles and for trucks used in domestic transportation.

More Fats Needed

Industrial uses of fats and oils this year will be so heavy that despite a currently improved glycerin situation, there will be a critical need for housewives to turn in at least 230 million pounds. Collections last year were a little under 100 million pounds, it is disclosed.

Little Heavy Cream

To save milk solids for more essential wartime uses, WFA has ordered that beginning August 1, all "prescriptions" for heavy cream must be approved by a local public health officer or secretary of a county medical society. Sale or delivery of so-called "filled" cream, containing more than 19 per cent of all kinds of fats (animal or vegetable) will be prohibited.

Need Milkweed Floss

Due to need for buoyant, waterproof material to replace kapok in manufacture of life jackets, roadsides and highway right-of-ways where milkweed is prevalent should not be mowed until after the pods are harvested in the fall for their floss. A campaign is in progress to collect at least 1½ million pounds of milkweed floss.

Sacks More Plentiful

Orders have been amended to permit an increased use of burlap in shipment of fertilizer, refined sugar and meat tankage. However, the maker or user may not stitch in an additional seam which permits the bag to be packed at less than full capacity.

Have First Choice

Returning war veterans will be given special consideration when applying to county farm rationing committees for rationed farm machinery, wherever their use will contribute relatively as much to the war-food program as use by any other applicant. Between 90,000 and 100,000 discharged veterans originally came from farms, Selective Service records show.

A Lumber Ceiling

An over-all control of lumber, in which a ceiling will be placed on the amounts of lumber that may be received by all classes of consumers, will go into effect late this year. Farmers' needs will be met by a general allotment to the WFA for farm use.

Afraid of Land Boom

With land prices already increased two fifths above prewar average and mortgage debt an acre up 25 per cent in the last 3 years, OWI predicts that a serious agricultural inflation is threatening.

Fill Oil Tanks

Fuel oil consumers have been asked by OPA to fill their home tanks as soon as possible to relieve storage, manpower and equipment problems throughout the nation.

No Time Limit

Ration certificates for purchase of men's rubber boots and rubber work shoes will be good indefinitely, says OPA. Formerly, consumers had to use rubber footwear certificates within 30 days of issue.

A Better Bandage

A new type of all-cotton gauze bandage that tends to fit and cling better than ordinary gauze, and which allows greater freedom of movement in bandaged joints, has been developed by the U. S. Department of Agriculture. The new fabric has a high degree of stretchability which makes the bandage partly self-fitting.

Want More Wheat

A national goal of 67 to 70 million acres of wheat for harvest in 1945 has been announced by WFA. This compares with about 67 million acres for this year, and 55 million acres in 1943.

Rye acreage equal to this year—about 2½ million acres—has been recommended.

May Get Stoves

Certificates may be issued by local War Price and Rationing Boards for coal and wood heating stoves to eligible applicants without regard to quota restrictions. Eligible applicants are those who have no stove to heat essential living or working space, or whose stoves are beyond repair within a reasonable time or at a reasonable cost.

Can Make More

Restrictions on manufacture of tire-changing tools, anti-freeze testers, battery fillers and battery hydrometers have been removed because of need for rebuilding and reconditioning automotive vehicles, farm tractors, Diesel and marine engines.

Hike Fertilizer Goal

The goal for production of normal superphosphate for the agricultural year beginning July, 1944, has been stepped up from the 7 million tons to be produced during the current year to 9,464,000 tons.

Get Extra Gas

Spare-time volunteer workers on farms and in food-processing plants

this summer may receive special gasoline rations for transportation to and from work. Applicants must be certified by the county agricultural agent or his farm labor assistant.

Lard Goes Free

All restrictions on the amount of lard acquired by industrial or institutional users have been removed by OPA, and all record keeping and reporting requirements are eliminated. Previously, only a 30 days' supply could be stockpiled.

Hunt for Ideas

Ideas of value to the war effort are wanted by the National Inventors' Council of the Department of Commerce. Since the council was formed in 1940 more than 200,000 ideas have been submitted.

May Build Cars

Possibly 2 million passenger cars, 1942 models with modifications, may be built after July this year, announces WPB.

No Permit Needed

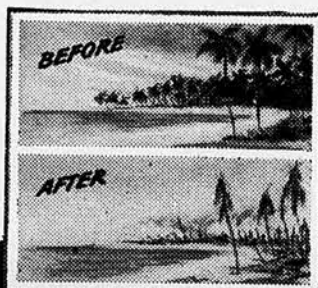
Farmers no longer have to get a permit to slaughter livestock and deliver meat to persons not living on the farm. The action was removed to facilitate movement of heavy supplies of livestock from farms into consumer channels.

FOR JUSTICE OF THE SUPREME COURT POSITION NO. 7

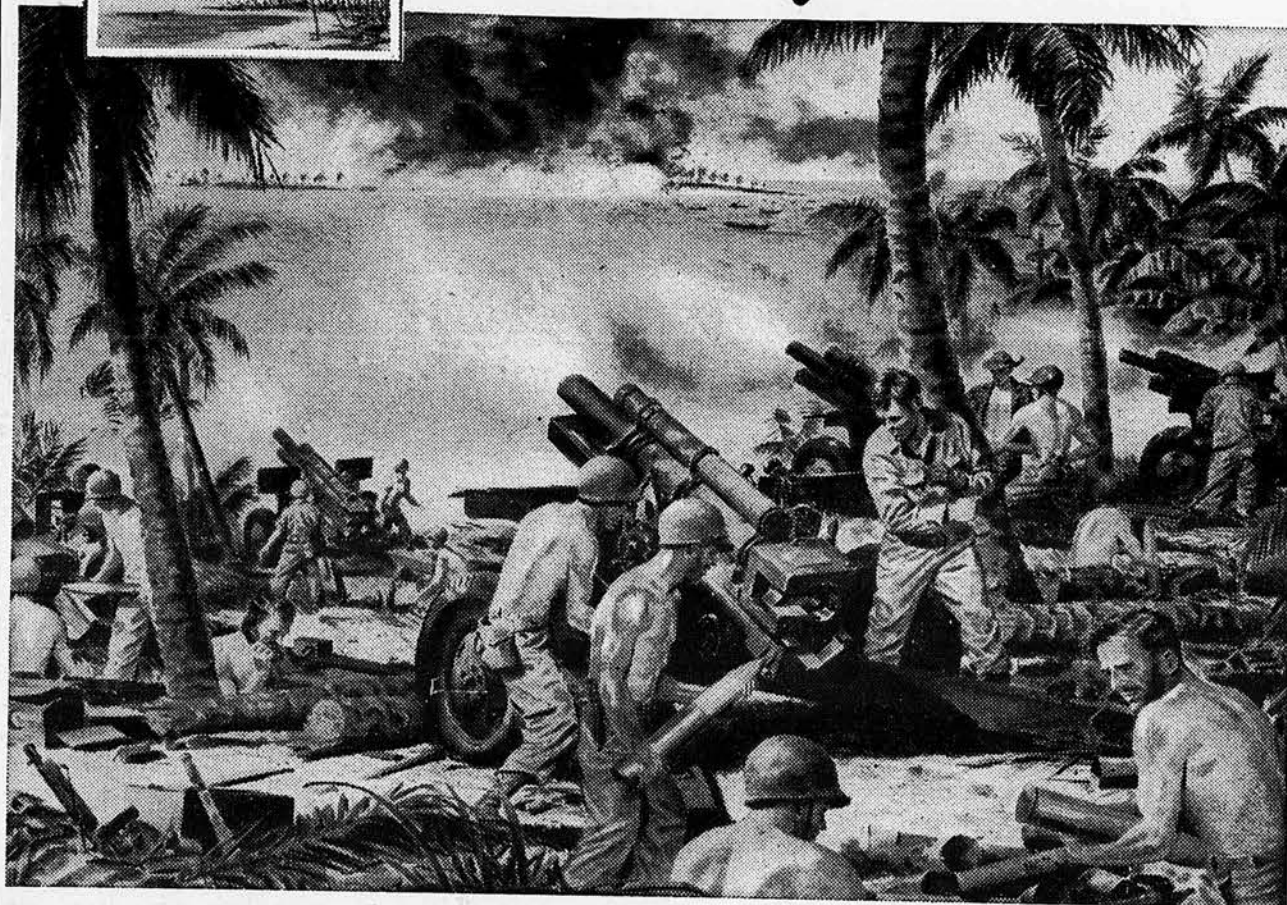


HOWARD F. McCUE
Primaries August 1
(Political Advertisement)

Buy More Bonds!



The "Scalping" of an Island!



How Army Fire-Power Blazed the Way at Kwajalein

8:58 A. M., January 31, 1944. . . all is quiet on the island of Enubuj. Looking at nearby Kwajalein, you can see its peaceful skyline of tropical foliage. 8:59 A. M. . . still all quiet. Situation unchanged. 9:00 A. M. . . the zero hour! Like the crash of some incredible thunder, the guns roar out in unison. It's the Army's "walking" artillery barrage, concentrating first in the waters off Kwajalein. . . then on the beach. . . then creeping slowly inland. Landing craft move up behind this protective screen of fire. Men swarm ashore, as the enemy huddles underground. Then the smoke clears away, and you can see that Kwajalein's heavy foliage has completely disappeared. "Like blowing the wig off a bald man's head," as one correspondent puts it. And Kwajalein is . . . scalped!

THE Army's use of heavy artillery, based on tiny Enubuj island, was only one of the many factors that made the capture of Kwajalein a "military classic." Naval shelling, aerial bombardment, the courage and skill of the ground forces . . . these will never be forgotten. But the Army's Fire-Power—the dramatic "walking" barrage from an off-shore atoll—saved hundreds, perhaps thousands of American lives. And we at Oldsmobile are proud to think that some of our 105 mm. artillery shell were used in this operation. Oldsmobile also builds shell for the Navy, aircraft cannon for the A. A. F., tank and tank destroyer cannon for our armored forces, plus other "censored" Fire-Power products now in production.

HELP GIVE OUR MEN
THE FIRE-POWER
THEY NEED



Future battles even greater than Kwajalein call for even greater Fire-Power . . . even greater effort on our part.

Buy War Bonds!

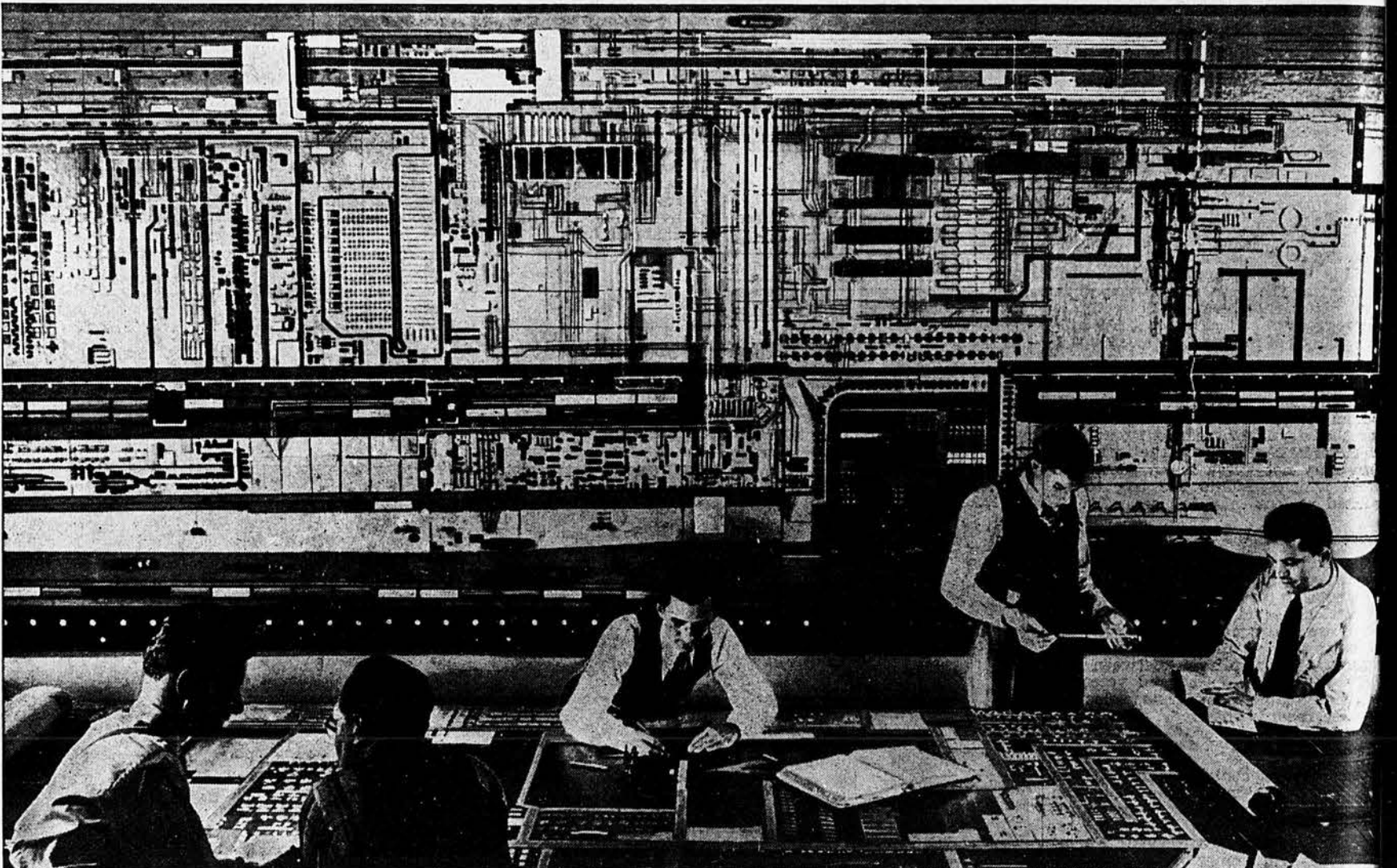
OLDSMOBILE DIVISION OF GENERAL MOTORS
FIRE-POWER IS OUR BUSINESS

IMAGINATION IS THE DIRECTING FORCE AT CHRYSLER

IMAGINATION IN MANAGEMENT

WHAT IT MEANS TO YOU—IN WAR—IN PEACE

Advance planning of the flow of materials and production



Imagination is a factory whistle you never hear, it's a call to action for people who like their work.

