

CONTINUING

MAIL & BREEZE

February 12, 1938

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Number 4
MANHATTAN
KANSAS



GREATER TRACTION LONGER LIFE!

ONLY the patented Firestone Ground Grip Tires have the following advantages:

Triple-Braced Traction Bars provide more positive traction under all soil conditions and do not break, bend or tear off as so often happens in other tires where bars are not supported.

52 to 89 Extra Inches of traction bar length give more earth-biting power for greater pull.

32% Greater Surface Contact in each revolution of the wheel distributes the load over greater area of tire. This gives increased pulling power and longer wear.

21% Flatter Tread gives greater shoulder traction to bite into soft soil.

Smoother Riding is made possible where all triple-braced traction bars are joined together, and form one continuous surface in contact with ground or pavement. Bumping on hard surfaces occurs where the rubber bars are disconnected like the lugs on steel wheels.

Better Cleaning in all soil conditions is made possible by the scientific arrangement of the spacing between the traction bars.

58% Longer Flexing Life is added by the patented Firestone Gum-Dipping process by which every fiber of every cord is saturated with liquid rubber. This prolongs the life of the tire, protects against penetration of moisture, guards against destructive internal friction, and adds great strength to resist the strain of heavy pulling.

Stronger Union between the tread and cord body is guaranteed by two extra layers of Gum-Dipped cords under the tread.

Greater Protection against all weather conditions is provided by an exclusive weather-resisting compound.

SEE your nearby implement dealer, tire dealer or Firestone Auto Supply and Service Store today. Accept no substitute for Firestone Extra Value.

INSIST upon Firestone Ground Grip Tires on your new tractor and farm implements for greater traction and longer life.

Listen to the Voice of Firestone featuring Richard Crooks and Margaret Speaks, Monday evenings over Nationwide N. B. C. Red Network

Firestone

GROUND GRIP TIRES

MORE FARM TRACTORS ARE EQUIPPED WITH FIRESTONE GROUND GRIP TIRES THAN ALL OTHER MAKES OF TIRES COMBINED

Harvey S. Firestone Puts the Farm on Rubber

The pioneering spirit of Harvey S. Firestone has made farming more efficient, easier and more profitable. For years he has been working with engineers and technical men on his homestead farm in Ohio, to put all wheeled farm implements, from the wheelbarrow to the combine, on rubber tires. He developed the first practical farm tire and more recently perfected the Firestone Ground Grip Tire, the greatest traction tire ever built. This tire enables the farmer to do his work in 25% less time, with greater comfort and with a saving of up to 50% in fuel.

WIBW Program Schedule

(Daily Except Sunday)

Two Weeks Beginning February 12, 1938

4:55 a. m.—Sons of Pioneers
5:00 a. m.—Roy Faulkner
5:30 a. m.—Alarm Clock Club
5:45 a. m.—Daily Capital News
6:00 a. m.—Interstate Nursery Program
6:15 a. m.—Roy Faulkner
6:30 a. m.—Col. Combs and Ramblers (M-W-F)
6:30 a. m.—Allis-Chalmers Program (Th-Sat.)
6:45 a. m.—Checkerboard Boys (M-W-F)
6:45 a. m.—Col. Combs and Ramblers (Th-Sat.)
7:00 a. m.—Interstate Nursery News
7:15 a. m.—Scott Powder Program (M-W-F)
7:30 a. m.—Rupf Hatchery Program
7:45 a. m.—Gospel Singers
8:00 a. m.—Unity School
8:15 a. m.—Olson News
8:30 a. m.—Hymns of All Churches—Betty Crocker
8:45 a. m.—Betty and Bob
9:00 a. m.—IGA Program (M-W-F)
9:15 a. m.—Myrt and Marge
10:30 a. m.—Protective Service—KANSAS FARMER
10:40 a. m.—Weather Bureau
10:45 a. m.—Judy and Jane
11:00 a. m.—The Party Line
11:15 a. m.—Dinner Hour
12:00 Noon—H. D. Lee News
12:15 p. m.—KANSAS FARMER MARKETS AND FARM NEWS
2:00 p. m.—Daily Capital News
2:15 p. m.—Harris Goar's Street Reporter
2:30 p. m.—Kansas Roundup
3:30 p. m.—Kitty Keene Inc.
3:45 p. m.—Edmund Denny
4:00 p. m.—Ma Perkins
4:15 p. m.—Shepherd of the Hills—Maude Butler
5:30 p. m.—Daily Capital News
5:45 p. m.—Jack Armstrong
10:00 p. m.—Joe Nickell—Daily Capital News
10:15-12—Dance Music

Highlights of the Week's Schedule

Sunday, February 13 and February 20

8:00 a. m.—Wings Over Jordan
8:30 a. m.—Aubade for Strings
9:00 a. m.—Reading the Capital Funnies
9:30 a. m.—W. Brown—Strings
10:00 a. m.—Weather Reports
10:05 a. m.—For Mother and Dad
10:30 a. m.—Major Bowes Family
11:00 a. m.—First Methodist Church
12:00 Noon—Moods in Song
12:15 a. m.—Pacific Paradise
12:30 a. m.—The Sunday Players
1:00 p. m.—Boris Morros String Quartet
1:30 p. m.—Dr. Christian
2:00 p. m.—N. Y. Philharmonic Symphony
3:00 p. m.—Father Coughlin
3:30 p. m.—N. Y. Philharmonic
4:00 p. m.—Elks Safety Program
4:15 p. m.—Hollywood Brevities
4:30 p. m.—Matinee Melodies
5:00 p. m.—Christian Science (Feb. 13)
5:00 p. m.—The People Speak (Feb. 20)
5:15 p. m.—Eventide Echoes
5:30 p. m.—Daily Capital News
5:45 p. m.—WIBW Players
6:15 p. m.—This Rhythmic Age
6:30 p. m.—SENATOR CAPPER
6:45 p. m.—Aristocrats of Swing
7:00 p. m.—The People's Choice
7:30 p. m.—Earaches of 1939
8:00 p. m.—Ford Sunday Hour
9:00 p. m.—Harmony Hall
9:15 p. m.—Emahizer's Melodies
9:30 p. m.—Skelly Court of Missing Heirs
10:00 p. m.—Joe Nickell—News
10:15 p. m.—American Legion
10:30-12 p. m.—Dance Music

Monday, February 14 and February 21

6:45 a. m.—Checkerboard Boys
7:15 a. m.—Scott Powder Program
9:00 a. m.—IGA
7:00 p. m.—Marling Forum of Public Opinion
7:15 p. m.—The Crime Patrol (also 8:45 and 10:15)
7:30 p. m.—Pick and Pat
8:30 p. m.—K P & L Musicale
9:00 p. m.—Lady Esther Serenade

Tuesday, February 15 and February 22

6:00 p. m.—Bar Nothing Ranch Folks
6:30 p. m.—Emahizer's Melodies
6:45 p. m.—Pentecostal Tabernacle
7:00 p. m.—Edward G. Robinson
7:30 p. m.—Al Jolson's Show
8:00 p. m.—Watch the Fun Go By
8:30 p. m.—Camel Caravan (Feb. 15)
8:30 p. m.—Cordell Hull (Feb. 22)
9:30 p. m.—Phillips Poly Follies

Wednesday, Feb. 16 and February 23

6:45 a. m.—Checkerboard Boys
7:15 a. m.—Scott Powder Program
9:00 a. m.—IGA
6:45 p. m.—Chevrolet Musical Moments
7:00 p. m.—Marling Forum of Public Opinion
7:30 p. m.—Texaco Town
8:00 p. m.—Chesterfield Presents
8:30 p. m.—Ben Bernie
9:00 p. m.—Wednesday Prayer Meeting
9:30 p. m.—Hudson Hobby Lobby

Thursday, February 17 and February 24

6:00 p. m.—Bar Nothing Ranch Folks
6:30 p. m.—We, the People
7:00 p. m.—Kate Smith
8:00 p. m.—Major Bowes Amateurs

Friday, February 18 and February 25

6:45 a. m.—Checkerboard Boys
7:15 a. m.—Scott Powder Program
6:15 p. m.—Marling Forum of Public Opinion
6:30 p. m.—Concert Orchestra
6:45 p. m.—Chevrolet Musical Moments
7:00 p. m.—Hammerstein's Music Hall
7:30 p. m.—Paul Whiteman
8:00 p. m.—Hollywood Hotel
9:00 p. m.—Coca Cola Songshop

Saturday, February 19 and February 26

6:00 p. m.—Bar Nothing Ranch Folks
7:00 p. m.—Kansas Roundup
8:00 p. m.—Prof. Quiz
9:00 p. m.—Lucky Strike Hit Parade

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Right: Tractor Row during the 1937 show when 100,000 visitors milled about the exhibits. Virtually every type of farm machinery again will be displayed this year with an even larger crowd expected from all over the Midwest.

What's New in Farm Power

*Four-Day Exhibition of New and Improved Models
Will Stress Efficient Service to Agriculture*

By ROY R. MOORE



WEEK after next—February 22-25 to be exact—Wichita will be capitol of the power farming world. For in that 4-day period the Western Tractor and Power Farming Equipment Show will be on in full wing. There is nothing else like it in America—or in the whole world for that matter.

Of course, a tractor show in itself is nothing new. They had them at scattered points in Kansas long before much thought ever was given to the new-fangled contraptions supplanting horseflesh. But the big Wichita show has this distinction. It is the only one almost national in scope.

Here most of the big implement companies exhibit for the first time their new models; here the presidents, vice-presidents and sales managers of the different companies appear personally and inspect their wares. They are particularly interested, of course, as to how the users of power farming equipment receive their new creations, for usually more than 100,000 farmers from over Kansas and Northern Oklahoma attend the big show.

This year, the Western Power Show appears to have had more early interest than ever before. For many weeks, Fred G. Wieland, secretary of the Western Thresher and Tractor Club which is sponsoring the show, has been virtually out of desirable space in the Forum, which in addition to Tractor Row, houses the exhibits. As a matter of fact, it has been almost impossible for the representatives of implement manufacturers to obtain quarters in Wichita hotels, so great has been the demand for reservations. The Western Power Show, without tremendous amount of publicity, bears about the same relation to the

power farming industry as do the Chicago and the New York Automobile Shows to the motor car industry. Thousands of farmers yearly wouldn't miss this big event for anything short of some great catastrophe. In fact, this show vies with the great state fairs in attendance and general interest.

About everyone agrees that Wichita is the heart of the power-farming industry. For in this area power farming was born. Gradually this new method of farming spread in all directions, just like ripples when a rock is thrown in a pond, until it has reached from coast to coast with varying degrees of intensity. It is entirely natural, therefore, that a national power show should be held near its birthplace.

Use of the Forum to house many of the exhibits at present is largely due

to the fact that Tractor Row, the official title for South Wichita Street, doesn't have room for all the companies that co-operate. In fact, there is quite a story in this development of Tractor Row. The thoroughfare is bordered on either side for several blocks with farm equipment distributors and dealers and has had this unique distinction for many years, even back in the days of horse-drawn equipment when the present Kansas metropolis was a small city.

The story of Tractor Row, the Wichita Thresher & Tractor Club, Inc., sponsors of the annual tractor show, and the show itself, is woven around the Wichitan, Fred G. Wieland, the first and only boss of the show.

It started 30 years ago when a thresher and tractor club was formed

and Wieland was chosen as manager of the show. The real story is woven around tractors, altho with the present trend toward speed for farm equipment, road and industrial machinery and tractors seem to be almost synonymous.

There was a time when implement men argued whether the tractor was to play an important part in farming or would be only a temporary "plaything." Farmers themselves entered the discourse. When a puffing tractor appeared on a farm, neighbors talked about the new-fangled thing, and arguments waxed hot. Old Dobbin was serenely grazing in the pasture, not worried about his importance in the agricultural picture, for the first tractors were nothing to brag about.

During the exhibits in 1923 and 1924, several inquiries for exhibit space were received from road and industrial machinery concerns, and the tractor show adopted a brother affair, the Road Show and School which has been held in Wichita every year since 1925, except two.

Wieland has been the closest observer of the change in the past 35 years. Machinery sold in the early days was mostly horse-drawn or steam propelled engines and threshing machines. But today the show embodies everything ultra-modern in the farm equipment and industrial fields.

It goes without saying that you are cordially invited to visit the Western Power Show. Maybe a one-day visit won't satisfy you. Come back the next day. Bring the family and see everything. There is no admission charge.

—KF—

Men Who Boss Big Show

President—F. R. Brooks, J. I. Case Co.
Vice-President—G. G. Hampton, Wood Bros. Thresher Co.
Secretary-Treasurer—F. G. Wieland, Tractor Club

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S. S. Smith, Minn-Moline Power Implement Co.
E. H. Schroeder, Oliver Farm Equipment Sales Co.
H. A. Smythe, Smythe Implement Co.

Chisels His Hard Pan

A number of farmers in Southwest Kansas have been selected by the Soil Conservation Service to do demonstration work on their farms. One of these is B. W. Parsons, Stevens county. Mr. Parsons has a "plow pan" or hard pan in his heavy soil, the same as most farmers in his section of northern Stevens county. When row crops are listed on wheat land, the seed lies on top of this pan and the plants never do well because the roots don't seem to penetrate it. For this reason Mr. Parsons is planning to try using a chisel. The chisel is an aid to storage of rainfall too. Contour farming and terracing are major practices Mr. Parsons will take up in his demonstrations of soil conservation.

Another Flood of War Propaganda

Passing Comment by T. A. McNeal

I WILL say frankly that I am alarmed over the situation in the Orient. There are tremendous forces which seem bound to drag us into war. The country is being flooded with propaganda calculated to stir up the war spirit. In addition to appropriating more than four times as much for the army and navy as were appropriated in any year prior to the time we got into the World War, the President is asking for an extra appropriation of 800 million dollars to build new battleships. He is asking that the army be made three times as large as it ever has been before in peace time. In short we are to become one of the most strongly militarized nations in the world.

The people of the United States who are more than 40 years old, will recall the widespread and exceedingly skillful propaganda that was fed to the people in 1917, to reconcile them to going to war, especially a foreign war. The propaganda followed three general lines. One line was building up a national feeling of hate toward Germany and the German people. This was accomplished by publishing gruesome stories about German outrages. Most of them, as we know now, were false. The original authors of these stories knew that they were false but they did not hesitate to publish them just the same. We, over here, read them and believed them. Our indignation was stirred to the depths, until we came to believe it was our duty to destroy the barbarians who were guilty of such inhuman cruelty.

The second line appealed to our national pride. The German submarines had sunk, not only the Lusitania with a great many American passengers, but they had sunk several other American ships. They had interfered with our right to sail on the high seas. Should we stand for this unlawful interference with our rights? Certainly not!

The third line of propaganda appealed to our idealism. We would engage in a war to end war, and to make the world safe for Democracy. That seemed to President Wilson like a noble purpose. I think he was entirely sincere in this belief.

So public sentiment was created. Our long-time reluctance to engage in war was broken down and we became, for the time being, war-mad.

We organized in an almost incredibly short time an army of 5 million men. We actually sent across the ocean more than 2 million men. Nearly 150,000 of the 2 million were left over there sleeping their eternal sleep in the soil of France. We spent more than 40 billion dollars and contracted obligations for the future which will not be paid in a hundred years. We lent our allies 10 billion dollars and have received for the loan only the hatred of those we helped.

We discovered, when it was too late, that we had been deceived by skillfully framed lies. The war to end war was the prelude to general armament to an extent never equaled in the history of the world, and every year since the close of the great war has been marked by brutal and bloody conflict.

Instead of making the world safe for Democracy, the trend toward Democratic form of government in Europe was reversed and there is less of popular rule than there has been for a hundred years. The world was almost bankrupted and credit was nearly destroyed. When the delirium was passed and we had time to sit down and take stock calmly, we discovered that not a single thing we had set out to accomplish had been accomplished, and all over the United States men and women were saying "never again."

But here we are fewer than 20 years away from the end of that devastating conflict and again we are being fed with war propaganda. Japan is represented as a most brutal nation. It has attacked China without cause and scattered its death bombs

More or Less Modern Fables

AN INDOLENT young woodpecker, which had been sent out by its mother to gather some provender for the family table, was found by its industrious parent sitting on a limb listlessly eyeing a place where a borer seemed to have entered. When his mother asked him what he was doing, the young woodpecker answered that he was waiting for the grub worm to come out of the hole so that he could catch it. Whereupon the mother woodpecker said impatiently: "My son, if you sit around waiting for grubs to come out of their holes you will have a mighty lean time of it in this world, I fancy. If you want that worm, you will have to get a move on yourself and dig it out."

The Flower Lady

By ED BLAIR
Spring Hill, Kansas

"How can you have such beautiful flowers?" Often they ask of her. The one they smile for, in sunshine and showers To the days when the wintry winds stir. "And, even then, when the sun can peep thru Sweet flowers bloom a sweet welcome to you!"

Her Answer

"How do I grow them?" 'Tis play, not dull work Planting and seeding the bed I may be weary but there is no irk For I am dreaming ahead— And I'll know soon with a thrill of delight How much each flowerlet grows in one night!

"Yes, there are pests and sometimes a freeze Ere the first flowers unfold I cover—uncover—for tender are these Pinks, reds, blues, lavenders, gold And all the colors a season may last Prized more each day till the season is past!"
(Copyright, 1938)

over helpless women and children. I have no doubt these charges are true, but we cannot undertake the job of policing the world. Neither have we the slightest assurance that our participation would reduce the horrors of the present war raging in the Orient. It would, in all probability, involve us in other wars even more terrible than that now raging in China.

It Is Everybody's Sales Tax

AS THIS is being read the legislature is in special session, considering possible amendments to the sales-tax law. There is no question that is of more general interest than this sales tax. It is one tax to which everybody contributes something, for anybody who buys anything to eat or wear must pay a sales tax. I start with the assumption that the present sales tax rate will not be changed by this legislature. The only questions that will be discussed in all probability will be the allocation or distribution of the tax when collected.

This brings up the interesting questions, first, how much will the sales tax amount to for the year, and how has it been distributed so far?

I am indebted to a detailed report prepared by the former head of the Kansas relief organization, John Stutz. He makes the estimate of tax that has been or will be collected during the first 10 months of the operation of the law. For these 10 months there has been or will be allocated to social welfare \$2,430,000; to school equalization \$2,115,300 and to property tax relief \$4,000,000.

Now let us look at the law concerning social welfare and refresh our minds concerning the distribution of the sales tax. The law provides for a "state board" and "county boards." It also provides for a "state director" and "county directors." It does not provide for an "old age pension" but does provide for old age "assistance." It provides for the collection of a sales tax of 2 per cent on "all sales of tangible personal property for use or consumption and not for resale, or supplying electrical energy, gas, water, service or entertainment, except wholesale sales."

The law provides for assistance to persons who have resided continuously in Kansas for 1 year preceding their application for assistance, who (1), have not sufficient income or resources to provide a reasonable subsistence compatible with decency and health; (2) who are not, at the time of receiving assistance, inmates of any public institution; (3) to any needy aged person who has attained the age of 65 years; (4) to the needy blind; (5) to the assistance of dependent children who have been born in the state or who have lived in the state for 1 year or whose mothers have lived in the state for 1 year.

The distribution of the welfare funds is made thru the county boards of commissioners who shall appoint county directors and assistants who shall investigate the applicants for assistance. The money collected from the sales tax shall be deposited in the

state treasury, and after deducting not to exceed 3 per cent for cost of administration of the law, the remainder shall be distributed as follows: First, not to exceed \$2,400,000 per annum for social welfare purposes, and a sum not to exceed \$200,000 for use with the crippled children commission; third the sum of \$50,000 on the first day of July 1937, and the sum of \$60,000 on the first day of July 1938, and a like amount on the first day of July every year thereafter, for the employment service; and fourth the sum of \$2,500,000 to the state school aid fund; 80 per cent of the balance, if any, to the county treasurers of the several counties of the state.

The language of the law is complicated and difficult to understand, but it will work out I think in this way. The federal aid in old-age assistance is limited to \$15 a month to the person. Now suppose a county decides to pay in the way of old-age assistance to persons of 65 and over \$30 a month. The government would contribute \$15, the county would contribute \$10.50 a month and the state would contribute \$4.50 a month. In the case of the blind the Federal government would only contribute one-third of the total allotted by the county.

After making these distributions, if there is a balance left in the sales tax fund the counties will get 80 per cent of it and this may be applied to reducing the taxes of the counties.

Now, let us go back to the statements made in the Kansas Government Journal. It estimates that during the next tax year, which will begin on July 1, 1938, there will be distributed by the several counties of the state for social welfare \$3,020,000; for school equalization, \$2,115,300 and for property tax relief \$6,000,000. Mr. Stutz, who prepared the figures for the Kansas Government Journal, estimates that this will mean in general tax relief in 1938, 6.69 per cent and in 1939, \$10.04 per cent.

The legislature is not in session as I write this and therefore I can only guess what it will do. There is ample opportunity for dispute and disagreement. There will be a clamor for increased old-age assistance and the establishment of an old-age pension system instead of old-age assistance. At present the average payments in the way of old-age assistance averages about \$19 a month. There will be an insistent demand that this be raised to a minimum of \$30 a month of which the Federal government would pay half. That in turn would mean that the amount allotted to the payment of old-age assistance or pensions, which ever it may be called, will have to be increased by a little more than 50 per cent. In other words, instead of \$3,020,000 which Mr. Stutz estimates will be paid out next year under the present plan, something over \$4,500,000 will be paid, and that will mean instead of the property tax being reduced by 10.04 per cent, it cannot be reduced more than 7 per cent.

The schools are not going to give up a part of the aid they now are receiving. On the contrary they will ask for more aid and if they get what they ask it must, of course, be taken from the amount rebated to the counties in the way of property-tax relief. I see the making of quite a beautiful scrap. The hair may be flying before this is read.

THE KANSAS FARMER

Continuing Mail & Breeze

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MARCO MORROW Assistant Publisher
H. S. BLAKE Business Manager

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Published every other Saturday at Eighth and Jackson streets, Topeka, Kan. Entered at the post office, Topeka, Kan., as second-class matter, under act of Congress of March 3, 1879.

Please notify us promptly of any change in address. No need to miss a single issue of Kansas Farmer. If you move, just drop a card, giving old and new addresses, to Circulation Department, Kansas Farmer, Topeka, Kan.

One year 50 cents; three years \$1.

Farm Matters as I See Them

Farm Homes Are Included

GOVERNMENT insurance of private loans for residence construction and repairs is available to farmers, under a provision inserted by the Senate in the National Housing Act recently passed by Congress.

Briefly, this act provides that the Federal government will insure mortgages made by a private lending agency on a farm property, "provided that the construction and repairs to be undertaken on such farm shall involve the expenditure for materials and labor of not less than 15 per cent of the total principal obligation of said mortgage."

There are certain limitations before any farm mortgage is subject to such insurance by the National Housing Authority. Start on construction or repairs must be begun after the enactment of the 1938 law; or after January 1, 1937, prior to its enactment. The mortgagor must be the owner and occupant of the property, and must have made at least a down payment of 10 per cent of the appraised value.

On a property appraised at \$6,000 or less a mortgage up to 90 per cent of its value can be insured. The base interest rate is 5 per cent—the Housing administrator can require as high as 6 per cent in areas where he considers this advisable—plus $\frac{1}{4}$ per cent a year insurance charge.

Mortgage loans protected by this government insurance to the lender are to be paid off in monthly installments, over a period of not to exceed 25 years. The interest is to be computed on the unpaid balance after each payment, instead of on the face of the note. This would indicate that the interest rate will not exceed $6\frac{1}{4}$ per cent.

For farm mortgages on property with appraised value of between \$6,000 and \$10,000 the mortgage insurance goes to only 80 per cent of the valuation, and the premium may be anywhere between $\frac{1}{2}$ and 1 per cent.

Loans in larger amounts may be insured on apartments and grouped residences, but as I read the act these are not available on farm properties.

I think the farm loan provisions may be of benefit to some farmers. It is hoped that the act will encourage private lending for building construction on a large scale, especially in the larger

cities. It should be noted that this act does not call for Government lending, nor for placing the Government in the money-lending business. The Government simply offers to insure mortgages made by private lending agencies for residence construction and repair purposes. I was very strong for the Housing Act, gave it my support and vote, both because of the possibilities in it of reviving the building construction interest, and its promise of lower interest rates on farm and city mortgages of this type.

Small Business Must Prosper

THE metropolitan newspapers poked a good deal of fun at the "Little Men of Business" conference in Washington last week. It was rather ludicrous, on the surface of things, to see several hundred men all trying to talk over one microphone in a convention hall. But I found more to think about than to laugh about in that meeting.

The continuance of our Nation as a representative Democracy depends in large measure, as I see it, upon whether or not the family-sized farm and the small independent business man continue to operate profitably within our economic structure. Both are in a bad way at present.

From what I learned of the convention, the small business men of the country are afraid of monopolies and centralization of business control in too few hands. They also are distrustful of the New Deal remedies that lead to too much centralization of governmental power in Washington and Washington bureaus.

I am strong for the small independent business man. He faces many troubles similar to those of the farmer, who as a matter of fact also is a small, independent business man, in a business that requires even broader activities than many lines of merchandising.

Lenient Collection Policy

I WAS glad to get word from the Farm Credit Administration the other day that it intends to pursue a lenient policy in collection of Farm Commissioner loans, and also in handling Land Bank loan collections. These loans, you may remember, were authorized in 1933, to take care

of distressed farmers who could not borrow money from any other source, even from the Federal Land Banks.

"We realize, of course, that in some cases because of adverse climatic or economic conditions, Federal Land Bank and Land Bank Commissioner borrowers will be unable to meet the terms of their mortgage contracts. However, the banks have power to grant assistance in worthy cases in which the borrowers cannot carry their loans."

The FCA, however, is opposed to general deferment of payments in any particular area, on the grounds it would only result in deferment of payments by many farmers who are in position to meet their obligations.

"We, therefore, believe that it is a sound policy to consider each case on its individual merits and to extend such assistance as appears warranted, rather than to take any blanket action which would effect all loans regardless of whether the borrower is able to meet the terms of his contract."

"In other words, where a borrower is temporarily in distress by reason of a crop failure or some other condition which is not likely to continue, a short term extension of the delinquent items may be justified and may best meet his need."

"If, however, a study of the case develops that the semi-annual installments on the loan as written are heavier than the income from the farm can normally carry, the entire loan may be extended over such period of time as appears reasonable and necessary for its orderly repayment."

For myself, I wish to add that if conditions later in the spring make it necessary, I will go beyond the policy laid down by the Farm Credit Administration, and support legislation for general deferment. In the meantime, I would suggest to those unable to meet their payments, that they get in touch with the secretary-treasurer of the local national farm loan association handling the loans, and discuss the matter in detail. And let me know how you come out.

Arthur Capper
Washington, D. C.

From A Marketing Viewpoint

By HOMER J. HENNEY

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	\$ 8.75	\$ 9.25	\$10.75
Hogs	8.75	8.40	10.00
Lambs	7.50	7.90	10.15
Hens, Heavy .....	.20	.19	.14
Eggs, Firsts .....	.17 $\frac{1}{2}$	.21	.20
Butterfat .....	.29	.30	.31
Wheat,			
Hard Winter	1.02	1.04	1.44 $\frac{1}{2}$
Corn, Yellow .....	.56 $\frac{1}{2}$	.60	1.20 $\frac{1}{2}$
Oats .....	.32 $\frac{1}{2}$	.34 $\frac{1}{2}$	.58
Barley .....	.65	.66	.96
Alfalfa, Baled	24.00	25.00	22.00
Prairie	12.00	8.50	14.50

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

Would it be a good time to buy steer and heifer calves or would you buy stock cows ready to calve this spring? I have lots of roughage and plenty of grass this coming summer.—R. W., St. Joseph, Mo.

About 7 chances out of 10 choice White Face steer calves bought on the breaks between February 1 and February 23 will show a profit above feed and grass costs if handled on a modified deferred feeding program so that you could sell in December of 1938 if

conditions on August 1 indicate that will be better than the October market. The odds on the heifer calves drop down to 6 out of 10 for reasons given by personal letter. The chances are only 3 out of 10 that your cow deal at present prices would be as profitable by November 1 as the calves. Stock cows at present prices are like dynamite if fat steer values follow the trend unexpected for the next 6 to 8 months.

I have feed and pasture. Would you buy straight back thin cows to put on grass and sell in September or would you buy 800 pound feeder steers at present low prices?—H. K., Abilene.

No, about 3 chances out of 10 either of these programs will pay expenses by early fall. If, however, the February break turns out to be worse than I have been indicating, you might get your feed and grass back if you buy these heavy feeders cheap enough. You will have to decide that, when the breaks come in February. Cattle prices are not due to advance much until late 1938 and not then unless 1938 corn production is reduced and business conditions are improving. Since neither of the programs are suitable I would suggest either cheap cattle for a short turn in order to use up the feed and then rent the grass, or buy in late spring for your grass or better yet, buy choice calves now, and keep them as long as necessary in order to get out. In either event don't overstock.

This is no time to overbuy even tho it is much safer than it was a few months back.

I have some lambs on feed that could be fed quite a while yet from the weight standpoint if market justifies. Should I crowd on feed or fool along?—F. S., Newton.

About 8 chances out of 10 you will be better off to carry along as long as you can. You should be better off than you would be by selling now and you will have used up more feed. You certainly will be better off than selling on the distress price level here in February and early March. In this type of year the spring peak is shoved over later than usual as some finishers hang on to their feeding lambs until weight forces them into the market.

I have plenty of corn. When would you buy stock pigs and for what market would you head?—E. K., Ionia, Mo.

About 4 chances out of 10 you can show a profit if you buy stock pigs at present prices (9-10 cents under 60 pounds) and if you figure your corn at 50 to 60 cents a bushel. The primary trend is downward on hogs but of course the July price should show a favorable ratio. What if it doesn't? What can you do? Sow and pigs can be juggled around, sold, kept, part sold, and what not. The pigs are risky.

If my opinion about July is correct then you are all right but by using your corn in a breeding or growing out program I can adjust your marketing program in April so as to sell at some other spot in case I am going to be wrong about July. To expect to sell on a hot spot at the seasonal peak in March or April is too speculative in this type of year.

Do you have a marketing question you would like to have answered in this department? It is a free service to subscribers of Kansas Farmer. Simply give as complete information about your problem as you can, and mail your letter to Department R. H. G., Kansas Farmer, Topeka, and you will get a prompt reply to your questions.

—KF—

Manure Improves Soil

"One of the best investments I have ever made was in barnyard manure," says M. G. Nickels, who 17 years ago purchased a Jefferson county farm on which he has made his home ever since. For three years, Mr. Nickels spent most of his spare time hauling manure from McLouth, a distance of one-half mile, to his 159-acre farm. The manure from his own stables also was spread on the fields, and as a result, a farm that had lost much of its fertility 17 years ago is today producing good crops whenever moisture conditions are at all favorable.



For centuries the sickle or reaping hook, as it was called, was used to harvest grain. One man could cut from $\frac{1}{2}$ to 1 acre in a hard day's work. The grain later was bound by hand.



A longer handle was put on the sickle to make the scythe, used as far back as in Roman times. A wider swath could be cut, but it still was necessary to rake and bind the grain.

Stealing Old Stuff

The Principles of Today's Streamlined Machinery Were Worked Out Centuries Ago

By CORDELL TINDALL

MAN is pretty smart in devising new tools and machines to help him in the business of existing. He always has been. Altho most modern implements, as we now know them, have been perfected in the last 100 years, the principles used in these machines were discovered, one by one, over a period of many centuries. And thereby hang some interesting tales. Primitive peoples naturally used primitive farming implements. In the stone age crude hand tools of stone were developed. From what our experts can dig up, it looks as if these implements at first were sharpened only on one side. A number of tools used in this period have been found, including hammers, chisels, planers, awls, knives, scrapers, borers and axes. Some of these were chipped from stone, others polished, and crude handles of wood, bone or horn attached. Our Indians knew and made many of these tools and they can be found in some of our fields today.

Then some fellow, perhaps a little smarter than the rest, struck upon the idea of a combination tool to do more than one job. This tool had a sharp point for boring and 2 edges for cutting and scraping.

As all primitive people were farmers, they naturally developed a few tools to help them in their work. At first they lived off the land and made no effort to sow and reap. But hard times convinced them that perhaps it was better to establish a home and try to grow something to tide them over the lean periods, such as the winter months. In the Old World they planted the small grain cereals, such as wheat; in the New World it was maize, or corn as we now know it.

At first a digging stick was used to work the soil. Sometimes it was weighed down by a stone. Then a crude hoe was devised made of a forked branch, then later it was equipped with a blade of stone or bone.

We must keep in mind the difference between a plow and a hoe. A hoe is used with a chopping motion only, while a plow is pulled thru the ground to make a continuous furrow. Just when the plow appeared is not known. It was a sharpened forked branch. It probably was pulled first by man power, altho the use of oxen and horses dates back to prehistoric times.

The oldest known representation of a plow is on an old Babylonian seal impress at the Pennsylvania University Museum. One man is shown seeding a tube, or grain drill, thru which the seed was dropped into the furrow. Apparently something like a modern lister.

The Egyptians made good use of the plow. They used animals to pull it, but as human labor was pretty cheap, they sometimes hitched as many as a dozen men to one plow. In Korea a 3-man plow and spade with 2 ropes is used

today. In far-away places primitive plows still are in use. But that's ahead of the story.

Just as there is a big difference in a hoe and a plow, so there was a difference in the people who developed the two implements. We might say that in the beginning of time there grew up both a hoe culture and a plow culture, two civilizations based on the use of these two farm implements. The plow culture was that of the Old World, and was closely connected with the use of small grains and draft animals. In the New World, the hoe was used to cultivate maize and there were no draft animals, for it must be remembered that there were no horses in America until the white man came.

We would not dare say that wheat is a greater crop than corn. However, the greatness of the Old World is said by many historians to be due to wheat. But we must consider the combination of wheat, the plow, the oxen and horse, and the cart. All of these things may not have originated at the same time but they appeared together in early Egyptian and Babylonian culture.

But corn growers can point with pride to the civilization based on maize in Central and South America, and even our Indians were pretty good corn farmers. But because corn needed only a crude hoe to cultivate it no farm implements were invented, so we must turn back to the Old World to continue our history.

We mentioned the cart in connection with the culture of the Old World. To have a cart one must have at least two wheels. The wheel may be said to be the greatest of all inventions. And like so many other fundamentals of farm machinery, its first use is only a guess.

Man at first carried all his burdens on his own back. But the weak or the lazy discovered that animals could carry their burdens and thus began the great effort thru the ages to "let George do it." The animals on hand, including the horse and the ox, were used for food and sacrificial purposes. The American Indian, having no horse, used dogs as his first beast of burden. Over the world there are a lot of pack animals, donkeys, cattle, camels, and the llamas, of the New World, a cousin of the camel.

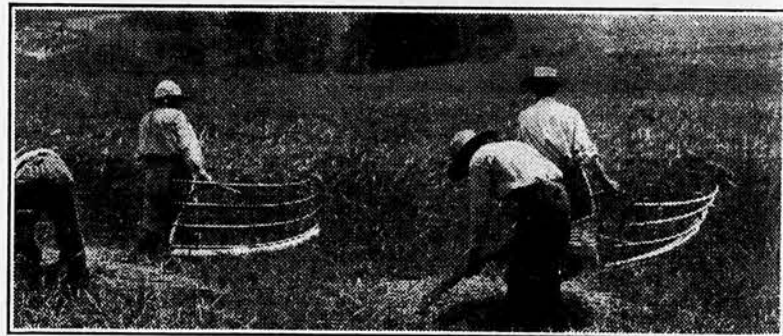
The next step was that the same lazy man perhaps—and the good that lazy men have done thru the ages always is minimized—found that the horse could drag more than it could carry, thus saving many trips. The sled is a familiar example of this. Also the two poles dragged by the horses of the Indians, called "travoises."

The next step in transportation was the wheel. The very first wheel, it is thought, was a log, used as a roller to move heavy objects. Then a brilliant mind put pegs on each side of the

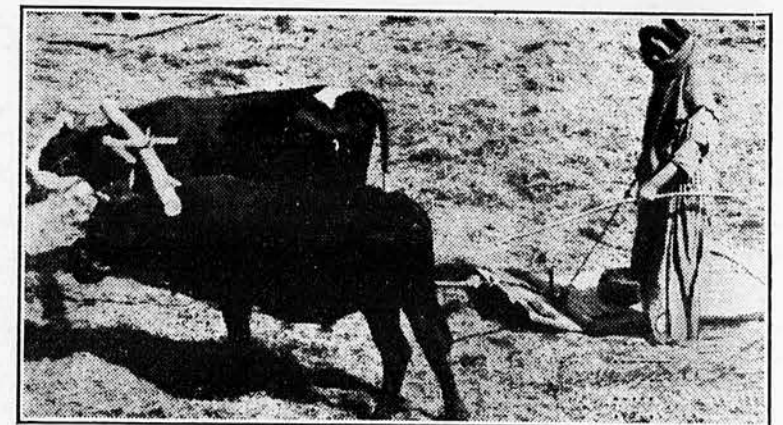
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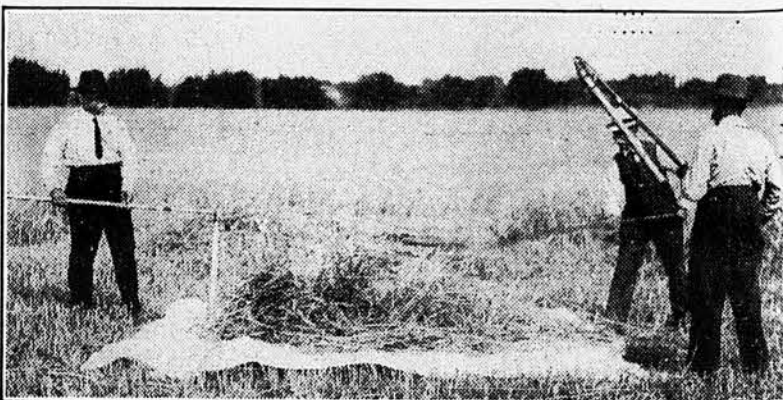
The Gauls, according to Roman reports, had a kind of header-reaper with a sharp blade in front. But it fell into disuse during the Dark Ages and the sickle again was used.



In the 18th century a 1-man reaper, a scythe with a cradle attachment, enabled one man to cut as much as 7 men using sickles. The cradle laid the grain in a neat windrow.



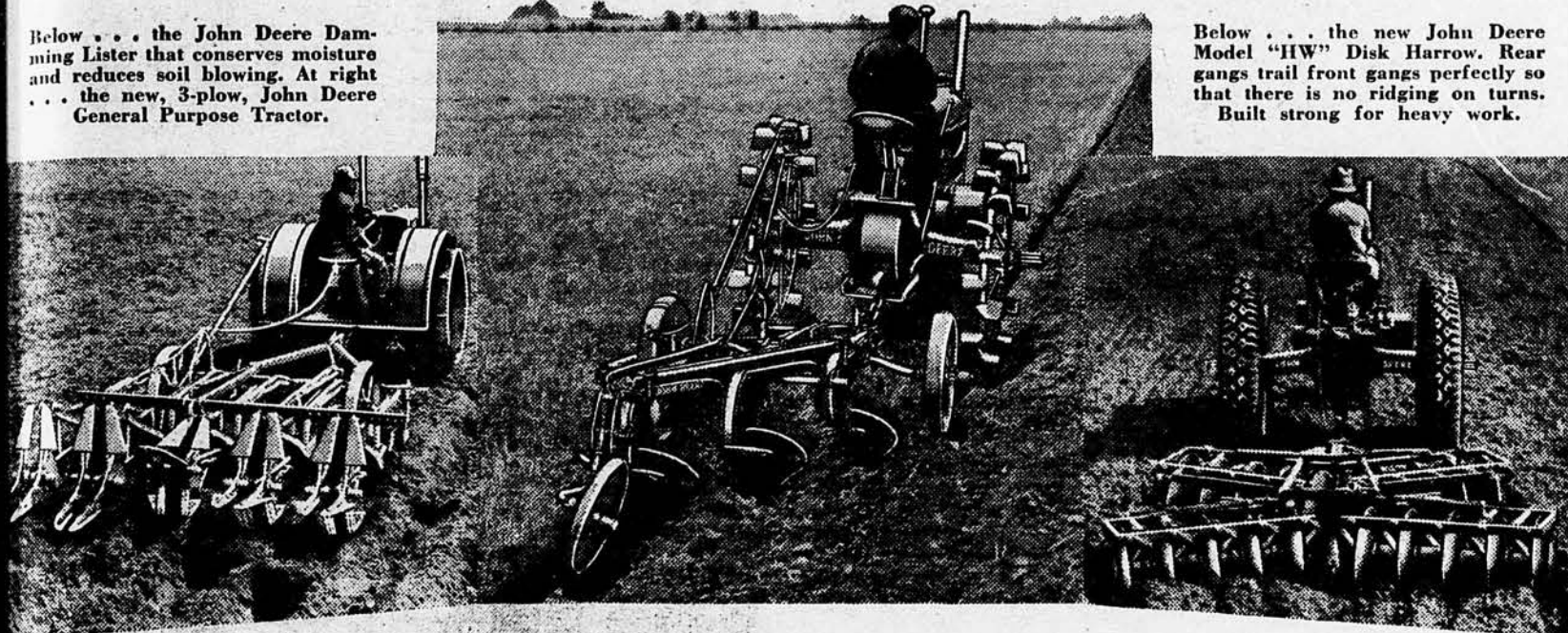
Threshing grain was a problem for the ancients. It was first done by hand, then by trampling with the bare feet. Animals, chiefly oxen, then were used to trample the grain from the hulls. Sometimes they pulled crude sleds over the grain.



The flail was developed during the Middle Ages. After the grain was beaten from the hulls it was separated from the chaff by dropping it in the wind.

...John Deere Invites You...

Below . . . the John Deere Damping Lister that conserves moisture and reduces soil blowing. At right . . . the new, 3-plow, John Deere General Purpose Tractor.



Below . . . the new John Deere Model "HW" Disk Harrow. Rear gangs trail front gangs perfectly so that there is no ridging on turns. Built strong for heavy work.

to see New and Modern Farm Equipment for 1938

A HEARTY WELCOME awaits you at our display at the Wichita Show which is being held at 439 South Wichita Street. Factory experts will be on hand to answer your questions and point out the quality features of the machinery in which you are interested.

See the new John Deere General Purpose Model "G" Tractor that pulls three bottoms under normal conditions . . . the new "HW" Harrow with its many new and exclusive features . . . the new John Deere Damping Lister that saves moisture . . . the new John Deere Straw Walker Thresher . . . new and improved John Deere equipment of all kinds.

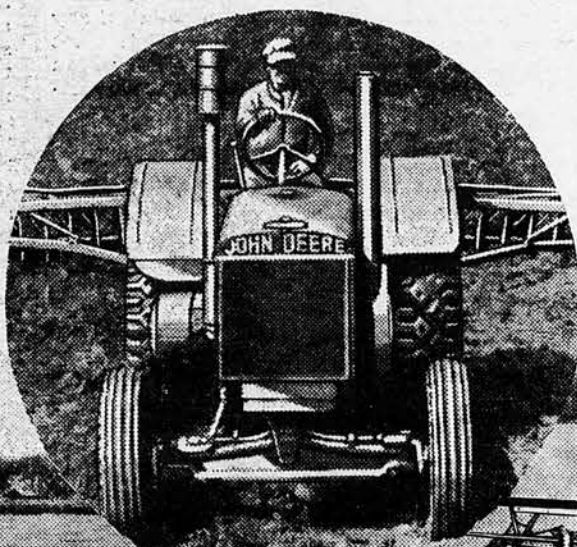
Look over the complete line of John Deere tractors

. . . tractors that pay for themselves through savings in fuel and upkeep expense and by spreading your tractor investment over a longer period of years. Inspect the full line of John Deere combines that do a better job of heading, saving, and cleaning your grain.

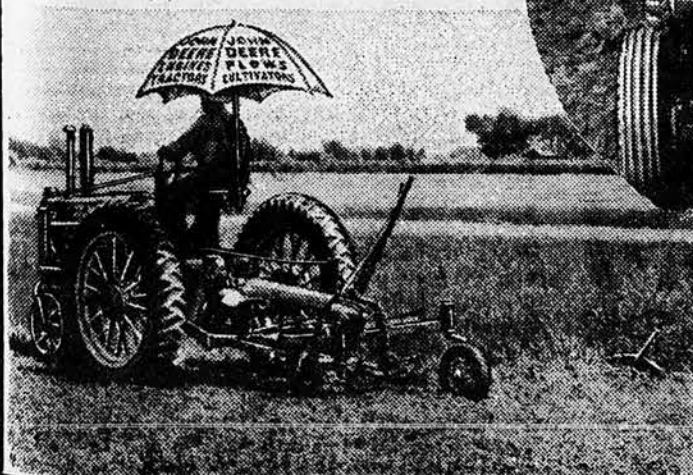
By all means, plan to visit our exhibit. You will learn of new and better ways to farm . . . new ways to cut operating costs . . . proved methods of increasing crop yields . . . and you'll enjoy meeting and talking with your friends. If, for any reason, you can't be with us, a letter or post card will bring free, illustrated literature on the tools in which you are particularly interested.

John Deere Plow Co. Kansas City, Mo.

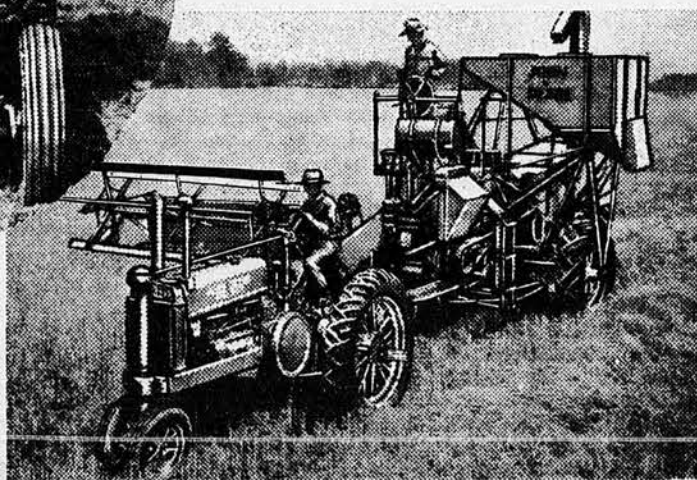
Below—the John Deere Power Mower that cuts from 25 to 35 acres a day, speeds up your harvest. See this mower, and the full line of John Deere hay tools that enable you to put up your hay in the best possible condition, at our exhibit at the Wichita Show.



John Deere Combines are available in 6-foot to 16-foot sizes. They are famous for a better job of saving and cleaning grain. While at the Wichita Show, make it a point to look over the John Deere combine line . . . combines that build up your profit through dependability and good work.



John Deere two-cylinder tractors are available in twelve different models, a size and type for every farm, crop, and purpose.





"The old lady sure was an actress."

A YEAR ago I wrote a story about my first tractor and since that time I have been the target for considerable comment. At times I feel that my mentality and sound judgment are being questioned for having made the purchase of such a machine. Sober thought and reflection lead me to think that perhaps there was something wrong with my mental equipment about that time, and my only alibi lies in the following facts: The tractor which I bought—bad as it was—was about as good as any of that vintage; and when I consider why I bought it, and what it replaced, I am forced to admit that it wasn't such a bad deal. But thereby hangs a tale.

It may be recalled that some 20 years ago there was a bit of a ruckus going on over in Europe which now is referred to as the World War. At the time it was a War to save Democracy, but since then it has developed that it was merely another war after all. In any event, be it what sort of war you may like, it did bring about some rather unique and weird revampings in our economic set-up in this country, and was the cause of a few screwy phrases such as "Raise More Wheat" and "Food Will Win the War," and it brought about the clever and patriotic ideas of Wheatless Days, Meatless Days, Heatless Days and Seatless Days, along with the Gasoline-less Sundays and various other patriotic slogans and catch phrases which were all going to save the universe for future generations.

To encourage the growing of more wheat our government hit on the happy idea of fixing the price of that commodity at \$2.20 a bushel F. O. B., Chicago, and among the suckers who snapped at that bait was the writer. We blessed a far-seeing administration which so boosted the price of our wheat and enabled us all to become wealthy in a single season. The mere fact that wheat was the only item on which the price was so fixed never dawned on us then. If the price of wheat had been allowed to seek its proper level, in comparison with other prices of the things we had to buy, the chances are that we would have been getting \$5.20 a bushel for our wheat.

But even a fixed price of \$2.20 was sufficient to encourage most farmers to plow up their front lawns and cow pastures and raise their patriotic quota of the staff of life. Today we find our government frantically dishing out hard cash to the same farmers if they will only agree not to grow any wheat, and in that manner get some of these front lawns and cow pastures back into grass and out of the eyes of the effete New Yorkers where they have been blowing in the form of dust storms for the last few years.

Like others of my generation, I was born 30 years too soon. I took up the vocation of farming when the government paid a bonus for working instead of for not working. I must admit that it seemed like a good idea to me at the time so off I went to what looked like a quick and sure-fire way to easy wealth.

I landed in a small western town in a section which had been blessed with a bumper wheat crop the year before the price had been raised to \$2.20 and there I let it be known that I was in the market for some land and all the necessary equipment with which to operate it. I was not long in being accommodated.

An old settler who had homesteaded a section near there got to me first and he fixed me up with my land. I say that he fixed me up and I say it advisedly. He certainly did all of that. I never shall forget the way his sweet old wife cried and carried on the day he brought her to the bank to sign the necessary papers which made me monarch of my new domain. She wept as if her heart would break at giving up that farm. One would have thought that I was foreclosing on the place and throwing her out into the cold instead of paying her five prices for it. In later

"Why I Bought a Tractor"

Anything Was Better Than a Locoed Mare—Another Hilarious Adventure of a Farm Machinery Pioneer

By FRANK MECKEL

years I have come to realize that the dear old lady was weeping tears of joy over getting rid of that dump. But at the time I thought I really had driven a sharp bargain and I was too tough to let a few feminine tears cheat me out of it. That old lady surely was an actress.

Having procured the necessary portion of the Good Earth to go ahead with my project I let it be known that I was looking for a good team of horses. I figured that I was far enough away from New England that I need have no fear of horse traders of the David Harum stripe—but apparently there had been quite a migration westward from New England shortly before I landed. A pack of wolves never gathered for the kill with any more zest than did my future neighbors swarm in on me to see that I got fixed up with a team.

As I have said, a war was on at the time and the French and Italians were buying artillery horses up at Fort Keogh and prices were high. Almost any brute that could travel on four legs had been shipped or driven up to the fort and offered to the God of War. The procedure up there was first to get acquainted with the French or Italian officers who were doing the buying. This could most easily be arranged over a bottle of "Hell's Delight" at the old Olive Hotel bar at Miles City. By the time the officers were ready to inspect a bunch of horses they would be so cockeyed that a flock of goats could have answered the purpose as well as a bunch of horses. They followed only one rule and that was that they must always reject 40 per cent of the horses offered for sale that day. The accepted animals were driven into stock cars and hustled east for shipment to Europe and the 40 per cent rejected were driven off across the prairie and then driven back again next day and run thru the mill again with a fresh batch. Eventually all the horses were accepted and shipped to the wars. Two-thirds of them had never had a rope on them before.

IT WAS some little time before the truth began to filter back from France that these American horses were killing more French artillerymen than were the German shells. When the truth did leak out, a new system was inaugurated. When a horse was rejected his right front hoof was branded with a letter R. In case the horse did not have a right front hoof they branded him on some other hoof—but I didn't know of this branding plan at that time. I learned of that later.

I wish that you might have seen some of the animals that were offered to me. Practically every one of them had an R branded on the right front hoof, for may it be said to the credit of these sharpshooters that at least they didn't try to palm off any three-legged horses on me. But they did trot out some remarkable beasts. One chap brought in a span of Indian ponies which he swore roundly would out-

pull any team in the county, and another one wanted to sell me a team composed of an 1,800-pound stallion and a 950-pound mare. The stallion had come west with General Custer in 1876, I do believe.

I finally fell for a team of mares—a long and rangy brown one with just a hint of Clydesdale in her ancestry and a dish-faced gray which had the rear end of a Percheron and the front end of a Cayuse. I was told that the gray was in foal but I couldn't let that deter me since time was short. I put \$400 cash on the line for this pair and then led them around to the hardware store to have them fitted with a set of harness. I may say in passing that the talk about the gray being in foal was a gross exaggeration.

My brown beauty stood quietly by for this operation but the other one must never have seen a horse collar before. She gave two snorts and a couple of



"I landed in a sitting position smack in a patch of cactus pads."

kicks and took off with the snubbing post dragging after her. Some friendly cowpunchers finally caught her for me after several hours and between about 6 of us we got some harness on her and hooked her to the shiny new wagon.

Things went fairly well for a day or two after that. She would pull well enough until the pulling got tough and then she just flew to pieces. I thought she was just a bit nervous and unsettled at the time. She never quit pulling, but she was too enthusiastic about it. When the load gave promise of sticking, something had to give way. It usually was a double-tree or a tracechain or some other piece of equipment. It would have been cheaper if the mare herself had given way, but she always seemed to come thru whole. She understood going straight ahead but turning and backing up hadn't been taught in the school she attended. When I tried turning her at the end of a row she invariably jumped over the tongue and started kicking and plunging until she had freed herself of all the load and harness and then it took four men and a boy to catch her again.

MY FIRST run-in with her was on a hayrake. I was raking sagebrush and noticed that she was getting fidgety and her head was going higher and higher and her eyes rolling in her head at the turns. Finally as I was turning at the end of the field it happened. She got a hind leg over the tongue and started kicking. The first thing to break that time was the tongue itself, and since the double-trees were fastened to the frame of the rake proper and not to the tongue as on a wagon, I had rather a wild ride while it lasted. The broken end of the tongue dug into the ground and the rake would buck up about 6 feet into the air and my face would be full of horses' heels. I had no stomach for falling under a careening dump rake to be disembowelled by the teeth, so at the first opportunity I slid backward off the seat and took a nose dive off the stern of my chariot. In doing so I must have kicked the pedal which engaged the lifting clutch for just as I started down off the seat over the back the rake proper came up and we met half way in the air.

(Continued on Page 32)



"When he did come back, he was ready to talk trade."

Who's Who at Big Wichita Show

By THE EDITORS

AMONG the Wichita exhibitors, Kansas Farmer is especially proud to list here a number of its advertisers, together with a few facts about the character of their exhibits and representatives who will be on hand to welcome all visitors and discuss farming problems.

International Harvester Company, Chicago, Ill. Exhibit spaces in the Forum showing a complete line of farm machinery as well as industrial equipment. In attendance: T. B. Hale, District Manager; Neal Higgins, Ind. Line; A. C. Lindgren, Eng. Dept.; C. C. Gray, Mgr. Hay and Grain Machine Sales; O. F. Scholl, Ass't. Mgr. Hay and Grain Machine Sales; F. H. Harrison, Supt. McCormick Works; C. V. Holman, Mgr. Dairy Equipment Sales, and N. L. Holman, District Rep. Dairy Equipment. W. E. Benton is in charge of the exhibit.

Caterpillar Tractor Company, Peoria, Ill. will exhibit in the Forum. Their exhibition will include mainly industrial products, Diesel Tractors and Diesel Engines. I. J. Howald will be in charge of the exhibit. Officials in attendance: E. R. Galvin, General Sales Manager; C. M. Burdette, Sales Manager-Central Sales Division; A. C. Jenvey, Agricultural Sales Manager.

Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Exhibit space in the Forum. A complete line of power farm equipment and an exhibit of industrial tractors and road building equipment will be displayed. E. G. Hulse, Industrial Manager, will be in charge of the exhibit. In attendance: H. C. Merritt, Vice President; W. A. Roberts, General Sales Manager; Jerry Malmo, K. T. Winslow and E. Abrahamson.

J. I. Case Company, Racine, Wis. Exhibit space in the Forum and on Tractor Row. Showing both industrial and farm machinery. Leon R. Clausen, President; W. L. Clark, Vice President and Ellis Chadwick, Branch Manager, Kansas City branch, in attendance.

Dempster Mill Manufacturing Co., Beatrice, Neb., will exhibit in the Forum. A complete line of pumps, water systems and machinery will be shown. George F. Myers will be in charge of the exhibit. In attendance: Earl Gaffney, Sales Manager, and K. A. Underwood, Manager Kansas City Branch.

Rotary Reaper Company, Kansas City, Mo., will exhibit the Rotary Reaper Combine in the Forum. C. C. Baldwin, President; E. C. Van Valkenburgh, Assistant to the President; G. E. Stanley, Sales, and E. W. Baldwin, Engineer, will attend.

The McPherson Concrete Products Co., McPherson, Kan., will exhibit Tongue Lock Concrete Stave Silo in the Forum. V. C. Anderson, Chester W. Anderson, and Fred H. Dreier will be present.

O. J. Watson Company, Wichita, Kan. Exhibit of Fordson tractors and implements in the Forum. In attendance: O. J. Watson, President and Charles F. Gardner, Secretary-Treasurer, plus officials of the Ford Motor Co., Detroit.

Interlocking Stave Silo Company, Inc., Wichita, Kan., will exhibit silo, cutter, hammer mill in the Forum. B. M. Radcliff, General Manager; Kent

Merry, President, and J. H. Radcliff, Vice President and Sales Manager will be in attendance.

National Tile Silo Company, Kansas City, Mo., will exhibit National Tile Silo in the Forum. Lee J. Talbott, Manager and W. C. Walden, General Agent, expect to attend.

The Dodson Manufacturing Company, Wichita, Kan., will exhibit their products in the Forum. D. W. Dodson, Glenn R. Dodson, Leon A. Dodson, Orville Stanton, of Wichita, and Ted Paulsen, Milwaukee, Wis., will attend the show.

Oliver Farm Equipment Sales Company, Chicago, Ill. The display will be in Tractor Row with a complete tractor and combine display. In attendance: M. S. Tucker, Assistant General Sales Manager; G. A. Dechant, Factory Sales Manager; J. T. Ashton,

Chief Engineer, Battle Creek plant; J. B. Dowd, Branch Manager; L. C. Geelan, Sales Manager, and C. R. Hunt, Assistant Manager of Kansas City Branch.

The Jacobs Wind Electric Company, Inc., Minneapolis, Minn., will exhibit Jacobs Wind Electric plant in the Forum. F. A. Stegeman will be in charge of the exhibit. M. L. Jacobs, of Minneapolis, will attend the show.

Skelly Oil Company, Kansas City, Mo., will exhibit a full line of farm machinery lubricants in the Forum. W. I. Atkin, Vice President; Jess Knowles, Sales Manager; A. E. Taylor, Advertising Manager; H. S. Dickson, Division Manager, and Jess Howard, are officials who expect to attend.

The Massey-Harris Co., Racine, Wis. This exhibit will be on Tractor Row with a complete line of equipment on display. A. Chekla and his assistant, H. F. Sweeney, will attend.

Minneapolis-Moline Power Implement Company, Minneapolis, Minn., will exhibit on Tractor Row. All types of farm equipment will be shown. In

attendance: Bon D. Grussing, Advertising Manager, and Frank Langham, Branch Manager, besides other Minneapolis officials.

Cleveland Tractor Co., Cleveland, Ohio. This company will exhibit several crawler-type tractors in the Forum. Many officials of the company will attend from the home office in Cleveland. Among them will be William Abilgaard, Sales Manager; E. E. Miles and B. T. Eagerton. Others will be J. C. McCorkle, H. C. Herman, L. F. Jones and T. J. Hicklin, the latter in charge of the exhibit.

—KF—

Best Results From Silage

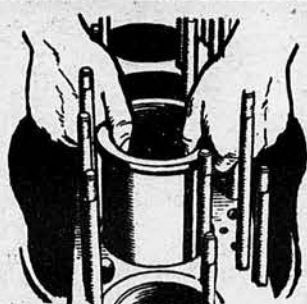
More than 1,200 tons of silage was put up on the Keilhorn Ranch near Cambridge, Cowley county, this fall. After 2 refills and several weeks of settling the silage is still above the top. Mr. Keilhorn has been feeding the silage to steers that were nearly ready for market. Silage is at its best when fed with alfalfa, cottonseed meal, corn, and molasses, as Mr. Keilhorn did it.

SEE and DRIVE the FARMALL 12

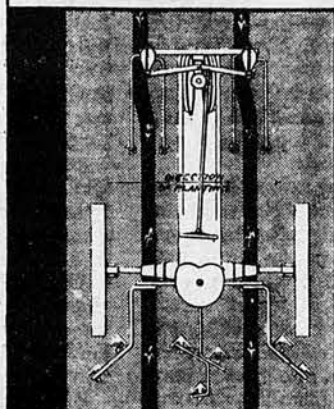


FARMALL 12 \$625
Now Reduced to

with regular steel-wheel equipment. Belt pulley \$4 extra. Same reduction on F-12 with rubber tires.

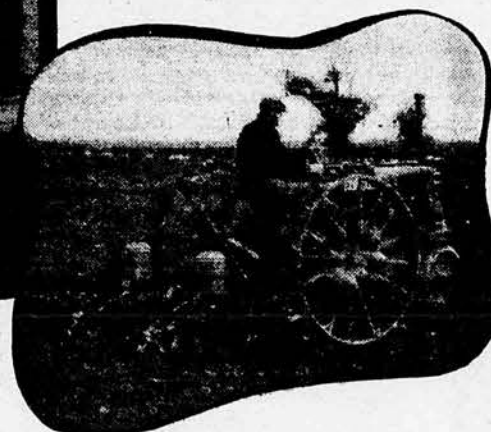


REPLACEABLE CYLINDERS— When the original cylinders become worn, brand new cylinders and pistons—duplicates of the originals—can be quickly and easily installed. The power producing part of the engine is then actually made as good as new.



The Farmall 12 Patented Cultivator Gang Shift permits good work in checkrowed corn at tractor speeds. Think what this feature means to you in closer cultivation, less hills plowed out and time saved. It's an exclusive patented Farmall feature.

**PROVE
F-12 Power,
Performance,
and Economy**



McCormick-Deering Tractors and Farm Machines will be exhibited and demonstrated at the WESTERN TRACTOR AND POWER FARMING EQUIPMENT SHOW at Wichita, February 22 to 25. We invite you to visit the International Harvester Exhibit while attending the show.

• The McCormick-Deering Farmall has behind it more farm testing and more farm approval than any other tractor on the market. When the F-12 was introduced the Farmall idea was already well known. The F-12 brought all of the McCormick-Deering Farmall advantages into a new price field. The Farmall 12 was purchased from the very first by many men who really needed a larger Farmall.

It takes a lot of extra value in a tractor to stand up under such extra demands. And the Farmall 12 stands up! Owners of smaller farms can accept this as positive proof that the Farmall 12 will do all of their power work, day-in and day-out, and ask no favors of any kind.

Each successive year has seen the Farmall 12 improved, its great value generously increased. The Farmall 12 now on display is the best yet.

Ask the nearest McCormick-Deering dealer to show you the Farmall 12 and the Quick-Attachable machines that work with it. Remember, the larger Farmall 20 and Farmall 30 also offer all the genuine Farmall advantages, plus extra power for bigger farms.

INTERNATIONAL HARVESTER COMPANY

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MCCORMICK-DEERING FARMALL 12



"I was walking around in the damp ground yesterday, and got a sore throat!"

In Wild Strawberry Time

A Young Bear Cub's Curiosity Leads to An Amazing Adventure for Pretty Sally

By WILLIAM GERARD CHAPMAN



A she bear with a single cub at her side cast appraising eyes over the sparkling expanse.

The First of Two Parts

THE EARLY morning light washed in a gray wave over the dark green crest of the spruce forest, and shortly the intervals were suffused with shimmering gold as the sun's first beams fell upon the mist curtain that overhung the low-lying ground. Each tiny atom of moisture among the millions in the dew-laden atmosphere reflected the golden tint radiantly, then slowly dimmed and was absorbed by the new warmth that came creeping into the air. As the last curling wisps of vapor dissolved the sunlight swept over the wild meadow, disclosing its rich enameling of wild-flowers and lush green grass. The earth dipped slightly to hold the seeping water of a turbulent stream that flowed nearby.

Emerging from the black wall of trees that rimmed this quiet glade a she bear with a single cub at her side cast appraising eyes over the sparkling expanse. Halting for a moment at the meadow's edge she sniffed the air inquiringly, then shambled thru the wet grass to drink at the pool. The cub's tiny bright eyes snapped with mischievous interest in every object that met his view. He suppressed his exuberance however, for already he knew that quietness and caution were advisable in the open spaces until they were examined thoroly for possible lurking dangers.

The mother bear drank of the clear cool water, and with her morning thirst satisfied quitted the meadow for breakfast. The cub was in the kindergarten stage of schooling and learning to supplement the lessening maternal supply of nourishment with more solid food. With twinkling baby eyes he watched his mother as she sought the roots of Indian turnip and prairie crocus and plowed them up with her snout. The cub sampled them and found the crocus roots eatable, but the pungency of the Indian turnip was rather too biting for his sensitive throat. Anyway, he had breakfasted on more familiar food back in the warm den under an overhanging rock in the heart of the forest, and was not very hungry.

When the roots palled the two moved off toward the stream. Here the old bear sniffed along the water's edge seeking any disabled fish that might have been cast up, and rooted among the stones in the shallows for tadpoles. A scurrying crawfish she hooked up with her claws and drew to the bank for her offspring's edification, watching him with shrewd eyes as he cautiously moved it about with his paw and smelt the strange-appearing thing suspiciously. A nip on his tender muzzle from the tiny pincers sent him back on his haunches with a whimper of astonishment; and the mother, apparently satisfied with this first lesson in the habits of crawfish, crushed it beneath her foot and swallowed the tit bit with smacking satisfaction.

The stream yielded very little food this morning and her hearty appetite impelled her to seek a more bountiful repast. Giving the cub a low guttural com-

mand to follow, she started off across the meadow and into the woods, heading for a chain of burnt hills that lay to the east. On the other side of this low range she knew of certain unused pasture lands where grew a fruit much to her liking.

A part of the way was rough going, and she frequently helped the cub along over the boulder-stream rise of ground, pushing him up with her nose and occasionally cuffing him into action when he hesitated before the obstacles that lay in their path. At length they passed over the crest of the rise, bald of trees save for the sombre gray rampikes that thrust upward out of the undergrowth—stark ghosts of hardwood killed by a forest fire that had swept the ridge many years before. They threaded their way thru these grim sentinel boles, and scrambled down the slope to gain the open ground that lay below.

This was a stretch of stump-land pasture where a settler had once grazed his meagre flocks, but long deserted and now with little likelihood of human intrusion.

As the two descended to the open an enticing fragrance in the air caused the older bear to sniff hungrily and shuffle along at a faster gait. The pleasing aromatic quality that reached her nose arose from a low dense growth that matted the ground—a carpet of wild strawberries, the tiny deep red fruit glowing brilliantly among the half shielding green leaves. Here the rich humus of the ancient forest floor in which they were rooted fed the berries lavishly; and watered by the limpid night dews they developed perfection of flavor quite unknown to the cultivated variety. The early summer sun had ripened them and set the sugar.

THE older bear fell to the feast. She curled her long red tongue around every heavily clustered plant and drew fruit and leaves into her mouth, expelling the coarser leaves and stalks and champing the luscious berries noisily. As she gulped them down she expressed her relish of their spicy sweetness with low grunts and woofs.

The cub watched her with interested eyes. Here was something in the way of food that was new to him, and apparently it was a very desirable food. The mother occasionally ceased her feeding to nudge him while she rumbled low in her throat, evidently to encourage the youngster to imitate her methods. He sniffed at the berries and at last tentatively mouthed them. His sharp little teeth pierced the delicate pulp and he licked the sweet juice from his lips and found it distinctly pleasing. The forest younglings learn rapidly, and soon he was eating with greedy delight. At first he seized the berries with his teeth, but quickly found the proper use of his tongue in gathering the clusters.

He ate until he could hold no more, his skin stretched so tight with his first meal of strawberries that he could scarcely waddle along after his more capacious mother. Finally even her enormous appetite was glutted, and she sought a warm grassy pocket between the roots of a large stump and curled up to bask in the grateful mid-day heat while she digested her meal. The cub sprawled beside her, his little paunch ludicrously distended. She licked away the sticky sweetness of the feast from his soft fur while he alternately dozed and made protesting passes with his paws at her face.

When he had rested long enough to feel the need of renewed activity, his playful sallies ended his mother's sleepy comfort, and she rose and sauntered off across the pasture, the cub following in her footsteps. She knew this region of old and was aware that the small group of farm buildings that lay at the pasture's lower edge had been forsaken by their former human occupants. She had all a bear's curiosity and felt today in a mood to gratify it concerning these peculiar dens that once had harbored the enemy of her kind. Until now she had not succeeded

in getting her courage up to the point of investigating the log structures, but she sensed in their long desolation a promise of safety, and she approached them without misgivings.

No trace of human odor lay around the little abandoned farmstead. She nosed about the cabin and crude pole sheds expectant of discovering something of an eatable nature; but nothing rewarded her keen nostrils save the medley of scents left by porcupines and mice and squirrels that for years had made the place a rendezvous. A red squirrel discovered her presence from his perch on the ridge-pole of the cabin, and ran up and down the moss-grown "scoop" roof chattering wrathful insults at the intruders. The bear eyed him maliciously for a moment, then ignored the insolent little blackguard and continued her explorations.

THE cub at first kept close to his mother's side, ill at ease in these strange surroundings. But gradually youthful curiosity overcame his timidity and he strayed from the protecting presence to do a little investigating on his own account. While he sought to fathom the mystery of some rotting timbers overgrown with weeds that lay in the rear of the cabin, the old bear pursued her vague quest around the out-buildings.

A sudden muffled squalling brought her racing toward the sound, fur bristling along her back and eyes snapping with angry apprehension. The cry was plainly for help, and she was ready to battle any living thing that threatened her offspring. But no marauder was in sight, nor even the cub, for that matter, tho the plaintive squeals still filled the air, sounding strangely unreal but unmistakably his and quite near to her. Puzzled and anxious she sought out his tracks with her nose, but these were so criss-crossed that they only confused her. Her rangings gradually drew the distracted mother closer to the outcry, and at last she knew that it arose from the clump of weeds. Picking her way over the crumbling wood at their roots she came upon a yawning black hole from whence the pitiful summons issued.

The cub had tumbled into an old well, the wooden curb of which lay in decay about its mouth, overgrown with a screening mass of green. It was fortunately dry and so matted at the bottom with litter that the force of his fall was broken, and the fat little body had suffered nothing worse than a severe shaking up. Terror-stricken with the sudden plunge and the quick enveloping blackness he squawled miserably for his mother.

Soon he heard her questioning calls and saw the silhouette of her head against the disk of blue light above him. But her arrival brought only the comfort of her presence; she was impotent to rescue him.