Imagination is doing things that "can't be done" . . . anticipating needs before they arise.

Imagination is the daring, unrestricted force in management that gives special character to Chrysler Corporation products—for war or for peace.

Management at Chrysler Corporation is "men in their shirt sleeves" — quick-minded, practical men. They keep the spark of imagination active throughout the entire producing and operating Chrysler organization. They stimulate the exchange of ideas and experience among its divisions to strengthen each with the resources of all.

Every Chrysler Corporation product is better because of this close co-operation . . . and because of the far-sighted research and engineering carried on for the whole group.

Today this Chrysler teamwork produces aircraft assemblies and engines, tanks, army trucks, harbor tugs, anti-aircraft guns, gyro-compasses, ammunition and other military equipment — all in large quantities.

Before the war, Chrysler imagination and technical skill brought you such important car developments as 4-Wheel Hydraulic Brakes, High-Compression Engines, All-Steel Bodies, Floating Power and Fluid Drive. When the war ends, we can again build quality cars and trucks for you.

CHRYSLER CORPORATION

PLYMOUTH • DODGE • DESOTO • CHRYSLER • DODGE Job-rated TRUCKS

AIRTEMP Heating, Cooling, Refrigeration

CHRYSLER Marine and Industrial Engines

OILITE Powdered Metal Products

YOU'LL ENJOY MAJOR BOWES THURSDAYS, CBS, 9 P.M., E.W.T.

BUY MORE WAR BONDS!

Aim to Beat Wheat Pests

Breeding Resistant Varieties Holds Real Hope

ROTATION of crops and thorough seed-bed preparation are the most frequently made recommendations for control of insects injuring growing wheat, according to a recent survey conducted by a sub-committee of the American Association of Economic Entomologists headed by Reginald H. Painter, of the Department of Entomology, Kansas State College in Manhattan. The report is partly the result of questionnaires sent to 31 entomologists in Federal and state laboratories and several Canadian provinces who have studied the control of wheat insects.

About 28 insects or groups of insects were reported as being important wheat pests, says Doctor Painter. For 15 insects in several localities the entomologists listed present methods of control as inadequate. This is most frequently considered to be true of the wheat-stem maggot, white grubs, wire worms and green bugs. These and some of the other insects will need additional research and study before control measures reach the best efficiency, the entomologist explains. Breeding wheat varieties resistant to various insects, and particularly varieties combining resistance to several insects and plant diseases with desirable agronomic characteristics, is a relatively new field offering considerable promise of good results.

In areas where wheat is repeatedly grown on the same land, destruction of volunteer wheat is an important means of insect control. In such areas this is good farming practice and is a means of reducing the abundance of many wheat pests, Doctor Painter points out. Summer fallow, another good farm practice in parts of the western and northern wheat-growing areas, often serves to starve such insects as the pale western cutworm. Rotation and timely, deep plowing are used to help control wheat insects in some areas, and are also usually considered good farming practices.

The survey showed that no one in-

sect is of major importance in all wheat-growing areas altho many take a consistent small toll over wide areas. Grasshoppers rank as the most dangerous pest over the entire western winter wheat and spring wheat-growing areas. Only in Illinois in the soft wheat-growing area were they listed as giving occasional general outbreaks. Doctor Painter states that use of poison bran mash for controlling grasshoppers and cutworms is the most universally recommended measure used on any wheat insect.

The Hessian fly was reported in frequent general outbreaks in hard and soft winter wheat-growing areas. It was ranked as a major pest in 11 states or general areas. According to the entomologists consulted, chinch bugs rank second to the Hessian fly as a pest of wheat in the eastern area and in certain parts of the central wheat-growing area. The pale western cutworm occurs in general outbreaks in some parts of the spring wheat area and in more western part of the hard winter wheat belt. Special methods of control are needed for the pale western cutworm but the other species of cutworms and army worms are generally controlled by use of poison bran mash.

Doctor Painter explains that some other insects are important only in smaller areas. Most important are the green bugs in the southern great plains, the false wire worms in the western part of the hard winter wheat area, the wheat-stem sawfly in the spring wheat area and the European wheat-stem sawfly in limited localities in the soft winter wheat belt. In contrast to the insects on orchard or vegetable crops, wheat insects are rarely controlled by use of insecticides. Poison-bran bait is an exception to the rule. Proper time of planting is an important control measure not only for the Hessian fly but in some areas is used against wheat-stem sawfly, wheat-stem maggot and pale western cutworms.

"Wired Help" to the Rescue

Two Kansas Families Receive Production Award

BY USING electrical equipment to maintain large food production with less farm labor, 2 North-central Kansas families earned the REA Food Production Award for 1943. They are the P. F. Hendricks family, of Glen Elder, and the Henry Topliff family, of Lovewell.

These families are the first in Kansas to receive the REA award. They were selected by the REA on the basis of nominations made by the local co-op and farm leaders.

Mr. and Mrs. Hendricks received their award Friday, May 19, 1944, at county-wide meeting of the Mitchell County Agricultural Conservation Association at Beloit. Mr. and Mrs. Topliff were presented with their plaque by C. W. Clair, county extension agent of Jewell county.

Mr. and Mrs. Hendricks operate a 20-acre farm 7 miles southeast of Glen Elder. They received electric service from the Jewell-Mitchell Co-op in June, 1942, shortly after they lost the services of their only son to the army. Mr. Hendricks says he and Mrs. Hendricks have been able to maintain production since that time only because they have the help of electric power.

During 1943, the Hendricks had only the help of a school boy for 2 months and a harvest hand for 10 days. They milked 12 cows, kept 38 head of beef cattle and 300 laying hens, raised 600 chickens and 75 hogs. Field crops consisted of 365 acres of wheat, 125 acres of barley, and 80 acres of sorghums.

Ninety acres were left for summer fallow and 80 acres were in pasture.

Electrical equipment on the Hendricks farm includes a milking machine, separator, feed grinder, water system, and shop tools powered by a 1½-horsepower electric motor. The cow barn, brooder house and henhouse are wired for electricity. Electrical equipment used in the household consists of a refrigerator, range, water system, kitchen mixer, sweeper, washing machine, bathroom heater and various small appliances.

Mr. and Mrs. Topliff live a mile west of Lovewell, where they specialize in milk and poultry production. During 1943 they farmed 515 acres with only the part-time services of one son who was still in school, and the help of neighbors during harvest and silo filling.

The Topliff purebred Holstein dairy herd consisted of 30 milk cows, 15 heifers, 2 sires and 7 young bulls. Whole milk marketed in 1943 had a butterfat content in excess of 6,000 pounds. The Topliffs also raised 3,000 broilers and kept a flock of 300 laying hens.

Field crops consisted of 80 acres of oats and barley, 70 acres of corn, 30 acres of wheat, and 20 acres of alfalfa that produced 5 cuttings. Fifty acres were used for rye and Sudan pasture and 265 acres were in permanent pasture.

The residence, dairy barn, barn, poultry house and shop all are wired for electricity. Electrical equipment includes a milking machine, water pump, shop tools, time clock for laying hens, and water warmers. In their home the Topliffs have a refrigerator, washing machine, iron, sewing machine and various small appliances that are appreciated.

The Topliffs bought another 80 acres this year and are planning to build a new dairy barn with additional electrical equipment. Mr. Topliff is a former president of the Jewell County Farm Bureau, and Mrs. Topliff is a 4-H Club leader.

Profits in Wartime

A Statement by International Harvester

BUSINESS, particularly big business, has to take a lot of criticism. Much of it is honest and well-meant. We are glad to have that kind of criticism and we try to benefit from it. But some criticism is not honest or well-meant. Some of it springs from malice, attempting to mislead the public by twisting facts.

Right now business is suffering from an example of this second kind of criticism. Judging by what we read and hear, it has succeeded in misleading many people. We refer to the charge that big business is profiteering, is "getting rich out of the war." Nobody, so far as we know, has made that charge directly against the Harvester Company. But we are a large business and an integral part of American business. If a mistaken idea is damaging to business in general, it is damaging to us. Hence this statement.

Doubtless there are cases where some corporations have earned more money during the war than most people would think proper. But those cases are exceptional. One thing we know is that public statements giving business "profits" before payment of taxes have been used to create a false picture. As a practical matter, there is no such thing as a profit before taxes. Taxes are as much a cost of doing business as money paid for labor or materials. The only profit a corporation earns for its owners is what it has left after all expenses, including taxes, have been paid.

The May bulletin of the National City Bank of New York, a recognized statistical authority, tells us what has actually happened during the war to 50 of the largest manufacturing corporations in the country (of which we are one). That bulletin reports that during the years 1940-1943 the combined sales (or gross income) of the 50 companies went up 148%. Their bill for wages and salaries went up 172%. Their taxes went up 225%. But their profits went down 14%.

And just to keep the record straight, in the case of our Company, our profit last year (1943) was 16% lower than it was in the year before Pearl Harbor, although our sales were 23% higher. Furthermore, our president has officially informed Harvester stockholders that for 1944 our sales will be still higher and our profit will be still lower.

We have never wanted or expected to receive more than a moderate profit on our wartime production. That is our policy, and we have lived up to it. We, like most of American industry, are not making excessive profits out of the war.

Lack of space prevents giving more than brief facts on this subject. Any reader desiring additional information may obtain a short folder on the topic by writing to the Public Relations Department, International Harvester Company, 180 North Michigan Avenue, Chicago 1, Illinois.

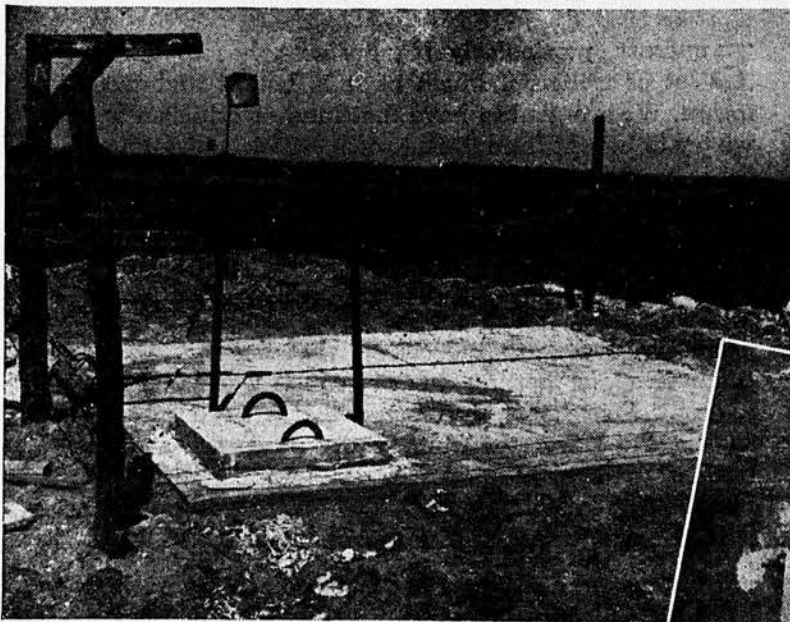
INTERNATIONAL HARVESTER

Picnic Games

There are 20 games besides several stunts suggested in my leaflet, "Games for Outdoors." Orders for this leaflet will be filled as long as the supply lasts. Please address Leila Lee, Kansas Farmer, Topeka. Price 3c.

You, Too, Can Have a . . . WATER SYSTEM

BY FLORENCE MCKINNEY



For a gravity system, the Frank Danefers, of Rossville, built this storage tank at the top of the hill above all the farm buildings, thus supplying water to livestock as well as the house.

FARM household water systems are within the means and ability of many farm families who do not now have them. Experiences of those who have them is the evidence. The answer lies not only in sufficient income but in whether a water system is at or near the top of conveniences for which to plan. If it is near the top of that list of things desired it is likely to get attention. Those who have a convenient water supply would not do without it. For too long, they pumped water from an outside well, carried it into the house, used it, and in some cases carried it outside again.

A part of the problem is solved if some member of the family is "handy" with tools and understands farm mechanics. In these days of mechanical training for boys in vocational agriculture classes, some families will find they have the necessary skill and technique right at home.

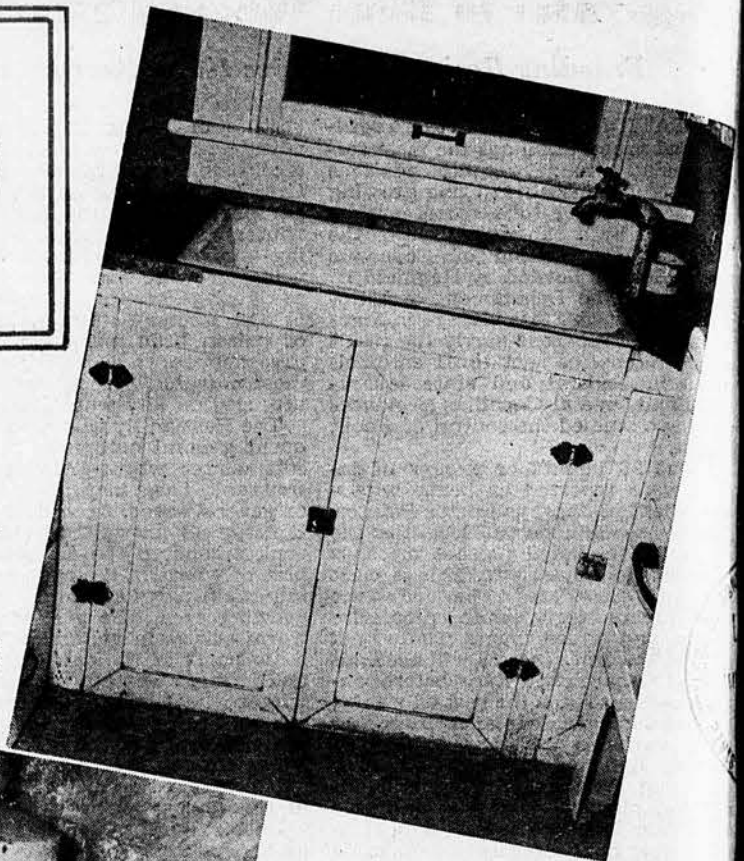
As for cost, it is less than that paid for a tractor, truck or automobile, items which ordinarily are replaced frequently. For an electric-power water system the additional expense is small, and still less if the windmill pumps the water. If well constructed, repairs are negligible, one owner testifying that in 14 years the repair bill had been exactly nothing.