With yearning eyes the mother bear circled the opening, crouching at the brink now and again to look down into the dark hole, whining anxiously and bidding him with low rumblings to try to climb up. The cub whimpered in reply, and strove vainly to find footing up the straight walls. At first she could not see the small black-furred form in the denser blackness of the bottom, but as her trampling about the edge broke down the weeds the light filtered in and made it possible for her to see him. She flattened herself on the ground beside the well and stretched down first one forepaw and then the other in a fruitless attempt to reach the imploring little captive; and once she tentatively backed to the edge to try a descent by the usual bear method. But the crumbling of the earth as she sought for a foothold with her hind feet discouraged her, and she renewed her circling and whining.

Suddenly she lifted her head to a new and startling sound. It was the beat of quick footfalls that came to her ears, and as they drew closer she growled menacingly and bared her teeth in sullen defiance. Whatever it might be it was advancing upon the cabin from the pasture, and dimly she associated the intruder with her cub's imprisonment in the pitfall. This of a certainty was the author of his mishap, and all her dormant ferocity blazed into being as she lurched forward to give battle to the unknown enemy before it could complete its designs. It was coming rapidly nearer and she rushed to the front of the cabin to intercept it. As the en-

(Continued on Page 25)

Fifteen Reasons Why Air Tires Made a Hit With Tractor Owners

By HARRY G. DAVIS
Director of Research, Farm Equipment Institute

FARM machines are riding on air. Perhaps you would say they are going on rubber tires, but you might be wrong in that. There is only 35 per cent, by weight, of rubber in the tread of a tractor or farm machine tire, while the inside of the tire is filled with compressed air. This makes it more correct to say "air" than "rubber" tires, and that farm machines are going on air. And what a change that means.

When the primitive farmer first started to till the soil, he stood on his feet and supplied power to his simple tools with the muscles of his arms and back. Next he fashioned a crude implement, hitched a draft animal to it and plodded along behind it, while he controlled its operations with his hands. Then came the wheel to transport the machine and to control the height and depth of its operations and he found a convenient, if not comfortable, perch where he might ride and save himself the exhaustion that comes from trudging hour after hour in soft soil and scorching heat.

Thus, step by step thru the stretch of the ages, the drudgery of farm work has been reduced. And now modern farmers are going to ride on air. Certainly, this is in line with present day trends.

They Strive to Please

In these times, when it is so easy to combine comfort, convenience and utility, it seems too bad that so many generations of farmers had to endure so many hardships, when it would have been so easy to have avoided many of them. But machinery manufacturers were not to blame. They always were intent upon giving farmers what they wanted. Perhaps it was the old-time reluctance to pay for what were called "fads and frills," no matter how much they would have added to comfort and convenience, that kept such improvements in the background. Older men and women can recall the caustic comments about the first farmer in their community who bought a riding cultivator.

"Too lazy to walk," some said; others declared that "the horses had enough to do pulling the cultivator without hauling him around," while some more facetious ones recalled the remarks of the Indian when he first saw a man riding a bicycle: "White man heap lazy; sits down to walk."

But times have changed. The old Spartan idea that heavy, burdensome toil was a natural part of farm work has given way to a newer philosophy that the best way to do most jobs is the easiest way. Farmers now consider their own convenience and comfort as well as the utilitarian features of the machines they buy. It is this newer philosophy that is bringing about this latest development in farm machines, or putting them on air tires.

Many Took a Chance

When air tires were first offered on tractors about 6 years ago, it took the average farmer about two trips around the field, one on an air-tired tractor and the other on a steel wheeled job, to make up his mind as to which he wanted. His only concern then was what would be the life of the air tires and what would be the annual cost of their upkeep. Despite some doubts on these two points, many were willing to take a chance and thousands of sets were sold the first year. Purchases rapidly increased and in 1935, 14 per cent of all wheel tractors manufactured were equipped with air tires at the factory. The proportion grew to 31 per cent in 1936, and it is estimated that about half of all the wheel tractors manufactured in 1937 rolled out of the factory on air tires.

While early buyers of air-tired tractors made their purchases on faith as to durability and cost of upkeep, their confidence has been justified by actual experience. In 1932, Blosser Brothers, of Kingman county, Kansas, bought an air-tired tractor which is said to have been the first one ever sold. This tractor, with its original tires still in good condition, was on exhibit at the 1937 Wichita Show. By the side of the tractor

was a card showing the amount of work it had done in 5 years. Here is the list:

Machine	Acres
Plow	635
One-way disk	460
Harrow	540
Drill	3,250
Combine	2,220
Spring-tooth harrow	1,830
Double disk	1,800
Lister	240
Middle buster	140
Total	11,115

In addition, the tractor had been used about 695 miles on public highways in going from one farm to another.

Why have air tires on tractors proved so popular with farmers? The American Society of Agricultural Engineers wanted the answer to this question and sent questionnaires to several hundred users of air-tired tractors, asking why they preferred air tires to steel wheels. From replies of actual users, the following 15 reasons have been tabulated:

- (1) Save fuel; (2) do more work; (3) easier riding; (4) easier on tractor; (5) give tractor more power; (6) can drive on improved and paved highways; (7) increase life of tractor; (8) can pull heavier loads; (9) can do more kinds of work; (10) throw less dust about operator; (11) reduce repair bills; (12) pack soil less than steel wheels; (13) reduce vibration; (14) enable operator to do better work, and (15) are better in orchards when working around fruit trees.

One important result which has come from putting air tires on tractors is to make them adaptable to road work, both in moving from farm yard to field and in highway transportation. Tractor manufacturers have increased the gear ratio of their tractors and now most of them will run from 10 to 15 miles an hour, and even more, in high gear, while other manufacturers have started to build wagons and trailers mounted on air wheels to be used for transporting products to and from town.

Following this trend, other machines also are being mounted on air tires. Some of these machines are so designed that the tires are interchangeable, thus permitting the use of the same set on several machines. This reduces the farmer's investment in tires and gives him their benefits at a minimum cost. Machines equipped with rubber tires include sprayers, combines, threshers, hay balers, manure spreaders and corn pickers.



"I'm going to be gone in the pasture all day, so Mom packed my lunch."

Shredder Husks the Corn

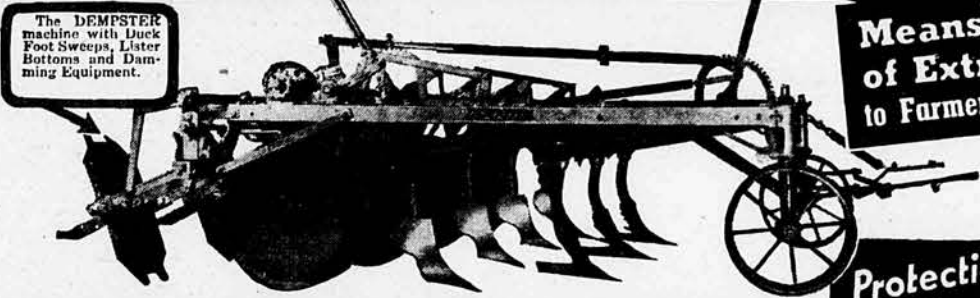
One treatment farmers are giving corn fodder this year, which has not been common for a number of years, is running it thru corn shredders. This husks the ears and delivers them into the wagon, while the stalks and leaves are torn to shreds and usually elevated into the haymow or some dry place. In years when roughage is rather scarce, shredded stover makes an excellent feed if supplemented. Any waste which is left in the mangers is fine for bedding.

A NEW MOISTURE CONSERVATION SYSTEM of WHEAT SMALL GRAIN and ROW CROP FARMING

Greatly Decreases the Weather Gamble!

Means Millions of Extra Dollars to Farmers Who Use it!

The DEMPSTER machine with Duck Foot Sweep, Lister Bottoms and Damming Equipment.



DEMPSTER TILLING, DAMMING and DEEP FURROW SEEDING MACHINE

HERE is today's most modern, most practical, most diversified machine—proved in actual service to be the most efficient, economical money-making machine the wheat farmer can buy! With the DEMPSTER TILLING, DAMMING and DEEP FURROW SEEDING MACHINE, you can follow the new system of farming that means bigger crops and better profits—till your land to hold the valuable moisture in the sub-soil—protect your land against drought, soil-blowing and winter kill.

THIS ONE MACHINE DOES EVERYTHING But Harvest the Crop!

You need but this one machine to do every job, and do it better, from one harvest to the next! The DEMPSTER as shown above does a 3-in-one job right after harvest. It goes right into the stubble field and cultivates the ground, cutting loose the vegetation and stubble—forms the furrows, leaving the trash and weed seed on top where it will not grow—and dams the furrows to catch fall and winter moisture. (Note illustration No. 1 at right). Then later in the season you can, in one operation, level the ridges and prepare an excellent seed bed with a layer of dust mulch plus a layer of trash which prevents soil-blowing. (Note illustration No. 2 at right). Then with the machine as pictured below, you can do an ideal job of deep furrow seeding—depositing the seed in a wide, moist, 6-in. seedbed and uniformly covering it with a layer of moist soil. (Note illustration No. 3 at right.)

Think of the money you save by not having to buy several different machines—and the time, labor and fuel you save in doing several jobs at one time!

ROW CROP With the DEMPSTER you can do an ideal job of seeding sorghum or row crops in an excellently prepared seedbed. You can seed practically all kinds of small grain for either fall or spring planting.

SUMMER FALLOW—The DEMPSTER is ideal for summer fallowing land. Just one operation and the land is set up in the fall of the year. Once over in Spring and later destroys vegetation and leaves summer fallow land ready for seeding.

CONTOUR FARMING—The DEMPSTER is the only tilling and damming machine with independent bottoms. This makes it an ideal machine for contour farming. Because, each bottom working independently, automatically adjusts itself to remain at the correct depth in the ground and continues to till the land uniformly when the machine passes over uneven ground.

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DEMPSTER MILL MFG. CO., 719 South Sixth St., BEATRICE, NEBRASKA

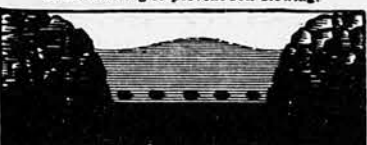
Protection Against SOIL BLOWING WINTER KILL and DROUGHTS!



(A) Trash in top of ridge. (B) Dammed furrow to catch and hold moisture.



(A) Ridges leveled. (B) Layer of dust mulch. (C) Trash covering to prevent soil-blowing.



Seed deposited in wide 6-in. moist seed bed and covered with layer of moist soil.

(Below) The DEMPSTER ready for seeding—with seven 5-in. Furrow Openers, Packer Wheels and Seed Box.



(38-12)

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These Dos and Don'ts of Tractor Care Have Been Farm Proved

By C. N. HINKLE

WELL do I remember the afternoon in early spring, when the quietness of the Western plains was interrupted by the bang! bang! sound of an approaching one-cylinder tractor.

I had just returned from school, and thinking the tractor was going to pass me up, on the section line a half mile north, I ran to corner to watch it go by. I was thrilled when I discovered the operator of the tractor was our neighbor. He gave me a ride home.

This "old-timer" did a pretty good job of plowing, when the neighbor could get it to run. But a large part of his time was spent in trying to start the tractor and driving around over the country after repairs.

Several years later I obtained my first job of running a tractor on a threshing outfit. On this model, every time the engine was stopped it was necessary to unbelt the tractor before it could be cranked. On the first job of threshing we had considerable trouble with the tractor overheating. There was much discussion among the farmers about this and the tractor got the blame. When an expert arrived, he found that the threshing machine feeder governor was adjusted so excessive speeds were required to keep the feeder running. When the governor was readjusted, so the separator could be driven at a slower speed, our heating troubles were over.

Warming Up Essential

Improper adjustment and operation still are the causes of most difficulties which result in tractor complaints.

A very common error often made by tractor operators is that of putting the tractor under load before it has had sufficient time to warm up. All tractors, regardless of make or fuel being used, should be started on gasoline and allowed to run at about half engine speed, with the radiator covered, until the water in the cooling system reaches proper operating temperature. The water in the radiator should be near the boiling point before turning on a heavy fuel, or the incoming fuel charge which has been vaporized in the intake manifold will condense when it strikes the cool cylinder wall and be scraped into the crankcase. This will wash carbon and soot into the crankcase and also dilute the oil. Many of the newer tractors are equipped with radiator shutters and temperature gauges for controlling the operating temperature of the cooling water. Such equipment will be a big help in eliminating the wide variations of temperatures often encountered on a cool windy day, when going with and against the wind.

Diluted Oil Over-Emphasized

Altho diluting the crankcase oil with unburned fuel is undesirable, it is doubtful whether it is as detrimental as we used to think. Several surveys conducted by professors and tractor builders show that there is virtually no difference in repair costs when tractors have been using a heavy fuel as compared to those which have been using gasoline. A study in Canada to determine the cause of excessive wear on tractors showed that a very rapid rate of wear took place during the warming up period. The engineers who were conducting this test stated that the rapid wear in their territory was due to lack of lubrication during the warming up period rather than to diluted oil.

Many farmers who own two-fuel tractors often ask the question of which fuel should be used in a tractor. The choice of fuel for tractors depends primarily upon the design of the tractor and on other factors such as operating loads, fuel prices, general economic conditions, convenience and tax exemptions. Economy is the principal reason for using a heavy fuel in the two-fuel tractor. Tests show that a two-fuel tractor on the same load will use about the same number of pounds of each fuel an hour. By using a heavier type fuel, the farmer will be able to buy his fuel at a lower price and as the heavy fuel weighs more, it will go farther to the gallon.

Fuel consumption tests conducted

on three two-fuel, general-purpose tractors, show that the fuel cost of plowing an acre of ground when using third grade gasoline was 21.8 cents an acre. The gasoline costs 12.2 cents a gallon. The cost of plowing an acre when using tractor fuel was 11.7 cents and the fuel cost 8 cents a gallon. By using tractor fuel in these two-fuel tractors, it was possible to save 10.1 cents an acre when plowing. A special attempt was made to burn each fuel most efficiently during the test. Whether this fuel saving is enough to offset such disadvantages as a special fuel for starting, less flexibility when using a heavy fuel is a problem that the farmer will have to decide for himself.

Most of the older model tractors were especially designed for burning kerosene. To eliminate the "fuel ping-pong" water injection was used. The first time I drove one of these old water injection tractors, I soon found out that you couldn't eliminate all the knock and still get maximum power out of the motor. I had the throttle wide open and the water valve adjusted, so that the tractor wasn't "pinging" but my uncle was standing on the separator motioning for me to open old "Kerosene Annie" up and give him more power. It was necessary to partially close the water valve before more power could be obtained. One of the biggest troubles encountered when using water injection comes when you try to start the tractor after forgetting to close the water valve.

Fuels Higher in Octane

Today special tractor fuels are much higher in octane or "anti-knock" qualities than kerosene, and less water is required to eliminate the knocking. On many of the newer two-fuel tractors, water injection has been eliminated. For best performance in these tractors a good grade, high octane tractor fuel should be used. A light straw colored fuel, usually indicates a "cracked" or higher octane fuel.

Whenever a heavy type fuel is being used, the heat adjustment on the manifold should be set in the hot position. Most tractors have these adjustments marked, but if there is any doubt as to the markings, move the manifold damper and listen to the sound of the exhaust. The setting which gives a muffled sound is the proper adjustment for burning the heavier fuels. To obtain additional heat on the intake manifold, and prevent the fan blast of air from striking the front part of the manifold, some manufacturers are supplying special tin shields. Some farmers have found that in their tractors they can improve the performance when using a heavy fuel by covering the intake manifold with an old piece of tin.

Carburetor Adjustments for Loads

The results of more than 500 field tests, conducted during the past year, show that the average tractor carburetor is adjusted rich. No doubt this rich adjustment is the result of put-

Facts You Will Use

Field tested facts on tractor servicing and operation, presented in this article by C. N. Hinkle, will be worth money to you every day you operate your tractor. Mr. Hinkle was reared on the Western plains of Kansas and spent the early part of his life in farming and operating power equipment. He received his B. S. degree in agricultural engineering at Kansas State College, and his M. S. degree in agriculture at Purdue University. He spent 7 years teaching motors and machinery in a Midwestern college and now is tractor representative for the technical department of the Standard Oil Company. You will wish to save this issue for handy reference.



C. N. Hinkle

the excess washing liquid and allowed it to stand for a few minutes so that the fuel would evaporate and drain. The element then was dipped in new crankcase oil. When properly taken care of this air cleaner did a good job of protecting the motor, but when allowed to become covered with dust would cause the motor to smoke.

On one of the university farms a tractor which was equipped with one of these oil soaked fibre moss type cleaners wore out after about 400 hours operation. In determining the cause of the rapid wear, it was discovered that the operator periodically had washed the element with kerosene, but had failed to saturate it with oil. Thus, the lack of an oil film had rendered the air cleaner ineffective and caused the motor to wear rapidly.

The oil bath type cleaner now is being used as standard equipment on virtually all the later model tractors. This cleaner requires less servicing than the oil soaked, fibre moss type and is very efficient if the proper grade of oil is used.

It is necessary to use a light oil in this type air cleaner or the incoming

air will not atomize the oil and the dust particles will not be covered with an oil mist. The oil level should be kept at the proper height and in cold weather it is very important that an oil suitable for prevailing temperatures be used. A heavy oil sometimes causes a restriction in the intake and chokes the motor. It often is possible to correct many dilution complaints on motor oil by putting the proper grade of oil in the air cleaner.

New Oil Won't Thicken

In general, it is recommended that the oil be changed in this type air cleaner after about three-eighths to one-half inch of dirt has collected in the oil reservoir. By using new oil, the farmer will obtain the proper viscosity oil and there will be less chance of the oil thickening due to the air carrying off the diluent which might be present in a used oil.

A simple method of testing the efficiency of an air cleaner is to disconnect the air cleaner from the carburetor and rub a white cloth on the inside of the intake. If any appreciable

amount of dirt is present, it is an indication that the cleaner is not operating properly or the dirt is entering between the carburetor and the air cleaner.

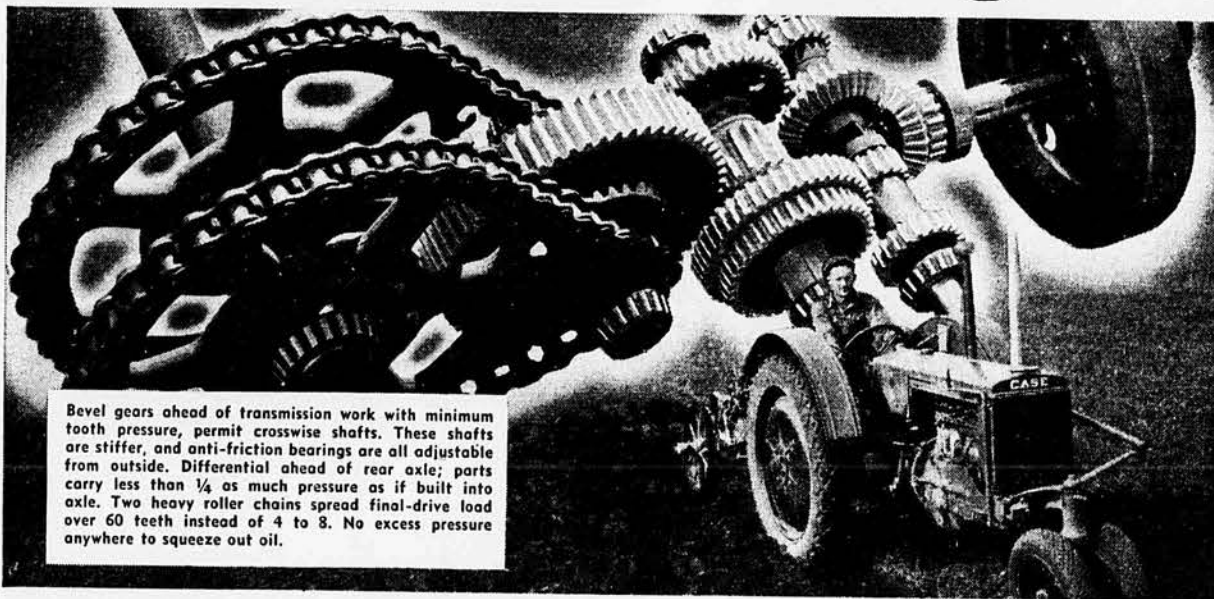
A very important item in the life of the tractor is that of proper lubrication. The cost of good oil amounts to about 8 per cent of the total operating costs but if neglected, may result in repair costs many times this figure. Users of lubricating oils have no simple means of telling the quality of an oil. They must depend on a reliable company to supply a good product. Tractor builders realize the importance of using a good motor oil in their equipment. They advise the operator to purchase his oil from a reliable company and to beware of "fly by night" oil dealers who make amazing claims, give guarantees and cut prices in an endeavor to pan off an inferior product on an unsuspecting customer.

Failure of an oil to perform its duties of separating the wearing parts, sealing the pistons and carrying off the heat, will result in excessive friction, rapid wear, and loss of power.

(Continued on Page 29)

See this SECRET of LOW POWER COST

At the Wichita Power Farming Show



Bevel gears ahead of transmission work with minimum tooth pressure, permit crosswise shafts. These shafts are stiffer, and anti-friction bearings are all adjustable from outside. Differential ahead of rear axle; parts carry less than 1/4 as much pressure as if built into axle. Two heavy roller chains spread final-drive load over 60 teeth instead of 4 to 8. No excess pressure anywhere to squeeze out oil.

"I don't see where it gets all its power," is a common saying among Case tractor owners. One of the sources of superior performance is shown above—the Case power-saving transmission. When you come to the Power Farming Show at Wichita, call at the Case exhibit and see this transmission cut away to reveal its secrets . . . how it gets more done because of the extra power it puts to work . . . why normally it runs for years and years with never a penny for repairs.

Or let your own Case dealer point out these features on his life-size display . . . no divided shafts . . . only three gear contacts in any speed . . . and the other power-saving features mentioned above. Ask him, too, about the handier, safer, smoother-working, longer-lived clutch . . . the many engine features that enable you to take your choice of low-cost fuels—any standardized tractor fuel from distillates to gasoline.

See the latest Case implements to cut the cost of farming . . . the Case Centennial tractor plow they're all talking about because it does things no plow ever did before . . . the heavy-duty power-lift wheatland

plows with higher clearance, flexible cylinder, and positive rotation of blades . . . the Case wide-type disk harrows that cut 14 to 21 feet, yet go through ordinary gates. Be sure to see the new "TO" turnover plow that gives you two-way operation with one-way compactness, convenience, and performance . . . that has automatic levelling and that raises and lowers without revolving the bottoms.

Don't fail to notice the Case basin lister . . . how it makes the dams as high as the ridges, and mulches the sides of the furrow with loose soil for better control of weeds and conservation of moisture. See the Case oil-bath Hi-Lift mower with its superior simplicity, rigidity and balance that make it the lightest-running mower . . . the Case oil-bath side delivery rake with only one pair of gears . . . the Case light-draft, leaf-saving loaders . . . and the Case pick-up baler, the successful windrow baling machine.

NEW CASE COMBINE

Ask your dealer about this—the latest among Case's many models of complete-job combines, designed especially for Kansas conditions. Remember to call on us whenever you are in Wichita.

J. I. CASE COMPANY . . . 400 S. WICHITA ST.

It costs LESS to farm with

CASE

ing the tractor under load before it has been properly warmed up. This would require a rich carburetor adjustment to keep the tractor from stalling. It is not necessary or recommended that the operator keep tinkering with the carburetor, but it is advisable to adjust the carburetor for the various loads and fuels being used. To adjust the carburetor on a tractor, the tractor should be thoroughly warmed up and then put under load. The load or high speed adjustment should be screwed down until the tractor misses. This indicates that the mixture is too lean so that the needle valve should be opened until the tractor picks up the load and runs smoothly. The vibration in farm tractors often causes the float needle valve to wear in the seat. This allows the fuel to raise to a greater height in the carburetor bowl before it is shut off by the float. Tractor complaints of smoking and uneven operation often can be corrected by adjusting the fuel level in the carburetor bowl.

Other common carburetor faults are excessive wearing of choke valves and throttle valve bearings. This allows dirty air to enter the intake manifold of the engine around the worn part without going thru the air cleaner. Many tractor operators fail to have these leaks fixed and their tractors will "inhale" enough dirt in a few weeks operation to wear out the top piston rings, pistons, intake valve guides and often damage the bearings.

Air Cleaners Guard Service

Many complaints of faulty lubrication and poor fuel can be traced to inefficient or neglected air cleaners. One of the principal reasons why many of the old tractors which were used in the dust areas of the West were out so soon was that they were not equipped with efficient air cleaners. I know from my experience with an old tractor which I owned that what I once thought was faulty lubrication was nothing more than an excessive amount of dirt getting past an inefficient air cleaner. It was a common practice for us to tighten the rods every 2 weeks and completely overhaul the motor every 60 days. In discussing these experiences with my students in Indiana, I found that some owned the same model tractor and were having very good success with it. The principal reason for their success was that they were operating their tractors under very clean conditions while I was operating in a cloud of dust. This excessively dusty condition had caused the rapid wear which took place in my tractor.

In many cases where a tractor is being operated under extremely dusty conditions, much trouble can be avoided by extending the intake pipe to a greater height. Many of the older tractors were equipped with long intake pipes, but in operation these pipes were broken off and never replaced. Thus the reason why one tractor would wear more than another often was due to the location of the intake manifold. The last tractor which I owned, on the farm, was equipped with an oil-soaked fibre moss type air cleaner. This air cleaner required servicing every half day or oftener, depending upon the operating conditions. To clean this element we removed it and washed it in gasoline, then swung the element vigorously so as to throw off

Western Power Show Exhibitors

THE following is a list of manufacturers scheduled to exhibit at the 35th Annual Western Tractor & Power Farm Equipment Show in Wichita, February 22-25:

Allis-Chalmers Mfg. Co., Milwaukee, Wis.
Avery Farm Machinery, Peoria, Ill.
Babson Bros. Co., Kansas City, Mo.
The Barber Co., Inc., Philadelphia, Pa.
Barlow & Seelig Mfg. Co., Ripon, Wis.
Blood Bros. Machine Co., Allegan, Mich.
Borbein, Young & Co., Wichita, Kan.
J. I. Case Co., Racine, Wis.
Caterpillar Tractor Co., Peoria, Ill.
Columbian Steel Tank Co., Kansas City, Mo.
Cowie Electric Co., Wichita, Kan.
Cyclone Air Cleaner Co., Portland, Ore.
Delco-Remy Division, General Motors Corp., Anderson, Ind.
Dempster Mill Mfg. Co., Beatrice, Neb.
Denny Road Machine Co., Wichita, Kan.
Dodson Mfg. Co., Wichita, Kan.
Eisemann Magneto Co., New York, N. Y.
E. D. Etnyre & Co., Oregon, Ill.
Fairbanks, Morse & Co., Beloit, Wis.

The Fafnir Bearing Co., New Britain, Conn.
Ford Motor Co., Detroit, Mich.
French & Hecht, Inc., Davenport, Ia.
The Galion Iron Works Mfg. Co., Kansas City, Mo.
Gar Wood Industries, Inc., Detroit, Mich.
General Distributing Co., Inc., Newton, Kan.
Hercules Motor Corp., Canton, Ohio.
Interlocking Stave Silo Co., Inc., Wichita, Kan.
International Harvester Co., Chicago, Ill.
Jacobs Wind Electric Co., Minnesota, Minn.
Johnson Bros. Auto Sup. Co., Wichita, Kan.
Laclede Steel Co., St. Louis, Mo.
Lincoln Engineering Co., St. Louis, Mo.
W. C. Lipe, Inc., Syracuse, N. Y.
Massey-Harris Co., Racine, Wis.
McPherson Concrete Products Co., McPherson, Kan.
Mid-Continent Butane Equip. Co., Wichita, Kan.
Minneapolis-Moline Power Implement Co., Minneapolis, Minn.
Murdoch Electric Co., Wichita, Kan.
National Tile Silo Co., Kansas City, Mo.
Northfield Iron Co., Northfield, Minn.

New Departure Division, General Motors Corp., Bristol, Conn.
Oliver Farm Equipment Sales, Chicago, Ill.
Papec Machine Co., Shortsville, N. Y.
Victor L. Phillips Co., Kansas City, Mo.
Productive Equip. Corp., Chicago, Ill.
W. A. Riddell Corp., Bucyrus, Ohio.
Rotary Reaper Co., Kansas City, Mo.
S. S. Sales Co., Wichita, Kan.
Scintilla Magneto Co., Inc., Sidney, N. Y.
Sears Roebuck & Co., Chicago, Ill.
Shaw Mfg. Co., Galesburg, Kan.
Sheldon Tractor Filler Co., Cunningham, Kan.
Sibbitt Iron & Foundry Co., Wichita, Kan.
Sinclair Refining Co., Tulsa, Okla.
Skelly Oil, Kansas City, Mo.
Spicer Mfg. Corp., Toledo, Ohio.
Stewart-Warner-Alemite Co., Chicago, Ill.
Stowe Hdwe. & Sup. Co., Kansas City, Mo.
Timken Roller Bearing Co., New Britain, Conn.
Truck Parts & Equip. Co., Wichita, Kan.
Universal Motors Oils Co., Wichita, Kan.
O. J. Watson Co., Wichita, Kan.
Wentz Equipment Co., Topeka, Kan.
Wichita Pump & Supply Co., Wichita, Kan.
Zenith Carburetor Co., Detroit, Mich.

Until Dinner Is Ready—

By THE EDITORS

Bachelor Roundup: A young widow of Dodge City suggests to the mayor that he round up the eligible bachelors of the city and start them writing to the widows, 9 of them, in her block.

Dog's Life: Frank Dehart, 18-year-old Wichita boy, plunged into the icy Arkansas River to rescue a terrier dog that had broken thru the ice. The dog's owner was little 4-year-old Donnie Carpenter.

Nut Explosion: A coconut blew up to startle Mrs. John Bourget, Augusta. The explosion apparently was caused by gases formed from the fermenting coconut milk.

War Mistake: Many wars may be a mistake but Ralph E. Baker, Parsons, claims he started the battle of San Juan Hill during the Spanish-American war by mistake. He was a substitute bugler and mistook a general's nod and blew the order to charge.

Thank You Marm: A Pittsburg man fell and dislocated his shoulder. A police patrol that was rushing him to a hospital hit a hole in the street and bounced him against the roof. The bump put his shoulder back in place.

Servant Snub: The "Big Apple" may be the dance craze of the nation but the butlers and maids of Park Avenue and Long Island in New York think it undignified. They refused to dance it at the fifth annual butler's ball.

Big Job: After working 12 years on a new dictionary, which will include the meanings of American words, two Chicago men have reached the word "clam."

Hat Hunting: R. M. Myers, Marysville, a car dealer, was given a good race by his hat recently. The wind blew his hat off in the country and he caught it only after a mile sprint.

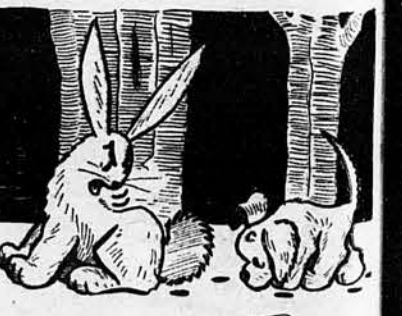
Hitchhiking Pussy: A Chicago cat that wanted to see the world came to Kansas on a Santa Fe fast train. It was found perched on a battery box under a Pullman and despite efforts of railroad men stayed there until the train reached Newton.

Romance Crash: America's famous "Honeymoon Bridge" over the gorge at Niagara Falls crashed recently when the worst ice jam in years weakened its foundations.

Cash Cupid: A probate court judge of Dodge City insists on cash for marriages. Early one Sunday morning a prospective groom wanted to know if he could pay his fee on the basis of 50 cents down and the rest in weekly payments. "Nothing doing, cupid is cash," said the judge.

Busy Editor: The newly elected editor of the student newspaper at the University of Kansas at Lawrence, Tom Ellis, also carried his own paper route. This is one of his jobs to help him earn his way thru college.

Student Collectors: College students have a habit of collecting souvenirs, according to Emporia police, who raided a men's dormitory and a fraternity house. Numerous signs, including "Beware of the Dog," and "No Fishing," and street markers and signs from oil stations were found.



"Only a pup? Say listen, kid! Don't be scaring me like that, I thought somebody was on my trail!"

See SKELLY'S MINIATURE REFINERY AND OIL FIELD DISPLAY at



Wichita KANSAS

**FEB. 22
23 - 24 - 25**

SKELLY OIL COMPANY

A Kansas Refinery

Using Kansas Crude

See the farm lubricant display



State Champions Are Crowned at Another Big Farm and Home Week

ANNOUNCEMENTS of wide interest to Kansas farm people were made at Farm and Home Week this year. These added to the full week of valuable farm information, for which Kansas farmers go to Manhattan in ever increasing numbers. Many farm men and women have attended Farm and Home Week regularly for years, and every session is a continuation of their education along latest lines of agriculture and home management.

The 1937 Kansas beef production winners were announced Thursday by J. J. Moxley, beef specialist in charge of the awards. T. I. Mudd and Sons, of Gorman, Russell county, won first place. Their 42 creep-fed Hereford calves weighed 818 pounds at 345 days old. They sold for \$14.86 a hundred and netted \$121.67 apiece. This is a fancy income from 42 calves less than a year old. The Mudds were the 1935 winners in this contest.

Second place went to Glen L. Bloom, of Medicine Lodge, Barber county. He sold 23 head of creep-fed Hereford calves, weighing 582 pounds at 261 days old, and netting \$49.47. They brought \$8.50 a hundred.

R. D. McCallum, Matfield Green, Chase county, raised 54 Hereford calves which weighed 493 pounds at 19 days old, to win third prize. Fourth place went to John R. Wright, Belvidere, Kiowa county, on 11 creep-fed Hereford calves, weighing 487 pounds at the same age as Mr. McCallum's calves.

Fifth prize was awarded to Harlan Coover, of Sylvan Grove, Lincoln county, who raised 8 Hereford calves to a weight of 550 pounds at 239 days old. His management methods were considered ideal, altho the number of calves was small.

Poultry Winners Announced

Five poultry champions were crowned on Tuesday, annual poultry day, by the Kansas Poultry Improvement Association. These were announced by M. A. Eaton and E. R. Halbrook, extension poultrymen. Winners in the certified flock group were Mr. and Mrs. Elmo J. Mahoney, Dorrance, Russell county, widely known breeders of White Leghorns. They kept 207 birds in 1937.

Poultry champions of the approved flock group were Mr. and Mrs. E. J. Hall, Clay Center, Clay county. They won on 325 White Leghorns. Management, production and cost of production were the important considerations in making prize selections.

A state turkey champion was chosen, and this prize also was shared by a married couple, Mr. and Mrs. H. E. Freeman, Hamilton, Greenwood county, who have been active in co-operative turkey marketing work and raise Bronze turkeys.

Poultry champions are selected annually for brooding and for management. The 1937 brooding winners were Mr. and Mrs. M. E. Rohrer, Abilene, Dickinson county. They kept 518 White Leghorns. The management champions were Mr. and Mrs. J. H. Cooling, Healy, Lane county. They had a 1937 flock of 35 White Leghorns.

The title of Premier Seed Grower was awarded Arnold C. Claassen, Whitewater, Butler county, and Herman L. Cudney, Trousdale, Edwards county, when announcement of their

selection was made Thursday evening by L. E. Hawkins, agricultural commissioner of the Kansas City Chamber of Commerce. Supervision of the Premier Seed Grower award is in the hands of the Kansas Crop Improvement Association, Kansas State College, the State Board of Agriculture, and the K. C. Chamber of Commerce.