Mr. and Mrs. H. A. Ward, of Franklin county, near Ottawa, have demonstrated that a water system which provides a plentiful supply to the home can be bought for \$400. The goal was not reached over night. The Wards moved to their present farm home 20 years ago and at that time the home water supply was provided by means of a pitcher pump without even a sink for convenience. They immediately installed a kitchen sink and in later years remodeled and built on to the house. Ten years ago they installed a complete bathroom. At that time a gasoline engine was used to pump the cistern water to the pressure supply tank. Two years ago, the REA line was built and Mr. Ward replaced the gasoline engine with an automatic electric pump. Today, the water system is complete and modern in every respect but it has taken a family goal, a plan, and the ingenuity of both Mr. and Mrs. Ward to complete the job.

In the Ward community underground water is difficult to find and the source of most of the stock water is from ponds. Most families have cisterns for the household supply. The Wards have as their only supply, the water from the cistern but during late years it was rebuilt and a filter added.

Mr. and Mrs. Ward believe that if a water system is at the top of the list of "wants" and the farmer himself is skillful and can do most of the installation, that the cost is "within the pocket-book" of many farm families.

The total cost can be divided into 2 parts, equip-



These built-in features are grouped around the sink in the kitchen at the home of LaVerne Spears, of Rossville. The water system is operated by an electric pump and motor.



This electric jet pump is installed in the basement of the LaVerne Spears home for their deep well system. The pressure tank and pump cost \$140.

kitchen. They liked the old system which was in the house originally, so they have retained that supply for drinking purposes. Today the overflow from that little tank is piped to the chicken pens. Mr. Murray dug a hole near the house and constructed a septic tank which never has caused trouble.

Mr. Murray says that many farmers could provide running water for the kitchen sink and laundry purposes, all for \$100. Of course, this is not a complete system, but for many it would be an enormous step ahead. The major costs of a complete system including waste disposal is brought about by high labor costs, septic tank and bathroom fixtures. Any farmer contemplating installation of a complete system can study plans carefully and determine just how much of the labor can be done within the family.

Complete Electric System

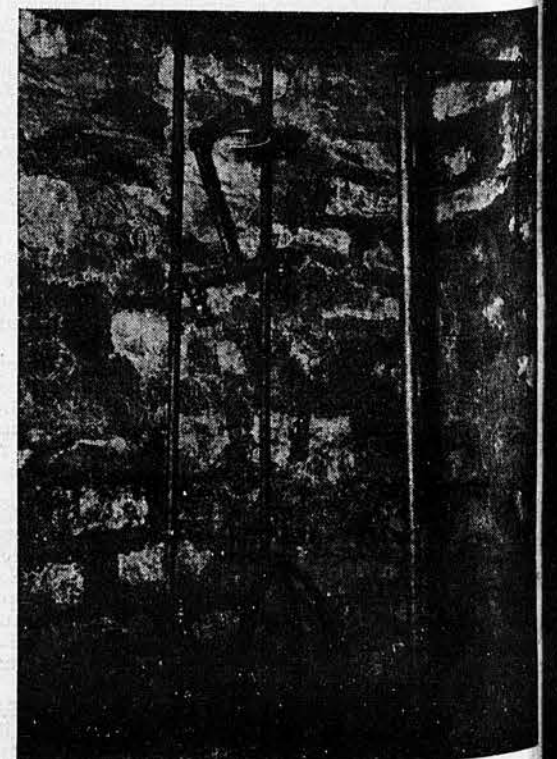
Several Shawnee county farmers and farmers' wives disclosed that a complete water system, one which supplies water to all the livestock, including the poultry, is a feature much desired. This was especially true at the [Continued on Page 11]

ment and installation. Since Mr. Ward is fairly skillful with farm tools he paid out only \$45 for plumbing labor. He did not have the required tools to install the bathroom plumbing outlets, but the remainder of the over-all cost was for equipment. The electric motor and pump cost \$45, the 144-gallon pressure tank \$25, the bathroom fixtures \$75, the septic tank \$50, the hot water tank \$15, kitchen sink and faucets \$20, remodeling the cistern \$50 and the other pipe and supplies \$75.

A System for \$100

A water system which would please many busy farm women who now have the "carry in and carry out" job could be constructed for \$100. The H. I. Murrys, of Franklin county, did it. They live near Pomona and have a unique system which is convenient, time-saving and perhaps its most outstanding feature is the low installation cost. Mr. Murray considers himself a pretty good mechanic and the water system is convincing evidence. When they moved to the farm 30 years ago, a primitive water system already was installed consisting of a windmill which pumped water directly into a 4- or 5-gallon open tank in a corner of the kitchen near the sink. An overflow pipe allowed unused water to run outside.

After a number of years they decided to add to the system and today they have the conveniences of a modern town water system, all without electricity. The windmill pumps water to a 600-gallon supply tank which is buried on a small knoll several hundred feet from the house. By gravity the water runs to the house where it is piped into the kitchen range for heating, then into the hot water tank for use in the bathroom which adjoins the



This device for taking a shower bath in the basement of the Adolph Thomas house, Silver Lake, was the least expensive feature, but one of the most appreciated.

Hints for House Cleaners

WHEN doing the daily and weekly cleaning, plan to clean one of the kitchen cabinets, a dresser drawer or wash the windows in a room. In this way, the whole family and house will not be upset by the old-fashioned spring upheaval.

Grease spots on wallpaper can be removed by rubbing with French chalk. Rub it on the spot and leave it for several hours. Then wipe with a soft cloth. When you wash windows, try polishing them with crumpled paper. It leaves them clean and sparkling.

Wash all the bric-a-brac in 1 day. Had you thought of putting some of it away for the summer?

Don't beat rugs. It wears them out, ruins the sizing and does not clean as thoroughly as washing with dry suds or using a vacuum cleaner.

Water paints are easy to apply—it won't take a professional painter to do the job and there is no shortage. Paint cleaners on the market now surpass anything manufactured heretofore. Dissolve a little in warm water and wash woodwork and walls—needs no rinsing. There is a secret to its success. Change wash water frequently, or there will be soiled spots. It dissolves dirt and smoke like magic.

Use Dry Suds

Regular soap and water does not work well for cleaning upholstery or the rug. It's too wet. Try the formula for dry suds. To 5 cups of water add a half a cup of soap, either flakes or scraps. Allow this to come to a boil and then cool. It becomes a jelly-like substance which can be whipped. When ready to use, whip it into an upstanding lather and brush it into the fabric vigorously. When clean, rinse with a cloth dipped in clean water. Follow this by drying immediately with a soft, absorbent cloth to prevent spotting or fading.

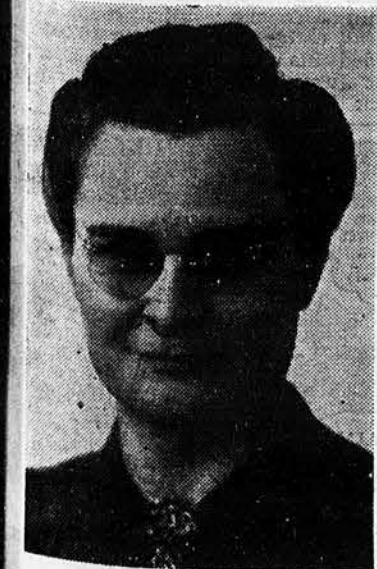
To Clean Furniture

Too much wax and furniture polish applied to wood will leave it gummy and dull. To remove this gummy accumulation give the furniture a good washing with a mixture of 1 quart of hot water to which has been added 3 tablespoons of linseed oil and 1 tablespoon of turpentine. Rub the furniture with a soft cloth wrung out of the solution which is kept warm, then dry and rub to a polish with another cloth.

Mary D. Ziegler Honored

AS OUTSTANDING H. D. A.

Mrs. Mary D. Ziegler, home demonstration agent of Shawnee county, has received an enviable recognition by being voted the outstanding agent for Kansas by the executive committee of the Kansas Home Demonstration Agent Association. She represented the Kansas group at the National Home Economics Association convention in Chicago which opened June 20. Mrs. Ziegler has been home demonstration agent in Shawnee county since December 1, 1930, and previous to that time she served 1 year in Pratt county. She is a home economics graduate of Kansas State College. Since her work began in Topeka, the



Mary D. Ziegler

membership of the demonstration units has increased 5 times with a total today of 23 units. All are carrying a prepared program designed by the local executive committee. The program for this year includes lunches for adults and children, work clothes for the home and garden, physical fitness, good posture, mental health, caning and repair of box cushions, symptoms of serious illness, farm family outlook, flower arrangement, restyling of wool garments and preparation of dried foods.

Have Water System

(Continued from Page 10)

Adolph J. Thomas farm, near Silver Lake, where 40 head of livestock and 900 laying hens were watered during the past winter in addition to 900 baby chicks added to the flock this spring. The Thomas water system is run by electric power, the well is 37 feet deep and was installed in 1927 when the house was built. Mr. Thomas hired plumbers to do the installation and he estimates that the total cost of both

labor and equipment was about \$1,000. The first electric pump had a 200-gallon-an-hour capacity and cost \$130. When it became necessary to replace it, he bought a 350-gallon capacity pump costing \$70.

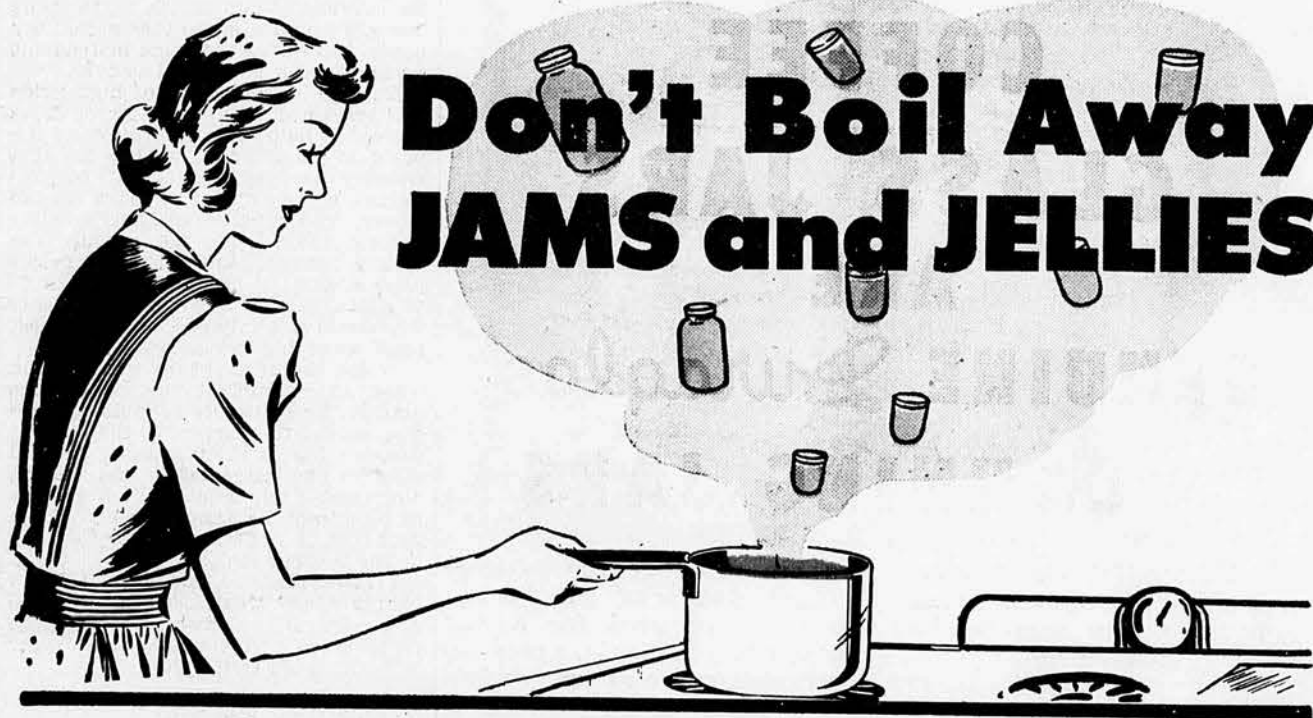
One of the most appreciated features of the entire system is a shower bath in a corner of the basement built at very little additional cost. Both Mr. and Mrs. Thomas said they could not do without it.

Mr. and Mrs. Frank Danefer, Jr., near Rossville, have partially completed their water system, doing most of the labor themselves. They are to be congratulated because they moved to this farm only 2 years ago. The water is supplied by a windmill on low land below the farm buildings from where it is pumped to a storage tank, 10 by 10 by 3 feet deep, located on the highest ground above the buildings where it runs by gravity to the house and watering tanks for all the livestock including the chickens. The Danefers will complete the bathroom arrangements at a later date. The estimated costs total \$192, including labor costs of \$67 and equipment \$125. This

low labor cost tells a story—that Mr. Danefer did most of the work himself, including digging all the ditches for the pipes. This windmill gravity system during the past spring supplied water to 24 cows, 25 hogs and 600 chickens, all this in addition to saving Mrs. Danefer countless steps in the kitchen. The family estimated that it required about 1 hour each day to carry water to the chickens and hogs, before the new system was installed.