Arnold Claassen is the second member of the Claassen Brothers' partnership to receive the award. Walter Claassen was selected as Premier Seed Grower in 1935. The Claassen Brothers operate some 1,400 acres in Butler county. Altho Arnold always quickly assigns full credit to Walter, the older of the partners, the success of their farm business unquestionably is due to the constant harmony and co-operation with which they and a third brother-partner, Herbert, work.

The Claassen Brothers specialize in the production of certified Kanota oats but they also grow Atlas sorgho, Kansas Common alfalfa, Korean lespedeza, Sweet clover, Linota flax and Tenmarq wheat.

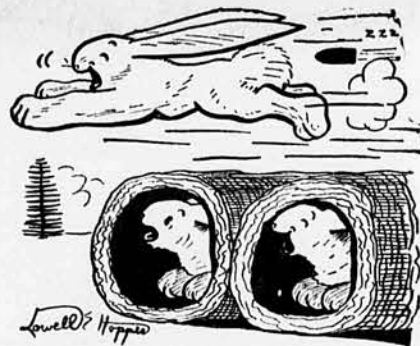
The "Golden Rule Farm" was established by Mr. Claassen's father in 1890. Accurate production records kept constantly since that time reveal that nearly 7,000 acres of wheat have been grown; the average annual yield has been more than 20 bushels an acre.

Herman L. Cudney owns and operates 552 acres in Edwards county. Altho he specializes in production of certified Tenmarq wheat seed, he also grows Kansas Common alfalfa, Sudan grass and has developed his own strain of Kansas Sunflower corn.

—KF—

Double Duty Land

Sudan grass and wheat did double duty for W. R. Keasling, Winfield, on 12 acres of land. First he harvested 25 bushels of wheat to the acre, and then after seeding Sudan grass, got more than a ton of hay to the acre. The hay



"There goes Speedy again! He has more fun running away from bullets during hunting season!"

will be used for sheep feed this winter. With $\frac{1}{4}$ pound of cottonseed meal a day, it should make a very good roughage. However, W. J. Daly, county agent of Cowley, suggests that a pound of ground limestone daily should be fed to 45 ewes receiving this kind of a ration for a very long period.

THE THRIFT CARRIERS FOR THE NATION



NEW 1938 CHEVROLET TRUCKS



GOOD NEWS FOR FARMERS . . .

For 1938, Chevrolet announces the most complete line of motor trucks in Chevrolet history—a range of chassis and bodies to suit every job on the farm. Chevrolet offers you four chassis models ($\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{2}$ tons) and a wide variety of Chevrolet-built bodies designed particularly to fit the needs of farm use. Let your Chevrolet dealer show you the full range of sizes and types. Among them you will find a Chevrolet truck suited to your needs.

CHEVROLET MOTOR DIVISION, General Motors Sales Corporation, DETROIT, MICHIGAN



Don't worry about it, Tim—we all make mistakes."



A NEW 122-inch wheelbase unit has been added to the Ford line of trucks and commercial cars—to bring Ford V-8 economy to loads in the one-ton range. It is available with either the 60 or 85 hp. V-8 engine and comes in three different body types—Stake, Panel and Express.

For contract hauling, the new Ford V-8 134-inch and 157-inch wheelbase trucks offer maximum performance and overall economy. These units are powered with the 85-hp. engine, now in its seventh successful year. Brakes are larger, quicker stopping. Steering is easier. Construction is stronger in vital parts. 7.50-20 dual tire and wheel equipment is available at slight extra cost.

For loads lighter than those in the one-ton range, the new 112-inch wheelbase commercial cars—with a choice of either the 85 or 60 hp. V-8 engine—do the job with unusual economy.

The 1938 Ford V-8 Trucks are the best looking, most dependable and most economical in all Ford history.

Make an "on-the-job" test and prove for yourself how they cut hauling costs in hard farm service.



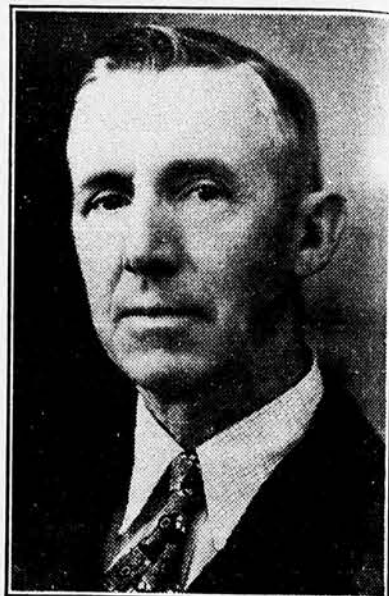
Master Farmers of 1937 Honored At Farm and Home Week Banquet

By THE EDITORS

WE PRESENT the 1937 class of Kansas Master Farmers, introduced at the achievement banquet Friday evening, Farm and Home Week, at Manhattan. There are countless Master Farmers in Kansas. To a degree every man, who with the help of his family, has achieved success in farming, is a master farmer.

Kansas Farmer selects 5 Master Farmers every year. They are presented as examples of the ideal farmer. With the aid of their families these men have achieved outstanding success. The Master Farmer award is an accepted incentive to better farming and farm living.

The 1937 selections are confined to the more favored sections of the state from a weather standpoint. The committee composed of J. C. Mohler, sec-



L. A. Hoop, Fowler

retary member of the Kansas Master Farm Homemakers, a project now sponsored by Kansas Farmer, and similar to the Master Farmer movement. The eldest child, Ellen, is a college graduate and her 3 brothers are making excellent progress. Mr. Brownlee is a native Kansan, who owns 1,100

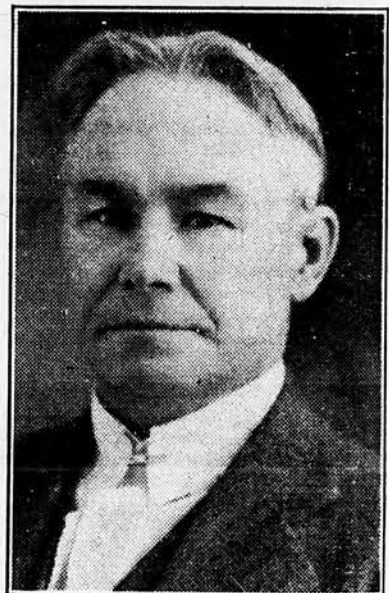


A. L. Criger, Howard

retary of the State Board of Agriculture, Topeka; L. E. Call, dean of agriculture at Kansas State College; and W. H. Burke, Little River, chairman of the State Board of Administration, felt that fair selections could not be made from sections of the state where crops had been near failures, until such time as crop returns were normal again. There were some fine examples of master farming ability from these counties, but farming activities had been so hampered for several years that the committee felt it could not justifiably make selections.

Considering the names of the new Master Farmers in alphabetical order, we have H. L. Brownlee, Sylvia, Reno county; A. L. Criger, Howard, Elk county; L. A. Hoop, Fowler, Meade county; A. T. Hoover, Detroit, Dickinson county; Frank L. Young, Cheney, Kingman county.

Mr. and Mrs. Brownlee have 4 children. Mrs. Brownlee has been a promi-



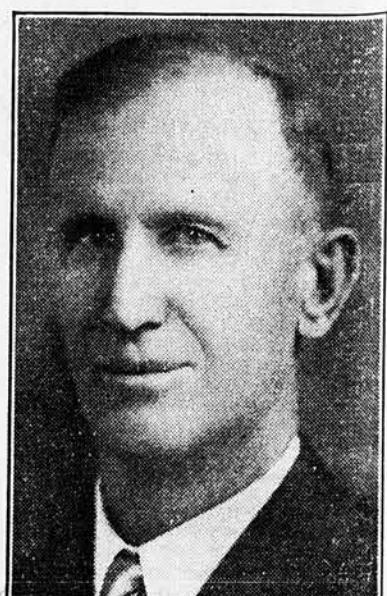
A. T. Hoover, Detroit

acres of farm land. This is located partly in Reno and partly in Meade counties. Wheat is the primary grain crop, and raising good Hereford calves has been the best paying livestock project.

The Brownlee family stands high in



Frank L. Young, Cheney



H. L. Brownlee, Sylvia

estimation of neighbors and acquaintances. Mr. and Mrs. Brownlee are active in community affairs and their efforts to a wide range of useful service. At the same time they have been successful as farmers and have a comfortable and beautiful home.

Mr. and Mrs. Criger live on a ranch in Elk county, which extends over 100 acres and is 50 per cent in cultivated land. The ranch is operated as a livestock plant and many head of young cattle and hogs are raised and fed in good years and bad. All cultivated lands are inclosed by netting fence and the business is conducted under the close scrutiny of Mr. Criger despite its large size and his many outside interests.

There are 3 children in the Criger family and all have the benefits of a modern home, situated in a beautiful farming country, close to a good town and a home which rises to the level being the master farm family.

The Hoop farm is located on Crooked Creek in Meade county. Mr. and Mrs. Hoop make their home in the comfortable family dwelling, and nearby lives their son, John, and his wife. A daughter, Florence, is teaching school.

In recent years Mr. Hoop and his family have made outstanding success at alfalfa production. They have battled grasshoppers to a standstill and reaped deserved rewards from hay and seed crops. Wheat is an important crop in abundant years and a sizeable acreage has been seeded each year with only mediocre results recently. The livestock features of the Hoop farm include a herd of 50 Hereford cows which assume the coarse roughage and feed grains produced. In the house a wind electric system supplies convenient power and light. Kerosene refrigeration is ready for warm weather use. A

convenience found in the Crooked Creek valley is artesian water, and a well 275 feet deep flows constantly, providing water for house and barnyard.

The 270-acre farm operated by A. T. Hoover is outstanding for the careful management of the owner and the changes he has made in his farming system to cope with conditions of the last few years. Sheep have been added to the livestock end of the business. Barley and wheat have taken the place of most of the corn for the time being. Contour farming is accepted as profitable. Rubber-tired machinery is in regular use. Mr. Hoover says that keeping farm records and a study of supply and demand has been his most valuable guide to profitable farm operation.

Two sons of the Hoovers, Evan and Alvan, farm in partnership with them. While this fact was to the advantage of Mr. Hoover in his rating as a father, his sons' activities were not considered in his farming record.

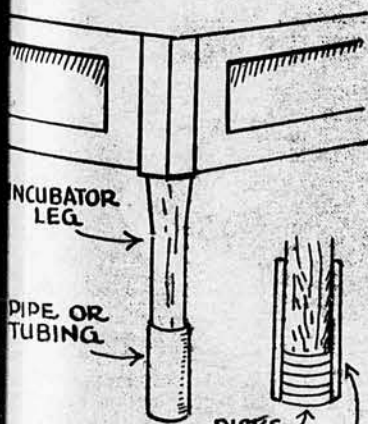
A strong member of the 1937 class is Frank L. Young. He and Mrs. Young have a family of 9 children. The eldest have attended college, the younger are in college or looking forward to it. This family has been active in all types of community endeavor, and the interest of the children has been considered essential to the success of the farm as a business. Every effort has been made to increase the part taken by the children in the operation and benefits of the farm.

There are 960 acres of mostly tillable land, and wheat is the important crop. However, a herd of 65 Jerseys, a flock of sheep, some purebred Percherons, and as many hogs as practical, make sorghums, spring barley and alfalfa necessary as feed for this quality livestock.

Ideas That Come in Handy

By FARM FOLKS

Incubator Steady



CROSS SECTION SHOWING DISKS AND LEG INSIDE TUBE

When operating the incubator in a dark room it is sometimes necessary to put blocks under the legs to make it level. The blocks are often accidentally dislodged and the eggs jarred. To overcome this slip pieces of pipe or tubing under the legs large enough to slip up and down. Then place circular disks of wood or cardboard under the legs and the tubes keep the disks from being knocked out.—Bernice E. McWilliams.

Drum Often Useful

An old oil drum, split lengthwise and hinged at one side, is indispensable on our farm. It serves a dual purpose as either a portable watering trough or a portable feed trough for all farm animals, and is an ideal container in which to mix fertilizers or feeds. When used as a container in which to mix mortar or concrete, the dried mortar concrete may be pounded from its drum container.—George S. Baker.

Square Cuts Roofing

Galvanized roofing may be quickly and easily cut with a carpenter's square by placing 2 2 by 4's close together across a couple of saw horses. Lay the roofing on top of the 2 by 4's, hold a short length of planking underneath, and with one hand insert the long part of

the square in the crack between the 2 by 4's at the end of the roofing and pull down on the short part of the square, using it as a lever and the short piece of plank as a pry. I often cut galvanized roofing in strips and use as a ridge roll when roofing outbuildings.—C. S. K.

Scraper From Old Broom

I made a good scraper from an old worn-out broom with the handle cut off and the straws cut off evenly about 2 inches above the stitching. I nailed it on the side of the back door step and it cleans mud from shoes much better than a regular foot scraper does.—Louis Rickman.

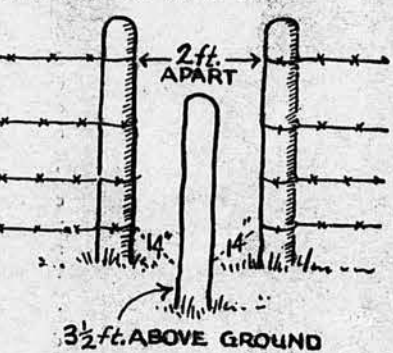
Wire Stretcher for Ground

Old wire stretchers for barbed wire are ideal for grounding the radio. Tie the end of the ground wire thru the hole in the end of the stretcher and drive into the ground.—Mrs. Wade Griffin.

To Sharpen Scissors

The scissor that has become dull can easily be sharpened by simply cutting thru sandpaper a few times. This has proved to be a quick and money-saving remedy.—Martha Carroll.

Walk Thru This Gate



This is the handiest gate on our farm. It is always open to allow a person to walk thru but will stop horses and cows. There are no latches to fasten so one can carry feed, water or milk without having to put it down.—George W. Burke.

IT HAS Everything IT DOES Everything IT'S A Beauty

WHAT THE OLIVER "70" WILL DO IN YOUR FIELDS.

ONLY THE "70" WILL DO ALL THESE THINGS

ONLY THE "70" HAS ALL THESE THINGS

6-Cylinder Power—the steady flow of overlapping power from the modern 6-cylinder engine goes to the Tip Toe Wheels through a transmission equally modern and efficient. 6-cylinder s-m-o-o-l-h-n-e-s means less vibration and quiet operation—saves wear on man and machine.

4 Speeds Forward—2½, 3½, 4½ and 5½ miles per hour.

Variable Speed Governor Control—fits the power to the load; saves fuel.

Tip Toe Wheels—actually help cultivate the soil instead of packing it. They get sure footing in practically all soil conditions, yet tread so lightly they hardly leave a track.

Central Tool Mounting—puts planters and cultivators in plain sight in front of the operator for easier, more accurate work—shortens headlands.

Real Driver Comfort—with Finger-Tip Control. Every control is easily reached from the comfortable spring-and-hammock driver's seat. Automotive-type steering provides fast, short-radius turns. The "70" is as easy to drive as your automobile.

Modern Tractor Engines—the "70" HC high compression engine for today's high-octane "regular" gasoline—the "70" KD engine for kerosene or distillate—Oliver gives you this choice of modern power.

And—you can have your "70" equipped with self-starter, implement power lift, rubber tires, electric lights and power take-off.

The "70" Enables One Man to Do More Work More Easily Than Before



Because no other tractor is built like the Oliver Row Crop "70", with Tip Toe Wheels, Central Tool Mounting and 6-Cylinder Power, no other tractor can equal the "70" from spring to harvest on power farm jobs. The "70":

PLOWS—with 2 big bases or 4 discs at 3½ and 4½ m.p.h.—with steady surplus drawbar horsepower, and sure traction.

PREPARES SEEDBEDS—with so light a tread that a spike-tooth harrow will erase the Tip Toe Wheel tracks.

BUSTS—with 2 or 3 bases, centrally mounted on strong, rigid beams, easy to hold on the rows.

PLANTS—2, 4 or 6 rows at a time with centrally mounted check row, runner sweep or vegetable planters—in plain sight before the operator—under accurate control and held rigidly in line.

CULTIVATES—2, 4, 6 or more rows at a time—corn, cotton, beet, bean, vegetable, disc, skip-row, or tool bar cultivators. Here the "70" is supreme on its Tip Toe Wheels that minimize soil packing—with central tool mounting that keeps the work in plain sight, and floating gangs that work at uniform depth.

PULLS—a 6, 8, 10 or 12-foot Grain Master Combine, a grain drill, harrow, deep cultivator, and other tools of equal draft.

DRIVES—a 22x36 thresher, fully equipped, right up to capacity; or a corn sheller or ensilage cutter.

PULLS AND DRIVES—a power binder, a 6-foot Grain Master Combine, 2-row Corn Master Picker-Husker, 1- or 2-row Oliver Potato Digger.

MOWS—with the Row Crop "70" Mounted Mower, or with a regular tractor-drawn mower.

Its high speed and easy handling get the work done on time with less labor, while working more acres.

WHY PUT UP WITH A TRACTOR THAT DOES LESS?

SEE AND DRIVE A "70" BEFORE YOU BUY!

Before you buy any tractor or even a team—ask your Oliver Dealer for a demonstration of the Row Crop "70" and its tools.

See your Oliver Dealer or send the coupon for the Oliver "70" Catalog.

See your Oliver Dealer or check and mail the coupon to Oliver, 1329 W. 13th St., Kansas City, Mo., Wichita, Kan.; Dodge City, Kan.

☐ Oliver Row Crop "70" ☐ Oliver Row Crop "80" ☐ Tractor Gang Plow
☐ Oliver Standard "70" ☐ Oliver Standard "80" ☐ Tractor Disc Harrow
☐ Oliver Orchard "70" ☐ Oliver 28-44 Tractor ☐ Combine

Name.....

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KF 2-12-38

The Best Is None Too Good!

Within Her Very Hands the Farm Homemaker Holds the Health and Happiness of Her Family. Doesn't She Deserve Good Equipment?

By RUTH GOODALL



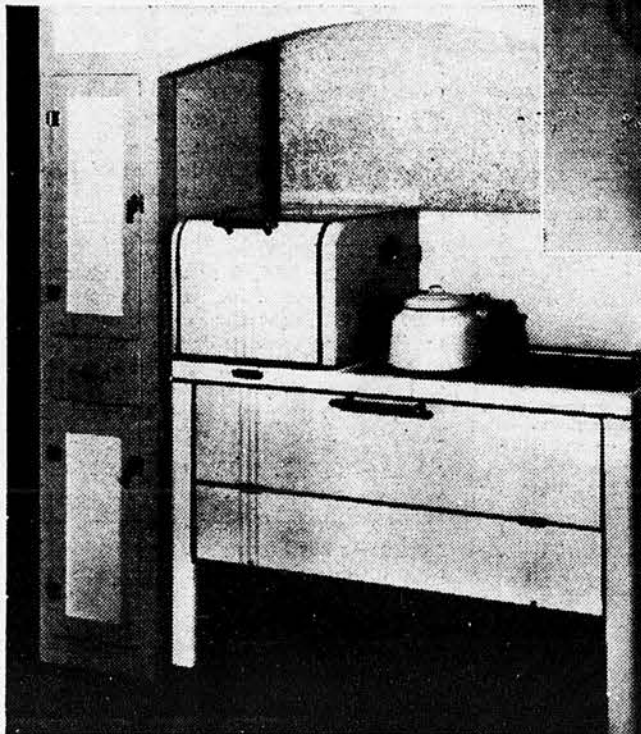
A turn of the dial, and the talents and news of the world streak thru the air to your comfortable old arm-chair. You needn't even move to tune in on this radio which operates on either high line or battery power.



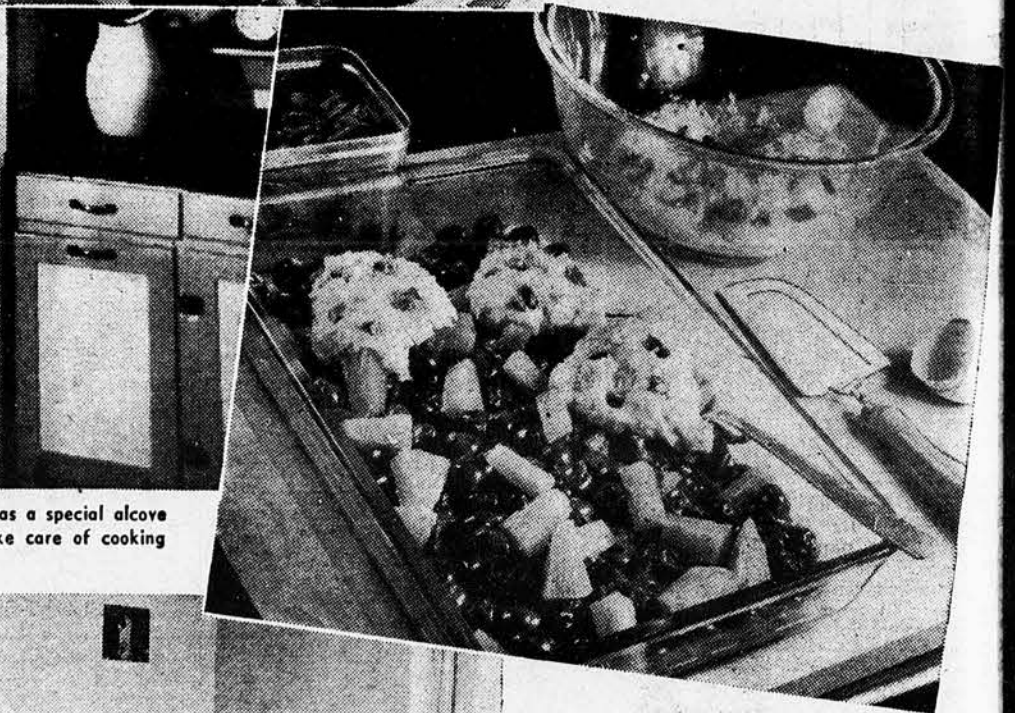
Center above—French fried—and why not! This new deep fryer meets every modern requirement. It not only brings convenience to your kitchen, but variation to your menu.



Right above—Sweet is the music a vacuum cleaner sings in the ears of any woman who ever has "salted" carpets and swept with a broom. This model even has a "dirt finder" for dark corners.

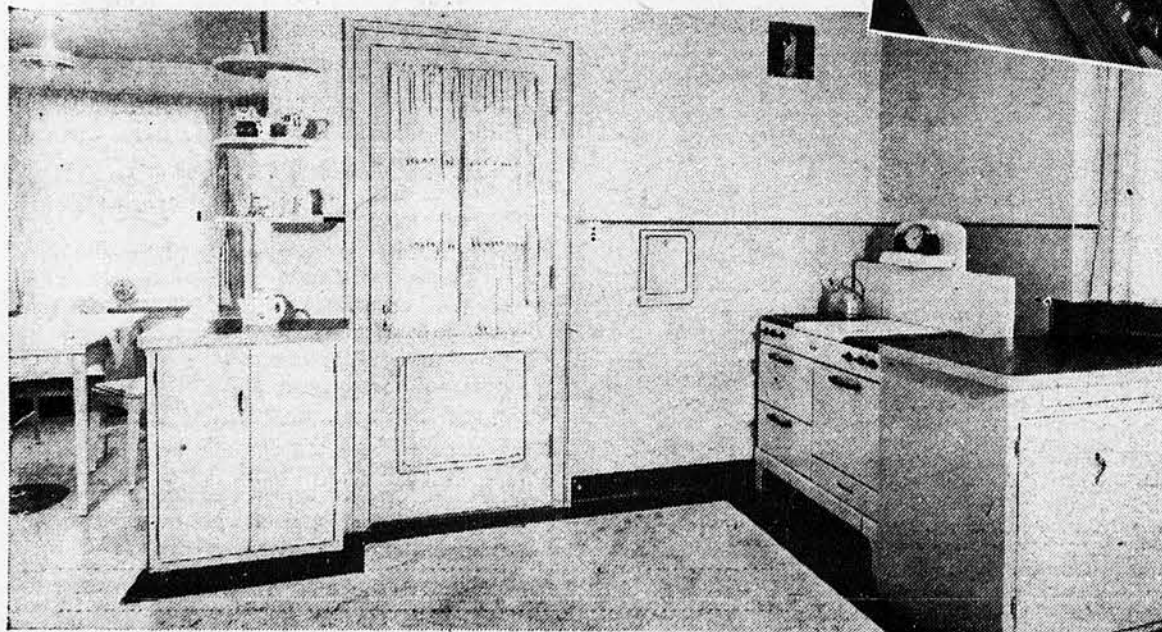


The kitchen in the home of Mrs. Clarence Henline, Bluff City, Kan., has a special alcove for her new streamline oil-burning stove. Cupboards at both sides take care of cooking utensils, while a flue vent carries off cooking odors.



Center—Designed to simplify food preparation, this cooker takes care of a complete meal with a minimum of fuel and a maximum of ease. Between times it's ideal for canning—or to sterilize the baby's bottles.

Above—Glass is becoming enormously important for cooking utensils. For beauty as well as convenience you will do well to include in your equipment glass saucepans, baking dishes, skillets, double boilers—for the same dishes do for both cooking and serving.



Left—Not an advertisement, no fairy tale, no pipe dream—but an actual picture of a rural kitchen and dining center on an honest-to-goodness farm. And there are any number just as spic and span and modern over the state, for farm homemakers are keeping pace with their former-husbands in this combine-tractor age.

Aren't You Glad We Told You?

Little tasks we must do every day
Done in an easier, pleasanter way

The lower part of a new aluminum double boiler may be kept bright and new looking by placing a few potato peelings in the water each time it is used. A stalk of rhubarb will work just as well.



A common clothesline split in half, makes two useful pan scrapers which do not rust or scratch aluminum or enamel ware.



New kitchen shears of sturdy construction with colorful handles can be used for cutting up poultry, slicing green beans, mincing bacon and parsley. Even cutting rope, carpets and wire screen are not too much to ask of them. A special hook on the handle prys off bottle tops and coarse teeth on the inside of the handles afford a firm grip to remove screw tops from bottles and small jars.

When you set up an ironing board, so place it that you won't be standing in your own light. You will save yourself much stooping if you place the basket of clothes on your kitchen stool.



Don't iron for hours standing on a hard floor. You'll be much more tired when the week's laundry is done than you would be if you stood on a rubber mat, or one made of thick linoleum.



Silverware may be cleaned quickly and easily if placed in a pan and covered with clabber milk. Let it stand on back of a warm stove for about 30 minutes, remove and wash as usual. It will look as bright as new.

Baking dishes which may also be used as servers have the advantage of keeping food hot longer as well as being a time and labor saver for the busy housewife. They may be used either in the oven or on top of the stove, add brightness and color to your table and are easy to keep clean and shining.



Coffee loses much of its flavor if it is left exposed to the air. If it is bought in paper bags transfer it to a tightly-covered tin or glass jar. Two jars could be even better, since one may be kept for present use and the other left sealed.

Bake and serve spoon or corn bread in well-buttered, individual baking dishes, instead cups or casseroles. This keeps the bread hotter, requires less baking time and makes it easier to serve.



Beating rugs or carpets often causes the threads of the weave to break. Use the carpet sweeper daily, if necessary, and a vacuum cleaner about once a week and your rugs will last much longer.

If the wringer on the washing machine is not adjusted too tightly, the task of wringing is simplified. The fewer wrinkles there are put into the clothes, the fewer there will be to iron out.

Shaking garments out thoroly before hanging them on the line also takes out wrinkles.

To cover your ironing board cut a piece of unbleached muslin—an old sheet serves nicely—large enough to cover the top of the board and lap around about 6 inches. Hem with bias tape, then thread heavy twine criss-cross on the under side of the cover. Draw this tightly for use and you'll find it easy to remove for laundering and is no hard task to replace.



Empty the vacuum cleaner into a large paper sack—saved from groceries. The sack can be discarded easily and the dust won't fly.

A wood box that helps to keep your floors clean is mounted on rubber-tired casters. At filing time the box is pushed to the door and it is not necessary for anyone to make dirty tracks across the room.



When you are ironing, have a rack at your right elbow for holding the finished clothes. It's handy, too, to keep a few hangers close by for the clothes you don't wish to fold.

If you are still sprinkling clothes by the old time method of getting your hand wet and then shaking it over the pieces to be ironed, you may be interested to know there is an electric spray on the market that will save you much time and effort—and which also dampens the clothes much more evenly.



Food choppers can prevent the little leaks that sink the ship. All pieces of stale bread may be run thru it for pudding; vegetable and fruit parings can be ground and mixed with dry feed for the hens; ground meat may furnish a delicious company meal; raw vegetables ground make a delicious salad addition to the children's lunch; and cook faster if used for soup.



These handy removable-bucket garbage pails are ideal for the kitchen. The tight-fitting lid can be raised by stepping on the foot pedal which eliminates stooping. You'll be pleased with the bucket which can be removed for emptying and cleaning and fits back into its attractive container. And so a utility utensil adds a decorative note to the kitchen.



Perfection and efficiency is the goal of us all. To solve one of the most difficult problems—keeping the labels on tin canisters—first moisten the labels with glycerine. This makes it easy to change them occasionally with proper labels according to contents.

Kitchen appliances which fasten to table or shelf by a clamp device sometimes mar the surface and, if they do not fit exactly, twist and slip during a stiff work-out.

Time and Temper Saver

I keep a pair of pointed nose pliers in my kitchen for use in opening jars of fruit, meat and vegetables. It never fails to grip the rubber ring tightly, breaking the seal in a jiffy, so the lid may be quickly unscrewed. —Homemaker.

To protect your working surface and to keep your appliance firm and steady, there is an inexpensive little rubber pad that fits snugly over the edge of any work table and over which your appliance clamps firmly.

Broom holders, small hooks and screws help to keep the household cleaning equipment in good working order. Hang up brooms, mops, dusters and cleaning brushes by attaching screws to the handles.



Women using power washing machines which have motors will find it helpful to put the end of the exhaust in the ashpan of their laundry stove, or whatever kind of stove they use, instead of out-of-doors. It works fine, not only does it put the exhaust smoke out-of-doors, but also cleans the stove pipes and chimneys of soot.

—KF—

She Doesn't Want March

By MRS. JOHN BENSON

I guess I'm funny. I haven't much ambition. All I want is a little house with a swing on the front porch and a garden close to the back. Bright linoleum on the floors and painted walls and gay curtains at the windows. The makings of a pie or a cake, or perhaps, a batch of biscuits or a pan of cornbread in the pantry. Pretty dishes in the dining room, pink and blue spreads on the beds...

A play yard outside the kitchen window, and little feet running in from play. A walk and a white gate with a little squeak, so I can tell when Someone Dear is coming in from work. A living room where all of us, with now or then a guest or two, can linger in the evenings.

When I read this over, I see that I have asked for all the best things in the world: A home, freedom from want, children and my man to love, companionship. Perhaps I am ambitious, after all.

CONSTIPATED?

AVOID DOSES THAT UPSET DIGESTION



FOR easy, pleasant relief from the headaches and loginess of constipation, choose a laxative that doesn't punish digestion. Take FEEN-A-MINT, the delicious chewing gum laxative. You'll like its flavor—but more important, it has no bulk or heaviness to upset your stomach. And the chewing increases the natural alkaline mouth fluids that help food digest. Join the 16 million folks who have already changed to FEEN-A-MINT! Good for young and old—and children love it. Get a package today at your druggist, or write for generous FREE trial package, Dept. 474, FEEN-A-MINT, Newark, N. J.

To Relieve Bad Cough, Mix This Recipe, at Home

Big Saving. No Cooking. So Easy.

You'll never know how quickly and easily you can overcome coughs due to colds, until you try this famous recipe. It gives you four times as much cough medicine for your money, and you'll find it the finest thing you ever tried, for real relief. Make a syrup by stirring 2 cups of granulated sugar and one cup of water a few moments, until dissolved. No cooking needed—it's no trouble at all. Then put 2½ ounces of Pinex (obtained from any druggist) into a pint bottle. Add your syrup and you have a full pint of medicine that will amaze you by its quick action. It never spoils, lasts a family a long time, and tastes fine—children love it. This simple mixture takes right hold of a severe cough. For real results, you've never seen its equal. It loosens the phlegm, soothes the inflamed membranes, and quickly eases soreness and difficult breathing. Pinex is a compound of Norway Pine, in concentrated form, famous for its prompt action in coughs and bronchial irritations. Money refunded if it doesn't please you in every way.



SPEAK A GOOD WORD for the KANSAS FARMER when writing to advertisers. It helps you and helps us.

Your Busy Hands!



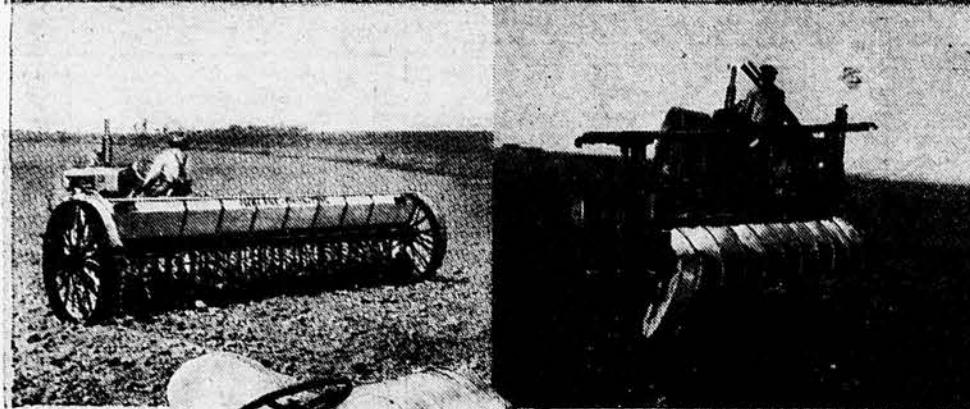
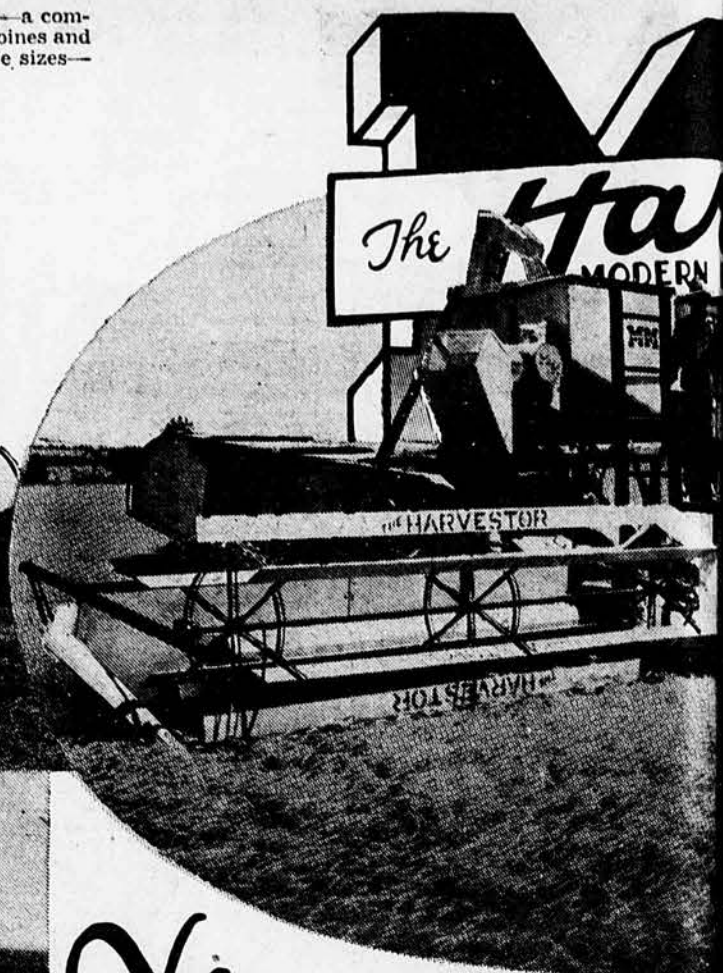
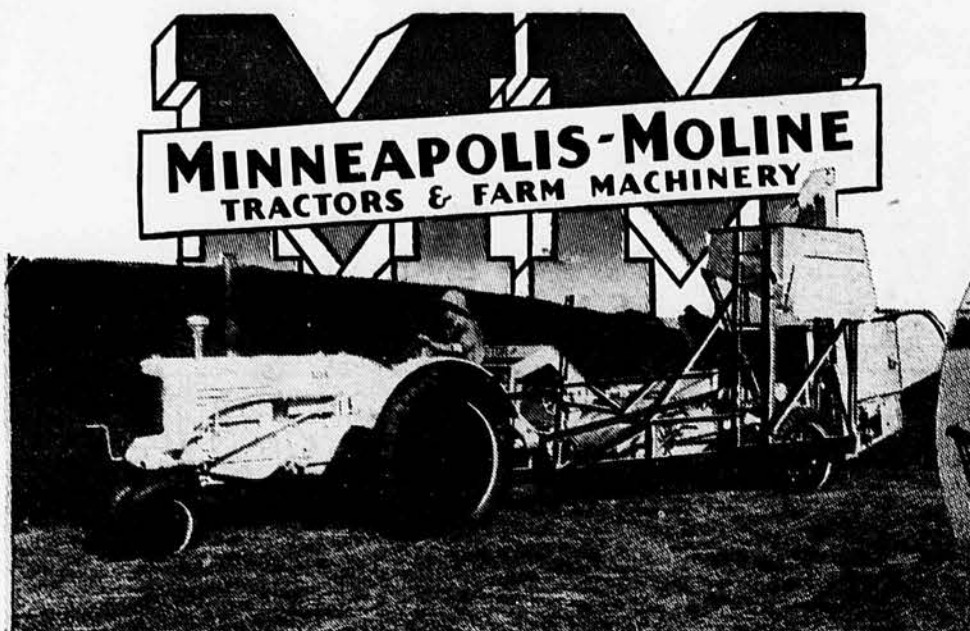
Protect them from Chapping

Must the hands that are busy all day bear the telltale marks of roughness, redness, or chapping? The answer is "No! Not if you follow the Mentholatum Method of keeping your hands in good condition."

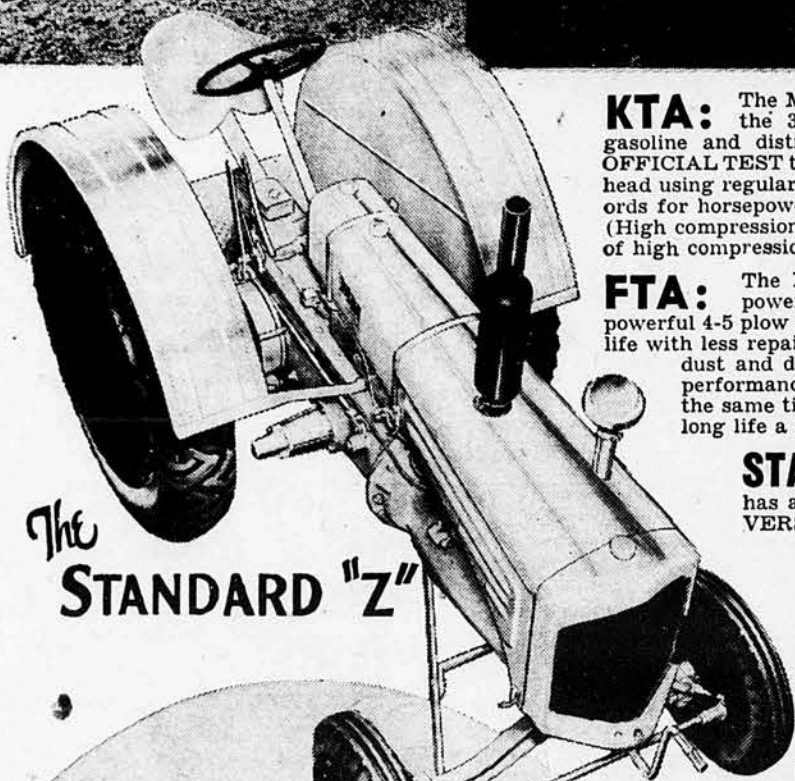
What could be simpler than this: Every night and morning, as well as after exposure to all rough work, apply a little Mentholatum to your hands and rub it in well. See if this treatment does not keep them smooth—in spite of dish washing, house cleaning, exposure to cold, etc.

MENTHOLATUM

THE RECORD: The 12-foot HARVESTOR is the most popular in its class—a complete sell-out in 1934—in 1935 the biggest seller of all combines and again a complete sell-out. In 1936 again the biggest seller in its size. Now there are three sizes—6-foot, 8-foot, and 12-foot. 1937's record surpassed all others. Get the facts now.



The ALL-AMERICAN Pioneers



The
STANDARD "Z"

KTA: The MM KTA is the tractor buy in the 3-4 plow size. It burns both gasoline and distillate efficiently. In 1936 on OFFICIAL TEST the KTA with high compression head using regular priced gasoline broke all records for horsepower and fuel economy for a tractor of its size and type. (High compression is optional.) Greater oil economy is another advantage of high compression. It's the power and fuel economy record breaker.

FTA: The MM FTA tractor is a record maker for economy and power—it is in a class by itself for the farmer who needs a powerful 4-5 plow tractor. Its modern design and construction mean longer life with less repair expense. Considered the most perfectly sealed against dust and dirt at all points. Ask for Official facts which prove its performance to be the most economical on fuel and oil—offering at the same time the most power for the least money in its class, and long life a matter of record.

STANDARD VISIONLINED "Z" with 5 forward speeds has all the features except the adjustable tread of the UNIVERSAL "Z." It's built to be a profit builder for owners.

WHEATLAND DISC PLOWS:

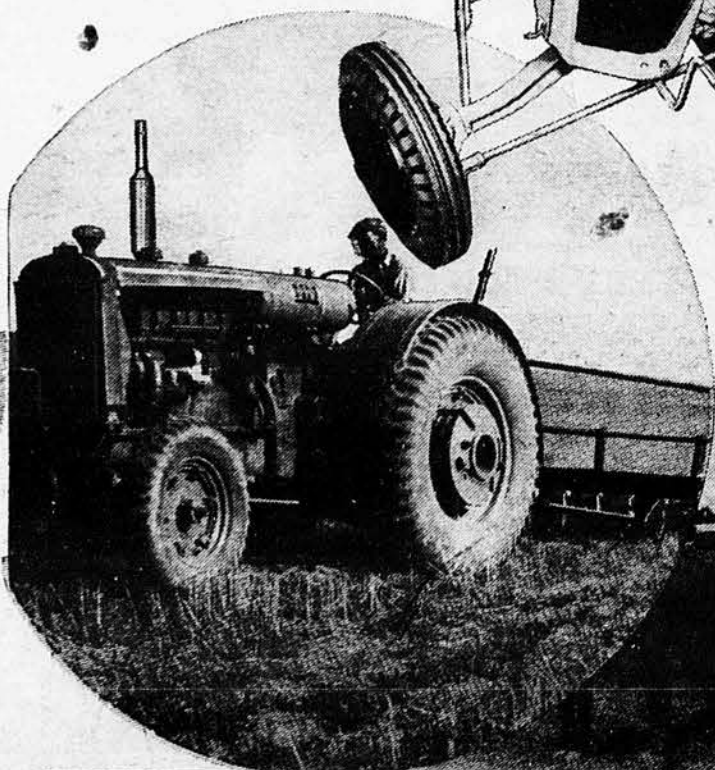
The Most Popular—The Original Successful Wheatland Disc Plows with 26-inch high-polished electrically heat-treated discs spaced 10 inches apart to do better work—pull lighter—prevent clogging. Many exclusive features. Rigid, HEAVY DUTY, bridge trussed frame—assures that all discs plow the same depth—always. Ocean liner type bearing takes the end thrust of the entire gang. No binding or end thrust on the new type radial bearings which are built with a dirt seal and never have to be lubricated. 4, 6, 8 and 10 ft. sizes. Seeding attachments available.

MOLINE-MONITOR DRILLS:

LIGHT DRAFT and long life accuracy, together with the assurance of uniform depth of drilling, are advantages of MOLINE-MONITOR drills. The new, all steel, roller bearing construction gives even lighter draft and longer life. Bushel-per-foot capacity, copper bearing galvanized steel hopper—Same reliable, reversible long life disc bearings, specially shaped steel wheels, famous Monitor-fluted or double run feeds—exclusive Monitor designed double or single disc openers that assure lighter draft and better drilling—tractor or horse wagon. Sizes for every need.

SPREADER:

Easiest to load . . . Easiest to Pull . . . The MOLINE spreader has set a new standard. Fifty to sixty bushels capacity—loading height only 36 inches. Patented offset front axles. Auto-turn steering. No complicated mechanisms or cut-away box that so often cause trouble. Patented wide spreader that shreds the manure. Light draft—a real two-horse spreader. Tractor hitch available.



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Make Our Place (401 N. Wichita)

IF YOU CAN'T COME

I am interested in buying machines

Name.....

P. O.

- ☐ Universal "Z"
- ☐ Universal "M" Wide Tread,
- ☐ 3-4 Plow Size
- ☐ Standard, 2-3 Plow Size
- ☐ "KTA," 3-4 Plow Size
- ☐ "FTA," 4-6 Plow Size

☐ Story of MM Tractor

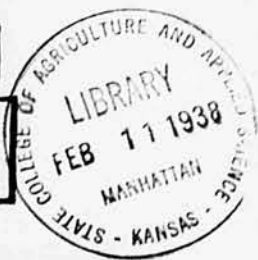
Dallas, Texas
Elk, Oklahoma
Amarillo, Texas

Omaha, Nebraska
Wichita, Kansas
Oklahoma City

ORDER NOW! Harvest your crop most economically with a 1938 HARVESTOR —6, 8 or 12 ft. cut. Consider the record since 1934. Complete sell outs year after year. We suggest that you place your order now.

Harvestor
COMBINE IN 3 SIZES

MINNEAPOLIS MOLINE
TRACTORS & FARM MACHINERY



Farmer's Choice

Progress

our MM's New
ade Machinery
At Annual
Tractor Farming
Exposition
Kan. 22-25, 1938

UNIVERSAL "M" has the same engine as the famous KTA. It has wide tread and high clearance. A complete line of Quick-On Quick-Off machines for all territories.

A NEW SYSTEM OF FARMING—As a result of recent disastrous dust storms and soil blowing in certain sections of the country, Minneapolis-Moline developed a new method of growing grain to make successful farming in semi-arid districts more certain. For equipment like this for all makes of Tractors ask for Uni-Tiller booklet. See this complete line of machinery.

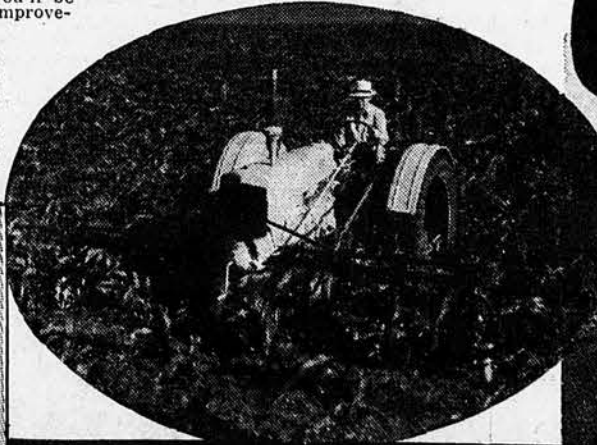
UNI-TILLER: A new system of farming for the Southwest for owners of all makes of tractors. Thousands of Uni-Carriers and tools in use for many years have proved that the Uni-Tiller is practical and economical.

All you buy is the new heavy duty UNI-CARRIER with double power-lift—only one sturdy frame, one set of levers, wheels, and any of the simple Uni-implements you may need. The carrier hitched directly to any wheel or crawler type tractor. The Uni-implements attach directly to the square, high carbon steel tool bar of the UNI-CARRIER by means of the tool bar clamps.

DAMMING ATTACHMENTS: New MM type without any complicated chain and Universal "M" tools for semi-arid districts.

HARVESTORS: The original HARVESTOR was the first practical lightweight, high-capacity combine for all crops, with many patented and exclusive features such as Single unit, all steel construction—Self-leveling shoe—No belts—Roller chain drives. Roller and Bronze bearings—Auger conveyor instead of canvas. The 12-foot HARVESTOR weighs nearly a ton less than previous combines of its size and is the most popular in its class—a complete sell-out in 1934—in 1935 the biggest seller of all combines, and again a complete sell-out. In 1936, increased production, and again the biggest seller in its size. Now there are three sizes—6-foot, 8-foot and 12-foot. 1937's sales and performance records surpassed all others. Get facts now so you'll be sure to have your Harvestor with many improvements for the 1938 Harvest.

HUSKOR: The MM HUSKOR is a 2-row Picker-Husker . . . The longer picking rolls run on roller bearings and get all possible ears. 12 full length HUSKING ROLLS do a cleaner job. FEWER but better GEARS and CHAINS.



UNIVERSAL "Z" TRACTOR

Entirely new and different! The Talk of Farmers and Engineers EVERYWHERE.
• 5 Speeds Forward—2 to 15 M. P. H.
• Variable Speed Governor—Adjustable from seat.
• Adjustable Tread—54" to 76" on regular models; 54" to 84" on single front wheel models . . . fenders adjustable with wheels.
• "140 Fewer Engine Parts"—Farm Implement News, July 29, 1937.
• Self-Starter and Electric Lights also available.
• The Original "Quick-on and Quick-Off" Machines—with Easy Slip-pin Hitch and Toe-tip Operated Power-Lift, and Square Tool Bar Attacher.

All Day---Every Day

Your HEADQUARTERS

COMPLETE FACTS

Please send facts promptly.

KFF

Wheatland Disc Plow
Tractor Flows
Corn Sheller
Horse Drawn Cultivators
Hay Tools
New MM System of Farming
Automotive Industries

St. Louis, Tennessee
St. Paul, Kansas
St. Paul, Missouri
Wichita Falls, Texas
Colby, Kansas
Salina, Kansas

**"USES 10 GALLONS
LESS GASOLINE
A DAY TRAVELS 1/4 MILE
AN HOUR FASTER"**



GETS 1/4 MILES MORE every 10-hour day out of his high compression tractor. Because of side-by-side tests in the same field, Florian Polcyn, Gorham, Kansas, found out just how much better a high compression tractor is.

**IN THE SAME KANSAS WHEATFIELD, PULLING THE
SAME LOAD, FLORIAN POLCYN'S HIGH COMPRESSION
TRACTOR BEATS TWO LOW COMPRESSION TRACTORS**

BECAUSE the Polcyn Brothers of Gorham, Kansas, use three tractors to work 1300 acres, they have had a unique opportunity to test the merits of high compression and low compression tractors in the same field. Says Florian (Mike) Polcyn: "We burn regular-grade gasoline in all of them. Our new high compression Minneapolis-Moline tractor uses 10 gallons less a day than either of the other two tractors, and it will gain a quarter of a mile in an

hour, plowing in the same field. In the course of a 10-hour day, the new high compression tractor actually goes 1/4 mile farther.

"This saving in gasoline and gain in additional distance holds good whether we are plowing with a nine-foot one-way plow, or plowing with a five-bottom moldboard plow."

To get added power from your tractor, ask your dealer or write your manufacturer today about getting high compression ("altitude") pistons or cylinder head to change it over to high compression. Easier yet, see that your next tractor has high compression pistons or cylinder head, which most manufacturers offer at no additional cost.



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BOOKLET**

Ethyl Gasoline Corporation
Dept. T-13, Chrysler Building, New York, N. Y.
GENTLEMEN: Please mail me your FREE BOOKLET,
"How to Get More Tractor Power."

I farm acres and use a tractor.

Name R.F.D.

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**IT PAYS TO BUY GOOD GASOLINE
FOR CARS TRUCKS AND TRACTORS**

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The products and appliances that they offer for sale are as represented. The things they say about farm profit and farm improvements are sound and truthful.

We wish to recommend to you the advertisements in Kansas Farmer as an additional source of farm information and help.

**Damming Attachments on Listers
Add to Their Popularity**

By E. A. STEPHENSON

LISTERS are staging a comeback in Western Kansas, thanks to the recent development of damming attachments to go behind them as a means of building water-holding reservoirs in the fields.

P. K. Cummings, Kingsdown, used dammers behind his lister on fairly level "hard land" soil when planting feed last spring. He left them off on a similar piece of ground which was more fertile than that dammed. The feed put in with the basins had as good a stand as the other early in the season, and this fall Mr. Cummings estimated he cut twice as much tonnage from this poor ground as he did from that not treated, as the basins caught and held two showers.

On the head of Bluff Creek south of Bloom, Ben Randall put his feed in with dammers and also put his rows on the contour. On this sloping rough ground, Mr. Randall raised about the best feed crop in his community. George Taylor, his neighbor down the creek, reported similar results.

On the Bar-Seven-Bar ranch south of Kingsdown, land summer fallowed on the contour with basin listing, caught every drop of a hard 2-inch rain in June. This rain ran off adjacent pastures and fields rapidly enough to flood Bluff Creek out of its banks.

Not all users of dammers were satisfied with their use, however. Bob Seacat of Bucklin, reported serious damage from washing on a sloping field thus treated. He listed up and down the slopes rather than on the contour, hoping the basins would hold. The first rain, however, disillusioned him, as the top basins filled and broke over to the next, and so on down the row until the bottom of the hill was reached with a big head of water which tore the lister trenches to pieces.

Two users of dammers on sandy ground were well pleased with results. McMinimy Brothers, southeast of Ashland, handled a considerable area advantageously in this manner, and near Englewood, E. C. Walker's basin-listed summer fallow was successful to the point that he had 48 inches of moisture at planting time. This compared with 22 inches on a neighboring field which had been worked with other implements.

Since the work developed at the Hays Experiment Station in which the first damming tool was a hand-operated "spade" arrangement, many types of dammers have been built. Some operate on the principle of a trip arrangement which kicks out when enough dirt gets behind it to press it up. Others work on a chain attached to a wheel of the machine, raising out of the row at regular intervals, and still others ride on a wheel which has a big lug attached, so that every time the wheel rotates the dammer will be raised.

In a talk before 75 farmers at Minneola recently, L. C. Aicher, superintendent of the Hays Experiment Station, made several specifications necessary for successful use of damming attachments. He made these points:

When dammers are used on land with more than around 2 feet of slope in every hundred, the listing must be done on the contour.

For summer fallowing, the listing should be done early in the year, in order to catch snow and rain.

If one is going to build dams, he should go all the way and build big ones, level with the lister ridges.

As a second operation on summer fallow the lister ridges can be "busted out" with dammers still attached.

To handle a field that has been dammed, a "noser" can be built at home to put in front of the tractor to knock down the dams as one goes along, thus avoiding a bucking bronco action on the part of the tractor. The Hays Experiment Station can supply blueprints of this attachment for 10 cents.

Dam-listed ground may be quite loose, especially if a busting operation is done. To help this situation, drag a wide-spaced, narrow-wheeled land packer behind tools on subsequent operations.

In selection of a damming attachment, look for one that is of sturdy, simple construction, for the operation is one that applies a lot of strains, jerks, and bounces on the frame of the tool.

The Hays Station has not used the old fashioned harrow in any connection with wheat ground preparation for 10 years because it compacts the top soil and "fines" it so much that it cannot absorb rains. Do not use it in leveling a basin-listed job.

A testimonial on this last point recently was made by Virgil Crane, north of Sitka, who contour-listed some summer fallowed ground, then as his last leveling operation, went crosswise to the listed rows with a harrow. He reports that in a small rain received after this operation every little harrow track made a runway for water with the result that he suffered a lot of washing damage.

Tom Bare, of Minneola, a former state wheat king, this week made this statement:

"If farmers 50 years ago in my old home county in Eastern Kansas had cared for the land in the way these new methods are prescribing, they would still have something left. As a boy I raised corn in a field there and the rows were 1/4-mile long. On a recent visit there I looked this field over, and saw big rocks all over it, with ditches so big and numerous that a man couldn't have made a single corn row a quarter of a mile long, no matter which way he went."

One Machine Does Many Jobs



The Dampster tilling, damming, and deep furrow seeding machine does everything but harvest the crop. Here it is doing a 3-in-one job right after harvest. It goes right into the stubble field and cultivates the ground, cutting loose the vegetation and stable—forms the furrows, leaving the trash and weed seed on top where it will not grow—and dams the furrows to catch fall and winter moisture.

New Machinery Developed to Carry Out New Farming Ideas

By TUDOR CHARLES

RAPID arrival of new inventions in the equipment field has calloused most of us to any great degree of awe. But to the farmer who needs a certain type of machinery, there is real news in latest developments. He wants to know just what inventions or refinements are found in the various makes of equipment he is considering. He will be at the Wichita machinery show if he can arrange it, and if he can't attend there he'll go to a smaller show or visit his dealer.

The many improvements can't be summarized entirely here. Only the machinery experts who will be at Wichita know about some of the things they will have to show. But in general we know what to expect.

There is a decided tendency to give more attention to small tractors. There are about 5 million farms in the United States which still are without tractors, while fewer than 2 million are using tractors. Most of these 5 million farms are small. It is here there is a need for smaller units. There have been several satisfactory small tractors in use for a number of years. One of the latest models is put out with rubber tires as standard equipment, and has a tubular design of frame construction between the engine and the differential housing. This permits full vision of the ground beneath the tractor from the driver's seat.

A year ago I told how the latest conventional 2-plow tractors, when equipped with rubber, would pull an extra plow bottom, skimming along easily with 3 plows behind. This proved fully accurate on our farm where we used our new tractor in sandy loam. We plowed alfalfa sod in early March, on reasonably black second bottom land, and the tractor handled 3 bottoms easily. However, our local dealer gave me a good ribbing one day later in the season. Several farmers living on heavy clay soil, the kind that holds moisture thru any drouth, read the article and proceeded to try 3 plows on their new rubber-tired outfits. They found 3 bottoms too much of a load for plow speed on heavy and sloping land. But the fact remains that the new "jobs" equipped with rubber will handle bigger loads than former tractors of the same rating with steel wheels.

Rubber tires are a big success on sandy land. It is possible to "stick" them and once you are stuck, there is no getting out without reducing the load or improving the traction. But if one does not stop in a difficult spot, rubber tires will take the worst sand ridges or pockets, and do it with scarcely any reduction in speed.

Adaptation of combines to smaller jobs was enough to make history last year. Kansas farmers went for combines in a big way to harvest their bumper wheat crop. The lowest priced outfits, operated by power take-off, were most successful on level and smooth land. On rough land where grades slow the tractor down, it is

necessary to shift to a lower gear, or grain will go over the threshing sieves as their action goes down. Temporary slowing of the tractor results in slowing of the threshing parts. Rough land is unsuited to satisfactory operation of a light, fast-moving combine, farmers say, because the speed and the bumps don't mix. A combine moving at slightly more than 2 miles an hour can negotiate gullies and hummocks with little damage, but taking these at 4 to 5 miles an hour doesn't appeal to the careful farmer, from what I can find out.

One need farmers have mentioned in this connection is a clutch control on tractors which will permit the power take-off to continue to operate even if the operator stops the tractor. Occasional stops in heavy grain simply mean that the combine is full of straw and the start must be made under these conditions, or else the shift gear on the tractor must be slipped into neutral and the clutch engaged. I haven't discussed the feasibility of this matter with any of the tractor engineers, but am only repeating what farmers say.

Tandem hitches for combines are not uncommon in Western Kansas, but



A new small tractor of the size said to be adapted to 60 per cent of the nation's farms. It is new in frame design and priced in accordance with its size.

their appearance in Eastern Kansas was a novelty. Raymond Adams, Maple Hill, using combines for the first time, pulled two 12-foot combines in tandem with good results.

Using combines to thresh sorghum seed from the shock was never so widespread as last fall. In the West I noticed farmers hauling bundles to the combine and using it as a stationary thresher. Some had attached a home-made elevator to carry the straw away

from the rear outlet, thus performing the work of a blower and permitting a reasonably sized stack.

Night cutting was common too, during the early part of the 1937 harvest. The weather was so dry there was no dew and thru Central Kansas one could see combine and tractor lights at all hours. Combines were used on a wider variety of crops. Brome and Crested wheat grass seed were combined suc-

(Continued on Page 33)

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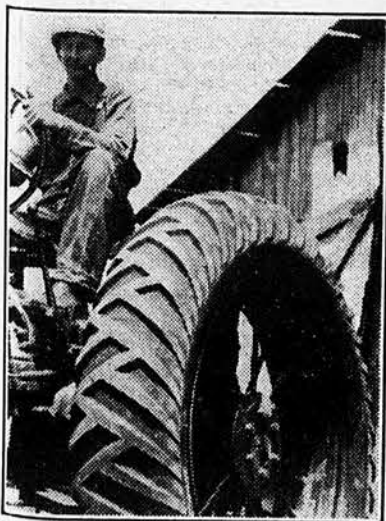
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H. F. Roepke, Pottawatomie county, says tires increased the cost of his tractor about 25 per cent, but it increased the amount of work it would do from 30 to 50 per cent with no greater fuel or oil expense.

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A \$50 Reward Is Paid to Men Who Helped in War on Thieves

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

ON THE night of November 8, poultry houses on several farms near Winchester, Jefferson county, were raided. Next day most of the turkeys and chickens were recovered at the sheriff's office. In the meantime, a private citizen, Chester Baecker, was called on near Midland, to assist two men whose car had stalled. He heard chickens squawking but was told it was birds. After the men had left the scene Baecker investigated a field nearby, found the chickens, and called the sheriff. Among the farmers who had lost property were two Service members, Eli Cathcart and E. P. Davies, both of Winchester. Both of them assisted in the prosecution by identifying their property and in other ways co-operating with the law enforcement officers. The two thieves, Al Miller and Walter Harrold, were given 5-10 year sentences in the state penitentiary. Service Members Davies and Cathcart both recommended that the \$50 reward be divided equally among the three of them, Davies, Cathcart and Baecker.

In acknowledging receipt of his part of the reward, Mr. Davies said, "I thank you for the \$16.66 check, as my part of the \$50 reward, also for the Protective Service. I appreciate them both." Cathcart said he was well pleased with the division of the reward and assured the Protective Service that he was ready to assist this agency at any time in its efforts to stop stealing.

Offered to Return Loot

There may have been a time when Kansas farmers would let a thief go free, provided he returned what had been stolen. George E. Winn, Hardtner, R. 2, believes the time for that kind of treatment has passed. A number of valuable tools were stolen from his farm recently. He, with the help of neighbors and members of the sheriff's force, followed the trail to the home of George Pratt. Upon being questioned, Pratt admitted his guilt and said he would be willing to return the tools if Winn would let him go free.

Winn refused to do this and insisted on a court trial. Pratt was given a 90-day jail sentence. A \$25 reward, paid for this conviction, was distributed equally among Winn, Deputy Sheriff Herman Wilhite, Hardtner and Lawrence Alexander, Kiowa, who furnished important information.

Clues From Neighbors

Turning detective, after a gun and other articles were stolen from his farm, L. B. Diller, R. 2, Washington, talked with several neighbors and picked up bits of information here and there. One neighbor had seen a questionable character, Warden Nedji, near the Diller farm. Another neighbor, later, was approached by Nedji and was asked for some shells of the size required by the Diller gun. The sheriff was notified, and questioned Nedji, until he confessed to the theft. He will serve a 60-day jail sentence. All of the \$25 reward, paid by Kansas Farmer, for this conviction, was sent to Service Member Diller, who expressed the intention of dividing with one or more of his neighbors, who imparted valuable information, when interviewed by Diller.

All Citizens Can Help

It is interesting to note that in the thefts mentioned, as well as in most other stealings from farms, very little could have been accomplished if it had not been for the assistance of private citizens who are in favor of law enforcement. Occasionally, sheriffs or other officers catch thieves in the act, or make arrests on suspicion. To a very large extent, however, crimes of this class are brought to light only thru the voluntary aid of law abiding people. It is the purpose of the Protective Service to encourage this sort of good citizenship. Many of our rewards go to informers.

To date, Kansas Farmer has paid out a total of \$26,775 in rewards for the conviction of 1,080 thieves, who have stolen from posted premises.

A Fight on Venereal Disease

By CHARLES H. LERRIGO, M. D.

PROCLAMATIONS of National Social Hygiene Day in February remind us of the importance of this great subject. It is hoped that the next decade may bring progress in stamping out the venereal diseases of gonorrhea and syphilis comparable to that obtained in the last one in fighting tuberculosis. We are assured by doctors who give special attention to such diseases that such success is possible if information can be spread and money provided; that the large number of innocent victims can be protected with some degree of certainty.

Half of the 500,000 new syphilis infections which come to the attention of physicians every year are found in young people between 20 and 30 years of age. One in five of all syphilis infections are found in boys and girls under 20. What does youth itself think of this? Are they indifferent? Do they understand the significance of these facts? The answer is that youth thinks a lot about it, is not indifferent, and does appreciate its significance.

Last year thousands of young men and women individually and collectively accepted the challenge, urged measures which would reduce the terrible toll of syphilis. Last year the Y. M. C. A.'s, 4-H Clubs, college and

university students, the American Youth Congress and many more have gone on record as favoring the campaign against syphilis and have taken concrete strides toward the realization of a syphilis-free country. And the number of determined young people is on the increase.

Not alone are the American Social Hygiene Association and the United States Public Health Service concerned with the guidance of an effective campaign against the disease. Such diverse groups, for example, as the Junior Chamber of Commerce, the General Federation of Women's Clubs and the Protestant Episcopal Church have determined to do something about it.

But transcending the value of all adult guidance is the heartening fact that youth itself is doing something, that youth recognizes the menace for what it is, and has vowed to rout its insidious foe. This paper suggests to inquirers of any age that you write to American Social Hygiene Association, 50 West Fiftieth St., New York City, for free information.



Dr. Lerrigo

No Sugar for Baby

I would like to know if sugar is healthful to put in baby's nipple.—Mrs. W.

I suppose you mean just enough to induce the baby to take the nipple. It is not recommended. It takes very little cane sugar to induce intestinal fermentation in a baby. Such sugar as is used should be mixed in the milk.

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

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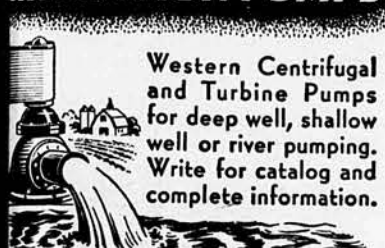
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Be sure to say when you write, that
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In Wild Strawberry Time

(Continued from Page 10)

raged mother bear rounded the build-
ing a flying form darted inside before
she could strike it down, and the door
crashed shut against her snarling, sav-
agely grinning face.

And to her angry amazement the fol-
lowing instant she was assailed from
behind by a screeching fury of teeth
and claws. Immediately she found her-
self engaged in a battle to the death
with a second enemy of whose approach
she had received no warning.

A LITTLE earlier this same day an
ancient buckboard holding two
young people deeply interested in
each other crept over a seldom travel-
ed backwoods road that skirted the
eastern edge of the abandoned farm.
The slender, pretty girl seated beside
the sturdy youth who was driving
looked up into his eyes shyly as he told
her of his plans for the future. The
plow-horse drawing the ramshackle
vehicle happily was set and staid in his
ways, else the young country swain
could not have given so much of his
gaze to the fresh, blue-eyed face up-
turned to his own. Both were lost in
the pleasure of being together.

Jeff had jumped at the hint dropped
by the girl's mother that Sally was to
return home that day from her spell
of nursing old Mis' Hammersmith over
at Big Forks; and he had volunteered
to go and get her. Big Jeff Tucker for
many months had held certain well-
defined ideas on these large plans of
his which he had not yet come to in
his telling of them. But perhaps Sally
Ingalls was not as unaware of what
they might be as he imagined. Jeff's
eyes said much that his tongue found
it difficult to frame. Now he was lead-
ing up to the most important phase of
his dreams, for the opportunity he had
long sought had come; and the time
and place were an inspiration for the
avowal.

An unclouded summer sun distilled
from the red-fruited choke-cherry
thickets and massed blooms of brier
rose and wild raspberry lining the
rutted tracks an essence that the light
breezes dissolved into an unmatchable
fragrance. And young blood was re-
sponding to the urge of the perfumed
air, vibrant with the notes of song
sparrows and yellow-hammers that
lighted on swaying milk-weed stalks
and rose and lighted again further on
as the buckboard with its absorbed oc-
cupants pursued them slowly along the
winding road.

A Proposal Postponed

But the ancient vehicle was traitor
to the lover's cause. As it rolled over
a "thank-you-marm" on the down
grade of a hill the forward axle snapped
and broke—and so did the thread of
the young man's discourse. At the sud-
den lurch Jeff threw his arm around
Sally's waist to prevent her falling
forward upon the horse, who stopped
in his tracks as the whiffle-tree came
down about his heels. Sally's always
blushing cheeks blushed redder with
the contact, and she nimbly drew out
of his embrace and stepped to the
ground. Jeff covered his lapse with a
hasty examination of the wrecked ve-
hicle and a string of mild expletives
over the mishap.

"Durn the blame' thing! We can't
get home in it now, Sally," he com-
plained. "Wish I could fasten up that
axle, but I haven't got any wire." He
pondered over the situation for a mo-
ment. "Tell you what we'll have to do,
Sally," he continued. "I'll tie Whitey
here to the fence an' foot it back to the
Forks an' get some baling wire; an'
you can set here an' wait for me; I
won't be gone more'n an hour."

"I reckon that's the best we can do,"
Sally agreed. "But tell you what, Jeff,
instead of waitin' here I'll go over to
the old deserted farm an' gather a
mess of wild strawberries. It's only
just across the rise yonder. There's
lots of them growin' in the pasture lot
and nobody hardly ever goes there
berryin'. You can stop at home for
supper and have some of them, too,"
she offered, smiling rosilily.

Jeff grinned happily. "Now that's
fine, Sally; you bet I will. And I've
got an old grain bag under the seat
you can pick them in." He fished it out,
and handing it to Sally strode rapidly
back along the road they had traveled.
(Concluded Next Issue)

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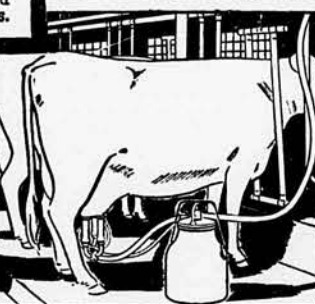
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Provisions in Revised Farm Bill Of Special Interest to Kansas

By CLIF STRATTON
Kansas Farmer's Washington Correspondent

AMONG provisions of the rewritten farm bill, which the House and the Senate took up this week—no one knows how long the debate on the conference report in the Senate will be—are several of particular interest to the farmers of Kansas.

The measure, as anticipated, continues the Soil Conservation Act, provides in addition commodity loans on wheat, corn and cotton, provides also for marketing quotas, when surpluses reach certain levels for each of these commodities and when two thirds of the producers vote to put the quotas into effect.