At the LaVerne Spears farm we found a deep well system run by electricity, which Mr. Spears installed himself. The pressure tank, pump and pipe cost about \$185.

These accounts of the experiences of real farmers, some even without electricity, is evidence that running water is within the financial means of countless farmers in Kansas. Several commented on the low cost in comparison to the tractor and the car and all agreed that in addition to the convenience both inside and outside the house, that running water could be a money-maker on every farm. Have you placed it at the very top of the list of things for which to plan?



MAKE COSTLY FRUITS GO FARTHER WITH M.C.P. PECTIN

THE old-fashioned method of jam and jelly making is wasteful and extravagant, because it "boils away" so much of your most costly ingredient—the fruit or juice—that you get fewer glasses from the same amount of fruit. The modern M.C.P. PECTIN method produces many more glasses of energy-rich jams and jellies which are so important in helping relieve the wartime shortage of meat, butter, eggs, etc., and save precious "points."

M.C.P. PECTIN jells more fruit or juice and sugar than any other pectin you can buy . . . prevents spoilage due to too short a boil . . . saves you time and work . . . and always assures you clear, tender, fine-textured jams and jellies with true, natural fruit and berry flavor.



USE THIS RECIPE FOR FRESH PEACH JAM



4 Cups Ground Peaches
6 Cups Sugar
1/4 Cup Lemon Juice
1 Package M.C.P. Pectin

Wash, peel, and remove pits from 4 pounds fully ripe peaches; grind the fruit. Measure exactly 4 level cups of the ground peaches (add water to fill out last cup, if necessary) in a large kettle. Add the M.C.P. Pectin and lemon juice, stir well and bring to a boil, stirring constantly. NOW, add the sugar (which has been previously measured), continue stirring, and bring to a full rolling boil. BOIL EXACTLY 4 MINUTES. Remove from fire, let boil subside, stir and skim by turns for 5 minutes. Pour into sterilized jars, allowing 1/2-inch space for sealing with fresh paraffin.



JELLS MORE FRUIT OR JUICE AND SUGAR THAN ANY OTHER PECTIN YOU CAN BUY

SAVE FOOD—BUY WAR BONDS

LET'S GO TO THE
PENGUIN ROOM—NICEST
PLACE IN TOWN



"No Salve Will Do"

I am getting on in years and I need a good salve that will cure an ulcer on my foot. It started a year ago.—C. R. J.

You do not give your exact age, but since you are well along in years the circulation thru the lower extremities is not so very good. The sore probably became infected and is now a chronic ulcer. No salve will do any good. It will be necessary to clean up the ulcer and stimulate circulation. Such cases are greatly benefited by supporting bandages. Sometimes baking the limb in a hot-air apparatus helps. It will be well to have a careful examination of urine. Sometimes such ulcers come from diabetes. Electric diathermy is worth consideration.

Skin You Love: The peel of apples is 5 times as rich in vitamin C as the flesh.

BUTTER-NUT COFFEE GLASS JARS ARE GENUINE Duraglas CANNING JARS

Butter-Nut Coffee glass jars are made of the same fine glass and are given the same annealing the best home-canning jars receive. They may be used for any method of canning... pressure cooker, oven or cold pack.



Butter-Nut jars have been used with success by many thousands of women these last few years. They are wide mouth jars that take regular size Mason jar caps. If you have more jars than you need, give your extras to friends who can use them, or to organizations sponsoring canning programs.

Butter-Nut

'The COFFEE
DELICIOUS'

Hints About Deafness

By CHARLES H. LERRIGO, M. D.

I HAVE been well able to sympathize with the "hard of hearing" crew since I joined it in my fifties. No matter what virility and ability a man possesses, the hearing impairment that shuts him away from easy communication with his associates in business and social life is a terrible handicap. I began the use of a hearing aid a little more than 10 years ago.

The aids were not so very good then, but each year saw better values offered. The improvements came so rapidly that wearers frequently shifted from one make to the other in order to get the very best. I myself experimented with 8 different styles in as many years. Then, a few years ago, all the leading makes adopted the vacuum tube. This brought improvement to its climax for the time being. I found a make that suited my needs, have used the same instrument 4 years, and it is as good as ever.

But the big objection of high price still remained. Not one in ten of those in need of help could afford to pay the price. My instrument, sold to me at a friendly discount granted only to physicians, was away out of reach for the person who must count every dollar bill carefully. I did not censure the manufacturers. I knew that high prices were necessary because sales had to be made from door to door, and agents who could sell only one or two a week must have big commissions.

Judge, therefore, of my gratification when an instrument was put on the market, by a thoroly reliable concern guaranteed to be equal to the best, at just one fourth the prevailing price. I sent for one immediately and, having now used it for a month, am glad to be able to make announcement of the fact that it is as satisfactory as any of the leading makes.

I have reissued my special letter "Hints About Deafness" and this will give particulars to any subscriber who requests it and encloses a stamped self-addressed envelope.

Better Try Resting

Catarh caused me to have a cough for 3 months and I got weak. I am 56 years old. My doctor examined my heart and said he thought there was a leakage.—F. C. B.

Your doctor may be right in diagnosing a leak in the valves of the heart.



Dr. Lerrigo

In such a case the blood is not pumped thru the lungs so efficiently, congestion arises and a cough results. I think the heart trouble rather than catarrh causes your cough; in fact, the heart leak will account for all of your symptoms. The remedy is to rest the heart so that it can "catch up."

Must Quarantine Children

I would like to ask you whether the law expects a quarantine in a case of mumps to be carried out the same as with smallpox. Had always understood that mumps did not carry on those who did not have the disease.—S. D.

No. The mumps quarantine applies only to those adult members of the household who have not had mumps. So far as known, mumps infection is not carried on clothing. Quarantine among children must be strict.

For Small Fry



Pattern 9073 comes in children's sizes 1, 2, 3, 4, 5 and 6. Size 6 takes 2 yards 35-inch material; slip 1 1/4 yards; panties 3/4 yard.

Pattern 16 cents (plus 1 cent to cover cost of mailing). Fashion Service, Kansas Farmer, Topeka.

Capper Picnic Comes July 14

SENATOR CAPPER'S 37th annual birthday picnic will be held as usual July 14, at Ripley Park in Topeka. And better still, Senator Capper is planning a trip from Washington to be there himself. This is an event looked forward to by thousands of boys and girls and their parents and other friends who wait eagerly for the day when the host returns to his home town to celebrate his birthday.

He is inviting all of his friends to join in the fun for there will be softball games and free rides on the Ferris wheel, the merry-go-round, kiddie-auto ride and the merry-mix-up. Then remember there will be plenty of ice-cream, perhaps even more than last year, for Uncle Sam is a bit more generous with the ration right now. Any-

way, bring your lunch so you can plan to spend the day and join in all the entertainment.

WIBW will be there with many top-notch radio entertainers and that as you know is great picnic fun. All crippled children under treatment by the Capper Crippled Children's Fund will be provided with a special tent and entertainment. J. M. Parks, manager of the Protective Service of the Capper Publications, Inc., will be in charge of all features connected with the crippled children.

Bus transportation within the city limits of Topeka will be provided free for all children. Last year 15,000 attended this annual affair. Don't forget that July 14 is the day and Ripley Park the place.

FAULTLESS FARM FUNNIES... GOODBYE TO WASHDAY BLUES!



From a Marketing Viewpoint

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

Will it pay to store wheat this year?
—S. C.

It depends on the price of wheat at harvest time in relation to the ceiling price. The wheat price ceiling will remain in effect, and it is probable that prices during the fall and winter will be at or near the ceiling. If the price at harvest time is only 6 or 7 cents less than the ceiling, there will not be much advantage in storing. If the market price is below the ceiling by more than the cost of storing, there would seem to be a good chance for a profit from storing.

I have a farm which I rent for share rent. Since I have no livestock, should I sell the oats at threshing?—A. Z.

Oats prices have been at the ceiling level and probably will remain near the maximum price thruout the season. You probably can get about as much for your oats at harvest time as you can get next winter or spring unless you plan to sell them for seed. You might render some livestock farmer a service by selling them to him rather than selling them to be shipped to a terminal market. Many communities were short of feed grain last spring, and they may be short again before another harvest.

I can buy some good quality, young ewes locally for prices not to exceed \$9 a head. Do you consider these a good buy?—V. M.

A sheep enterprise established with good ewes and well managed probably

is one of the safest investments at the present time. Liquidation of breeding flocks started last year and all indications point to further liquidation this year. Large numbers of range ewes probably will go direct to packers again this year. Wool stocks probably will be reduced somewhat this year because of the high rate of consumption by mills.

I would like to know whether it is advisable to go out of the hog business at this time. I keep between 30 and 50 sows and I am not interested in pork production unless the outlook is bright.
—H. J.

It probably will be profitable to raise the number of pigs this fall for which you can produce enough feed grains on your own farm. Private estimates indicate that the 1944 pig crop will be about 10 per cent below the 1942 crop. The War Food Administration goal for 1944 production was set at a production equal to that of 1942. If the demand for meat continues high and no drastic lowering of price ceilings occurs, pigs produced this fall should show a good profit.

Award to Tomson

Honors are not new to James G. Tomson, cattle breeder and grain farmer of Wakarusa. His latest is winning the Skelly Agriculture Award, which will be presented July 1.

This year the Tomson farm of 910 acres is expected to yield 30,000 pounds each of beef and pork; 900 dozen eggs, 4,000 bushels of corn, 3,000 bushels of hybrid seed corn, 2,000 bushels of oats, 500 bushels of barley and 300 bushels of soybeans.

Uncertainties Will Increase

(Continued from Page 5)

50 per cent more copper than 1938; twice as much aluminum.

WPB is about ready to release materials for experimental models in a number of lines; for new machine tools; is expected to urge manufacturers to work on their sales organizations — if WMC will permit; provide for pilot plants to be set up for testing materials, processes, the results theoretically at least to be available to all producers interested.

Auto industry may get a very pale blue "go" sign late this fall. Very few new cars might come off the lines next spring, late. Output will be limited, perhaps 2,000,000 a year, and production at that rate is not expected before late 1945, possibly early 1946.

Looks like conversion from a war economy to a semi-war economy is "around the corner." There is something familiar about that phrase, or was about 15 years ago. So don't be too optimistic about it. Seriously, the shift now is expected to be measured by months.

Protection for Farmers

The revised OPA extension act, which the White House is expected to allow to become law, attempts to give these protections to farmers and farm commodity prices:

1. OPA to set price ceilings which reflect parity prices to farmer producers.
2. Make adjustments in price ceilings as frequently as necessary to keep ceilings reflecting parity prices.
3. Give accused violators their day in court against prosecutions; but the act does not allow persons or corporations to rush into Federal district courts to halt enforcement of price ceilings, other regulations or orders of OPA.

Before the bill reached final action, all special protections, such as those proposed for oil in the Disney and Thomas amendments, and cotton textiles in the Bankhead Senate bill, were eliminated.

Road Outlook Not so Good

Emphasis in the postwar highway problem will be shifted from construction of farm-to-market highways to highway work in more congested areas, to provide employment as well as provide highways.

The House Committee on Highways has brought in a bill expected to be acted on in the fall, which emphasizes change in policy. The formula in

use for more than a quarter of a century in allocating Federal funds—matched by the states—allowed one third for area, one third for population, one third for highway mileage. H. R. 4915 changes this formula to one in which the apportionment is based on one half according to population, one fourth to area, and one fourth to post-road mileage. The bill authorizes appropriations of \$1,500,000,000 over a 3-year period.

Instead of about two thirds of the funds going for Federal highway systems outside of municipalities, under the new proposal funds would be available annually as follows:

(1) For projects on Federal-aid highway systems, inside as well as outside municipalities, \$225,000,000.

(2) For projects on secondary and feeder roads, including farm-to-market roads, rural free delivery mail and public school bus routes, either outside municipalities or inside municipalities of less than 10,000 population, \$125,000,000.

(3) For projects on principal highways in urban areas on Federal-aid highway system, \$150,000,000.

Some of the more densely populated Eastern states are trying to get over a modification of H. R. 4915 by which 30 per cent of the total would be apportioned to urban populations; 40 per cent by the formula outlined in 4915, and 30 per cent according to motor vehicle registrations. They also propose to increase the total of Federal aid for the 3 years to \$2,000,000,000, so that only a few of the smallest states would lose dollars by the change.

If the big states' proposal, sponsored by Representative Miller, of Connecticut, should be adopted, the Kansas allocation for 3 years out of the \$2,000,000,000 total would be \$36,620,000 instead of \$34,155,000 out of \$1,500,000,000; Ohio would get \$10,140,000 instead of \$59,760,000; Missouri, \$57,220,000 instead of \$44,715,000; New York, \$189,300,000 instead of \$92,940,000; Wyoming, \$12,420,000 instead of \$15,090,000. However, the precedent would be set for basing highway Federal aid on urban population instead of on area and highway mileage.

Tack Cushion

A handy receptacle for sundry tacks, nails and screws that will be polite to your fingers, is a large cork kept in the kitchen cutlery drawer for convenience.—Mrs. C. B.

WAR TIME SPREADS

Make your own Jams and Jelly

"WE USE MORE JAMS AND JELLIES INSTEAD OF BUTTER. I PUT UP MY OWN WITH FRESH FRUITS."



"PEN-JEL CONSERVES YOUR SUGAR, TOO. YOU SAVE 1 TO 3 CUPS ON EVERY BATCH!"