One of the changes made in the Soil Conservation Program applies only to arid and semiarid regions. The change allows conservation and diversion payments to be made for "water conservation and the beneficial use of water on individual farms, including measures to prevent ruin of buildings or check dams and ponds, and providing facilities for applying water to the land."

Insurance for Wheat Only

Included in the bill, as a separate title, is the Federal Crop Insurance Act, applying to wheat only, and to go into effect next July 1. It authorizes a total appropriation of 100 million dollars for purchase by the Government of stock in the Federal Crop Insurance Corporation, of which not more than 20 million may be appropriated for the next fiscal year.

Crop insurance on a bushelage basis, based on experience the last 10 years on the farm and in the county in which the wheat farm is located, will be offered to wheat growers. The act does not propose to insure income, but only to insure the farmer, who elects to pay the premiums, against loss of more than 25 per cent of the normal yield on the acreage insured.

In the local administration of the act the 3 members of the county committee shall be named by delegates from each local committee in the county. The county agent will sit with the county committee, may be elected secretary, but will have no vote. The state committee, from three to five members, will be named by the Secretary of Agriculture.

More Money for Small Farmer

Changes in the present act affecting payments to individual farmers include larger payments for small farmers, and limit total payments to any "individual or corporation" to \$10,000 a year in any one state.

Hikes for small farmers are on the following scale: Any farmer whose payment under the act was less than \$20 will get an additional 40 per cent between \$20 and \$40; additional \$8 plus 20 per cent of excess over \$20; between \$40 and \$60, additional \$12 plus 10 per cent of excess over \$40; more than \$60 but not more than \$186 additional \$14; between \$186 and \$200, increased to \$200.

Wheat growers who sign contracts will not be required to reduce acreage during 1938, the wording of this provision being "the farm acreage allotments shall be made for wheat in 1938, but in determining compliance wheat shall be considered in the group with other crops for which special acreage allotments shall not be made."

Highlights of the provisions for commodity loans on wheat, corn and cotton are these:

Commodity Credit Corporation, upon recommendation of the Secretary of Agriculture with approval of the President, is authorized to make loans on agricultural commodities, including dairy products. Amount, terms and conditions shall be fixed by the Secretary.

In addition to these discretionary loans, mandatory loans for wheat, corn and cotton are provided under certain conditions.

Whenever the price of wheat on June 15, is below 52 per cent of parity (parity now is about \$1.16), or if the July crop estimate for wheat is more than a normal year's domestic consumption plus exports, then loans to

co-operators are mandatory, the amount to be between 52 and 75 per cent of parity. When marketing quotas are in effect, nonco-operators will be entitled to loans, but only to 60 per cent of the amount per unit lent to co-operators; loans to nonco-operators also are limited to that part of his wheat subject to penalty if marketed.

The mandatory loan provisions for cotton are the same as for wheat.

Loans on Corn Are Different

Corn loans are on a different basis. They are to be available whenever the November crop estimate shows an excess of corn beyond ordinary domestic consumption plus exports, or if the price is below 75 per cent of parity.

The corn loan shall be 75 per cent of parity if the estimate does not exceed normal year's consumption and exports, and the price is below 75 per cent of parity.

Loans will be 70 per cent of parity if estimate exceeds normal consumption by not more than 10 per cent.

Loan will be 65 per cent of parity when excess over normal consumption is between 10 and 15 per cent; 60 per cent of parity for excess of between 15 and 20 per cent; 55 per cent of parity between 20 and 25 per cent excess over normal consumption; and 52 per cent of parity when excess over normal domestic consumption plus exports is more than 25 per cent.

These corn loans are available for corn growers in the commercial corn-producing area at the foregoing rates; to nonco-operators in the commercial area only when marketing quotas are in effect, and then only at 60 per cent of the amount available to co-operators.

Outside the commercial corn producing area co-operators are entitled to loans at 75 per cent of the rate afforded co-operators in the commercial area.

If producers vote down marketing quotas when a referendum is held on whether these shall be imposed, then the loans shall not be made during that marketing year—but loans already made may be renewed.

Parity payments in addition to conservation payments—an adjusted difference between market price and parity price for co-operators—are authorized if and when Congress makes appropriations for that purpose. The Administration program at present calls for imposition of processing taxes to pay the cost of such parity payments to wheat, cotton, corn, rice or tobacco producers.

Protected on Deficiency Judgments

Producers are protected against deficiency judgments on any commodity loans made—they cannot be personally liable for anything except the commodity pledged as security, unless the loan was obtained thru fraudulent misrepresentation by the producer.

Marketing quota provisions for corn will go into effect—unless one-third of the producers in the commercial area vote in a referendum against the quotas going into effect—when the Secretary finds that the total supply of corn is 10 more than the normal supply on October 1, of any year.

Normal for corn, cotton, wheat is a year's normal domestic consumption plus exports, plus 7 per cent in the case of corn, 40 per cent in the case of cotton, and 15 per cent in the case of wheat. The foregoing are "carry-over" allowances. The total supply is the carry-over in a commodity plus the estimated production of the commodity during calendar year in which the marketing year begins.

The commercial corn producing area shall include all counties in which the average production of corn—excluding corn used as silage—during the 10 calendar years preceding, after adjustment for abnormal weather conditions, is 450 bushels or more to the farm and 4 bushels or more for each acre of farm land in the county. Within 10 days after the act is passed, thereafter on February 1, the Secretary shall proclaim what counties are in the commercial corn producing area.

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Kansas Farmer Market Place

No farm marketing quotas with respect to corn shall be imposed on a farm which normally produces less than 300 bushels a year.

The farm marketing quota, if and when marketing quotas are imposed, will be the amount used as silage, plus the actual production of acreage of corn not used as silage, less than the amount allowed for farm consumption, less the storage amount found applicable to that farm.

The storage amount just mentioned shall be the number of bushels equal to the smallest of the following amounts:

(1)—Normal production in excess of the marketing percentage of the farm acreage allotment (the marketing percentage will be given in the marketing quota proclamation submitted to producers for referendum vote);

(2)—The amount by which the actual production of the farm exceeds normal production of the marketing percentage of the farm acreage allotment;

(3)—The amount of the actual production of the acreage of the farm not used for silage.

In addition, the local committee, after notice of hearing, shall declare a further reduction in the storage amount equal the number of bushels required for farm consumption, storage amounts of less than 100 bushels shall not be considered.

The penalty for marketing corn in excess of the marketing quota for that farm will be 15 cents a bushel. As long as the farmer has stored under seal his proper storage amount, he will not be regarded as having marketed in excess of his quota.

Marketing quotas for wheat may be imposed by referendum—as in the case of corn—when the Secretary finds that the total supply is more than 35 per cent in excess of a normal year's domestic consumption and export. Total

supply is prospective crop plus carry-over.

The marketing quota for wheat will be the normal year's domestic consumption plus export plus 30 per cent. Individual farms will be assigned quotas by the local committee on this basis, after the state committee has assigned county quotas and the Secretary has assigned state quotas. Penalty for marketing in excess of the quota will be 15 cents a bushel. No farm's marketing quota can be reduced to less than the normal production of half the farm acreage allotment.

The cotton provisions are rather more complicated than either wheat or corn, in attempting to protect the small grower—production from less than 5 acres is entirely exempt, for instance. The cotton penalty is 2 cents a pound.

When Quotas Are Effective

The effect of the language used in defining conditions under which marketing quotas shall be imposed is that referenda shall be held when the total supply of wheat at the beginning of a marketing year is more than 940 million bushels; the total supply of corn more than 2,700,000 bushels; of cotton at 19½ million bales.

The Boileau (dairy groups) amendment has been modified so that it applies to dairy cattle only. Diverted acres may not be used to provide feed or pasture for dairy cattle to produce for market on farms where the number of dairy cattle has been increased beyond the normal number if the farm is in a county where the number has been increased.

In other words, diverted acres used to feed dairy cattle shall not deprive the co-operator of his diversion payments, unless he has increased the number of his dairy cattle used for market purposes and the county in which his farm is located also has increased the number of dairy cattle.

Stealing Old Stuff

(Continued from Page 6)

roller to hold them under the burden so that it would not be necessary to pick the roller up behind and put it in front again. Or again maybe it was a lazy fellow. This worked better but still there was a lot of friction. So the middle section was cut away making a crude axle. In some places in the world we still have this type of wheel turning with the axle. The next step was to cut away part of the wheel to lighten the whole thing, again to make less work. It was a long time before spokes were used. In China today a type of wheel made in an "H" form is in common use.

Just where the wheel was invented is a disputed question. In the civilizations of the New World, the Incas, Mayas or Aztecs, there was no wheel. The Egyptians were fairly late in acquiring it and adopted it long after they knew the plow. The wheel probably was invented only once, somewhere in Southeastern Asia, and its use spread to all the world. Wagon wheels of about 500 B. C. have been dug up at Dejbjerg, in Jutland, and now are in the Copenhagen museum. These were not made of separate short pieces put together, but are turned in a circle out of a single block of wood.

Like many other inventions, the wheel found ready use in warfare. Chariots were great weapons for the Egyptians and Assyrians. But they had more noble uses as they were honored means of carrying leaders and heroes and played a big part in many religious ceremonies.

A Need for Harvesters

The early agricultural implements mentioned have been for tilling the soil only. As fields became larger and there were more people in the cities to feed, it became necessary to devise quicker means of harvesting crops. In the New World, where corn was king, this was not necessary and corn harvesters are only a recent invention. But in the land of wheat, it was more work. The first sickle to cut grain was made of bone or stone, but in the Bronze Age blades were cast from metal. The familiar new-moon-shape of the hand sickle is centuries old. The Romans put longer handles on their blades and were able to stand up and make a wider swath.

The early Gauls developed a sort of reaper-reaper pulled by oxen which, according to Roman reports of the

implement, was something like our modern reaper. But during the Dark Ages the hand sickle was the common tool. The scythe, which later developed into the cradle which we all know, was used up until the Agricultural Revolution and numerous inventors turned their wits on the problem of reapers.

Threshing also was a problem. Tramping around on a pile of the cut grain with bare feet was one method. Oxen and animals also were used to tramp the grain. A sort of sled drag by oxen was another primitive method.

The flail, which we consider pretty primitive, was not known until the Middle Ages. It is not known just when or where it was first used. It consisted, as most of us know, of two pieces hinged together, and was used to beat the grain from the hulls. The chaff was separated from the grain by letting it drop and the wind, either natural or artificial, blew the chaff away. The flail was used until threshers came into use.

Principles Found by Ancients

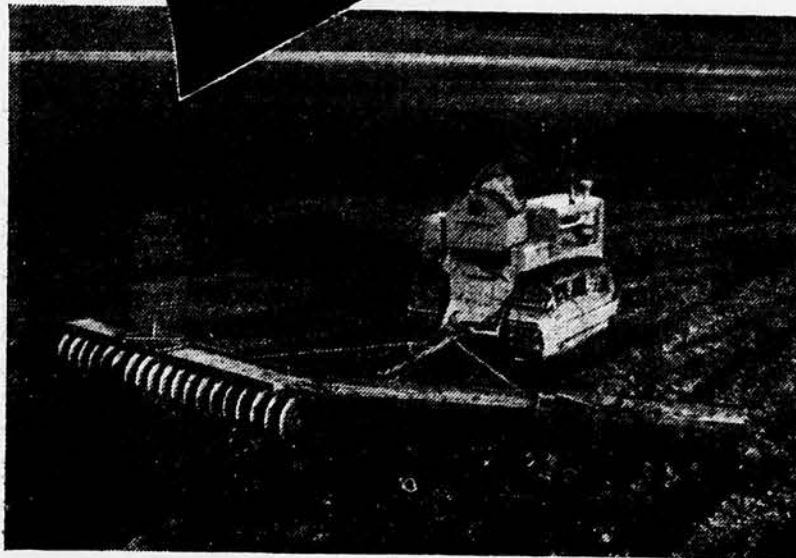
Many principles of our farm implements have early histories. For instance, the lever is thought to have been known as early as the stone age. At any rate the Egyptians knew its use and utilized it in building the pyramids. Archimedes, a Greek inventor credited with numerous inventions, once said to his king, "Give me a place to stand and I will move the earth." Incidentally, this Greek created a device used on every threshing machine to elevate the grain. This spiral device, something like an endless screw, was invented to empty the hold of a ship of water.

The cog wheel, an essential on most of our modern machinery, probably was developed in Egypt. We must give the same country credit for the fly wheel. Early rope makers used it to keep their rope rotating continuously. The Egyptian flywheel also is found in the Orient, where it is used to keep in rotation the little prayer drums in the hands of the faithful. Balance scales were another Egyptian invention.

Most interesting is as early use of the ball bearing principle. Remains of an old ship have been dug up in Lake Nemi, in Italy, which had a ball bearing apparatus revolving a pavilion to keep the commander of the ship in the shade.

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"I have particularly noticed how

well this tractor works on listed ridges," states Mr. Cott. "The tracks fit the row spacing, and the machine's light tread does not mash down even the sandy ridges.

"Our soil varies considerably in this area. We have heavy land, and sandy places all in the same field. With the 'Caterpillar' track-type Tractor, it all looks alike."

The 5-6 plow Diesel D4 ordinarily saves \$350.00 to \$500.00 on fuel alone for Kansas owners. Let the coupon bring you further facts on "Caterpillar" track-type Tractors.

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Valentines for the Barnyard Folks

By LEILA LEE

WHAT a surprise the Barnyard Folks are going to have on Valentine's Day! Jimmy Guinea told Leila Lee that, with your help, his valentines for the Barnyard Folks this year are the best ever. He received many, many valentine verses from all his little friends, and he wants to thank every one of you for helping him out. Jimmy and the judges decided that Joy George, Route 2, North Topeka, and Dean Lignitz, Haddam, sent in the best verses, so they each win a prize of \$1. Joy sent in 10 verses, and Dean 5, and all their verses were very good. Here are some of their verses:

Pudgy Porker,
You're a corker!
The more you eat
The fatter your meat.

Henrietta Hen
Sat in her pen,
Eating mash by the keg,
But never laying an egg.
—Joy George.

Henrietta Hen:
Cackle, cackle, where you go,
When you stop, nobody knows.
Lay an egg 'most every day.
That will keep the axe away.

Mildred Cow, you had better try,
To make your milk test way up high.
Or you may be sold at a market,
And be carried home in a basket.
—Dean Lignitz.

Here are some other verses the judges thought were good:

You like to jump, you like to run,
You like to gallop and have your fun,
But Calvin, is your head as active, too?
Then guess who sent this valentine to you.
—Bobby Bayer, Garden City.

Grandpa Whiteface, you're a sight,
We'd think you owned this farm,
To hear you bellow, snort and stomp,
Worse than a thunder storm.
—Minnie Knudsen, Frankfort.

Around the corner I took a peep,
And who was there, but Charlie Sheep.
He was running, and jumping and
feeling so gay,
That I figured his mother must be
away.
—Donald Hinricks, Leonardville.

Jimmy Guinea:
Trickery is all you think about,
If the others get after you, you pout,
So you better not do it very much more
Or the others will throw you out of
the door.
—John Stepanich, Cherryvale.

Of course, Jimmy Guinea received verses for Harold Calf, Tobias Turkey, Wackie Duck and Mac Goat, too; however, we don't have space to print all the verses here, but plan to use a good many of them in future issues of Kansas Farmer. So watch for the verses sent in by the following girls and boys, who received honorable mention in the contest: Mary C. Manly, Frankfort; Marjorie, Esther and Wayne King, Burlington; Betty Wright, Haddam; Doris Fordice, North Topeka; Helen Asp, Genoa, Colo.;

New Contest Coming

In the next issue of Kansas Farmer, you will meet Uncle Cordy Clever, a favorite pal of Clara and Carl Clever. A new kind of contest will be announced. You'll like Uncle Cordy, and we hope you try out in the contest. Watch for the next issue!—Leila Lee.

Helen Laird, Harper; Roy Wright, Haddam; Rowena Urie, Deerfield; Elizabeth B. Parks, Parker; Doris Lignitz, Haddam; Martha Lee Neal, Elkader; Aletha Coleman, New Castle, Colo.; Ulva May Calvert, Mason City, Ia.; Adeline Kasselmann, Ellinwood.

We'd Like You to Meet—

Doris Fordice, North Topeka

"I am 10 years old, have brown hair and brown eyes. I have one brother and one sister. They both go to high school. I am in the fifth grade and go to Capital School. My teacher is Miss Marshall. There are 13 pupils in my school."

Helen Asp, Genoa, Colo.

"I am 13 years old. I am not going to school because I have been sick in bed with heart trouble for a whole year. I love to read papers, books, and like to write and receive letters. I like very much to live here on the farm, and like to milk cows, help with the house work, and so on. But, of course, I am not able to do anything like that until I get better."

Elizabeth B. Parks, Parker

"I am a Jayhawker, living in Linn county. I go to Pleasant Home school, am 12 years old and in the seventh grade. I have several nice pets. Monkeyface is a big yellow cat; Buster, a shepherd-collie puppy, and I have 6 white ducks. One of my ducks lays an egg every day now. I also have a big roan cow and her two daughters, one son and a granddaughter. Their names are Roanie, the cow, Rose, Tillie, King Tut and Rosa Lee."

Adeline Kasselmann, Ellinwood

"I am 13 years old. I go to the Pleasant School, District 74. My teacher's name is Miss Unruh. I am in the eighth grade and expect to go to high school next year, if I pass. I have a brother and sister, who are both older than I. Their names are Esther and Jack. My brother is married and lives on the farm, and my sister teaches school. My pet dog's name is Fritz. He is brown and white, and is about a foot high."

Won't you write us a letter, telling a bit about yourself, so we can print it here? We'd like to hear from you.
—Leila Lee.

Know Your Kansas

How well acquainted are you with the counties of Kansas? Here is the first of a puzzle series, each question to be answered by naming a Kansas county. See how many you and the family can name, then turn to page 33 and grade yourself. Watch for the next set, which will be printed soon:

- (1) What county in Kansas is a cat?
- (2) What county is a berry?
- (3) What county is a car?
- (4) What county is a hair cutter?
- (5) What county plays a musical instrument?
- (6) What county is in a hurry?
- (7) What county is a path?
- (8) What county isn't telling the truth?
- (9) What county is a cereal?
- (10) What county means to darken?

History Repeats

Centuries ago, Cleopatra, famous Egyptian queen, wore copper and bronze ornaments. Since that time, popularity of copper and bronze ornaments has gone up and down, but style notes show these age-old metals will be more fashionable than ever this year.



THIS BIG LINER IS SENDING OUT DISTRESS SIGNALS.... CAN YOU PUT THE FOLLOWING LETTERS TOGETHER AND SEE WHAT'S WRONG? **RONUGDED NO RFE**

These Dos and Don'ts of Tractor Care Have Been Farm Proved

(Continued from Page 13)

If the lubricating oil only partially performs its function, wear takes place gradually and it will take some time before the ill effects of faulty lubrication begin to show up. Thus the fact that the lubricating oil apparently is giving satisfaction is no guarantee that it is entirely satisfactory for use in the motor as the ill effects may show up at a later time.

The trend in tractor lubrication is toward the use of lighter oils. Improved lubrication systems, less clearances, better cooling, use of protective equipment, better fuels and better oils, all are responsible for this change. Lighter oils have the advantage of flowing more freely and will do a better job of protecting the engine during the warming up period. On old "Kerosene Annie" it was the common practice to turn the sight feed lubricator several revolutions by hand before starting the tractor. This provided lubrication during the warming up period.

A general rule to follow in selecting a motor oil is to use the lightest grade which will properly seal the pistons and separate the wearing parts. Experiments have proved that an oil which is too heavy will increase the fuel consumption, and the added cost of the fuel usually is more than the extra cost of using a lighter oil.

Changing Crankcase Oil

Of all the specifications relating to oils, the most important for the tractor operator to consider is that of viscosity number. Viscosity number is not an indication of quality but merely tells how heavy the oil is, or is the number which denotes the fluidity of the oil. The larger the number, the heavier the oil. The viscosity numbers range from 10-W to 60 or 70. The tractor instruction books and lubrication recommendations supplied by reputable oil companies designate the proper grade of oil to use.

In use, the crankcase oil becomes contaminated with particles of burned carbon, fine dust particles, and unburned fuel. The oil in the tractor motor should be changed at stated intervals, usually every 60 hours, but more often when operated under extremely heavy loads or dusty conditions. It is to be expected that a tractor motor when operating under good conditions, will use some oil. Therefore, it is advisable to check the oil level at least every half day, or oftener. A generally recommended practice for controlling dilution when using heavier fuels, is that of partially draining the crankcase at the end of every 10-hour period and refilling to the proper level with new oil. A higher viscosity oil often is used when a heavier fuel is used in the two-fuel tractor.

How Oil Filters Work

Many farm tractors are equipped with oil filters. The filters which are commonly used on modern farm tractors are of the all-filter type; that is, all the oil is supposed to pass thru the filter before it goes to the bearings. The tractor owner, when buying a new tractor, often learns how all the oil passes thru the filter before it goes to the bearings, but sometimes fails to remember that the filter is equipped with a by-pass valve so that if the ele-

ment is not cleaned regularly to prevent plugging, the by-pass valve will open and the bearings still will be supplied with sufficient lubrication. Farmers often become worried when they take the oil filter on their tractor apart and find a thick deposit on the filter element; they cannot understand how enough oil to provide proper lubrication can pass thru this dirty element. Such conditions often result in oil complaints which would not arise if the operator understood how the filter worked.

Most oil filters have a metal element which has a .003 inch spacing for filtering the oil. In service, these elements are very ineffective until they become coated with a thin deposit which acts as a binder and an additional filtering bed.

Laboratory tests conducted on used crankcase oils taken from tractors, show that where a deposit is found on the filter, the used crankcase oil usually contains very little fine dust particles, but where no deposit is found on the filter more dust particles will be found in used oil. In cases where heavy loads and dusty conditions are encountered, it is advisable to clean the oil filter every day.

About 1 gallon of water is formed and passed off in exhaust gases for every gallon of fuel burned. In cold weather, piston blow-by will allow some water vapor to enter the crankcase where it will be condensed. By cleaning the filter every day, the operator will prevent accumulation of much water which often results in sludge formation and clogging of oil lines.

Tractor Transmission Needs Care

Tractor transmissions also should receive some care and be properly lubricated. It is recommended that the oil be checked at least once every week and be replenished if not up to the proper level. Most engineers recommend that the oil in the transmission be changed at least once a year. When tractors are operated only a few hours during cold weather, the proper viscosity of transmission oil can be obtained for this limited service by diluting the transmission oil with 10 per cent kerosene. It is very important that a light transmission oil be used in cold weather or the oil will channel and not be carried up to the bearings.

Whenever the transmission oil has been thinned for winter operation, it is important that it be drained and replaced with the proper grade of transmission oil before the heavy spring plowing season begins.

Care of Front Wheel Bearings

Front wheel bearings on farm tractors also should be given regular service. Most of the front wheel bearings are so constructed that dirt is carried out of the bearings by grease which works out around the inner dust seal. When lubricating such bearings it is important that enough grease be forced into the wheel so that a small amount works out around the inner side of the hub and carries out the dirt. The front wheel bearing should be carefully watched for end play and if any end play is noticed, the front wheel should be jacked up and the bearing adjusted. To adjust the front wheel bearings, tighten the lock nut until the wheel drags, then back off the lock nut about one-sixth of a turn. At least once a year the front wheel bearing should be removed and washed in gasoline or kerosene. Remove the old grease in the wheel and repack it with new grease. If the inner dust seal is removed it should be replaced with a new one. All dust seals on the front wheels should be inspected every time the wheel is removed and replaced if they show signs of wear.

Tractor owners who wish to operate their tractors efficiently should read their instruction book carefully, select a good motor oil, use a good fuel, service the tractor regularly, warm it up before putting it under load, and when using a heavy fuel the cooling water should be kept near the boiling point. Correct carburetor adjustment and running the motor hot will do much to prevent wear and increase the efficiency of burning the fuel.

THE NEW IMPROVED FORDSON

... READY FOR ANY JOB!

THE 1938 Fordson All-Around Tractor, however, has not been rebuilt from the ground up. For it would be crazy to change all the fine features that made Fordson famous.

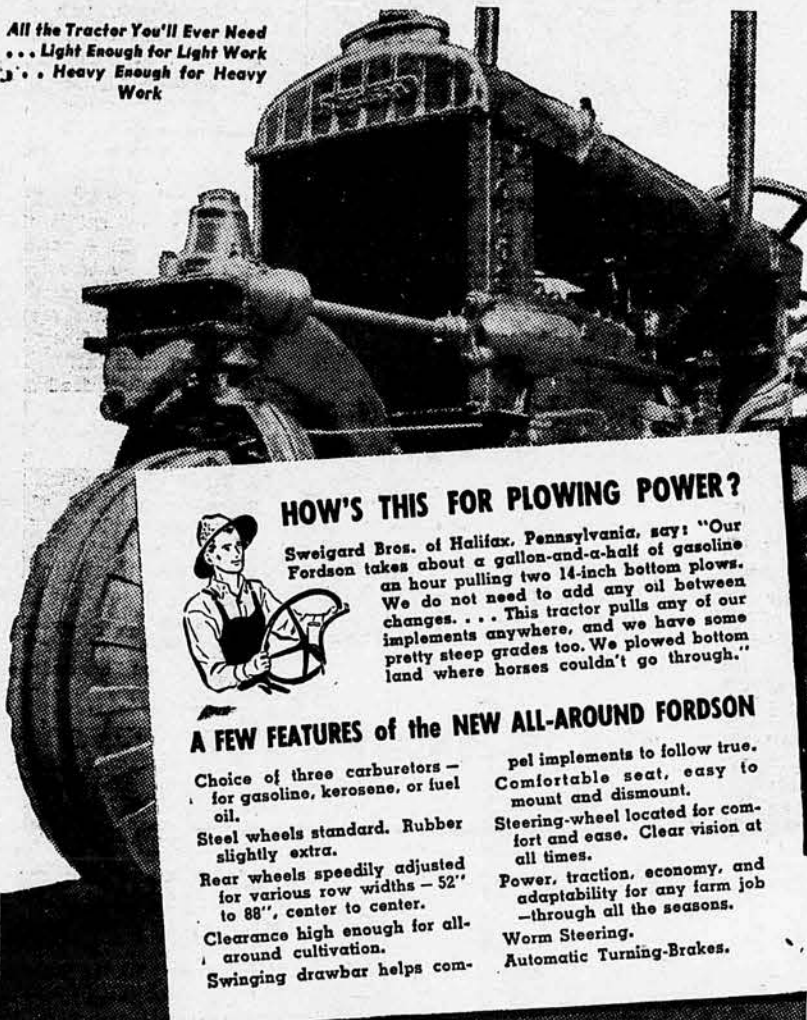
Everything about this tractor has been proved—in the fields and around the barnyard. The only changes are those that should have been made. Nothing was done just to give something new to talk about. It's not an experiment!

Originally built to do an all-farm job, the Fordson is still built for that.

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Yes, lady, I think it's awful cute, too, but you'll hafta mail your letters in town."



An old cow hand from the Rio Plate.

The tenth of a series of travel adventures of a Corn Belt farmer in South America.

THE republic of Uruguay is only a little larger than the state of Minnesota, but the climate, the soil and the people combine to make it one of the leading livestock countries of South America. The seasons are the opposite of our own. July is the coldest month, with an average temperature of 55 degrees. Livestock has green pasture the year 'round. January, the hottest month, has an average temperature of 80 degrees, and early in the morning there is just enough chill in the air to make a coat feel comfortable. In this cool climate there are fewer of the parasites that make stock raising in the tropical countries a more or less hazardous business.

The mountain range along the coast of Brazil flattens out before it reaches the Uruguay border and the level grass-covered plains are only a little above sea level. Thus there is no barrier against the moisture-laden winds that sweep in from the sea and the rainfall is ample. The topsoil does not average more than 2 feet in depth and is generally underlaid with rock. In many places this rock crops out on the surface and this has prevented a general "plowing up" of the country, such as has taken place on the fertile plains of Argentina. Ninety-five per cent of Uruguay's exports still are meat or meat products.

The people of Uruguay all seem to want to live in the cities and one-third of the entire population of the country resides in the city of Montevideo. In addition, there are several other fair-sized cities. The result is a small rural population and the land mostly held in great *estancias* (ranches). At the Montevideo livestock market I was told of one *estanciero* (ranchman) who sold his wool clip for 1 million pesos. The next week he sold 6,000 head of 4-year-old steers at 47 pesos a head, and the following week, 3,000 head of 3-year-olds at 30 pesos. Not a bad month's business, even if the Uruguayan peso is worth only 30 cents in U. S. exchange.

MOST of the *estancieros* are of Spanish Basque blood, and the Basques have been stockmen for generations. In addition, they probably are the proudest people in the world. All business transactions are "*Honrar de Basque*" (honor of a Basque). There are no written contracts and no peso ever changes hands to bind the bargain. Mr. Doyle of "*Frigorifico Armour*" told me of buying 6,000 head of cattle on one *estancia* for future delivery. Cattle prices suddenly bounded upward by 20 pesos a head, but the cattle were delivered without a whimper.

It was in Mr. Doyle's company that I visited the Montevideo cattle market, which probably is the only one of its kind in the world. Three United States-owned and one English-owned packing plants have buyers; there also are several "*saladeros*"—plants for the drying and curing of salt "*jerky*." The only market buildings are a shed for saddle horses and a long, 1-story building that is equally divided be-

A Pen-less Cattle Market

No One Doubts the Honesty of Uruguay's Ranchers—Who Are Raising Beef Every Bit as Good as Ours

By ROBERT C. VANCE

tween a restaurant and a general assembly room where the only furniture is desks, slung against the wall, where checks may be written. Despite the fact that more than 1 million head of cattle pass thru this market every year, there is not a stock pen of any kind. Herds that are unloaded from the trains or driven in from the trail are held separate by the mounted employees of the stockyard until they are sold. The buyers ride from herd to herd making their bids. When a herd is sold it immediately is started down the road to the "*frigorifico*."

"Remember, you are dealing with Basques," Doyle said, having noted the camera slung on my shoulder. "I once saw a tourist get his camera smashed over his head for snapping a picture without asking permission." An attendant led 2 horses out of the shed. When Doyle saw that I mounted on the left side and neck-reined my horse instead of hauling at the rein, he rode off and left me to my own devices.

The "Zebu" cattle of Brazil had dulled my appetite for South American beef, but as I rode thru this market, I saw that Uruguay beef was something else again. Reds, roans and Whitefaces—these cattle were as well bred as anything that ever came out of Kansas. They carried plenty of fat but it was all grass fat. This part of the world regards corn as human food and very little of it is fed to the animals.

My horse probably had put in a good many years carrying cattle buyers. He seemed to have his own ideas as to how much time should be taken in dickering for a bunch of cattle. When this time had passed he would get fidgety and impatient to move on. As the Uruguayan saddle has no horn or cantle, I didn't argue with him but let him have his own way. The result was that I spent the morning talking with the people that my horse thought I should interview, which proved to be as good a way of arriving at a cross section of general impressions as any.

AS IN OUR own country, the cattle business of the pampas has developed a costume peculiar to itself. The pampas sun does not have the glare and heat common to our western plains, so the 10-gallon hat is unnecessary. The *gaucho* (cowboy) usually wears a narrow brimmed felt hat. In lieu of a coat, he wears a "*pancho*," which is a blanket with a slit in the center to thrust the head thru.

Very loose and baggy trousers, "*bombachas*" are worn tucked into knee-high boots. The *bombachas* have no pockets but he wears a wide leather belt with pouches attached to carry money and tobacco. The belts are decorated with brass studs or with sewed-on copper and silver coins. A sheath knife is worn, thrust under the belt squarely in the center of the back. The knife is as much a part of the riding costume as are the boots, and the young dandies

who canter along the streets of Montevideo with no more serious purpose in life than getting some fresh air all carry knives.

I do not recall having seen a pair of spurs in the entire Rio Plate region but all carry riding crops. The saddle is simply a frame with attached stirrups and is padded up with sheepskins. These sheepskins serve as a bed when the *gaucho* spends the night in camp. Where a lasso is used, the end is tied to the cinch ring but about half of the *gauchos* still cling to the "*bolas*." The bola is three lead weights, about the size of a baseball, fastened together with rawhide thongs. When thrown, the weights carry the thongs around the legs of the running animal and throw it.

As the morning passed I began to feel grateful toward my impatient horse. It was much easier to let him carry me away than to put up arguments, in halting Spanish, in defense of the United States sanitation regulations.

NEARLY all South America is infested with foot-and-mouth disease and the U. S. Bureau of Animal Industry will not allow meat to be imported into the United States unless it has first been boned and cooked. This means that the choice Rio Plate beef must be canned before it is shipped into the United States. The canned meat that is sold in the United States must pay an import duty of 6 cents a pound, but it is automatically barred from competition with anything except the very cheapest grade of beef.

The Rio Plate *estanciero* regards the U. S. regulations as a personal affront. He knows that he is raising some of the best beef in the world and he resents having to sell it as "*canner*" grade. If he can back you into a corner where there is no escape he relieves his mind something like this:

"England and Germany accept our chilled beef, but to sell in the United States we must put this meat into cans. Foot-and-mouth disease! There has never been a case of it south of the Rio Negro, yet you refuse to accept chilled beef from that district. Que Caramba, *senor*, it is simply that you do not want our beef. You are ashamed to raise the tariff over 6 cents a pound so you are hiding behind this sanitation thing. Meat is all we have to sell. How do you expect us to buy goods that are manufactured in North America if you will not take our beef in exchange?"

The *estanciero's* complaint is echoed by the businessman of the city. "Go out on the street and look over the automobiles," a banker in Montevideo told me. "You will find that practically every car that is less than 3 years old was made in the United States. Every car that is more than 3 years old was made in Germany or England. Do you know what is selling your cars down here now? It's the drouth. When the dry weather burned up your crops and pastures,



Reds, Roans and Whitefaces—the cattle were as well bred as anything that ever came off our own western ranges.

price of beef went up, until we ship our beef into the United States over a 6-cent tariff wall, even we did have to sell it in cans. Last year there were 86 million pounds of beef shipped into the United States from the Rio Plate ports. That beef was paid for in goods manufactured in the United States."

"How about the farmer and stockman in the United States?" I asked. "That 86 million pounds is a lot of beef, especially when it is shipped from some foreign country to compete with the beef that is raised by our stockmen."

"Then figure it this way," he answered. "Your country has a population of more than 136 million. That 86 million pounds of beef is slightly more than 1/2 pound to the person. When our workmen are employed they are doing plenty of meat. Manufactured goods sold to us helps to keep the wheels turning. As for competition with your own stockmen, remember that they have the advantage of a 6-cent tariff. We are not asking that this tariff be lowered. But we do wish to see our good Rio Plate beef in roasts and steaks instead of in cans."

"And just how can we let you ship in your roasts and steaks without danger bringing foot-and-mouth to our own land?" I asked that question a good many times in the next 30 days, but no man seemed to have a clearer view of the matter than any other person I interviewed.

One plan would be for the U. S. Bureau of Animal Industry to establish bonded warehouses in the North American seaports. Let South American beef be stored in these warehouses, under seal, and sold only to outbound vessels. I do not see how this plan could avoid any possible danger of bringing foot-and-mouth into your farming districts.

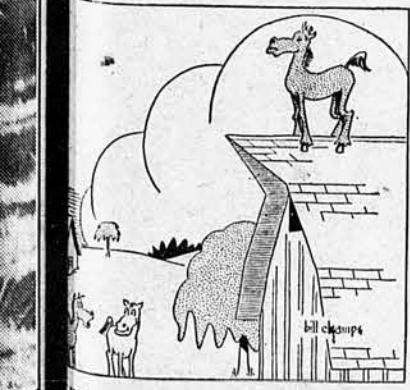
Concern of Both Continents

What I would personally like to see is for the U. S. Department of Agriculture to co-operate with the governments of Uruguay and Argentina to clean up our infected areas. Let them send their experts down here and let us stamp this thing out and then the quarantine on any district as long as it is free of the disease.

North America has as much at stake in this matter as we have. This country is a steadily growing market for goods manufactured in the United States—if we can sell our beef to you. The government of Uruguay controls balance of trade with foreign countries by requiring a permit for the importation of goods. If a business man wishes to import a cargo of machinery in the United States, in a year when balance of trade is unequal, he is to buy his machinery in Germany or England. The government has just made a deal for railway equipment with a German firm. A Hungarian had bid 100,000 pesos less on the offer but the German firm's bid was rejected because Germany was buying Uruguay beef. There is, in prospect, an 80 million-peso hydro-electric plant on the Rio Negro. This contract, although not yet officially awarded, goes to a German firm because the government has agreed to accept 80 per cent of the payment in meats."

While this story deals with Uruguay it applies also to Argentina. You will find all the same arguments and comments in Buenos Aires as in Montevideo. Also I wish to make it plain that I am not expressing my own personal opinions, but am telling only what our neighbors to the south are thinking.

In the next story I will tell about a visit to an estancia in Uruguay.



He's on a strike—he says 'cooked oats for breakfast or there he stays!'

An Early Seedbed and Summer Following Best Wheat Practices

By TUDOR CHARLES

THE year 1937 didn't bring so many new methods in connection with winter wheat production in Kansas, but rather served to prove the value of several already tried practices and items of equipment.

A number of farmers over the state were asked to describe the features of their farming systems which had been most profitable. Since this question included the entire business, both crops and livestock, it was notable that 11 out of 35 named either summer fallowing or early seedbed preparation for wheat as their most profitable farm practice. This emphasizes the belief we already had, that wheat yields are affected most by the soil preparation. This applies primarily to the western two-thirds of the state, although last fall soil moisture was deficient at seeding time even in much of Eastern Kansas.

Tractor power, an extra plow bottom or two, wide coverage field cultivators, weeders, and harrows, all are aids to early seedbed preparation. On our farm last July, with the aid of a

new 3-bottom plow, and a rubber-tired tractor, we worked the soil day and night, and had plenty of moisture for wheat germination on September 15, while later fields were too dry.

L. R. French, Pretty Prairie, and his son Homer, plow directly following the combine. A big rubber-tired tractor is used on the combine, and one on the plow. They said nearly every farmer in their community followed this same practice of early seedbed preparation.

The most valuable practice George L. Whitcomb, of Cedar Point, Chase county, has found for wheat, is application of 60 pounds of treble phosphate to the acre. He produced wheat for a total cost of 61 cents a bushel under this practice, charging \$6 an acre rental on the land.

A method that Clyde Clubine, Havana, Montgomery county, has found successful in his farming is to use the combine. He raises more than 200 acres of wheat annually.

The field cultivator, preferably with sweeps or duckfoot shovels, has been

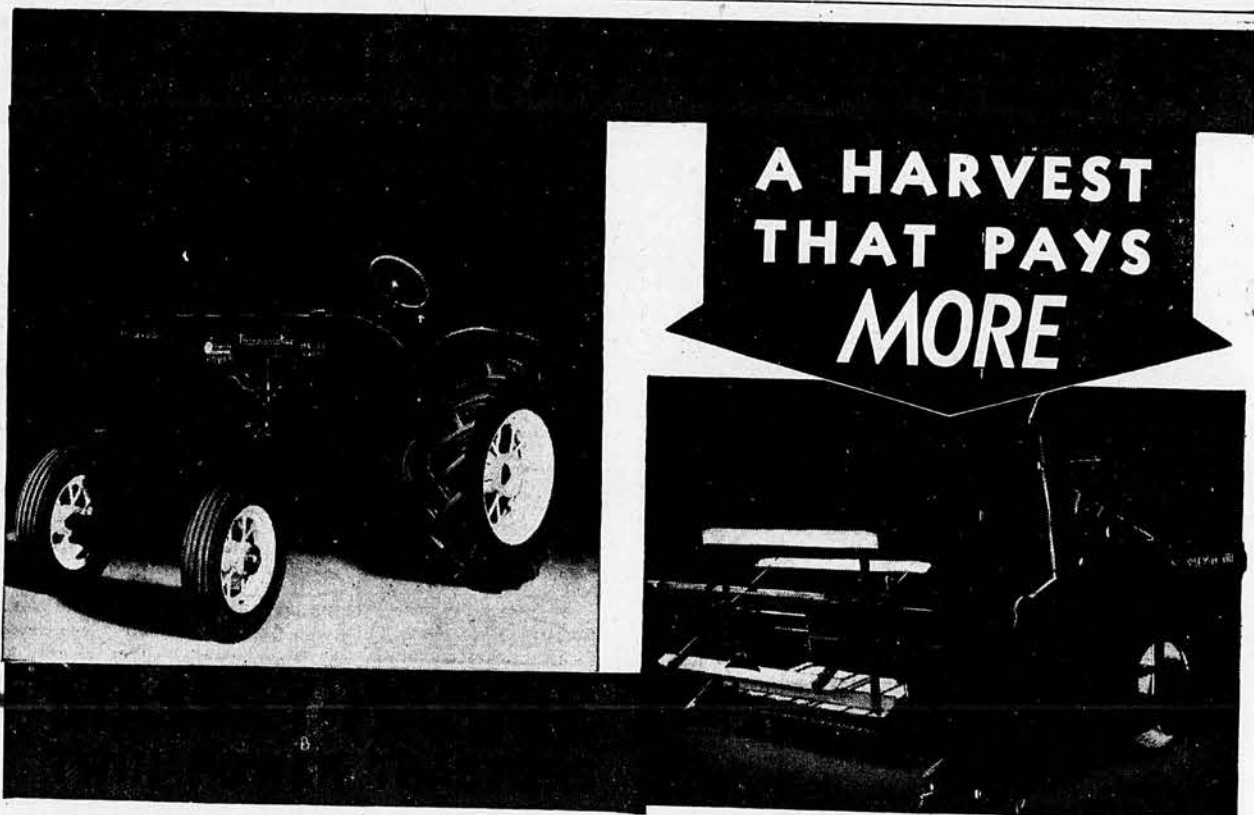
accepted as the best surface tillage tool for wheat land in the western wheat areas. When used on the contour, the small furrows made by the cultivator hold heavy showers, and moisture penetration is much deeper. Guy Olson, Colby, found the soil damp about a foot deeper where it had been contour cultivated.

Drilling on the contour has been beneficial, too. Fred Magley, Bird City, drilled across a steep slope and a heavy rain washed only slightly, the contours stopping the wash at the bottom of the grade. At the headlands the drill was used up and down the slope to seed out to the fence, and this rain cut ditches as deep as one's hand.

The combine harvester coming to Eastern Kansas was the most sensational happening of the wheat year. Combines were used in fields where one would never have expected it, and during the rush of harvest could be seen at night in every part of the old binder territory.

A notable increase in strip farming was seen in 1937. Wheat was seeded in strips with sorghums of one kind or another between. This really checks blowing, particularly if a good cover is left of sorghum stubble.

Fertilizer on wheat already has been mentioned. It was a great year in that respect, with the treated fields escaping the black rust and often doubling the yield of untreated wheat.



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Why I Bought a Tractor

(Continued from Page 8)

The teeth of that rake gave me a boost I shall never forget. They caught me right in the back and kicked me at least 10 feet skyward but by the time I came down the rake had left and I landed in a sitting position smack in a patch of cactus pads. Friends, I want to say that I doubt very much whether there ever was a more restless individual in 7 states than I was after I landed. In fact it was some time before I realized that something had given way inside of me. Next day a doctor told me that three of my ribs had been knocked loose from my spine. By that time I was so stiff and sore that my one consolation was that the Lord had taken at least one of man's ribs away years before to make Eve. At least that was one rib that wasn't hurting me.

However—medical skill and a little rest along with my exuberant youth worked wonders, and in a few weeks I again was in the pink and ready for my next experience.

I had to drive to town—14 miles away—and chose to cut thru the back way. I had to go thru a couple of those western gates that way but trusted to luck. I got thru the first one in fine condition and in fact I got nicely thru the second one, too, but after setting the brake and getting down to close the gate after me a pesky jackrabbit jumped out of the sagebrush and darted right past my team.

I felt it coming and made a wild dive for the wagon but by the time I left the ground the wagon did too and I hit the dirt on all fours. Away went my outfit—now on the ground—now in the air—all in a cloud of dust. Before long it was out of sight but I could follow very readily the two shiny tracks in the dirt where the wheels were sliding. Thank God I had set the brakes or else I'd still be hunting among the hills. I ran across the wagon seat in the brush and knew I was on the right trail. Then I found the end

gate and after that I found all sorts of debris scattered over the landscape, and after a 9-mile hike I came upon what was left of my team and conveyance. They finally had jolted the box off the bolsters and so jammed things up that they were tired and discouraged in dragging it any further. Actually, that made three of us who were tired and discouraged.

I believe I could have stood all that and been able to carry on but some weeks later the final blow fell.

I had sort of a lean-to shed on the place which served as a barn. The stalls were marked off by heavy pine poles rather than partitions and they faced the front wall. In this wall my predecessor on the land had sawed a number of square holes—one in front of each stall—thru which the horses might be fed thus saving much time and effort in going around into the barn with a measure of feed for each beast.

The team was in the barn on this beautiful Sunday morning and I went out to give each one of my faithful steeds her daily portion of oats. The feed boxes were off at one side, and

to be certain that I dumped the feed into this box I stuck my head in thru the hole to give a looksee and get the box properly located. All went well with the brown mare and I became careless, I guess, for just as I got my head thru the hole in front of the gray—WHAM! SLAM! BANG! Something just grazed my right ear and two boards came flying off the front of my barn followed by a right front hoof. I knew it was a right front hoof for I just caught a glimpse of the letter K on it as it came thru. In jerking my head out of the hole I must have been a little hasty for I caught the back of my neck on the edge and nearly decapitated myself.

Attacked from Wrong End

This was my first experience with striking horse. I knew fairly well how to stay away from a set of flying heels but a horse which kicked you from the wrong end was a new one on me and to say that I was surprised and shocked is putting it mildly.

It was too much. I had stood for a lot but this was the last straw. I could understand a horse going for you when you abused or tormented the beast, but for a pesky brute to go for you with all feet flying and try to conk you when you're trying to be decent and give her a good feeding of high priced oats was pouring it on and I'd be dad-burned if I'd put up with any more of that foolishness. A lot of good I'd be as a help in raising wheat to win the war if I got my skull caved in by flying hoofs.

So I returned rather sadly to the house and sat there on the porch in silent meditation, considering what would be best under the circumstances when I heard the sound of wheels approaching. I looked up and saw coming toward me a team of fine Missouri mules pulling a spring wagon in which two men were seated. My visitor turned out to be two recently arrived pilgrims like myself but apparently of a more investigating and inquiring turn of mind. They were out riding around and visiting up and down the foothills, and as it was getting along toward noon by then I suspected they had decided to drop in on me and let me feed them. Well, they had caught me in my most jovial and hospitable mood. That was a cinch.

We sat around and conversed at some length, exchanging our respective views and opinions of the community at large—they doubtless wondered when we ate, and I wondering when they would leave so that I might eat and the day wore on.

I finally told them of my experience with my gray mare and I thought I noticed a trace of a grin on the face of one of my guests as I proceeded with my story. When I had finished I relieved myself of about a half pint of tobacco juice and remarked, "So you the feller that bought that locoed mare from George Tomkins."

Understands All Now

Locoed mare? What was this? That was it, eh. I had bought a loco animal and had never known it. Gradually a great light came over me and I became filled with an understanding which amazed me. Things began to unfold as I looked back over the previous months of tribulation, pain and discouragement. I had heard and read about loco weed and locoed horses but so far as I knew I had never been closely associated with one of the critters. That is, I had never been associated any more closely than I have owned one and nearly been killed several times as a result.

It seems that one of my guests had been approached by this unspeakable George Tomkins, but he brought his own work stock with him from Missouri and besides, he had a relative who had lived in these parts for a long time and this relative tipped him off concerning this loco mare which had a reputation as a killer and general bad actor.

Woe was me. What I needed was a relative or two nearby to tip me off a few of the facts of life. I felt so miserably alone and neglected right then. I developed a strong feeling of sentiment toward George Tomkins, after turning the matter over in my own mind for several days I decided against trying to take it out of his hands. Perhaps the fact that George was about 6 feet 4 and a pretty tough looking hombre might have influenced me just a little. I don't recall now. But

(Continued on Page 34)

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Early Chicks Have Advantages

By MRS. HENRY FARNSWORTH

How about hatching a brood of early chicks this year? There has been more activity among the poultry raisers the country over than for several years at this time of the year. Especially is this true among those poultry raisers who hatch and rear broilers for the early market. Whether there will be more broilers than the market can take at good prices remains to be seen.

Farm poultry raisers generally, however, market their cockerels as a sideline. If the



Mrs. Farnsworth

broilers more as chicks are home hatched or if straight run chicks are bought from a hatchery, they may be expected to run about 50 per cent cockerels. These are marketed at 10 to 12 weeks of age, and usually pay the feed bill for the entire lot up to that age. This is possibly the main reason why more farm people still prefer straight run chicks. Pullet chicks cost more a chick to start with, and excepting a few culls from them, there is no cash return until they come into production. There is a tendency to overcrowd the houses too, in getting pullet chicks. Only half the usual number of straight run chicks should be placed in the brooder house, for it will be necessary to move half the pullets to other quarters to avoid crowding otherwise. A good buy for the person who raises only broilers in the cockerel chicks are sexed at the hatchery.

Hens Must Have Good Ration

Some of the things we farm poultry raisers should consider are that we must feed a good ration if we expect good fertility and hatches of strong chicks. We must supply the foods that are breeding flock needs. We must supply vitamin E, without which there would be no fertility or good hatches. Plenty of good yellow corn and green feed in some form will take care of this part of the ration. In the absence of sunshine we may add cod liver oil, and we should feed a balanced mash. In addition to good feeds we must give enough hopper room in order that the hens may eat enough to produce well. The foot of hopper space to every 4 hens is sufficient. Likewise there should be enough drinking space.

After the eggs are laid we must make plans to see that they are stored in a suitable place until we are ready to place them in the incubator. A standard size egg case is a good container in which to keep them. If they are to be kept over 10 days, the case must be turned over daily but turning is not necessary if used within a few days. The temperature at which the eggs are held has quite a good deal to do with the hatchability. While the temperature should not be above 70 degrees it should be an even temperature. They should be gathered at this time of the year several times during the day to keep them from becoming chilled, then stored in a temperature of 45 to 55 degrees. A test made with eggs held at 54 degrees for 20 days were found to hatch very satisfactory. While eggs held this length of time will hatch under good storage conditions, many times the chicks are not so strong or so disease resistant.

Avoid Many Disease Germs

While it may possibly be a little more trouble to hatch chicks early and the expense is somewhat more for fuel for brooding, there are several advantages that the early hatched chicks have over those later broods. In the first place they are hatched from the best layers and the birds of best vitality, for it is those that lay under adverse weather conditions. Naturally chicks hatched from such parent stock are harder—more disease resistant. Then there are not so many disease germs developing early in the year as there are later. Coccidiosis and tapeworm infestation do not trouble the early hatched chicks. They get a good start before these germs start. Then these February and March hatched pullets will start laying in the latter part of the summer when the hens are slackening, which makes a better balanced year around production. In most cases these pullets, especially of the lighter breeds will take a rest and go thru a slight molt before the hatching season next year, and be ready to produce big fine hatching eggs that give as good results in most cases as the hen flock.

—KF—

Know Your Kansas

Answers to puzzle on page 28:
(1) Thomas; (2) Logan; (3) Ford;
(4) Barber; (5) Harper; (6) Rush;
(7) Lane; (8) Lyon; (9) Rice; (10) Cloud. Did you have a perfect score for this little test?

New Machinery for New Ideas

(Continued from Page 23)

fully, and there was some combination of bluestem grass seed.

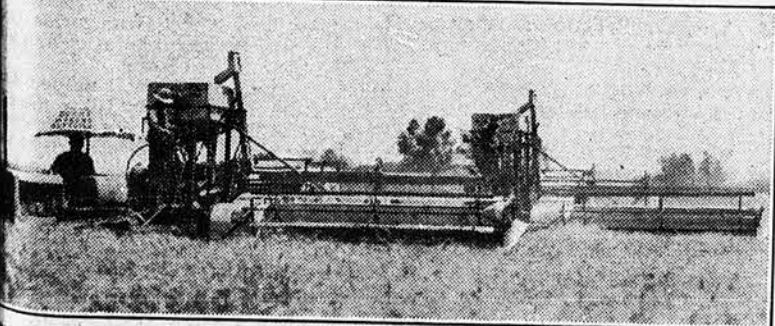
Machinery dealers experienced a sell-out on fertilizer drills last year. The only way many farmers could do a proper job of putting phosphate on their wheat and winter barley was to hire owners of fertilizer wheat drills to do the seeding or rent their equipment.

There is some interest in fertilizer sorghums and it is a good practice. It has given greatly increased yields on poorer land in Eastern Kansas. The only way to do a good job of applying fertilizer to row crops is with attachment to the planter. These are not expensive, the cost is about \$25. It is important to have phosphate applied in just the proper relation to

row-crop seed in order to get desired results.

New uses for standard equipment may be even more important to farmers than new equipment design. Among the practices which gained momentum last year are contouring and bindweed eradication with the duckfoot cultivator, basin-listing on the contour, making terraces with disk plow or even regular moldboard plow, and pasture-furrowing with the lister. In Thomas county farmers used 6-inch spade shovels on a heavy tiller to make pasture furrows on reasonably level land.

A minor refinement we can't see, but which is important, is improved lubrication which results in easy running and long wear.



Two 12-foot combines with one tractor in Raymond Adams' wheat field, Maple Hill.

Farmer for February 12, 1938

THE

YOUR BABY CHICKS DESERVE A GOOD FEED

YOU BET! AND FUL-O-PEP MASHES GROW FINE PULLETS AT LOWER FEED COST.

THIS LOOKS LIKE GOOD FEED TO ME

I WONDER WHAT IT IS?

FUL-O-PEP CHICK STARTER THE BOSS SAID

THAT'S RICH IN OATMEAL

feed FUL-O-PEP CHICK STARTER

SURE! THEN WE'LL GROW BIG, RUGGED AND HEALTHY

RIGHT! AND DEVELOP INTO FINE, CAPABLE PULLETS TOO

FUL-O-PEP FED CHICKS GROW INTO FINE PULLETS

• Ful-O-Pep Chick Starter contains lots of oatmeal—and every farmer knows that all live stock does better on oats. And the Experiment Stations have now demonstrated that oats and oatmeal excel other grains in raising chicks. They contain valuable minerals, vitamins and proteins which grow better bone and avoid slipped tendons; make for better digestive conditions which invite rugged growth, and contain factors which prevent cannibalism among chicks.

• Build yourself a bigger, better flock of capable pullets this year—pullets that are well developed, strong, vigorous and well-feathered. Raise them on Ful-O-Pep Mash fed the Ful-O-Pep Way. Start now with your baby chicks. Put them on Ful-O-Pep Chick Starter and Ful-O-Pep Fine Chick Feed. It gives them that fine, uniform growing start that means so much to their future successful development.

• You will be delighted as you see your chicks grow into pullets this season, the Ful-O-Pep Way—on Ful-O-Pep Chick Starter plus grain and (later) oats fed as directed in the new 32-page book "Raise More and Better Chicks," which is FREE for coupon or postcard. It tells you how to raise better pullets for less money.

THE QUAKER OATS COMPANY
Dept. 23-B, 141 W. Jackson Blvd. CHICAGO, U. S. A.

MAIL COUPON for FREE 32 PAGE BOOK

Name

23-B Address



I SPRAY MY CHICKS WITH

DR. SALSBUARY'S CAM-PHO-SAL

TO GUARD AGAINST COLDS, GASPING AND BROODER PNEUMONIA!

DR. SALSBUARY'S CAM-PHO-SAL

FOR CHICK HEALTH ASSURANCE

Dr. Salsbury's POULTRY HEALTH SERVICE STATION

Dr. SALSBUARY'S LABORATORIES Charles City, Iowa

BECK'S WARM BROODER

Build it yourself
Broods 150 chicks. FEW CENTS weekly runs it. TAKES PLACE of 150 BROODER HOUSE. Plans, Heater, \$4.25. Circular free.
R. L. BECK, DEPT. 041, SULLIVAN, WIS.

Beware Kidney Germs If Tired, Nervous, Aching

Are you Run Down, Nervous, suffer Aching or Swollen Joints? Do you Get Up Nights, or suffer from Burning Passages, Frequent Headaches, Leg Pains, Backache, Dizziness, Puffy Eyelids, Loss of Appetite and Energy? If so, the true cause often may be germs developed in the body during colds, or by bad teeth or tonsils that need removing. These germs may attack the delicate membranes of your Kidneys or Bladder and often cause much trouble. Ordinary medicines can't help much because they don't fight the germs. The doctor's formula Cystex, now stocked by all druggists, starts fighting Kidney germs in 3 hours and must prove entirely satisfactory in 1 week and be exactly the medicine you need or money back is guaranteed. Telephone your druggist for Cystex (Siss-tex) today. The guarantee protects you. Copr. 1937 The Knox Co.

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Queen of the Market. Big Money Maker. Large Solid Fruit—Excellent Canner. To introduce to you our Vigorous Northern Grown "Pure Bred" Garden Farm and Flower Seeds, Bulbs, Strawberry Plants, Fruits and Nursery Items we will mail you 125 Seeds of Condon's Giant EVER-BEARING Tomato FREE. Most Complete Seed and Nursery Book—150 pages—600 pictures. Bargain Prices. Write Today. Send no money—don't delay. Box 242 Rockford, Illinois

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Founded in 1920 by Arthur Copper
A most worthy and effective philanthropy. Work limited by no boundary lines and discriminating in favor of no race or creed. No solicitors, no salaries, supported by purely voluntary contributions. Address: CAPPER FOUNDATION FOR CRIPPLED CHILDREN 20-A Copper Building, Topeka, Kansas

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Mon.—Wed.—Fri.

At . . . 6:45 a. m.

"Col. Combs and Ramblers"

Tues.—Thurs.—Sat.

At . . . 6:45 a. m.



"EZRA and FAY HAWKINS"

Mon. thru Sat.

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"The Voice
of
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The "IGA Quintet"

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At . . . 9:00 a. m.

TEN \$100 BILLS A DAY!

Tune in at 4:00 p. m.
Mon. thru Fri.

For Details!

The H. D. LEE NEWS

Mon. thru Sat.

IMPLEMENT ISSUE SHOPPER

Here is an unequalled opportunity. You can send for many of the booklets offered in the advertisements of this issue of Kansas Farmer without sending individually to the manufacturers. For you can check below opposite the booklets you want and mail this entire list to Kansas Farmer. We will see that you get what you want.

- ☐ Illustrated Literature Picturing and Explaining the Dempster Tilling, Damming and Deep Furrow Seeding Machine. P. 11.
- ☐ Free Trial Package of Feen-A-Mint. P. 19.
- ☐ Minneapolis-Moline Farm Machinery. P. 20-21.
- ☐ Free Booklet, "How to Get More Tractor Power." P. 22. (Mail coupon with this list.)
- Three Booklets, P. 24:
 - ☐ Double Profits From Legumes.
 - ☐ Building Soils for Cotton and Corn.
 - ☐ Peas for Profit.
- ☐ Literature on New Aero-Matic Windmill. P. 24.
- ☐ Complete Information on Cletrac Agricultural Models. P. 24.
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- ☐ Free, "Hidden Treasures in Your Soil." P. 26.
- ☐ Complete Information on the New 1938 Fordson All-Around Tractor. P. 29.
- ☐ Full Information on The Bear Cat Grinder. P. 29.
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- ☐ Free Sample Corona-Wool Fat and Instructive Literature. P. 30.
- ☐ Catalog and Complete Information About Western Pumps. P. 30.
- ☐ New 32-Page Book, "Raise More and Better Chicks." P. 33.
- ☐ Dr. Salisbury's First Aid to Baby Chicks. P. 33.
- ☐ Details of Roderick Lean Diskmor. P. 35.
- ☐ Complete Description of Rotary Reaper. P. 35.

There are a few advertisements containing coupons requesting special information. We suggest that you fill these coupons and mail direct to the manufacturer.

KANSAS FARMER, Topeka, Kansas

I would like the booklets checked above.

Name

Address (R. F. D.)

Post Office K212

Why I Bought a Tractor

(Continued from Page 32)

the decision to skip the whole matter so far as George was concerned came another decision, and that was that I would mechanize my farm, and that immediately.

I felt so grateful to my Missouri guests that Sunday for giving me the low-down on this horse deal that I broke down and asked them to stay and eat with me. I was closest to the door when I extended the invitation, but I was the last man inside the house when the dust settled and the rush subsided. Tho they cleaned me out of a week's provisions, I considered it a bargain. Hadn't they saved my life?

At any rate I bought a tractor the very same week and I've always felt that bad as that tractor turned out to be, I was justified. Some men buy a tractor because they want one. Some buy because someone sells them one. Some buy tractors to keep the boys on the farm or because they like the smell of gasoline. But I was driven to it by an old gray mare and I still think my excuse was as good as any. Certainly I had enough provocation.

All who read my story of that tractor know that it did not solve my problems entirely, altho I did know which end of the tractor did the kicking and it never swapped ends on me, altho it did play all manner of other devil's tricks. But to say that my troubles ended when I got a tractor would not be entirely truthful. Not by any means.

Went All of the Way

When I decided to mechanize I went the whole way. I jumped off the deep end so to speak. I not only got a tractor but I also got what was purported to be a truck. It was really an old Model T Ford on which someone had mounted an express body. I saw it advertised in a Billings paper and forthwith hied myself to Billings and made the purchase. The garage man told me that it had formerly belonged to the Salvation Army. Maybe so. I know I have never felt quite as warmly toward the Salvation Army since that time.

After much sharp bargaining I induced the man to throw in a spare tire, which I later discovered did not fit, and a set of tire chains—just in case. He also gave me a tankful of gasoline and a jack. The tire chains turned out to be a happy idea for before I had gone 20 miles I was up in the hills of the Pine Ridge range and the pass was filled with snow. In spots the snow was so deep that I sank out of sight. I finally tried backing over the divide on the theory that the back end was lighter and wouldn't bog down so badly. It was a stroke of genius except that all the water ran out of the radiator and I had to melt snow in a tomato can time and again to refill the cooling system. I lost my chains in the snow

bank, and couldn't find them and it took me 14 hours to negotiate the 63 miles to the ranch and it got cold when the sun went down, too.

My next problem was to dispose of my team of mares. I was afraid it would be another mistake and that I might need the team to haul the truck around when it broke down, but I was completely fed up with the beasts and my mind was made up. They had to go. I was soon to learn that buying a locoed mare and disposing of one are two separate and distinct sales problems and had to be handled in an entirely different manner.

To begin with, I had to find an unsuspecting victim and that was no cinch. The joke had been spread all over the countryside and up and down both sides of the valley. Every one knew about my locoed mare. In the second place I found that a native was much more likely to tip off another native than he was to tip off a pilgrim from back East.

A Policy of Waiting

Advertising that team in the local paper would have been so much money thrown in the river, so I strengthened my fences, turned the horses out on pasture and adopted a waiting policy.

Finally fortune smiled on me. Someone told me about an old Indian who had a fairly new John Deere binder, and by the grapevine route I got word to this old buck that I'd consider trading him a good team of mares for his binder provided he could dig up \$100 cash to boot. One fine day he and his squaw drove up and sat in their wagon for half a day looking over the fence at my team. They never spoke a word. Late in the afternoon they drove away. Next day they came back and repeated the performance. Next day they came again and then I didn't see them again for nearly 2 weeks but when they did come back, he was ready to talk trade. He said that he'd trade me the binder for the team and give me \$40 boot. I held out for \$100 for a while and then weakened and fell off to \$75. He stood his ground because \$40 was all he could dig up.

Reluctantly I broke down and made the deal with him but insisted that he had to deliver the binder before he could have the team. I really would have traded even or given some boot. He left his \$40 with me as a sign of good faith and about 2 weeks later he showed up dragging the binder and that was the last I saw of my mares. I wished him well with them but I've had a guilty feeling about it even to this day.

So that's the how of it all. When the old gray mare took a kick at the whiffletree I was willing to stand for it, but when she started in using me as a target I bought a tractor.

Popular Safety Program Indicated

A BIG reduction in accidents which cause loss of life, much pain and suffering, and a huge cost in property damage, seems assured on Kansas farms if letters received by the Kansas Safety Council are an indication.

The first state-wide Farm Accident Prevention Program, according to safety authorities, is now under way.

Over 50,000 "Farm Accident Primers," describing the innocent appearing dangers that lurk on nearly every farm, prescribing the simple remedies which will prevent a needless accident, and offering prizes to young people in a prevention program, have been distributed. More copies are available and are being mailed by the State Board of Agriculture, the State Department of Public Instruction, the State Department of Vocational Education, the State 4-H Club Leader in Manhattan, and the Kansas Safety Council.

Judging committees in every county have been appointed and they will promote interest in the program. County winners will compete for the state prizes.

Kansas Farmer is offering a gold watch to the winning boy and the winning girl in the state. The Kansas Safety Council is offering a trip to the American Royal Livestock Show in Kansas City, with all expenses paid, for the winning school group or club.

The Farm Accident Primer lists and illustrates such common dangers so often found about homes, such as broken steps, ladders left where young children can play on them, stairways without hand rails, dead limbs left in trees and up-turned nails in boards.

Typical farm accidents are from dangerous animals, pitchforks concealed in hay, split handles in axes, children riding on unguarded machinery, and rotted ropes used for hoisting.

—KF—

Legumes and Pasture Good

Lespedeza has done fairly well as a pasture crop for A. A. Pease, Fort Scott. Most all of the tame pastures killed out the past few years he said. A pasture was seeded to lespedeza and other tame grasses, a couple of years and at first the lespedeza crowded out all the other grass. But the next summer the drouth was too much for even it. Mr. Pease said the legume had done well on poor soils in his neighborhood, without addition of limestone. This is its one advantage over alfalfa and the clovers. Soybeans made a good hay crop for Mr. Pease. He planted them in rows and bound them at harvest. In 1936 they became over-ripe before harvest, due to wet weather, so he kept them for seed. The price of soybean seed last spring was good too.



Edward Geffert, Humboldt, is general handy man around the large farming operations of A. C. Geffert and his 7 sons, who farm together and each handles a branch of the farm work. Here is the feed mill used, housed in a dry granary, and Edward preparing to toss in a scoopful of ear corn.

Longer Season for Feed Grinders, Made More Popular by Sorghums

ALTHO the usual season of feed grinding on a wide scale is nearing an end, this year we may see continued far into the spring and summer.

Many cattle were bought late and started on feed only recently. Feed was carried along until the cattle were bought. After several months of haphazard feeding of bundle sorghums, whether by preference or because of lack of funds to buy a grinder, most farmers are going to be in a mood to find up their feeding season with round fodder, and maybe even ground alfalfa hay, in the feed bunks.

As the feeding season goes into the final months, cattle are going to require a little more palatable and digestible mixture of feed. Nothing would improve sorghum fodder, alfalfa hay, and grain quicker than grinding. From many angles it looks like a paying proposition to change from whole feed to ground feed now. Grinding is more and more accepted on Kansas farms. Feed grinding appeals to many farmers as a means of improving their feed supplies. It can be done at their leisure. A move from farm to farm doesn't necessitate leaving either storage facilities or feed. Leo Croft, Kinsley, is having Atlas roller and good alfalfa hay ground by neighbor for his cows. A combination roller and burr mill is used. The feed is eaten "slick and clean." It makes the feed do more good and go perhaps half again as far, at only small cost for grinding.

F. M. Cudney, Trousdale, uses his roller hammer mill to grind barley, corn and alfalfa hay. Not much of the roller ground alfalfa meal is fed, but enough to balance the ration along with wheat pasture for the high producing Jerseys.

H. H. Johnsmeyer, Marion, likes to see his stock well fed but he can't bear to see them waste feed. So he grinds corn and fodder in a large roller and hammer mill and feeds this to lambs, calves and fat cattle. He doesn't use a

screen in front of the hammers for grinding sheep and cattle feed. But the pounding breaks nearly all the Atlas sorghum grain and the knives and hammers together make fine pulp of the roughage.

Feed grinding extends from torrid weather to wintry blizzards on the A. L. Criger farm, near Howard. Large acreages of Kansas Orange are grown, and after the silos are filled, the extra supply goes in the shock to await later grinding or chopping. Cattle are put on feed in early fall, and by winter time there is silage space for some of the shocked sorghum. This usually is made into silage by addition of water, altho it may be fed dry-ground if conditions warrant.

Not only have increased acreages of sorghums given roughage grinding a boost in Kansas, but the swing from corn to barley and wheat for feeding has made grinding necessary. An example is A. T. Hoover and Sons, of Dickinson county. They grind barley and oats for their lambs. Barley acreage has replaced corn on the farm and it must be ground for all types of stock. Hoovers results prove ground barley is an excellent lamb feed.

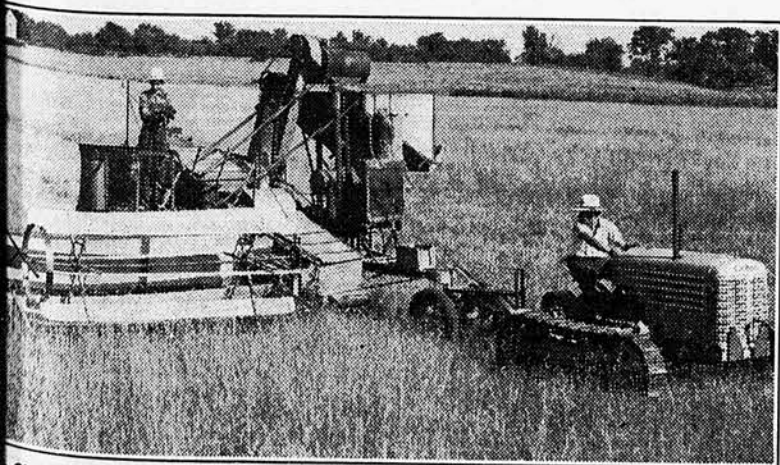
Kafir and Atlas are chopped dry and put in the silo for winter feed on George L. Whitcomb's place, Cedar Point. This work is done in coldest weather, and Whitcombs like the finely chopped mixture. They grind coarse alfalfa hay with it, also. The machine used is an ordinary ensilage cutter, with sharp knives.

—KF—

Terraces Level Ground

Terraces on relatively level ground hold the moisture and insure better wheat production in Western Kansas, believes R. E. Frisbie, McDonald. He has a terraced field, which was seeded to wheat 2 years consecutively. The second year, 1937, this field made better than 5 bushels to the acre of 60-pound wheat.

Little Tractor Pulls Big Combine



Cleveland Tractor Company will exhibit several models of Cletracs at the Wichita Tractor Show. Both agricultural and industrial types will be shown. This picture shows a tiny power-house hauling a heavy combine during the wheat harvest.



With a DISKMOR wide Disc and your tractor . . .