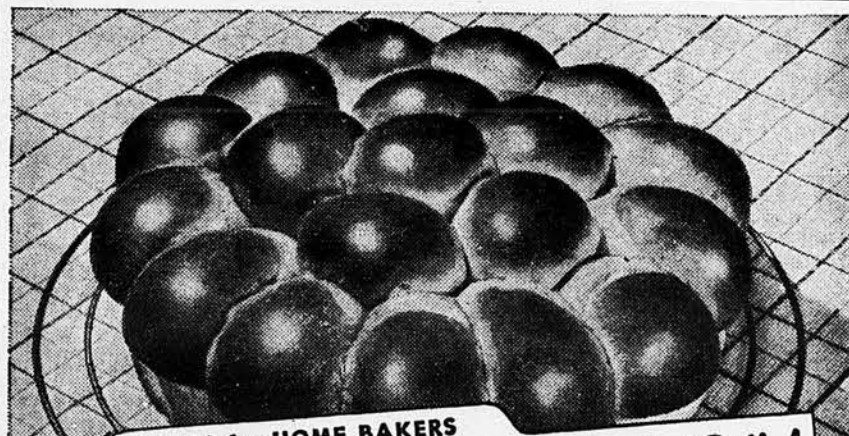
Home-made jams and jellies are not rationed and Pen-Jel requires no points. Never was it more important to save every bit of our precious fruit and berry crop. With Pen-Jel you not only save the crop—you save points—SUGAR—and get more glasses.

Put up jams and jellies now, while fruit is plentiful for ample wartime spreads all next winter. Because Pen-Jel is stronger you save SUGAR—get more jam and jelly—at even less cost per glass.



PEN-JEL CORP., KANSAS CITY, MO.

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HINTS for HOME BAKERS

Cereal Leftovers make Wonderful Rolls!
Make them with Fleischmann's yellow label Yeast—the only fresh yeast with more EXTRA vitamins

CEREAL ROLLS

1 cup milk
2½ tablespoons sugar
4 teaspoons salt
4 tablespoons shortening

1 cup any cooked leftover cereal
1 cake Fleischmann's Yeast
1 cup lukewarm water
8 cups sifted flour

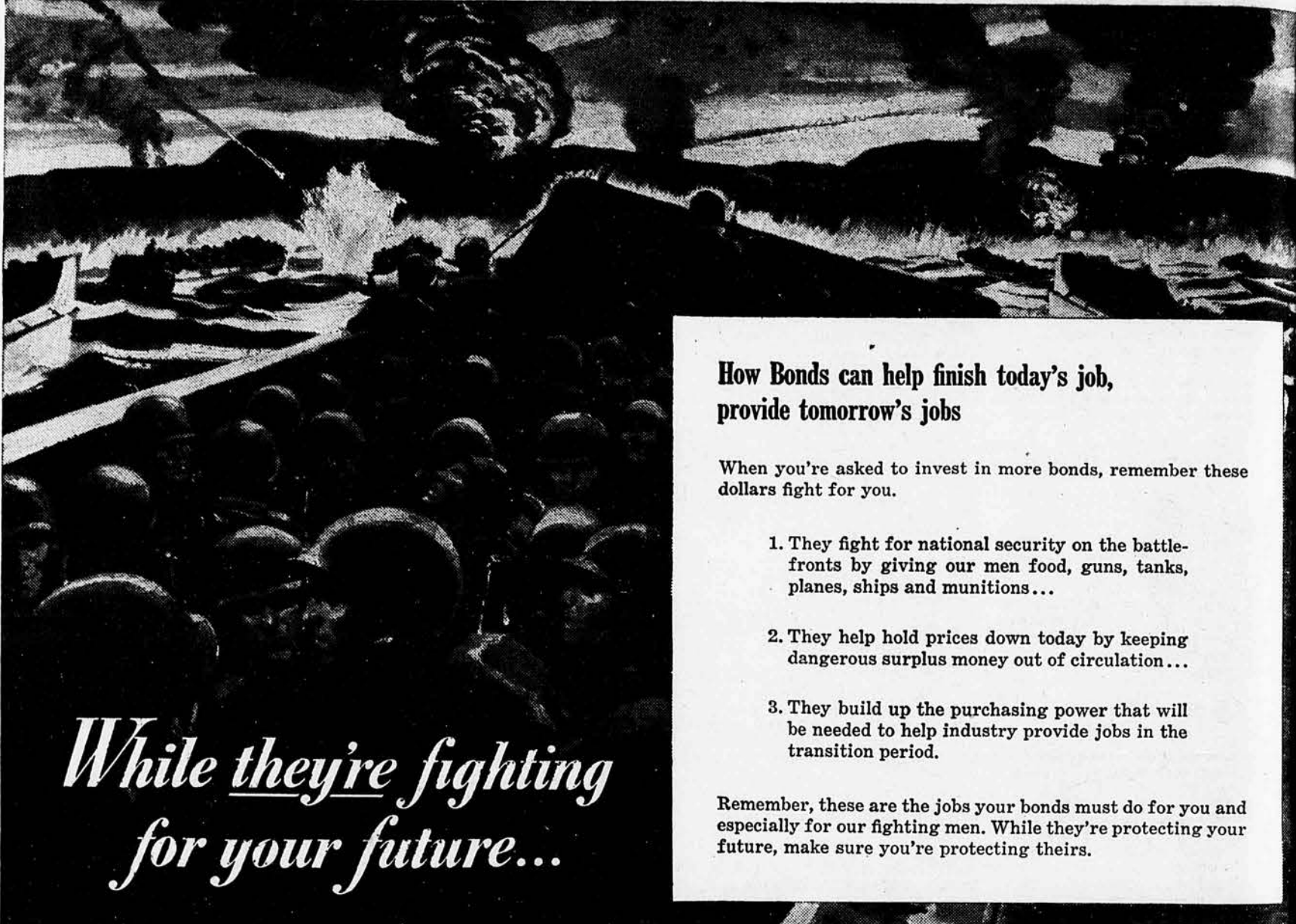
Scald milk, add sugar, salt, shortening and cereal; cool to lukewarm. Dissolve yeast in lukewarm water and add to cereal mixture. Add half the flour and beat until smooth. Add remaining flour or enough to make easily handled dough. Knead dough quickly and lightly until smooth and elastic. Place dough in greased bowl, cover and set in warm place, free from draft. Let rise until doubled in bulk, about 1½ hours. When light, shape into rolls and place close together in greased layer cake pans. Cover and let rise again until doubled in bulk, about 1 hour. Bake in hot oven at 425°F. about 25 minutes. Makes 2½ dozen.

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sole producers of MONEL...producers of other high-Nickel alloys.



First Choice Is Farming

ALTHOUGH decorated 3 times for his service with the Army Air Corps, T/Sgt. Nelson R. King, of Beattie, still claims farming as his chief interest in life and is planning to return to his Kansas farmlands upon discharge from the service.

Sgt. King now is receiving treatment at Torney General Hospital, Palm Springs, Cal., where, in Memorial Day Retreat ceremonies, he received the Purple Heart from Col. A. B. Jones, commanding officer of the hospital. The decoration was awarded for injuries sustained last November when he saved the life of the ball turret gunner of a B-17 while on a bombing mission over Bremen, Germany.

Complete amputation of his fingers was necessitated by severe frostbite which he sustained when, while flying at an altitude of 27,000 feet with temperature 53 degrees below zero, he removed his heated gloves to replace the gunner's defective oxygen mask. For gallantry in action Sgt. King received the Silver Star before being returned to this country. He also has the Air Medal for completing 5 missions; his injury was sustained on his ninth.

Sgt. King, who reported for active duty with the Air Corps 2 years ago, went overseas in September, 1943, as radio operator on a B-17, and was stationed in England. He will soon be transferred to McCloskey General Hospital at Temple, Texas, for specialized treatment.



T/Sgt. Nelson R. King, farmer of Beattie, 3 times decorated by the Army Air Corps, but still planning to raise crops when his Army Service has been completed.

seedings. Depth of seeding tests show that buffalo grass and western wheatgrass should be planted at about 1 inch in depth and that blue grama should be seeded on the surface with press drill wheels running over it.

Use Less Water

More alfalfa may be produced by limiting the amount of water used to irrigate, Colorado tests show. Three 8-hour irrigations resulted in an average total application of 12.65 acre-feet of water an acre, while 3 one-hour irrigations resulted in an average total application of 1.68 acre-feet of water an acre.

Average yield for the heavier application was 4.91 tons an acre while the lighter application brought 5.08 tons an acre, giving an additional yield with considerable less water.

New Hereford Group

Twenty-seven breeders signed as charter members of The Southeast Kansas Hereford Breeders' Association organized June 14, at Parsons. Many others in 26 counties covered by the association are expected to join.

Dr. T. E. Smith, Independence, was elected president. Other officers are O. K. Thogmartin, Fort Scott, vice-president, and H. P. Stephens, Parsons, secretary-treasurer.

B. M. Anderson, Kansas City, acting secretary of the American Hereford Breeders' Association, assisted in the organization.

Grass Seed Shortage

(Continued from Cover Page)

adaptability. At first it will be used for seeding increase fields, but eventually will become available for pasture plantings.

Brome grass from northern sources is particularly unadapted to this, the southern portion of the great brome grass region. This important species apparently consists of 2 major types, one of Russian origin, adapted to the northern states and to Canada, and the other of Hungarian origin, adapted to the central Corn Belt states. The first importations of brome grass to the United States were of the latter type and the early fields in Kansas were from this seed. From these early plantings has developed the strain which is now certified as Kansas brome. It is perfectly winter hardy, withstands summer heat and drouth, and continues to produce for many years because it is adapted to this region.

Most of the brome grown in Kansas may be traced to the original seedings made by the Achenbach Brothers, of Washington, Kansas, in 1895. In addition to this strain of brome there are several others of similar origin and which resemble one another closely in appearance as well as in adaptability. These include a type grown in the region south and southeast of Emporia, which has been derived chiefly from old plantings made on the Jeanerett farm near Hartford, about 1895. The Lincoln strain, now certified in Nebraska, and the Fisher strain from Iowa also are of the southern type, having originated from the early

Hungarian importations. If Kansas seed cannot be obtained, these strains could be safely grown in this state and will give satisfactory results under local conditions.

Kansas never has produced enough brome seed to meet the demand within the state, but despite this fact a certain amount is shipped out of the state each season. This increases the seed shortage here and encourages shipment into this state of brome grass seed from the Dakotas and from Canada. This seed is mostly of Russian origin and is not adapted to Kansas. The plants are smaller under our conditions than are those of the local strains. They are more susceptible to leaf diseases, and are shorter lived. Failures to obtain stands are often experienced when northern seed is sown, and the plants are slow to spread vegetatively. For this reason the poor stands do not "thicken up" as do the thin stands of local brome grass.

Tests at the Kansas Experiment Station have shown that northern strains of brome grass may be expected to yield about 1 ton less forage a year than southern strains on the basis of air-dry hay. These tests included only spring and early summer growth or the difference in favor of the southern strains would undoubtedly have been even greater. Similar results have been obtained at the Nebraska and Iowa stations.

In addition to brome grass, several other tame perennial grasses are adapted to Kansas. These include

orchard grass, meadow fescue, timothy, redtop, bluegrass and the rye grasses. They are not as productive as brome but are frequently sown in pasture mixtures with brome and alfalfa. No Kansas strains as yet have been developed in any of these species but commercial strains are fairly well adapted. Since they are not often planted for pasture, except in mixtures with brome grass, and this species will usually replace them in a few years, their chief function in pasture mixtures is to help provide quick cover after seeding and to aid in producing large amounts of feed the first season or two. Adaptability is, therefore, not as important as in the case of brome grass.

With the present trend toward a grassland agriculture and the greatly increased demand for grass seed, it is to be hoped that greater production can be attained in Kansas. With certified brome grass seed selling for 20 to 25 cents a pound or more and with seed yields ranging from 200 to more

than 450 pounds an acre, production of this crop can be one of the most profitable of farm enterprises. Seed yields of brome grass often decline after a few seasons but evidence is accumulating to show that they can be maintained profitably by application of nitrogen fertilizers. Not only do these fertilizers give the greater seed yields, but they improve the stand and thereby help to crowd out the annual bromes which often contaminate brome seed.

There is a real need for expanded production of good grass seed in Kansas, seed which not only is adapted, but is free of weeds and which has been cleansed in such a manner that it can be drilled easily. Adequate supplies of such seed will do much to encourage a greater and greater use of perennial pasture crops, not only on land that is to be permanently retired from cultivation, but in long-time crop rotations.—By Kling L. Anderson, associate professor of pasture management, Kansas State College.

New WAR PRODUCT STOPS RUST...

Farm Machinery

A new Sinclair product, developed to prevent rusting of U. S. Army equipment, is now available to farmers. It's Sinclair Rust-O-Lene B. By painting or spraying this new product on metal parts, you keep your farm machines from rusting for many months, even when they are out in the open.

If applied correctly SINCLAIR RUST-O-LENE covers metal with a tough protective film that resists cracking, peeling or slipping.

Unlike oil or grease, Rust-O-Lene B "resists" washing off in the rain, and yet is easily removed with kerosene or gasoline.

It can be put right on wet surfaces. Applied over surfaces already rusted, it prevents further rusting for months. It is sold in barrels, 100 lb. drums and 25 lb. pails.

Get Sinclair Rust-O-Lene B now to save your machines and save you work. Phone or write your local Sinclair Agent today.

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Help your birds mature into plump, profitable meat—tone them up for the big egg production job ahead. Regular use of TONAX in their mash provides growing birds with needed blood-building elements and trace minerals. Contains mild astringents to help relieve swollen intestinal tissue—also effective stimulants to pep flagging appetites. Fine for layers, too! No fillers in TONAX; 100% active ingredients. Convenient and inexpensive. Only 1 lb. to 100 lbs. of mash. If your birds need a tonic, give them TONAX—it pays! 2 lbs., 75c; 6 lbs., \$2. At your Lee Dealer (Drug, Hatchery, Seed or Feed Store).