A late Spring or labor shortage can't hold you back in seed bed preparation! Cover 60-75 acres a day, easy. Tests prove early planted crops yield better net profits. Delay is costly. Get your DISKMOR now . . . have your crop in on time.

Roderick Lean
A FARM TOOLS
PRODUCT **DISKMOR**

21 FT. 38 DISCS

15 FT. 28 DISCS

One man loads or unloads end gangs easily, quickly. 15 ft. size clears 12-ft. gates. Simpler . . . only one control rope. Exclusive snubbers insure better penetration. Many exclusive features. See your Farm Tools dealer NOW, or write for details.

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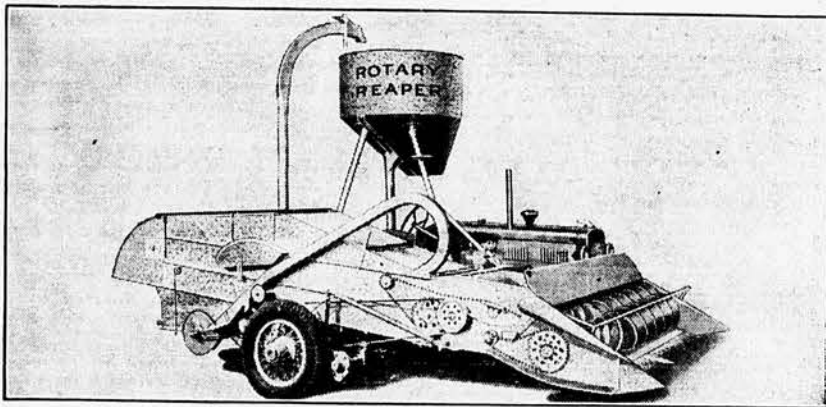
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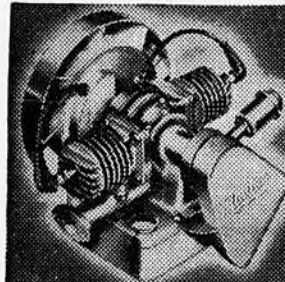
REVOLUTIONARY COMBINE AMAZES



Hundreds of farmers throughout the West and Southwest watched with astonishment the performance of Curt Baldwin's new combine, the Rotary Reaper. As Robert H. Shedd of San Bernadino, Calif., said, "The Rotary Reaper harvested some of my wheat which measured 5 ft. 9 in. and ran 45 bu. to the acre. Examination of the straw showed a perfect job of separating and cleaning." C. O. Rosenberger of Hemingford, Neb., adds, "As we drove along by the Rotary Reaper my speedometer showed 15 mi. per hr.—and it was doing good work." Every wheat farmer is interested in learning all about this amazing new one-man self-propelled combine that has the speed and the capacity to harvest 30 bu. wheat at better than 6 miles per hour; that saves power by carrying the load; in which the harvester, thresher and separator are built in one rigid, self-contained unit, eliminating all flexible and sliding parts; that embodies a spring-mounted carriage, hydraulic lift and snubbers and the new Baldwin "Semi-Suspension System of Separation." Find out for yourself. Write Curt Baldwin, c/o Rotary Reaper Co., King St., Ottawa, Kans., today, for a complete description.

SENSATIONAL IMPROVEMENT IN WASHER ENGINES

NEW MAYTAG Twin-Cylinder Multi-Motor



Ask for a demonstration
IF IT DOESN'T SELL
ITSELF, DON'T KEEP IT

For more than twenty years Maytag washer improvements have led the industry, and they still do. Now this remarkable new Twin-Cylinder engine gives you the following advantages:

VERY
EASY TERMS

- Smooth, vibrationless power.
- Easier starting.
- Does a big washing on one quart of gasoline.
- Interchangeable with an electric motor.

Own the washer that holds world leadership. Electric models for homes with electricity.

THE MAYTAG COMPANY, MANUFACTURERS
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reported last Fall. Be satisfied with only the best Hybrid for your territory. Hybrids for Iowa, Neb., Mo., Kans., Minn. and S. D. Get 15-25 bu. more per acre with McNeilly Hybrid! Costs less than \$1.00 per acre to plant and get these increased yields. Drought resisting, still stalked, deep rooted, higher feeding value. Write today for complete information.

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and FREE Samples too
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Write quick for full information on Champion Permanent Round Hog Houses—or Poultry Houses. Sectional. Easy to erect or move. All sizes—up to Giant Extension Houses that can be expanded with increasing herds or flocks. Lowest priced housing on market. Agents wanted.

WESTERN SILO COMPANY, Dept. 20, Des Moines, Iowa

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Words	One time	Four times	Words	One time	Four times
10.....	\$.80	\$ 2.40	18.....	\$ 1.44	\$ 4.32
11.....	.88	2.64	19.....	1.52	4.56
12.....	.96	2.88	20.....	1.60	4.80
13.....	1.04	3.12	21.....	1.68	5.04
14.....	1.12	3.36	22.....	1.76	5.28
15.....	1.20	3.60	23.....	1.84	5.52
16.....	1.28	3.84	24.....	1.92	5.76
17.....	1.36	4.08	25.....	2.00	6.00

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

FARMERS MARKET

RATES 6 cents a word each insertion if ordered for four or more consecutive insertions; eight cents a word each insertion on shorter order, or if copy does not appear in consecutive issues; 10 word minimum. Count abbreviations and initials as words and your name and address as part of the advertisement. When display headings and white space are used, charges will be based on 50 cents an inch line, or \$7 per column inch; five line minimum; 2 columns by 163 lines maximum. No discount for repeated insertion. Headings and signature limited to 24 point openface type. No cuts allowed. Copy must reach Topeka by Saturday preceding date of issue.

REMITTANCE MUST ACCOMPANY YOUR ORDER

RELIABLE ADVERTISING

We believe that all classified advertisements in this paper are reliable and we exercise the most care in accepting such advertising. However, as practically everything advertised has a fixed market value, we cannot guarantee satisfaction. In cases of honest dispute we will endeavor to bring about satisfactory adjustment, but our responsibility ends with such action.

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

Wonderful POULTRY BOOK
FREE LOW PRICES in varieties SEX LINKED and PUREBRED. BABY CHICKS, PULLETS or MALES. Also STARTER CHICKS. LAYERS. Cocks and Hens. ALL FLOCKS BLOOD TESTED FOR BVD. Write quick for this fine book. GREAT WESTERN HATCHERY, Box 34, Salina, Kans.

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CHOICE STRAWBERRY PLANTS. TWELVE varieties. Boysenberry, Youngberry plants. List free. James Sterling, Judsonia, Ark.

TOBACCO

DEWDROP — OLD TOBACCO — MELLOWED in bulk. Guaranteed satisfaction or money refunded. Fancy smoking, five pounds 75c; 10—\$1.40; 25—\$3.00. Mild handpicked chewing, five pounds \$1.00; 10—\$1.75; 25—\$4.00. Free! New formula for home manufacturers. Guaranteed to save 60%. Dewdrop Farms, Farmington, Ky.

SAVE—BUY DIRECT FROM FACTORY. 200- 000 farmers say you can't beat "Kentucky Pride" chewing, 30 big twists, sweet or natural, \$1.00; 30 full size sacks smoking, extra mild or natural, \$1.00; 24 full size sweet plugs, \$1.00. Satisfaction guaranteed. Murray Tobacco Co., Murray, Ky.

GUARANTEED CHEWING, SMOKING OR Cigarette tobacco, five pounds \$1.00, ten \$1.75. Pay when received. Pipe and box cigars free. Carlton Tobacco Company, Paducah, Ky.

KENTUCKY'S SPECIAL — GUARANTEED best mild smoking or red chewing, 12 pounds \$1.00. Recipe, flavoring, box plugs free. Valley Farms, Murray, Ky.

POSTPAID, GUARANTEED, RICH MELLOW hand picked chewing, 7 lbs. \$1.00, smoking, 10 lbs. \$1.00, sample 25c. L. M. Gallimore, Dresden, Tenn.

GUARANTEED: CHEWING OR SMOKING, 5 pounds \$1.00; 10—\$1.60. Mild smoking, 10—\$1.50. Pay postman. United Farmers, Bardwell, Ky.

POSTPAID: GOOD OLD SWEET JUICY RED- leaf Chewing, 7 pounds \$1.00. Real Smoking 10. Guaranteed. W. L. Crews, Dresden, Tenn.

POSTPAID, GUARANTEED, VERY BEST 28- in, sweet juicy Redleaf Chewing, 10 lbs. \$1.35; real Smoking \$1.00. B. Moon, Sharon, Tenn.

PAY WHEN RECEIVED, HONEST WEIGHT tobacco, guaranteed, 20 lbs. smoking or 15 chewing, \$1.00. Dick Adams, Sharon, Tenn.

GUARANTEED: 10 POUNDS FINE RED chewing or smoking tobacco \$1.00. Nice pipe free. Farmers Union, Mayfield, Ky.

CANARIES
RAISE CANARIES. MEN-WOMEN, GET INTO this profitable business. We buy your birds, other markets waiting. Small investment. Free booklet. Ill Bird Co., Dept. 265, Onley, Ill.

BUILDING MATERIAL
LUMBER AND SHINGLES, MIXED CAR LOTS direct from mill to consumer at remarkable savings. Send us your bill for estimates. McKee-Fleming Lbr. Co., Emporia, Kan.

WHOLESALE OILS
WANTED RELIABLE FARMER IN EACH township as dealer for Archer Lubricants, batteries, radios and wind chargers. Fish and Gillette tractor tires and wheels. Have good proposition for right man. Write in. Dept. E, Archer Petroleum Corp., Omaha, Nebr.

PATENT ATTORNEYS
INVENTORS—TIME COUNTS—DON'T RISK delay in patenting your invention. Write for new 48-page free booklet, "Patent Guide for the Inventor." No charge for preliminary information. Clarence A. O'Brien and Hyman Berman, Registered Patent Attorneys, 150-P Adams Building, Washington, D. C.

PATENTS, BOOKLET AND ADVICE FREE. Watson E. Coleman, Patent Lawyer, 724 9th St., Washington, D. C.

BUSINESS OPPORTUNITIES
SALE OR TRADE: GOOD PORTABLE FEED grinding business and equipment; also 110 acre farm near Lawrence. Oscar Markley, Baldwin, Kan.

COTTAGE CAMP—\$1700.00 income 1937, no depression here. Age, sickness forces sale. C. A. LaFort, 2117 Garfield, St. Joseph, Mo.

CISTERN FILTERS
JOBBER, DEALERS, TINNERS SELL U-S Cistern Filters. Saves cistern cleaning. Have better health. U-S Filter Co., Bloomington, Ills.

CISTERN
WATER when you need it with concrete cisterns but like a jug. Cheaper and better. Get our estimates. Write or phone 2-4713. Al Crouch, 2231 California Ave., Topeka, Kan.

LAND—KANSAS

LAND AUCTION—1,245 ACRES; FEBRUARY 24; William Griggs Estate, on graveled highway and creek, three miles southwest of Salina, Salina County, Kansas. Modern improvements; sold in four tracts, positively to highest bidder. Successful sale enables us to sign contracts guaranteeing satisfactory prices for no commission. For descriptive folder write Audlin Clark Land Auction Company, Salina, Kan.

OWNER LIVING LONG DISTANCE FROM THE farm wishes to sell 80 acres in eastern Kansas, Neosho county between Chanute and Ft. Scott. Good land, fair barn and rundown house. An opportunity to get 80 acres at low price. Good roads. K. E. Shepard, 360 N. Michigan Avenue, Chicago, Ill.

FARMS: ALL SIZES, TYPES AND PRICES. settle estates, also mortgage company holdings. Eastern Kansas. Write for listings, state what you prefer. Fred L. Coleman, Garnett, Kan.

EIGHTY ACRE LEVEL CREEK BOTTOM farm. Alfalfa, timber, close town, improvements cost \$1500. Federal loan \$1500. Sell equity \$1700. Possession. C. J. Griffith, Norton, Kan.

NICE 120 NEAR EMPORIA. ALL WEATHER road, good buildings, only \$30 an acre. T. B. Godsey, Emporia, Kan.

240 ACRES, BEST BOTTOM, NEAR EMPORIA, highly improved, sale or trade. T. B. Godsey, Emporia, Kan.

FARMS, ALL PRICES, IN ONE OF THE BEST counties in the state. No trades. B. W. Stewart, Abilene, Kan.

LAND—MISSOURI
FEDERAL FARM VALUES. A COMPLETE variety in Missouri, Illinois, and Arkansas to choose from. Well located. Priced to sell. Easy terms. Just a few days. Advantages of buying your farm from the Federal Land Bank of St. Louis. These are typical. 160 acres, Johnson county, Missouri, 11 miles to Warrensburg on paved state highway No. 13; 1 mile to school, 2 miles to church; R. F. D.; telephone and electric high line; two-story 6-room house, barn, poultry house, shed; watered by well, springs and cistern; gray silt loam, lies medium rolling; 100 acres tillable, 50 acres pasture, 10 acres timber; \$6800, 80 acres, Shannon county, Missouri, 1 1/2 miles to Monticello, on a public gravel road, 1 mile to U. S. highway No. 60; 1 mile to school and church; R. F. D.; 4-room house, barn, poultry house; watered by cistern and ponds; brown loam, lies gently rolling; 15 acres tillable, 30 acres tillable pasture, 25 acres pasture, 10 acres timber; about 20 fruit trees; \$1200. Pay 1/4 cash, balance in easy terms of 5% over 20-year period. No trades. Write for free list of farms today. Please tell us the counties in which you are especially interested. The Federal Land Bank of St. Louis, St. Louis, Mo.

LAND—MISCELLANEOUS
FEDERAL LAND BANK FARMS FOR SALE. We have farms and ranches in Kansas, Oklahoma, Colorado and New Mexico. Priced on actual value. Sold on convenient terms. Favorable interest rate. No trades. Tell what locality you are interested in and we will mail you farm description. Federal Land Bank of Wichita, Wichita, Kan.

THE GREAT NORTHERN RAILWAY SERVES an agricultural empire of fertile, productive farms where rents, prices and operating costs are low in Minnesota, North Dakota, Montana, Idaho, Washington and Oregon. Write for free book and full information. E. C. Leedy, Dept. 202, G. N. Ry., St. Paul, Minn.

FARMING THAT PAYS THE FARMER IN North Carolina. Good farm lands at reasonable prices. Long growing season, diversified crops offer real profit opportunities. Livestock, dairying, fruit culture, truck farming. See advertisement page 37. Write Dept. Conservation and Development, Raleigh, N. C.

BARGAINS IN LAND, WHERE CROPS ARE dependable. Washington, Minnesota, Montana, Idaho, Oregon and North Dakota. Literature. Impartial advice. Specify state. J. W. Haw, 81 Northern Pacific Ry., St. Paul, Minn.

REAL ESTATE SERVICES
SELL YOUR PROPERTY QUICKLY FOR cash no matter where located. Particulars free. Real Estate Salesman Co., Dept. 510, Lincoln, Neb.

IN THE FIELD
Jesse R. Johnson
Capper Farm Press
Topeka, Kansas

Ben Hook, veteran Duroc breeder of Silver Lake, has plenty of good breeding stock for sale.

G. V. Cook, of Freeport, has 4 registered Percheron stallions for sale. Weanlings and 2-year-olds.

G. W. Locke, DeGraff, has the largest and highest producing herd of registered Red Polled cattle in the state. He always has breeding stock for sale.

Harry Bird, referred to in the last issue as Harry Birdwell, has advertising in our Polled Shorthorn section. Mr. Bird has a good herd and can supply the needs of his old as well as new customers.

H. F. Miller, of Norcut, Hereford breeder, has 20-month-old bulls for sale. Mr. Miller sold the most of his herd to a Texas breeder last fall, but he still has a small herd and wants to sell the bulls right away.

Lawrence Strickler, Milking Shorthorn breeder, reports good inquiry and sales on advertising carried in Kansas Farmer. Among the recent sales made was a pair of bred heifers to M. R. Goering, of Moundridge.

Charles Phillips, of Monticello, Illinois, writes as follows, "Please give me addresses of parties in Kansas, Oklahoma and Nebraska who have Hereford cattle and sheep for sale. I have a farm in Missouri that I want to stock."

F. E. Wittum & Son write for change of copy and say they have 34 bred gilts for sale and as fine a lot of fall boars and gilts as they ever have raised on the farm. The Wittums breed the thicker fleshed, easier feeding kind of Poles.

Ben M. Ediger, of Inman, offers a 3-month-old son of a line bred Bar None Clay Duke bull, junior champion at the International in 1937. The calf's dam is a granddaughter of the 18,000 pound milk producing cow, Glenside Pearl Clay 7th.

When Clarence Miller of Alma says "short- legged, easy feeding kind of Durocs" the statement means just what it says. Mr. Miller has bred gilts and fall pigs of this type and is willing to send them out on approval. They are registered and immuned. Address him at Alma.

Vern Albrecht, veteran Duroc breeder and showman, has a fine selection of bred gilts for

HAMPSHIRE HOGS

Kansas Hog Raisers!!

Come to This Big Hampshire
Bred Sow Sale in

Fremont, Neb., Feb. 28

12 leading Nebraska Hampshire breeders are consigning 75 bred sows and gilts and some top notch fall boars to this sale. You will find many attractions and a useful offering throughout. The breeding is excellent with a good range of farrowing dates. Write to me for a free catalog.

H. C. McKelvie, Sale Mgr.

Lincoln, Nebraska

Col. A. W. Thompson, Auctioneer

Quigley Hampshire Farms

Bred Sows and Gilts. Registered, immunized. Twenty head to farrow in March and April. Bred to sons of High Score, twice World's Grand Champion.

15 head boars ready for service.

QUIGLEY HAMPSHIRE FARMS

Williamstown, Kan.

Mail Address: St. Marys, Kan.

SHEEP

BRED SHROPSHIRE EWES

A few select registered ewes bred to sire of Champion pen of lambs on Foot and Carcass at the 1937 Kansas Lamb Show, American Royal Building. Excellent Shropshire type. Request details.

HENRY E. SCHMIDT, FREEPORT, KAN.
President, Harper Co. Sheep Producers

AUCTIONEERS AND SALES MANAGERS

Bert Powell

AUCTIONEER

LIVE STOCK AND REAL ESTATE

715 Lincoln St. Topeka, Kan.

COL. H. D. WILLIAMS
Livestock and general farm sales auctioneer.
Denton (Doniphan Co.), Kan.

HORSES

Reg. Percheron - Belgian Sale

In the Animal Husbandry Arena,
Stillwater, Okla., Thursday, Feb. 24

39 mares (most of them in foal and broke to work), 12 stallions. For catalog, address
OKLAHOMA PUREBRED HORSE AND JACK ASS'N.

Stillwater - Oklahoma

BELGIAN HORSES

Reg. Belgian Horses

Prize winners at several state fairs. Stallions and mares, priced reasonable.

J. F. BEGERT, BOX 43, TOPEKA, KAN.

PERCHERON HORSES

7 Pure Bred Percheron Stallions

For sale: coming 4-year-old black stallion, coming 2-year-old black stallion; 5 coming yearlings, blacks and greys. Good individuals, priced right. Would consider other livestock in exchange.

TERRELL BROS., R. 1, McDONALD, KAN.

Reg. Percheron Stallions and Mares

15 stallions and 25 mares. Good individuals with the most popular blood lines.

H. G. EHELMAN, SEDGWICK, KAN.

Percheron Stallions

For Sale: Four Percheron stallions, weanlings to coming 2 years old. Imported Glacis, Lagos and Hilar breeding.

GEO. V. COOKE, FREEPORT, KAN.

PUREBRED PERCHERON STALLION

Purebred Percheron Stallion, dark gray, coming 2-year-old, for sale.

CHARLEY DELP, ST. JOHN, KAN.

Reg. Percheron Horses & Jersey Sale

On Farm, Half Mile South of Belle Plaine, Kan.,

20 Miles South of Wichita

Wednesday, Feb. 23

20 REGISTERED PERCHERONS

6 studs, from one year to mature stallions. 14 mares and fillies (all mares of breeding age are in foal and broke to harness). The blood of CARNOT, CASINO and HOULEUX. Mares bred to a son of IMP. MU.

REG. JERSEYS: Cows in milk, one 2-year-old bull and a choice lot of heifer and bull calves. Financial King, Stockwell and St. Maues breeding.

350 EWES: Good Westerns, bred to registered Blackface rams. For March lambing. Write for catalog to

W. P. Hamilton, Belle Plaine, Kansas

Auctioneers: Boyd Newcom and Chas. Cole

Jesse R. Johnson, Fieldman

sale. Mr. Albrecht says they are as good as he has ever raised, weighing up to 450 at 10 months old. He also has some good young purebred Angus bulls. They include first, second and third calf winners in the Columbus, Neb., show. The others are of the same breeding.

I wish to call your attention to the Kansas Milking Shorthorn Society Selling Service. For information pertaining to Kansas Milking Shorthorns in a general way get in touch with their secretary, Harry Reeves of Pretty Prairie.

Fred D. Strickler, Hutchinson, well known breeder of Ayrshire cattle reports a very good demand from breeders and 4-H Club boys for his young breeding stock. His herd average last year was 373 pounds of fat and he had a high Ayrshire cow in their testing association with 467 pounds of fat.

With courage to overcome obstacles such as short crops and still shorter pastures, Mr. and Mrs. C. A. Randel, living near Cedar Bluff, are holding their herd of Polled Shorthorn cattle intact. Their present herd bull, Collynie Gallant 2nd., a Hultine bred bull, is an extremely low, thick animal. At present they have for sale a yearling and a mature herd bull.

The Duallyn Farms Milking Shorthorn herd of Eudora, was established in 1917 and has practiced careful selection of breed stock, size, type and production. In this herd possibly as many record of merit cows will be found as in any herd in the state. The present herd sires are Northwood Butterboy 9th and Louis Protector. The dams of these bulls were high producers.

Kansas Farmer has just received from the Ayrshire Breeders' Association of Brandon, Vt., a nice schedule of advertising to start at once and extend over several months. Breeders of Ayrshire cattle who live in Kansas appreciate this service and the assistance Secretary Conklin gives in helping to bring before Kansas farmers and dairymen the merits of this great breed of cattle.

We call your attention to the announcement of Bert Powell, livestock and real estate auctioneer in this issue of the Kansas Farmer. Mr. Powell has been located in Western Kansas for years but now is located at Topeka, Kan. Mr. Powell has been selling for many Kansas livestock breeders for many years and we know that he is capable of conducting sales of purebred livestock of all breeds and can sincerely recommend him as an able salesman.

Arthur Bloomer, who owns one of the leading Shorthorns of the state, offers young bulls suited to head registered herds and improve the quality of commercial herds. He features the blood of Revolution and Divide Superb. The Bloomer cow herd carries the blood of leading Scotch families; he has used Tomson bred bulls. Mr. Bloomer always reaches out for the best when buying breeding stock and is willing to pay what is necessary to own a good animal. His address is Lancaster.

Henry E. Schmidt, president of the Harper County Sheep Producers Association, is offering for sale a few registered ewes. These ewes are bred to Mr. Schmidt's stud ram which sired the champion pen of lambs, on foot and carcass, at the 1937 Kansas State Lamb School held in the American Royal Building. Lambs sired by this ram have been constant winners wherever shown. The top ram lamb of the 1937 Southern Kansas Ram sale that brought \$42.00 was sired by Mr. Schmidt's ram.

Foster Farms, of Rexford, is well known to every Kansas Hereford breeder. It is one Hereford establishment where you can go and be assured that you can buy breeding stock of the highest type any time of the year. This well known Hereford establishment has possibly as many prize winners on their farm as you will find anywhere. Yet if you want bulls or females for range or farm, they have them also. Manager E. D. Mustoe will be pleased to show you this splendid array of Herefords.

Terrell Bros., Percheron breeders of McDonald, started breeding purebred Percherons 3 years ago. They made their original purchase from Dell and Son of Beatrice, Neb. This purchase consisted of a mare in foal and 2 fillies. They have kept the produce of these mares and added two purebred mares in the meantime, and their herd now numbers 17 head. They now wish to sell a black 4-year-old stallion and 6 head of younger stallions. See their advertisement elsewhere in this issue.

E. C. Lacy & Sons, of Miltonvale, offer at private sale a good selection of red and roan Scotch Shorthorn bulls sired by their great breeding bulls, G's Victorious and Scottish Major. Among them are several real herd bull prospects. They are from 10 months to 2 years old. No Kansas herd has made greater progress in good Shorthorn development during the last half dozen years. They have made correct matings and their cattle have won a lasting place among breeders and farmers who like the low set, thick kind of cattle.

A Kansas purebred livestock breeder recently said, "Boyd Newcom works for the breeders the year around but charges only for what he does on sale day." I recalled this remark recently when spending an hour with Mr. Newcom in his office in the Exchange building at the Wichita Stock Yards. While we visited or walked to and

from the hotel during the dinner hour, it seemed that everyone wanted to ask some question regarding the livestock business. Where to buy a stallion, a pair of mares, a bull or something pertaining to past or coming public sales, Mr. Newcom has lived in Wichita a long time and has a wide acquaintance among the farmers and stockmen of the Southwest. He always is pleased to give information concerning the good of the livestock business. He does it in a frank, kindly way that with his unfailing humor has endeared him to farmers and breeders in every part of the states where he makes sales.

The Wilken Bros., who live northwest of McDonald in Cheyenne county, have been breeding registered Hereford cattle for more than 20 years and now have about 300 head. The firm is holding its first public sale on Monday, February 28. The sale will be held in the big Bird City sale pavilion. They are selling about 85 head, all young cattle. Nothing over 3 years old, 25 bulls coming yearlings, 40 heifers coming yearlings, heifers, and 20 2 and 3-year-old bred heifers. Applications may be filed any time for a catalog.

Quigley Hampshire Farms, owned by E. C. Quigley, of St. Marys, again is offering for sale 20 head of choice spring gilts and young sows bred to sons of High Score, the world's grand champion in '37 and '38. The junior champion also was bred by the Quigley Hampshire Farms. Their offerings are of the best and the blood lines are distinctive. Every offering is registered, immunized and guaranteed. These sows and gilts will farrow in March and April. Only 20 head are offered. They also have 15 head of boars that are ready for sale.

We wish to call to your attention the round-up sale of Hereford bulls to be held in Kansas City, Mo., on Monday and Tuesday, February 28 and March 1. This sale offers everyone interested in buying herd material a chance to make a selection to fit their particular needs. In an offering of this size it gives the small farmer as well as the rancher a chance to buy what he wants at a price he can afford to pay. Cattle all are tested for T. B. and abortion. Write for catalog to The Hereford Association, at 300 West 11th, Kansas City, Mo.

Merl G. Palmer has bred registered Herefords on his farm just south of Hope, in Dickinson county, for many years. Starting with a Good Donald and Beau Mystic cow foundation, and using good bulls has made it possible to build up a good herd. The herd now numbers about 120. The older and commoner kind were weeded out during the depression years and now his herd is very uniform. The 20 bulls he offers are of different ages. All of them are ready for service. They are in nice thrifty condition, not loaded with fat, but carrying about the right amount.

Jas. T. McCulloch, of Clay Center, has been making sales for the purebred livestock breeders of this and adjoining states for a good many years. He has thrived on the work. His methods of selling are modern and he not only continues

"I am well pleased with the result of my advertisement. I sold all the gilts today to one man and have 5 inquiries to date." — Leo Schumacker (breeder of Spotted Polands), Herington, Kan.

to sell for those who have employed him for their sales in other years but others have come to note his ability to conduct sales in a way always satisfactory to both buyer and seller. He is an unusually hard worker and the last animal sold at the close of a hard afternoon gets the same attention as does those coming into the ring when the bidding is more brisk.

Former Governor Charles W. Bryan of Lincoln, Neb., recently dispersed his draft horses and farm machinery. The sale was advertised in Kansas Farmer. Mr. Bryan writes, "I received several inquiries from your paper and a large number of Kansas people attended the sale. The crowd was estimated from 8,000 to 10,000. Horses and machinery sold well as could be expected. Five young teams of unregistered mares sold for prices ranging from \$400 to \$500 a span. I appreciate the good attention given to my advertising and extend best wishes to everyone connected with your publications, including Jesse R. Johnson."

H. C. McKelvie, sales manager, Lincoln, Neb., notified us to claim February 28 for the Nebraska Hampshire Breeders' bred sow and gilt sale to be held at Fremont, Neb., on this date. Twelve of Nebraska's leading breeders are consigning to this sale. Nebraska breeders have produced in the last few years possibly as many or more outstanding Hampshires than the breeders of several adjoining states. Considering the number that is selling you should have an opportunity to select breeding stock at prices that will not be prohibitive. Bred sows and gilts are hard to find this spring. Write Mr. McKelvie for catalog.

L. E. Ladin, of Crab Orchard, Neb., has on hand an unusually fine selection of young registered Aberdeen Angus bulls. They range in ages from 10 months up to over 2 years. There also is as usual a limited number of females ready to go out into new hands. They are bred to the grand champion bull at the Nebraska show and sale last year. This bull is seven-eighths the blood of the International grand champion last year. He is also the highest priced bull sold in Nebraska last year. The Ladin cattle are of correct type and none are better bred. The herd is located just over the line in Nebraska. Mr. Ladin's advertising appears regularly in Kansas Farmer.

The sale advertisement of W. G. Buffington, who sells registered Shorthorns in the big new sale pavilion at Arkansas City, February 22, carries a cut of a choice breeding cow in the Buffington herd. This cow as a heifer was a member of the show herd and now is a valuable breeding matron in the herd. Mr. Buffington is selling a fine lot of young stock and some cows with big calves at foot. It will be a good place for the beginner as well as club boys and girls. The place of selling has been chosen with a view to the comfort of those attending the sale and everyone is invited by Mr. Buffington to come as buyers or visitors. Write now for catalog if you haven't already done so. His address is Geuda Springs.

One of the outstanding herds of Polled Hereford cattle to be found in Kansas is the John Ravenstein herd at Belmont in Kingman county. This herd was established 20 years ago with a small foundation of deeply bred Anxiety horned

AYRSHIRE CATTLE

For Most 4% Milk



Big, economical producers of 4%, premium milk
Write for literature and list of breeders
Ayrshire Breeders' Ass'n.
260 Center St., Brandon, Vt.

RAISE AYRSHIRES

Reg. Ayrshire Bulls

For sale—four young bulls, excellent breeding and from cows with 400 pound fat record. These bulls ready for light service, priced from \$50 to \$100.

FRED D. STRICKLER, HUTCHINSON, KAN.

GUERNSEY CATTLE

Would you be interested in a herd sire, a grandson of one of these

Langwater Valor Langwater Slogan Langwater Africander

Three of the great MAY ROSE sires of the age. 170 cows in herd. Everyone has a DHIA record, and many Advanced Register records. Bulls are priced right.

Jo-Mar Farm

SALINA

KANSAS

Reg. Guernsey Bulls

For sale. Six to 24 months old. Popular breeding. Prices, \$50 to \$150. T.B. and Bang's accredited.

TOM COOPER FARM, ARDMORE, OKLA.

HOLSTEIN CATTLE

Dressler's Record Bulls

From cows with records up to 1,018 lbs. fat. We have the highest producing herd in United States, averaging 558 lbs. fat.

H. A. DRESSLER, LEBOW, KAN.

Holstein Bull For Sale

Choice young Holstein from high producing stock. For more information and prices write

CARL TANGEMAN, NEWTON, KAN.

MILKING SHORTHORN CATTLE

DUALLYN MILKING SHORTHORNS

Young Bulls for Sale—From Small Calves to Yearlings. Their dams are Record of Merit cows. We have one of Kansas' oldest and highest producing herds. The Young Bulls from these cows are for sale. Write us for prices.

JOHN B. GAGE, EUDORA, KAN.
(Farm 4 Miles Southwest)

GRANDALE MILKING SHORTHORNS

Red, little white, 3 months old bull, out of a granddaughter of Glenside Pearl Clay the 7th. The highest cow for butterfat in the U. S. Price of calf \$65.00.

BEN M. EDIGER, INMAN, KAN.

SOCIETY SELLING SERVICE
offers herd bulls, yearlings, bull calves, cows. Located near you. Members' cattle are listed for \$25 per head. Dues \$1 a year.
KANSAS MILKING SHORTHORN SOCIETY
Pretty Prairie, Kan.

Livestock Advertising Copy

Should Be Addressed to

Kansas Farmer

Livestock Advertising Dept.,

Topeka, Kansas

Kansas Farmer is published every other week on Saturday and copy must be mailed to reach the Kansas Farmer office not later than one week in advance of publication date.

Because we maintain a livestock advertising department and because of our very low livestock advertising rate we do not carry livestock advertising on our Farmers' Market page.

If you have pure bred livestock for sale write us for our special low livestock advertising rate. If you are planning a public sale write us immediately for our

SPECIAL PUBLIC SALE SERVICE

KANSAS FARMER
Topeka, Kansas

Jesse R. Johnson, Manager,
Livestock Advertising Department

KANSAS FARMER

Publication Dates, 1938

February	12-26
March	12-26
April	9-23
May	7-21
June	4-19
July	2-16-30
August	12-27
September	10-24
October	8-22
November	5-19
December	3-17-31

Advertising

To insure being run in any issue, copy should be in our office one week in advance of any date given above.

An all-day trip to the Store

WHEN GRANDFATHER WAS A BOY



Now there's a friendly Republic Dealer within a few minutes of your farm

● Today your local Republic dealer is your neighbor. You can reach him quickly and easily. He talks to you man to man. He treats you fairly. He is a booster for your community. He devotes himself to serving you well—for his living depends on your business and your good will. He is a specialist in his line. He selects his merchandise carefully. He carries extensive stocks, so that you may have

the widest possible choice. He handles the Republic line of fence, barbed wire, steel posts, roofing and other products, because he knows how they are made, how durable they are, how well they will serve you. He *knows* their reputation for quality and long life. He knows how Republic operates. He knows that it is an aggressive, modern organization that leads in the development and production of

special steels and steel products. He knows that Republic gives you an honest dollar's worth of merchandise for every dollar that you spend. And he knows, too, that Republic has invested millions of dollars in special plants and equipment for the exclusive production of agricultural steels and steel products.

Republic sees the great need

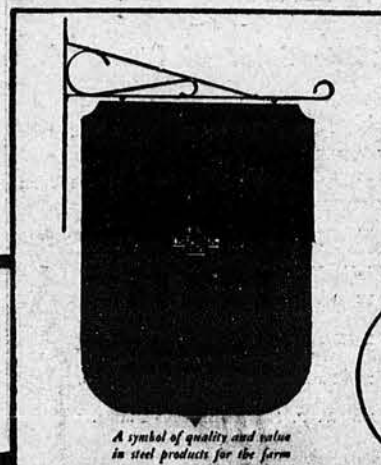
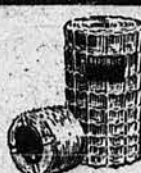
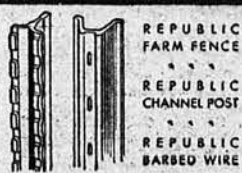
for better and finer steels on America's farms. And Republic is filling that need through keen, alert, business-like dealers in each community—men who truly represent Republic—men who command your respect both as merchants and as neighbors.

The Republic dealer in your trading center has been selected with much thought and care. He is a good man to know.

REPUBLIC STEEL CORPORATION
(Wire Div.) 7850 South Chicago Ave., Chicago, Ill.

(General Offices: Cleveland, O.)

Farm products plants at
Gadsden, Ala. and Chicago, Ill.



*How well do you know
your local dealer?*
Your Republic dealer is interested in you. You should be interested in him—for each of you helps the other. Plan to get better acquainted.