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How Do Your Eggs Grade in Summer?

By MRS. HENRY FARNSWORTH

WE FARM women are so accustomed to breaking fresh eggs that perhaps we do not appreciate how fortunate we are. We have become so used to them that we do not stop to admire the full, round, upright yolks in the center and the thick, heavy whites surrounding them. We do not stop to think of the difference in eggs of varying ages under different handling and management. If suddenly we should all have to sell every egg produced on a grade basis more would be learned at once of the different qualities of eggs.

A new-laid egg under candling shows an air space of about 1/8-inch in depth. The egg shell is porous so the moist contents are exposed to the drying influence of the air and evaporation of the contents is taking place constantly. Water makes up about 65 per cent of the contents of the egg and as evaporation takes place the air cell becomes larger. Under the candle one can tell much about the age of the egg—at least it is a guide in determining how fresh it is.

The Signs of Age

As eggs get older the white becomes weak and watery. The fibrous membrane that holds the yolk in place becomes weak which causes the yolk to break easily when the shell is broken. A fresh egg under candling shows a yolk that is dimly visible and which moves before the candle as the egg is turned with a slow, sluggish movement. No germinal development is to be seen. The white is like a semisolid mass. As the egg ages the yolk moves more rapidly when the egg is turned, the air cell becomes larger. If there is any marked development of the germ, the germ spot shows an increase in size and the yolk appears darker.

Holding fertile eggs in a warm place a few hours will cause germ development and eggs will be put in a lower grade under graded selling. If kept long enough to show blood vessels the egg becomes unfit for food and is a total loss. It is appalling the loss producers take each year from this cause alone. And much of this loss can be avoided.

During hot weather the best way to eliminate these losses is by producing infertile eggs. "Swat the Rooster" was the slogan adopted when it was first advocated to get rid of the males at the end of the hatching season. Males

should be marketed if no longer needed, and young ones may be raised to replace them for next hatching season. Or if they are so valuable they are needed to be held over for another year they may be confined to a pen to themselves.

There are other qualities that effect the value of eggs other than the interior quality. Size of the egg is important. Pee-wee eggs cannot be expected to appeal to the housewife. From a 24- to 26-ounce average is needed to bring the best satisfaction and price. The shell should be of good shape and be clean to insure the egg reaching the customer in an attractive package. It should be a strong shell so that it will not be easily broken in transit. A fresh, full-bodied egg with a stained shell may be just as good to eat as one with a clean, spotless shell but it doesn't have the appeal to the eye and the appetite of the buyer. It just doesn't have the selling value and may be classed as a dirty.

Washing dirty eggs is not satisfactory altho a lye water solution for washing does give fair results on eggs that are to be used for immediate consumption. Rubber gloves should be used in this solution to protect the hands. Keeping clean, fresh nesting material and gathering eggs 3 times a day at least will help in keeping eggs clean. Storing in a cool place and marketing twice a week is the best way of delivering clean, fresh eggs. One poultry authority made the statement that there is no substitute for an egg. It is the only breakfast food served to you in a package sealed by nature and untouched by hands. It is up to us as individuals to take care of that package so it reaches the consumer in its original attractive container.

Three Suggestions

If clotheslines and clothespins are boiled about 10 minutes when new, they will give much longer service.

Cane seats of chairs can be tightened by spraying them with hot water. For the tiny holes in last year's garden hose, apply pliable roofing paint the entire length of the hose. This treatment will close all the tiny breaks and will make the hose wear longer. —Ellen Moore.

Shake the Seed

Empty talcum powder cans are handy seed dispensers when planting garden, as the seed can be scattered much more evenly than when shaken from the package. The holes in the can may be enlarged to accommodate larger seeds. Then, too, it is not a bad idea to save the seeds collected during the summer in talcum cans. —Mrs. C. B.

Built-in "Chicken Catcher"



When Mr. and Mrs. Herbert Young, Midwest poultrymen, built a new multi-unit, Missouri-type laying house last fall, Mrs. Young had a new idea about a built-in "chicken catcher." The rest of the family were amused at her idea but this feature was put into the house. Now, the idea is a decided success. It is pictured here. A feed room was partitioned off at the east end of the house. Across the south end of this room, or along the front of the house, a small runway large enough for hens was built, leading to 2 entrances for hens cut into the front. To enter and leave the house the hens must pass thru this runway. The runway is equipped with a "trap door" at its entrance into the feed room so that when the trap door is closed the runway serves as a catching coop. The hens are used to entering this runway and may easily be driven into it anytime desired. Two entrances were cut into the house, so that either can be used. The doors are on each side of a dividing fence so that the area around the house can be rotated between chicken yard and garden.

Flashes on the Farm Front

(Continued from Page 6)

never be more than 25 feet apart. Copper or galvanized steel of heavy quality are the best materials. All joints should be of low-resistance metal, and there must be no abrupt turns in the down-conductors.

It is very important that grounds be properly made. One of the best is attachment to an underground pipe when this is possible. If the soil is a loam over clay, or some other soil type which retains moisture, it may be sufficient merely to drive a metal rod 10 feet into the ground and attach to this.

Where the soil does not stay moist,

a trench may be dug some 3 feet below the ground and away from the building for 12 feet or farther, the wire being extended in this. A very effective, but rather expensive, manner is to lay a copper ground entirely around the building in a trench, and hook all down-connections to this. The grounds should extend below the building's foundation so that the walls will not be damaged.

In wiring a silo which is adjacent to a barn, it is best to run one wire over to the lightning-conductor system on the barn, and a second one directly to the ground.

Use of electricity on farms has increased the hazards of lightning, if the equipment is not correctly installed. Lightning arrestors should be attached outside the building and properly grounded, separate from lightning conductors and at least 6 feet away.

There is an enormous loss of cattle each year by lightning strokes which hit and follow fences. A fence with metal posts is relatively safe, especially if some of the posts are extended deep. Those having posts of wood or stone should have pipes or metal posts driven at least 5 feet into the earth and at intervals of 150 to 300 feet; all the wires should be securely attached to these. In addition, long fences should have a gap of non-conducting material—wood or otherwise—at intervals of 1,000 feet.

If there is a grove of trees in the pasture, it often is best to remove lone isolated ones. If you have only a few scattered trees for shade, it may save precious stock by putting lightning rods in the tops of these trees and grounding the down-conductors in a trench extending away from the trunks.

Then, too, it is highly desirable that the farmer observe some precautions in regard to his own safety. He may discover that he isn't "as fast as lightning" any more.

Can Reduce Rural Loss

From a human standpoint, Old Jove doesn't have nearly as many notches on his gun as many would imagine. Forty times as many people die from falling as from lightning. However, nine tenths of the lightning casualties are rural folk. This is due to the fact that the lightning bolts are attracted by the widely separated farm buildings, while in the cities, skyscrapers, power lines, and similar objects catch the bolts. The rural loss can be reduced by more knowledge on the subject. Ignorance is not bliss in this respect.

When in buildings, don't stand in the immediate vicinity of down-spouts, down-conductors, near chimneys, or where some pipe, wire, or rod enters the building from the outside. Also, it is well not to stand beneath a light cord where the lightning might jump thru you to the ground, or between 2 large metal objects such as stoves and washing machines. Cellars or basements are safe places to be if the storm is violent.

If caught outdoors avoid lone, isolated trees, hills, lone buildings, or wide open spaces. No one wants to be "down and out" but when the lightning snaps close by and you are out, it often is better also to be down. Your chances are 15 times better when hugging the earth than when standing up "like a man"—and like a human lightning rod. If possible, get into dense trees, in a cave, in a ravine or canyon, or other depression, or at the foot of an overhanging cliff. Of course, stay away from fences.

In one respect, lightning is a valuable agricultural ally, for it operates the world's greatest fertilizer plant. It breaks the air down into oxygen and nitrogen, the latter uniting with raindrops; according to estimates, 100 million tons of it falls annually from the skies.

Wins Scholarship

For outstanding 4-H work in the Baileyville community, Irene Mathewson, daughter of Mr. and Mrs. Albert Mathewson, was awarded a year's scholarship at Kansas State College by the Union Pacific Railroad. Miss Mathewson is a graduate of Baileyville high school, president of the Happy-Go-Lucky 4-H Club, and president of the Nemaha Council of 4-H workers. She has won many first prizes in baking, sewing and gardening. She attended the Round-Up held in Topeka

in 1943, and the one in Manhattan last month. Another record made by Miss Mathewson is perfect attendance at school the last 6 years.

Corn From the South

Two Government agencies, WFA and WPB, are co-operating with the War Shipping Administration to allow importation from South America of 150,000 tons or about 6 million bushels of corn during July. Plans are being made for additional shipments later.

Flood of Eggs

Every housewife is being urged by the WFA to purchase and store in the ice box an extra dozen eggs to prevent spoilage of this valuable product that will be needed next winter.

At present there are 1,400 carloads, or 25 million dozens of eggs, for which no cold storage space can be found.

Indian Medicine

When Indians were affected with skin infections they used a poultice derived from the "creosote bush." Extract from this bush now has been found to increase the "keeping time" of butter, lard, and other animal fats. One pound of extract will increase the keeping time of 10,000 pounds of butter tenfold, says the Science Digest.

The extract also can be used to protect fat-containing dehydrated foods, such as cheese, against rancifying.

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This new 128-page book, "Stammering, Its Cause and Correction," describes the Bogue Unit Method for scientific correction of stammering and stuttering—successful for 43 years. Benj. N. Bogue, Dept. 3706, Circle Tower, Indianapolis 4, Ind.

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White They Last—thousands weekly. Free catalog gives prices, F.O.B. terms, guarantees, etc. Bloodtested 300-egg breeders, White Leghorns, Anconas, Minorcas, \$8.40. Pullets \$12.45. 3 to 4 week started White Leghorn Pullets \$26.95. Rocks, Reds, Orpingtons, Wyandottes, \$8.40. Pullets \$11.50. Heavy assorted, \$6.95. Surplus Assorted, \$3.95. Special grades higher. Free catalog gives our F.O.B. terms, guarantees, etc. Send money order. Thompson Hatchery, Springfield, Missouri.

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Millions Nancy Hall Potato Plants. 500-75c; 1,000-1.35; Portoricans 500-1.00; 1,000-1.50. Cash with order. Lewis Plant Farm, Gleason, Tenn.

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

For Sale—Collie crossed to Shepherd. Heelers. Males \$8. Females \$3. Ernest Schoenrock, Fairbury, Nebr.

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

PRODUCE WANTED

Money for your cream by return mail; correct test and weight; the better the cream the bigger the check; we want good cream. Ship to Spring Valley Butter Co., Kansas City, Mo.

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.

WANTED TO BUY

Pop Corn. Hayes Seed House, 1004 N. Kansas Ave., Topeka, Kan.

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

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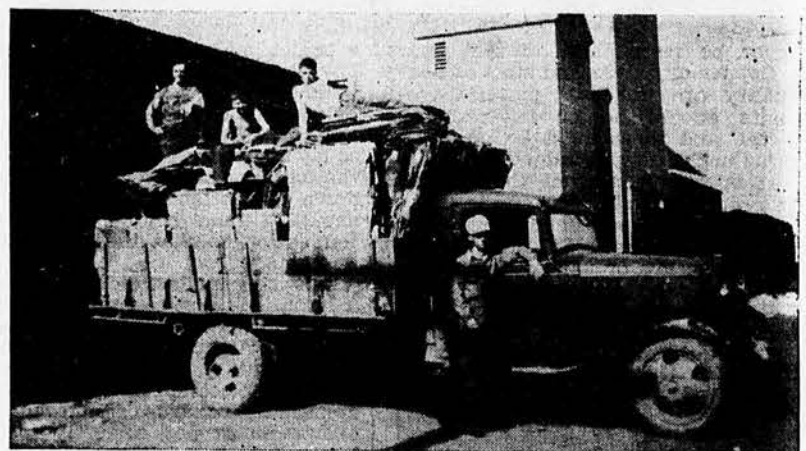
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Paper Drive to Buy Purebreds



An outstanding job of collecting waste paper has been achieved by the Smith Center F. F. A. chapter, which has collected, sorted and prepared 2 carloads. Here students and their instructor, Charles Mantz, left, are shown packing in their second carload. Total weight of the paper was 58 tons, all of which was graded, tied and weighed before loading. Now the chapter is working on its third load. Profits from the paper will be used to purchase purebred livestock and certified seed for distribution to members on shares, to purchase tools and equipment for the shop, and to buy War Bonds for the chapter.

Demonstrators Are at Work

Thirty emergency food preservation assistants already have been employed by the Kansas State College Extension Service and are at work in various counties. They were employed to emphasize insect and disease problems of farm gardens and preservation of food. Since spring gardens have not been as productive as usual, they are encouraging the planting of fall gardens. Turnips, beans, Chinese cabbage or celery cabbage as it is sometimes called and spinach can well be planted from July 20 to August 1 and will mature if given the proper care. Ordinarily potatoes would be recommended for a fall crop this year, but the seed supply has vanished. A small plot of summer fallow land will be the best fall garden location.

The food preservation assistants are paid from Federal funds and work with both rural and town people. Any already existing organization, club or school may call on them for food preservation demonstrations.

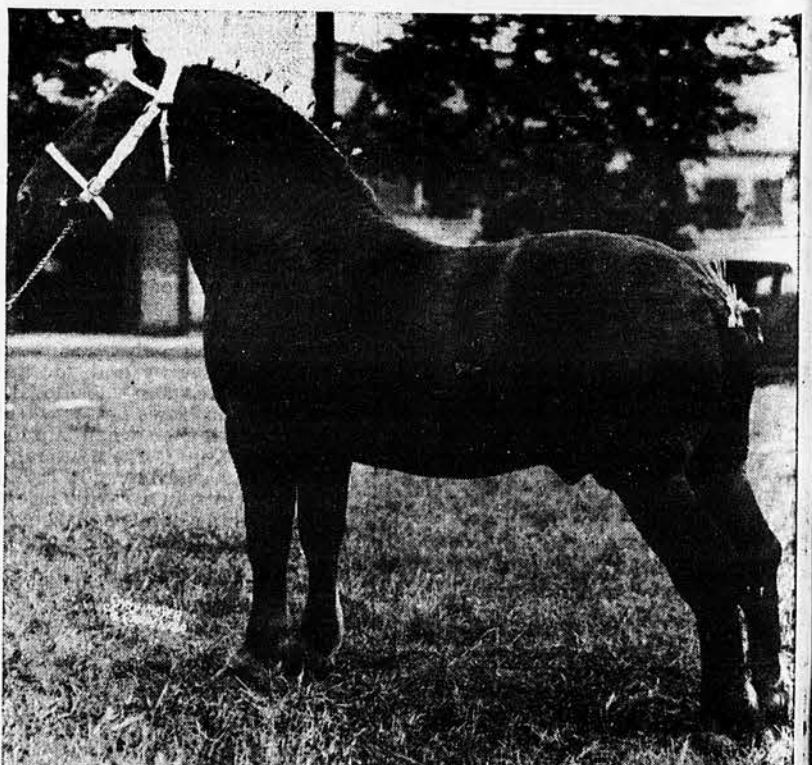
These home economists are now working in the following counties under the supervision of Gertrude Allen

and Mary Fletcher, Extension Nutritionists: Brown, Jackson, Shawnee, Douglas, Kingman, Jewell, Mitchell, Crawford, Nemaha, Jefferson, Seward, Woodson, Reno, Neosho, Labette, Rush, Ness, Finney, Meade, Rooks, Republic, Graham, Lincoln, Coffey, Linn, Anderson, Greenwood, Elk, Chautauqua, Kearny, Grant, Stevens, Phillips and Riley.

No Waste Space

In most poultry houses the space over the nests is never used. Recently I figured out a convenient use for this waste space. By using 8 laths and nailing a cleat on the ceiling, I made a dandy brood coop where sitting hens are kept. This utilizes the space above the nests and permits cleaning. The nests are made of light framing, and woven wire forms the partitions. This cuts down the amount of material used and permits every bit of space to be thoroughly cleaned and treated. In front of the nests are slats upon which the hens step. These are supported on hinged pieces so they may be turned up in front of the nests to keep birds from entering.—O. O. C.

Establishing Herd of Suffolks



This proved Suffolk stallion will reach Reno county this fall to be at home at Rotherwood Farm, where A. Lewis Oswald and son, John C. Oswald, are establishing a herd of Suffolks, generally recognized as the lightest of the draft breeds. "Guardian" was bred by F. Newton Pratt, Suffolk county, England, and imported into this country by L. B. Westcott, of Clinton, New Jersey, president of the American Suffolk Association, from whom Oswald & Oswald purchased him. He was first at the International, Chicago, in 1937, and recently several of his fillies were purchased by the Chilean government. Rotherwood Jerseys long ago established a national reputation. Now Suffolk draft horses are joining Rotherwood Jerseys. The Oswalds also purchased a pair of fillies from Dan Casement, Manhattan. The fillies were sired by Piedmont's Temple, an outstanding Suffolk in the Casement herd. They also purchased a pair of full sisters, one a 4, one a 3, from Glenn Wuester, of Beattie. These were sired by Earl of Valera.

July 15
Will Be Our Next Issue
Ads for the Classified and Livestock Sections must be in our hands by
Saturday, July 8

HOGS



O'Bryan Ranch Hampshires
Hiattville, Kan.
(Real Packer type.)

Late farrowed fall boars. Also weaned pigs. Boar and 2 gilts not related, \$100; registered, immunized. Pigs, either sex, \$35 each.

IN THE FIELD



Jesse R. Johnson
Livestock Editor
Topeka, Kansas

Writing from Alden, in Rice county, FRANK C. MILLS, auctioneer and Shorthorn cattle breeder, says he is in the midst of harvest with labor shortage. He has 160 acres of grain to harvest and hardly time to spare from the cultivation of 230 acres of row crops. There has been plenty of rain in that section of the state and pastures never have been better.

Homer Alkire, secretary of the NORTH CENTRAL KANSAS FAIR, writes that preparations are being made for one of the best fairs in the history of the association. The third largest fair in Kansas has grown in importance during the years since its organization, largely because of the able assistance of the business men of Belleville, where the fair is held. The dates are August 28, 29, 30 and 31. Catalogs soon will be ready for distribution.

DR. W. H. MOTT, of Herington, has attended every annual meeting and sale of the National Holstein Friesian Association since 1916. He says Kansas breeders and their herds are coming to receive national recognition for accomplishments over the years. Only one other delegate has a record of attendance equal to that made by Dr. Mott. Hobart McVay, of Nickerson, and Dr. Mott were members of the nominating committee, Mott as chairman. The annual consignment sale composed of 82 head made an average of about \$1,400 a head.

The D. A. RIDER Jersey cattle sale held at Bethel, June 22, resulted in a general average of \$221. Mr. Curry, a Kansas buyer, took the herd bull at \$300 and the high cow at \$500, along with several other females. About two thirds of the offering stayed in Kansas. Calves sold from \$70 to \$100. The offering was good and fully appreciated. Slightly higher prices would have been in line with the quality of the cattle sold, but the busy season of the year doubtless cut down the attendance some. Bert Powell was the auctioneer.

ARTHUR E. ROEPKE, of Waterville, is a general farmer and stock raiser, but for several years has specialized in growing registered Duroc hogs. Early he discovered that farmers were turning toward a more compact type of hog and with this trait in mind he secured breeding stock from breeders who grew that type of Duroc. He now has about 60 spring pigs largely sired by a grandson of The Admiral, one of the leading boars of the breed, also other litters are by different boars. The sow herd has been selected and developed over several years and carries the breeding of such noted sires as Golden Fancy. Mr. Roepke says it is difficult to secure corn but he considers the future of the hog business good enough to justify the expense and work incident to the growing of good Durocs.

A definite dual-purpose type in mind, a willingness to discard undesirable individuals and long and repeated herd bull hunts are the factors that have made the G. W. LOCKE Red Polled herd, at El Dorado, the leading herd for type and production in the entire country. Of the more than 100 head now in the herd, all but 4 were dropped on the farm and 2 of these are herd bulls, Franklin and Red Boy, a pair of the best balanced bulls of the breed. Both come from a long line of ancestors bred for the best dual-purpose performances. Franklin was first in class at many leading state fairs and shows in 1941. Thirty to 40 cows are in milk all the time. At the present time 200 quarts are being produced and distributed to the families of El Dorado, which has been the market ever since the herd was established more than 30 years ago.

CARL BILLMAN, Spotted Poland China specialist, of Holton, continues to grow his usual number of breeding animals, regardless of the opinions of the in-and-outers. He now has about 200 head on alfalfa pasture and a light grain ration. During the last selling season he sold more than 100 head for breeding purposes and marketed a goodly number at prices that showed a profit when sold for slaughter, even the grain was scarce and high. He has about 40 very uniform last fall gilts, all sired by the grand champion, Silver Ace, and bred for early fall farrow to his new boar selected from a leading Nebraska herd. More than 100 spring pigs are the get of Silver Royal, a son of Royal Defender. Mr. Billman says many farms in his county, once thought worn out, now are producing better than they did years ago, due to better seeds and more livestock. Billman's Spots may be seen at the fairs this fall.

When ROY GILLILAND, JR., moved on the 160-acre farm he now owns near Holton, he realized that only by a better system of crop rotation and seedling down could the farm be made capable of income sufficient to pay taxes and interest. A few years later he bought the farm, and last year added another eighty. Now about 200 acres are seeded to lespedeza, brome grass and alfalfa. The farm-land washing has been checked and the farm is making a profit annually sufficient to pay taxes, and liquidate obligations. New fences have gone up separating pastures and fields. Registered Berkshire hogs are the chief project; about 60 head now are on hand. Thirty-five gilts that have been bred for fall were in a pasture of alfalfa and lespedeza and in good breeding condition also not receiving a bit of grain. Mr. Gilliland believes lespedeza makes the best pasture for either cattle or hogs. They like it better and seem to take on more flesh than from any other grass.

Of the more than 200 head of registered Hereford cattle now on the FRED R. COTTRELL ranch, at Irving, only the 3 herd bulls were brought to the farm. The remainder of the herd was bred and developed on the ranch. The improvement in quality is due to selection of good herd bulls and the culling that has been going on for the 53 years since the herd was established. I recall one of the early sires, old Governor, a bull of mammoth size and the sire of some wonderful cows; but lacking the thickness and quality now so in evidence in the herd. During the years 3 bulls from the Hazlett herd have been used. Each year the choicest heifers have been kept in the herd and matings have been made to remove any type defects that have ap-

peared from time to time. The 1,200-acre ranch has been used for no other purpose but growing better Herefords. The pastures have been carefully grazed, and the big round barn, capable of sheltering 300 head of cattle, has been kept in the best of repair, painted and reroofed when necessary.

Public Sales of Livestock

- Ayrshire Cattle
October 4—H. M. Bauer, Broughton, Kan.
- Holstein Cattle
October 17—Holstein-Friesian Association of Kansas, Abilene, Kan. Secretary—Grover Meyer, Bascher, Kan.
- October 24—Central Kansas Holstein Breeders, Hillsboro, Kan. W. H. Mott, Mgr., Herington, Kan.
- Hereford Cattle
September 2—Wm. H. Hargus, Belton, Mo.
- Jersey Cattle
October 20—Jersey Breeders' State Sale, Hutchinson, Kan.
- Milking Shorthorn Cattle
October 2—Nebraska Milking Shorthorn Breeders' Sale, Fairbury, Nebr. Arthur Sell, Milford, Nebr., Secretary.
- November 8—Henry J. Haag, Holton, Kan.
- Shorthorn Cattle
September 28—Bellows Brothers, Maryville, Mo.
- October 16—Dwight C. Diver and others, Chautauque, Kan.
- October 31—North Central Kansas Shorthorn Breeders, Beloit, Kan. Edwin Hedstrom, Secretary, Riley, Kan.
- Duroc Hogs
October 7—Clarence Miller, Alma, Kan.
- Poland China Hogs
October 21—C. R. Rowe, Scranton, Kan.
- Hampshire Sheep
August 5—Edwin Cox, Fayette, Mo.

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	\$16.75	\$16.85	\$16.25
Hogs	13.55	13.50	13.75
Lambs	15.25	15.85	14.85
Hens, 4 to 5 lbs.22	.23	.23%
Eggs, Standards ..	.33	.31	.39
Butterfat, No. 1 ..	.46	.46	.45
Wheat, No. 2, Hard ..	1.57	1.69	1.44½
Corn, No. 2, Yellow	1.03%
Oats, No. 2, White ..	.87½73
Barley, No. 2	1.17½	1.15	1.07½
Alfalfa, No. 1	23.50	33.00	22.00
Prairie, No. 1	18.00	18.00	13.00

Two Diseases Hinder Production

TWO livestock diseases, hog cholera and brucellosis of cattle, are today's greatest threats to America's 1944 food production, says the American Veterinary Medical Association.

Checking the findings of state veterinarians and chief livestock sanitary officials of the nation's 37 leading food-producing states, the survey shows that brucellosis or contagious abortion of cattle is the greatest threat to food production in 16 states, and hog cholera the No. 1 problem in 11 states. Major livestock disease dangers reported by other states include mastitis of dairy cattle, swine enteritis, anthrax, and parasitic problems. "There are 2 answers to the problem of brucellosis," says a report on the survey by Dr. J. G. Hardenbergh, secretary of the association. "If cattle raisers in each area will join in having their animals tested regularly for this disease, it can be stamped out within a reasonable time. In those herds where the disease does exist, calfhood vaccination has proved quite effective in preventing its occurrence among younger animals, and in building up herds eventually free of the infection."

"Hog cholera, the next greatest threat to food production, cannot be cured after it has attacked a drove of swine, but it can be prevented by systematic vaccination. All spring pigs should be vaccinated around weaning time, thus providing an effective barrier against the disease in each rural area."

The survey also showed that in many states the current shortage of farm help, the shortage of feed, and Government ceilings on livestock prices, are tending to decrease livestock and poultry production this year.

Tongue Twisters

Every time you use standard disinfectants and protectants on your potato, flower and Victory garden vegetable seeds this year you are dealing with some chemical tongue twisters. Here are some of the common chemical compounds: Hydroxymercurichlorophenol, hydroxymercurinitrophenol, and tetramethylthiuramdisulfide.

Beef CATTLE



RAISE SHORTHORN\$

MORE BEEF, MORE MILK, MORE PROFIT
FREE illustrated booklet, "Farm Security with Shorthorns" tells how Shorthorns respond to greater wartime demands for more meat and milk. Remember—you sell beef by the pound. Shorthorns outgain and outweigh all other breeds. Bigger packer checks—more profit. Write for list of thousands of Shorthorn breeders... Subscribe to Shorthorn World—twice monthly—\$1.00 per year—\$2 for 3 years.

Write to American Shorthorn Breeders' Assn., Dept. N-319, Stock Yards, Chicago 9, Illinois

Shorthorn Herd for Sale

Have sold farm and offer at private sale my entire herd of heavy milking beef Shorthorns. Herd established over 40 years. Good quality and best of breeding.
O. S. CLODFELTER, UDALL, KAN.

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 & Females

Offering bulls of serviceable age, also bull calves. Will sell a few cows and heifers. All Bang's tested. 100% calf crop this year. Harry Bird, Albert, 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. Chockily bred of Earl Marshall and Frizemere breeding.
L. E. LAFLIN, Crab Orchard, Nebr.

Walnut Valley Hereford Ranch

Offers 20 bulls, 10 to 24 months old, many herd bull prospects. All are deep, thick, strong-boned—Hazlett, WHR and Foster breeding. Also 15 choice heifers, 10 to 14 months old, similar breeding. Leon A. Walte & Sons, Winfield, Kan.

Dual-Purpose CATTLE

FOR SALE — ONE OR ALL 25 HEAD SELECT MILKING SHORTHORNS

Cows, Bred Heifers and Young Bulls. My last two herd sires were Gage bred.
LLOYD DICKINSON
Moran - - - Kansas

Craig's Polled Milking Shorthorns

Offering a 7-year-old daughter of Woodside Thor, nice red in color and will freshen soon.
MAX CRAIG, OSAGE CITY, KAN.

Locke's Reg. Red Polls

Herd established 30 years. 100 head in herd. Franklin and Red Boy in service. Bulls and bred and open heifers. Visit our herd.
G. W. LOCKE, EL DORADO, KAN.

Offering Red Polled Cattle

Red Polled Bulls, 1 year old and under. A few cows and heifers.
J. M. LYONS, R. 3, COFFEYVILLE, KAN.

SHEEP

REGISTERED SHROPSHIRE RAMS

40 registered yearling Shropshire rams. Most of them sired by the champion ram, H. H. Chapell 764. Priced from \$25 to \$40. Also a few choice ewes.
H. L. FICKEN, BISON, 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 Piasm Avenue Topeka, Kan.

Frank C. Mills, Auctioneer

Available for Registered Livestock, Real Estate and Farm auctions. Experienced and qualified.
ALDEN (Rice County), KANSAS

Kenneth Veon, Auctioneer

LIVESTOCK—LAND—FARM SALES
Desire Auctioneer's Job with Sale Barn
BOX 784, LINCOLN, 1, NEBR.

Lefty Lawson, Auctioneer

Purebred livestock, real estate and farm sales. References, those for whom I have sold.
JUNCTION CITY, KANSAS

BUY WAR BONDS NOW!

Scheel's "Better Type" Hampshires
Now offering Fall Boars and Fall Gilts—Visit our farm or write us about the good ones we are offering. We have sold Registered Hampshire hogs into several states and they make good. Real, easy feeding, good doing kind.
DALE SCHEEL, EMPORIA, KANSAS.

Quigley Hampshire Farm

ST. MARYS, KANSAS
Registered Fall Boars: Immunized; Double Score and Roller breeding; low down, good hams, even regular belts.

OVER 100 DUROC BRED SOWS AND BRED GILTS
Bred to "Perfect Orion," our greatest herd boar ever. Others bred to outstanding sires. Extra good boars for sale, all ages. Real easy-feeding, short-legged type. Immune, registered, shipped on approval. W. R. Huston, Americus, Kan.

FANCY DUROC BRED GILTS

Low-set, wide-backed, dark-red, quick-fattening kind. Registered, double immunized. Guaranteed to please or money refunded. Write for prices. CLARENCE MILLER, ALMA, KAN.

MARCH-FARROWED DUROC PIGS

Deep-bodied, dark-red and of the best breeding. Sired by Proud King Orion (son of Proud Orion Ace), Bar None (1942 Kansas and Oklahoma grand champion) and the \$500 Bar Y King. Priced to sell while young. Pairs guaranteed. Immune. No culls offered.
ALLEN KETTLER, R. 4, PAOLA, KAN.

Billman's Spotted Polands

45 bred sows and gilts. 115 spring pigs. Sired by or bred to such sires as Silver Ace (grand champion Kansas and Oklahoma State Fairs 1943). Pairs not related.
CARL BILLMAN, Holton, Kan.

Registered Hereford Hogs

High-winning herd National Show. Home of Fashion Corrector. Boars. Pigs. Bred Gilts. Circular. YALEHURST FARM, PEORIA, ILL.



O.I.C. Pedigreed Hogs
Blocky, easy-feeding type.
PETERSON AND SONS
Osage City, Kan.

Dairy CATTLE

Topliff's High-Producing Holsteins In Service



A great son of the great sire, Fredmar Sir Fobes Triune, whose index is 503 lbs. fat in Class C. Mating him with cows of approved type and heavy production. Our high cow for last year made 678.5 lbs. fat on twice-a-day milkings. Choice bulls for sale from calves to serviceable age. Farm half mile from Lovewell, Kansas.
Henry Topliff, Formoso (Jewell Co.), Kan.

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.

Registered Holstein Bull Calf

Two months old, beautifully marked and excellent type. Dam a 450 butterfat cow as a 3-year-old. First check for \$50 buys this calf.
W. H. MOTT, HERINGTON, KAN.

FIVE GUERNSEY COWS

For sale. Also three Bulls, and Cream Separator.
WM. SCHRUBEN, DRESDEN, KAN.

FARMER-PRICED

From Wisconsin to Louisiana and from Kentucky to New Mexico, Rotherwood Jerseys—both the sires and the matrons—are writing eloquent tributes to the Jersey Bred and to the potent State of Kansas! Here the best are farmer-priced when you mention the Kansas Farmer!
ROTHWOOD JERSEYS
Route 3 Hutchinson, Kansas

Choice Dairy Heifer Calves

\$18. TRUCK LOTS OLDER HEIFERS.
SHAWNEE DAIRY CATTLE CO., Dallas, Tex.

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Kansas Farmer is now published on the first and third Saturdays of each month, and we must have copy by Friday of the previous week.

JESSE R. JOHNSON, Fieldman
Kansas Farmer - - - Topeka, Kansas

Give as much as you can—as often as you can to the U.S.O.



The Tank Truck

News from Your Conoco Agent about Lubricants, Farm Fuels, and Service



ONE LITTLE...



TWO LITTLE...



THREE LITTLE TRACTORS...

AND HOW THEY WERE SAVED FROM ENGINE ACIDS

MAYBE you have one tractor, or two, or three—and maybe you work a family-size farm or operate a 1000-acre ranch. But you're bound to have the job of trying to protect your engines from dread internal acid corrosion! Every cylinder explosion creates deadly acid, and some acid is almost sure to be trapped when you switch off the ignition!

Now there's no way for you to be sure that acid isn't in there. Yet even so you can keep inner engine parts from needless acid damage. Simply by getting your engine internally OIL-PLATED with Conoco Nth motor oil, you can help prevent corrosive acids from touching bare metal—and that's real help against ruinous corrosion!

Here's how OIL-PLATING is Attached to Metal!

OIL-PLATING is an acid-resistant surfacing fastened direct to engine parts you must protect from acid. OIL-PLATING stays fastened for many a day because it's attracted to metal and held in place by the "magnet-like" force of an advanced Conoco Nth synthetic. That's why OIL-PLATING can't all quickly part company with engine parts and leave them fully exposed to acid damage! Even when your engine is idle for days, the acid-resistance of protective OIL-PLATING remains.

Users' Statements Prove Value of OIL-PLATING!

Next to using a product yourself, the best way to be "shown" about it is to hear the comments of those who have used it. Here is the report of Nelson Walter, who farms 240 acres near Highland, Illinois, and whose McCormick-Deering tractor gets plenty of hard work all year. He writes, "In the past I used other well known branded products, but . . . my repair and maintenance cost has been far less by using Conoco products 100%." Now

that's an uncompromising statement, but when you know about OIL-PLATING, it's not surprising. It's not isolated, either, for here's the statement of another Conoco user to back it up.

Charles Kent, whose 375 acres are near Powell, Texas, operates two John Deere tractors, and he reports: "... during the past three years I have used Conoco Nth oil exclusively in my two tractors and have had no repair bill whatever." Then he goes on, "Prior to the time I started using your Nth oil, I was using another brand of oil and I did not get the same good service . . ."

Nth Oil's Second Feature a Great Boon too!

OIL-PLATING seems to have worked out for both these men—and both, mark you, were careful to compare Nth oil's performance with previous experience they'd had in their own machines. The performance characteristics of Nth oil, as reported by users, are helped a lot by another Conoco Nth synthetic called *Thialkene inhibitor*. This one's function is to retard breaking down of the oil.

OIL-PLATING and *Thialkene inhibitor* always team up to give consistent performance of the kind which led E. G. Sundeen to write in from Bonners Ferry, Idaho. He has farmed from 300 to 1500 acres annually since 1931, "... during which time," he writes, "I have used Conoco Bronz-z-z gasoline, Conoco Nth motor oil, Conoco transmission lubricants and greases . . ."

Operating three tractors during that period—an International, a McCormick-Deering, and a Case—Mr. Sundeen has had plenty of opportunity to find out about motor oils. He writes further: "... the only repair given to these tractors has been valve grinds and new rings. Conoco Nth motor oil has insured longer engine life and fewer repairs, as my experience proves."

Now actually no oil—not even Conoco Nth oil—can insure what Mr. Sundeen claims, unless the owner himself takes a lot of painstaking care. Much of the credit goes to Mr. Sundeen himself, but it shows how highly he regards Nth oil. The two basic reasons are OIL-PLATING and *Thialkene inhibitor*.

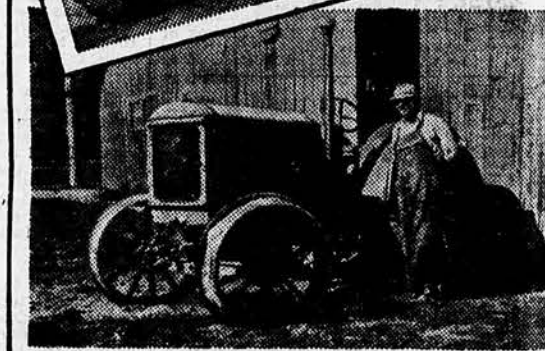
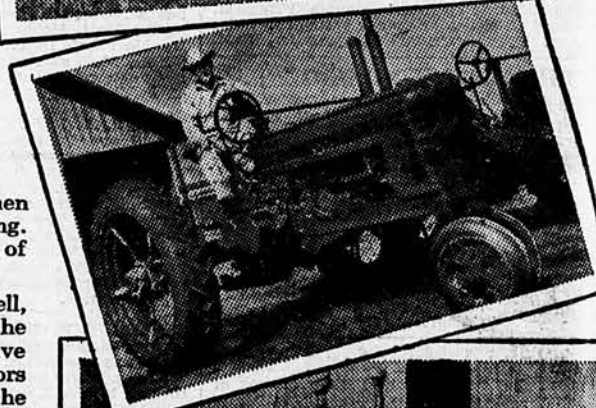
Get the benefits of OIL-PLATING and *Thialkene inhibitor* in your own tractor—truck—car. All you need is a fill of Nth oil. Phone Your Conoco Agent today. He'll see that you get your supply of Conoco lubricants, including Nth . . . oil that OIL-PLATES. Continental Oil Company

HORMONES AND X-RAYS FOR BIGGER HARVESTS?

Agricultural research men are working hard these days on developments that aim at substantially increased yields of many common crops!

Two developments have been reported. First, word has come from Oklahoma that experimental hormone treatment of cotton and peas has resulted in higher gross yields of these crops! Second, experts at Cornell University are now working to change internal plant structure by means of X-ray treatment. They hope to increase the net yield of edible parts of certain plants!

These are just two of the many lines of American agricultural research. Every day scientific farming—and that includes mechanized farming—is advancing your chances for better living.



(Top.) This scene sure has the feel of a good hot prairie sun in it! It's on Nelson F. Walter's farm near Highland, Illinois. Mr. Walter stands by his tractor and Conoco Commission Representative Clarence Jenne is at the right.

(Center.) Charles Kent of Corsicana, Texas, seems mighty pleased about something—maybe over the way his two tractors "purr" continuously," as he puts it, using Conoco Nth oil!

(Bottom.) Here's E. G. Sundeen of Bonners Ferry, Idaho, with one of the three tractors he's operated since 1931, using Conoco products 100%.

THE GREASE VETERAN SAYS:

"Getting on toward dog days now—time for man and beast to watch out. Time for you to watch out for your equipment, too! By this time of year, most of your machinery has been through a pretty hard spell of work, and it will pay you to check the lubrication of your machine—and to give 'em a once-over for mechanical troubles. By doing that, a fellow can stop troubles before they start—and save himself from a power of lost time right in the middle of the busy season!"

If you want a hand in giving your machines the attention recommended by The Grease Veteran, phone Your Conoco Agent. He'll be Johnny-on-the-Spot with good advice on the oils and greases you need to keep everything in top-notch condition. And he's got a FREE Conoco Tractor Lubrication Chart for you—made up specially for your own make and model tractor. If you haven't received your FREE Conoco Tractor Chart yet, call Your Conoco Agent right away to come out and take one up for you.

ALWAYS AT YOUR SERVICE

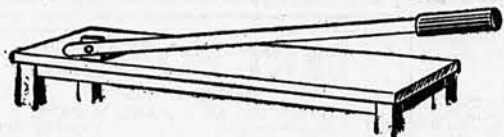


Your Conoco Agent

\$ 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—and win \$1.00 for each of your ideas printed!

From D. C. Grove of Otterville, Missouri, came the original sketch of the corn chopper made from a corn knife drilled to pivot when bolted to a bench. A similar chopper has been in constant use on his farm for twenty-five years!



An old fifty-gallon barrel with a strip three inches wide removed from one side end-to-end makes a handy self-feeder for chickens, calves and hogs, says Frank Sebor of Kildare, Oklahoma. The barrel is suspended horizontally over a feed trough by a length of salvaged pipe which passes through holes in the barrel ends. The pipe is supported on two-by-fours nailed to the ends of the trough. The barrel is easily rotated to bring the side-slit up for filling, and is then rotated back to feed gradually into the trough.

From a length of old broom handle and a discarded butcher knife, Richard Rainwaters of Bannerdale, Arkansas, made the cane cutter illustrated here.

